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ABSTRACT BOOK

Short Orals and Lightning Talks



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2025 Abstract Book

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Day 1 – Monday 13th October

Morning

Lightning Talks

The process of social inclusion of people with spinal cord injuries - reducing the waiting time for sports initiation: (2474) **Karla Lorena Mendonça Campos**

ISQUA2025-ABS-2474

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Preferred presentation method: 10 Minute Lightning Talk (E-Poster)

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: A high average waiting time for patients with spinal cord injury (SCI) to participate in sports can delay the rehabilitation process of SCI patients in the Agir +Saúde program at a Specialized Rehabilitation Center IV, which serves people with physical, hearing, visual and intellectual disabilities. The aim of the study was to analyze the average access time and propose actions to improve this indicator.

Methods: From the initial analysis of the scenario, the participation of the physical education professional in the overall assessment was implemented for optimized referral to sports modalities. A Voice of the Customer (VOC) survey was carried out with patients to understand how this implementation was perceived by them.

Results: Based on the analysis of the problem of the high average waiting time for patients with SCI to take part in the sports activities of the Agir + Saúde program, an action plan was drawn up to include a physical education professional in the overall assessment of SCI in order to reduce this time, thus eliminating three stages from the flowchart of the sports activities process for people with SCI (therapy in the gym, assessment in the gym and medical consultation).

As a result of the inclusion of the physical education teacher in the Global MS, there was a reduction in the waiting time from the Global MS assessment to the Agir+Saúde assessment from 240 days to 5.3 days, a reduction in the waiting time from the Agir+Saúde assessment to the start of physical activity from 30 days to 7 days and an increase in the number of patients assessed at the Global MS per month from 11.8 to 18 patients per month, an action seen by the VOC survey as beneficial by our patients.

Conclusion: With the implementation of the physical education teacher in the global evaluation of SCI, the time taken to indicate and start practicing sports was reduced, helping in the process of social inclusion and readaptation of the patient.

References: Medola FO, Busto RM, Marçal ÂF, Achour Junior A, Dourado AC. Sport in the quality of life of individuals with spinal cord injury: case series. Rev Bras Med Esporte [Internet]. 2011Jul;17(4):254-6. Available from: <https://doi.org/10.1590/S1517-86922011000400008>

Labronici RHDD, Cunha MCB, Oliveira ASB, Gabbai AA. Sport as a factor in integrating the physically disabled into society. Arq Neuropsiquiatr 2000;58:1092-9.

Disclosure of Interest: None Declared

Importance of Person-Centered Pathology in Healthcare: (2054) Larissa Marinho

ISQUA2025-ABS-2054

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Preferred presentation method: 10 Minute Lightning Talk (E-Poster)

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Brazilian law requires that patients are given access to their medical records without delay and this increasing access to medical records has the potential to empower patients to take a more active role in their care . Yet, in order to achieve this objective, health systems must start to recognize patients as a core stakeholder in the design of clinical documentation tools. Recognizing the impact of clear communication on patients' well-being drove patients are not content with access alone and they seek to understand and better contextualize their results. A number of studies have shown better outcomes when patients are involved in the decision-making process (for exemple patients with low-grade prostate cancer might be offered different treatment options, ranging from active survalliance to

surgical removal and radiation therapy). Yet they cannot participate without understanding their diagnosis. However, without proper context, it is difficult for patients to make an informed decision about their care.

Methods: Anatomic pathology laboratories are traditionally focused on analyzing tissue samples to diagnose diseases, such as cancer. Cancer pathology report, prepared by a pathologist, is an essential diagnostic tool, usually comprising a gross description, a microscopic description, stage, grade, and the results of any cancer-specific tests ordered. Yet, these reports are routinely written in language that is beyond the comprehension of most patients, and studies have shown this is a burden on patients in terms of stress, anxiety and effective management of their conditions. Introduction of Large Language Models, such as ChatGPT, allows patients to upload their report to the model and request an explanation but that response might not be accurate, potentially exacerbating the issue. This problem is not unique to pathology and is relevant to other diagnostic fields.

Much progress has been made in radiology, which much like pathology, is diagnostic in nature . While a few changes, such as lay mammography reports, were mandated by law, other initiatives were spurred by recognizing that understanding a diagnostic report is one of the patients' needs. Although it could be argued that the discipline of pathology is unique in the sense that it is largely devoid of direct clinician-patient interaction, pathologists must recognize that, ultimately, patients are recipients of their reports. Recognizing the importance of improving communication between pathologists, patients and their family there are initiatives that could enhance the accurate communication of pathology reports and results to patients, while offloading this task from clinical colleagues :

Results:

1-Patient Centered Pathology Reporting (PCPR): Patient-centered pathology reports have the potential to improve communications between providers and patients, and providers and family members of the patient. Using simple, non-medical language needs to be an essential part of this patient-centered report. Medical jargon in reports often leaves patients confused and uncertain about their diagnosis and reports that considers patient's level of understanding and provides explanations or definitions of medical terms can help patients feel more informed and in control. These initiative helps ensure patient feels cared for, respected, and valued, improving overall satisfaction with the healthcare system and empowers patients by giving them the information they need to actively participate in their care.

Most patients who received a PCPR preferred it to a standard report and Patient-Centered Pathology Reports should be a focus of future interventions to improve patient care because no framework or guidelines exist for generating reports with accessible language. The Brazilian Society of Pathologists provides synoptic cancer reporting templates that are widely used in anatomic pathology . In many instances, those reports are generated electronically based on the information entered by pathologists. It should be feasible to add a lay summary that is automatically generated along with the synoptic report.

2-Pathologist led consultations: Pathologist-led consultations refer to medical discussions or meetings in which pathologists take the lead in providing insights, diagnoses based on laboratory and diagnostic results. Pathologists may have office hours where they explain reports to patients, oncologist or surgeon . Consultation process can initiate by contacting the surgical pathology department or pathologist can insert an invitation in the pathology report or send a text message in the electronic medical record; this allows for an appointment to be made like any other doctor's visit. Agenda for the appointment is set by inquiring if the patient has any specific questions and establishing the patient's level of understanding of the disease.

During this consultation pathologist shows patient name on the slide and can describes the tissue processing procedure and slide preparation.Using simple, non-medical language needs to be an essential part of the process. Patient is shown normal tissue in order to identify significant structures using basic terminology; for example "the cell membrane is a "shell" that surrounds the cell and protects it, and the nucleus is like the "brain" of the cell, which controls its activities". Once a foundation of normal is established, patient is shown diseased tissue, which often leads to additional questions.If there are any questions regarding treatment, it can direct to clinicians.

Conclusion: Many patients do not understand the vital role pathologists play in their health care. Person-centered pathology is a means of cultivating relationships with patients, fellow clinicians, health system leaders and lawmakers.Improving patient experience and outcomes by fostering a more personalized and collaborative approach may directly contribute to both clinical decision-making and patient well-being. Patient testimonials are powerful political activism tools that can highlight the positive effects that pathologists have on personalized care.

Disclosure of Interest: None Declared

Patient Satisfaction Survey: Contribution of the User Service to Healthcare Quality Improvement: (3780) Nicole de Melo Viana Taumaturgo

ISQUA2025-ABS-3780

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Preferred presentation method: 10 Minute Lightning Talk (E-Poster)

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: According to the National Humanization Policy, the User Service (SAU) is a key component in healthcare delivery, acting as a bridge between the community and management. Through a structured listening system, the SAU identifies improvement opportunities and promotes multidisciplinary strategic actions to ensure satisfactory and sustainable healthcare for clients. The service is delivered via multiple tools: individualized in-person consultations; active outreach in waiting and observation areas to assess satisfaction surveys; communication channels such as QR codes in common areas, WhatsApp, and email. Monthly data analysis monitors satisfaction rates and identifies areas for improvement.

Methods: This study evaluates the impact of the User Service's activities on healthcare quality in an emergency care unit, highlighting its role in improving workflow, user satisfaction, and safety. The analysis focuses on addressing needs identified through user feedback and collaboration with management to develop strategies for service enhancement.

Results: In 2024, compared to January and December, there was a 508% increase in user service interactions due to diversified communication channels. Satisfaction surveys revealed that despite a significant rise in feedback volume, complaints remained at an average of 3%, with the lowest at 1% and the highest at 4.8%. Key strengths included empathy, humanization, and clear communication. Common complaints were delays in medical care, risk classification flow, and wait times for test results. The Net

Promoter Score (NPS) breakdown for the year was: 85% promoters, 12% neutrals, and 3% detractors. A total of 14,861 feedback instances were recorded, with 99.6% receiving responses.

Conclusion: The User Service (SAU) solidified its role as a strategic pillar in healthcare quality management, ensuring efficient communication between users and leadership. Based on 2024 feedback analysis, the SAU integrated with the risk management forum to address key complaints, trained staff in user communication, enhanced feedback via WhatsApp, and established monthly criticality reports and audits for access management. These actions aim not only to resolve issues but also to strengthen user-system relationships, fostering a healthier and more efficient healthcare environment. Active listening proved vital in identifying patient needs and driving multidisciplinary improvements. [The adoption of] was also crucial for trend identification, enabling strategic decision-making. Thus, the SAU reaffirms its role as essential in delivering effective, transparent, and population-aligned healthcare.

Disclosure of Interest: None Declared

Technological Applications in Environmental Sustainability Management of Taiwan Hospitals: (2208)
Chia-Ying Tsai

ISQUA2025-ABS-2208

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Sustainable development is the global priority. In 2023, the UN Climate Change Conference (COP28) highlighted the role of healthcare in climate action. Following Taiwan’s commitment to its 2050 net-zero goal, hospitals are integrating information technology into environmental management. This study investigates the adoption of such technologies in Taiwan hospitals through a survey-based analysis.

Methods: This survey, conducted in 2024, employed a self-developed questionnaire across 479 Taiwan hospitals to explore smart environmental management applications. For the purpose of this survey, "Environmental Sustainability Management Technology" is defined as the use of automation to monitor hospital equipment and energy data, incorporating abnormality alerts to reduce staff workload and support control operations. Developed through expert discussions, the questionnaire covers three key areas: "Energy Management," "Disaster Prevention," and "Environmental Inspections." Results are compared with the 2022 survey to analyze trends in technological application.

Results: The study received responses from 204 hospitals (27 medical centers, 177 non-medical centers), resulting in a 42.6% response rate. Driven by policy promotion, hospitals are actively advancing environmental management in three key areas (image 1):

Energy Management:

The survey reveals that the "Air Conditioning Control Management " is the top investment item in hospitals (56% in medical centers, 33% in non-medical centers), followed by Smart Electricity management (52% in medical centers, 12% in non-medical centers). By integrating centralized monitoring, alarm systems,

environmental sensors, and big data, hospitals automatically monitor and adjust energy usage. Additionally, 52% of medical centers and 23% of non-medical centers have implemented centralized smart monitoring for medical gases, using IoT and real-time monitoring to ensure safety and reduce energy consumption.

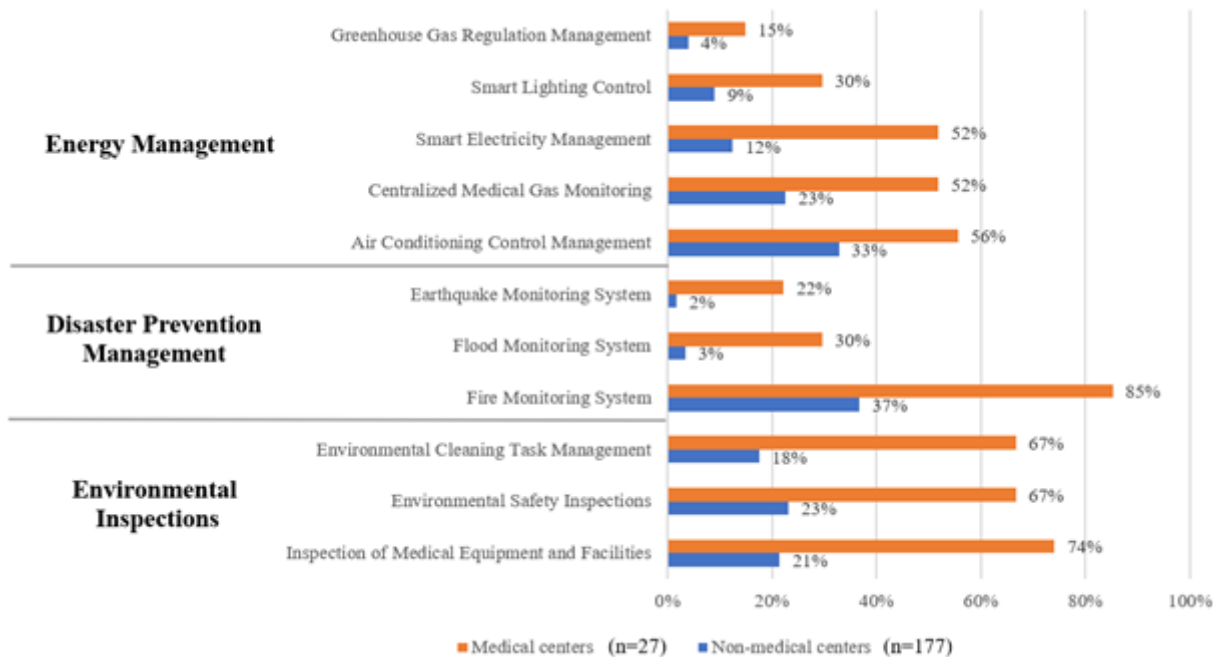
Disaster Prevention Management

According to the Taiwan Patient Safety Reporting System (TPR), 513 fire incidents were reported between 2020 and 2022, emphasizing the importance of fire risk management. The adoption rate of "Fire Monitoring System " increased significantly in 2024, with 85% of medical centers and 37% of non-medical centers implementing these systems. Additionally, due to climate change and Taiwan's location on the Pacific Ring of Fire, the 2024 survey also included "Flood Monitoring System" and "Earthquake Monitoring System ". Results show that 20-30% of medical centers have implemented both systems, while non-medical centers are in the early stages of implementation.

Equipment Inspections

According to TPR, equipment malfunctions are the leading cause of public incidents in hospitals. By 2024, 74% of medical centers had implemented "Inspection of Medical Equipment and Facilities," while 23% of non-medical centers had adopted "Environmental Safety Inspections" for regular safety checks. To enhance facility safety and sustainability, hospitals have also introduced smart management systems for hazardous materials, elevators, access control, and environmental cleaning.

Image:



Conclusion: The research indicates that while Taiwan’s sustainable culture is still in the process of being established, nearly 70% of hospitals have adopted Environmental Management Technologies, driven by policy support and technological advancements. Through automation and data analytics, hospitals can optimize resource use, mitigate risks, and enhance efficiency. To further promote low-carbon healthcare and foster a safer, sustainable medical environment, hospitals should implement government policies by conducting carbon inventories, improving energy efficiency, and training sustainability personnel.

References: DHILLON, Vardeep Singh; KAUR, Dilpreet. Green hospital and climate change: Their interrelationship and the way forward. *Journal of clinical and diagnostic research: JCDR*, 2015, 9.12: LE01.

Psychometric Properties of the Second Version of the Hospital Survey on Patient Safety Culture across a Regional Hospital System of Brazil: (1690) Alejandro Arrieta

ISQUA2025-ABS-1690

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Patient safety culture (PSC) is the set of values, beliefs, and norms within a healthcare organization regarding patient safety. The World Health Assembly Global Patient Safety Action Plan 2021-2030 highlights the importance of regular PSC measurement for managing and improving healthcare systems to eliminate preventable harm. Despite growing global interest, PSC awareness and measurement remain limited in many Latin American countries. This study addresses the need for a validated PSC measurement tool in Brazil.

The objective is to evaluate the psychometric properties of the Healthcare Management Americas (HMA) survey across a regional hospital system in Brazil. The HMA survey builds upon the Brazilian Portuguese version of the Hospital Survey on Patient Safety Culture (HSOPSC v2), previously translated and adapted by Reiss et al. (2023) using one hospital in Sao Paulo. This study contributes to the validation of a reliable instrument for measuring PSC and ultimately improving patient safety practices in the Brazilian healthcare context.

Methods: The HMA survey was distributed to 4,152 clinical and non-clinical staff across eight private non-profit hospitals in Brazil between April and May 2023. Construct validity was assessed using confirmatory factor analyses (CFA) and exploratory structural equation modeling (ESEM). Reliability was evaluated through Cronbach's alphas for CFA models and McDonald's Omega for ESEM models. Convergent validity was tested by regressing HSOPSC v2 patient safety outcomes on factor scores of the best-fitting model. Ethical considerations were addressed through anonymous survey administration to ensure respondent privacy and encourage truthful responses.

Results: The response rate was 59% (n=2,434). Nurses (39%), females (72%), and staff with multiple jobs (75%) were the most common respondents. Table 1 presents the fit indices and reliability for the best-fitting model, the Bi-Factor ESEM model. All HSOPSC v2 items were significantly associated with the overall general factor. The factors "Communication about Error," "Response to Error," and "Staffing and Work Pace" explained the largest variation in the overall PS score. Convergent validity testing revealed significant associations between model factors and patient safety outcomes, including the number of patient safety events and the patient safety culture rating. The overall G factor accounted for the largest variation in patient safety grade (28.3%).

Image:

Table 1: Fit Indices and Reliability of the Bi-Factor ESEM Model

Fit Index	Value
χ^2/df	2.24
CFI	0.99
TLI	0.97
RMSEA	0.02
95% CI RMSEA	(0.02-0.03)
SRMR	0.01
AIC	186066.82
BIC	188150.34
aBIC	187012.36
McDonald's Omega	0.92

χ^2 : Chi-square; df: Degrees of Freedom; CFI: Comparative Fit Index; TLI: Tucker-Lewis Index; RMSEA: Root Mean Square Error of Approximation; SRMR: Standardized Root Mean Square Residual; AIC: Akaike Information Criterion; BIC: Bayesian Information Criterion; aBIC: Sample-Size Adjusted¹ BIC.

Conclusion: The HMA survey, adapted from the HSOPSC v2, demonstrates strong psychometric properties, making it a valid and reliable instrument for measuring PSC in the Brazilian healthcare context, which is consistent with and generalizes the findings of Reiss et al. (2023). The Bi-Factor ESEM model’s superior fit suggests the presence of a general PSC factor alongside individual sub-dimensions. The significant associations between model factors and patient safety outcomes highlight the survey’s practical relevance. These findings support the use of the HMA survey for PSC measurement in Brazil, which can inform targeted interventions to improve patient safety across various hospitals and staff roles.

Disclosure of Interest: None Declared

Assessing Hospital Performance of Department of Health-Managed Hospitals in the Post-Pandemic Era: Insights for Safe and Quality Patient Care: (2239) Roderick Manzo Napulan

ISQUA2025-ABS-2239

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: The Department of Health (DOH) has developed and implemented quality indicators to measure performance of hospitals under its direct supervision and control. These consist of 24 indicators with corresponding targets to gauge the hospital performance aligned with the Health Sector Strategy 2023-2028 and the Strategic Performance Management System.

Methods: This descriptive-correlational study assesses the performance of 75 DOH-managed hospitals in a post-pandemic year, examining correlations between hospital capability, capacity, occupancy rate, utilization census, human resources, and annual budget. Statistical analyses were performed in Stata 18 using data extracted from the Online Health Facility Statistical Report System and DOH central office database. Nonparametric tests, confirmed by the Shapiro-Wilk Test, were employed. Medians, interquartile ranges, frequency, and percentages described the data. Comparisons on the performance of the service capability level and category examined by Kruskal-Wallis and Mann-Whitney Tests, respectively. Spearman's rank correlation coefficient assessed correlations between overall performance and factors. y decisions, resource allocations, and prioritization, enhance healthcare service delivery, and ultimately improve patient outcomes.

Results: Results showed a median overall hospital performance of 80% (IQR 71.43-85.71%). Top-performing indicators that met the targets included capital formation (100%), functional specialty centers (100%), Client Experience Survey Score (99%), Hospital Acquired Infection Rate (97%), and ISO 9001:2015 accreditation (94%). Significant positive correlations with overall performance were found for hospital capacity, inpatient service days, inpatients, outpatient visits, emergency patient visits, human resources to patient ratio, and annual budget (p-values < 0.05). Performance increased significantly with ascending hospital service capability levels (p=0.0052). Significant positive correlations with overall performance were found for hospital capacity, inpatient service days, inpatients, outpatient visits, emergency patient visits, human resources to patient ratio, and annual budget (p-values < 0.05).

Conclusion: This study provides insights into the performance of DOH-managed hospitals, highlighting areas of strength and opportunities for improvement. The findings can inform policy decisions, resource allocations, and prioritization, enhance healthcare service delivery, and ultimately improve patient outcomes.

Disclosure of Interest: None Declared

Thailand's Patient Experience: Trends and Results in Healthcare System Improvement 2022-2024: (2732) Piyawan Limpanyalert

ISQUA2025-ABS-2732

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

If yes, what year?: 2023-2024

I confirm that the submission has been approved by all authors: Yes

Introduction: The Healthcare Accreditation Institute (HAI) is responsible for setting standards and accrediting healthcare service quality. Currently, over 1,115 hospitals have been accredited, and 977 facilities report to the National Reporting and Learning System. HAI recognizes that patient experience is a key component of high-quality and safe healthcare, encompassing factors such as service accessibility, communication with healthcare providers, and patient involvement in treatment planning.

Background: Patient experience surveys play a crucial role in improving healthcare services. These surveys provide real-time feedback, help assess service quality, and enhance patient satisfaction. Research highlights factors influencing patient satisfaction, including service quality, healthcare personnel accountability, and effective relationship management.

In 2019, HAI developed the Patient Experience Program, which is based on people-centered care, which recognizes patients as a team in their own health care. Designed for hospitals, the tool enables them to collect valuable feedback from patients and families about their experiences in the healthcare setting. The survey of 16 questions was in 3 key areas: 1) Quality and Care Processes, 2) Healthcare Services, and 3) Engagement. This feedback helps hospitals refine their processes to align services with patient needs while reinforcing ethical values in healthcare.

Methods: This study utilizes data from the Patient Experience Program (PEP) over a 3-year period, spanning three fiscal years (1 October–30 September each year). The research focuses on evaluating patient experiences to inform improvements in healthcare service quality and safety. Study Design, A retrospective analysis of patient experience data collected through a web-based application using both quantitative and qualitative methods.

- PEP Web-based Application
- Target Group: Patients and families participating in the 3P Safety hospital
- Sampling Method: Convenience sampling based on voluntary participation in the survey; have data collection tools
- Survey: Checklist and Rating Scale: Questions measuring patient experience and service quality
- Survey QR Code: Digital access to facilitate participation and rating using emotion icons to assist respondents, increasing understanding and engagement in the survey process. The survey consisted of 16 questions focusing on 3 key areas: 1) Quality and Care Processes, 2) Healthcare Services, and 3) Patient Engagement.

- [Implement Plan](#)

Results: The Patient and Family Experience Survey analyzes on 3 key areas. The highest satisfaction scores are used for learning purposes, while the lowest satisfaction scores are examined to identify processes that impact patient safety. The insights are then used to improve workflow and strengthen high-scoring areas. This approach reflects the healthcare system's commitment to comprehensive care, fostering positive relationships between patients, families, physicians, nurses, and hospital staff. Results from 2022 to 2024 are broken down by the number of patients and families surveyed on patient and family experience, healthcare eligibility, and patient type.

Outcome for Quality and Processes of Care: Between 2022-2024, a hospital survey on patient care experiences across all member hospitals indicates an overall upward trend in patient and family experiences with healthcare facilities. 93% of the feedback related to medical care showed improvement. Healthcare Services: from 2022-2024, the results reflect an upward trend in patient and family experiences with

healthcare facilities. 94% of respondents expressed the highest satisfaction regarding clear guidance on abnormal symptoms that require follow-up visits and scheduled check-ups and The results indicate a consistent increase in recommendations by patients and families, reflecting strong patient engagement, involvement in care, and the effectiveness of the healthcare system.

Image:



Conclusion: Actively listening to patient experiences is essential for evaluating and learning from their feedback. Utilizing this data effectively allows for the design and enhancement of healthcare services that align with the needs and expectations of patients and families, ultimately ensuring a high-quality healthcare system. The quality of care is reflected in the overall patient experience, including a well-designed, aesthetically pleasing environment, a welcoming atmosphere, and service models that prioritize safety and effectiveness.

Acknowledgment: We express our sincere appreciation to 3P Safety hospitals

References: **References:** 1. Piyawan L., et al. (2019). Patient Experience Program for Patients and Personnel Safety in Thailand. 2. Patient Network Groups and Civil Society. (2019). *Report on patient networks and civil society engagement*. [HAI].

Disclosure of Interest: None Declared

How project management methodology enables the implementation of Accreditation in the Public Sector and in large Health Organizations: A success case in large-scale planning and execution: (2338) Ana Maria Saut

ISQUA2025-ABS-2338

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction:

There is a growing trend of acquisitions and mergers, forming large organizations in the Healthcare area, as well as in the different sectors. Another relevant trend is the performance of social organizations in partnership with the public sector, which can lead to the formation of broad and complex organizational structures, with significant challenges in terms of coordination, planning and management.

Accreditation of healthcare institutions plays a crucial role in ensuring quality and safety standards in service delivery. However, accreditation processes need to adapt to this new reality, which demands large-scale planning and management.

This study presents a case of accreditation of more than 450 Basic Health Units (BHU) in São Paulo. The objective is to present the experience of managing a large accreditation project, with the support of project management tools.

Methods:

A qualitative approach based on the case study methodology was employed, including interviews, observation and review of documents, reports, and process patterns.

The project was carried out in São Paulo, coordinated by the Municipal Health Department, and involving 12 Social Health Organizations (OSS) and 465 BHU. The first phase of the project began in April 2023 and was completed in June 2024. Phase 2 started in November 2024 and will continue until May 2025 to continue the certification of the remaining units and conduct the scheduled maintenance visits.

The accreditation model adopted was the National Accreditation Organization (ONA), covering organizational diagnosis, accreditation, new evaluation, and ordinary maintenance visits.

Results:

The project's goal represented an increase of approximately 30% in institutions certificated by ONA in Brazil in a very short period of time. In the first phase, approximately 800 visits were carried out and 276 BHU were accredited. The project can be considered one of the largest primary care certification initiatives in the world. Several challenges were encountered for the execution of the project. First, the evaluation standard for

Primary Health Care was new, representing a technical challenge for the team of evaluators. In addition, most of those evaluated in the Municipal Health Department, OSS and BHU had their first contact with the accreditation model at the beginning of the project. Therefore, the project represented a challenge for all parties involved.

To overcome the challenges, profound changes were made to the processes with two pillars: project management and large-scale processes. Figure 1 presents an overview of the changes in the process.

Chart 1 presents a summary of the problems and solutions.

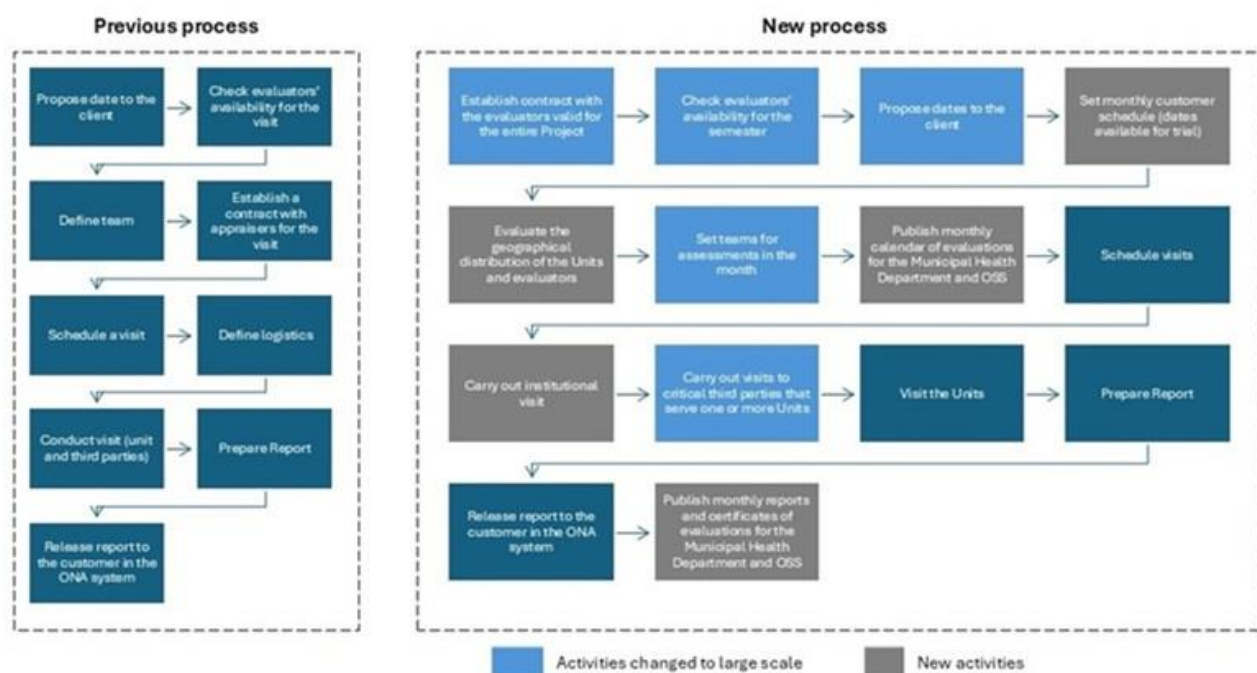
Problem	Solution found	Critical success factor
Few leaders	Review number of days per visit (only 1 day)	P
	Develop a leadership training program	CA
Small team	Carry out selection processes with groups	P
	Ad referendum procedure in the Committee	P
High time to write scheduling email and risk of error (number of information and repetitive task)	Develop query for e-mail text	I&T
High number of contracts	Establish only one contract with each evaluator for the entire project	P
High number of people to communicate the schedule	Develop a platform for disseminating daily planning	CO, I&T
Excessive calls to clarify doubts and high number of registrations invalidated due to system error	Record video with instructions about the process	GT, CO
High travel time	Use maps for logistics planning	GT

Repetition of critical institutional and supplier requirements for all Units	Institutional and critical third-party assessment replicated for all assessments	P, GT
	Developing a file repository for evaluators	I&T
Systemic problems in all Units	Analysis of systemic problems identified in the diagnoses	CU, GR
Payment of fee per visit	Consolidated payment once a month	GT
System allowed access to only one person per UBS	Develop a platform (reports and certificates) for OSS and Municipal Health Department	I&T

Legend: (P) Planning; (CA) Training; (I&T) Innovation and Technology; (CO) Effective communication; (GT) Time management; (GR) Risk management; and (CU) Culture of continuous improvement.

Other actions carried out were letter with guidance on guiding standards of the Brazilian Accreditation System, on-call for technical questions, meetings, and availability of presentation with alignment of the requirements to be evaluated, availability of management reports. And finally, the action of planning larger teams than initially stipulated in the regulations was carried out, incorporating new evaluators to accelerate development. This measure was also taken to mitigate risks, support the team in time management, and reduce stress from potential overload.

Image:



Conclusion:

What makes this case special and innovative is such a high number in such a short time. The main factors that contributed to the success of the project were planning, communication, training, innovation and technology, time management, culture of continuous improvement and risk management.

São Paulo's experience can serve as a model for other major cities, showing that it is possible to implement a robust primary health accreditation system on an urban scale.

Disclosure of Interest: None Declared

Evacuation of a Healthcare Institution During a Flood: Lessons Learned to Ensure Patient Safety: (3855) Dionisia Oliveira

ISQUA2025-ABS-3855

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Preferred presentation method: 10 Minute Lightning Talk (E-Poster)

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: In May 2024, the state of Rio Grande do Sul suffered from heavy rainfall that caused a rapid rise in river levels, resulting in the worst flood in the state’s history. During this period, Mãe de Deus Hospital had its basement flooded, along with its surroundings, making the institution completely inaccessible to pedestrians or regular vehicles. The hospital’s basement, which housed not only administrative areas but also essential utility systems such as machine rooms, electrical substations, generators, medical gas stations, and water reservoirs, was completely submerged. These systems are crucial for the functioning of a healthcare institution. Given the failure of all utility systems and the persistence of the heavy rains, the decision was made to proceed with the complete evacuation of all patients.

The objective of this study is to contribute to the development of knowledge aimed at ensuring patient safety and quality of care in crisis situations by addressing the challenges faced and lessons learned.

Methods: This is an experience report on the evacuation process of a healthcare institution during a flood that occurred in May 2024 in Porto Alegre, Rio Grande do Sul.

Results: The crisis plan was activated on May 2, 2024, and the total evacuation of the hospital was completed within 36 hours, on May 4 and 5, 2024. During this period, 278 patients were evacuated, including critically ill adult and neonatal patients. The transfer of patients to unaffected areas was only possible through vehicles provided by the Brazilian Army, as the hospital was completely surrounded by water.

Throughout the crisis, several key lessons were learned:

1. The patient safety culture, implemented for over 15 years, was crucial in ensuring that all actions prioritized maximum safety, even in the most adverse situation the institution had ever faced.
2. A detailed crisis plan, which outlined leadership roles, communication processes, and contingency measures for all systems and resources, was essential.

3. Collaboration with other healthcare institutions in the city, public agencies, the armed forces, ambulance services, health insurance providers, and even the media enabled a swift response to all patient and family needs.

4. Clear and assertive communication, along with tailored strategies for different audiences as outlined in the crisis plan, was a key factor in ensuring the safety of patients, families, staff, and service providers present in the hospital.

5. Providing support to teams before, during, and after the event was fundamental, prioritizing empathy, respect, resilience, and collaboration.

It is important to highlight that no deaths occurred during the evacuation or transport to other healthcare institutions.

Image:



Conclusion: The evacuation of Hospital Mãe de Deus provided numerous valuable insights, such as identifying vulnerabilities related to the location of utility systems and the lack of contingency measures for these structures. On the other hand, the crisis clearly demonstrated the institution's strong safety culture, the critical role of a well-structured crisis plan, and the immense responsibility and cooperation of healthcare professionals who spared no effort in ensuring patient safety throughout the process. Effective communication and partnerships with other institutions were also fundamental to the success of the evacuation.

References: HARVARD. MDPH Hospital Evacuation Toolkit; 2014

HRQ Publication. Hospital Evacuation Decision Guide; 2010

Disclosure of Interest: None Declared

Preventing Critical Deterioration: Evaluating the Effectiveness of MEWS in Reducing Code Blue Events in the Medical-Surgical Setting: (3168) Ashraf Imtiaz

ISQUA2025-ABS-3168

Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Patients in medical-surgical wards often experience critical deterioration that leads to late interventions and increased Code Blue events. The absence of a structured early warning system such as the Modified Early Warning Score (MEWS) often resulted in delayed responses and poor patient outcomes, including increased mortality rates.

Objective: To assess the effectiveness of MEWS in reducing the incidence of Code Blue events, improving patient outcomes, and engaging staff in proactive monitoring and intervention.

Methods: Plan

1. Identified the need to implement the Modified Early Warning Score (MEWS) in medical-surgical wards.
2. Developed an implementation strategy, including staff training, system integration into the Hospital Information Management System (HIMS), and ongoing reinforcement through refreshers.
3. Established baseline data collection on Code Blue events and patient outcomes before implementation.

Do

1. Conducted staff training sessions to ensure proper understanding and use of MEWS.
2. Integrated MEWS into the HIMS for seamless documentation and accessibility.
3. Reinforced learning through refresher sessions to enhance compliance.

Check

Collected post-implementation data on Code Blue events and patient outcomes for comparison with baseline data.

Act

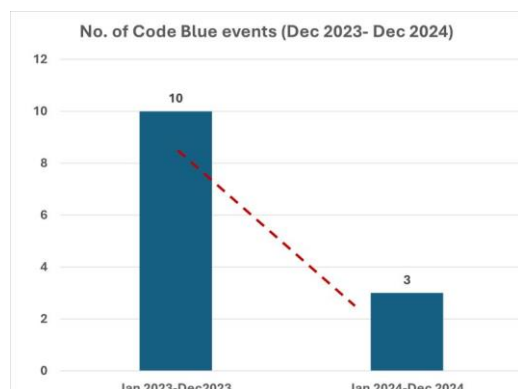
1. Addressed gaps identified through data analysis and staff feedback.
2. Made necessary refinements in training, system integration, and reinforcement strategies to enhance effectiveness.
3. Ensured continuous monitoring and improvement of MEWS implementation.

Results: Results

Following the implementation of MEWS:

1. Code Blue events decreased by 70%, from 10 events in 2023 to 3 events in 2024.
2. Full-code mortalities on the floor reduced to zero in 2024, a 100% improvement compared to three mortalities in 2023.
3. Staff feedback highlighted improved patient monitoring and timely interventions, enhancing overall care quality.

Image:



Conclusion: The implementation of MEWS significantly reduced Code Blue events and eliminated floor mortalities, demonstrating its effectiveness in improving early detection and timely intervention for at-risk patients. Extending MEWS hospital-wide and standardizing its use can further enhance patient safety and care outcomes.

Disclosure of Interest: None Declared

Improving Hand Hygiene Compliance at Evercare Hospital, Lahore: A Quality and Safety Initiative: (3084) Ashraf Imtiaz

ISQUA2025-ABS-3084

S. Pervaiz¹, A. Ali^{2,*}, K. Shahzad³, P. Amirali⁴, A. Imtiaz⁴, F. Shahid⁴

¹Quality and Patient Safety, ²Medicine, ³Infection Control, ⁴Nursing, Evercare Hospital Lahore, Lahore, Pakistan

Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

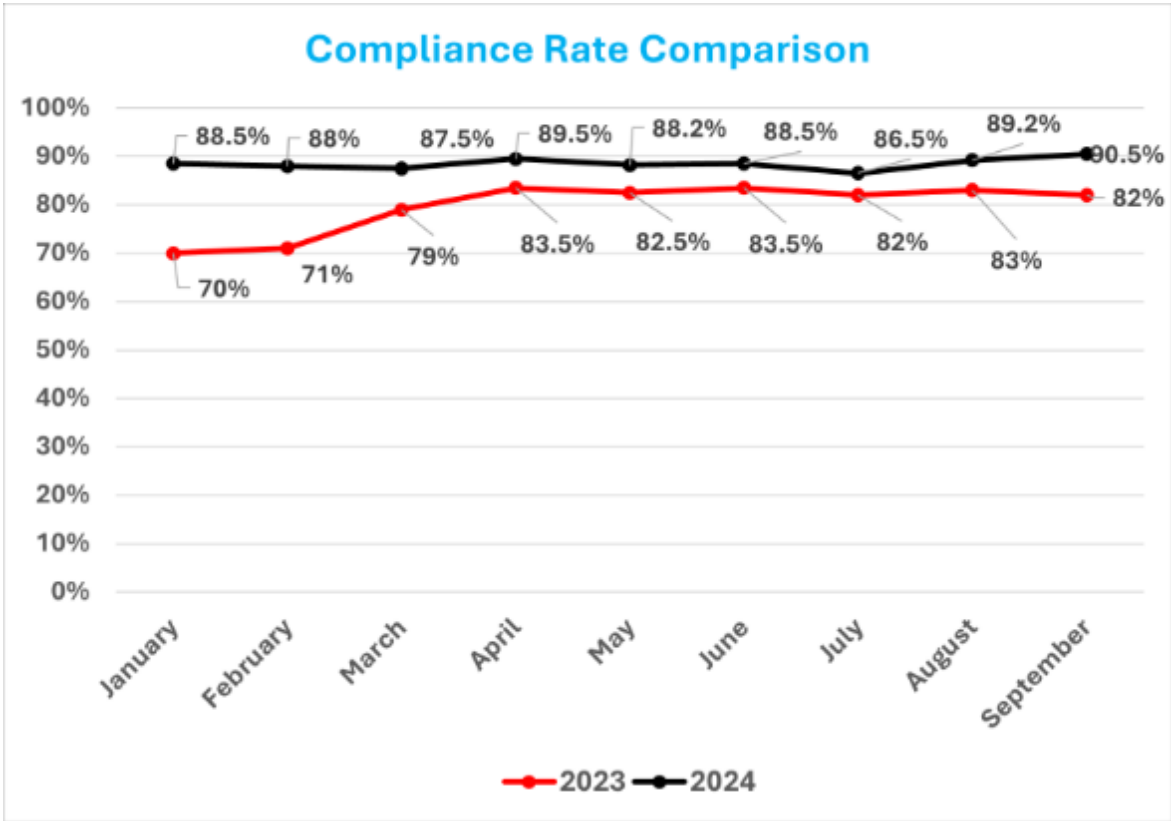
I confirm that the submission has been approved by all authors: Yes

Introduction: Healthcare-associated infections (HAIs) pose a significant threat to patient safety worldwide, often exacerbated by non-compliance with hand hygiene protocols among healthcare workers. Despite being one of the simplest and most effective preventive measures, compliance rates often fall short due to various challenges, including workload and inadequate training. This project aimed to improve hand hygiene compliance at Evercare Hospital, Lahore, as a quality and safety initiative to reduce HAIs, improve patient outcomes, and align with international standards.

Methods: A pre- and post-intervention observational study was conducted using the WHO Hand Hygiene Observation Form. Data on compliance rates at five critical moments of patient care were collected over nine months, analyzed for trends, and compared to previous audits. Interventions included structured training sessions, distribution of educational materials, installation of hand hygiene stations, and regular feedback sessions. Compliance rates were monitored through audits and spot checks, with feedback provided to staff for continuous improvement.

Results: The comparison of compliance rates between 2023 and 2024 revealed a marked improvement (shown below). In 2023, compliance started below 82% but gradually increased, while in 2024, compliance consistently exceeded 90%. These results underscore the effectiveness of the interventions implemented, demonstrating sustained improvement and approaching the Joint Commission International's recommended compliance target of 95%.

Image:



Conclusion: The interventions significantly improved hand hygiene compliance among healthcare workers at Evercare Hospital, contributing to better infection control and patient safety. Ongoing efforts, including continuous training, regular audits, and ensuring accessibility to hygiene supplies, are essential to achieving and maintaining compliance rates above 95%.

Disclosure of Interest: None Declared

Argentine Society of Reproductive Medicine (SAMeR) accreditation program as a driver of continuous and sustainable improvements in quality and safety of patient care: (1964) Débora J. Cohen

ISQUA2025-ABS-1964

Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Assisted reproductive medicine has become essential in supporting the health and well-being of patients facing infertility. Accreditation is crucial to ensuring that fertility centers operate in compliance with strict quality and safety standards. SAMeR has been accrediting fertility centers in Argentina since 2004. As the world undergoes rapid changes, particularly in healthcare and social services, SAMeR has recognized the need for its accreditation programs to evolve. In this context, our study aimed to evaluate the impact of modifications to the SAMeR accreditation program by addressing two key questions: Are fertility centers able to adopt normative changes? If so, how long does it take for them to adapt?

Methods: To explore these questions, the total number of fertility centers enrolled in the accreditation program since 2012 was evaluated, and those fertility centers that experienced the program's changes between 2012 and 2024 were selected. Since that year, the program underwent an operational change, transitioning to a three-year validity model with annual follow-up visits, where efficiency outcome data reported by the centers to the Argentine Registry for Assisted Fertilization (RAFA) were validated. We assessed the impact of changes incorporated into SAMeR's accreditation manual (versions 12 and 13) on the centers' compliance and continuity in the program. These changes included new regulatory requirements following the approval of the national fertility legislation in 2016 (version 12) and a structural revision of accreditation standards in 2022 that introduced specific requirements for patient care processes and quality and safety management aligned with international best practices (version 13). Key indicators were also examined to evaluate quality and patient safety over time.

Results: Of the 46 private fertility centers reporting to RAFA, 43 voluntarily enrolled in the accreditation program. Twelve centers did not implement the changes and withdrew from the program; 11 are in the process of making the modifications, and 20 made the program's changes from 2012 to 2024, qualifying for inclusion in this study. Results showed that after the first three-year cycle, 92% of the assessed centers fully met accreditation standards. However, only 54% of the clinics were able to respond satisfactorily in the first year following the changes introduced in version 12, and it took six years for 93% of the assessed centers to fully integrate these changes. To meet the structural modifications required in version 12, 35% of clinics relocated to newly built installations, whereas 50% requested a 12-month extension to carry out changes in their existing buildings. Since the implementation of version 13 in the last quarter of 2023, 75% of the centers have successfully achieved accreditation.

Conclusion: This study provides evidence that private fertility centers in Argentina are actively engaged in the accreditation process. SAMeR's accreditation standards have helped ensure compliance with regulatory requirements under fertility legislation in the field of medically assisted reproduction in Argentina. Over time, fertility centers have found it increasingly easier to achieve full accreditation, highlighting the importance of introducing innovation within the accreditation programs. Additionally, the number of years a fertility center has participated in accreditation seems to influence its ability to adapt to changes, emphasizing that accreditation serves as a strategic tool that enables centers to respond more swiftly to normative updates. Only by adopting a global perspective to drive effective periodic changes in the SAMeR accreditation program can compliance with quality and safety requirements in patient care be ensured. This approach will serve as

a bridge for the continuous improvement of fertility centers in developing countries in the face of challenges arising from the incorporation of new technologies and changes in the social and environmental landscape.

Disclosure of Interest: None Declared

Short Oral

Towards quantitative measurement of coproduction value creation in healthcare: Modified Delphi Process results from Phase III of the CO-VALUE study.: (3804) Brant Oliver

ISQUA2025-ABS-3804

B. Oliver^{1,*} on behalf of CO-VALUE study investigators

¹Dartmouth, Hanover, United States

Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Coproduction is a promising and developing new area in healthcare quality which conceptualizes healthcare as a service that is created in relationship between patients and/or care partners and professionals.¹ Demonstrating the value of coproduction of healthcare service will require assessment and measurement approaches for coproduction value. The CO-VALUE study aims to develop these approaches.² In Phase I, 12 sites in four countries adapted a value model used in business³ to develop a self assessment approach to identify value creating elements.⁴ Phase II included a subset of four of the original sites representing two countries which applied the new self-assessment approach to inform QI work over a one year period, and focus groups to identify qualitative domains of value creation and assess initial feasibility, acceptability, and utility of the self-assessment approach.⁵ Phase III seeks to leverage findings from the first two phases to inform development of a prototype quantitative measures set for pilot testing in a subset of two of the four sites that participated in Phases 1 and II. Here we report on initial work in Phase III-- a modified Delphi process used to specify the prototype.

Methods: The CO-VALUE study is approved by the Dartmouth IRB as a minimal risk research study. We used a modified Delphi process which balanced rigor with burden to participating sites and is similar to that recently conducted by the IBD Qorus collaborative to develop a value compass.⁶ Multivoting was used in three steps to specify a priority list of four macro value compass domains, specify priority subdomains for each major domain, and select a parsimonious set of metrics for each.

Results: The modified Delphi process was conducted successfully and completed in February, 2025, resulting in an initial value compass (see Figure 1) to assess coproduction value creation in four macro categories: (1) access and connectedness; (2) outcomes; (3) experience; and (4) utilization and burden.

Image:

Initial Coproduction Value Creation Compass for Multiple Sclerosis



Conclusion: The prototype will now be piloted in two multiple sclerosis centers participating in Phase III to assess feasibility, acceptability, and utility of the prototype measures and to inform the future optimization of the prototype measures set.

References: 1. Batalden M, Batalden P, et al. Coproduction of healthcare service. *BMJ Qual Saf.* 2016 Jul;25(7):509-17. doi: 10.1136/bmjqs-2015-004315.

2. Oliver BJ, Batalden PB, Dimillia PR, et al. (2020). Coproduction value creation in healthcare service (CO-VALUE): An international multicenter protocol to describe the application of a model of value creation for use in systems of coproduced healthcare services and to evaluate the initial feasibility, utility, and acceptability of associated system-level value creation assessment approaches. *BMJ Open*;10:e037578.

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4. Oliver BJ, Forcino R, Batalden PB. (2021). Initial development of a self-assessment approach for coproduction value creation by an international community of practice. *International Journal for Quality in Health Care*, Volume 33, Issue Supplement_2, November 2021, Pages ii48–ii54, <https://doi.org/10.1093/intqhc/mzab077>.

5. Forcino RC, Jobse BC, Ahmad J, Oliver BJ. Using Focus Groups to Evaluate a Self-Assessment Approach to Coproduction Value Creation in an International Community of Practice: Phase 2 of the CO-VALUE Study. *Perm J.* 2024 Sep 16;28(3):278-283. doi: 10.7812/TPP/24.009. Epub 2024 Aug 27.

6. Oliver BJ, Kennedy AM, van Deen WK, et al. (May, 2021). Development of balanced whole system value measures for Inflammatory Bowel Disease care in the IBD Qorus collaborative using a modified Delphi process. *Inflammatory Bowel Diseases*; izab091, <https://doi.org/10.1093/ibd/izab091>.

Disclosure of Interest: None Declared

The therapist knows best. No, wait: the patient knows better: A multi-method qualitative study to identify Patient Reported Outcomes for psychomotor therapy in adult mental health care: (1395) Albertine de Haan

A. de Haan ^{1 2,*}, J. Moeijes ¹, M. Scheffers ¹, P. van der Wees ^{2 3}

¹University of Applied Sciences Windesheim, Zwolle, ²Radboud University Medical Center, Nijmegen, Netherlands, ³George Washington University, Washington DC, United States

Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

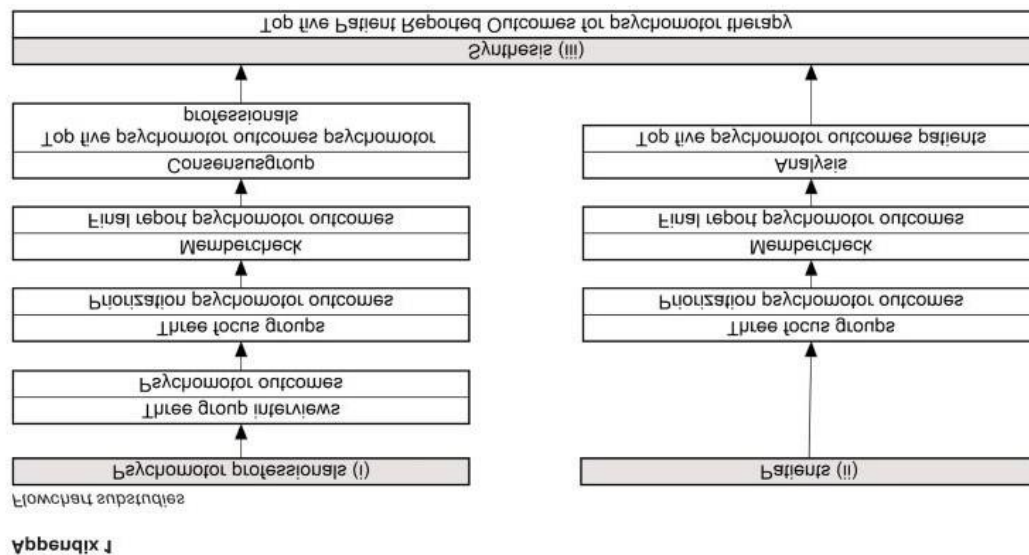
I confirm that the submission has been approved by all authors: Yes

Introduction: Psychomotor therapy is an experiential therapy using movement- and body-oriented interventions. It is broadly used in adult mental health care in the Netherlands and aims to diminish psychiatric symptoms, increase mental health and improve psychosocial functioning. However, a standardised utilisation of patient-reported outcome measures (PROMs) in research and practice in adult mental health care is lacking, resulting in a gap in systematic research and evaluation of psychomotor interventions. While using PROMs is relevant for evaluating interventions and monitoring individual patient progress, specific psychomotor Patient Reported Outcomes (PROs) deemed relevant and corresponding PROMs remain unidentified. The purpose of this study is to select widely endorsed outcomes for psychomotor therapy. More specifically, the research question is as follows: Which five PROs are most relevant from the perspectives of psychomotor professionals and patients in adult mental health care in the Netherlands, and what is the synthesis of both perspectives?

Methods: A multi-method qualitative study was conducted, consisting of three sub-studies: (i) the selection of the five most relevant psychomotor outcomes from the perspective of psychomotor professionals, using a modified Nominal Group Technique in an adapted serial design; (ii) the selection of the five most relevant psychomotor outcomes from the perspective of patients using a narrative approach in (focus) groups; and (iii) the synthesis of the selections from (i) and (ii). See Appendix 1. Data analysis entailed an iterative process of merging, matching, and categorising the outcomes mentioned by the participants. Finally, ranking and rating were used to prioritise the top five psychomotor PROs. Ethical approval for this study was obtained from the Medical Ethics Review Board University Medical Center Groningen (2019/409).

Results: Seven groups of psychomotor professionals (n=55), and three groups of patients (n=27) participated in the study. Psychomotor professionals selected body experience, emotion regulation, stress regulation, movement experience, and sensory awareness as most relevant. Patients selected body experience, social interaction, movement experience, emotion regulation, and self-image. After synthesis of both selections, the five most relevant PROs for psychomotor therapy in adult mental health care in the Netherlands are body experience, emotion regulation, movement experience, social interaction, and stress regulation.

Image:



Conclusion: The five most relevant PROs in psychomotor therapy in adult mental health care in the Netherlands are identified and broadly supported by psychomotor professionals and patients. The selected PROs provide the foundation for selecting PROMs for evaluating interventions and monitoring outcomes psychomotor therapy.

Disclosure of Interest: None Declared

Co-producing a Patient Reported Experience Measure (PREM) for and with people with intellectual disability to enhance health outcomes and improve equity of healthcare.: (1425) Bronwyn Newman

ISQUA2025-ABS-1425

B. Newman ^{1,*}, B. Catlett ¹, L. Mimmo ^{1,2}, R. Harrison ¹ and Listen to Me Consumer Leadership Group

¹AIHI, Macquarie University, ²Nursing Research Unit, Sydney Children's Hospital Network, Sydney, Australia

Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: People with intellectual disability globally experience inequity in healthcare access and health outcomes. Patient-reported experience measures (PREMs) are increasingly used internationally to plan, prioritise and enhance care, however PREMs are often not designed to include data collection from people with intellectual disability. Listen to Me is a 3 year consumer-led project working to develop and use patient-reported information to improve healthcare quality among people with intellectual disability in Australian hospitals. This presentation will report methods and findings from the co-production and creation of the digital PREM prototype.

Methods: Collaborative, accessible design principles were used to co-produce the Listen to Me PREM prototype within an inclusive research governance structure. People with lived experience of intellectual disability and family members were involved in all elements of this research, including governance, data collection and analysis. Appropriate ethics approval has been obtained for this research via a Human Research Ethics Committee, and researchers are aware of the ethical considerations in research design and

conduct. We used accessible communication, responsive arts-based activities and inclusive data collection methods in five hybrid co-production workshops, with participant contact between meetings as required. Preliminary testing of the PREM prototype (developed in the co-production workshops) was conducted via qualitative interviews using think aloud techniques to further refine the PREM. An accessible eDelphi survey was used to confirm the suitability of the digital PREM prototype for people with diverse communication and support needs.

Results: We facilitated 5 accessible co-production workshop meetings with 8 members of the Listen to Me Consumer Group, and 3 visiting team members with specific expertise. Workshops were held face to face or online with additional contact available between workshops as needed. We used a suite of accessible strategies, such as easy read, visual stories and arts-based activities to facilitate the coproduction of a PREM suitable for people with intellectual disability. There were 3 phases to our coproduction: identifying current practice, determining scope and then designing the PREM prototype with a focus on identifying suitable topics, question types and modality. The digital PREM prototype was refined via testing with people with intellectual disability and findings from an accessible eDelphi survey. The digital PREM prototype will be shared in this presentation.

Conclusion: The Listen to Me digital PREM is the first PREM co-produced with and for use by people with intellectual disability. When creating data collection tools to inform change, input from all stakeholders throughout the process is vital. Including perspectives of consumers, alongside practitioners and policy makers, enabled the creation of a PREM that is accessible to end users, can inform service improvement and ensures data usability. The knowledge gained from the PREM will enable a focus on significant areas for improvement as identified by people with intellectual disability, supporting improved outcomes and greater equity in health care.

Disclosure of Interest: None Declared

She's found her voice: working with children and young people with and without learning disabilities and their siblings as partners in research: (2117) Kate Oulton

ISQUA2025-ABS-2117

K. Oulton ^{1,*}, J. Wray ¹, J. Abrams ², S. Flynn ³, M. Foo-Caballero ⁴, P. Harniess ⁵, L. Hearn ⁴, G. Potier ⁶, A. Rao ⁴, L. Watson ⁷, F. Gibson ¹ and Seen and Be Heard Parent and Children and Young People's Advisory Group

¹Centre for Outcomes and Experience Research in Children's Health, Illness and Disability , Great Ormond Street Hospital, ²Kingston School of Art, Kingston University, London, ³Centre for Research in Intellectual and Developmental Disabilities, University of Warwick, Warwick, ⁴Blood, Cells and Cancer Directorate, Great Ormond Street Hospital, London, ⁵Department of Health and Life Sciences, Northumbria University, Northumbria, ⁶Learning Disabilities Team, Kingston University, ⁷Learning Disabilities Team, Great Ormond Street Hospital, London, United Kingdom

Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Children and young people (CYP) with intellectual disabilities and who are autistic find many aspects of hospital particularly challenging, with evidence of there being multiple barriers to them receiving equal access to care and services in England (Oulton et al.2022). What this means for those receiving cancer care and treatment, however, is largely unknown as very limited qualitative research has been undertaken with them to identify their needs and experiences. As part of a larger ethnographic study to explore this, a key objective was to co-produce a suite of inclusive research resources *with* CYP with cancer *for* CYP with cancer, including a novel interactive research journal for participants to share their research journey.

Methods: Co-production of the research journal involved an in-person workshop and multiple follow-up sessions with CYP, over a 6-month period. To aid inclusivity and nurture creative ideas the workshop was co-facilitated with illustrators and hand-puppets were used as an elicitation method. Visual instructions and cues were also provided to aid understanding. Some CYP required a communication partner to aid participation, such as a parent/sibling or healthcare professional. Multiple creative activities were incorporated to help CYP imagine and decide the look and feel of the journal and its content. This included a) creating a character for the journal, b) bringing and sharing their favourite journals from home and c) trialling and providing feedback on different styles of journal pages and activities. A research team member, a health psychologist, helped facilitate sensitive aspects of the discussion. Following the workshop, numerous iterations of the journal were undertaken with participants, with additional input from the Down's Syndrome Association in the UK. All CYP and their parents provided assent and/or consent prior to participation. Travel costs and lunch were provided. All participants received a certificate and a thank-you voucher.

Results: Our co-production group included eight patients and four siblings aged 7-15 years. All patients had received or were receiving treatment for cancer. Of these, one was autistic, one had Down's Syndrome and two had additional needs. All participants interacted fully in the workshop, with some requiring 1:1 support throughout. The use of puppets to aid participation and dialogue was well-received with everyone wanting to take theirs home to keep. Children and young people provided extremely positive feedback about taking part in the co-production process. The mother of one young autistic person undergoing treatment for cancer, for example, said her daughter was subsequently buzzing, and that the process of being involved had improved her mental health and enabled her to 'find her voice again'. All CYP received a copy of the final journal to keep.

Through the co-production process, participants shared their own experiences as a cancer patient or sibling, and what considerations they felt were important when helping others to share their cancer journey. They felt it was important that the journal could be personalised and wanted it to have interactive elements. They particularly liked the idea of including photographs and stickers, as well as emojis and the use of colour for expressing their mood, thoughts and feelings. Some CYP described often feeling too unwell or tired to do long activities when undergoing treatment and so having different options for sharing their journey was important, as well as having some pages solely for fun. They also talked about the potential for particular topics such as food to be triggering to some cancer patients and the need for this to be considered in the design process. From our observations of CYP interacting during the workshops and testing out different parts of the journal, we identified the importance family members played in a child or young person's cancer journey and the need for specific adaptations for those with visual, learning and/or communication needs.

Two journal types, a standard and easy-read version, have been co-produced with our participants, with the help of illustrators. Each journal has three sections: 'all about me' which enables personalisation of the journal, 'sharing experiences and feelings' which has multiple interactive elements and 'fun and engaging' activities. The first two sections include space for writing, drawing, stickers, and photographs. The 'sharing experiences and feelings' section provides different illustrated templates for participants to describe aspects of care and treatment throughout each day or week and record how they felt about these. Other topics include

sensory aspects of the journey such as sight/sounds, textures/tastes, as well as space and environment, and interactions with staff and family. The easy-read version has been simplified, with fewer sections on each page, boxes for the use of symbols, and a place for parent/carers to add a comment.

Conclusion: We believe the co-production of research resources is an important part of any research study, and that children and young people, including those with additional needs, can be valuable partners in this process. With a group of twelve patients and siblings we were able to successfully co-produce a novel interactive research journal, in standard and easy ready format, for use during ethnographic data collection. Despite some aspects of the process including sensitive conversations, children and young people enjoyed taking part and provided positive feedback. However, the extensive planning, time and financial resources required cannot be under-estimated, including consideration of the need for communication partners during co-production activities, psychology input, visual cues and instructions, and inclusive and creative data collection methods.

References: Oulton K, Wray J, Kenten C, Russell J, Carr L, Hassiotis A, Jewitt C, Kelly P, Kerry S, Tuffrey-Wijne I, Whiting M, Gibson F. Equal access to hospital care for children with learning disabilities and their families: a mixed-methods study. Southampton (UK): National Institute for Health and Care Research; 2022 Jun.

Disclosure of Interest: None Declared

Harnessing the Power of Coproduction to Build a Virtual Peer Support Network for People with Long Covid: The Promise Partnership ConnectShareCare (CSC) Pilot: (2952) Sandra Knowlton-Soho

ISQUA2025-ABS-2952

S. Knowlton-Soho ^{1,*}, F. Mehta ², J. Ahmad ², B. Jobse ³, M. Holthoff ⁴, J. Parsonnet ⁵, K. Parsonnet ³, B. Oliver ^{1 3 4}

¹Office of Care Experience, ²Quality & Value, Dartmouth Health, ³Dept of Community & Family Medicine, Geisel School of Medicine at Dartmouth, Lebanon NH, ⁴The Dartmouth Institute for Health Policy & Clinical Practice, Geisel School of Medicine at Dartmouth, Hanover NH, ⁵Section of Infectious Diseases & Intl Health, Dept. of Medicine, Dartmouth Hitchcock Medical Center, Lebanon NH, United States

Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

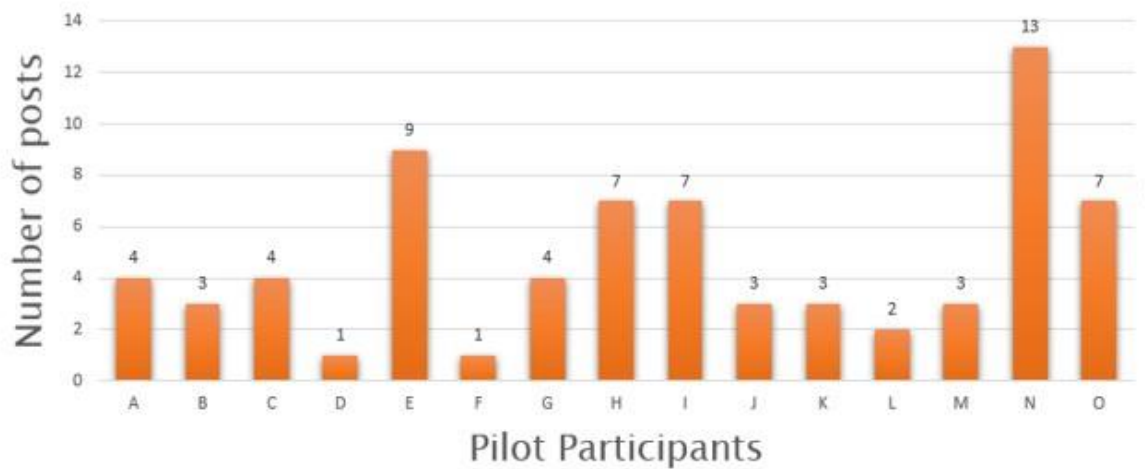
Introduction: ConnectShareCare (CSC) is a Peer Facilitated Online Support Network that has been in operation since 2021 in our region. Two main functions of this network are to provide a safe, virtual space for people with similar lived experiences to share information and to offer each other emotional support in a moderated online environment. CSC was developed as part of the Promise Partnership Coproduction Learning Health System (CLHS), a joint collaboration between Dartmouth Health and The Dartmouth Institute to implement a CLHS based on principles of co-production. The initial development of CSC was accomplished in palliative and cancer care for caregivers of persons of serious illness (O'Donnell et al., 2024). As of Spring 2024, ConnectShareCare had expanded to two ongoing peer support groups - one for care partners of people with serious illnesses and one for people experiencing grief & loss. The next phase of development for CSC in 2024 was to establish a peer support network for a patient population, which we describe here. Our goal was to determine the feasibility, acceptability and utility of CSC to facilitate a virtual peer support group for patients with Long COVID.

Methods: The study was designed as a short-term (4-6 week) pilot with a convenience sample of 10-20 participants. All invited participants had been seen in the Post-Acute Covid Syndrome Clinic at Dartmouth Hitchcock Medical Center and diagnosed with Long Covid. This pilot study was reviewed by the Dartmouth Health IRB and determined as “not human subjects research.” To recruit participants, 51 email invitations were sent from PACS clinician to previous support group participants. 20 (39%) people joined. From June 21-July 31, 2024, Long Covid Support Group pilot project was conducted. For feasibility and acceptability, number of posts per member and cumulative posts over time were graphed. To determine utility and acceptability, a focus group was held to collect qualitative data.

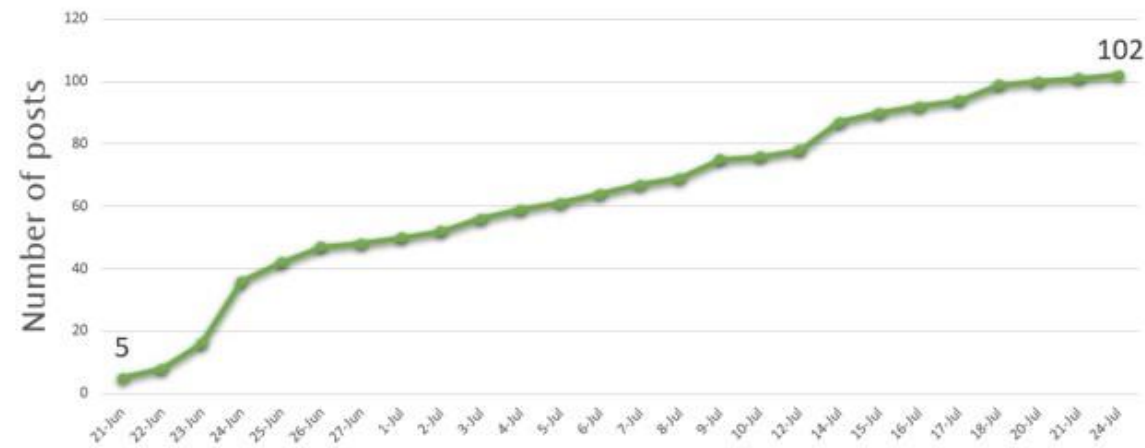
Results: Of those who joined, 18 (90%) visited the site at least one time & 14 (70%) actively posted at least one time. Nine people participated in the focus group in Aug 2024. Focus group consensus was that the virtual support group fulfilled an unspoken need to feel safe and heard locally.

Image:

PILOT STUDY – # of Posts by Participant



PILOT STUDY – CUMULATIVE DAILY POSTS



Conclusion: Results of the pilot support initial feasibility, acceptability, and utility of CSC for persons with Long COVID. Participants found CSC to be a useful tool for interacting with other people who have Long Covid to receive emotional support and learn about helpful resources. In Sept 2024, the support group was open to the public and as of Jan 2025, the group had 75 members. Key components to the success included a clinician champion willing to promote participation, mentors/moderators to oversee the platform and assist members, and “superusers,” members with lived experience who post on a regular basis and encourage

others to participate. The results of this pilot will inform work to achieve our long term aim to scale virtual peer networks for care partners, patients and the healthcare workforce throughout our health system.

References: O'Donnell EA, Van Citters AD, et al. A Web-Based Peer Support Network to Help Care Partners of People With Serious Illness: Co-Design Study. JMIR Hum Factors. 2024 May 8;11:e53194.

Disclosure of Interest: None Declared

Prevalence of Compromised Dimensions According to the Risk of Vulnerability in Elderly Patients in Supplementary Primary Care – USIFAMÍLIA: (2978) Gabriella Polastri Stiilpen Barbosa

ISQUA2025-ABS-2978

G. P. S. Barbosa ^{1,*}, K. Moraes de Oliveira Carvalho ¹, P. Ohana Rodrigues ¹, M. Cristian Lagares Ferreira ¹, N. de Freitas Fernandes ²

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Preferred presentation method: 10 Minute Lightning Talk (E-Poster)

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: The Clinical-Functional Vulnerability Index (CFVI-20) is a simple, fast, objective, and multidimensional screening tool that addresses self-perceived health, daily-living activities, cognition, mood, mobility, communication, and comorbidity—defined as having five or more chronic diseases, polypharmacy, and/or recent hospitalization. The application of the CFVI-20 aims to quickly identify frail elderly patients and recommend preventive measures to improve their autonomy and independence. Changes in these dimensions help identify patients with functional cognitive decline or dependence in daily-living activities. Since 2014, the São Francisco Xavier Foundation, through its health plan operator Usisaúde, has provided primary care through Usifamília, focusing on elderly health and using the CFVI as a screening tool to assess key dimensions considered predictors of functional decline and/or mortality in the elderly.

Observe the prevalence of clinical-functional vulnerability markers used in the CFVI-20 among patients assisted by a Supplementary Primary Care program in the Steel Valley region of Minas Gerais from January 2020 to March 2022.

Methods: A cross-sectional observational study with descriptive analysis of the following vulnerability markers used in the CFVI-20: comorbidity, cognition, mobility, loss of basic and instrumental activities of daily living, mood, and communication. The CFVI-20 scores of all elderly patients in the program were analyzed, with those classified as low vulnerability risk excluded for not meeting the specified marker criteria.

Results: The analyzed group consisted of 943 patients classified as medium or high risk of clinical-functional vulnerability. Among these, 511 (54.1%) scored for mood loss, 767 (81.3%) were considered to have comorbidities, 534 (56.6%) had cognitive impairment, 470 (49.8%) showed mobility loss, 529 (56.1%) scored for loss of some type of activity of daily living, and 204 (21.6%) had communication limitations. Out of the total patients, 33 (3.5%) scored in three dimensions, 273 (28.9%) in four or more dimensions, and only 9 (0.9%) scored in all seven dimensions.

Image:

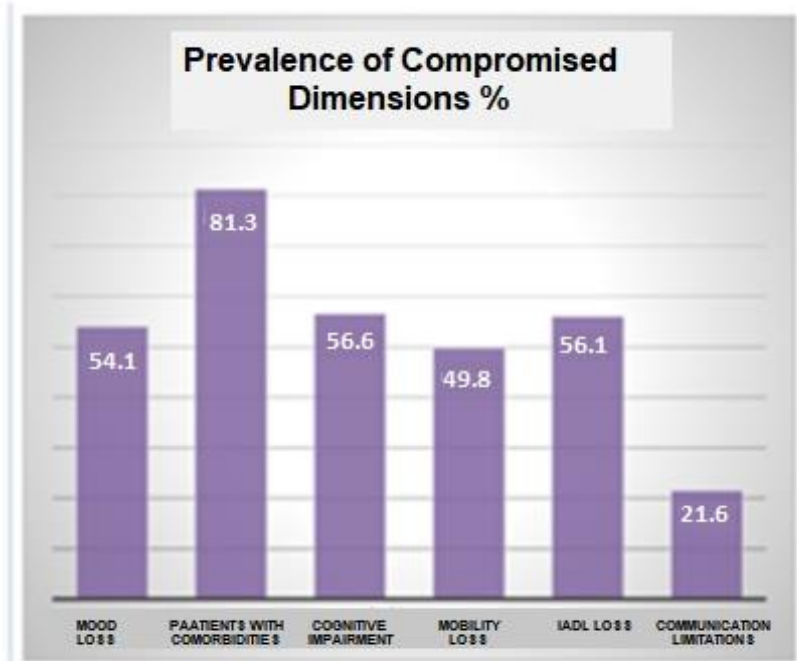


Chart 1: Analysis of the Prevalence of Compromised Dimensions in the CFVI-20

Conclusion: This study analyzed the dimensions of the CFVI-20 in patients classified as medium and high risk of clinical-functional vulnerability to identify which markers are most compromised, aiding in the development of strategies to reduce vitality loss in the elderly. The analysis revealed that most frail or at-risk elderly patients have multiple comorbidities, i.e., five or more comorbidities, use five or more medications, and/or were hospitalized in the last six months. Around half of the elderly in the analyzed group reported cognitive complaints and/or loss of some type of daily-living activity. Similarly, half showed mobility loss. The analysis also indicated that most patients scored in more than four dimensions, demonstrating that elderly frailty is multifactorial and leads to increased clinical-functional vulnerability.

References: Moraes EN, Carmo JA, Lanna FM, Azevedo RS, Machado CJ, Romero DEM. *Índice de Vulnerabilidade Clínico Funcional-20 (IVCF-20): reconhecimento rápido do idoso frágil* [Clinical-Functional Vulnerability Index-20 (CFVI-20): Rapid Identification of Frail Elderly]. Revista Saúde Pública. 2016; 50: 81.

Oliveira C E S, Felipe S G B, Silva C R D T, Carvalho D B, Silva-Júnior F, Figueiredo M L F, Santos A M R, et al. *Vulnerabilidade clínica e funcional de idosos de um centro dia* [Clinical and Functional Vulnerability of Elderly in a Day Care Center]. Acta Paul Enferm 2020;33:eAPE20190172.

Disclosure of Interest: None Declared

Experiences of Perinatal Individuals Initiating Medications for Opioid Use Disorder in the Inpatient Setting: A Qualitative Study:(2532) Casey Tak

ISQUA2025-ABS-2532

C. Tak ^{1,*}, K. Lawrence ¹, R. Prasitwarachot ¹, R. Jawish ¹, M. Tyszko ¹, E. Charron ², E. Johnson ¹, J. Cochran ¹, T. Metz ¹, A. Gordon ¹, M. Smid ¹

Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: While medications for OUD (MOUD) are recommended treatment during and after pregnancy, continuation of MOUD declines postpartum, coinciding with increased overdose risk for this population. Understanding the initiation process of MOUD during pregnancy may illuminate strategies to improve long-term treatment outcomes. The objective of this study was to explore the experiences of perinatal individuals initiating MOUD in the inpatient setting. We also sought to understand the most important factors that pregnant individuals with OUD consider when evaluating MOUD treatment options (buprenorphine or methadone).

Methods: A qualitative study was conducted at a single academic center among perinatal individuals (pregnant or up to 12 months postpartum) aged 18+ with OUD who initiated MOUD in the inpatient setting at some point during pregnancy. An advisory committee of individuals with lived experience with OUD informed the development of a semi-structured interview guide. The interviews explored participants' motivations for seeking hospital-based MOUD initiation, interactions with healthcare providers, level of involvement in care decisions, and factors influencing MOUD (buprenorphine or methadone) selection. We planned to recruit up to 25 participants, with an interim analysis conducted after 12 interviews to assess thematic saturation. Interviews were conducted in-person or virtually by a trained interviewer. Two independent coders analyzed the data using an inductive approach rooted in a modified grounded theory framework. Data were analyzed using Dedoose software. This study was approved by the University of Utah Institutional Review Board.

Results: From September 2024 through January 2025, we recruited 23 pregnant individuals with a mean age of 31.6 (standard deviation, SD, 5.5) years. The mean gestational age at hospitalization for MOUD initiation was 19.7 weeks (SD, 10.4). Most were publicly insured (n=21; 91%), completed high school or more education (n=16; 69.6%) and were unhoused (n=12; 52.2%). The majority were initiating on methadone (n=13, 56.5%) with the remainder on buprenorphine (n=12, 43.4%). Most had previously used MOUD in the past (n=19, 82.6%). Three main themes arose from the coded interviews (Table 1). The first theme was the role of pregnancy on their decision to initiate MOUD. Many participants' primary concern was the wellbeing of their fetus, a strong motivating factor to initiate or reinstate MOUD. Another theme was the critical role that clinicians and hospital staff had in their overall initiation experience, citing patient-centered and non-judgmental environments as critical to perceived recovery trajectory. Finally, the third theme centered on medication decisions, in which past experiences and recommendations of a participant's community were highly influential.

Image:

Table 1. Themes and relevant participant quotations

Theme 1: The role of pregnancy and the decision to initiate MOUD	P12: I knew that the time was running out, and I had to get sober because I was pregnant. P21: ...finding out about the baby, making sure the baby was safe... it completely changed my view on everything.
Theme 2: Impact of hospital and clinical staff on perceived recovery trajectory	P5: she just like didn't believe me, [she] didn't think that I actually needed a medication yet; ..if she would have just listened, I wouldn't have ended up in tears. P12: ...you know, I know that I've made the wrong choices to even end up here...but nobody gave me bad judgment or looked at me any differently. It was just what I needed.
Theme 3: MOUD decisions linked to past experiences and community influence	P10: I just had bad reactions to suboxone before...and I succeeded with [methadone]. P13: I've been on methadone before, and I know that coming out...that was really, really hard.

Conclusion: Pregnancy itself and a destigmatized environment for MOUD initiation, along with past experiences with MOUD, shaped decisions surrounding initiation of MOUD in pregnancy. Identifying factors at treatment initiation that are most important to pregnant individuals with OUD may inform interventions aimed at improving medication continuation during pregnancy and postpartum.

Disclosure of Interest: None Declared

From Intent to Impact: Strategic Collaborative Community Health Actions to Close Life Expectancy Gap. For health systems, success in bridging the health equity gap resides in connecting these efforts to the organization strategy that will drive action and outcomes. In our service areas, there is a noticeable difference in life expectancy to 15 years zip codes that are less than 10 miles apart or within a 15-minute drive. To address this issue, Cone Health's Center for Health Equity has launched the CATCH 5-in-5 program, which stands for Collaborative Actions Toward Community Health. This initiative aims to increase life expectancy by five years over the next five years. To achieve this goal, we will collaborate with communities and develop outreach programs focusing on three key areas: access to care, health education, and economic vitality. Our aim is to reach individuals who are most affected by poor health.: (2368) Olu Jegede & Chris Cornue

ISQUA2025-SES-2368

C. M. Cornue¹, O. Jegede^{2,*}

¹Chief Strategy Officer, ²Center for Health Equity, Cone Health, Greensboro, North Carolina, United States

Proposed Session Duration: 45 Minutes

Session Description: For health systems, success in bridging the health equity gap resides in connecting these efforts to the organization's strategy that will drive action and outcomes.

In our service areas, there is a noticeable difference in life expectancy—up to 15 years—between zip codes that are less than 10 miles apart or within a 15-minute drive. To address this issue, Cone Health's Center for Health Equity has launched the CATCH 5-in-5 program, which stands for Collaborative Actions Toward Community Health. This initiative aims to increase life expectancy by five years over the next five years. To achieve this goal, we will collaborate with communities and develop outreach programs focusing on three key areas: access to care, health education, and economic vitality.

Our aim is to reach individuals who are most affected by poor health.

Session Format: Presentation (30-40 minutes) with Q&A (5-15 minutes)

Target Audience: Health system Leaders, Clinicians, Primary Care, Strategy Leaders, Public Health, Community Based Care & Partners, Patients.

Objectives: Audience will understand:

the importance of strategy tied to organizational & community action

how to address gaps in life expectancies, with supported data & outcomes

impact of social drivers of health on a community through examples

how to create a healthcare ecosystem in minoritized communities

Research: - David A. Ansell, MD, MPH, et al. Health Equity as a System Strategy: The Rush University Medical Center Framework. Published April 21, 2021. NEJM Catal Innov Care Deliv 2021;2(5) DOI: 10.1056/CAT.20.0674. VOL. 2 NO. 5. Copyright © 2021. <https://catalyst.nejm.org/doi/full/10.1056/CAT.20.0674>

- The Promise of Prevention: The effect of four preventable Risk Factors on National Life Expectancy, By Goodarz Danaei et al, Harvard School of Public Health, Boston.

- Dwyer-Lindgren L, Bertozzi-Villa A, Stubbs RW, Morozoff C, Mackenbach JP, van Lenthe FJ, Mokdad AH, Murray CJL. Inequalities in Life Expectancy Among US Counties, 1980 to 2014: Temporal Trends and Key Drivers. JAMA Intern Med. 2017 Jul 1;177(7):1003-1011. doi: 10.1001/jamainternmed.2017.0918. PMID: 28492829; PMCID: PMC5543324.

- Nambi Ndugga, Latoya Hill, and Samantha Artiga, Key Data on Health and Health Care by Race and Ethnicity. Published: June 11, 2024. <https://www.kff.org/key-data-on-health-and-health-care-by-race-and-ethnicity/?entry=executive-summary-introduction>

We will review research data comparing the drivers of life expectancy in the general population with that in our service areas and then discuss data from our CATCH 5 in 5 Registry showing improved health outcomes.

Most of these data used are between 2017 and 2024.

Suitability: This presentation showcases the critical link among healthcare system, strategy, and clinical leadership with a strong emphasis on the importance of partnership to drive community-based action and change. The possibilities that are created when this alignment occurs are inspiring and critical if we are to shape a future of healthcare access, equity, and outcomes for ALL.

Have you presented this session at a Conference before including ISQua?: No

Disclosure of Interest: None Declared

Adoption, Design, and Implementation of a Patient Safety Program for the Prevention of Venous Thromboembolism (VTE) at Hospital Español de la Ciudad de México: (2867) Luis Ramon Torres Torija Arguelles

ISQUA2025-ABS-2867

R. Puppo Castro ¹, X. S. Pompa Borbolla ^{1,*}, L. R. Torres Torija Arguelles ¹, R. Martinez Zubieta ²

¹Calidad, ²Dirección Médica, Hospital Español, Ciudad de México, Mexico

Preferred presentation method: 10 Minute Lightning Talk (E-Poster)

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: El tromboembolismo venoso (TEV) es una de las principales causas prevenibles de morbilidad hospitalaria. Hasta el 60% de los casos de TEV están relacionados con la hospitalización, lo que la convierte en una de las principales causas de muertes intrahospitalarias prevenibles. La incidencia global varía entre el 2 y el 10%, y América Latina reporta tasas anuales entre 0,75 y 2,69 casos por cada 1.000 individuos. Este estudio evalúa la factibilidad de un **programa de prevención de TEV** en el Hospital Español de la Ciudad de México, basado en las mejores prácticas internacionales y adaptable a hospitales con limitaciones financieras. Dado su impacto, esta iniciativa ha sido designada como **Objetivo Internacional de Seguridad del Paciente N° 7** en la institución. **Objetivos:** 1. Identificar a los pacientes de alto riesgo al ingreso e iniciar la trombopprofilaxis oportuna mientras se evalúan los riesgos de sangrado. 2. Implementar un sistema de seguimiento y reevaluación periódica de los pacientes hospitalizados. 3. Mejorar el cumplimiento de las directrices de prevención por parte del personal médico mediante intervenciones específicas. 4. Evalúe los resultados utilizando indicadores clave de seguridad del paciente.

Methods: Se desarrolló un **sistema de monitoreo proactivo estratificado por riesgos**, que incluye: - **Evaluación inicial del riesgo de TEV** utilizando escalas validadas (p. ej., Caprini Score) al ingreso. - **Reevaluaciones periódicas de 24-48 horas** para ajustar las estrategias de prevención en función de la evolución clínica. - **Auditorías en tiempo real** Para identificar pacientes de alto riesgo sin profilaxis adecuada. - **Intervención directa del médico** para asegurar el cumplimiento de las guías institucionales de trombopprofilaxis. - **Revisión de comités interdisciplinarios**, en la que participan médicos en formación, líderes de enfermería y funcionarios de seguridad del paciente.

Results: La incidencia de TEV intrahospitalario disminuyó de **1,9 casos (2017) a 0,10 casos (2024)**. - **Aumento del 72% en la adherencia** a la trombopprofilaxis farmacológica entre el personal médico. - **Reducción de la mortalidad relacionada con la embolia pulmonar** en pacientes hospitalizados.

Image:



Conclusion: El **Programa de Prevención de TEV del Hospital Español** demuestra que las mejores prácticas reconocidas internacionalmente se pueden implementar con éxito en **entornos de bajos recursos** con **una inversión mínima** y **un alto impacto clínico**. Estos hallazgos se alinean con estudios globales que muestran que la **prevención del TEV reduce las tasas de trombosis adquirida en el hospital hasta en un 60-70%**, aliviando la carga clínica y económica de esta afección.

References:

1. **Hospital Español de la Ciudad de México.** (2019). *Guía de Tromboprofilaxis Institucional: Manejo de Pacientes con Riesgo de Enfermedad Tromboembólica Venosa* (Versión B, Código GUIA-ETV-01). Hospital Español de la Ciudad de México.
2. **Kahn, S. R., Lim, W., Dunn, A. S., Cushman, M., Dentali, F., Akl, E. A., & Cook, D.** (2012). Prevención de TEV en pacientes no quirúrgicos. *Cofre*, 141(2_suppl), e195S-e226S. <https://doi.org/10.1378/chest.11-2296>
3. **Caprini, J. A.** (2005). Evaluación del riesgo de trombosis como guía para la atención de calidad al paciente. *Enfermedad al mes*, 51(2-3), 70-78. <https://doi.org/10.1016/j.disamonth.2005.02.003>
4. **Instituto Nacional para la Salud y la Excelencia Asistencial (NICE).** (2018). *Tromboembolismo venoso en mayores de 16 años: reducción del riesgo de trombosis venosa profunda adquirida en el hospital o embolia pulmonar*. Obtenido de <https://www.nice.org.uk/guidance/ng89>

Disclosure of Interest: None Declared

Improving Post-Surgical Opioid Stewardship: A Path to Safer ACL Recovery: (2422) Samantha Chan

ISQUA2025-ABS-2422

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¹Quality, Safety & Risk Management, ²Nursing Clinical Services, KK Women's and Children's Hospital, Singapore, Singapore

Preferred presentation method: 10 Minute Lightning Talk (E-Poster)

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Patients undergoing knee surgeries, particularly ACL reconstructions, often experience moderate to severe pain and are discharged on post-operative day 1 with multimodal analgesia. However, inconsistent opioid prescriptions create uncertainty around opioid safety and handling, especially among teenage patients who manage their medications independently. Studies have highlighted the risk of opioid overuse in this population, underscoring the need for a standardized prescribing approach.

An audit was conducted to assess opioid sufficiency at discharge for ACL surgeries. Data revealed a median of 1.45 mg/kg of oxycodone was prescribed, but follow-ups by the Nursing Team showed a median of only 0.6 mg/kg was consumed. A month later, patients were encouraged to return unused opioids to the Pharmacy to prevent misuse. Pain scores and feedback indicated effective pain management, with 16% of patients requiring no opioids post-discharge. These findings highlight the need to review opioid prescribing practices.

Methods: The team shared the audit findings with the team - Orthopaedic surgeons, anaesthetists as well as the nurses from the Paediatric Pain Management Team managing the patients. Upon seeing the findings, all agreed to reduce orders by standardizing the prescription to 2 days of oral oxycodone 0.4mg/kg prn, unless there are other clinical indications/ needs.

While trial-ing the new workflow, the team noted that there were irregularities in prescriptions. A Root Cause Analysis revealed that junior doctors rotating through the department were not aware of the new workflow as they have just been rotated into the department. A briefing session were held to convey the change and the new workflow has also been incorporated into the junior/ new doctors' orientation program where all will have to undergo as they join the department.

Results: The initiative led to a significant reduction in opioid prescriptions, with a 49% decrease in prescribed opioids, a 51% reduction in patient consumption, and a 42% decrease in the excess balance of oxycodone in the community. Although there was a slight increase in the median patient-reported pain score from 1.61 to 1.79 out of 10, no patients requested opioid refills or were readmitted for pain management. These results indicate that the streamlined opioid prescribing approach successfully minimized opioid use without compromising patient pain management or outcomes.

Image:

Results

Patient age group	14 to 18 years old
Weight	45.8 to 108kg
Monitoring period	February to September 2024 (8 months)
Sample size	n = 33 (13 pre intervention, 20 post intervention)

Results	Pre Intervention	Post Intervention	Achievement	P-Value
Median Ordered	1.45mg/kg	0.74mg/kg	49% Reduction	<0.005
Median Consumed by patient	1.5mg/kg	0.74mg/kg	51% Reduction	<0.005
Median Balance Oxycodone in the community (capsules)	12	7	42% Reduction	
Median Patient Reported Pain Score	1.61	1.79	Slight increase but patients did not request for refill or re-admitted for pain management	

Conclusion: The streamlined opioid prescribing approach for ACL reconstruction patients resulted in no reported functional debilitation, readmissions due to pain, or refill requests. Some patients required no opioids post-discharge, reducing the risk of opioid misuse. Standardized prescriptions not only enhanced safety, minimized unnecessary costs, it had also improved patient outcomes, reduced the risk of opioid diversion in the community and ensured safe, effective pain management. Future efforts should focus on further standardizing prescribing practices and enhancing patient education on opioid use and disposal.

References: JAMA Network Open - Preoperative vs Postoperative Opioid Prescriptions and Prolonged Opioid Refills Among US Youths - July 5, 2024

MDEdge - Persistent opioid use a risk after surgery in teens and young adults - January 24, 2018

Disclosure of Interest: None Declared

Digital Transformation in Pharmacy Practice: Achieving Quality Enhancement and Sustainable Healthcare Delivery: (1655) Ching-Wen Chen

ISQUA2025-ABS-1655

C.-W. Chen ^{1 2,*}, M.-Y. Lai ^{1 3}, T.-Y. Lin ¹, C.-L. Ou-Yang ¹, S.-Y. Wu ¹, M.-S. Wu ¹, L.-Y. Tang ¹, C.-H. Lu ¹, P.-C. Lin ¹, C.-C. Hsieh ¹, H.-M. Chang ¹

¹Department of Pharmacy, Kaohsiung Veterans General Hospital, Kaohsiung, ²Department of Pharmacy and Master Program, College of Pharmacy and Health Care, Tajen University, Pingtung, ³Institute of Information Management, National Kaohsiung University of Science and Technology, Kaohsiung, Taiwan

Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Medication dispensing processes in outpatient settings are complex and prone to errors, potentially compromising patient safety. Automated equipment and intelligent systems have been introduced worldwide to improve dispensing accuracy. Despite technological advancements and assistance, human intervention by pharmacists remains crucial. This project aims to enhance medication safety by integrating digital transformation with quality improvement strategies in pharmacy services.

Methods: We implemented a multi-faced quality improvement initiative focusing on reducing medication dispensing errors through four key strategies: (1) user-centric customized medication labeling coding: enhancing reminders and identification, (2) real-time prescription information synchronization and optimization within the verification system: integrating data with the near-miss incident reporting system, (3) distinctive chromatic alert pop-up windows: implementing visual alerts for anomaly detection, and (4) barcode medication administration (BCMA) integration: enhancing real-time query capabilities. We evaluate the interventions by collecting baseline dispensing error data from 2021 to 2022, implementing strategies from June to October 2023, and then assessing the impact of dispensing errors from November 2023 to October 2024. A nonparametric chi-square test was used to compare the dispensing error rates before and after implementation, with a statistical significance set at < 0.05 .

Results: Analysis of over ten million prescription records revealed a significant reduction in medication dispensing errors. The dispensing error rate decreased from 8.29 parts per million (ppm) to 1.99 ppm at one-year follow-up post-implementation. Statistical analysis confirmed the significance of these improvements ($p < 0.001$). Operational efficiency showed marked improvement, with a 21% decrease in peak-hour waiting time, while patient satisfaction metrics increased from 4.2 to 4.6 on a five-point scale. Furthermore, the intervention yielded annual socioeconomic benefits exceeding NTD 3.4 million through improved dispensing efficiency, reducing medication error and paper consumption.

Conclusion: Our innovative approach demonstrated how integrating digital transformation into pharmacy practices can improve service quality and patient safety by leveraging optimized user interfaces, process automation, environmental awareness, and supply chain visibility, ultimately contributing to sustainable healthcare delivery.

Disclosure of Interest: None Declared

Less is More: Implementing the Choosing Wisely Initiative to Reduce NSAIDs Usage in Pre-ESRD Patients Through a Data-Driven, Multidisciplinary Approach: (3270) Yun-Hsuan Li

ISQUA2025-ABS-3270

Y.-H. Li^{1,*}, C.-H. LIU², M.-J. YANG², C.-Y. HSIAO³, H.-C. LIN⁴, H.-F. KAO⁵

¹Department of Medical Quality, ²Medical Quality, ³Nephrology, ⁴Pharmacy, ⁵IT, Ditmanson Medical Foundation Chia-Yi Christian Hospital, Chia-Yi City, Taiwan

Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Chronic kidney disease (CKD) led Taiwan's top ten medical expenditures in 2019, costing NT\$56.2 billion. NHIA's 2020 analysis found that Pre-End-Stage Renal Disease (Pre-ESRD) patients using NSAIDs initiated dialysis 129 days earlier than those who did not. To prevent NSAID-induced renal damage, NHIA conducts quarterly audits of NSAIDs prescriptions for CKD patients. Data showed our hospital's NSAIDs prescription rates for Pre-ESRD patients exceeded those of peer institutions within the Southern Healthcare Network. Aligned with the Choosing Wisely initiative, which promotes evidence-based decision-making and reduction of unnecessary medical interventions, an interdisciplinary team was formed to implement structured interventions to reduce NSAID-related adverse events and improve medication safety.

Methods: A multidisciplinary team, led by the Department of Medical Quality, collaborated with nephrology, pharmacy, IT, to develop policies minimizing NSAID risks. Departmental visits reinforced Choosing Wisely principles, advocating evidence-based prescribing and minimizing unnecessary NSAID use. Also patient engagement was central to this initiative, ensuring individuals played an active role in treatment decisions. Educational efforts included public lectures and patient counseling. Sessions emphasized renal risks, alternative pain management strategies, reinforcing Choosing Wisely's message of informed, responsible healthcare choices. Additionally, the physician order entry system was updated with automated alerts. NSAID prescriptions were blocked for eGFR < 15 (excluding dialysis patients), while alerts for eGFR 15-45 prompted physicians to minimize NSAID use. For prescriptions exceeding 28 days, an eGFR test was mandated if no recent data was available. Further more, A Power BI dashboard enabled real-time tracking, providing feedback to physicians and department heads, ensuring continuous safety improvements.

Results: Since Q4 2021, NSAID-related adverse events in CKD patients dropped from nearly 400 annually to just 8 cases in Q1 2023 following Q3 2022 intervention. NSAIDs prescription rates for eGFR < 45 declined from 10.63% to 4.92%, and for eGFR < 15, the rate reached 0% in Q4 2023 and Q1 2024. This demonstrated the effectiveness of a structured, interdisciplinary approach in reducing medication-related risks.

Conclusion: End-stage renal disease (ESRD) remains a major health issue in Taiwan, with incidence and prevalence rates exceeding those of other developed nations. To slow CKD progression, integrating evidence-based medication safety mechanisms is essential. This project embodies the Choosing Wisely initiative, advocating prudent prescribing and reinforcing the concept that "Less is More"—reducing unnecessary NSAIDs prescriptions leads to better patient outcomes rather than over-reliance on medication. By adhering to the Hippocratic principle of "First, do no harm," interdisciplinary collaboration and multifaceted interventions successfully minimized NSAID-related adverse events, optimizing patient-centered care. Standardizing these strategies across healthcare institutions may enhance medication safety and improve overall care quality.

References: Szeto, C. C., Sugano, K., Wang, J. G., Fujimoto, K., Whittle, S., Modi, G. K., ... & Chan, F. K. (2020). Non-steroidal anti-inflammatory drug (NSAID) therapy in patients with hypertension, cardiovascular, renal or gastrointestinal comorbidities: joint APAGE/APLAR/APSDE/APSH/ recommendations. *Gut*, 69(4), 617-629

Disclosure of Interest: None Declared

Improving discharge data quality through a co-designed multidisciplinary educational approach: (2416) Rachel McCauley

ISQUA2025-ABS-2416

R. McCauley ^{1,*}, A. Matthews ¹, A. Connolly ¹, M. Kirwan ¹

¹School of Nursing, Psychotherapy and Community Health, Dublin City University, Dublin, Ireland

Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Hospital charts and discharge summaries act as communications between junior doctors and Hospital In-Patient Enquiry (HIPE) data coders. To date, despite their indirect communications, no intervention has been co-produced by both junior doctors and HIPE coders pertaining to their shared recording of patient data. Hospital acquired adverse events (HAAEs) in older people are known to be useful indicators of care quality and are highly costly to the health system. These conditions have the potential to be missed or mis-identified in the process of data recording to data coding. The aim of this study was to co-design an educational tool with junior doctors and HIPE coders to enhance the identification and capturing processes of recording HAAE data.

Methods: A four-step co-production framework was developed in order to co-develop an educational tool to increase the identification and capturing of three common hospital acquired adverse events (HAAEs); delirium, pneumonia, and urinary tract infections. This four-step co-production consisted of assessment of existing educational/informational resources, stakeholder/user consultation, co-production workshopping, and development and piloting of a co-produced educational tool. Step one consisted of investigating the current resources available to junior (intern) doctors in their completion of hospital charts and discharge summaries for use by HIPE coders. Step two consisted of surveying HIPE coders and managers on their experiences in coding HAAEs from hospital charts and discharge summaries. Step three amalgamated the findings from steps one and two to workshop the content and presentation of the educational tool with a panel of experts in both completing and coding charts and discharge summaries. Finally, step four involved piloting and evaluating the produced tool with junior doctors.

Results: A literature review and thematic analysis of a survey conducted with HIPE coders and managers (n=75) across the Republic of Ireland were undertaken as step one and two of framework. Provisional results indicate that omission of HAAEs occur due to a combination of a lack of delineation between pre-existing and hospital acquired adverse events, and a lack of signposting of hospital acquired adverse events by junior doctors on charts and discharge summaries. Based on these results, we will progress to step three, developing the content and format of the educational tool which will assist junior doctors and HIPE coders in understanding their collaborative responsibility to communicate HAAEs and to increase the accuracy of the recording of HAAEs. Once undertaken, we aim to progress to step four, piloting this tool in a partnering hospital when completed and approved by our expert panel. These findings will be available for presentation at ISQua's 41st International Conference. At this stage, this framework will have satisfied its aims and have produced the proposed educational tool for presentation.

Conclusion: In identifying the areas of missed communication and the resulting potential for omission of HAAEs in HIPE data, we aim to disseminate this free-for-use tool beyond our piloting hospital as a resource for all junior doctors and HIPE coders to use to hone HAAE recording processes.

Using a Real-Time Intelligent Radiation Dose Monitoring System to Reduce X-ray Retake Rate: (2411) Chih-Cheng Kuo

ISQUA2025-ABS-2411

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: X-ray imaging is one of the most widely used radiological examinations due to its relatively low radiation exposure to patients. However, improper equipment use, incorrect parameter settings, and poor patient positioning by radiologic technologists (RTs) often lead to unclear or incorrect images, necessitating retakes without patient notification. This increases both medical costs and patient radiation exposure. In the first half of 2023, the X-ray retake rate reached **7.65%**, exceeding the international average of **5%**.

To effectively manage equipment, manpower, radiation exposure, and operational efficiency, we developed a **real-time digital X-ray radiation dose intelligent monitoring system**. This system continuously monitors X-ray procedures, providing real-time alerts to RTs and image quality control personnel. The goal is to reduce retakes, improve healthcare quality, and enhance patient safety.

Methods:

Establishing Radiation Dose Thresholds for X-ray Examinations

Based on the **International Commission on Radiological Protection (ICRP)** guidelines for tissue and organ radiation weighting factors, we defined minimum, maximum, and threshold radiation doses for different X-ray examinations. This enables RTs to intuitively manage radiation exposure.

Developing an Intelligent Monitoring System

A **fully digital real-time radiation dose monitoring system** was implemented with preset dose thresholds. If an examination exceeds its threshold, an alert is immediately displayed on the RT's workstation and the image quality control center, notifying staff of an **"abnormal dose"**. This ensures adherence to the **As Low As Reasonably Achievable (ALARA)** principle and minimizes the retake rate.

Targeted Staff Training and Support

For RTs with higher retake rates, **individualized coaching** was provided by experienced mentors. After training, unit supervisors conducted follow-up discussions using the **ADAPT (Ask-Discussion-Ask-Plan Together)** method. Training effectiveness was jointly evaluated by mentors and supervisors. Those who failed to meet performance criteria underwent additional coaching.

Results:

1. The X-ray retake rate **decreased from 7.65% (H1 2023) to 3.01% (H2 2024), a 60.65% reduction**, significantly lower than international benchmarks.
2. A total of **8 RTs** received targeted coaching, with **only one requiring further training** due to an **OSCE score below 80%**. This individual later improved and passed.
3. **Staff satisfaction reached 94.4%, while patient satisfaction was 95.2%** in 2024.
4. **Economic benefits:** Improved positioning accuracy and reduced exposure errors minimized equipment overuse, saving approximately **NT\$730,000** annually in medical costs.
5. **Workforce efficiency:** Fewer retakes reduced RT workload, saving **2 labor hours per day**, amounting to **over NT\$180,000 in annual labor costs**.

Conclusion:

1. The **radiation dose real-time monitoring system** established a **backend management database**, tracking retake personnel, body parts, causes, and equipment. Monthly reviews ensure continuous performance improvement.
2. Although X-ray examinations are **not yet included in nuclear regulatory radiation quality assurance requirements**, real-time monitoring ensures **proactive radiation safety management**.
3. Beyond system implementation, **fundamental improvements in compliance with ALARA guidelines** and enhanced professional skills among RTs contribute to **sustained reductions in unnecessary radiation exposure**.

Disclosure of Interest: None Declared

Use of AI to predict the intervention effectiveness of the incidence in-hospital cardiac arrest: (2089) Hui-Chen Lee

ISQUA2025-ABS-2089

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Preferred presentation method: 10 Minute Lightning Talk (E-Poster)

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: In-Hospital Cardiac Arrest (IHCA) is a common and high-risk patient safety issue in healthcare settings. Vital signs deteriorate a few hours before a cardiac arrest event. Reducing the occurrence of cardiac arrest in hospitals focuses on early identification and prevention. The clinical warning system can detect the deterioration of a patient's condition before an incident occurs, and alert the medical team to immediate medical action. In the analysis of emergency quality indicators, about 50%-84% of patients with IHCA will have a deterioration of clinical symptoms and vital signs 6-8 hours before the cardiac arrest event, but only 25% of patients can be detected by medical personnel in advance. AI is used to predict patients with

unexpected cardiac arrest, remind the medical team to intervene as soon as possible, and reduce the incidence of cardiac arrest in the hospital.

Methods: Referring to the National early warning score (NEWS), the six indices of blood pressure, body temperature, pulse, respiration rate, oxygen use and blood oxygen saturation concentration were used as indicators, and the severity was determined according to the data of different sub-items, and the sub-scores were summed up. Through AI, the scores of the above six items are calculated every 4 hours, and when the score reaches more than 5 points, the automatic alert information system allows the medical team to grasp the condition of the patients in the hospital and deal with them in a timely manner, and carry out shift handover.

Through AI prediction, the hospital cardiac arrest event is intervened and dealt with as soon as possible, and the first aid quality is reviewed and analyzed every month, and the incidence of unexpected cardiac arrest events in the hospital and the effectiveness of first aid quality are analyzed.

Results: A total of 449 patients with cardiac arrest in the hospital from 2019 to 2024 were analyzed, and 378 patients had an AI warning score higher than 5 within 24 hours before the cardiac arrest event, with a predictive power of up to 84.2%. The mortality rate of in-hospital unexpected cardiac arrest events decreased from 72.3% before improvement to 62.8% after improvement ($p<0.05$). The proportion of patients with unanticipated cardiac arrest who survived and was discharged increased from 25.6% before improvement to 35.8% after improvement ($p<0.05$). The proportion of patients with cardiac arrest resuming spontaneous circulation increased from 58.4% before improvement to 71.3% after improvement ($p<0.05$). The proportion of patients receiving hypothermia has been increased from 60% before improvement to 100% after improvement.

Conclusion: AI can predict patients in high-risk groups with IHCA, helping the medical team to detect patients whose condition is deteriorating early and intervene early. The improvement did reduce the mortality rate of unexpected cardiac arrest events in the hospital, while improving the quality of first aid, and increasing the proportion of survivors and discharge after resuming spontaneous circulation and first aid. Early intervention in medical treatment can reduce the occurrence of unexpected emergency events for patients.

Disclosure of Interest: None Declared

Transforming OR Efficiency and Patient Care: Evercare Hospital Lahore's Journey of Innovation and Expansion: (3350) Uzair Shaikh

ISQUA2025-ABS-3350

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Evercare Hospital Lahore, established in 2019, faced operational challenges, worsened by COVID-19, limited specialties, inefficiencies, and lack of digital systems. Its 7 operating rooms struggled with poor scheduling, weak KPI monitoring, communication gaps, paper-based records, staff training issues, and billing inconsistencies. These problems, identified in Q4 2022, impacted patient safety, costs, reputation, and staff performance. In Q1 2023, the hospital launched interventions focused on cultural change and process innovation to improve outcomes.

Methods: Evercare Hospital Lahore applied the PDCA (Plan-Do-Check-Act) Model to improve its operating rooms (ORs) by addressing inefficiencies, enhancing patient safety, and optimizing workflows.

Plan:

- Identified challenges such as inefficient workflows, documentation gaps, and poor stakeholder collaboration.
- Set goals to transform OR culture, implement technology-driven solutions, and enhance patient and employee experiences.
- Proposed solutions, including an in-house HIMS and ERP system, cultural shifts, and process improvements.

Do:

- Developed HIMS with OR booking, digital documentation, automated billing, and KPI dashboards.
- Streamlined patient journeys and staff workflows.
- Encouraged cultural and behavioral changes through teamwork, upgraded staff lounges, and stakeholder collaboration.
- Enhanced patient safety with infection monitoring, digital feedback, and governance structures.
- Improved employee experience via upgraded facilities and engagement in decision-making.
- Promoted OR capabilities through ethical marketing and partnerships for complex surgeries.

Check:

- Monitored clinical KPIs (e.g., OR utilization, changeover times, SSI rates).
- Conducted audits and feedback reviews for infection control, patient experience, and staff satisfaction.
- Held monthly governance reviews to track progress and address gaps.

Act:

- Continuously refined HIMS and ERP systems.
- Standardized successful interventions hospital-wide.
- Strengthened stakeholder engagement and transparency.
- Promoted OR advancements through ethical marketing and expanded partnerships.
- This structured approach helped improve OR efficiency, patient safety, and hospital reputation while fostering a culture of continuous improvement.

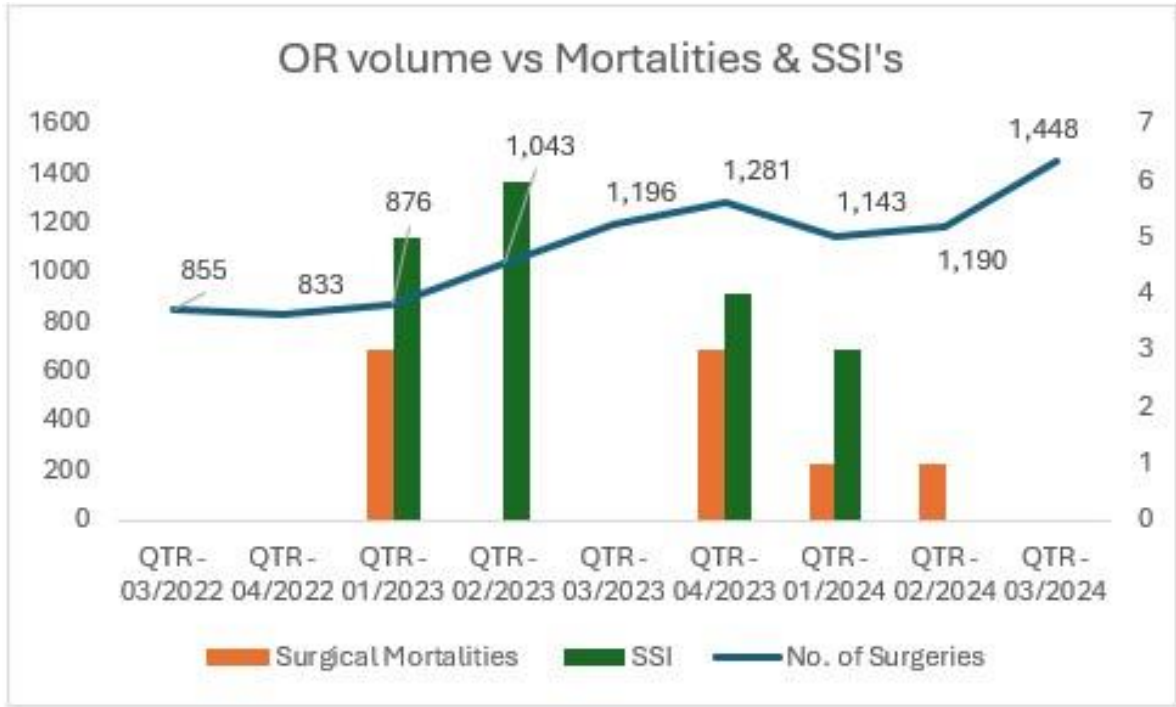
Results: The Q1 2023 interventions led to a 69% increase in OR service volumes by Q3 2024, despite initial challenges.

Key Outcomes:

- Healthcare Quality: Reduced Surgical Site Infections (SSIs) and fewer than five OR incidents in the last two quarters, indicating improved safety.
- Patient Experience: A digital feedback system (introduced in Q4 2023) enhanced transparency, showing increased satisfaction with care quality and communication specially in OR with more than 90% satisfaction for all specialties.
- Health Outcomes: Improved post-operative survival rates, shorter hospital stays due to optimized workflows, and a continued decline in SSIs through strict clinical protocol adherence.

These improvements reflect enhanced efficiency, safety, and patient-centered care in Evercare Hospital Lahore’s ORs.

Image:



Conclusion: The success of **Evercare Hospital Lahore’s interventions** led to the adoption of similar initiatives at **Evercare Hospital Lekki, Nigeria**, customized to local needs.

Key Actions in Lekki:

- Leadership engagement and **cross-hospital collaboration**
- Strengthened **clinical SOPs** and **capacity-building programs**
- Early results show **increased patient volumes** and **improved care quality**

Key Lessons:

- **Stakeholder involvement, cultural transformation, strong leadership, and data-driven decision-making** are crucial for sustainable improvements.

Way Forward:

- Evercare **Lekki will continue expanding** the initiative.
- **Evercare Lahore plans to integrate AI** into OR systems in the next phase to further enhance performance and patient outcomes.

Disclosure of Interest: None Declared

Bridging Gaps in Small Sick Newborn Care: A Data-Driven CQI Approach in NEST 360 supported facilities in Kenya, Malawi, Nigeria, and Tanzania, 2025: (2217) Nebiyu WENDWESSEN Hailemariam

ISQUA2025-ABS-2217

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

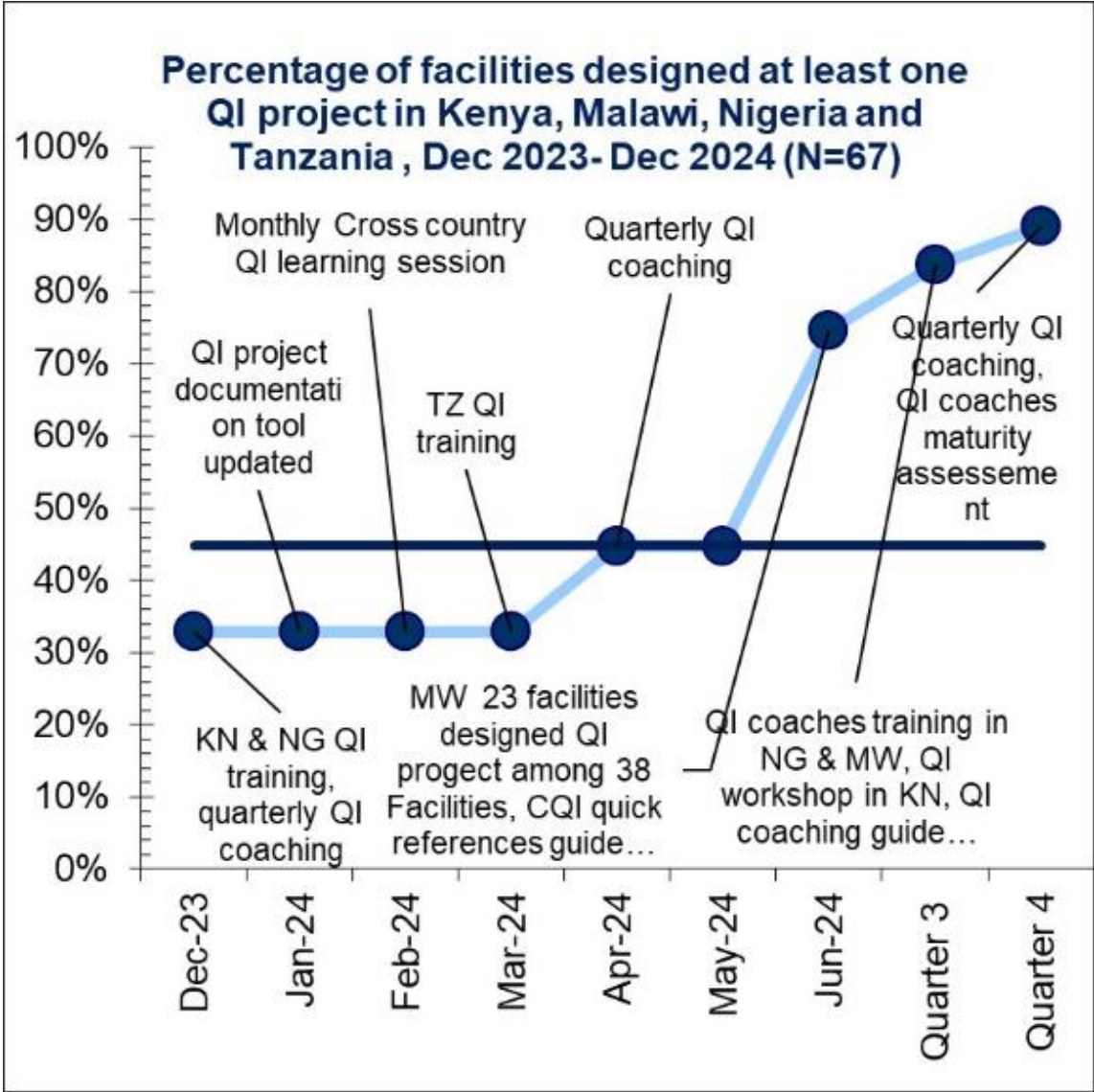
Introduction: Supporting SDG 3.2 to end preventable neonatal deaths, the NEST360 program, launched in 2019, aims to reduce neonatal mortality in level II neonatal wards across four African countries. Achieving this goal requires accelerating coverage and quality of care improvements in critical interventions, including Continuous Positive Airway Pressure (CPAP), Kangaroo Mother Care (KMC), phototherapy, and neonatal hypothermia reduction, through a systematic approach. In 2021, the program started a Continuous Quality Improvement (CQI) approach to drive progress in these 4 interventions, focusing on both coverage and quality. We describe the NEST360 CQI approach to improve small sick newborn care (SSNC) and accelerate QI in 67 NEST360-supported newborn care units in the 4 countries.

Methods: The CQI approach encompassed interventions and support including developing and distributing training materials that build on existing national QI tools, Ward improvement team (WIT) CQI quick reference and coaching guide, identifying quality gaps using an online dashboard accessible on the ward, CQI training for WIT and in-facility QI coaches, providing onsite and virtual QI coaching, facilitating in-country and cross-country learning sessions, and monitoring responses and outcomes for intervention adjustment. We report on data from December 2023 to December 2024.

Results: A total of 404 WIT members from 67 NEST360-supported hospitals received basic and coaches' level CQI training. As of December 2024, 88% (n=59) of facilities have at least one local QI coach to support CQI. NEST360, in partnership with country Ministry of Health, conducted 259 onsite and virtual coaching,

ensuring all supported hospitals received one or more onsite QI coaching per quarter. In quarter 4 of 2024 96% of facilities designed and implemented one or more QI project per facility. These interventions contributed to facility and program-level improvements in CPAP, KMC, and neonatal hypothermia reduction at admission coverage. The increase in QI was facilitated by strong leadership at country and facility levels, and broader NEST360 actions including infrastructure funds, appropriate equipment and maintenance, advocacy, and clinical training and mentorship. Harvesting learning from CQI activities is contributing to change packages for the key interventions.

Image:



Conclusion: We implemented a structured CQI approach that empowers facility WIT and local QI coaches, leveraging country QI work, resulting in a measurable increase in QI activities and improvements in CPAP, KMC, hypothermia prevention, and phototherapy coverage. Moving forward, continued investment in local CQI capacity building and embedding CQI principles within local health systems is underway to further scale and sustain SSNC coverage and quality improvements.

Disclosure of Interest: None Declared

Lunchtime

Lightning Talks

Improving Immediate Postpartum Family Planning Uptake Through High-Impact Bundle Intervention in Primary Healthcare Units, Ethiopia: (3399) Zekarias Seife Bashaye

ISQUA2025-ABS-3399

Z. S. Bashaye ^{1,*}, B. Abera ¹, H. Abdi ¹, T. Dana Darebo ¹, E. Abate ¹, B. Kifle ¹, T. Hiwot ¹, A. Kedir ¹, B. Teklewold ¹, I. Shemsedin ¹

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Preferred presentation method: 10 Minute Lightning Talk (E-Poster)

Have you presented this abstract at an ISQua Conference before?: No

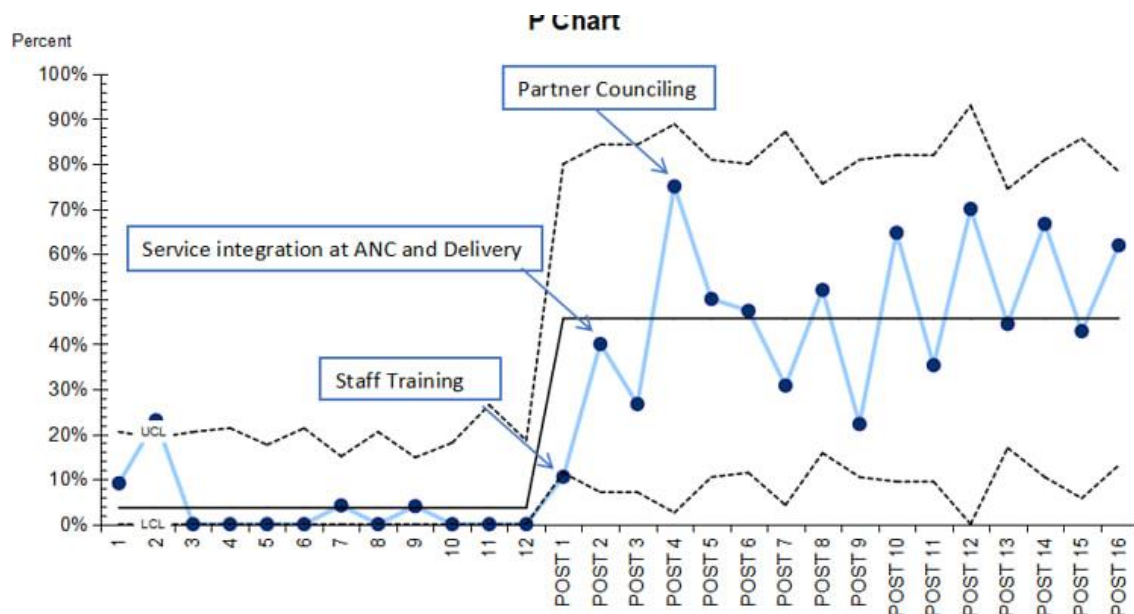
I confirm that the submission has been approved by all authors: Yes

Introduction: In Ethiopia, Immediate Postpartum Family Planning (IPFP) uptake remains low, with only 10% of postpartum women utilizing contraception, increasing maternal and infant health complications. Despite its proven benefits, IPFP is underused due to missed opportunities for counseling during antenatal care (ANC) and delivery. This study aimed to increase IPFP uptake into at Bishoftu Health Center through a bundled quality improvement intervention from a baseline 3.36% to 40 %.

Methods: The intervention integrated immediate postpartum family planning (IPFP) counseling and services into ANC and delivery workflows. The intervention included (1) staff training on IPFP counseling and service provision, (2) routine integration of PPFP counseling into ANC visits, (3) establishment of a dedicated PPFP corner in the maternity ward, and (4) introduction of partner counseling to improve decision-making support. A pre-intervention baseline assessment over 12 weeks determined the existing IPFP uptake rates to be 3.36%. Following this, a 16-week intervention period began, where trained staff recorded weekly data on IPFP uptake from maternity service records. Data were analyzed using Statistical Process Control software, QI-Charts v. 1.0.39, with a P-chart for monitoring trends. Control limits were set at ± 3 standard deviations from the mean uptake rate to detect shifts. All participants provided informed consent, and patient confidentiality was ensured through anonymized data and secure storage.

Results: The P-chart analysis demonstrated a significant increase in average IPFP uptake, rising from a pre-intervention baseline of 3.61% over 12 weeks to 45.68% during the 16-week intervention period. Among contraceptive methods, Long-Acting Reversible Contraceptives (LARCs) were the most frequently chosen, accounting for 86.47% of selections, with implants being the most preferred method. Partner involvement was associated with a notable increase in adoption rates, with IPFP uptake reaching 75% during its initiation in the fourth week of implementation

Image:



Conclusion: Integrating IPPFP into ANC and delivery workflows through a bundled approach significantly improved uptake at Bishoftu Health Center and sustained improvements over time. This intervention reduced missed opportunities by ensuring structured counseling, staff training, and partner involvement in decision-making. These findings suggest that similar interventions in resource-limited settings can improve postpartum contraceptive access and maternal health outcomes.

Disclosure of Interest: None Declared

Patient safety first: A study on the compliance of evaluation reports with patient safety standards: (1861) Camila Leal Deister Machado

ISQUA2025-ABS-1861

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¹Certificação, Organização Nacional de Acreditação, São Paulo, Brazil

Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Patient safety is a fundamental pillar of healthcare quality and essential for reducing risks within healthcare organizations. This study analyzes data extracted from evaluation reports, focusing on specific requirements related to patient safety protocols, highlighting how organizations have implemented these standards.

Objective: To analyze the compliance with patient safety standards through specific requirements assessed in healthcare organizations, based on evaluation reports.

Methods: Quantitative analysis considering data extracted from 3,848 evaluation reports of accredited organizations between 2022 and 2024. The analysis focused on 1,400 accredited organizations, encompassing various profiles.

Results: Three requirements related to patient safety policy were analyzed in the subsections of leadership, quality, and safety management, and subsections in the Patient Care Section that apply.

The results in the Leadership Subsection show that 83% of healthcare organizations comply with requirement “establishment of a documented patient safety policy”, indicating that the vast majority recognize and formally adopt safety practices as a strategic pillar. However, the 8% non-compliance and 8% partial compliance suggest that some organizations still need to evolve in this regard.

The results from the Quality and Safety Management Subsection indicate that 69% of healthcare organizations comply with the requirement “establishment, implementation, and maintenance of patient safety protocols”, reflecting a positive scenario in line with expectations for adherence to these protocols. The 23% partial compliance suggests challenges in consolidating them. On the other hand, the 8% non-compliance highlights persistent barriers in some institutions. The zero percentage of "not applicable" is consistent, as the requirement is mandatory.

The results related to the requirement "Complies with the patient safety protocol guidelines, aligned with the Institutional policy" from the Patient Care Section indicate that 56% of healthcare organizations comply with the guidelines of patient safety protocols. This result reflects the substantial effort of healthcare teams in integrating evidence-based practices. However, the high percentage of "not applicable" (32%) is concerning, especially considering that this requirement is mandatory. Additionally, non-compliances (8%) and partial compliances (4%) suggest significant challenges in the effective implementation and adherence to institutional guidelines.

Conclusion: While the high compliance rate is positive, the observed gaps show that some organizations still face challenges in structuring and effectively implementing safety policies. These results suggest the need for greater educational support, continuous monitoring, and incentives.

The elevated percentage of "not applicable" in the Patient Care Section suggests inconsistencies in how criteria are filled out or interpreted by surveyors or organizations themselves, or a lack of clarity about the mandatory nature of the requirement.

These results highlight the need to strengthen surveyors training, standardize guidance, and raise awareness within healthcare organizations. A thorough review of evaluative and communicative practices could help reduce discrepancies and ensure greater adherence to the required standards.

References: ONA methodology

Disclosure of Interest: None Declared

Danger Zone: Application of Active Methodology with Escape Room in Safe Medication Chain Training: (3328) Léia Venâncio Paes

ISQUA2025-ABS-3328

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Preferred presentation method: 10 Minute Lightning Talk (E-Poster)

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: A study conducted in Brazilian public hospitals identified 1,500 medication errors, with 30% of doses showing failures, most of which were related to the timing of administration (77.3%). This highlights the need for strategies to reduce medication errors. Active methodology is a pedagogical approach that places the professional as the protagonist, encouraging their active participation through practical activities, problem-solving, and simulations. This approach aims to promote deeper learning, stimulating skills such as critical thinking and collaboration. In the context of the "Danger Zone" training, styled as an escape room, the active methodology aligns with the goal of empowering the healthcare team, promoting interactive and practical learning about the safe medication chain, which is essential for reducing errors and improving patient safety.

Methods: The training was conducted in two stages. In the first stage, daily dialogues were held via broadcasts, addressing topics on safe medication, with the distribution of audiovisual materials and informational cards. In the second stage, employees participated in a practical training session in the escape room format, where each phase was associated with a specific medication safety theme. Participants worked on the storage and identification of LASA medications, identification of potentially hazardous medications, selection of the correct prescription, performing double checks, organizing the nine rights of medication administration, and the medication reconciliation flow as a puzzle. The goal was to reinforce the content learned in the first stage and provide an immersive experience, stimulating practice and collaboration to ensure patient safety.

Results: The first stage of the training, with videos and informational materials on safe medication, reached 197 employees (75.35%). The retention survey via Google Forms indicated good assimilation of the content: LASA (93.8% correct), Potentially Hazardous Medications (96.4%), Medication Prescription (100%), Double Check (92.7%), 9 Rights of Administration (majority correct), and Medication Reconciliation (95.3%). In the second stage, in the Escape Room format, 171 employees (68.2%) participated. Most completed the activities between 11 and 28 minutes. Performance was good, with notable high participation from nurses (97.2%) and administrative teams (100%), while physicians had a participation rate of 50%. The analysis showed a drop in overall participation from the 1st (72.4%) to the 2nd stage (68.2%), which may have been influenced by the technical nature of the content and the dynamics of the medication flow.

Conclusion: The training faced challenges such as updating the broadcast lists, difficulties in reaching the entire clinical staff due to turnover, and the technical complexity of the topic for administrative and support areas. Adherence was over 70%, with good acceptance of the methodology, despite obstacles such as nighttime application. The retention survey identified areas for improvement, and the impact of the content will be monitored to ensure continuous improvement in safety and quality.

Disclosure of Interest: None Declared

“Leveraging Technology to Improve SBAR Compliance: A Quality Improvement Initiative to Enhance Nurse Handoff Communication”: (2196) Mabel Adobea Owiredu

ISQUA2025-ABS-2196

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¹Quality, ²CEO, ³Nursing, FOCOS Hospital, Accra, Ghana

Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

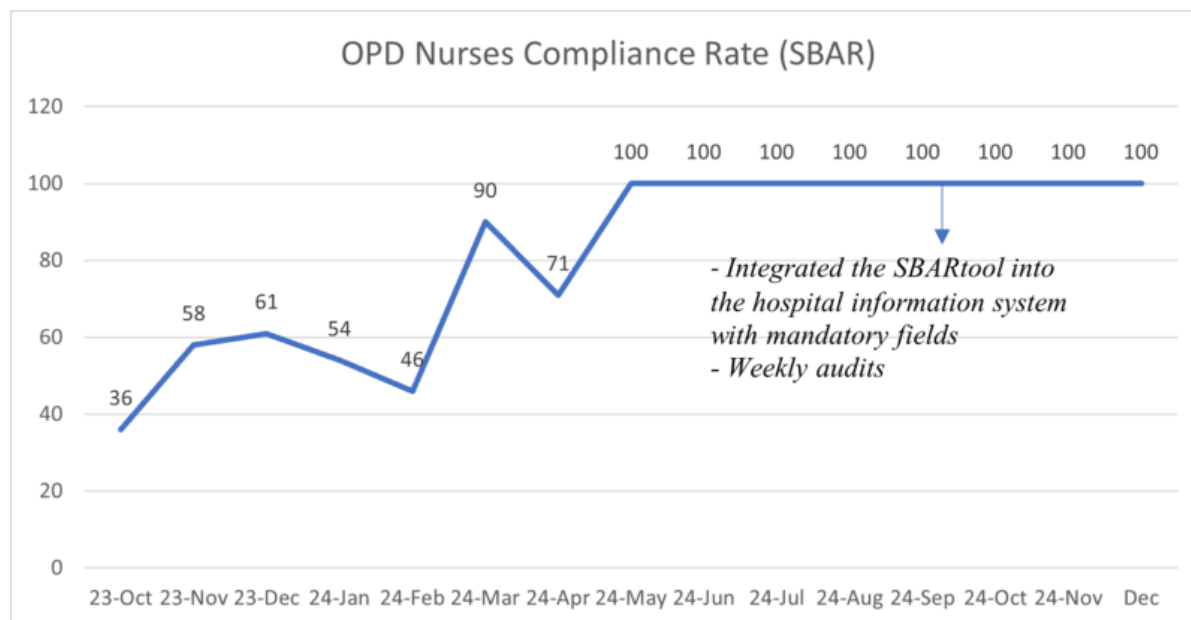
I confirm that the submission has been approved by all authors: Yes

Introduction: Effective communication in healthcare is critical to ensuring patient safety and delivering high-quality care. Despite the existence of standardized communication tools like the SBAR (Situation, Background, Assessment, Recommendation) framework, inconsistent usage and poor compliance among nurses continue to pose significant risks. Miscommunication has been identified as a leading contributor to medical errors, with studies linking communication failures to adverse patient outcomes, including delayed treatment, incorrect interventions, and patient harm (The Joint Commission, 2017). This improvement project aims to evaluate the effectiveness of leveraging technology to enhance nurses' compliance with the SBAR communication framework.

Methods: A retrospective data review was conducted to assess nurses' compliance with using the SBAR (Situation, Background, Assessment, Recommendation) tool during patient hand-offs from the outpatient department (OPD) to the inpatient department (IPD). A cause-and-effect analysis was performed to identify factors contributing to this issue and inform improvement strategies. The improvement project employed the **Plan-Do-Study-Act (PDSA) framework**, integrating a detailed **cause-and-effect (Ishikawa/Fishbone) analysis** to pinpoint root causes.

Results: The compliance rate data illustrates a significant improvement in nurses' adherence to the SBAR tool for patient hand-offs over time. Initially, compliance was low, starting at 36% in October 2023, increasing gradually to 61% by December 2023. The data reflects the positive impact of structured interventions and leadership support in improving adherence to standardized communication protocols, ultimately enhancing patient safety and care continuity.

Image:



Conclusion: The implementation of SBAR for hand-off communication significantly improved compliance from a low of 36% in October 2023 to a sustained 100% by May 2024. The project's phased approach, leveraging the PDSA framework, ensured continuous monitoring and iterative improvements, ultimately embedding SBAR into the hospital's workflow.

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Disclosure of Interest: None Declared

Ibero-American Network of Drug Post-consumption Programs: A comparative study: (2963)
Pedro J. Saturno-Hernandez

ISQUA2025-ABS-2963

P. J. Saturno-Hernandez ^{1,*}, R. Quiroz-Razo ¹

¹CIEE, National Institute of Public Health, Mexico, Mexico

Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: The global increase in medicines production, consumption, and disposal has significantly impacted the environment. Various studies reveal the presence of drug residues in water and soil. In particular, antibiotics discharged to the environment contribute to the development of antimicrobial resistance, a growing health crisis responsible for an estimated 1.27 million deaths per year. The European Union has made significant progress in regulating and comprehensively managing expired and unused medicines and hazardous waste. In 2015 the Ibero-American Network of Drug Post-Consumption Programs (INDPP) was created, including Spain, Portugal, Colombia, and Mexico. The objective of this study is to conduct a comparative analysis of the characteristics of the Program and the strategies implemented in the four countries to control the environmental impact of expired and unused medicines, identifying opportunities to improve and extend these initiatives in Latin America.

Methods: We carried out a documentary search and collection of information related to expired and unused household medicines based on official sources in the four countries and data provided directly by the programs that make up the INDPP. We designed comparative tables on the organizational structure of the programs, mechanisms for the collection, transport, storage, classification, and disposal of medicines, coverage indicators, and strategies to minimize the environmental impact, with data reported until 2023.

Results: In the last decade, the INDPP has managed and disposed more than 65,000 tons of expired and unused medicines, the majority (89%) in Spain and Portugal. In these two countries, territorial coverage is practically complete, and 100% of the pharmacies and pharmaceutical laboratories participate. They use a 'reverse logistics' approach, which involves the movement of products from the consumer back to the manufacturer, throughout the process from collection to disposal. This approach does not exist in Mexico and Colombia. Disposal has different levels of classification and recycling (between 34 and 70%), except for Mexico, which uses incineration without classification or recycling. Mexico also has the lowest coverage and collection containers per 100,000 inhabitants, and Colombia has the lowest amount of tons and average rates of grams collected per inhabitant. In the two American countries, especially in Mexico, a greater lack of control of expired and unused medicines will likely produce a greater environmental impact.

Conclusion: The INDPP offers the opportunity to identify experiences and good practices for managing expired and unused medicines, which could be implemented in other countries, moving towards circular and sustainable models with complete territorial coverage and reverse logistics with the responsible participation of the pharmaceutical industry. Of the four countries, Mexico is the most in need of effective interventions for managing expired and unused medicines, in addition to promoting education and citizen participation as strategic axes to improve collection rates and reduce environmental damage.

Disclosure of Interest: None Declared

A Novel Approach to Patient Safety Education: Integrating the Human Factors Analysis and Classification System (HFACS) to Build a Culture of Safety in Medical Training: (1298) Jui-Ting Chang

ISQUA2025-ABS-1298

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Patient safety is a cornerstone of modern medical education and practice. The landmark report *To Err is Human* highlighted the significant human and financial costs of preventable medical errors, underscoring the need for systemic strategies to improve safety. Although patient safety education is now integral to medical curricula, many programs fall short in equipping students to identify and address the systemic and human factors behind unsafe practices. These skills are critical for error prevention and fostering a strong safety culture in healthcare. The Human Factors Analysis and Classification System (HFACS), developed for aviation, categorizes human errors into four levels: Unsafe Acts, Preconditions for Unsafe Acts, Supervisory Factors, and Organizational Influences. While effective in analyzing errors in high-risk fields like healthcare, its use in medical education is limited. This study aims to address this gap by evaluating the impact of an HFACS-based educational intervention on medical students' ability to identify human factors and report adverse events.

Methods: We employed a pre- and post-test design to evaluate the impact of an HFACS-based workshop on patient safety competencies. The participants included 40 fifth- and sixth-year medical students from Fu Jen Catholic University and China Medical University in Taiwan, with the study conducted at Shin Kong Wu Ho-Su Memorial Hospital. The study consisted of three phases: the Pre-test Phase, where students completed a questionnaire assessing their baseline understanding of reportable adverse events and analyzed a simulated clinical scenario involving a fatal medication error to identify the contributing human factors; the Workshop Phase, which included a 90-minute session covering patient safety principles, adverse event reporting, and the HFACS framework with real-world examples to systematically analyze errors; and the Post-test Phase, where students repeated the questionnaire and video-based assessment to evaluate their progress in recognizing adverse events and identifying human factors. Data were analyzed using SPSS software, with independent sample t-tests conducted to compare pre- and post-test results, and statistical significance set at $p < 0.05$.

Results: The workshop significantly improved students' competencies. Recognition of adverse events increased from a pre-test accuracy rate of 77.0% (SD = 18.5%) to 94.0% (SD = 0.9%), $p = 0.005$ (Figure 1). Awareness of the importance of reporting adverse events improved from 68.6% (SD = 17.2%) to 80.5% (SD = 9.6%), $p = 0.016$ (Figure 2). The total number of identified human factors increased from 5.5 (SD = 2.4) to 34.9 (SD = 15.6), $p < 0.001$, with significant improvements observed across all HFACS levels (Table 1).

Image:

Table 1: Recognition of Human Factors

HFACS Categories	Pre-test Mean (SD) (n=30)	Post-test Mean (SD) (n=34)	p	95% Confidence Interval	
				Lower Bound	Upper Bound
Total	5.5 (2.4)	34.9 (15.6)	<0.001	23.9	34.9
Level 1 : Unsafe Acts	2.6 (1.4)	10.6 (3.7)	<0.001	6.7	9.5
Level 2 : Preconditions for Unsafe Acts	2.2 (1.1)	14.4 (6.1)	<0.001	10.0	14.4
Level 3 : Supervisory Factors	0.7 (0.6)	5.9 (2.9)	<0.001	4.1	6.3
Level 4 : Organizational influences	0.1 (0.3)	4.0 (3.6)	<0.001	2.6	5.2

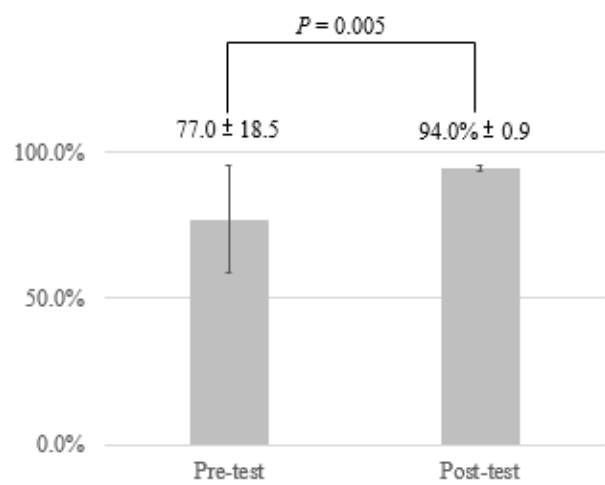


Figure 1: Recognition of reportable adverse events

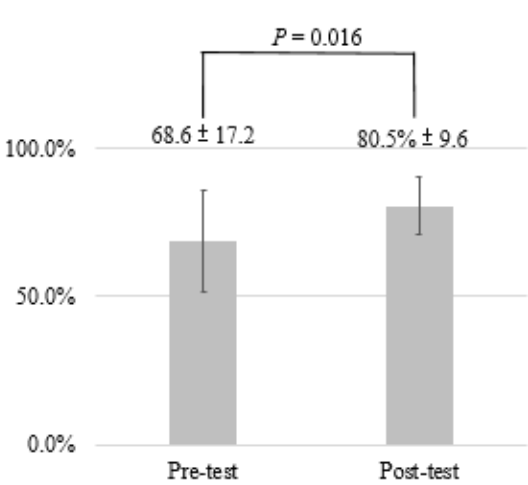


Figure 2: Recognition of the Importance of Reporting

Conclusion: This study demonstrates that HFACS-based educational interventions significantly enhance medical students’ understanding of patient safety principles and their ability to identify human factors contributing to medical errors. Integrating HFACS into medical curricula provides a structured and systematic approach to error analysis, thereby fostering a stronger culture of safety. However, addressing higher-level systemic issues, such as organizational culture and resource allocation, requires further emphasis. Future training initiatives should incorporate continuous education, practical applications, and interprofessional collaboration to develop a comprehensive understanding of patient safety.

Embedding HFACS into medical education equips future healthcare professionals to systematically address systemic challenges, ultimately driving safer healthcare systems and better patient outcomes worldwide.

Disclosure of Interest: None Declared

Nosocomial Respiratory Infections reduction with Improvement Science: (2366) Maisa Cabete Pereira Salvetti

ISQUA2025-ABS-2366

A. Quaggio Neto ¹, C. Catelan Souto ², T. Schalk ², M. C. P. Salvetti ^{2,*} and HEAB Pneumonia Prevention Team: Marcos Carraro Banov, Taisa Souza, Priscila Rotta, Gisele Favero, Flávia Branquinho, Isabela Piva Calixto, Carolina Braga da Silva, Jéssica Fernandes Perego, Tamiris Gabriela Noli.

Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Healthcare-associated infections (HAIs) are the most frequent adverse healthcare events¹ and pneumonia, whether associated (VAP) or not with mechanical ventilation (NV-HAP), is the most common HAI.²In clinical wards of the Américo Brasiliense State Hospital (HEAB) Nosocomial Respiratory Infections (NRI) (Pneumonia and Tracheobronchitis) represented 50% of HAIs between 2020 and 2022.

There are well-established practices for the prevention of NV-PAH³, including: early assessment and management of dysphagia, oral hygiene, patient positioning and early mobilization.

The Model for Improvement (MFI) is an effective strategy to manage health quality⁴; thus, this work used this method to improve care practices to reduce NRI.

Methods: The study has a Quasi-Experimental design in which the NRI Incidence Density is evaluated before (2020 - 2022) and after (2023 - 2024) interventions. It did not imply a breach of confidentiality of patient data, nor the application of new health technologies, so there are no ethical implications in this report.

The project used the 03 MFI questions design (figure 1) and was conducted in a multidisciplinary team, with speech therapists (ST), doctors, nurses, physiotherapists (PT), nutritionists and occupational therapists. Patients' family members were included in some activities, such as folders design.

To propose change ideas, quality improvement tools⁵ were used: cause analysis (Ishikawa Diagram), brainstorm, theory of change organization with Driver Diagram. Ideas were tested with Plan-Do-Study-Act cycles. The result and process measures were displayed in control and run charts. Its analysis was based on statistical process control rules ⁶.

The diagnosis of NRI was based on criteria defined by the National Health Surveillance Agency⁷. We decided to include cases of tracheobronchitis because patients with these infections often develop relevant clinical repercussions (fever, increased and purulent respiratory secretions, worsening gas exchange), but do not make NV-HAP diagnosis because they do not present radiological criteria.

Results: We observed that, from January/2023, with the project's actions, there was a significant reduction in IRN Incidence Densities (3,09 to 0,81), including several consecutive months without a single case, as can be seen in chart 1. Process measures also improved: oral hygiene (52%), patient correct positioning (88%), timely dysphagia screening (83%) and early mobilization (95%).

The interventions implemented after PDSA cycles are listed in table 1. We highlight: dysphagia screening at admission, effective risk signaling at bedside, patient and caregivers orientation and clear professionals roles and routines.

Image:

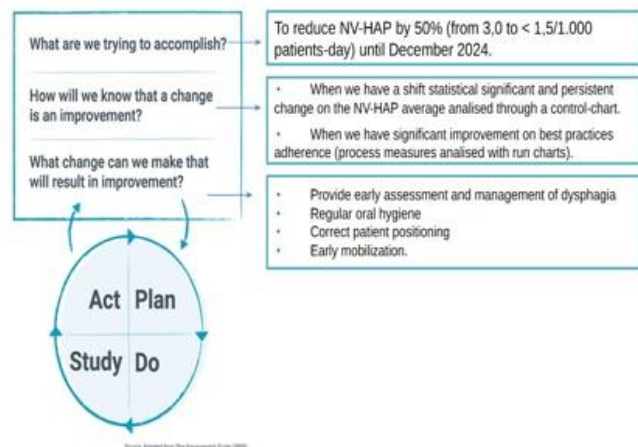


Figure 1

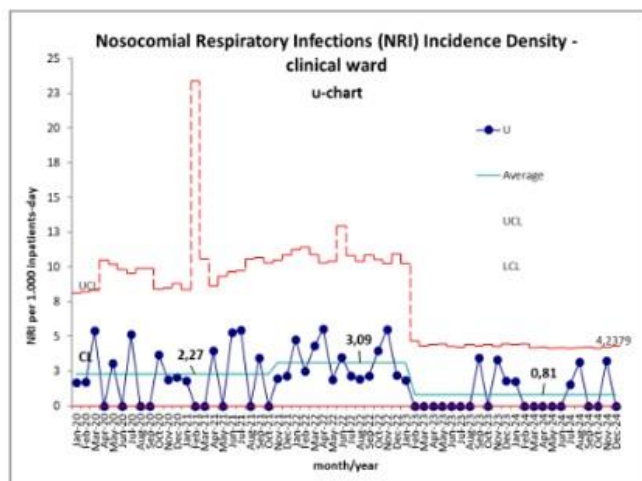


Chart 1

LIST OF IMPLEMENTED CHANGES
Application of a dysphagia screening checklist upon patient admission linked with request for speech therapy consultation and dietary adjustment when risk factors are identified
Assessment by speech therapy within 72 hours of patient admission flagged as being at risk for dysphagia
Risk signalling with a patient bedside board containing patient-friendly guidelines for pneumonia prevention to all patients fulfilling dysphagia risk criteria
Provision of an Oral Hygiene Kit upon admission to all patients in the ward
Standardization of the thickener portion on diet preparation (different foods and liquids) for dysphagia risk patients
Provision of a folder delivered with the diet for at-risk patients with easy guidance for patients and companions on NV-HAP prevention practices (e.g. bed positioning during and after diet, oral hygiene after feeding)
Inclusion of an information board attached to infusion pump for patients on enteral diet with guidance for patients and caregivers on NV-HAP prevention practices
Audit of NV-HAP prevention practices in wards using Google Forms initially and later using Kamishibai cards, with creation of process indicators and feedback for the teams involved
Standardization of markings through stickers on patient bed rails indicating elevation of the headboard at 30 and 45 degrees
Bed maintenance process roles and responsibilities agreements to ensure that all beds have the correct elevation of the head
Bed positioning training according to recommendations for NV-HAP prevention for the entire multidisciplinary team
Holding biweekly meetings with members of the Pneumonia Prevention Team
"Rounds" on site with the clinical ward healthcare workers whenever a new stage of the project was implemented and retroactive feedback related to the NV-HAP

Table 1

Conclusion: We observed that the use of Improvement Science to implement best practices for the prevention of NV-HAP led to a significant infection reduction in the HEAB wards. As for possible biases involved, as this is a Quasi-Experimental study, other factors concomitant with the interventions may have influenced the outcome, such as the decrease in the hospitalization of patients due to SARS-CoV 2 infection.

References: 1 Global report on infection prevention and control. Geneva: World Health Organization; 2022.

2 Magill SS, et al; Emerging Infections Program Hospital Prevalence Survey Team. Changes in Prevalence of Health Care-Associated Infections in U.S. Hospitals. *N Engl J Med*. 2018 Nov 1;379(18):1732-1744.

3 Klompas M, et al. Strategies to prevent ventilator-associated pneumonia, ventilator-associated events, and nonventilator hospital-acquired pneumonia in acute-care hospitals: 2022 Update. *Infect Control Hosp Epidemiol*. 2022 Jun;43(6):687-713.

4 Langley GL, et al. *The Improvement Guide: A Practical Approach to Enhancing Organizational Performance (2nd Edition)*. San Francisco: Jossey-Bass Publishers; 2009

5 *Quality Improvement Essentials Toolkit*. Boston: Institute for Healthcare Improvement; 2017. (Available at [ihi.org](https://www.ihc.org))

6 NHS Institute for Innovation and Improvement. A guide to creating and interpreting run and control charts. 2009.

Disclosure of Interest: None Declared

Improving Medication Safety for New Healthcare Staff with HFACS Human Factors Analysis and Experiential Activity Teaching: (2687) Hsiuhsia Weng

ISQUA2025-ABS-2687

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Preferred presentation method: 10 Minute Lightning Talk (E-Poster)

Have you presented this abstract at an ISQua Conference before?: Yes

If yes, what year?: 2023-2024

I confirm that the submission has been approved by all authors: Yes

Introduction: During the COVID-19 pandemic, restrictions on in-person training and clinical internships left new nursing staff with weakened clinical skills, communication gaps, and decision-making challenges, increasing patient safety risks. Between September 1 and October 18, 2023, our Emergency Department reported five medication errors involving seven newly recruited nurses (tenure: 3–7 months). Baseline assessments showed communication self-efficacy at just 36.26%, with many hesitant to seek help due to fear of judgment and uncertainty. Using the Human Factors Analysis and Classification System (HFACS), we identified key contributors: skill-based and decision-making errors, psychological stress, lack of supervision, and organizational barriers. Interviews revealed communication difficulties, information reception challenges, and reluctance to seek support.

To address these gaps, we implemented structured training interventions integrating experiential learning, mentorship programs, and gamified teaching methods to enhance clinical skills, foster communication, and improve patient safety.

Methods: From September 2023 to February 2024, we implemented an improvement plan to address key challenges faced by new nursing staff, including insufficient clinical skills, communication barriers, fear of the clinical environment, and lack of structured guidance. The most critical issues identified were inadequate clinical support and limited operational proficiency.

To mitigate these gaps, we introduced:

- Conducting consensus meetings for mentors to enhance their understanding and support for new staff.
- Joint medical team support for new staff through welcome ceremonies.
- Promoting teamwork and communication skills through team communication games.
- Implementing gamified teaching, such as medication administration games.
- Introducing a dual mentor system for targeted guidance through assessment and the involvement of assistant mentors.

- Implementing a comprehensive mentorship mechanism and arranging "little angels" to provide constant support and guidance for new staff.

Results: The intervention yielded significant improvements in communication, medication safety, and confidence among new nursing staff.

- 1. Communication self-efficacy increased from 36.26% to 73.46%, reflecting a 102.6% improvement in confidence when engaging with team members.
 - 2. Medication errors dropped from 5 cases to 0, demonstrating a 100% reduction in safety incidents caused by communication issues.
 - 3. New staff retention rates improved from 85% to 100%, indicating stronger professional integration and workplace satisfaction.
 - 4. Satisfaction with the support system rose from 67% to 95%, showing a 41.8% increase in perceived guidance and mentorship effectiveness.
- These results highlight the effectiveness of structured mentorship, gamified training, and team-based learning in enhancing clinical competence and patient safety.

Image:

Significant improvements in communication, medication safety, and confidence were observed:

Measure	Pre-Intervention	Post-Intervention	Improvement
Communication Self-Efficacy	36.26%	73.46%	↑ 102.6%
Medication Errors	5 cases	0 cases	↓ 100%
New Staff Retention	85%	100%	↑ 17.6%
Satisfaction with Support System	67%	95%	↑ 41.8%

Conclusion: These outcomes demonstrate that through organizational support, targeted training, and team-building activities, it is possible to effectively improve the communication skills and clinical abilities of new nursing staff, thereby enhancing patient safety and the quality of care. The successful implementation of this improvement plan provides strong evidence on how to effectively support new nursing staff and improve the quality of healthcare services, offering a viable model and reference for similar future projects.

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2. Khalafalla, F. G., & Alqaysi, R. (2021). Blending team-based learning and game-based learning in pharmacy education. Currents in pharmacy teaching & learning, 13(8), 992–997. <https://doi.org/10.1016/j.cptl.2021.06.013>

Disclosure of Interest: None Declared

J. Opípari ^{1,*}

¹BP - A Beneficência Portuguesa de São Paulo, São Paulo, Brazil

Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: BP – A Beneficência Portuguesa de São Paulo, one of the largest healthcare hubs in Brazil, has embarked on its decarbonization journey in response to the global challenges of climate change. Believing that human health is directly connected to environmental health, our mission is to reduce greenhouse gas (GHG) emissions and promote a more sustainable future for the hospital sector. Our primary goal is to cut GHG emissions by **50% by 2030** and achieve **net-zero emissions by 2050**, in alignment with the **Race to Zero campaign**. To achieve this, we prioritize the use of **renewable energy**, mitigate the environmental impact of hospital operations through **low-carbon medical practices**, and **enhance transparency and emissions monitoring**.

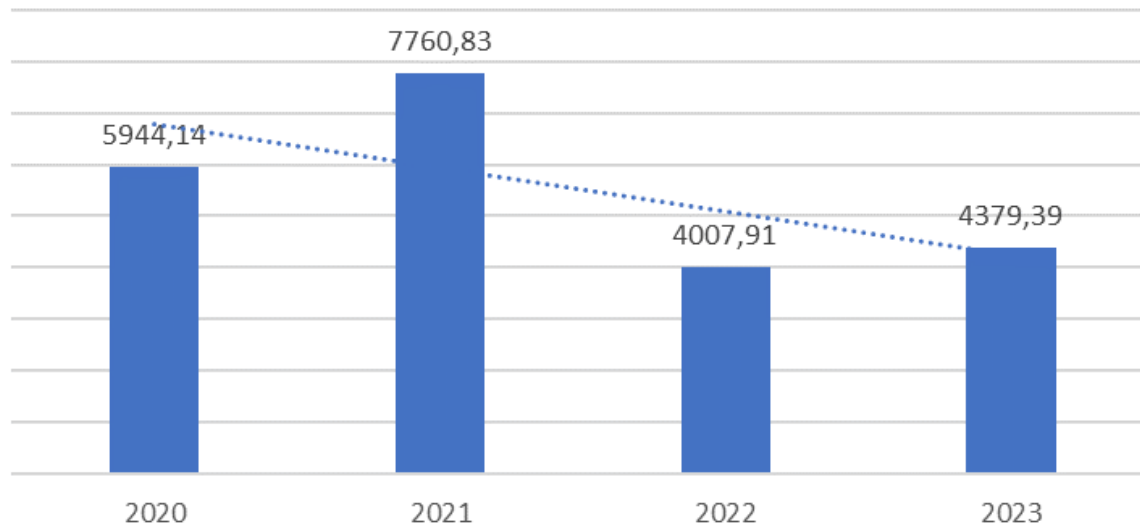
Methods: Our journey began in 2016 with the development of a **GHG inventory**, which identified the hospital's major emission sources. Since 2022, we have been consuming **clean energy** through the **Free Energy Market** and adopting **Renewable Energy Certificates (I-RECs)**. In 2023, BP initiated its decarbonization process by joining the **Health Care Climate Challenge**, integrating the **Public Emissions Registry of the GHG Protocol**, and adhering to the principles of the **United Nations Global Compact Network Brazil**.

The drive for decarbonization has intensified, fueled by growing awareness of the **healthcare sector's environmental impact**. In this context, we implemented the **replacement of nitrous oxide (N₂O)—a greenhouse gas with a high global warming potential—with more sustainable anesthetic alternatives**. This initiative reflects BP's **institutional commitment to reducing its carbon footprint**, extending beyond administrative operations into clinical practices. The replacement process, officially implemented in **August 2024**, was preceded by **awareness campaigns and clinical team preparation**, carried out during the **first half of the year**. Additionally, the economic feasibility of **replacing N₂O with injectable anesthetics** was carefully evaluated, considering associated medical costs. The decision to **discontinue the supply of N₂O** marked a decisive step in the transition to **more sustainable anesthetic practices**.

Results: One of BP's most significant impacts is the **substantial reduction in CO₂e emissions**. At the **Mirante Unit**, combined **Scope 1 and 2 emissions** were reduced to **872.10 tons of CO₂e**, representing an **approximate 71% reduction**. At the **Paulista Unit**, we achieved a **26% decrease**, reducing emissions to **4,379.39 tons of CO₂e** for the year. Additionally, the **use of renewable energy** and **steam generators replacing traditional boilers** increased **energy efficiency** and **reduced our carbon footprint**, leading to **operational and financial savings**.

Image:

Redução das emissões de GEE (escopo 1 e 2) BP Paulista - tCO₂e



Conclusion: The biggest challenges currently faced by BP are:

- (i) **Mapping Scope 3 emissions**, which involves tracking **suppliers** and identifying the **environmental impact across the entire supply chain**.
- (ii) **Developing a strategy to anticipate climate risks**.
- (iii) **Creating an adaptation and resilience plan for hospital infrastructure** to address climate change.

Today, we **monitor our Scope 1, 2, and 3 emissions on a monthly basis**, have implemented a **protocol for eliminating nitrous oxide use**, and have **replaced boilers with a more efficient alternative**.

We reaffirm our commitment to a more sustainable future by joining the **Race to Zero Campaign** and the **Net Zero Ambition Movement**. These initiatives reflect **BP's dedication to reducing carbon emissions and promoting sustainable practices**, aligning with key global climate mitigation goals.

Disclosure of Interest: None Declared

Implementation of an electronic cohort to assess the longitudinal quality of care of hypertensive patients in Uruguay: (3139) Ezequiel García-Elorrio

ISQUA2025-ABS-3139

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Hypertension is a leading cause of cardiovascular morbidity and mortality, responsible for one-third of global deaths. An estimated 1.3 billion adults aged 30-79 years have hypertension, with higher prevalence in low- and middle-income countries. In Uruguay, 42% of individuals aged 30-79 are affected. Among hypertensive individuals, 55% receive treatment, but only 29% have their blood pressure under control. In 2010, a population-based prospective cohort study, CESCAS I, was initiated in Uruguay to evaluate cardiovascular diseases and their risk factors. To ensure representativeness, a multistage random sampling approach was used. A high prevalence of hypertension (45.5%), obesity (36.7%), central obesity (57.6%), and diabetes (12.4%) was observed among adults 35-74 years old. Most health system quality data focus on structural metrics, but longitudinal data on processes of care, user experience, and quality of life are scarce in Latin America. The Lancet Global Health Commission on High-Quality Health Systems (HQSS) emphasizes that care should consist of processes of care, quality impacts, and foundations. The QuEST-LAC network developed a tool to collect information on these aspects. This study aimed to use this tool to gather longitudinal data from hypertensive people living and receiving care in Uruguay, with the main goal of describing the quality of care, user experience, and the feasibility of phone-based follow-up.

Methods: This study used an electronic cohort (e-cohort) design to follow hypertensive people from the CESCAS study. Eligible participants were hypertensive adults with access to a personal mobile phone. Participants completed a baseline face-to-face survey and blood pressure measurement, followed by monthly telephone surveys, and a final face-to-face survey at the end of the eight-month follow-up period. Key outcomes included feasibility of the e-cohort and user experience.

Results: Of the original 1,501 CESCAS participants, 942 were contacted by phone. Among them, 92 had died, 298 declined to participate, and 169 were ineligible. A total of 383 agreed to participate, with 336 attending the health facility for the baseline visit. Ultimately, 200 hypertensive participants provided informed consent and completed the baseline survey. Regarding follow-up, 92.5% responded to 4 or more phone surveys, and 80.5% completed 4-6 surveys, with 92.5% responding to the final survey by phone. User experience data showed that 86.7% felt they were treated with kindness, 83.7% understood their care instructions, and 87.8% reported no medical errors. However, only 45.1% would recommend the healthcare facility, and the perception of care quality as "excellent" or "very good" decreased from 61.2% at baseline to 22.8% during follow-up.

Conclusion: The electronic cohort tool for monitoring hypertensive patients in Uruguay proved feasible, with high follow-up rates and minimal loss to follow-up. Participants generally reported respectful treatment by healthcare professionals. However, less than half of the participants would recommend the healthcare facility underscores the need for reforms to improve care quality in the health system.

Disclosure of Interest: None Declared

Enhancing Medical Care Services for Patients with Traumatic Brain Injury Through the Utilization of Automated Systems: (2408) Chih-Cheng Kuo

ISQUA2025-ABS-2408

Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: The incidence of traumatic brain injury (TBI) is exceptionally high, with one TBI case occurring every hour in Taiwan. Research in the U.S. reveals approximately 340,000 severe TBI cases annually, leading to a 15% mortality rate. Clinical assessment of TBI is difficult due to the influence of patients' physiology and lifestyles, resulting in profound impacts on patients, families, and society.

Our institution has observed a gradual increase in TBI patients, yet the lack of integrated and effective communication across teams hinders the overall effectiveness of patient care. Care indicators, such as the in-hospital mortality rates for TBI patients from January to March 2023, fall below those of peer institutions. We have developed a comprehensive case management care model, aiming to enhance the emergency handling and care capabilities of patients, ultimately reducing readmissions and mortality rates.

Methods: **1. Aspect of Intelligent System**

1. Enhancement of Case Management System through Infrastructure: The system integrates with the HIS, PACS, NIS and LIS. It automatically extracts fundamental information and examination data of TBI patients, collecting diverse records of medical interventions by various healthcare professionals. This ensures real-time access to patient information for each team member, facilitating instant two-way communication.

2. Aspect of Process

1. When the TBI team is activated based on the assessment by the emergency physician, the system aids in pre-filling orders for "GCS Q1H" and "Discharge Education." It also recommends physicians to arrange for CT scans.

2. Revision of patient care mechanisms: The TBI team will contact with patient in 7 days, providing relevant educational and care information. Assistance is provided for referrals to relevant resources with case managers, nutritionists, rehabilitation specialists, and pharmacists.

3. Providing follow-up care for discharged patients (including those with mild, moderate, and severe injuries) and connecting them with community healthcare services.

3. Aspect of Team Member

1. Designing specialized training programs for traumatic brain injury, tailored to the professional needs of physicians, nurses, nutritionists, rehabilitation therapists, and pharmacists. Monthly case discussion sessions are organized, focusing on interdisciplinary teams and challenging critical cases.

Results: From 2024, we admitted 408 cases:

1. The inpatient mortality rate for TBI patients is 4.6%, marking an 18.5% decrease.

2. Only one revisit within 72 hours due to TBI-related issues occurred among emergency discharges.

3. The proportions of TBI patients returning to the operating room, returning to the intensive care unit, and being readmitted within 30 days post-discharge all remained at 0%.

4. Within two hours of TBI patients arriving at the hospital, the percentage of GCS score assessments recorded every 60 minutes is 96.8%, reflecting a 49.8% improvement.

5. Within the first 7 days of injury, TBI inpatients receiving basal caloric replacement via intravenous or enteral routes have a ratio of 93.8%, showing a 56.4% improvement.

6. 100% of TBI patients underwent rehabilitation team assessment within two working days before transferring out of the intensive care unit, indicating a 28.6% improvement.

7. Early PTS high-risk group patients receiving antiepileptic drugs within 7 days post-injury have a ratio of 93.8%, a 6.4% increase.

Conclusion: Through the intelligent system, healthcare providers can provide timely medical care services, and integrate comprehensive case management mechanisms. Coupled with post-discharge follow-up education, this approach can effectively prevent TBI patients from missing the golden treatment window due to subtle initial symptoms, optimizing their quality of life in the prognosis. The establishment of the disease team and the implementation of automation can extend horizontally to other disease care teams within the hospital, become to a medical center relied upon by the public.

Disclosure of Interest: None Declared

Impact of the Implementation of a Multidisciplinary Daily Form and Huddle on the Reduction of Catheter Related Bloodstream Infections (CRBSI): (3222) Carlos Alberto Cordeiro De Abreu Filho

ISQUA2025-ABS-3222

C. A. C. De Abreu Filho ^{1,*}, F. Ramos Pellegrini ¹, T. G. Pancev Toledo ¹, F. A. da Silva ¹, P. H. Vieira Donato ¹, R. C. Velasquez Medeiros ¹

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Bloodstream infections (BSIs) associated with invasive devices are a major cause of morbidity and mortality in intensive care units (ICUs). Bundle-based prevention strategies, such as daily assessment of device maintenance needs, have proven effective in reducing these infections¹. This study evaluated the effectiveness of implementing a daily form, combined with multidisciplinary huddles, in reducing the density of primary Catheter Related Bloodstream Infections (CRBSI) in the ICU.

Methods: This was a retrospective observational study of 6569 patients admitted to the ICU of Hospital e Maternidade Brasil Rede Dor during 2024. A daily form (questionnaire) for auditing invasive devices was implemented starting in June 2024. The questionnaires were completed by the intensivist, in conjunction with daily huddles and multidisciplinary visits. The questionnaires assessed: catheter maintenance needs; type of dressing used; signs of inflammation and secretion at the catheter site; and proper catheter handling by nursing staff. CRBSI were diagnosed according to Infectious Diseases Society

of America (IDSA)² criteria. The density of CRBSI was calculated as the number of infections per 1000 catheter-days.

Results: Results: Between June and December 2024, 2532 venous catheter audits were performed. The types of catheters audited included 769 (30.3%) central venous catheters (CVCs), 853 (33.7%) peripherally inserted central catheters (PICCs), 261 (10.4%) long-term catheters, 329 (12.9%) arterial catheters, 313 (12.4%) hemodialysis catheters, and 7 (0.3%) pacemakers. The density of CRBSI from January to December 2024 is shown in Table 1. A significant reduction in CRBSI density was observed after the implementation of the daily forms.

January	February	March	April	May	From June to September	October	November	December
0	1.85	1.86	0	1.53	0	1.64	0	0

Conclusion: Conclusion: The implementation of the daily forms and assessment of the need for invasive devices resulted in a significant reduction in the density of CRBSI. This highlights the importance of systematic monitoring and thorough review of catheter maintenance. Prior studies have shown that daily review of the need for invasive devices, combined with multidisciplinary visits, significantly reduces hospital-acquired infections³. The daily forms and huddles allowed for the early removal of unnecessary devices, a key factor in CRBSI prevention⁴. Continuous monitoring of catheter-related practices and educational measures to improve adherence to protocols are necessary.

The implementation of the daily forms, huddles, and multidisciplinary visits had a positive impact on reducing the density of CRBSI. Continued use of this strategy, and its expansion to other units, could further improve patient safety.

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Disclosure of Interest: None Declared

Acolhe UPA: Sensitization and Best Practices for Safe and Inclusive Welcoming of Community Diversity: (3767) Janaina Paulo De Souza

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Recognizing the importance of humanized and welcoming care in emergency services, institutional values, and the diversity of the community we serve, the Acolhe UPA project was developed to strengthen a universal, equitable, and comprehensive approach to the Amazonian population using emergency care services. Welcoming is practiced in the technical-operational dimension as an essential practice for organizing emergency services and should be understood beyond the triage or risk classification process typically applied by nursing professionals. Welcoming means receiving clients in a way that supports their needs, ensuring more humanized access.

Methods: By mapping processes, we identified gaps and uncertainties among staff regarding the management of vulnerable groups, such as the hearing impaired, indigenous peoples, individuals with autism, women, the elderly, and children. To equip staff and promote safe and efficient welcoming practices for these groups, we developed a semiannual training program with external experts, including lawyers, psychologists, educators, doctors, and nurses, addressing specific themes monthly. The topics covered were: Training professionals in basic LIBRAS (Brazilian Sign Language) communication; Welcoming indigenous peoples: Respecting culture and values in care; Humanized care for individuals with Autism Spectrum Disorder (TEA); Humanized care for women victims of violence; Humanization and comprehensive care for the elderly; and Welcoming children and adolescents victims of violence.

Results: To assess the impact and potential improvements in approaches to inclusion and diversity, we asked participants to evaluate the training themes through an online form. The survey was administered after every three lectures, with five questions covering: Evaluation of training content; Reflection and sensitization; Application in daily practice; Effect on organizational culture; and Suggestions/feedback. In the first phase, 91.7% of staff agreed that the training helped identify ways to avoid prejudice or discriminatory practices in care, increasing by 5% in the second phase. After the training, 100% of staff in both phases felt more aware of the specific needs of minority groups. In the first phase, 66.7% noticed changes in how they or their team served minority groups, increasing by over 26% in the second phase. All staff perceived a positive impact on the unit's culture regarding inclusion and diversity, with 75% considering it very positive and 25% positive in both phases. In the descriptive feedback, in the first phase, over 35% of responses requested continued LIBRAS training, approximately 30% highlighted the value of active methodologies, 24% emphasized the importance of indigenous care approaches, and 11% praised the project. In the second phase, 53% praised the execution of the themes, 14% suggested increasing the duration, frequency, and expansion to night shifts, 18% commended the high competence of the speakers, and 15% suggested gamifying audience engagement.

Image:



Conclusion: Through staff evaluations, we were able to refine the training cycles to achieve technical and behavioral outcomes by fostering reflection and sensitization among professionals in their daily health practices. These results demonstrate that small actions, independent of material resources, equipment, or technology, can make a significant difference. The Acolhe UPA project has successfully promoted a more inclusive, respectful, and humanized approach to care, reinforcing the importance of continuous education and cultural sensitivity in emergency services.

Disclosure of Interest: None Declared

Building an Ethical Organizational Culture Through Compliance Dialogues.: (2144) Josenei Skorek

ISQUA2025-ABS-2144

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Preferred presentation method: 10 Minute Lightning Talk (E-Poster)

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: The "Compliance Dialogues" initiative is a program implemented at the Dr. Henrique Santillo State Rehabilitation and Readaptation Center - CRER, since 2022 by the members of the compliance committee, with the aim of developing a fair and ethical culture, internalizing institutional values and strengthening organizational integrity among professionals. Objective: To present the methodology

Compliance Dialogues and how ethical issues are incorporated into this action implemented by the compliance committee in the unit.

Methods: The "Compliance Dialogues" program is one of the initiatives implemented in the annual action plan of the compliance committee, consisting of in-person meetings directed at all leaders, with the participation of the board. The sessions are conducted interactively, based on institutional policies, the code of ethical conduct, and legislation that guides ethical practices and the integrity of the institution. Initially, basic concepts regarding the theme are discussed, and subsequently, participants are directed into small groups and receive practical cases that have occurred or may occur in the unit during work activities, focusing on pillars such as conflict of interest, harassment, agreement with norms and legislation, corruption, among others. Professionals understand the case and discuss the theme as well as jointly define the decision-making in the face of the dilemma and later present and discuss with the entire group, at which point contributions from all participants are made. This context has led to the action being named Compliance Dialogues.

Results: These moments arose from the need to practically discuss essential ethical issues in organizational daily life. The implementation of this initiative has generated positive impacts in all areas of the institution, strengthening a fair culture within the unit, where professionals are made aware and held accountable for the importance of ethics, making them vigilant in the application of institutional policies and good practices of compliance and integrity, thus enabling welcoming and assertive dialogues. These actions contribute strongly to a fairer culture for all, which contributed to the result of 100% conformity in the second cycle of the Internal Compliance Audit of the unit. The importance and reach of the initiative is evidenced by the adherence of leaders from third-party companies in the cycle implemented in 2024. In this sense, being recognized as a relevant and solid initiative by the corporate matrix - Agir, the program has been adopted in all institutions managed by the organization, transitioning from a local action to a corporate-level action.

Conclusion: The initiative fosters a robust and conscious ethical culture among all active professionals, regardless of their affiliation. Through a proactive and educational approach, the committee not only strengthened agreement with internal policies but also promoted a work environment where integrity and ethics are priorities, demonstrating the effectiveness and efficiency of the program, reinforcing the ongoing commitment to ethics and compliance.

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Disclosure of Interest: None Declared

The Australian Consortium for Aged Care Quality Indicator Repository: A Source for Quality Indicators to Monitor Older People's Care Experiences Across Care Settings: (1422) Maria Carolina Inacio

ISQUA2025-ABS-1422

M. C. Inacio ^{1,*}, O. Ryan ², B. Pulling ², R. Fernando ², C. Wyman ², D. Harries ², G. Caughey ¹ and Australian Consortium for Aged Care (ACAC)

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: Yes

If yes, what year?: 2024

I confirm that the submission has been approved by all authors: Yes

Introduction:

Quality indicators (QIs) are useful tools to measure, evaluate, monitor, and compare the level of care and outcomes of a system and are foundational elements of quality improvement activities. Older individuals access care in numerous settings and multiple QI programs across these settings, often stored in multiple places/sources, exist to monitor their care.

The aim of this work was to develop the Australian Consortium for Aged Care (ACAC) QI Online Repository, which was designed to comprehensively capture international quality monitoring programs' QIs focusing on older people, and their attributes, for providers, policy makers, and researchers.

Methods:

Nine scoping reviews identified and synthesised QIs and their attributes (e.g., identifying and defining characteristics, data/reporting, and sources) used internationally at a population level to measure care quality experienced by older people in eight key care settings, including aged care (residential and home care separately), primary care, care transitions, rehabilitation care, palliative care, dementia care, rural and remote care, and hospital care. The ACAC QI Online Repository includes all identified QIs and flags those that were (1) population based, routinely used, publicly available, in English, and (2) assessed by ACAC collaborators (i.e., academics, clinicians) as having good scientific acceptability.

Results:

As of February 2025, 5076 QIs were identified across eight completed reviews, with 2878 QIs being population based, routinely used, publicly available and in English, and 399 deemed to have good scientific acceptability (See Table 1 for QI summary by setting). The first QI Repository public release occurred in February 2025 (<https://agedcareconsortium.com.au/quality-indicators>) and an update is planned for mid-2025.

Image:

Table 1. Australian Consortium for Aged Care Quality Indicator Repository by Care Setting

Stages	Criteria	QI Repository Total	Residential Aged Care	Home Care	Care Transitions	Palliative Care	Rehabilitation Care	Dementia Care	Rural and Remote Care	Hospital Care	Primary Care
1: Scoping review of international QI programs	Identified in scoping review general searches.	5076	366	292	737	454	770	714	107	*	1636
2: QIs that met ACAC inclusion criteria	(1) population-based standardised data collection; (2) routinely monitored / reported; (3) publicly available; (4) English language	2678	327	226	366	133	130	62	53	*	1552
3: QIs with generally good measurement properties as assessed by the ACAC collaborators	QI rating based on scientific acceptability.	399	61	58	37	62	29	32	33	*	87

QI=Quality Indicator. ACAC=Australian Consortium for Aged Care.
*To be finalised March 2025.

Conclusion:

The ACAC QI Online Repository is a comprehensive resource of internationally implemented QIs used to examine the experience of older people in the care settings where they most often receive care. This QI Repository is an important resource for individuals involved in quality measurement and monitoring to identify potential metrics, learn about QI implementation and use, and examine similar QIs across care settings.

Disclosure of Interest: None Declared

Corporate Social Responsibility: Impact on Healthcare in India, A Systematic Review: (2264) Kanika Jain

ISQUA2025-ABS-2264

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: Yes

If yes, what year?: 2024

I confirm that the submission has been approved by all authors: Yes

Introduction: The growing importance of Corporate Social Responsibility (CSR) in India’s healthcare sector stems from legislative mandates and an increasing recognition of its potential to address systemic challenges. CSR has evolved from mere philanthropy to strategic investments aimed at enhancing healthcare delivery, infrastructure, and access. Corporate Social Responsibility (CSR) in India has played a transformative role in addressing healthcare challenges by mobilizing resources, fostering public-private partnerships, and promoting sustainable health initiatives.This review aims to synthesize evidence on the measurable impacts of CSR initiatives in the Indian healthcare system.

Methods: Search Strategy

Databases including PubMed, Scopus, JSTOR, and government repositories were searched using keywords such as “Corporate Social Responsibility,” “healthcare,” “India,” and “quantifiable outcomes.” Grey literature and case studies from corporate reports were also reviewed.

Inclusion and Exclusion Criteria

Inclusion criteria: Studies published between 2010 and 2024, reporting quantifiable impacts of CSR initiatives in healthcare (e.g., health outcomes, infrastructure development, service accessibility).

Exclusion criteria: Non-healthcare CSR projects, opinion articles, and studies without measurable data.

Data Analysis

Data were extracted, categorized, and analyzed for trends in focus areas, geographical coverage, implementation methods, and measurable outcomes.

Results: This review analyzed 72 studies, comprising of 45 peer-reviewed articles, 15 case studies from corporate reports, and 12 government or NGO reports. Among these, 50 studies focused on healthcare outcomes (e.g., mortality rates, vaccination coverage), 15 addressed infrastructure development, and 7 evaluated community awareness initiatives.

Three focus areas of CSR in Healthcare namely infrastructural development, preventive healthcare programs and capacity building were ascertained from the review. Over 40% of CSR funds were allocated to building healthcare facilities, including hospitals and diagnostic centers, particularly in rural areas. Using funds through CSR, large-scale vaccination drives, health check-ups, and disease awareness campaigns were conducted throughout the country which impacted at least a million lives.

Quantifiable impacts as ascertained were that in CSR intervention areas a reduction in Maternal and child mortality by at least 25 - 30% was witnessed. CSR initiatives were responsible for the establishment of over 1000 Medical Mobile Units and Primary Health Centers making health accessible in the rural and remote areas. Increased awareness w.r.t. hygiene practices and non-communicable diseases was seen amongst the rural population in the intervention areas.

Certain challenges that were identified were the uneven geographical distribution of CSR funds with the urban areas and Southern states receiving more CSR funding than their counterparts. There is a lack of standardised framework for evaluating long term impacts. Lack of awareness about the policy amongst eligible healthcare providers.

Conclusion: CSR in healthcare has demonstrated significant potential for driving public health improvements in India. By addressing systemic gaps such as insufficient infrastructure and healthcare worker shortages, CSR initiatives contribute to achieving national health goals. However, a more strategic and coordinated approach is required to ensure equitable distribution and sustainability. The quantifiable outcomes highlighted in this review underscore the potential of CSR to bridge systemic gaps and promote sustainable health interventions. Structured frameworks and collaborative efforts will be critical in scaling these successes and ensuring equitable healthcare for all.

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Disclosure of Interest: None Declared

Patient Safety Incidents in the Psychiatric Inpatient Setting: Integrating Evidence from Expert Opinion and Literature Review: (2412) Andrea Conti

ISQUA2025-ABS-2412

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

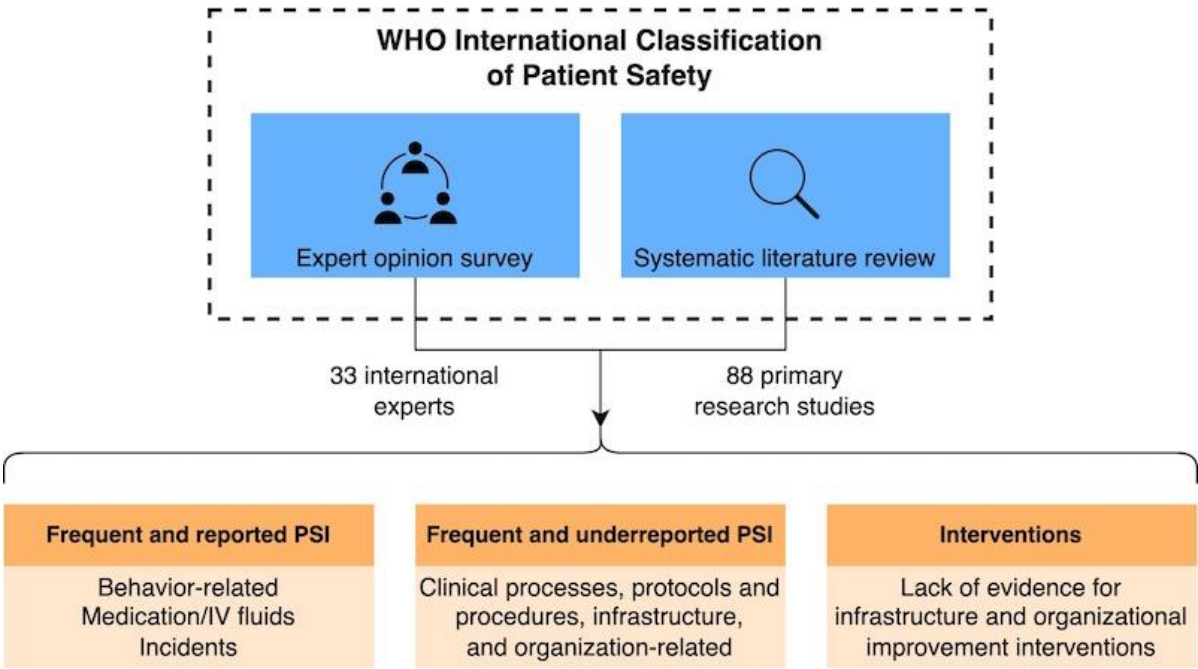
Introduction: Although psychiatric patients are highly vulnerable to safety incidents, research and intervention efforts remain limited. This context's challenges demand a deep understanding of PSI nature, frequency, and characteristics. However, evidence on PSI occurring in psychiatric inpatient setting remains limited, with several aspects and incidents potentially overlooked. Aiming to address this knowledge gap, we adopted a mixed-methods approach to identify rates and types of the most frequent patient safety incidents in the inpatient psychiatric setting.

Methods: We combined two complementary methodologies, namely a systematic review and an expert opinion survey. The review was conducted following PRISMA guidelines (PROSPERO: CRD42023389235), to identify primary studies on PSI in psychiatric inpatient settings. Information was extracted and classified according to the World Health Organization International Classification for Patient Safety (ICPS) framework.

The expert opinion survey was developed adopting a seven-step systematic process which included the adoption of a specifically developed ICPS taxonomy and therefore administered to international healthcare quality professionals. Data quality was ensured through an assessment of response invariability and inconsistency, with independent evaluation by two researchers.

Results: Overall, 88 studies were included in the review (30 observational, 24 qualitative, 21 descriptive, 6 mixed-methods, 4 quasi-experimental, 2 case reports, and one Delphi), and 33 international healthcare quality experts from 15 different countries took part to the survey. Most discussed PSI were behavior-related incidents (54 out of 88 studies included in the review; 29.9% of the total PSI as estimated by experts), Medication/IV fluids (22; 9.5%), and patient incidents such as falls (14; 8%). Incidents related to processes, procedures, infrastructure, and organization represented over 25% of expert-estimated incidents, yet only eight studies addressing these topics were identified in the literature review. Most discussed contributing factors identified in the review were related to service and care delivery organization (28), and to patient characteristics (27), while actions to reduce risk were mainly directed to service organization (54) and staff (17). Only seven studies identified mitigating factors. 24 studies described an intervention to actively reduce the risk or mitigate the consequences of PSI, through the implementation of specific protocols and guidelines (38%), the adoption of technological solutions and devices (21%), and the constitution of teams specifically dedicated to managing PSI. Such interventions were mainly targeted to reduce the occurrence of behavior-related PSI (25%), increase safety culture (21%), and reduce medication errors (16%). In contrast, experts strongly advocated for infrastructure and organizational improvement interventions.

Image:



Conclusion: Current literature might underestimate certain types of PSIs in psychiatric settings, such as incidents related to processes, procedures, infrastructure, and organization. Moreover, the differences between expert opinion and published data suggest highlight the limitations of traditional incident reporting and analysis systems. Our approach, incorporating both published evidence and expert insights, might be helpful to deeply understand the nature and characteristics of PSI. Future safety initiatives must address the unique challenges of psychiatric care, particularly regarding infrastructure design, medication management, and behavioral incident prevention.

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Disclosure of Interest: None Declared

Risk Analysis in the Stages of Benzylpenicillin G Benzathine Preparation in Pediatrics: A Study with HFMEA: (3708) Aline Francisca Cesário Feitosa

ISQUA2025-ABS-3708

E. M. Ferraz ^{1,*}, A. F. C. Feitosa ² on behalf of Karen Valessia da Silva, Thalita Marques de Mesquita, Viviane Peixoto dos Santos Pennafort, Ana Elza Oliveira de Mendonça. and Karen Valéssia da Silva, Thalita Marques de Mesquita, Viviane Peixoto dos Santos Pennafort, Ana Elza Oliveira de Mendonça.

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: INTRODUCTION: Patient safety is a fundamental principle in healthcare, especially in pediatric settings, where children are more vulnerable to complications. Inadequate administration of benzylpenicillin G benzathine can result in therapeutic failures, severe adverse reactions, and infections. Despite strict protocols, medication preparation errors continue to be a concern, a situation that requires investigations to identify and reduce these failures.

OBJECTIVE: To analyze the risks in the preparation process of benzylpenicillin G benzathine.

Methods: METHODOLOGY: This is an evaluative study conducted from June to December 2024. Six professionals participated, and the inclusion criteria were working in a hospital environment, patient safety or pharmacovigilance experience, and knowledge of risk analysis methodologies. The exclusion criterion was the unavailability to participate in the analyses and discussions of the study. The HFMEA (Healthcare Failure Mode and Effect Analysis) methodology was applied to identify risks in the process, considering the probability, severity, and scope of potential errors. Seven virtual meetings were held on the Google Meet platform to discuss the preparation process of benzylpenicillin G benzathine in pediatrics. A risk matrix was then developed, and preventive barriers were defined. The study followed the ethical guidelines of Resolution No. 466/2012 of the National Health Council.

Results: RESULTS: The risk analysis revealed several problems associated with the preparation of benzylpenicillin G benzathine. The most critical risks were: errors in material separation, inadequate disinfection of the tray used for preparation, dosing errors, and other lower-impact risks, including errors in needle selection and contamination due to failure in ampoule sanitation. The main contributing factors to these errors were the lack of standardization of processes and the need for continuous team training. The need for implementing standardized digital protocols, training with realistic simulation and gamification, regular audits, and the use of artificial intelligence for predictive failure analysis was emphasized.

Conclusion: CONCLUSION: The study revealed significant failures in the preparation of benzylpenicillin G benzathine in pediatrics. Standardizing procedures, training the team, and implementing innovative strategies were considered essential measures to minimize these risks and ensure patient safety.

Disclosure of Interest: None Declared

Assessing knowledge and attitude of nurses towards prevention of pressure injury to reduce its prevalence: (1733) Talal ALFadhalah

ISQUA2025-ABS-1733

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Pressure injuries can greatly affect a patient's health, safety, and quality of life. The prevalence of pressure injuries is a widely used clinical indicator of patient safety and quality of care. The knowledge and attitudes of nurses towards preventing pressure injuries are vital for providing safe, high-quality healthcare. Nursing in Kuwait suffers from a research gap on this topic. In the current study, our objectives were to assess the level of nurses' knowledge and attitudes to PI prevention and to explore their relationship with the prevalence of PIs and PI prevention practices. We aimed to fill this research gap and to guide strategies for improving nursing care and service outcomes. It is anticipated that this study will enhance nurses' knowledge on PIs, help to change their attitudes towards prevention and advance PI prevention strategies in public healthcare settings. Achieving those objectives will eventually lower the prevalence of PIs, decrease the costs associated with PI, shorten inpatient hospital stays and reduce the risk of hospital-acquired complications.

Methods: This was a cross-sectional study conducted in the public general hospitals of Kuwait. The Standing Committee for Coordination of Health and Medical Research in Kuwait approved the research (1962/2022). An online form, a Modified Pieper's Pressure Ulcer Knowledge Test and the Moore and Price scale were used to gather data, covering variables related to hospitals, nurses, patients, pressure injuries, and prevention practices. We processed and analysed data using Microsoft Excel and SPSS 23.

Results: The mean national prevalence of pressure injury was 17.6% (95% CI: 11.3–23.8). Regarding preventive measures, "pressure injury assessment on admission" has been provided to 65.5% of patients. Correlation analysis revealed that the only statistically significant correlation with the prevalence of hospital-acquired pressure injury was "pressure injury assessment on admission", which was strongly negative ($p = -0.857$). The median score of nurses' knowledge on preventing pressure injuries was 73.2% (IQR: 68.3–78.0), and only 31.7% of the knowledge test items were answered correctly by 90% of participants or more. The median attitude score was 41.0 (IQR: 37.0–44.0). There were statistically significant strong positive correlations between nurses' age, years of work experience, attitude score, and the percentage of trained staff complying with measures against pressure injury. Attitude score had a statistically significant and strongly negative correlation with the rate of hospital-acquired pressure injury.

Conclusion: This study offers inestimable insights into the field. In Kuwait, nurses' knowledge of how to prevent PIs is unsatisfactory to borderline satisfactory. The nurses generally have positive attitudes towards preventing pressure injuries, which has a strong negative correlation with hospital-acquired pressure injury rate. Despite this, the prevalence of hospital-acquired pressure injuries is still higher in Kuwait than it is globally. Many risk factors for the development of pressure injuries are public health concerns, and effective mitigating strategies are needed. Preventing pressure injuries is a complex, multifaceted process, and a high prevalence of pressure injury and low compliance with prevention practices cannot be explained solely by poor knowledge or negative attitudes. Studying the barriers to practicing pressure injury prevention and managing established pressure injuries would offer a wider perspective into this national issue, especially since the positive attitude of Kuwait's nurses was not mirrored by compliance with pressure injury prevention practices. However, there is an urgent need to work with the parties concerned to establish effective education and training programmes to bridge these gaps.

Disclosure of Interest: None Declared

Validation of a Method for Leadership Development in Healthcare Professionals to Strengthen Patient Safety Culture: (3037) Flávia CAMILA LAVOYER Paganotti

ISQUA2025-ABS-3037

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Preferred presentation method: 10 Minute Lightning Talk (E-Poster)

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Patient safety culture encompasses a set of values, norms, and competencies that shape team behavior and decision-making. However, in many healthcare institutions, professionals often perceive themselves solely as operational staff, lacking leadership awareness and preparation to manage the technical, behavioral, and emotional demands associated with leadership roles. For this reason, it is necessary to establish a leadership development method for healthcare professionals, aiming to strengthen the patient safety culture.

Methods: To address this gap, the **"On the Leadership Trail"(NA TRILHA DA LIDERANÇA)** program was developed, consisting of six meetings totaling 12 hours. Each meeting integrated theoretical content, discussions, practical tool applications, and knowledge exchange, supporting self-development through an individualized leadership action plan. All supporting materials were provided via the e-learning platform **fc.eadplataforma.app**.

The meetings covered key leadership themes, including: **leadership concepts and self-awareness, fundamentals of interdependence and the relationship between personal and professional life in leadership development, DISC behavioral assessment and its applications in organizational contexts, different leadership roles and responsibilities, goal setting and the development of personalized leadership action plans, essential behavioral competencies for effective leadership.**

Results: From August 2020 to October 2024, eight cohorts of the **"On the Leadership Trail" (NA TRILHA DA LIDERANÇA)** program were conducted in a live online format. A total of 46 healthcare professionals from both the public and private sectors in Brazil participated in the program. Participants engaged in discussions on self-awareness and the necessity of self-leadership as a prerequisite for effectively leading others.

A key highlight of the program was the **DISC Behavioral Assessment. Based on these assessments, 46 individualized development goals** were established, aimed at fostering more effective leadership behaviors.

At the conclusion of the program, participants completed a **course satisfaction survey**, which employed the **Net Promoter Score (NPS)**. Result was 100.

Conclusion: The method was validated based on the high engagement rate, the successful establishment of individualized leadership development action plans, and the **100% satisfaction**. The findings suggest that leadership development significantly strengthened patient safety culture by fostering a sense of team integration, promoting shared responsibilities, enhancing decision-making agility, and improving overall professional performance. Participants demonstrated increased confidence, efficiency, and commitment to their roles, contributing to a more proactive and safety-oriented healthcare environment.

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Disclosure of Interest: None Declared

Inclusive emergency departments: A qualitative study on older adults', carers', and ED care providers' experiences of Australian emergency departments: (2652) Robyn Clay-Williams

ISQUA2025-ABS-2652

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: The complex physical, social and psychological needs of unwell and dependent older adults may be poorly served in a fast-flowing Emergency Department (ED) environment (1), and other alternatives to the ED environment for prolonged comprehensive assessment and care may be more suitable (2). This study explored the experiences and expectations of older adults (≥ 65 years), carers and ED care providers in three metropolitan public hospitals in Sydney, Australia. These insights will be used to generate high quality, inclusive ED care interventions which will enhance the safety and quality of Australian emergency departments for older adults aligned with the function of the ED.

Methods: This study which elicits the experiences of users and providers, is part of a larger experience-based codesign study that was conducted in the EDs of three Australian metropolitan public hospitals. ED care providers (geriatricians, ED clinicians, nurses and allied health professionals), older adults and carers were recruited using purposive sampling. Data to elicit experience were collected using semi-structured interviews and participant observations of emergency departments. Data collection continued until data saturation was achieved. Interviews were transcribed and data were thematically analysed.

Results: Semi-structured interviews with older adults and carers ($n=12$) and ED care providers ($n=46$), and non-participant observations ($n=214.5$ hrs) were conducted. The results revealed that the way care is delivered, in combination with specific characteristics of the ED environment, did not meet the needs of older adults. Older adults were grateful for the care they received in what they perceived to be a busy environment. However, carers and ED care providers were unsatisfied with quality of the care provided, including the need for carers to advocate for older adults, and lack of timely care with ED care providers short staffed and attending to more urgent priorities. To create high quality, safe, inclusive health systems, and navigate challenges of providing care to an aging population, we propose that EDs will need to adapt services to address the increasingly complex and acute care needs of older adults. Optimal flow strategies are challenging as they must align with the function of the ED while also meeting the older person's expectation of personalised care.

Conclusion: These insights will inform future Australian ED interventions for better experience for older adults, their carers, and ED staff alike.

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Examining trends in patient experience across Australian general practice: The role of practitioner-related factors before, during and after COVID-19 pandemic.: (2891) Tina Janamian

ISQUA2025-ABS-2891

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: Yes

If yes, what year?: 2024

I confirm that the submission has been approved by all authors: Yes

Introduction: Patient experience is a key indicator of healthcare quality, shaping service improvements and informing policy decisions. Patient-Reported Experience Measures (PREMs) capture patients’ perceptions of their healthcare encounters, identifying key determinants of experience such as practitioner empathy, communication, and accessibility. While existing research has explored these factors, few studies have examined how they evolved in response to healthcare disruptions like the COVID-19 pandemic. The pandemic altered healthcare delivery globally, limiting patient access, shifting practitioner-patient interactions, and reshaping expectations. However, there is limited empirical evidence on how these changes impacted patient experience within Australian general practice.

This study aims to analyse trends in patient experience across Australian general practice, focusing on practitioner-related factors before, during, and after COVID-19. By identifying evolving associations between these factors and overall patient experience, this research provides critical insights for optimising patient-centred care and ensuring resilience in healthcare delivery during future disruptions.

Methods: This study utilised secondary data from the Practice Accreditation Survey (PAIS), a validated PREM tool, capturing patient feedback across three time periods: pre-COVID-19 (2017–2018), during COVID-19 (2020–2021), and post-COVID-19 (2023–2024). A total of 51,107 patient responses were analysed. Quantitative variables were rated on a Likert scale and converted into percentage scores.

Statistical analysis included ANOVA to assess differences in patient experience across time periods, with post-hoc least significant difference (LSD) tests identifying specific time-point variations. Network analysis was conducted to explore evolving associations between practitioner-related factors and overall experience, providing insights into the changing dynamics of patient experience.

Results: Findings revealed a significant decline in overall patient experience during COVID-19 ($p < 0.05$), followed by a notable rebound post-pandemic. The most substantial declines during COVID-19 were observed in practitioner listening ability (-2.27%), time allocated to patients (-2.24%), and consideration of

personal circumstances (-2.37%). While patient experience levels improved post-pandemic, certain factors—such as confidence in the practitioner and time allocated—remained below pre-COVID levels ($p > 0.05$).

Network analysis identified consistent predictors of experience across all periods, with practitioner warmth, listening ability, and patient recommendation likelihood demonstrating the strongest associations with overall experience. However, reassurance and self-care support gained importance post-pandemic, indicating a shift in patient priorities towards emotional and self-management support in healthcare interactions.

Conclusion: This study demonstrates that patient experience with Australian general practice declined significantly during the COVID-19 pandemic but recovered post-pandemic, with some practitioner-related factors remaining below pre-pandemic levels. The findings highlight the importance of maintaining effective communication, ensuring sufficient consultation time, and enhancing patient reassurance strategies to sustain high levels of patient experience. These insights emphasise the need for adaptable patient-centred care strategies, particularly in times of healthcare disruption. Future research should explore qualitative patient feedback to further contextualise these trends and inform targeted improvements in general practice.

Disclosure of Interest: None Declared

ScoreLab: An Intelligent Tool for Performance Evaluation and Feedback in Clinical Laboratory: (2307) Helen Cristina Branco Moreira

ISQUA2025-ABS-2307

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¹IMD, SP, Brazil

Preferred presentation method: 10 Minute Lightning Talk (E-Poster)

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: ScoreLab is an innovative tool designed to monitor employee performance and facilitate team management. Unlike traditional models, it provides each employee with a personalized dashboard displaying their performance indicators, allowing them to track their strengths and identify opportunities for improvement. This enables continuous and targeted feedback, aligning individual growth with the institution's objectives. In this way, it is possible to highlight and value internal talents in a fair and equitable manner.

This study aims to demonstrate the positive effects that the tool can bring to laboratories, highlighting improvements in organization, efficiency, and team engagement.

Methods: The platform allows managers to track each employee's progress on an individual basis. Each employee has access to their performance dashboard, making it easier to create specific development plans and improvement actions. The intuitive interface ensures easy adoption and team engagement, fostering a constant feedback environment and continuous growth.

Results: Increase in Productivity

The TAT (Turn Around Time) index increased by an average of 9% after the tool's implementation, reaching a historic positive record, demonstrating improvement in the team's speed and organization. According to Gallup's research (2017), teams with continuous feedback show 14.9% more productivity, reinforcing ScoreLab's effectiveness in this regard.

Reduction in Recollects

Before the tool was implemented, the highest record the collection team achieved was 6 consecutive months of meeting the goal. After the introduction of ScoreLab, the same team achieved the goal for 12 consecutive months. According to Goleman's studies (1998), emotional intelligence in the workplace, which can be fostered through appropriate feedback, is crucial for improving performance and operational effectiveness.

Reduction in Corrections

The correction rate dropped by 93% compared to the pre- and post-tool periods. This significant reduction reinforces the importance of continuous feedback and evaluation systems, as stated by Ruch et al. (2017), who assert that well-structured performance management can reduce errors and rework.

Increased Recognition

Employees who stand out the most each month are immortalized on a digital recognition board, encouraging team engagement. Recognition is a powerful motivational factor, as highlighted by Herzberg (1966), who emphasizes the importance of recognition in increasing job satisfaction and talent retention.

From the generation of the Score, it is possible to identify each employee's strengths and weaknesses, and based on that, provide specific training aimed at more effective professional growth.

Conclusion: With ScoreLab, IMD has not only improved team performance but also achieved significant milestones, such as the QMENTUM seal and recognition as a Great Place to Work (GPTW). By focusing on individualized development, the tool ensures more efficient management and a more collaborative and productive work environment. The project began in June 2022 with 15 evaluated employees and, by 2025, expanded to nearly 100 employees per month.

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Disclosure of Interest: None Declared

Program “One Life, One Seedling”: (3717) Lise Hizumi Falcão de Castro

ISQUA2025-ABS-3717

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: The “One Life, One Seedling” program, developed by the José Silveira Foundation and implemented at Santa Casa de Jequié, was launched in 2022, with the support of the Public Prosecutor’s Office of the State of Bahia, to address the degradation of the Atlantic Forest and promote environmental sustainability. The initiative establishes a symbolic connection between the birth of a baby and the planting of a tree, encouraging environmental preservation for future generations. Upon hospital discharge, each mother receives a native tree seedling along with guidance on planting and basic care. Participation in the program is voluntary, aiming to engage families in environmental conservation and strengthen sustainable practices. The seedlings, donated by the Arboretum Program, are cultivated in the plant nursery at Santa Casa de Jequié and registered for technical monitoring.

Methods: The program distributes native tree seedlings to mothers treated at the Santa Casa de Jequié maternity ward, reinforcing the connection between birth and reforestation. Each participating mother commits to planting and caring for the tree. To ensure the necessary technical support, a monthly follow-up system was established, allowing the José Silveira Foundation to provide continuous guidance on planting, irrigation, and pruning, as well as encouraging tree growth in parallel with the babies’ development. To compensate for seedlings that could not be planted by the mothers, Santa Casa employees voluntarily planted more than 300 seedlings, reinforcing a culture of sustainability within the institution. Additionally, the creation of a plant nursery enables the maintenance and cultivation of seedlings before donation, ensuring the continuity of the program and allowing for tree replacement in degraded areas.

Results: Since its launch, the program has demonstrated positive impacts on both environmental sustainability and social engagement. By December 2024, the program had already distributed more than 4,000 seedlings, contributing to the restoration of native vegetation and strengthening environmental education among participating families. The program has also become well established internally, with the participation of more than 50 employees involved in planting and maintenance activities, fostering a cultural shift within the institution. In addition to restoring degraded areas, the initiative helps conserve soil, reducing erosion and increasing water retention, directly benefiting the transition region between the Caatinga and the Atlantic Forest. As a result, the environmental impact expands, favoring biodiversity and contributing to climate change mitigation. The program has also strengthened community awareness, encouraging sustainable practices and highlighting the connection between public health and environmental preservation.

Conclusion: The “One Life, One Seedling” program stands out as an innovative sustainability strategy within the healthcare system. The connection between birth and reforestation reinforces collective responsibility for environmental preservation and promotes sustainable habits among future generations. The creation of a plant nursery, the engagement of employees, and the voluntary participation of mothers demonstrate the potential for replication of the program in other institutions and locations. In addition to directly contributing to environmental regeneration, the initiative strengthens the link between public health, community engagement, and socio-environmental responsibility. The success of the program confirms its relevance as

a model of sustainable best practices within the healthcare sector, generating long-term positive impacts and serving as a reference for other environmental conservation initiatives.

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Disclosure of Interest: None Declared

HAI Auditing in the Digital Era: An Automated Approach to Continuous Improvement in Healthcare: (2221) Lucas Passamonti De Souza

ISQUA2025-ABS-2221

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Healthcare-Associated Infections (HAIs) are a major challenge to patient safety in hospitals. Effective prevention requires systematic monitoring and regular audits to ensure adherence to protocols. Manual audits have limitations, including low coverage, difficulty in data integration, and time consumption.

Advancements in healthcare technology allow the digitalisation of audits, improving the identification of non-compliances and enabling real-time, automated systems for more efficient HAI control. This approach enhances responsiveness and data-driven decision-making.

The ‘Minimum Requirements for Infection Prevention and Control Programmes’ document published by the World Health Organisation (2019), highlights the importance of conducting regular and systematic audits as an essential tool to promote adherence to fundamental preventive practises.

The objective of this study is to evaluate the implementation of an automated tool for real-time data collection in audits of Healthcare-Associated Infection (HAI) prevention measures related to invasive devices at the Hospital Centre of the Evandro Chagas National Institute of Infectious Diseases (INI/Fiocruz).

Methods: A comparative observational before-and-after study was conducted, analysing two distinct periods:

- Period 1: Manual audits performed between October 2020 and September 2021.
- Period 2: Automated audits conducted between October 2021 and September 2022.

The digitalisation of the process was implemented by integrating the REDCap system with an interactive dashboard in Power BI. The automated system enabled real-time data collection and analysis, facilitating the identification of non-compliances and the timely implementation of corrective measures. The study's primary outcome was audit coverage, measured as the percentage of monitored days relative to the total days of invasive device use.

Results: The implementation of automated auditing led to a significant increase in audit coverage. A total of 9,147 audits were evaluated in the study. During the manual auditing period, the average coverage was 3.59%, whereas in the digital period, this figure rose to 23.76%, reaching 52.99% in the final month analysed.

Other notable impacts include:

- Greater integration among healthcare teams, fostering a collaborative environment for HAI prevention.
- Reduced response time for correcting non-compliances.
- The team's growing maturity over the years, which contributed to the study's outcomes.

This study aimed to overcome previous limitations by integrating an automated audit tool that not only verifies results but also enables continuous monitoring of the processes involved. By providing structured real-time data, the system promotes a broader perspective, allowing healthcare teams to quickly identify critical points within workflows and make adjustments before potential failures result in infections.

Image:

HAI Auditing in the Digital Era: An Automated Approach to Continuous Improvement in Healthcare

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OBJECTIVE

Evaluate the implementation of an automated tool for real-time data collection in audits of Healthcare-Associated Infection (HAI) prevention measures related to invasive devices at the Hospital Centre of the Evandro Chagas National Institute of Infectious Diseases (INI/Fiocruz).

METHODS

A comparative observational before-and-after study was conducted, analysing two distinct periods:

- Period 1: Manual audits performed between October 2020 and September 2021.
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The digitalisation of the process was implemented by integrating the REDCap system with an interactive dashboard in Power BI. The automated system enabled real-time data collection and analysis, facilitating the identification of non-compliances and the timely implementation of corrective measures.

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CONCLUSION

The findings reinforce the importance of technological innovation in hospital management, demonstrating that audit automation can strengthen the safety culture and drive sustainable improvements in healthcare delivery.



Conclusion: The shift from manual to automated auditing improved hospital surveillance, increasing coverage, detecting non-compliances faster, and enhancing team engagement - ultimately boosting patient safety.

Focusing on processes over outcomes strengthened audit effectiveness and supported sustainable HAI prevention in high-risk areas like ICUs.

At INI/Fiocruz, the automated tool advanced HAI prevention, improving audit coverage, team engagement, and process management, which demonstrates technology's role in enhancing patient safety and quality improvement.

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Disclosure of Interest: None Declared

Outcomes of a Task-Shifting Cesarean Delivery Training Program for General Practitioners in Ethiopia: (3351) Ishmael Shemsedin Hassen

ISQUA2025-ABS-3351

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¹Healthcare System Impact Syndicate Africa, Addis Ababa, Ethiopia

Preferred presentation method: 10 Minute Lightning Talk (E-Poster)

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Task-shifting obstetric surgical services from obstetricians to general practitioners (GPs) is a strategy to address surgical needs in regions with critical specialist shortages. The Operative Services and System Management (OSSYM) training program, a two-week intensive didactic and four-month practical surgical training, aimed to equip GPs with the competency to independently perform primary cesarean sections for low-risk pregnancies in rural Ethiopian primary care facilities. This study describes the training outcomes and the time-to-milestone achievement patterns of the trainees.

Methods: Seventy general practitioners from across Ethiopia voluntarily participated in a four-and-a-half-month surgical training program led by obstetrician-gynecologists at regional general hospitals. The program commenced with a two-week intensive induction at a skills laboratory, encompassing basic surgical skills, maternal and neonatal resuscitation, Structured Point-of-Care Obstetric Ultrasound (SPOUS), and systems management with a focus on quality improvement. This was followed by four months of on-site, hands-on training in cesarean section procedures and obstetric ultrasound. Technical skill competency was assessed using the Objective Structured Assessment of Technical Skill (OSATS). The final assessment score was a weighted average of OSATS scores and written examination results, with a minimum passing score of 70%. Trainees were required to complete a minimum of 40 independent cesarean deliveries for certification. Data were collected from OSATS result sheets, procedural logbooks, and retrospective surveys, and analyzed using SPSS.

Results: Of the 70 trainees, one withdrew before completion and was excluded from the analysis. All remaining 69 GPs achieved the milestone of 40 independent cesarean deliveries. Sixty-seven trainees (97.1%) passed the final assessments and graduated without further supervision. The median final assessment score was 86%, and the median OSATS score was 85.5%. Two trainees scored below 70% and were discontinued. Procedural logbook data revealed median times to achievement of key milestones: 13

days for skin closure, 16 days for fascia repair, 24 days for uterine repair, and 30 days for complete fetal and placental delivery. Retrospective survey data confirmed that 100% of trainees completed the required 40 independent cesarean deliveries by week 16. Logbook data indicated a higher procedural demand for uterine closure, with 74% of trainees requiring over 10 observed/assisted (O/A) procedures. Fetal delivery exhibited the most extensive requirement, with 41.2% of trainees needing more than 20 O/A procedures. Most trainees required at least 21 observed and assisted procedures before performing a cesarean section under direct supervision, with significant inter-individual variation in the number needed to progress to proactive and distant supervision.

Conclusion: This study demonstrates that an intensive four month and two weeks task shifting training program for obstetric surgical care is well-received by GPs. Trainees achieved major milestones within the expected timeframe, and the majority attained the required skills for competency. Further research is warranted to evaluate patient outcomes and safety profiles.

Disclosure of Interest: None Declared

Improving clinical governance to ensure quality and patient safety: results from a public hospital in the Brazilian Amazon: (3771) Adda Sabrina Moura

ISQUA2025-ABS-3771

I. Pereira¹, D. Freire¹, J. Freitas¹, A. Telles¹, E. Mota Filho¹, Q. Monteiro², A. Sabrina Moura¹, G. Cabral³, J. Almeida⁴, W. Brandão¹, I. Jerez⁵, M. G. S. Borba^{6,*} and NQSP Departament

¹Quality and Safety Patient Departament, ²Healthcare-associated infections Prevention, ³Nurse Departament, ⁴Training and Education Departament, ⁵ICU Departament, Hospital Delphina Rinaldi Abdel Aziz - CHZN/INDSH, ⁶Quality and Safety Patient Departament, Hospital Delphina Rinaldi Abdel Aziz, Manaus, Brazil

Preferred presentation method: 10 Minute Lightning Talk (E-Poster)

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Within hospital corporate governance, the healthcare management model is largely defined by clinical governance. To enhance both management and clinical performance, a strategic, value-based healthcare framework is implemented, aligning with principles of quality, patient safety, and value-based medicine.

Objectives

To present key care performance indicators based on the core pillars of clinical governance as defined within the institution.

To discuss how the implementation of Plan-Do-Study-Act (PDSA) cycles has contributed to improvements in hospital clinical performance indicators.

Methods: This is a descriptive observational study analyzing the clinical performance resulting from the implementation of clinical governance in a Brazilian Amazon public hospital. The clinical governance framework was structured around the following pillars: patient safety, clinical effectiveness, risk management, clinical audit, patient and family engagement, and education and development. These pillars form a set of principles designed to ensure the quality and safety of healthcare services.

Key initiatives included the implementation of standardized therapeutic plans, management of clinical protocols, and the application of PDSA cycles¹ in the analysis of adverse events. An integrated training program was also established, utilizing realistic simulation methodologies of real clinical cases to train personnel on essential clinical protocols and best healthcare practices.

Performance indicators were monitored monthly by the quality and patient safety team. These indicators were then discussed monthly with hospital managers, who evaluated the results and compliance with planned actions to improve clinical outcomes. Data was collected using a dedicated software system for quality and patient safety monitoring. No conflicts of interest were reported by the authors.

Results: A comparison of results from 2023 to 2024 reveals substantial improvement in the performance of key healthcare quality indicators, including the rate of adverse events, the overall mortality rate, and the rate of healthcare-associated infections (HAIs). The primary results are summarized in Table 1.

Table 1: Healthcare Quality and Clinical Performance Indicators:

Categories	Indicators	Rate		Relative Percent Difference (%)	p-value
		2023	2024		
Patient Security	Density of adverse events	1,01	0,99	32.9	p<0.001
	Adverse Event Rate	19,20	6,33	51.88	p<0.001
Clinical Effectiveness	Sepsis protocol compliance rates	64%	75,20 %	63.64	p<0.001
	Healthcare-associated infections (HCAIs) rate	1,90	1,12	41,05	p<0.001

	ICU length of stay (ALOS)	16,1 (days)	13,42 (days)	2,92 days	p<0.001
	Bed Turnover Rate (BTR)	39,60	42,19	6,54%.	P<0.002
	Hospital mortality	8,28%	6,91%	16,54	p<0.001
	Clinical deterioration rate	5,6%	4,9%	12,5	-
Clinical audit	Compliance rate	60,71%	49,66 %	11,05%	p<0.001
Patient and family engagement	Number of Patient and family advisors	14,489	16,815	16.06	-
Education and development	Total training hours	62,009	60,316	2,72	-
	Training Hours per Employee	09:26:29 hours/year	19:47:01	109,7%	-

The improvements in healthcare quality indicators underscore the importance of implementing and effectively managing clinical governance within a hospital setting. Investing in employee training, utilizing active methodologies such as clinical simulation, enhances training effectiveness, increases adherence to institutional clinical protocols, and contributes to a reduction in the institutional mortality rate.

Conclusion: Implementing and managing clinical governance, with broad participation from the medical and multidisciplinary team, leads to improved healthcare performance and reduced harm from adverse events. Furthermore, it provides operational effectiveness and consequent cost reduction.

References: Quality Improvement Essentials Toolkit. Boston: Institute for Healthcare Improvement; 2017.

Disclosure of Interest: None Declared

Understanding Experiences of People with Disability in the Emergency Department: A Qualitative Study: (2730) Nema Hayba

ISQUA2025-ABS-2730

Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: People living with disabilities (PWD) present more frequently to the emergency department (ED) for care than other population groups due to challenges accessing timely, comprehensive, primary care for their complex needs(1). These needs, which inherently rely on connection, time, and understanding, cannot always be met by ED clinicians in this high-pressure environment. There are few peer-reviewed studies reporting the patient experience (2) and less reporting evaluated interventions to improve ED experience for this cohort (3). This study represents one of the steps of the first stage of Experience-Based Codesign by exploring the experiences of adults with disabilities regarding their care in the Emergency Departments (ED) at three Australian hospitals. The study aimed to identify their needs and preferences for ED care to guide the co-design of future interventions that enhance their ED experience.

Methods: Semi-structured interviews were conducted with participants recruited through snowballing and purposive sampling. Researchers also engaged with disability organisations and National Disability Insurance (NDIS) service providers in the local health district. Eligibility criteria included: i) adults aged 18+, ii) living with a disability, iii) having a National Disability Insurance (NDIS) plan, iv) able to provide consent, or able to participate in a supported consent and participation model, and v) visited one of the three participating EDs in the last 12 months. Four participation models were employed: 1) 1:1 interview with eligible individuals, 2) 1:2 interviews with individuals and a support person, 3) 1:1 interviews with supporters of individuals unable to consent, and 4) 1:1 interviews with epistemic experts (e.g., disability specialists, academic clinicians). Interviews with epistemic experts were included to supplement data from cohort participants given prior challenges in recruiting priority participants for research. Thematic analysis was performed.

Results: 28 participants were interviewed, of whom 13 were PWD, 11 were paid carers or house managers who had supported a PWD in ED, and 4 were academic clinicians as epistemic experts. Findings indicate that ED care is suboptimal, especially for non-verbal patients. Patients reported that they did not feel safe in the ED, and care quality often heavily relied on the presence of a support person. Both patients and epistemic experts recognised limited workforce capacity and resources but advocated for alternate communication methods to improve patient-provider interactions to address complex needs. Policy changes are needed to fund support persons in the ED for consistent care and improve clinician exposure to preferred communication and care needs. Viable interventions are proposed to prioritise the specialised needs of patients with disability throughout their journey in the ED.

Conclusion: The ED system must be sensitive to the needs of PWD so as not to further disadvantage, disable and create vulnerability. Helpful resources are published in the grey literature, but evaluation needs to consider patient experience and outcomes, staff experience and system performance for sustainable care improvement.

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Disclosure of Interest: None Declared

Afternoon

Lightning Talks

Evaluating the Planetree Collaborative Initiative: Enhancing Patient-Centered Care and Improving Safety Outcomes in Brazilian Institutions: (2615) Claudia de Barros

ISQUA2025-ABS-2615

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Preferred presentation method: 10 Minute Lightning Talk (E-Poster)

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: The *Planetree* model represents a transformative approach to healthcare, placing the patient at the center of care through a holistic framework that addresses physical, emotional, social, and spiritual well-being. Since 2012, *Planetree* Brazil, based at the Hospital Israelita Albert Einstein, has led efforts to train and support Portuguese-speaking healthcare institutions in implementing this methodology to achieve “Person-Centered Care Certification”. The *Planetree* Collaborative was designed as an accelerator of change, equipping institutions with evidence-based tools to improve quality and safety indicators while fostering a culture of humanised, patient-centered care. Despite increasing recognition of the benefits of this approach, challenges remain in integrating humanistic care principles with institutional quality and safety metrics. The structured assessment of this initiative provides valuable insights into its effectiveness in clinical outcomes and offers a scalable model for broader implementation.

Methods: The *Planetree* Collaborative is being implemented in seven private healthcare institutions across the Brazilian territory, starting in 2024 with a planned finalisation in December 2025. A multifaceted strategy is being employed, combining Kotter’s Change Acceleration Framework to drive organisational alignment, foster leadership commitment, and accelerate the adoption of patient-centered care practices, and the Model of Improvement, enabling rapid-cycle improvements through iterative learning (plan-do-study-act cycles). We assess: (i) process indicators, tracking compliance with key patient safety outcomes (length of stay – LOS and falls), (ii) net-promoter score (NPS), and (iii) evaluate the density incidence of the following clinical indicators: (a) three critical healthcare-associated infections: catheter-line associated bloodstream infections (CLABSI), ventilator-associated pneumonia (VAP), and catheter-associated urinary tract infection (CAUTI); and (b) Pressure ulcer. Additionally, patient safety culture was assessed using the Hospital Survey on Patient Safety Culture (HSOPSC) version 2.0, applied at baseline. After the collaborative, a control follow-

up assessment is planned to evaluate the sustainability of improvements and identify long-term changes in patient safety culture.

Results: So far (February 2025), implementing *Planetree* interventions improved patient safety and quality indicators: LOS reduced by 3% (4.31 to 4.18 days), and falls decreased by 61% (0.4 to 0.1), respectively. NPS, remains over 80%. The three HAI, CLABSI, and VAP, dropped-down by 62% (2.3 to 0.9 catheter-day) and 63% (6.7 to 2.4 ventilator-day), respectively. CAUTI incidence remains stable (0.45 per catheter-day). Pressure ulcer incidence declined by 39%, with one institution achieving a 55% reduction in an intensive care unit. These results indicate that implementing a structured, patient-centered care model is feasible, suggesting that integrating patient-centered strategies with evidence-based safety protocols leads to tangible improvements in clinical outcomes. The planned follow-up assessment will provide critical insights into the institutions' long-term sustainability and patient-safety cultural changes.

Conclusion: The *Planetree* Collaborative has successfully reduced critical clinical outcomes and improved patient experience. By integrating structured change methodologies, this model offers a scalable, evidence-based approach for institutions seeking to strengthen safety and care quality, and to achieve “Person-Centered Care Certification”.

Disclosure of Interest: None Declared

The Patient Experience Assessment in Republic of Korea: (1851) Jung Won Shin

ISQUA2025-ABS-1851

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Health Insurance Review and Assessment Service(HIRA) was introduced the patient experience assessment in 2017 to improve patient-centered healthcare service quality in the Republic of Korea. Currently, the fourth evaluation has been completed to measure the patient experience level of hospitals with 100 beds or more.

Methods: Subjects were 476,128 patients who are over 19 years old and were admitted to 374 hospitals. Patients were randomly selected by using the claimed data. The evaluation cycle is two years, and the evaluation method was a telephone survey using a structured questionnaire from the 1st evaluation in 2017 to the 3rd evaluation in 2021, and was changed to a mobile web survey method from the 4th evaluation in 2023. And survey was conducted between August and December 2023 (for 5 months). Depending on the size of the hospital bed, 100 to 300 patient experiences were collected, and the ultimate goal was to collect more than 60,000 patient experiences. Survey questionnaire consisted of 24 questions. The main contents are nurse service, doctor service, hospital environment, treatment process, overall assessment and assurance of patient rights by reflecting Korean situation. In addition, asking about patient characteristics such as education, utilization of emergency room, and self-rated health. A linearisation method (0-33-67-100 points, 0-100 points) was used for scores of each questions. survey output and claimed data are utilized

analysis of results. Also, patient-mix adjustment is currently in progress using patient characteristic variables for comparison between hospitals.

Results: As a result of the 4th evaluation, 64,246 responses were collected and the analysis was completed, and the evaluation results were disclosed in September 2024. The 4th evaluation's overall score was 82.44 points, with the average scores for all six evaluation areas being over 80 points(85.03 points for nurse service , 81.11 points for doctor service, 81.15 points for hospital environment, 83.06 points for treatment process, 83.83 points for overall assessment, 80.02 points for assurance of patient rights). The introduction of the mobile web survey increased 10.2%(64,246) from 58,297 respondents in the 3rd evaluation telephone survey, and the response rate averaged 13.6%, similar to the 3rd evaluation(14.6%). In particular, the average response time was 4 minutes and 41 seconds, which decreased significantly compared to the average of 9 minutes and 39 seconds of the 3rd evaluation.

Conclusion: The 4th(2023) Patient Experience Evaluation was converted from the existing telephone survey method to a mobile web survey method, allowing the public to participate in the survey at a time convenient for them. Accordingly, in order to expand publicity for the public and support the elderly who are vulnerable to the mobile web environment, functions such as text enlargement and voice support(reading) were applied to the survey screen to encourage participation from many citizens. In order to confirm the changes in the medical field through the introduction of the evaluation, a survey on the impact of the introduction of the patient experience evaluation was conducted on workers at the 4th evaluation target institutions in 2024. The results showed that the introduction of the patient experience evaluation had a positive effect on improving the quality of medical services, and that they felt that medical services were changing to be more patient-centered. Through efforts to create a patient-centered medical culture, it is estimated that the 4th evaluation result achieved an average of 80 points or more in all six evaluation areas. We believe that the introduction of a mobile web survey to increase the convenience of patient participation is a meaningful first step toward improving the quality of medical care that the public can feel. This year, we plan to measure the level of patient experience by improving it to questions suitable for the mobile web environment and conducting a 5th evaluation.

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Disclosure of Interest: None Declared

Analysis of the Clinical-Functional Stratum of Elderly Patients Receiving Home-Based Care from a Multidisciplinary Team in a Supplementary Primary Care Service: (2899) Gabriella Polastri Stilpen Barbosa

ISQUA2025-ABS-2899

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Preferred presentation method: 10 Minute Lightning Talk (E-Poster)

Have you presented this abstract at an ISQua Conference before?: No

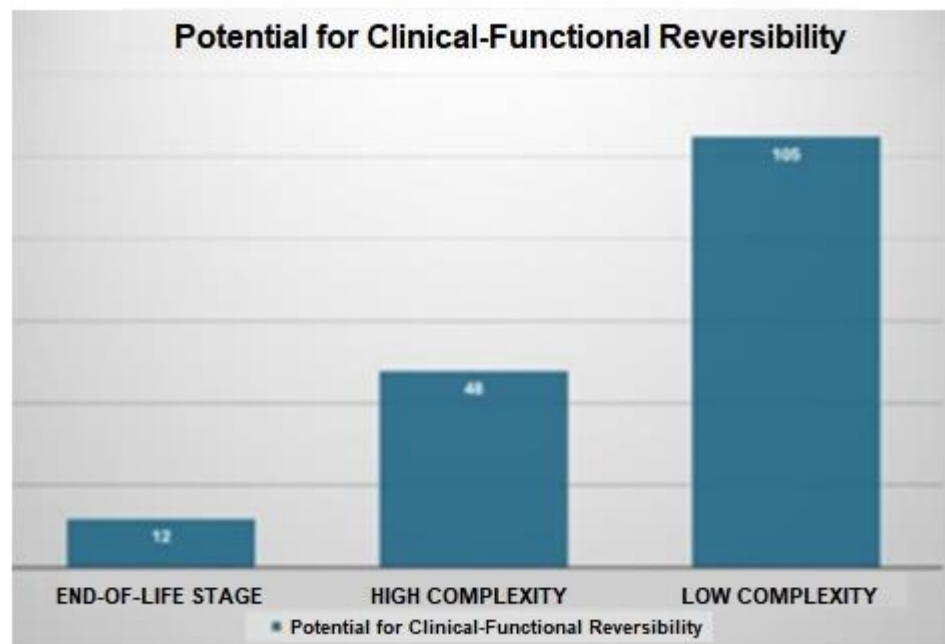
I confirm that the submission has been approved by all authors: Yes

Introduction: The longevity of the population has significant impacts on various health segments, making it a challenge to meet the care demands of this group. As people age with chronic diseases, the number of cases of functional disability rises, often necessitating a shift to home-based care. Therefore, it is essential to use scales that stratify the risk and severity of frailty in elderly patients on an individualized basis. The Visual Frailty Scale (VFS) consists of 10 strata, resulting in three categories: robust elderly (strata 1 to 3), elderly at risk of frailty (strata 4 and 5), and frail elderly (strata 6 to 10)—with stratum 10 representing the maximum degree of frailty. In 2014, the São Francisco Xavier Foundation, through its operator Usisaúde, launched the primary care program Usifamília, which incorporates clinical-functional stratification into the routine of health teams and provides home-based care for the most fragile patients. This study aims to analyze the importance of stratifying the functional capacity and frailty of elderly patients receiving home-based care from a supplementary primary care service.

Methods: An observational study with descriptive analysis of the Visual Frailty Scale (VFS) of elderly patients receiving home-based care from a multidisciplinary team in a Supplementary Primary Care Service located in the Steel Valley region of Minas Gerais. Out of the 184 elderly patients, 17 did not have a defined VFS and were excluded from the sample.

Results: Among the 167 patients evaluated, all were categorized as frail elderly, with 54 (32%) ranked as VFS 10, indicating complete dependence on basic activities of daily living. Sixty-eight patients (41%) were VFS 9, meaning the only thing they could do without any assistance was eating. Those who remained independent for transfers and feeding, VFS 8, accounted for 37 elderly patients (22%). Out of the remaining patients, only 2 (1%) were VFS 7, i.e., fully dependent on all instrumental activities of daily living (IADLs) but independent on self-care, and 6 patients (4%) were VFS 6—partially dependent on IADLs. The evaluation also allows for the stratification of established functional decline and the potential for clinical-functional reversibility. Among the 167 patients evaluated, 7% (12 elderly) were in the end-of-life stage, requiring exclusive palliative care. Around 29% of patients (48 elderly) were of high complexity, suggesting a high potential for functional and quality-of-life improvement. These patients benefit the most from intensive follow-up by multidisciplinary teams. Finally, 63% (105 elderly) were classified as low complexity, meaning they had established functional decline and low potential for clinical-functional reversibility. For these elderly patients, the focus of interventions is on preventing further functional decline.

Image:



Conclusion: This study highlights the importance of stratifying elderly patients receiving home-based care to evaluate their clinical-functional status and frailty risk, as stratification results are crucial for designing tailored care plans focused on functional recovery, preventing frailty deterioration, and offering early rehabilitation to those at risk. Additionally, this analysis allows for evaluating the indication of palliative care levels for each stratum and complexity, as well as devising ways to keep patients in the end-of-life stage comfortable.

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MAIA, Luciana Colares et al. *Fragilidade em idosos assistidos por equipes de atenção primária* [Frailty in Elderly Patients Assisted by Primary Care Teams]. Revista Ciência e Saúde Coletiva, Rio de Janeiro, year 2020, v. 25, n. 12, p. 5041-5050, Dec 4th. 2020. DOI 10.1590/1413-812320202512.04962019.

Disclosure of Interest: None Declared

From Preoperative Planning to Postoperative Recovery: A Patient-Centered, Multidisciplinary Approach to Reducing Surgical Infection Rates in Orthopedic Surgery: (3623) YUN-HSUAN LI ISQUA2025-ABS-3623

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Surgical site infection (SSI) is a significant complication in orthopedic surgery, particularly in implant-related procedures, leading to prolonged hospital stays, increased medical costs, and additional surgical interventions. In 2023, the SSI rate in our hospital's orthopedic ward rose to 0.34%, exceeding the

previous years' averages. To address this issue, we adopted a patient-centered, multidisciplinary approach based on TeamSTEPPS, integrating orthopedics, endocrinology, infection control, nursing, and nutrition teams to optimize infection prevention and standardize workflows. Our goal was to reduce the SSI rate to 0.18% through enhanced coordination and adherence to best practices.

Methods: We leveraged TeamSTEPPS' Situation Monitoring and Communication Modules to enhance real-time patient assessment, risk identification, and standardized cross-disciplinary communication, ensuring seamless team integration across three phases. In the preoperative phase, we implemented a risk assessment and patient preparation strategy. The orthopedic and endocrinology teams introduced diabetes screening, referring patients with HbA1c > 9% for glucose management, and dietary education were provided to optimize nutrition and blood glucose stability. The infection control and nursing teams standardized chlorhexidine bathing within 24 hours pre-surgery and prophylactic antibiotics within 60 minutes, with additional doses for procedures over two hours. The nutritional team referred obese (BMI>30) and malnourished (BMI<18.5) patients for personalized nutrition plans, focusing on caloric control for obesity and protein/micronutrient supplementation for malnourished patients to support immune function and wound healing. During the intraoperative phase, we focused on aseptic techniques and surgical environment control. The surgical team ensured strict hand hygiene, controlled OR traffic, and sterile field maintenance. Implant sterilization followed international infection control guidelines, while bone grafts were antibiotic-impregnated to reduce implant-related infections. Additionally, real-time intraoperative infection assessments were conducted, with microbial cultures and prophylactic antibiotic adjustments for suboptimal wounds. In the postoperative phase, we emphasized wound care standardization and patient education. The nursing and infection control teams implemented a uniform wound dressing protocol, ensuring consistent use of waterproof dressings and frequency adjustments. A Wound Care Education Manual covered wound types, dressing procedures, medication guidelines, and complications, supplemented by QR-code-accessible instructional videos and a Wound Care Simulation Model, enabling patients and caregivers to practice proper dressing techniques and improve post-discharge wound care.

Results: Implementation of this multidisciplinary, patient-centered model led to a substantial reduction in SSI rates, decreasing from 0.34% in 2023 to 0.16% in 2024, which surpassed the hospital's infection control target of 0.18%. In addition to the overall reduction in infection rates, significant improvements were observed in several key areas. Aseptic dressing compliance among nurses improved markedly, rising from 77.8% to 100%, ensuring consistency in wound management practices. Furthermore, SSI-related readmission rates showed a considerable decline, dropping from 78.6% to 42.9%, which highlights the effectiveness of enhanced infection prevention protocols. Additionally, patient knowledge on appropriate dressing changes improved significantly, with the percentage of patients correctly identifying proper dressing techniques increasing from 60% to 90%, reflecting the impact of structured patient education and self-care training initiatives.

Conclusion: This study demonstrates that TeamSTEPPS-driven multidisciplinary collaboration effectively reduces SSI rates while enhancing patient safety and postoperative care quality. By structuring clear team roles across preoperative, intraoperative, and postoperative phases, we ensured standardized execution and improved outcomes. Our model serves as a scalable framework for other surgical specialties (e.g., cardiothoracic and neurosurgery), contributing to broader hospital-based infection prevention strategies.

Disclosure of Interest: None Declared

Reduction of Primary Bloodstream Infection in Oncohematological Patients in the Bone Marrow Transplant Unit.: (2981) Claudia Bezerra De Castro BEZERRA DE CASTRO Claudia

ISQUA2025-ABS-2981

R. D. M. C. R. Rafaela Ralph ^{1,*}, A. R. D. S. Arthur Rodrigues ¹, M. D. S. A. Marcleide da silva ¹, M. C. D. S. P. Monica Cristina ¹, C. A. Crislayne Almeida ¹, C. B. D. C. B. D. C. Claudia ¹, S. S. D. A. F. Steffany Simoes ², J. L. P. D. S. Jose Leonardo ², B. V. D. A. A. Bruno Vinícius ²

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Preferred presentation method: 10 Minute Lightning Talk (E-Poster)

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Hematological neoplasms form a heterogeneous group of malignant diseases that affect the functioning of the bone marrow and lymphoid organs. Among the treatment options for these neoplasms is hematopoietic stem cell transplantation. Onco-hematological patients routinely require central venous catheters (CVCs) for the initiation and continuation of treatment, due to long protocols, the characteristics of vesicant anticancer drugs with potential tissue necrosis, possible blood transfusions, and hematopoietic stem cell transplantation. However, cancer patients are vulnerable to an increased risk of catheter-related infections, whether due to a breach of aseptic technique during catheter insertion, non-validated handling practices of the system, or patient immunosuppression. Primary bloodstream infection (PBI) is a potentially fatal complication in cancer patients undergoing chemotherapy and can occur alongside infections from other sites. The use of intravascular devices and prolonged hospital stays have been identified as the main related factors for bloodstream infections in this population. It is important to emphasize that this type of infection is preventable through the adoption of updated and evidence-based strategies, although current measures included in the ANVISA good practices package and other international documents, such as the German Commission for Infection Control and Prevention, are not specifically directed at cancer patients; they still hold high normative value.

Methods: A quantitative, observational, and retrospective study, with analysis of secondary data obtained from medical records and institutional records. The approach will be descriptive and analytical, correlating the adoption of good practices in the handling of central venous catheters (CVCs) with the incidence of primary bloodstream infection (PBI) in onco-hematological patients.

Results: Through the massive application of recommended practices in the handling of CVCs, such as the use of checklists, hand hygiene, the use of an extended sterile field, skin preparation with Chlorhexidine Gluconate > 0.5%, and a sterile transparent semi-permeable dressing with a change time not exceeding 7 days, results showed a 5% decrease in the rate of CVC usage between the years 2023 and 2024. Another important result was the reduction of PBI associated with the central catheter, with a decrease in incidence from 4 to 1 of this adverse event between the mentioned years. Regarding the adherence rate to the measures package, indicators show 100% adherence by the Bone Marrow Transplant unit team.

Conclusion: The study quantitatively illustrates the relationship between good practices and the reduction of bloodstream infections, and adherence to recommended measures from national and international bodies leads to a decrease in adverse events and increases patient safety quality.

Disclosure of Interest: None Declared

Co-Designing a Primary Healthcare Intervention to Improve Diabetes Care in Mendoza, Argentina: A Qualitative Case Study: (2336) Ezequiel García-Elorrio

ISQUA2025-ABS-2336

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Preferred presentation method: 10 Minute Lightning Talk (E-Poster)

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction:

In low- and middle-income countries, primary healthcare (PHC) faces significant challenges in delivering effective care for chronic conditions, exacerbated by fragmented systems, resource limitations, and inequitable access. In Argentina, despite national strategies for non-communicable diseases (NCDs), implementation varies due to decentralised governance, leading to gaps in care. The Ministry of Health of Mendoza, Argentina, collaborated with QuEST network to assess the health system and develop and evaluate an intervention for improving primary diabetes care. To develop an intervention package, including implementation strategies, we used an Evidence-Based Co-Design, emphasising stakeholder collaboration. By actively involving staff and patients, co-production ensures that health services are shaped by those who use and deliver them. Its core principle revolves around equitable partnerships among stakeholders, where each party contributes meaningfully to the design, development, and implementation processes. This study aimed to co-design a contextually relevant intervention to strengthen diabetes care in Mendoza's PHC system.

Methods: Using a qualitative case study approach, we conducted in-person and online co-design workshops (November 2024–February 2025), involving patients, healthcare providers, and policymakers. We conducted in-person and online co-design workshops (November 2024–February 2025) involving patients, healthcare providers, and policymakers. Codesign process: The first session promoted trust and respect. A role-playing activity encouraged reflection on personal experiences and empathy, proposing solutions to diabetes care issues. Participants mapped user journeys for diabetes management in three groups: patients, healthcare professionals, and policymakers. On day 2, participants identified facilitators and barriers to improving care and prioritized intervention elements. The Sailboat Strategy exercise explored factors influencing diabetes care. We used the World Café methodology to explore diabetes care issues and solutions, with participants rotating through stations focused on patient education, follow-up, and adherence. On day 3, participants prioritized and refined solutions, developing a practical implementation plan using the Implementation Research Logic Model. Sessions 4 and 5 were held online, and session 6 was held in person with a smaller group of participants from previous workshops to refine co-designed implementation strategies into a cohesive intervention package.

Facilitators documented discussions and key insights from workshops through notes and reports, using all completed activities as data. Reflexive thematic analysis was applied to workshop findings. Data were analysed using reflexive thematic analysis to identify key themes and intervention strategies.

Results: The co-design workshops included healthcare professionals (n=14), decision-makers (n=10), and patients (n=14). Activities contributed to a collaborative, creative, reflective, and engaging workshop environment.

Emotions and Engament: Throughout the discussions, participants expressed various emotions that shaped their perspectives on diabetes care. Healthcare professionals conveyed frustration over barriers; decision-makers reported helplessness due to structural inefficiencies and constraints; patients experienced denial and fear upon diagnosis, frustration with delays and financial burdens. Moments of hope emerged through collaborative discussions and proposed solutions.

Barriers to Diabetes Care: Participants highlighted barriers to accessing diabetes care, such as limited appointment availability at secondary level, inadequate connectivity at centres, and medication supply shortages. Care-related challenges included brief consultation times, appointment absenteeism, and a lack of patient-centred care. Professionals pointed to healthcare staff burnout, insufficient statistical data, and shortages of specialized human resources. Patients identified a lack of community support as a barrier to achieving good health and managing their diabetes. Specifically, they highlighted insufficient opportunities for physical activity, limited family support, and challenges with treatment adherence. Participants developed a framework emphasizing multidimensional strategies, stakeholder collaboration, and systemic improvements.

Potential solutions: Key solutions included enhancing diabetes care access through digitalization and telemedicine, fostering community engagement through structured physical activity programs, improving patient-centred care via training and reminders, and ensuring long-term system sustainability by addressing workforce shortages and policy gaps. Feasibility assessments considered required resources such as technical infrastructure, training programs, and administrative support, assigning responsibilities to healthcare providers, policymakers, and local authorities to ensure successful implementation.

Final intervention package: The process resulted in a set of interventions included a) *Community Resource Mapping and Social Prescription*, b) *Protected and deferred appointments* to ensure timely and flexible access to care, c) *Self-care workshops for patients* and d) *for families* to empower them with knowledge and skills, professional training to enhance the competencies of healthcare providers, e) *Patient registration* to systematically track and manage participants, and f) *the use of WhatsApp for communication and engagement* to facilitate real-time interaction and support among teams and patients. Each strategy was designed collaboratively with key stakeholders to ensure feasibility, sustainability, and alignment with local healthcare needs.

Image:



Conclusion: The process identified actionable solutions to improve care quality, equity, and efficiency by integrating diverse stakeholder perspectives. The findings underscore the potential of co-design to address complex healthcare challenges, with implications for scaling and adapting similar approaches in other settings and conditions. The intervention will be tested in a randomised controlled trial.

Disclosure of Interest: None Declared

Evaluating the impact of Statutory Duty of Candour on health consumers, professionals and services.: (1033) Bronwyn Newman

ISQUA2025-ABS-1033

R. Harrison ^{1,*} on behalf of Statutory Duty of Candour Evaluation Project Team

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Statutory duty of candour (SDC) requires each healthcare service entity by law to provide the patient or their family or carer who experiences an adverse event with; a written account of the facts, an apology, a description of the health service's response to the event, and the steps being taken to prevent reoccurrence. To date, the impact of SDC implementation on patients, families, staff and service provision have been understudied. This research aims to evaluate the impacts of SDC in the two years since its implementation, exploring patient, family, staff and service delivery impacts of SDC implementation.

Methods: A mixed-methods sequential design will be employed, comprising a document literature review, document analysis, survey and interview data from patients, families and health service staff between 2024-2026. Health service staff working in Victorian health settings since SDC implementation in 2022 and consumers using these services during the study period were recruited via state health agencies, professional organisations and social media. Survey data were subject to quantitative analysis using statistical software, with inductive content analysis applied to free text survey items and corresponding responses in the interview data. Inductive thematic analysis was further undertaken to explore the overall interview dataset.

Results: A total of 219 respondents have participated in the survey (69 consumers; 150 staff), with a further 50 individuals (25 consumers; 25 staff) taking part in a follow-up interview. Key findings highlight the value of the principle of candour in relation to healthcare safety events but the practical challenges of implementation for staff. Inflexible timelines were considered to inhibit appropriate clinical and interpersonal decision-making about healthcare communication in the patient and family interest. SDC implementation was considered by staff as promoting action in communication with patients and families about safety events but not achieving different impacts in their experiences and care. This was reflected in the consumer data that underscored the importance of candour but the lack of noticeable change in care experiences from the legislative change.

Conclusion: This research provides the first evidence of how the SDC is being used and affecting healthcare experiences across a health system. By employing evaluation criteria from the UK's Duty of Candour review, we seek to compare these findings with those of the UK review. Our findings provide a vital contribution to the sparse evidence base about the SDC and its application in healthcare settings internationally.

Disclosure of Interest: None Declared

Utilizing the HFACS Model for Root Cause Analysis of Surgical Events: A Case Study of Ureteral Surgery Site Identification Errors: (2413) Po-Chun Lee

ISQUA2025-ABS-2413

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Surgical site errors, or Wrong-Site Surgery (WSS), remain a critical patient safety concern. The WHO identifies these errors as preventable and stresses standardized protocols for risk reduction (WHO, 2009). Gawande et al. (2003) attribute WSS to human error, poor communication, and inadequate procedural controls, while Stahel et al. (2010) highlight ongoing incidents despite the Universal Protocol. Lee et al. (2025) demonstrate the value of the Human Factors Analysis and Classification System (HFACS) in root cause analysis (RCA) for surgical errors. This study applies the HFACS model to analyze a specific WSS case, identify contributing factors, and propose targeted safety improvements.

Methods: This study employed a retrospective root cause analysis (RCA) framework, utilizing the HFACS model to investigate an incident involving the erroneous implantation of a left ureter into the right side at a medical center. The investigation incorporated a comprehensive review of surgical records, patient charts,

team interviews, and data from the hospital's adverse event reporting system to pinpoint contributing factors across four hierarchical levels: (1) unsafe acts, (2) preconditions for unsafe acts, (3) supervision and management errors, and (4) organizational influences. Additionally, on-site interviews were conducted to evaluate the communication processes within the surgical team and the adherence to standard operating procedures, aiming to identify potential error-prone areas.

Results: The analysis revealed several primary factors contributing to the surgical error:

Unsafe Acts: The surgeon relied on memory rather than verified markings, failing to perform a final verification, thereby neglecting the surgical site markings.

Preconditions for Unsafe Acts: Poor communication among the medical team and insufficient clarity between the surgeon and assistants regarding the surgical site marking during the procedure.

Supervision and Management Errors: Ineffective oversight of the preoperative handoff process and the absence of a real-time mechanism for double-checking during the operation.

Organizational Influences: Lack of adherence to preoperative verification procedures, such as the Time-out protocol, particularly for high-risk surgeries, which lacked additional review mechanisms

Through the HFACS model, this study established that the surgical error involved multilayered factors, particularly indicating significant deficiencies in supervision and team communication.

Conclusion: This study confirms the HFACS model as an effective tool for identifying root causes of surgical site errors and guiding targeted improvements. Key recommendations for healthcare institutions include: (1) strengthening preoperative verification with standardized checklists and double confirmation for high-risk procedures, (2) enhancing supervision through immediate surgical reviews and visual aids, and (3) improving team communication via simulation-based training to mitigate errors. These findings provide actionable insights for reducing surgical errors and improving patient safety.

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Disclosure of Interest: None Declared

Short Orals

Improving Patient-Centred Care and Healthcare Efficiency Through Digital Remote Monitoring of Hyperemesis Gravidarum: A Mixed-Methods study of the Luscii Mobile Application: (1562) Grazia Antonacci

ISQUA2025-ABS-1562

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Nausea and vomiting in pregnancy (NVP) affects up to 80% of women, with hyperemesis gravidarum (HG) - the severe form - impacting 0.3-3.6% of pregnant women. This condition represents one of the most common reasons for hospital admissions during pregnancy, with typical stays lasting 3-4 days, leading to significant healthcare resource utilisation and patient burden. Current care pathways often lack systematic outpatient monitoring, resulting in potentially preventable hospital visits and variable care quality. Digital health solutions offer promising opportunities to transform care delivery, but evidence regarding their effectiveness in HG management remains limited.

This study aimed to evaluate the acceptability, feasibility, and clinical impact of the Luscii mobile application - a novel digital platform designed to enable remote monitoring and self-management of HG patients. The investigation specifically focused on assessing improvements in healthcare accessibility, patient-centred care delivery, clinical effectiveness, and resource utilisation efficiency.

Methods: A comprehensive mixed-methods evaluation study was conducted at Chelsea and Westminster Hospital NHS Foundation Trust between March 2023 and February 2024. The quantitative component encompassed analysing app engagement data from 153 patients (42 from Chelsea and Westminster Hospital and 111 from West Middlesex University Hospital) and comparing clinical outcomes between app users (n=55) and non-users (n=40). Key metrics included hospital admission rates, emergency department visits, ambulatory care utilisation, and clinical indicators.

The app incorporated validated assessment tools, including the Pregnancy-Unique Quantification of Emesis and Nausea (PUQE) score, the Hyperemesis Level Prediction (HELP) score, and the Hyperemesis Impact of Symptoms (HIS) questionnaire. Patient monitoring categories included food and fluid intake, symptoms, weight, medications, and mental health parameters. Data analysis used descriptive and inferential statistical methods to evaluate engagement patterns and clinical outcomes.

The qualitative component comprised 30-minute semi-structured interviews with 10 consenting patients who used the app, exploring experiences regarding accessibility, usefulness, and impact on care quality. Thematic content analysis was conducted using NVivo software.

Results: Quantitative analysis revealed strong patient engagement with core monitoring features over the average usage period of 51.63±28.98 days. Highest engagement was observed for food intake (10.31±9.54 entries/patient) and fluid intake (10.33±9.95 entries/patient), with robust participation in symptom tracking through PUQE (10.03±10.24 entries/patient) and HELP scores (9.68±8.62 entries/patient).

App users demonstrated significantly lower odds of frequent Ambulatory Emergency Care visits compared to non-users ($p<0.0001$), indicating improved care efficiency. Clinical improvements were substantial, with positive transitions observed in 97% of fluid intake and 99% of food intake monitoring events. While PUQE scores showed no significant difference between groups, the app effectively improved overall progress and psychosocial functioning through other metrics.

Thematic analysis of qualitative interviews identified three key domains of impact: enhanced health self-management, improved care accessibility, and increased patient empowerment. Patients reported that the app effectively supported symptom monitoring, facilitated timely access to healthcare professionals, and reduced unnecessary hospital visits. However, some users identified opportunities for improvement regarding automated responses, alert frequency, and provider communication features.

Image:



Impact on Care Accessibility and Patient Empowerment

Conclusion: This study demonstrates the Luscii app's effectiveness in transforming HG care delivery through improved patient monitoring, reduced healthcare utilisation, and enhanced patient engagement. The digital platform successfully balanced healthcare efficiency with patient-centred care, providing accessible support while maintaining clinical quality. Implementation challenges identified through user feedback provide valuable insights for future digital health initiatives in maternity care.

Key recommendations include streamlining provider communication processes, optimising notification systems, and enhancing mental health support features. These findings have significant implications for the

broader adoption of digital health solutions in managing high-risk pregnancies, potentially leading to more efficient, accessible, and patient-centered care delivery models.

Disclosure of Interest: None Declared

AI for Patient Safety: Deep NLP Insights into Medication Errors in Thailand: (2169) Ake-Chittra Sukku

ISQUA2025-ABS-2169

AI for Patient Safety: Deep NLP Insights into Medication Errors in Thailand

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¹The Healthcare Accreditation Institute (Public organization), Nonthaburi, ²SiliconHealth Company, ³Chulalongkorn Hospital, Bangkok, Thailand

Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Medication errors threaten patient safety. Thailand's National Reporting and Learning System (NRLS), a web-based platform, collects and analyzes clinical incidents nationwide. Established under the 2P Safety policy in 2017, NRLS is a centralized database for knowledge exchange and learning.

Most NRLS data is free-text, making it unstructured, hard to categorize, and difficult to analyze. This limits data-driven insights, missing opportunities to identify risks and improve patient safety.

This study uses Natural Language Processing (NLP) to transform unstructured NRLS data into actionable insights. AI-driven text mining uncovers hidden medication error patterns, especially in high-alert drugs, providing real-time, precise error detection. These insights strengthen safety protocols, clinical decisions, and error prevention.

Methods: 1. Data Source & Extraction

- Dataset: Utilized NRLS data comprising 486,582 medication error reports submitted between February 2018 and April 2024.

- System Features: The NRLS is a web-based application, supporting real-time data entry and integration with hospital risk management systems. It ensures data security through user role-based access controls.

- Data Integration: Hospitals contribute data through two methods. 1) Real-time automatic reporting via the HRMS on Cloud system. 2) Standardized data import through the NRLS service for facilities not utilizing the HRMS on Cloud.

2. NLP-Powered Analytical Framework

- **Named Entity Recognition (NER):** Employed to identify critical entities such as drug names, dosages, administration routes, and patient outcomes within unstructured text reports.

- **Entity Linking (EL):** Mapped extracted entities to standardized medical terminologies, enhancing data consistency and facilitating comparative analyses.

- **Classification Models:** Developed transformer-based models (e.g., BERT, RoBERTa) to categorize incidents by error type and severity, enabling targeted interventions.

- **Data Visualization:** Integrated processed data into interactive dashboards, providing real-time insights.

3. Technical Validation

- **Performance Metrics:** Evaluated models using precision, recall, and F1-score metrics across multiple randomized test sets to ensure reliability.

- **Iterative Refinement:** Continuously improved models based on performance feedback.

Results: 1. Top Medications Involved in Errors:

- Paracetamol: 18,466 cases, Simvastatin: 17,581 cases, Omeprazole: 16,817 cases
- Amlodipine, Ceftriaxone, Warfarin, among others.

2. Common Error Types Identified:

- Incorrect dosage: 93,982 cases
- Missed administration: 66,347 cases
- Wrong medication dispensed: 55,984 cases
- Errors due to look-alike/sound-alike medications and incorrect administration routes.

Impact on Reporting Efficiency

- The integration of NLP techniques reduced manual review time by approximately 70%, streamlining the incident reporting process and allowing healthcare professionals to focus on implementing preventive measures.

Image:

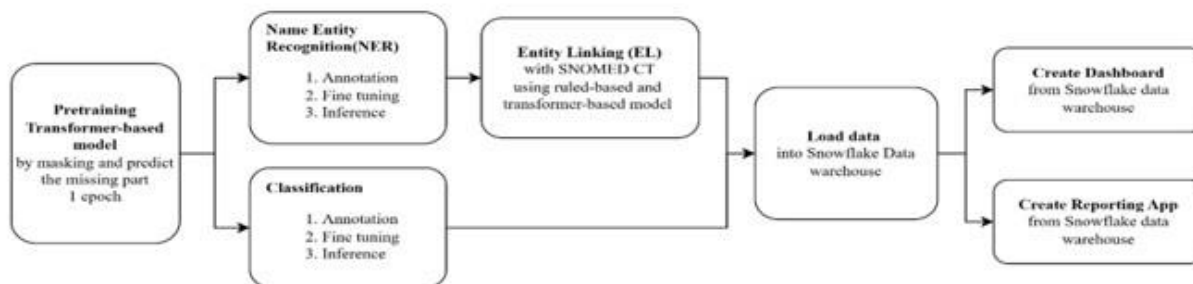


Figure 1: Workflow of data extraction process



Figure 2: Example of annotating free text from an incident report using an annotator tool. The legend indicates how to distinguish between types of named entity,

Conclusion: NLP integration in Thailand's NRLS converts unstructured reports into actionable insights, enabling automated detection, classification, and trend analysis of medication errors. This improves real-time monitoring, reduces manual workload, and enhances data-driven decisions for patient safety.

By identifying high-risk medications and error patterns, NLP enables targeted interventions and policy improvements. Linking extracted data to SNOMED CT enhances standardization and interoperability.

To maximize impact, efforts should improve data quality, model transparency, and bias mitigation, ensuring NLP remains a trusted tool for healthcare safety.

References:

- 1). Zoie S Y Wong, Neil Waters, Jiaxing Liu, Shin Ushiro. **A large dataset of annotated incident reports on medication errors.** Science Data. 2024 Feb 29;11(1):260. doi: 10.1038/s41597-024-03036-2.
- 2). Christian Boxley, Mari Fujimoto, Raj M. Ratwani, Allan Fong. **A text mining approach to categorize patient safety event reports by medication error type.** Scientific Reports. 2023;13:18354. <https://doi.org/10.1038/s41598-023-45152-w>

Disclosure of Interest: None Declared

Identifying and analyzing the loss to follow-up rate in outcome measurement: a pathway to enhancing value-based care at Fundación Santa Fe de Bogotá: (3519) Carlos Kerguelen

ISQUA2025-ABS-3519

C. Kerguelen ^{1,*}

¹Fundación Santa Fe de Bogotá, Bogotá , Colombia

Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: To date, there is no consensus on an acceptable or predictable loss to follow-up (LTFU) rate in outcomes measurements, yet evidence suggest that in patient-reported outcomes measurements (PROMs) the initial LTFU rate is around 30% and may tend to exceed during prolonged follow-ups (1). However, the extent to which this rate varies based on factors such as the patient's clinical condition, outcome taxonomy, as well as measurement instruments and methodologies remains uncertain, despite their critical role in optimizing clinical and operational management for accurate clinical decision-making.

This presentation aims to showcase the results of Fundación Santa Fe de Bogotá (FSFB) experience identifying and analyzing the LTFU rate in outcome measurements of patients treated for different clinical conditions, examining its variation based on baseline clinical condition, outcome type (clinical or patient-reported), measurement modality (telephone or in-person), and follow-up nature (single vs multiple measures over time).

Methods: To identify and analyze the LTFU rate, we developed a detailed analysis of the outcome measurement data available in the corresponding digital ecosystem of FSFB. This required a methodological process divided into two main phases:

1. **Operational definition of the LTFU rate:** we defined the LTFU rate as the percentage of ineffective measurements at a given time of those patients susceptible to measurement. This implied the definition of exclusion criteria, corresponding to the percentage of ineffective measurements because the patients were not eligible at that time, either due to death, lack of informed consent, no reaching of the minimum time required for measurement, clinical limitations that prevented response or language barriers.

2. **Data identification and analysis:** Relevant analysis variables were defined to identify and characterize the LTFU rate, such as measured clinical conditions (segmentation), the number of patients included in each of these, measurement scales used, outcome type (clinical or patient-reported), measurement modality (telephone or in-person), follow-up nature (single vs multiple measures over time), and effectiveness in the response rate or completeness of the total measurements. We achieved the above by creating a **dynamic business intelligence dashboard** that allows the daily visualization of the LTFU rate of outcomes measurements and its variation according to the established variables.

Results: After three years of FSFB Outcomes Unit functioning, responsible for measuring and managing outcomes in 25 clinical conditions, an overall LTFU rate of 20.6% was identified for the total number of programmed measurements. An overall data exclusion rate of 5.5% was identified, for ineffective measurements because of patients not being eligible.

When analyzing the variation in the LTFU rate, we highlight four main aspects:

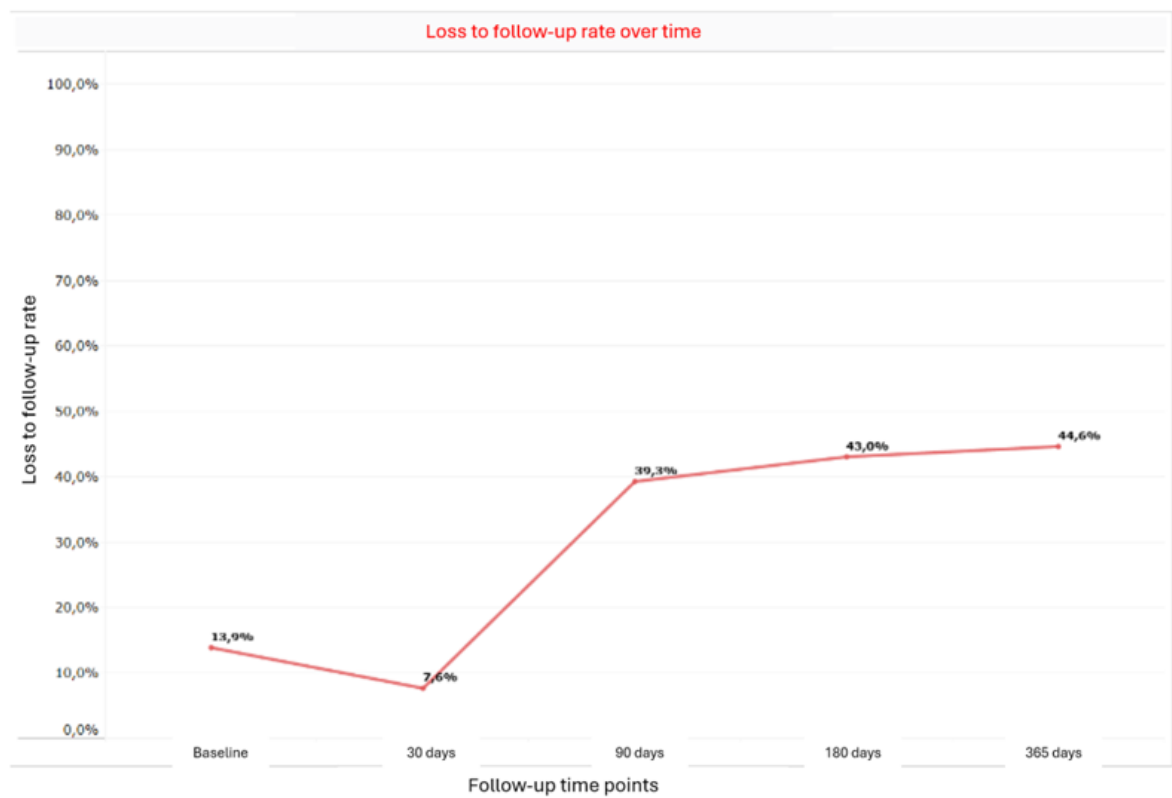
Variation by clinical condition. The LTFU rate ranged from 0% to 46.8% among the different clinical conditions, with Parkinson's and Neurovascular being those with the most significant LTFU rates and Abdominal Surgical Conditions and Gynecological Diagnoses with 0% LTFU rates. In addition, the response to the same outcome showed variations between clinical conditions (LTFU rate for risk of depression in colorectal cancer was 33.3%, while in burns was 22.2%).

Influence of the type of outcome and measurement modality. The LTFU rate in clinical outcomes extracted from medical records was 9.23%. In PROMS varied between 25.7% and 37.7% depending on the application modality (telephone: 32.02% or in-person: 10.6%).

Impact of the follow-up nature. Outcomes measured at a single time point had a LTFU rate ranging from 0% to 8.3%. In comparison, those measured at multiple time points demonstrated a variable response between 7.6% and 44.6%, with an increasing trend as the follow-up period lengthens (Refer to Image).

Leading causes of loss. The most frequent reasons for LTFU outcomes measurements were failure of the professional to record information in the agreed source, representing 23% of losses; difficulties in telephone contact, with an impact of 18%; and non-attendance to follow-up appointments (15%).

Image:



Conclusion: Through this experience, we managed to identify and analyze the LTFU rate in measuring outcomes through an innovative technological solution, addressing a key information gap in this area. As a result, this opens a path to optimize the analysis of response effectiveness in outcome measurement and to drive strategic actions to strengthen the delivery of value in healthcare. Based on the findings, it is important to consider strategies to increase the response rate, such as diversifying measurement methods, adjusting the patients data collection environment through an omnichannel approach, and encouraging greater adherence of clinical groups to outcome measurement. Further studies are needed to 1) analyze how knowledge of the LTFU rate contributes to clinical management and to 2) explore how this rate varies by sociodemographic factors not considered in this project, to strengthen equity in outcome measurement.

References: (1) Ruseckaite, R., et al. (2023). Response rates in clinical quality registries and databases that collect patient reported outcome measures: a scoping review. *Health and Quality of Life Outcomes*, 21(1), 71.

Disclosure of Interest: None Declared

Cross-Sectional Multicentric Study on Safety Climate in 66 Public Healthcare Services in Brazil: A Comparative Analysis Across Professional Categories and Levels of Care: (3247)

Fernando Oliveira

ISQUA2025-ABS-3247

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

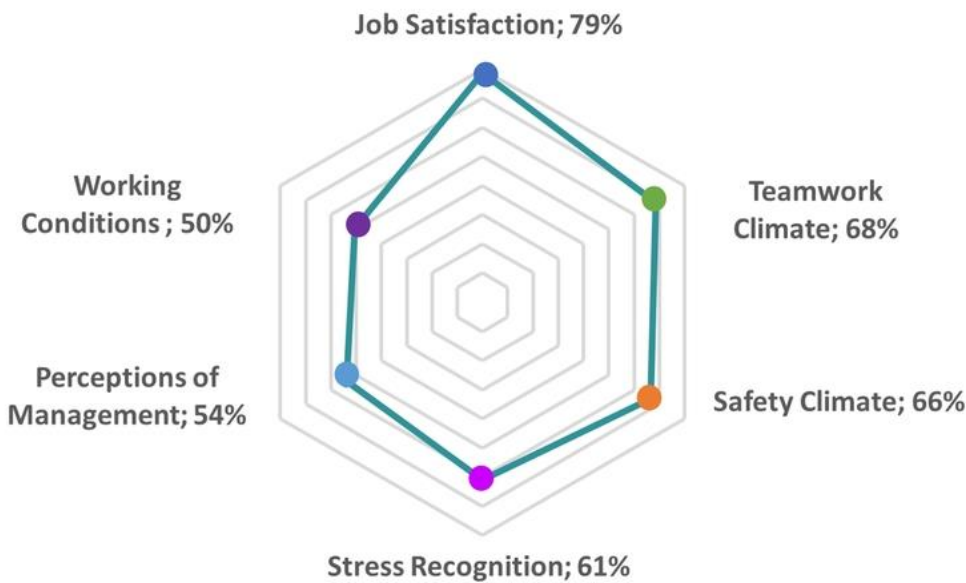
Introduction: Associação Paulista para o Desenvolvimento da Medicina (SPDM) is a private, non-profit organization that manages public services through management contracts in Brazil. Promoting a safety culture (SC) is a strategic institutional objective. Despite significant progress in patient safety, the culture of safety has improved slowly. A study conducted in 311 Brazilian hospitals (104,000 responses) highlighted that fear of punishment remains a predominant issue. Furthermore, comparative studies across different levels of care, including primary care and mental health services, remain scarce. This study aimed to analyze six dimensions of SC across professional categories and levels of care, including clinical staff, support services, and community health agents (CHAs), who are essential to Brazil's public health system. The findings aim to support systemic SC improvements.

Methods: A cross-sectional multicentric study conducted in 66 healthcare services used the Safety Attitudes Questionnaire (SAQ) - Short Form 2006, assessing teamwork climate, job satisfaction, perception of management, working conditions, and stress recognition. Data collection occurred between 2022 and 2024 from all active healthcare professionals via anonymous online surveys. A five-point Likert scale measured SC, with positive response rates analyzed by professional category and care level. The study adhered to Brazilian data protection laws, received institutional approvals, and had no conflicts of interest.

Results: The study covered 9 hospitals, 6 specialist outpatient clinics, 3 mental health services, 42 primary care units, 5 high-cost pharmacies, and 1 diagnostic center, with 3,945 responses. Professional distribution was as follows: 1,059 (27%) nursing technicians, 594 (15%) doctors, 504 (13%) multidisciplinary team members, 339 (9%) nurses, 151 (4%) CHAs, and 1,298 (33%) support and administrative staff. O resultado consolidado das seis dimensões está apresentado na Figura 1: Radar de Clima de Segurança. The percentage of positive perceptions was tabulated by Safety Culture domains, level of care, and professional category. Job satisfaction had the highest positive response rate (79%), reflecting professional pride across categories and care levels, consistent with prior healthcare and aviation studies. The "Working Conditions" domain received the lowest scores across most professional categories and levels of care, ranging from 46.8% to 60.1%, with hospitals reporting the lowest values. Among nursing technicians, the lowest-rated domain was management perception (51.6%), whereas community health agents (CHAs) had the lowest score in stress recognition (44.4%). Doctors (71.7%) and nurses (70.9%) demonstrated greater awareness of stress-related error risks, whereas nursing technicians (56.3%), multidisciplinary staff (52.8%), and CHAs

(40.4%) exhibited the lowest levels of awareness. Fatigue impact perception was the lowest-scoring indicator across all professional categories and levels of care, with the poorest scores in primary care (31%) and among CHAs (24.5%).

Image:



Grafic1. Safety Climate Radar– SPDM 2022-2024

Conclusion: The results demonstrated consistency across different professional categories and levels of care. The findings suggest that the noble purpose of the profession, reflected in professional pride, may serve as a motivating factor for greater engagement in quality improvement in initiatives. However, the study identified challenges related to working conditions, which may contribute to the high levels of burnout observed among healthcare professionals. In this regard, the low recognition of stress and fatigue as factors impacting performance is concerning. The lowest-rated item was the perception of fatigue as a risk to patient safety, highlighting the urgent need for more structured fatigue management processes in healthcare. The integration of data across sectors and comparisons between professional categories can guide more focused and effective strategic actions to promote a culture of safety.

Disclosure of Interest: None Declared

Serious adverse events linked to temporary healthcare staffing : what can we do ? : (1497)
Fatou Diagne

ISQUA2025-ABS-1497

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¹Haute Autorité de santé (HAS), La Plaine Saint-Denis, France

Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: The shortage of healthcare professionals in medical and social care institutions in France has led to an increased reliance on temporary staff, particularly interim workers. To identify the risks associated with this practice and propose solutions to enhance patient safety, the French National Authority for Health (HAS) conducted an analysis of reported serious adverse events (SAE) related to care involving temporary healthcare staffing.

Methods: SAE related to temporary healthcare staffing were identified using specific keywords. The search encompassed all serious adverse events reported to the HAS since the inception of the national reporting system, from March 2017 to June 2024. The HAS drew on the root cause analysis conducted by each reporter using the ALARM (Association of Litigation And Risk Management) framework to identify the main contributory factors of these SAE.

Results: A total of 512 SAE related to temporary healthcare staffing were identified. The immediate causes of these events were predominantly medication errors (mainly overdoses and patient or medication mix-ups), errors related to the organisation of care (deficiencies in monitoring, delays in care and coordination failures among professionals) and equipment-related errors (inappropriate use and non-use of prescribed equipment). The main root causes reported were linked to professionals (lack of qualifications and skills) (83%), patients (health status and comorbidities) (76%), tasks to be performed (failures in the implementation of protocols and procedures) (72%) and the team (poor communication between professionals, handover and alert failures) (70%).

On this basis, several recommendations were made, including:

- limiting the employment of temporary healthcare staffing to short-term needs only, while enhancing the attractiveness of healthcare professions (salary) and retaining professionals (quality of work life) ;
- ensuring the alignment of temporary personnel's skills with job requirements and, if necessary, promptly organising appropriate training (use of specific equipment or medications, information systems, technical procedures);
- arranging close supervision by an experienced professional;
- promoting the immediate integration of temporary personnel within existing teams and organisations upon their arrival (access to information systems, introduction to procedures, protocols and facilities, task allocation).

Conclusion: Over the past two years, public authorities have implemented legislative measures to regulate the use of medical and paramedical interim staff, while encouraging the examination of its impact on the quality and safety of care. In this context, in addition to the publication of the analysis presented here, the HAS plans to produce a short patient safety solution describing instances of SAE involving permanent staff, to raise awareness among healthcare professionals about high-risk situations. Furthermore, an integration strategy for new arrivals and temporary workers incorporating teamwork and human factors is being developed.

Disclosure of Interest: None Declared

Suicide risk assessment in clinical practice: time to shift from prediction to therapeutic assessment, formulation, and risk management - moving from risk to safety: (1193) Elin Fröding

ISQUA2025-ABS-1193

E. Fröding ^{1,2,*}

¹Jönköping University, ²Region Jönköpings County, Jönköping, Sweden

Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Despite increasing evidence that suicide risk prediction is ineffective, clinical practice is still dominated by attempts to predict who is at risk of suicide and to implement measures to reduce that risk. The intensity in suicidality is influenced by several different interacting factors and can fluctuate rapidly. Current static risk assessment approaches fail to capture this variability.

Methods: Building on research in suicidality, suicide prevention, and patient safety, as well as international discussions and clinical experience, we propose to introduce therapeutic suicide risk assessment and formulation approaches in Swedish health care to shift the focus from predicting suicide to preventing suicidal acts.

Results: Key components are:

- A person-centered approach that:

- shifts focus from statistical risk and protective factors at the group level to the individual's situation, conditions, and context

- emphasizes informed consent and shared responsibility

- A proactive focus that collaboratively with the patient identifies:

- individual vulnerabilities, dynamic factors and potential triggering events that may increase suicidality in the near future

- strategies for dealing with these integrated into treatment planning and crisis plans

- A holistic perspective that links therapeutic risk assessment and formulation to managing variability in suicidality and incorporates safety planning.

Conclusion: In this presentation, we will outline the theoretical and empirical foundation of this approach, provide examples of its application, and discuss how it might contribute to advancing suicide prevention efforts, shifting from risk to safety.

References: - Pisani, A.R., et al., *Prevention-Oriented Risk Formulation*, in *Suicide Risk Assessment and Prevention*, M. Pompili, Editor. 2021, Springer International Publishing: Cham. p. 1-31.

- Hawton, K., et al., *Assessment of suicide risk in mental health practice: shifting from prediction to therapeutic assessment, formulation, and risk management*. The Lancet Psychiatry, 2022. **9**(11): p. 922-928

Phased implementation of surgical safety care bundle in a tertiary care teaching hospital.: (3165) Lallu Joseph

ISQUA2025-SES-3165

A. S. Joselyn ^{1,*}, L. Joseph ²

¹Anaesthesia, ²Quality Management Cell, Christian Medical College Vellore, Vellore, India

Proposed Session Duration: 45 Minutes

Session Description: The WHO surgical safety checklist is a simple tool designed to avoid errors in the peri-operative period. In middle- and low-income countries, especially in large teaching institutes, acceptability of an entire checklist by all the team members at a time might not be feasible. The main challenges are the attitude of senior surgeons, complexity of a teaching institution with high turn-over of postgraduates, interns, nursing students that required continuous training and audits, huge patient load and emergency procedure load, different surgical specialities with different complexities and different checklists that had to be made uniform. We have demonstrated that the model of incorporating all the important steps for safe surgery in a gradual, phased manner, with repeated re-audits, have shown that it's easier to be adapted. This helps the stakeholders involved to repeatedly practice one component of the checklist and become familiar before moving to the other parts of the checklist. This slow and steady process of small interventions improves the whole team's compliance with the checklist rather than aggressive one-time implementation without success.

Session Format: This is an oral presentation. Preferred time of 45 minutes. Format - presentation with the powerpoint and interaction with Q&A session.

Target Audience: Healthcare professionals working in operation rooms (surgeons, anaesthesiologist, nurses, peri-operative technicians), Policy makers and healthcare managers.

Objectives: - The phased manner of implementing a WHO surgical safety checklist with repeated teaching and audits have shown that it's easier to be adapted in larger teaching multispeciality hospitals.

- The change in the safety culture has visibly demonstrated a reduction in near misses and never events.

Research: Research was conducted from 2009 to 2023.

Surgical safety checklists - Usage of surgical safety checklist, improved from 65% in Jan 2010 to 99% in July 2010 and the appropriateness of the usage (all components of checklist being filled) improved from about 70% in 2014 to 86% in 2016. Following the introduction of the new format with six stages in 2019, it has reached 97% as accountability improved.

Surgical consent - The availability of surgical consents improved from 56% in Jan 2010 to 99% in July 2010. The usage of 14 individual components of generalised surgical consents namely risk, benefits and alternatives improved from 56% in 2010 to 70% in 2015. The individual specialized consents for procedures were introduced which was specific to each surgical speciality was introduced in 2019 following which the compliance improved significantly to 99%.

SSM - Surgical site marking improved from 74% in 2017 to 95% in 2019. With the implementation of the stringent protocol regarding SSM, (made mandatory for a patient to be allowed inside theatre) and recovery nurses being empowered to send back patients to ward without SSM, the compliance has remained higher.

Sponge count - Sponge count documentation has been below 80% in 2010 and though it was constantly being audited, it was implemented as a part of the safe surgery protocol in 2019. Sponge count has been incorporated in 2 phases of new surgical safety checklist following which the compliance has significantly improved and stayed above 80%.

Suitability: In middle- and low-income countries, especially in large teaching institutes, acceptability of an entire checklist by all the team members at a time might not be feasible. Our model of incorporating all the important steps for safe surgery in a gradual, phased manner, with repeated re-audits, have shown that it's easier to be adapted. This helps the stakeholders involved to repeatedly practice one component of the checklist and become familiar before moving to the other parts of the checklist. This improves the whole team's compliance with the checklist rather than introducing the entire checklist.

Our project has shown the improvement in surgical safety by reduction in never events. The increased number of near misses reported over the years, clearly indicates the culture of openness, reporting and the efficiency of the system in preventing never-events. Also, the increase in the number of adverse events demonstrates the efficiency of the checks and balances at different levels in eliminating never-events.

Have you presented this session at a Conference before including ISQua?: No

Disclosure of Interest: None Declared

Enhancing Healthcare Quality and Safety: Evaluating Employee Safety Culture across Units in a Corporate Hospital: (1991) Anna George

ISQUA2025-ABS-1991

V. Vijai ¹, A. George ^{1,*} and Jyothi Antony(Aster Medcity), Beena John(Aster MIMS Calicut), Deepthi Rebekah(Aster CMI), Ranjita Dutta (Aster Whitefield) , Neelam Pagotra(Aster RV), Nagesh Gundap(Aster Aadhaar), Shamsheer V(Aster MIMS Kottakal) , Narayanan R(Aster DMMC), Mouhsina M(Ast

¹Quality Management , Aster Medcity hospital ,Aster DM Healthcare, Ernakulam, India

Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Patient safety culture refers to the shared values, beliefs, and behaviors within a healthcare organization that prioritize patient safety in daily operations. It plays a critical role in minimizing medical errors, improving patient outcomes, and enhancing overall organizational performance. A positive safety culture encourages open communication, trust, and collaboration, leading to better error prevention and continuous improvement

Objectives

- 1.This study evaluates the patient safety culture across 16 units of a pan-India corporate hospital network using the AHRQ Patient Safety Culture Survey Tool
- 2.The survey assesses staff perceptions on safety practices, communication, teamwork, and the work environment among doctors, nurses, paramedics, and support staff. The goal is to identify strengths and areas for improvement in safety culture, aiming to enhance clinical practices, reduce errors, and foster a collaborative work environment.
- 3.The study seeks to identify strengths and areas for improvement, with a goal of enhancing clinical practices, safety standards, and creating a cohesive safety culture across the hospital network.
- 4.The study also compares the hospital network's findings with a 2019 US-based survey, highlighting common challenges and offering insights for strengthening patient safety culture across healthcare settings.

Methods: A cross-sectional study was conducted across 16 units of a corporate hospital network in India, with 7,175 staff members from clinical and non-clinical units. The standardized Agency for Healthcare Research and Quality (AHRQ) Patient Safety Culture Survey tool was used to assess key safety culture aspects like communication, teamwork, leadership support, and safety practices. The survey was distributed via Google Forms for accessibility, anonymity, and higher response rates across dispersed units.

The AHRQ tool contains 40 items, including single-item and composite measures on safety culture. Data were analyzed using descriptive statistics and averages in Microsoft Excel. Ethical considerations, such as informed consent and confidentiality, were ensured, with ethical review and approval.

The study aimed to identify strengths and areas for improvement in safety culture across departments, providing insights to enhance clinical practices, patient safety, and staff engagement, ultimately contributing to improved patient care quality.

Results: The survey, conducted across 16 units of a corporate hospital network with 7175 staff members, revealed strong safety culture perceptions, particularly in teamwork (84.92%), communication openness (85%), and hospital management support for patient safety (82.30%), surpassing the similar 2019 Hospital Survey on Patient Safety Culture in 25 US hospitals survey results. However, areas for improvement included staffing levels (59.2%), response to safety errors (67.7%), and reporting safety events (67.15%). Urban units showed stronger safety culture perceptions compared to rural ones. The overall patient safety rating was 73%, higher than the US hospitals' 66%, but the low reporting of safety incidents (9.5%) indicated room for improvement in transparency and safety communication.

COMPOSITE MEASURES	US HOSPITALS	Corporate group of Tertiary care Hospitals - India
TEAM WORK	81%	84.90%
COMMUNITION ABOUT ERROR	68%	85%

HOSPITAL MANAGEMENT SUPPORT FOR PATIENT SAFETY	68%	82.30%
MANAGERIAL SUPPORT FOR PATIENT SAFETY	81%	79.46%
COMMUNICATION OPENNESS	76%	75.49%
ORGANIZATIONAL LEARNING	72%	75.43%
HANDOFFS AND INFORMATION EXCHANGE	58%	74.90%
RESPONSE TO ERROR	61%	67.70%
REPORTING PATIENT SAFETY EVENTS	74%	67.15%
STAFFING AND WORK SPACE	56%	59.22%

Image:

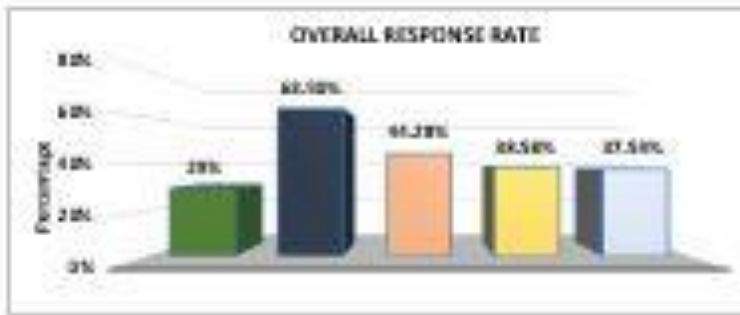


Fig 1 showing the category wise response rate



Fig 2 shows the overall patient safety rating across the units of the Corporate Hospital

Patient Safety Rating

E1 How would you rate your unit/work area on patient safety?

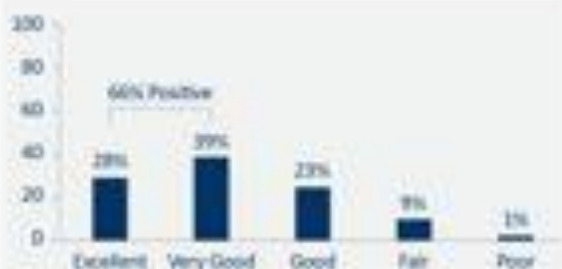


Fig 3 showing the patient safety rating in the pilot test of 2019 Hospital Survey on Patient Safety Culture in 25 US hospitals.

Conclusion: The study reveals a strong safety culture across the 16 units, with positive perceptions of teamwork, communication openness, and management support, particularly in urban regions. Key strengths include effective safety practices and positive attitudes towards patient safety. However, areas for improvement were identified, such as staffing levels, response to safety errors, and reporting incidents. The lower reporting of patient safety events highlights the need for better transparency and reporting systems.

References: Gaal S, Verstappen W, Wolters R, Lankveld H, van Weel C, Wensing M. Prevalence and consequences of patient safety incidents in general practice in the Netherlands: A retrospective medical record review study. *Implement Sci.* 2011;6:37. doi: [10.1186/1748-5908-6-37](https://doi.org/10.1186/1748-5908-6-37).

World Health Organization. *Global Status Report on Road Safety: Time for Action*. Geneva, Switzerland: World Health Organization; 2009.

Disclosure of Interest: None Declared

Participatory action research to address gender norms and power dynamics of female community health volunteers: initiative to empower health workforce in Nepal: (3363) Abriti Arjyal

ISQUA2025-ABS-3363

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Female community health volunteers (FCHVs) serve as close-to-community providers delivering promotional and preventive health services in Nepal. The influence of gender norms on their work and experiences is context-embedded and dynamic. This study aims to explore how participatory action research can support FCHVs in addressing the issues related to gender norms and power dynamics identified during our preliminary research.

Methods: We adopted a participatory action research (PAR) approach, engaging 12 FCHVs and municipal officials from six distinct wards within Chandragiri municipality, Nepal. A series of participatory workshops and activities were conducted with FCHVs to identify and prioritize gender-related problems and co-create a participatory video. The video was subsequently showcased in the community. The entire process was evaluated using observations, reflective meetings, focus group discussions, and interviews.

Results: During the prioritization process, guided by problem tree analysis, FCHVs highlighted lack of acknowledgment/recognition of their dual responsibilities by stakeholders, community, and family members, due to limited understanding of their work as a primary concern. To address this, FCHVs co-created a short video reflecting their lived experiences, engagement, and challenges further influenced by gender norms and values. Throughout the co-creation process, FCHVs participated in a series of workshops and activities, drafting the video script, learning to operate equipment like go-pros and sound recorders, and engaging in community filming. The final video was showcased in the community, in the presence of community and local stakeholders. The participants expressed appreciation to FCHVs for their services and acknowledged their valuable contributions to the health system. Some stakeholders emphasized the video as an innovative approach to communicating messages to the community about FCHVs' multiple responsibilities in balancing gender roles at home and work and advancing justice and belonging. Similarly, FCHVs expressed that participation in video development was a novel experience, that facilitated recognition of gender issues, discrimination, and disrespect faced at different levels. They mentioned enhanced recognition from the community and health facilities, along with increased understanding and support from their families for their work and dual responsibility. Additionally, they felt empowered, noted improvements in self-confidence, communication skills, and technical advancement in using cameras and sound systems.

Conclusion: The co-created video emerged as an innovative and powerful tool, amplifying the voices of FCHVs within the community. It empowered them and served as a medium for advancing gender equality

and fostering a more inclusive and just health system. However, long-term evaluation is necessary to assess the impact on the community.

Disclosure of Interest: None Declared

Implementation of a Hospital Adequacy Project for LGPD Compliance: Enhancing Data Protection, Quality, and Efficiency in Healthcare: (3478) Maria Carolina de Toledo Sivieri Moreno

ISQUA2025-ABS-3478

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: The increasing complexity of data management in healthcare, coupled with stringent regulatory requirements such as Brazil's Lei Geral de Proteção de Dados (LGPD), necessitates robust and innovative approaches to organizational adequacy. Despite available guidelines, healthcare institutions often face challenges in integrating legal, technological, and operational aspects into a coherent framework. This study aims to evaluate a multi-phase, consultative project designed to achieve comprehensive LGPD compliance in a hospital setting, thereby improving data protection practices and overall organizational performance.

Methods: A prospective implementation study was conducted over a 12-month period using an exclusive methodology previously validated in IBES/CNSaude LGPD Certification processes. The project comprised the following non-chronological phases:

- **Kick Off:** Educational session to raise awareness among managers and teams handling personal data.
- **Privacy Program Implementation:** Execution of actions to align policies, manuals, and reports with LGPD standards.
- **Classification of Legal Bases:** Analysis and validation of the mapping of contracts and eight critical internal documents relevant to data processing.
- **Diagnosis:** Self-assessment and Data Mapping workshops to identify gaps and areas for improvement.
- **Maturity Report and Implementation Roadmap:** Evaluation and validation of existing processes, culminating in an action plan focused on mitigating the highest risks.
- **Follow-Up:** Continuous monitoring and adjustments, with a focus on integrating new business requirements.

The project was led by professionals with deep expertise in healthcare and data protection, coordinated by a DPO (data protection officer), bridging the gap between legal/technological domains and clinical operations. Collaborative tools and a co-management platform were used to facilitate autonomous decision-making and real-time tracking of project phases. Training and know-how transfer were provided through daily educator support and targeted workshops.

Results: Preliminary metrics indicated significant improvements in several key areas:

- The Privacy Program achieved a **92** % alignment with updated policies and manuals.
- Critical internal documents were successfully classified and validated, reaching **85** % completion.
- Awareness sessions resulted in a **35** % increase in data protection competency among staff, as measured by pre- and post-training assessments.
- The Maturity Report and Roadmap enabled the identification and mitigation of high-risk processes, with a corresponding **40** % reduction in non-compliance incidents over the project period.

Conclusion: The multi-phase Hospital Adequacy Project effectively facilitated LGPD compliance while enhancing data protection practices, operational efficiency, and team engagement. The integration of educational interventions, continuous monitoring, and collaborative management not only bridged critical knowledge gaps but also paved the way for the eventual certification of good practices in data protection. These findings highlight the potential for such innovative, consultative approaches to serve as a model for healthcare institutions aiming to meet complex regulatory standards.

Conflict of Interest:

The authors declare no conflicts of interest.

Abbreviations:

- **DPO:** data protection officer
- **LGPD:** Lei Geral de Proteção de Dados (Brazilian General Data Protection Law)

References: 1. Silva, M. et al. "Implementing Data Protection Strategies in Healthcare: Challenges and Outcomes." *J Health Inform Manage*. 2021;15(2):112–120.

2. Oliveira, R. et al. "Bridging Legal and Technological Gaps in Healthcare Compliance." *Health Policy Technol*. 2020;9(3):245–253.

Disclosure of Interest: None Declared

Improving Workforce Well-Being and Organizational Effectiveness: Assessing Employee Satisfaction and Engagement in the Philippine Department of Health: (3358) Roderick Napulan

ISQUA2025-ABS-3358

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: The 8-Point Action Agenda of the Health Sector mandates the Department of Health (DOH) to adopt humanistic leadership to promote good governance which aims to ensure a competent and committed health workforce by safeguarding their rights and prioritizing their health and well-being. To assess the effectiveness of these initiatives, the DOH measured employee satisfaction and engagement on whether the current strategies meet the intended objectives and contribute to fostering a motivated and effective healthcare workforce.

Methods: This cross-sectional study included 14,363 DOH employees across the country in 2024 which assessed 11 domains related to employee satisfaction and engagement, as well as 2 domains focused on motivations and needs. Levels of agreement and key variables were measured using a 5-Likert scale and was expressed as percentages and frequencies.

Results: The Satisfaction and Engagement Index of DOH employees scored at 85% with top scoring domains being The Work Itself (93%), Commitment to the Organization (92%), and Culture (88%); while low scoring domains are Work Environment (76%), Rewards and Recognition (75%), and Development/Opportunity (85%). Opportunities for personal growth and development rank as highest (96%) in employee motivation and needs, while Job security is viewed as the highest (94%) work-related rewards.

Image:

85.49% SATISFACTION AND ENGAGEMENT INDEX



EMPLOYEE-MOTIVATION-AND-NEEDS



WORK-RELATED-REWARDS



Conclusion: DOH initiatives were found effective in improving workforce well-being through the employee satisfaction and engagement as shown by the high index score. Innovations and continuous improvements for work environment, rewards and recognition, and development and opportunities for employees are necessary to optimize organization effectiveness and ensure workforce well-being.

References: N/A

Disclosure of Interest: None Declared

Constructing the Foundation of Learning Health Systems in Africa: How to Scale Formation of Healthcare Worker Quality Improvement Learning and Build Critical Mass: (3340) Ruthpearl Ng'ang'a

ISQUA2025-ABS-3340

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Three in every five preventable deaths in low- and middle-income countries (LMICs) are due to poor quality of care. One of the key gaps in healthcare systems in sub-Saharan Africa (SSA) is the limited application of quality improvement (QI) principles in frontline healthcare institutions.

This study examines how to expand institutional team learning to establish a strong QI knowledge base within organizations. It aims to develop a learning health system approach to quality improvement in Sub-Saharan Africa by integrating an existing online self-paced learning platform with weekly social media check-ins.

Methods: Prospective longitudinal cohort design

An invitation to join the online learning cohort was provided through the ACQUIRE website. Registration for the limited ACQUIRE subsidized slots was prioritized to those applying in teams of at least six participants from a single institution to build a critical mass of QI knowledge.

Learning Platform: The Institute for Healthcare Improvement Basic Certificate in Quality and Patient Safety provided an internationally recognized certification and opportunity to track learner completion of the 13 courses and 17.5 continuing professional education credits.

Innovation: ACQUIRE innovatively utilized individual self-paced learning on the IHI platform combined with leaderboards during the weekly check-ins via WhatsApp.

The cohorts: The training was implemented in three 6-week cohorts starting in March, June, and October 2024, and teams of six from the same institution were put into four WhatsApp groups in each cohort. Variation in support of the different cohorts allowed testing ways to build efficiency and scale peer learning. The April cohort WhatsApp groups involved a lot of one-on-one hand-holding, and Zoom calls to respond to queries, while the June cohort had less hand-holding, and individual learners reaching out to the course admin would be encouraged to ask their questions in their WhatsApp groups, leading to a more vibrant team dynamic. The October cohort was used as a control for the previous cohorts. It involved two WhatsApp groups of individuals from two separate physical locations working in the same institution. In contrast, the third WhatsApp group comprised individuals from different institutions and countries. The fourth WhatsApp group was similar to the April and June cohorts, involving six teams from the same institutions.

Results: More than 1000 healthcare workers applied in less than 10 days, most in institutional teams. 1000 participants from 106 institutions representing 11 countries enrolled. An overall 81.6% completion rate was obtained. Consistent completion rates between cohorts demonstrated increased effectiveness of the WhatsApp working groups and ACQUIRE's learning through Plan-do-study-act cycles around how to stimulate peer learning. In our thematic analysis of the chats, the theme 'learning value and impact' of the training had more than 90 mentions followed by the importance of peer support and collaboration with 85 mentions.

Conclusion: Innovative utilization of an online learning platform combined with WhatsApp working groups reinforced healthy team dynamics that inspired genuine peer-to-peer learning and accountability, elements that are integral to quality improvement practice within their healthcare institutions. Promotion of peer-to-peer learning within WhatsApp groups and from the ACQUIRE communications team tested in PDSA cycles with variable levels of individual interaction and drove efficiencies in QI team engagement.

Disclosure of Interest: None Declared

What can we learn from the international experiences of developing and integrating physician associates to inform their implementation in the UK hospital settings: a realist review: (1471) Yingxi Zhao

ISQUA2025-ABS-1471

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Physician assistants/associates (PAs) were introduced to address healthcare demand and workforce shortages, playing significant roles across various specialties in secondary care worldwide. Despite their contributions, integrating PAs into clinical teams remains challenging, particularly in the UK, where PA roles are new. This challenge is amplified by confusion and contestation over PA roles, exacerbated by the previous lack of statutory recognition, leading to an “identity crisis.” PAs’ value and clinical credibility have been questioned, especially following media coverage and investigative reports.

This realist review aims to explore the mechanisms and contextual factors that enable successful development and integration of PA roles within secondary-care multi-professional teams in high-income countries. The review proposes strategies for refining PA role development, improving integration, and reducing role conflicts in UK secondary care.

Methods: We adopted a realist review approach to generate causal explanations through the identification of contexts, mechanisms, and outcomes. Following Pawson’s five steps, we searched Ovid MEDLINE, Ovid Embase, Ovid Global Health, Ovid PsycINFO, and EBSCOhost CINAHL for articles published between January 2000 and April 2023. Studies were selected based on their relevance to the programme theory and methodological rigor. Two reviewers independently screened articles. Context-mechanism-outcome (CMO) configurations were extracted and analysed to refine the initial programme theory, offering causal explanations of how, why, and for whom PA roles work in secondary care settings.

We involved patient/carer and public involvement and engagement (PPIE) throughout the process, ensuring relevance and responsiveness. PPIE contributed by reviewing the research question and preliminary findings. A group of health and care collaborators, including regulators, training programme representatives, professional groups, and hospital managers, provided valuable insights to refine the research approach.

For our presentation, we will focus on our key findings and results, providing a detailed overview of the mechanisms and contexts that enable successful PA role integration.

Results: We identified and analysed 76 articles, primarily from the US (n=48), UK (n=12), and Canada (n=6). The programme theory revealed four key concepts:

1. **Triggers for role development:** PA role development often requires a ‘trigger’, such as workforce shortages or service delivery challenges. Resistance to PA roles is likely without dissatisfaction with the status quo. Justifications like improving continuity of care or addressing physician shortages are crucial for success.

2. **Decision spaces and implementation complexity:** PA role integration depends on decision-making at national, organisational, departmental, and individual levels. Variability in funding, salary, scope of practice, and supervision creates challenges, particularly in the NHS. This results in inconsistent implementation and role definitions.

3. **Role negotiation and forging identity:** PA roles are shaped through negotiation within multidisciplinary teams and organisational contexts. This process involves demonstrating skills, navigating regulatory limitations, and comparing roles with junior doctors and nurse practitioners. Institutionalising roles requires defining rights, obligations, professional jurisdictions, and clarifying resource allocations.

4. **Showcasing outcomes and gaining buy-in:** Demonstrating PA impact through audits and evaluations can reduce resistance. However, outcomes like continuity, trust, and collaboration are difficult to measure directly. Without clear evidence of improvement, there remains a perception that “adding PAs is not harmful” rather than “PAs improve outcomes.”

Conclusion: This review highlights the complexity of developing and integrating PA roles in secondary care and underscores the importance of context-specific, transparent workforce strategies with long-term investment. A key limitation is that the findings are based solely on published literature. However, the programme theory and findings from this realist review will inform ongoing empirical research in eight NHS trusts and health boards across England and Scotland, providing richer evidence. These insights will be crucial for guiding effective PA role implementation and reducing professional role conflicts within the NHS.

Disclosure of Interest: None Declared

Day 2 – Tuesday 14th October

Morning

Lightning Talks

Maximising healthcare accreditation: The power of incentives in shaping global adoption: (3879) Tina Janamian

ISQUA2025-ABS-3879

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: Yes

If yes, what year?: 2024

I confirm that the submission has been approved by all authors: Yes

Introduction: Accreditation plays a critical role in driving continuous quality improvement and enhancing safety within healthcare systems. However, its adoption varies significantly across countries due to differences in policy and regulatory frameworks, financial structures, and healthcare priorities. This study examines the impact of various incentives—regulatory, financial, workforce, insurance-based, and public recognition—on driving accreditation uptake worldwide. Understanding these drivers and influencing factors is essential for informing policy development and optimising universal accreditation uptake.

Methods: A semi-structured questionnaire was designed to examine a range of approaches—including policy and regulatory drivers, financial incentives, quality-based reimbursement, workforce initiatives, insurance-driven models, and public recognition strategies—aimed at enhancing the uptake of healthcare accreditation across diverse international services and sectors. The questionnaire was electronically distributed to all members of the ISQua External Evaluation Association Accreditation Council in July 2024. A multi-step thematic analysis was conducted, categorising responses by incentive type, mapping them against accreditation frameworks, and classifying their impact as high, moderate, or low. A comparative analysis assessed the effectiveness of each incentive model in driving accreditation uptake.

Results: Preliminary findings from 13 countries indicate that policy and regulatory mandates are the most effective drivers of accreditation uptake, ensuring near-universal compliance in countries such as Portugal, France, and Saudi Arabia. Financial incentives, particularly those linked to healthcare funding models (e.g., Taiwan's National Health Insurance and France's IFAQ system), significantly boost voluntary participation. Quality-based reimbursement models (e.g., France, Australia) contribute to sustained long-term accreditation engagement and continuous quality improvement. Insurance-linked incentives show mixed effectiveness, with uptake dependent on the structure of public and private insurance markets. Workforce incentives (e.g., Australia, Japan, Jordan), particularly in rural and underserved areas, enhance healthcare provider retention but have an indirect impact on accreditation rates. Public recognition strategies help build trust but are

insufficient as standalone drivers, as observed in Brazil and South Africa. Gaps remain in data on financial sustainability, enforcement of mandatory accreditation, and the influence of patient awareness on accreditation decisions.

Conclusion: A multi-incentive approach combining policy drivers with financial and regulatory mechanisms yields the highest accreditation uptake, particularly in mandatory systems. In contrast, countries with voluntary accreditation require stronger incentives to drive participation. To better evaluate the impact of these strategies, improved data collection and reporting are needed, as such data remains scarce in many countries. Furthermore, to evaluate the broader impact of widespread accreditation adoption on quality and safety, improved data collection, reporting, and impact studies must be integrated into accreditation program implementation.

Disclosure of Interest: None Declared

Enhancing Maternal and Neonatal Team Simulation Training Through High-Fidelity Technology: (2888) Wei-Ting Hsu

ISQUA2025-ABS-2888

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Maternal and Neonatal safety is one of the key priorities actively promoted by the World Health Organization. Pregnancy and childbirth inherently carry potential risks, and healthcare professionals are tested on their ability to recognize emergencies, perform clinical interventions, communicate effectively, and collaborate as a team during high-risk obstetric scenarios. Early identification, prevention, and appropriate management can reduce the incidence of obstetric complications. Simulation-based training is considered a crucial strategy that allows participants to experience realistic clinical scenarios in a safe, harm-free environment. Through repeated training, participants can develop rapid and appropriate responses, enhance clinical skills, and refine their decision-making based on feedback, thereby increasing their confidence. The effective use of structured communication tools and teamwork strategies can optimize the management of complex obstetric emergencies, improve team performance, and enhance maternal and neonatal outcomes.

Methods: 1. Development of Maternal and Neonatal Critical Care Training Modules

To strengthen trainees' knowledge of obstetric risks and emergency management, six training modules were developed and delivered in small-group workshop formats:

- Identification of Obstetric Emergencies
- Introduction and Management of Postpartum Hemorrhage
- Emergency Management Before the Arrival of a Pediatrician

- Neonatal Advanced Life Support
- Advanced Airway Management in Obstetric Patients
- Application of Team Resource Management

2.Design of Simulation Scenarios

Based on high-risk obstetric events reported in incident reviews and annual safety reports, two simulation scenarios were developed with a focus on unexpected, life-threatening conditions for both mother and baby:

- Emergency Delivery and Neonatal Resuscitation for Preterm Birth
- High-Risk Pregnancy Assessment and Neonatal Pneumothorax Management

3.Acquisition of High-Fidelity Simulation Mannequins

To create highly realistic clinical scenarios for comprehensive clinical response training, a SimMom obstetric simulation mannequin was procured. This digital simulator replicates various patient characteristics, including vocal responses, pupillary reactions, and vital signs. It can simulate different labor positions and facilitate training for both normal and complicated deliveries.

4.High-Fidelity Team-Based Simulation Training

Participants recruited for the training included healthcare professionals specializing in Maternal and Neonatal critical care. The training was conducted in a simulated labor and delivery room using a high-fidelity SimMom mannequin and standardized patients.

- Pre-training: Instructors set up the simulation environment and aligned on training objectives. Participants familiarized themselves with the environment, equipment, and simulation tools.
- During training: Each team performed a 15-minute high-fidelity simulation scenario with assigned roles based on case-based learning.
- Post-training: Faculty provided feedback, facilitated discussions, and guided participants in reflective learning.

Results: 1.Through interactive teaching and case-based discussions, participant satisfaction with course design and teaching quality reached 99%.

2.Implementation of SimMom in 2024 for simulation resulted in 90% of participants reporting a highly immersive learning experience due to the realism of the simulator and environment.

3.Three high-fidelity simulation training were conducted in 2024, with 12 participants per session. Based on the Kirkpatrick Model of Training Evaluation:

- Level 1 – Reaction: Overall participant satisfaction with the training reached 94%.
- Level 2 – Learning: Confidence assessments before and after training showed significant improvements across all competencies, with the greatest improvements in:

Emergency medication and equipment use (+39.7%)

Rapid assessment and decision-making (+39.4%)

Initial management of obstetric emergencies (+38.2%)

- Level 3 – Behavior: 64% of participants expressed satisfaction with their team’s overall performance, particularly in team communication.

Image:



Conclusion: Through the application and continuous refinement of high-fidelity simulation technology, our team has demonstrated significant improvements in clinical emergency response and team collaboration. Moving forward, we will further enhance our training models to safeguard maternal and neonatal safety.

Disclosure of Interest: None Declared

Quality assessment of the Paraná State Organ and Tissue Donation System - Brazil: (2224)
Rafael Rodrigo da Silva da Silva Pimente

ISQUA2025-ABS-2224

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Understanding the areas for improvement in the organ donation process can contribute to the development of strategies and public policies aimed at enhancing the quality of care, which, in turn, can significantly impact transplant effectiveness. Objective: To evaluate the State Organ and Tissue Transplant System of Paraná, Brazil.

Methods: Evaluative study, developed in quantitative (Phase 1) and qualitative (Phase 2), exploratory-descriptive, cross-sectional, in the form of a case study. The scenario was the State Transplant System of Paraná. Data collection took place from January 2022 to November 2023. In Phase 1, 13 quality indicators of donation after brain death from the Organ Donation European Quality System were used, data contained in institutional electronic reports, physical medical records, and notification, donor, and transplant documents, covering the period between 2017 and 2021. In addition, a form was developed to record the variables which characterized the System, the Intra-Hospital Committees, and the management and care activities performed. Descriptive and inferential statistics were used for the analysis, adopting a significance level of 5%. In Phase 2, 29 managers and health professionals took part. Semi-structured interviews were used as a collection technique, transformed into narratives and subjected to Bardin's content analysis. The ethical and legal principles in research were followed. The research was approved by the Ethics Committee for Research Involving Human Beings (CEP) of the School of Nursing of the University of São Paulo, under opinion no. 5.000.957/2021.

Results: One structural indicator reached the recommended target: "Members of the donation team with a history of ICU," a rate of 75.80%, and one process indicator, "Documentation of the cause of non-donation," with a rate of 100%. The other indicators did not reach the standard rate; however, that with the highest percentage (92.36%) was "Referral of potential brain-dead donors," and the lowest (35.38%) was "Time dedicated by the key person to donation." There was significant evidence for the year and macro-region in the indicators: "Documentation of key points of the donation process" (88.21%); "Documented organ disposal" (79.74%); "Patient/family consent" (73.43%); "Unexpected cardiac arrest" (8.11%); and "Conversion rate of donors in brain death" (65.19%). Six categories and their subcategories emerged from the narratives, namely: "Quality and its pillars: meanings, monitoring and tools," "Quality indicators used in the donation process"; "Institutional resources as foundations of quality"; "Strengths and notable vulnerabilities in the donation system and services"; "Envisioning continuous quality improvement from the perspective of managers and professionals"; and "Articulation between skills and interpersonal relationships with a view to quality in the donation process." The experience of key informants revealed that quality monitoring occurs in the state of Paraná through the application of structure, process and result indicators; in addition, singularities that strengthen or weaken the donation system were revealed.

Conclusion: The findings showed that of the 13 indicators, 11 require improvement actions to increase the quality of the donation process and achieve international quality standards. Additionally, quality monitoring involves regular assessments based on metrics, information systems, and effective communication. The study highlights determining factors that can improve the donation and transplant process within the Brazilian health system, leading to better outcomes for users.

- References:**
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Improvement of the Echocardiography lab Training System to Enhance Examination Expertise & Sonographer Satisfaction: (1391) Yeawon Kim

ISQUA2025-ABS-1391

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Echocardiography is a diagnostic procedure that uses ultrasound to visualize and analyze the heart's movement, structure, blood flow, valvular abnormalities, thrombi, and tumors to diagnose and evaluate heart diseases. This examination plays a vital role in diagnosing cardiovascular diseases.

In this process, 'sonographer' assist in diagnosis by capturing images of the heart using ultrasound machine. To perform this role effectively, sonographer must develop advanced imaging skills to obtain high-quality images. They also require a comprehensive understanding of cardiac anatomy, hemodynamics, and pathophysiology, along with the ability to understand the patient's clinical background and apply various parameters appropriately during the examination.

In laboratory medicine field, accuracy is controlled by reducing human and mechanical errors through internal/external quality control, quantitative/qualitative quality management, and the use of QC materials. However, echocardiography, which requires manual effort to obtain the correct view and perform the examination, is susceptible to various human errors, which can directly affect the accuracy of the results.

Methods: To address these challenges, consistent theoretical knowledge and advanced imaging skills among examiners are crucial. This requires not only acquiring updated reference values provided by reputable international organizations but also fostering continuous information sharing, communication, and training among examiners.

To achieve this, we developed our own 'procedural manuals' and utilize 'shared folders' to distribute updates on the latest reference values. 'Regular conferences' are held to ensure that all examiners adhere to consistent theoretical and technical standards. Additionally, the training system is systematized to help new employees or those returning after a leave of absence quickly adapt to both theoretical and practical aspects of the job. Furthermore, examiners are supported in obtaining international certifications, such as the RDCS, to help them advance as professionals aligned with global standards in echocardiography.

And to quantify the improvement effects, we conducted surveys about 'echocardiogram reference theory' and the 'sonographer satisfaction score' before and after. (The satisfaction score was divided into items related to 'professionalism (consistency) and education environment.)

Results: In conclusion, the satisfaction score regarding the echocardiography training system improved from 2.0 to 4.8 points, and the survey score related to the professionalism of the echocardiography sonographers increased

from 1.9 to 4.4 points. Additionally, the reference knowledge test score significantly improved from an average of 68.7 to 96.3 points.

Conclusion: We are still in the process of improvement. Based on the developed training materials, we aim to ensure that consistent education continues to be delivered. We will establish criteria for selecting individuals responsible for the training. Additionally, we will continuously monitor areas that need further enhancement in education. And also we will continue to host mini-conferences to share the latest insights and cases, and regularly update the manuals. Now 'the manuals', focused on theory required for Echocardiography, will be supplemented with practical content to provide effective and accurate support in mastering the examination skill.

Disclosure of Interest: None Declared

Radiology Communication Guide: Enhancing Team and Patient Interactions: (3456) Aline MORIAO CARVALHO De Souza

ISQUA2025-ABS-3456

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Preferred presentation method: 10 Minute Lightning Talk (E-Poster)

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Effective communication in healthcare is essential for patient safety and value-based care. Studies indicate that communication failures contribute to approximately 70% of adverse events (JOINT COMMISSION, 2022).

A recent survey highlighted that, in the patient's perspective, communication and empathy are the most important non-technical skills, accounting for 81% of overall patient satisfaction (KWEET et al., 2021).

In radiology, multiple stakeholders are involved in the communication process, including patients, referring physicians, insurance companies, and healthcare team members such as nurses and technicians.

In our practice, we have identified recurring communication failures that impact workflow efficiency and patient outcomes.

This study aims to present our experience in implementing an effective communication model within an imaging clinic, to enhance daily interactions and optimize clinical practice.

Methods: This cross-sectional study involved theoretical-practical training using realistic simulation and formative assessment, targeting professionals working in an imaging clinic in Brazil.

The training was conducted between November 2020 and February 2021 in small groups of eight participants, following the recommendations of the Brazilian Ministry of Health. The practical training incorporated structured communication tools, including AIDET and SBAR, to enhance communication effectiveness.

Building on the success of this model, we expanded its implementation to another imaging clinic in Brazil in 2025.

Results: A total of 111 employees participated in the study, representing 82% of the staff. The study was conducted in two phases:

- 1. **Interactive Lecture:** Participants attended a 60-minute interactive session including video demonstrations.
- 2. **Individual Evaluation:** Each professional was individually assessed on their communication skills.

To enhance communication within the healthcare team, we implemented **SBAR (Situation, Background, Assessment, and Recommendation)** specifically in radiology. This resulted in notable improvements, particularly in communication between nursing technicians and radiologists, as well as more effective decision-making regarding contrast injection.

For patient-centered communication, we applied **AIDET® (Acknowledge, Introduce, Duration, Explanation, and Thank You)** to improve interactions between healthcare professionals, patients, and their families. Two assessors evaluated participants using the 10 criteria listed below to recognize and commend their performance.

Building on these results, in 2025, we expanded this method to another clinic, involving nine participants, including receptionists, administrative staff, radiology technicians, and nurses.

Evaluated items

- Sanitized hands before the service
- Used Personal Protective Equipment appropriately
- Made eye contact and smiled
- Greeted the patient, saying name and function
- Said the duration of the service and explained what will be done
- Asked if the patient has any questions
- Performed the checkback with the patient
- Listened to the patient and acted with respect
- Informed the next steps
- Thanked the patient

Conclusion: We observed a **20-point increase** in the Net Promoter Score (from **57 to 77**) following the implementation of the model. The adoption of structured communication protocols significantly improved interactions between healthcare teams and patients/families.

To further support best practices, we developed an **e-book** titled *Value-Based Radiology Communication Guide*, providing recommendations to encourage a patient-centered and value-driven approach. This resource was acquired by the **Brazilian College of Radiology** and will be distributed to its members.

References: KWEE RM, KWEE TC. Communication and empathy skills: Essential requisites for patient-centered radiology care. **Eur J Radiol**. 2021 Jul;140:109754. doi: 10.1016/j.ejrad.2021.109754. Epub 2021 May 3. PMID: 33964705.

Disclosure of Interest: None Declared

Short Orals

External Validation of a Machine Learning Risk Prediction Tool for Safer Opioid Prescribing: (3294) Fizza Israr Gilani

ISQUA2025-ABS-3294

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: Yes

If yes, what year?: 2024

I confirm that the submission has been approved by all authors: Yes

Introduction: As the opioid crisis continues, Alberta remains one of the leading provinces in Canada for overdose deaths and opioid consumption. The College of Physicians and Surgeons of Alberta, CPSA, regulates the medical profession and plays a key role in opioid stewardship through the administration of the Tracked Prescription Program (TPP), Alberta's prescription drug monitoring program (PDMP). CPSA collaborated with public health researchers to develop a supervised machine learning (ML) model to predict a 30-day risk of opioid-related adverse outcomes (death, emergency department visit or hospitalization) following an opioid dispense. With research validation complete, the objective of this prognostic study was to test the Opioid Risk ML model in a real-world setting for external validation.

Methods: Applying the Opioid Risk ML model to TPP data, weekly risk predictions were shared with a test group of physicians for highest risk patients to whom they prescribed an opioid. A survey was used to collect clinician feedback. A mixed methods approach was used to analyze concordance rates, response pathways and workflow impacts along with gathering perspectives on the model's integration into clinical practice.

Results: During the study, 390 individual patient risk predictions were shared with study physicians. Of these, 73% aligned with clinician risk assessments and 1 in 4 prompted an action (e.g. therapeutic modifications, patient education on naloxone). Study physicians spent as little as 30 minutes as long as four hours reviewing a weekly report, with variations between providers and from week to week. Key response themes included alignment and discrepancies between model-predicted risks and clinician expectations, the integration of risk assessments into individualized patient care plans, and the challenges of balancing automated predictions

with nuanced clinical judgment and real-time patient data. The study highlights both the strengths and limitations of the ML model. While it shows promise in identifying high-risk patients and guiding interventions, challenges in predictive accuracy were evident. Clinician feedback emphasized the need for the model to incorporate a broader range of patient-specific factors to improve accuracy and clinical utility.

Conclusion: The Opioid Risk ML model offers benefit as a decision support tool for patient care quality improvement and proactive risk mitigation for opioid patients. Future improvements should focus on integrating comprehensive patient data, optimizing workflow integration and further testing in additional prescriber groups and practice types relevant to opioid prescribing.

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Disclosure of Interest: F. Gilani Employee of: Project completed during the course of CPSA employment.

Application of Lean Methodology and Business Intelligence in Pharmaceutical Management: Automation of Product Scanning Monitoring for Patient Safety: (2477) Sara Trindade Espírito Santo Camacho

ISQUA2025-ABS-2477

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: The traceability of hospital products is essential for patient safety and operational efficiency. At the Evandro Chagas National Institute of Infectology, failures in the scanning of pharmaceutical products compromised medication control. To optimise this process, Lean methodologies and Data Science (DS) were applied, combining ETL automation and Data Visualisation (DataViz) through Business Intelligence (BI). This approach enhanced decision-making, reduced operational failures, and streamlined the workflow in the hospital pharmacy.

The aim of this study is to monitor and optimise the scanning of dispensed products, implement BI-driven automation to reduce the rate of unscanned products and ensure traceability in compliance with hospital standards.

Methods: The data were extracted from the stock and dispensing system, processed through an automated ETL pipeline, and consolidated into a BI dashboard in Power BI. Statistical techniques were applied for validation, including:

- **Normality Test (Shapiro-Wilk):** Analysis of data distribution.
- **Homogeneity of Variance Test (Levene):** Assessment of process stability.
- **T-Test:** Comparison of means before and after interventions.
- **Control Chart:** Monitoring of monthly variations in unscanned products.

The Lean methodology was applied to reduce time wastage and optimise processes, while BI-driven automation enabled rapid analyses and insights for corrective actions.

Results: Process Overview

- 1,106,859 products handled between January and December 2024.
- Overall USP rate of 1.27% (14,052 items lacking proper traceability).
- Balanced distribution across shifts: 48% daytime and 52% nighttime.

Monthly Distribution and Scanning Monitoring

- Median of 970.5 items/month, ranging from 575 to 2,374 products.
- Outliers identified in February and March (>2,000 items/month).
- In the initial months (Jan–Apr), values exceeded the Upper Control Limit (UCL = 1,504 products).
- Following intervention in May, values remained within acceptable limits.
- USP reduction from 2,374 in March to 575 in December.

Statistical Validation

Normality Test (Shapiro-Wilk): Period 1: 0.927, $p = 0.5774$ and Period 2: 0.952, $p = 0.7397$. Both samples had $p > 0.05$, confirming normal distribution, allowing for T-Test comparison.

Homogeneity of Variance Test (Levene): $p = 0.0028$ ($p < 0.05$), indicating a statistical difference between periods.

T-Test: $p = 0.00066$ ($p < 0.05$), demonstrating a significant reduction in the USP rate.

Control Chart: Monthly monitoring of USP variations.

Reduction in the Unscanned Medication Rate

- **Before intervention (Jan–Apr):** 1.90%
- **After improvements (May–Dec):** 0.95% (50% reduction).
- **Highest rates:** February (2.21%) and March (2.46%).
- **Lowest rates:** November (0.80%) and December (0.69%).

Impact on Management

- BI and Lean automation enhanced efficiency in managerial tasks, allowing more time for corrective actions with the team.

- Improved traceability enhanced patient safety, ensuring efficient control over medication administration.

Image:

Visão geral

Rastreamento produtos

Monitoramento Crítico

Box plot

Carta de controle

Melhoria



TURNO

Todos

ESTOQUE

Todos

PRODUTO

Todos

1.106.859

Total de Produto Movimentado

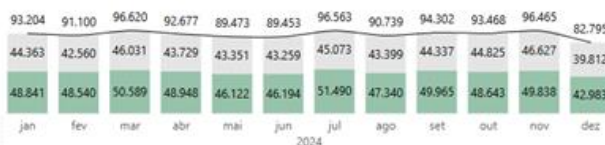
Qtd. Movimentada por turno

Total de 1.106.859 produto movimentado



Qtd. Movimentada ao longo tempo

● Diurno ● Noturno ● Qtd. Produto Movimentado

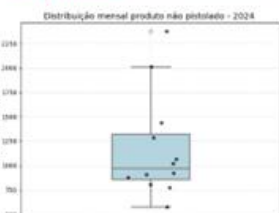
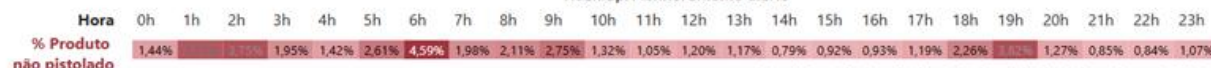


Qtd. Movimentada ao longo tempo

● Qtd. Total Movimentada ● Não pistolagem de produto KPI



Rodmap: Monitoramento diário



Qtd. Movimentada ao longo tempo



Carta de Controle: Quantidade de Produtos Não Pistolados ao longo de 2024



Melhoria do Processo: Redução da Taxa de Medicamentos Não Pistolados (%)

— Medicamentos não pistolado (%) — Média



Conclusion: The application of Lean methodology and Data Science in pharmaceutical management resulted in a more efficient and proactive approach, ensuring greater traceability and patient safety. The project achieved a 50% reduction in the unscanned product rate, standardised processes by eliminating instabilities, and optimised workflow, enhancing the control of the hospital pharmacy. Its positive impact underscores the importance of automation in hospital management, contributing to the reduction of time waste and the sustainable optimisation of processes.

Disclosure of Interest: None Declared

Artificial Intelligence in Healthcare Risk Management in the Wards of a Public University Hospital (3656) Helena Barreto dos Santos

ISQUA2025-ABS-3656

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Healthcare risk management in hospital wards is a major challenge due to the diversity of factors involved in incidents and the complexity of hospital care. Artificial intelligence (AI) stands out as a strategic tool for optimizing the identification and mitigation of these incidents, especially in large hospitals. In this context, this study aimed to analyze the notifications received by the Quality and Safety Subcommittee (QSS) from the wards of a large public university hospital, comparing data from the SA-OM™ (Strategic Adviser - Occurrence Manager) software with the results obtained through NotebookLM™ to identify the main weaknesses.

Methods: Hospital de Clínicas de Porto Alegre has 891 beds and the structure for healthcare safety management has a Risk Management Committee and 16 multidisciplinary quality and safety subcommittees. The adults ward subcommittee is responsible for monitoring notifications in the wards, which cover 487 beds and account for the greatest diversity of incidents, and evaluates notifications of incidents and near misses using the SA-OM™ software. Incident descriptions are recorded at the time of notification, while classification is conducted by the RM team. We compare the aggregate classification reports generated by the system with the results obtained from NotebookLM, an AI tool developed by Google Labs. We input the textual data of notifications in the AI resource to obtain help to identify the main weaknesses while ensuring data protection under corporate subscriptions to Google's basic packages.

Results: Between January and December 2024, the adults ward QSS received 237 notifications. The main types of incidents recorded were related to medication administration (27.4%), laboratory samples (17.3%), medication prescription (11.0%), communication failures (9.3%), diets (8.9%), issues with the pneumatic tube system (5.9%), catheters (5.5%), patient transport (3.8%), lack of identification bracelets (2.5%), and others. When using the artificial intelligence tool, a correspondence was found in the descriptions of the incidents. The three most frequent types of occurrences were related to medication administration, laboratory sample handling, and communication failures between teams. Initially, the AI grouped the prescription and medication administration incidents together. However, by inserting a specific command for further detailing, the tool was able to differentiate these events, accurately stratifying administration and prescription errors.

Conclusion: The use of NotebookLM in healthcare risk management could be to be an effective tool for identifying patterns and vulnerabilities in reported incidents. Beyond its accessibility and ease of use, this tool can be integrated into any risk management system, requiring only the input of textual descriptions of notifications. However, to ensure data security, a corporate subscription to a basic Google package is required. In this way, AI emerges as a promising solution for optimizing incident analysis and aiding in strategic decision-making to enhance healthcare safety. Nevertheless, further research is needed to assess its predictive capabilities and effectiveness in various healthcare settings.

Disclosure of Interest: None Declared

Trust Dashboard: A Data-Driven Innovation Platform for Public Confidence in HA-Accredited Hospitals: (1083) Piyawan Limpanyalert

ISQUA2025-ABS-1083

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Hospital Accreditation (HA) is a pivotal mechanism for enhancing healthcare service quality in Thailand, ensuring that hospitals both public and private adhere to standardized. A critical factor in measuring the success of HA accreditation is public trust, which reflects the perception of safety, confidence, and satisfaction among patients and their families. This research introduces the Trust Dashboard, a data-driven innovation platform designed to visualize and analyze result automatic from the public regarding HA-accredited healthcare facilities.

"Trust Dashboard" aims 1) Result assess the level of trust and satisfaction among service users of HA-accredited hospitals, 2) Identify key factors influencing public confidence in healthcare services and 3) Develop a continuously updated dashboard to provide hospitals with actionable insights for quality improvement.

Methods: Sample and Data Collection: The study surveyed individuals receiving care from 244 HA-accredited hospitals across Thailand sine 2021 - 2024. The hospitals were categorized into two accreditation levels:

- **Standard HA:** 218 hospitals as collection from at least 3,600 samples.

- **Advanced HA:** 26 hospitals as collection from at least 600 samples.

Survey Methodology: 1) Quantitative data consists of a questionnaire 4-part that inquired on general information, attitudes, the trust and confidence of hospital, and suggestions. 2) Qualitative data with in-depth interview. The result demonstrated in 6 domains influencing public trust (Physical Environment, Personnel professional, Standards of treatment and care, Service management and health equity, Confidence in Service Delivery and Overall Public Trust)

The statistics used in data analysis were frequency, percentage, One-way ANOVA and Stepwise multiple regression analysis. However, this research has been approved for consideration of human research ethics COA.IHRP2022098 and COA.IHRP2023004 in 2022-2023 by the Institute for Human Research Protection (IHRP)

Results: This research: A survey of public' Confidence in HA-accredited hospitals trust in HA-accredited healthcare facilities with a total of 4,189 respondents (*table1*), The average public trust score was 4.1061 out of 5.000 or 83.20%, The respondents expressed willingness to return to HA- accredited hospitals was 98.07% and 97.31% recommended HA-accredited hospitals to others, The highest-rated factor was confidence in healthcare services an average score was 4.2313 out of 5.0000 or 84.63% (*Chart 1*)

Top priorities for suggestions for service improvement included: Physical Environment, Standards of treatment and care and Personnel professional, respectively

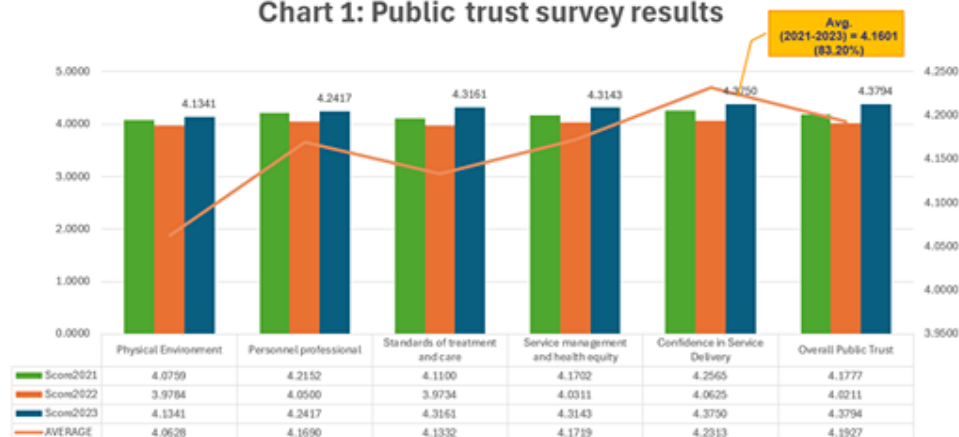
Development of Trust Dashboard: as a **data-driven platform** to support hospital quality improvement. The dashboard aggregates and visualizes feedback from service users, enabling hospitals to monitor public trust trends with continuously updated data and address key issues promptly with Implementation Phases aims: **Phase I (2022-2023):** Data collection through surveys and interviews. **Phase II (2023-2024):** Development of the Trust Dashboard, integrating survey data for automated analysis. (*Picture 1*), **Phase III (2024-2025):** Expansion of survey methodologies and dashboard functionalities to include predictive analytics for trend forecasting. and **Phase IV (2025-2026):** Continuous improvement and expansion of dashboard usage across all HA-accredited hospitals.

Image:

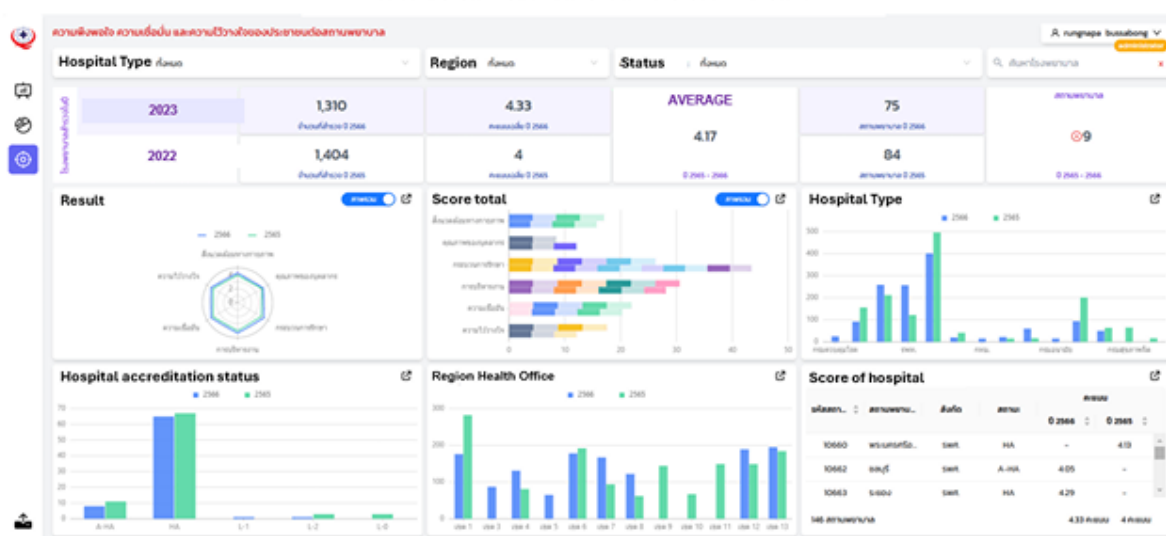
Table1: Total Hospitals Included and respondents

Hospital Type	2021		2022		2023		Total Hospital	Total Sample
	Hospital	sample (n)	Hospital	sample (n)	Hospital	sample (n)		
HA	76	1218	75	1200	67	1148	218	3566
Advance-HA	9	258	9	204	8	161	26	623
	85	1476	84	1404	75	1309	244	4189

Chart 1: Public trust survey results



Picture 1: Trust Dashboard



Conclusion: Trust Dashboard provides an innovative approach to integrating Public Confidence in HA-Accredited Hospitals feedback into healthcare quality management. By leveraging data-driven, hospitals can proactively address service gaps, enhance patient experiences, and strengthen public Confidence in HA-accredited institutions. The generated support evidence-based decision-making, ensuring that healthcare services evolve to meet the needs of the Thai population effectively.

This research underscores the importance of systematic public trust assessment and offers a scalable model for improving healthcare accreditation impact through digital transformation.

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Disclosure of Interest: None Declared

Integrating HFACS and RCA Frameworks for Comprehensive Medical Event Analysis: A Comparative Study of Adverse Events in a Hospital Setting: (2091) Jiun-Yi Liv

ISQUA2025-ABS-2091

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Root Cause Analysis (RCA) is widely used in healthcare to investigate adverse events by identifying the root causes of medical errors. While RCA is effective, its structure may have limitations in addressing human factors and systemic issues. The Human Factors Analysis and Classification System (HFACS), initially developed for aviation, offers a more detailed, multi-layered approach, focusing on both human and system-related causes. This study applies HFACS to reanalyze 13 major medical adverse events at Mackay Memorial Hospital over the past four years, comparing the findings with those from traditional RCA to explore differences and areas for improvement.

Methods: The research team comprised experts in patient safety and quality management, including four physicians, one nursing expert, and three quality management professionals, all trained in both RCA and HFACS with extensive practical experience in case analysis. We retrospectively reviewed 13 major medical adverse events at Mackay Memorial Hospital, initially analyzed using traditional RCA, which categorizes root causes into nine primary categories. The team then applied the HFACS framework to these same events, attributing causes based on the four HFACS levels. The original RCA root causes were mapped to the corresponding HFACS levels according to the established classification correspondence. The results from the HFACS analysis were then compared to the direct HFACS classification outcomes, focusing on consistency across levels two to four, as well as consistency at the subcategory level. Consistency was defined as the ratio of instances where both RCA and HFACS identified a root cause, plus instances where neither identified it, to the total number of cases.

Results: The 13 adverse events included four surgical site errors, one retained foreign object during surgery, one medication error, three transfusion errors, two catheter care errors, and two equipment usage errors. The events were classified with SAC levels 1 (2 cases), 2 (4 cases), and 3 (7 cases), all requiring re-hospitalization for additional surgeries or prolonged hospitalization. In the original RCA analysis, all 13 events had causes identified at the second and third HFACS levels, with 12 cases at the fourth level. The most frequent contributing factors were related to tools and technology, supervisory management, and procedural issues (8 cases each), followed by inadequate planning (6 cases) and improper task assignments (5 cases), with communication and resource management contributing to 3 cases each. In the HFACS expert consensus classification, 12 cases had causes identified at the second level, and 11 cases at the third and fourth levels. Subcategories differed from the RCA results, with procedural issues identified in 10 cases, followed by mental state issues (8 cases) and organizational culture (6 cases). Tools and technology, communication problems, supervisory management, and resource management contributed to 4 cases each. When comparing both classification methods, the consistency at the second level was 100%, at the third level was 92.3%, and at the fourth level was 84.6%. At the subcategory level, the lowest consistency was seen in mental state

(30.8%), supervisory issues and procedural problems (38.5%), and inadequate planning (46.2%). Consistency in tools and technology, and organizational culture was 53.8%, while task assignment and communication issues showed 61.5% consistency. Other factors had over 70% consistency.

Conclusion: This study demonstrates the advantages of applying the HFACS framework to medical adverse event analysis, particularly in its ability to capture a deeper understanding of human factors and systemic issues. Consistency between RCA and HFACS was highest at the second level (unsafe behavior preconditions), suggesting both methods identified common contributing factors at this level. However, the third and fourth levels (management and organizational factors) showed more nuanced discrepancies, highlighting the added value of HFACS in exploring these dimensions more thoroughly than RCA. HFACS provides a more detailed analysis of issues such as mental state, supervisory weaknesses, and organizational culture. Also, HFACS excels in addressing more complex organizational and cultural factors, which are often underexplored in RCA analyses. This insight underscores the broader perspective HFACS offers for analyzing adverse events in healthcare.

In conclusion, this study illustrates how the HFACS framework enhances the depth and comprehensiveness of adverse event analysis compared to traditional RCA, particularly in uncovering systemic and human factors. Although there were discrepancies in certain subcategories, the integration of RCA and HFACS can provide a more complete picture of root causes, thereby informing more targeted and effective corrective actions. The use of both frameworks could lead to the development of more scientifically rigorous and actionable models for continuous improvement in healthcare settings.

Disclosure of Interest: None Declared

A Process Improvement Study to Enhance Patient Handoff and Promote Patient Safety in the Progressive Care Unit: (2621) Eliseo Jr. Fernando

ISQUA2025-ABS-2621

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Patient handoff is a critical process in healthcare where responsibility for a patient's care is transferred from one healthcare provider to another. The aim is to ensure that essential patient information is communicated clearly and completely so that care continuity is maintained without errors. However, patient handoffs are often cited as a significant area of risk in healthcare settings due to a range of potential problems. Common problems in patient handoff are communication failures, inconsistency in handoff protocols, interruptions and environmental factors, inadequate training, workload and time constraints, technology and documentation issues and human factors such as fatigue and burnout. If patient handoff problems are not addressed, it can lead to patient dissatisfaction and loss of revenue due to consequential damages.

At a tertiary academic medical facility in Quezon City, Philippines, data showed that from June to December 2023, there has been an increasing incidence rate of concerns related to patient handoff in Progressive Care Units which was 119.4% (27 incidents). Therefore, the project aimed to reduce the incidence rate of concerns related to patient handoff in Progressive Care Units to 30% by August 2024.

Methods: This patient safety initiative project utilized the Plan-Do-Study-Act (PDSA) framework. The scope of this project starts with the designated nurse accomplishing the end-of-shift handoff worksheet/tool to handoff the patient and appropriate care and ends when the designated nurse files the appropriate handoff worksheet tool in the patient's medical record. The root cause analysis was done using the fishbone diagram in order to identify factors which directly or indirectly affect the problem. Following the focus group discussions with stakeholders, the possible causes were grouped according to man, machines, methods, materials, and environment, and were identified as follows: (1) unclear handoff process; (2) inadequate time allocated for handoff; (3) miscommunication between staff; (4) non-compliance on standardized protocols; (5) inadequate handoff training; (6) incomplete patient information; (7) high turnover of staff; (8) staff fatigue or burnout; (9) increased workload; (10) interruptions during handoff; and (11) inconsistent locations for handoff.

To address the identified root causes, the following solutions have been implemented: (1) develop structured training programs; (2) Incorporate bedside endorsement of patients into the handoff process; (3) Provide handoff training and education; and (4) standardize handoff locations.

Results: After eight (8) months of solution implementation from January to August 2024, it was found that the incidence rate of concerns related to patient handoff in the Progress Care Units was reduced by 32.70%, which exceeded the target of 30% reduction.

Conclusion: In conclusion, the improvements and changes to the patient handoff process in Progressive Care Units resulted in increased patient satisfaction, a stronger organizational reputation, and prevented loss of revenue due to consequential damage and need for additional manpower.

When conducting patient handoffs, one of the most important things to remember is that "communication is key". Structured, clear, and comprehensive handoff processes, supported by teamwork and technology, are essential to improving patient safety and reducing errors. Continued training, compliance to standards, and involving the patient in the process are critical strategies to enhance the quality and effectiveness of handoffs in any healthcare setting.

Disclosure of Interest: None Declared

Optimizing Magnetic Resonance Imaging (MRI) Safety: A Team Resource Management Approach.: (1318) Chiayi Lin

ISQUA2025-ABS-1318

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¹Chung Shan Medical University Hospital, Taichung, Taiwan

Preferred presentation method: 10 Minute Lightning Talk (E-Poster)

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Magnetic Resonance Imaging (MRI) is a widely used diagnostic tool, yet its strong magnetic field poses significant safety risks, particularly concerning ferromagnetic objects. Reports from The Joint

Commission (JCI) and documented cases in Taiwan highlight incidents where metallic objects became projectiles, causing severe injuries. These events underscore the need for strengthened MRI safety protocols, particularly in emergency scenarios requiring interdisciplinary coordination. This study aimed to enhance MRI safety through a structured Team Resource Management (TRM) approach, integrating scenario-based training to improve clinical skills, situational awareness, and team collaboration.

Methods: Following an in-depth analysis of existing safety challenges, the team developed and implemented the "SAFE" framework, focusing on three key domains:

1.Environmental SAFE:

- Enhanced warning signage for greater visibility and awareness.
- Upgraded metal detection systems to prevent unauthorized ferromagnetic object entry.
- Established a designated emergency response area near MRI zones to facilitate rapid interventions.

2.Handover SAFE:

- Implemented an electronic hand-off system to standardize MRI patient transfers using ISBAR (Introduction, Situation, Background, Assessment, Recommendation) for structured communication.
- Developed and enforced a comprehensive metal screening checklist to ensure thorough pre-scan safety assessments.
- Introduced a catchy song-based mnemonic to remind staff and patients to check for metallic objects before entering the MRI suite.

3.Emergency SAFE:

- Utilized a time-bound board game as a pretest to assess baseline MRI safety knowledge.
- Conducted scenario-based simulation training in a high-fidelity simulation center. Twenty-one participants, including emergency residents, intensive care unit nurses, and radiology interns, engaged in an MRI emergency scenario. Simulations incorporated role assignments, environment and equipment familiarization, metal detector usage training, hands-on exercises, debriefing, instructor feedback, and group discussions.

Results: From January 2021 to December 2024, no MRI-related adverse events were recorded, demonstrating the effectiveness of the implemented safety measures. Compliance with patient transfer and metal screening protocols increased from 74% to 99.6%. At Kirkpatrick Level 1, participants reported 100% satisfaction with the session. At Kirkpatrick Level 2, post-training assessments showed a significant improvement in MRI safety knowledge, with test scores increasing from 79.6% to 89.6%. A paired t-test revealed a statistically significant difference ($P < 0.001$).

Image:

[illegible]

Conclusion: The implementation of the TRM-based SAFE framework significantly enhanced MRI safety by reducing adverse events, improving cross-team collaboration, and strengthening emergency preparedness. The integration of scenario-based training improved staff readiness for high-risk situations, fostering a culture of safety.

References: 1.Mittendorff, L., Young, A., & Sim, J. (2022). A narrative review of current and emerging MRI safety issues: What every MRI technologist (radiographer) needs to know. *Journal of medical radiation sciences*, 69(2), 250-260.

Disclosure of Interest: None Declared

The Role of the Pharmacist in the Hospital Setting: Multidisciplinary Visits Focusing on Prescription Safety: (2836) Esla Lessa Borba

ISQUA2025-ABS-2836

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Medication errors are a frequent challenge in hospital settings, adversely affecting clinical outcomes, patient safety, and healthcare costs. Existing evidence suggests that the active involvement of clinical pharmacists in multidisciplinary teams can significantly reduce prescription errors and promote the rational use of medications.

Methods: A prospective interventional study was initiated in November 2020 at a tertiary hospital. The protocol included daily bedside visits by clinical pharmacists, systematic review of medical prescriptions, and real-time feedback during multidisciplinary rounds. Data were collected using standardized forms and analyzed through descriptive statistical methods. Key performance indicators measured included the percentage of evaluated prescriptions, the rate of medication prescription errors, pharmacovigilance notification indices, and the proportion of patients receiving discharge guidance from pharmacists. All procedures adhered to ethical guidelines and received approval from the institutional review board.

Results: The intervention resulted in the evaluation of 100% of medical prescriptions, exceeding the target of 95%. The error rate in medication prescriptions was maintained at 1%, meeting the established benchmark. The pharmacovigilance notification index decreased from a target of 5% to 3%, and dispensing errors were completely eliminated (0% versus a target of 2%). Additionally, 13% of patients received pharmacist-led discharge guidance (against a target of 20%), and pharmacist participation in multidisciplinary rounds achieved a rate of 97% (compared to a target of 100%). These findings indicate that the implemented measures effectively improved prescription safety and medication management.

Conclusion: The integration of clinical pharmacists into multidisciplinary hospital rounds significantly enhances prescription safety and supports the rational use of medications. The study's outcomes underscore the vital role of pharmacist-led interventions in reducing medication errors, thereby contributing to improved patient safety and healthcare quality.

References: Desnoyer A, et al. PIM-Check: development of an international prescription-screening checklist designed by a Delphi method for internal medicine patients. *BMJ Open*. 2017 Jul 31;7(7): 2017

Disclosure of Interest: None Declared

Analysis of the Usability and Effectiveness of Implementing Smart Dispensing Counters in an Emergency Pharmacy: A Case Study of a Medical Center in Taiwan: (1465) Tzu-Yao Huang

ISQUA2025-ABS-1465

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Preferred presentation method: 10 Minute Lightning Talk (E-Poster)

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Emergency pharmacists are tasked with the critical responsibility of dispensing medications rapidly and accurately. However, the independent working model typically adopted in emergency pharmacies lacks re-verification mechanisms, increasing the risk of dispensing errors.

In high-pressure scenarios where urgent medication administration is required, even minor dispensing errors can lead to severe consequences.

To enhance medication safety and reduce human error, the emergency pharmacy implemented a Smart Dispensing Counter in September 2023. This technology-driven system aims to minimize dispensing errors by guiding pharmacists through the medication dispensing process with enhanced accuracy. This study

evaluates the usability and effectiveness of the Smart Dispensing Counter since its implementation and provides insights for future optimizations.

Methods: This study collected data from January to September 2024, utilizing statistical reports from the Smart Dispensing Counter, the hospital's Drug and Medical Supply Management System, and the HIS 2 Pharmacy System. Power BI was employed for big data analytics, aggregating relevant data for comprehensive analysis.

In addition, the study used the System Usability Scale (SUS) and qualitative surveys to assess pharmacists' acceptance, satisfaction, and user experiences with the Smart Dispensing Counter. This approach aims to evaluate the system's real-world impact in the emergency pharmacy setting and identify potential areas for improvement.

Results: There are 670 medications in the emergency pharmacy, of which 598 (approximately 89.25%) have been successfully integrated into the Smart Dispensing Counter. Medications are categorized and stored based on prescription frequency and characteristics into near, mid, and far zones, with usage rates of 21.89%, 28.26%, and 29.86%, respectively.

Between January and September, the average usage rate of the Smart Dispensing Counter significantly increased from 0.81% to 57.55%. Among different shifts, the day shift showed the highest usage rate at 30.61%, followed by the evening shift at 27.77%, and the night shift at 10.47%.

Big data analysis revealed peak prescription times at 08:00, 16:00, and 23:00, corresponding to Smart Dispensing Counter usage rates of 28.54%, 28.56%, and 9.00%, respectively. Furthermore, 55.63% of medication dispensing occurred between 15:00 and 01:00, while the highest usage rates for the Smart Dispensing Counter were recorded between 09:00 and 14:00, ranging from 29.77% to 32.64%.

Seventeen valid questionnaires were collected, revealing an average SUS score of 69.56, indicating good user acceptance. Qualitative feedback highlighted that the system is widely used, user-friendly, and effective in reducing dispensing errors in the emergency pharmacy. However, additional verification steps introduced by the system were noted to cause delays, particularly during peak periods, impacting dispensing speed.

Users suggested further optimization of the workflow and improvements to the alignment of medication bins to enhance usability and increase user acceptance.

Conclusion: The Smart Dispensing Counter has demonstrated high usability, ease of learning, and effective support for medication location and verification. Users generally exhibited a positive attitude towards the system, and usage rates increased significantly following enhanced awareness and training. However, during peak dispensing periods, the additional verification steps were perceived as slowing down the dispensing process, leading to decreased usage rates and limiting the system's full potential.

To further enhance the system's acceptance and effectiveness, future research can utilize the Technology Acceptance Model (TAM) to explore the influencing factors of user acceptance of smart medical technology. This approach will help identify potential barriers to usage and inform targeted strategies for system improvements.

References: Brooke, John. (1995). SUS: A quick and dirty usability scale. Usability Eval. Ind.. 189.

Disclosure of Interest: None Declared

Innovation, Efficiency, and Quality in Hospital Care: The Role of the Internal Regulation Center (NIR) at IMIP: (1997) Raphael Campos Buarque

ISQUA2025-ABS-1997

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: The Brazilian Ministry of Health established the Internal Bed Regulation Center under the National Hospital Care Policy (PNHOSP) – Consolidation Ordinance No. 2 of September 28, 2017, to enhance emergency management and optimize hospital bed allocation within the Unified Health System (SUS). The Internal Regulation Center (NIR) is a Technical-Administrative Unit that monitors patients from arrival to discharge, including transfers. This study explores the experience of the Instituto de Medicina Integral Professor Fernando Figueira (IMIP), a philanthropic tertiary hospital in Pernambuco serving SUS patients. With over 1,000 beds and three emergency departments (Adult, Pediatric, and Obstetric), IMIP provides statewide care. NIR-IMIP was implemented in 2020 for centralized bed management, incorporating the Surgical Scheduling Center (CAC) in 2022 to improve transparency and efficiency. Given this structure, is it relevant to discuss how NIR work process has contributed to improving the quality of care for hospitalized patients? Therefore, this study aims to analyze NIR's contribution to optimizing bed management and patient flow, emphasizing innovation, efficiency, and quality in hospital care.

Methods: The work consists of an experience report on the NIR-IMIP work process. The data were collected through the MV Soul system, based on management reports. Indicators of Length of Stay (LOS) of the Adult Emergency Care Service (SPA) and the Average Length of Stay (MPR) of the Adult Medical Clinic between 2018 (the year before the implementation of the NIR) and 2024 were analyzed, as well as indicators of unscheduled surgeries in the years 2023 and 2024.

Results: The results achieved by the NIR team were significantly enhanced through the daily use of effective tools such as Kanban (an instrument that allows organizing and optimizing the workflow in continuous processes, analyzing the clinical and social issues that interfere in the hospital discharge process), Rounds (moments of quick discussion of the patients' clinical cases, involving communication and decision-making about multidisciplinary care and the therapeutic plan), Huddles (a short meeting held at the beginning of each day with representatives from various medical clinics to review pending hospital discharges), and the bed management panel (it's a painel that allows the visualization of vacant and occupied beds, enabling the best use of installed capacity and the monitoring of patients admitted to the hospital from the first six hours until their hospital discharge). Between 2021 and 2024, these innovations led to remarkable improvements in patient flow and resource allocation. Specifically, the length of stay (LOS) in the Emergency Room (ER) saw a dramatic 43% reduction. The average ER LOS dropped from 4,483 minutes (from 2018 to 2020) to 2,513 minutes (from 2021 to 2024), with a notable further decrease to just 935 minutes in 2024, as can you see in the graphic below. This remarkable decline ensured that patients' stays in the ER were consistently under 24 hours, reflecting a major leap in operational efficiency and the timely management of patient care. In the adult

medical clinics, the average LOS was reduced from 10 days (2018–2020) to 7 days (2021–2024), which not only improved the turnover of hospital beds but also expanded the overall service capacity. The impact was further evident in surgical operations, where unscheduled surgeries dropped by 43% in 2024 compared to 2023. This reduction highlights the increased predictability and planning achieved through the NIR system's integration. Additionally, the systematic approach to data extraction and the development of indicators became more streamlined and efficient, contributing to more informed decision-making. The NIR system's implementation at IMIP had a profound effect on optimizing both bed management and patient flow, substantially reducing LOS in the ER and medical clinics.

Image:



Conclusion: The successful implementation of the NIR system at IMIP has significantly optimized various operational aspects of the hospital, particularly in bed management and patient flow. By streamlining these processes, the system has led to a marked reduction in both Emergency Room and medical clinic stay durations, facilitating quicker and more efficient patient throughput. Furthermore, the integration of NIR with the Surgical Scheduling Center has further elevated operational efficiency by minimizing surgery cancellations and improving the overall management of surgical resources. This cohesive integration ensures that surgeries are better scheduled, resources are optimally allocated, and patients experience less delay in receiving care. The strategic role of NIR in preventing overcrowding within the hospital has been pivotal in maintaining a high standard of care, as it effectively balances patient demand with available capacity. Ultimately, NIR has become an essential tool in fostering a culture of innovation, operational excellence, and superior quality within IMIP's healthcare services, directly contributing to enhanced patient care outcomes and organizational sustainability.

References: BRAZIL. Ministry of Health. Consolidation Ordinance No. 2, September 27, 2017. Consolidation of the regulations on the national health policies of the Unified Health System. 2017. Available at: http://bvsms.saude.gov.br/bvs/saudelegis/gm/2017/prc0002_03_10_2017.html. Accessed on: Jan 20, 2025.

Disclosure of Interest: None Declared

Enhancing Cervical Cancer Screening and HPV Vaccination Coverage through a Quality Improvement Collaborative in a High-Burden Cancer Region of the Brazilian Amazon: (1700)

Livia Pedrillo

ISQUA2025-ABS-1700

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Preferred presentation method: 10 Minute Lightning Talk (E-Poster)

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Cervical cancer is one of the leading causes of cancer-related mortality among women in Brazil, with disproportionately high incidence and mortality rates in the North, particularly in Manaus. Despite the availability of HPV vaccines and cytological screening, uptake remains suboptimal due to systemic barriers, including inadequate healthcare access, socioeconomic constraints, and vaccine hesitancy. The "*Cuida Colo*" initiative, a quality improvement (QI) collaborative, aims to enhance cervical cancer prevention by integrating evidence-based interventions that target screening adherence and vaccine coverage across primary healthcare units (UBS) and schools. Our findings offer valuable insights for policymakers on how structured root cause analyses and QI strategies can guide national efforts to optimise cervical cancer prevention strategies.

Methods: The "*Cuida Colo*" initiative was structured as a pilot QI study, involving six participating UBS (small-scale) selected based on indicators below local screening and vaccination coverage goals. This QI collaborative was implemented in the Brazilian Amazon state (Manaus city) from June 2023 to August 2024. The implementation framework followed the Model of Improvement methodology, emphasising iterative in-person learning sessions, remote coaching, and Plan-Do-Study-Act (PDSA) cycles to refine intervention strategies swiftly and effectively. Core components included: capacity building through learning and training sessions for healthcare professionals on cervical cancer screening protocols and HPV vaccination guidelines; data-driven decision-making (utilising real-time integrated data to monitor performance indicators); community engagement through school-based HPV vaccination campaigns, parental education initiatives, and proactive outreach strategies (including educational videos, leaflets, and incentive *in situ* activities); process standardisation, ensuring timely follow-up for abnormal cytology results and reducing barriers to HPV vaccine uptake. The primary outcomes included the proportion of women aged 25-64 undergoing cervical cytology screening and HPV vaccination coverage among children aged 9-14 years. The research project assessing the "*Cuida Colo*" initiative was approved under the number CAAE 83216124.6.0000.0071.

Results: Root cause analyses identified workforce shortages, infrastructure limitations, disconnected workflows among stakeholders, data indicators that were not linked and unavailable to front-line workers (loss of follow-up and feedback), lack of communication between health and education state secretaries, and parental hesitancy as key implementation barriers. At the end of the intervention period, the initiative achieved: (i) a 30.8% increase in cervical cancer screening coverage, resulting in 4,140 additional screenings compared to baseline; (ii) a 63.5% increase in HPV vaccine doses administered, translating to 1,713 additional vaccinations; (iii) school-based interventions resulted in 91.3% HPV vaccination coverage in the target population, a 76.5% increase from baseline. All educational materials developed—including videos,

leaflets, and training modules—will be presented during the presentation to facilitate replication and dissemination.

Conclusion: The “*Cuida Colo*” initiative presents a scalable, data-driven framework for improving cervical cancer screening and HPV vaccination rates in high-burden regions, achieving remarkable results through evidence-based practices and promoting safe practices. Expanding and sustaining these improvements through national policy alignment can significantly contribute to Brazil’s cancer prevention and immunisation goals, especially in resource-constrained settings.

Disclosure of Interest: None Declared

Reducing Pediatric Procedural Pain: Implementing the Global Comfort Promise at Mackay Children’s Hospita: (1740) Hsuan-Chih Laov

ISQUA2025-ABS-1740

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

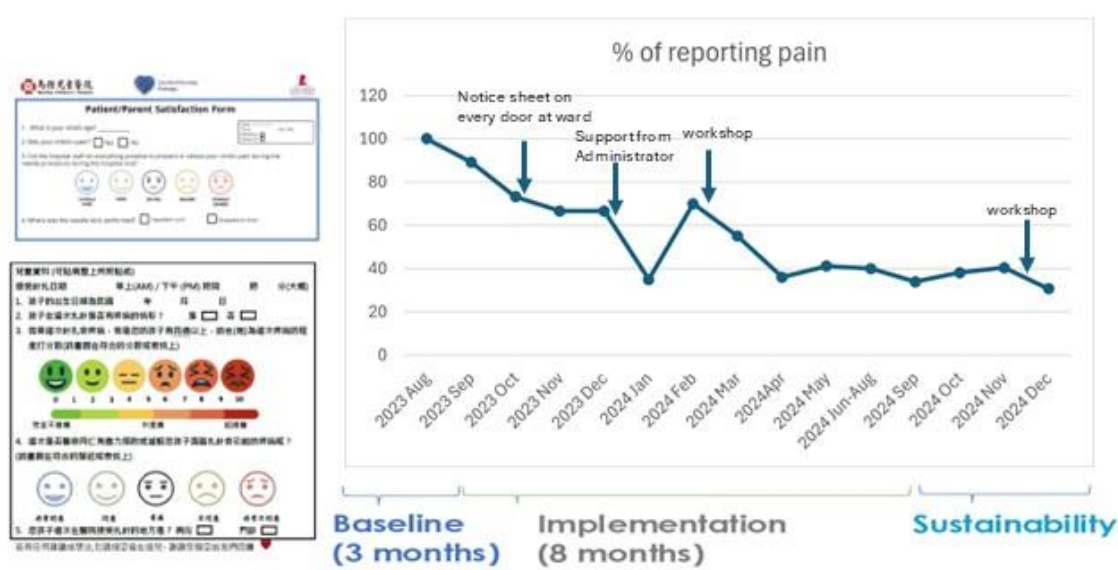
I confirm that the submission has been approved by all authors: Yes

Introduction: Effective management of procedural pain in pediatric patients is a global concern, with studies showing high prevalence among hospitalized children. For instance, a 2015 U.S. study found that 76% of pediatric patients experienced pain, often due to needle-related procedures. Similarly, a 2019 report from South Africa indicated that 87% of hospitalized children endured pain largely from procedures like blood draws and injections. Addressing this issue, a 2020 study in Taiwan highlighted deficiencies in pediatric pain management education for clinicians, prompting calls for enhanced training programs. In response, the "Global Comfort Promise" project was launched in early 2023 by the Institute for Healthcare Improvement and St. Jude Children's Research Hospital to implement an evidence-based protocol to reduce needle-related pain in children and assess its applicability across diverse healthcare settings. This presentation details our efforts and outcomes in improving pediatric procedural pain management under this initiative.

Methods: From August 2023 to December 2024, a retrospective review of the Patients and Parents Satisfaction Cards (SAT) from (Figure) MacKay Children’s Hospital was conducted. The initial three months of this period served as the baseline. The subsequent ten months were designated as the implementation phase. During this time, staff were trained to consistently apply five primary interventions: topical anesthesia, comfort positioning, age-appropriate distraction, breastfeeding or sucrose for infants, and effective communication. Specific implementation actions were detailed and executed accordingly. The final four months (September 2024 to December 2024) constituted the sustainability phase. The primary outcomes measured were the percentage of pain-free procedures and the level of satisfaction reported by patients and parents.

Results: During the study period, a total of 545 Satisfaction Cards (SAT) were collected following real-time needle stick procedures. Out of these 545 procedures, 74 occurred during the baseline period, 209 during the implementation phase, and 262 during the sustainability phase. Initially, nearly 100% of patients reported experiencing pain, with 81% of patients indicating pain during the baseline period. Following the implementation of the Good Clinical Practice (GCP) bundle, the percentage of patients reporting pain decreased to 46.9%, reflecting a 34.1% reduction. In the sustainability phase, the pain reporting rate further declined to 35.9%. Throughout the study period, there were 293 pain-free procedures documented. Among the 252 patients and parents who reported a painful procedure, 245 indicated that pain prevention or alleviation strategies were effective. This led to a 97.2% satisfaction rate regarding the efforts made by our staff, despite the reported painful experiences.

Image:



Conclusion: The collaborative implementation of the Global Comfort Promise (GCP) bundle, alongside comprehensive staff and caregiver education, robust administrative support, and strategic enhancements in facilities and the clinical environment, has demonstrably reduced procedural pain among pediatric patients. The integration of these multifaceted approaches highlights the efficacy of the GCP bundle in addressing needle-related pain, thus paving the way for significant improvements in patient comfort levels during medical procedures. Moving forward, our strategic objective is to further develop these initiatives with the aspiration of establishing Mackay Children’s Hospital as a benchmark for pain-free pediatric care. This will involve continued efforts in education, resource allocation, and environment optimization to sustain and enhance pain management practices.

References: 1: Friedrichsdorf SJ and et al. Pain Outcomes in a US Children's Hospital: A Prospective Cross-Sectional Survey. Hosp Pediatr. 2015 Jan;5(1):18-26.

2: Velazquez Cardona C and et al. An audit of paediatric pain prevalence, intensity, and treatment at a South African tertiary hospital. Pain Rep. 2019 Dec 6;4(6):e789.

3: Chiang LC and et al. Student nurses' knowledge, attitudes, and self-efficacy of children's pain management: evaluation of an education program in Taiwan. J Pain Symptom Manage. 2006 Jul;32(1):82-9.

Disclosure of Interest: None Declared

Integrating Outcome Transparency via Internal Benchmarking with Process Redesign Initiatives in Surgical Departments: A Retrospective Observational Study Across Eight Austrian Hospitals: (1567) Teresa Hochstrasser

ISQUA2025-ABS-1567

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Benchmarking is a key tool for measuring surgical outcomes and fostering continuous quality improvement (CQI). It enhances transparency in patient outcomes and enables integration into structured quality initiatives. Since 2015, the University of Applied Sciences Upper Austria, in collaboration with the Oberösterreichische Gesundheitsholding (OÖG), has developed the *LeistungsVergleich Medizin* (LeiVMed) platform to collect, monitor, and analyze patient data. This platform continuously provides eight hospitals with data on morbidity, mortality, clinical processes, and costs. Between 2015 and 2019, standardized clinical pathways for cholecystectomy and herniotomy were also introduced to standardize perioperative processes, enhance adherence to best practices, and reduce variations in surgical outcomes. Concurrently, CQI initiatives were implemented by hospital quality management teams but were subsequently discontinued with the onset of the COVID-19 pandemic at the beginning of 2020.

This study aims to analyze trends in complication rates over a nine-year period.

Methods: This study was conducted across eight small to medium-sized Austrian hospitals. Hospital databases provided patient risk factors, medical services, length of stay (LOS), and mortality data, complemented by a review of handwritten documentation by specially trained nurses and verified by physicians in a two-step process.

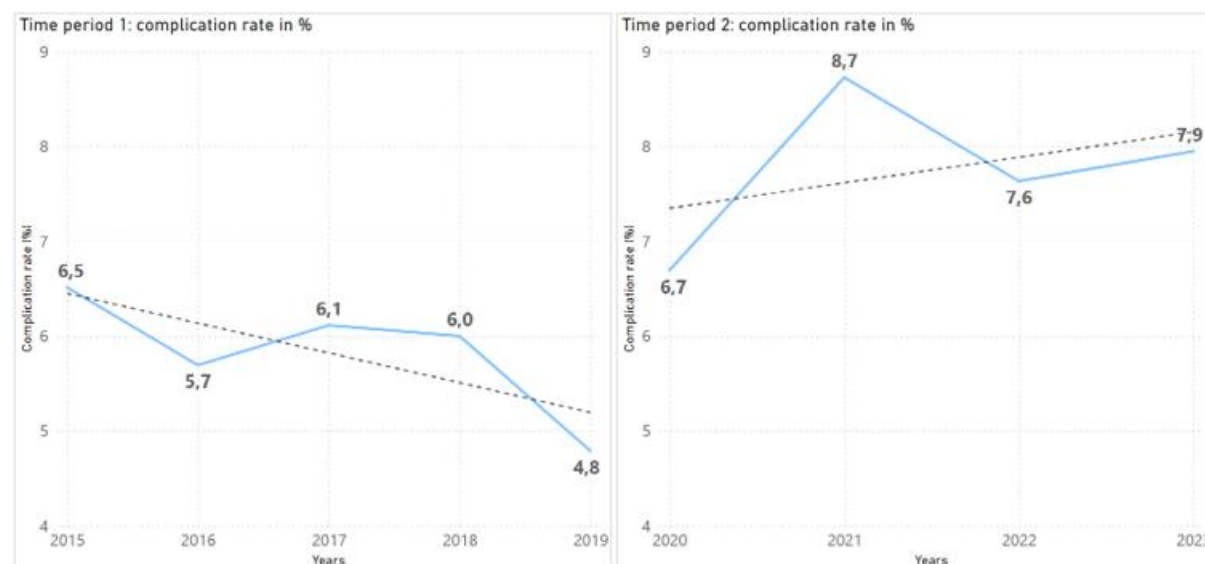
The study included 2,412 cholecystectomy and 2,850 herniotomy patients in time period 1 (2015–2019) and 2,106 cholecystectomy and 2,145 herniotomy patients in time period 2 (2020–2023). A total of 305 and 328 patients, respectively, were classified as having postoperative complications.

A retrospective regression analysis was performed on data from April 2015 to August 2023, incorporating patient demographics, ASA classification, risk factors, type of surgical procedure, surgical department, and admission type (elective vs. emergency) to identify factors independently associated with complications. Between 2015 and 2019, clinical pathways were implemented, and benchmarking results were systematically shared. These CQI initiatives and process redesign efforts were discontinued due to the COVID-19 pandemic.

Results: Mean complication rates were 5.8% (4.8%–6.5%) in time period 1 (2015-2019) and 7.7% (6.7%–8.7%) in time period 2 (2020-2023). (see the graph below)

Logistic regression confirmed that lower complication rates were significantly associated with time period 1 ($\beta = -0.24$, $p = 0.0045$), lower ASA classifications (ASA 1–3 vs. ASA 4; all $p < 0.0001$), elective admissions ($\beta = -0.42$, $p < 0.0001$), and fewer preoperative risk factors ($\beta = 0.08$, $p = 0.0020$). Age was positively associated with complications ($\beta = 0.02$, $p < 0.0001$). Surgical departments varied significantly, with departments 2–6 showing lower complication rates compared to department 8 (all $p < 0.05$).

Image:



Conclusion: Scientific evidence on process redesign in healthcare remains limited. However, our findings suggest that during 2015–2019, when internal benchmarking was combined with the implementation of clinical pathways and CQI measures, complication rates were significantly lower than in 2020–2023, which lacked structured quality initiatives. As patient risk was accounted for, our results indicate that integrating outcome transparency with process redesign may be a key strategy for improving surgical outcomes.

Disclosure of Interest: None Declared

Qualitometer Audit: A Tool for the Development of Corporate and Clinical Governance in a 100% SUS hospital.: (3770) Paula Narjara DO AMARAL Azevedo Cartágenes

ISQUA2025-ABS-3770

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Effective management of the healthcare workforce is essential to ensure quality of care. The “Qualitometer” (Quality Thermometer), an audit methodology created by the Quality and Patient Safety Center – NQSP assesses the degree of teams’ adherence to good institutional management practices while stimulating the development of organizational skills: leadership, conflict management and strategic vision, at the operational, tactical and strategic levels. Composed of 14 requirements, the Qualitometer covers risk

management, management by indicators and strategic planning. This study presents the results of applying the Qualitometer with data collected between 2022 and 2024, at the Galileu State Public Hospital, a medium and high complexity back-up institution, 100% SUS, 104 beds, located in Belém-PA, with ONA certification – Level 3.

Methods: The Qualitometer audit is conducted by the NQSP and the Quality Commission, made up of members from the operational and tactical levels, who received training in ISO 19011 practices. Data was collected through interviews with employees and document review, with each item classified as compliant (C), non-compliant (NC) or not applicable (N/A). Ethical considerations were observed, ensuring data confidentiality.

Results: Figure 1 shows the evolution of global compliance in Qualitometer between 2022 and 2024. In 2022, the percentage of processes (hospital sectors) that achieved 100% compliance was 22.5%. In 2023, this percentage became 37.5% and in 2024, it reached 47.5%, revealing that the methodology actually contributed to strengthening the institution's corporate and clinical governance practices.

Image:



Figura 1: Evolução da Conformidade Global no Qualitômetro (2022-2024)

Conclusion: The Qualitometer audit at the Galileu State Public Hospital demonstrated a positive evolution in global compliance over the years. The results reflect the continuous efforts to improve the best management practices recommended by the hospital, as well as the effectiveness of the Qualitometer as a tool for evaluation and continuous improvement. Replicating this methodology in other health units could contribute to promoting excellence in care, in line with international quality standards.

Disclosure of Interest: None Declared

Uncovering Unmet Needs among Healthcare Teams: The Second Victim.: (2293) Jacob Dreier

ISQUA2025-ABS-2293

S. Fisher^{1,*}, Y. Gendler², R. Djerassi³, J. Dreier³

Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Healthcare providers encounter adverse events and medical errors, and inadequate awareness and support can leave these teams vulnerable as "second victims". The objectives of our study were to assess healthcare professionals' understanding of the second victim concept, evaluate the existing support systems in place, and identify the types of support mechanisms they consider most desirable.

Methods: An online survey with 18 statements distributed through the organizational email system twice weekly in February 2024. The survey focused on emotional responses following involvement in medical errors, perceived support from supervisors, and the availability of organizational resources. Statistical analysis performed using R statistical software. The Chi-Square test applied to examine differences between categorical variables. A Likert scale was used, where 1 represented "strongly disagree" and 6 represented "strongly agree." The nonparametric Wilcoxon rank-sum test and Pearson's Chi-squared test were used to assess differences between groups and associations between categorical variables, respectively. Factor analysis conducted to explore the underlying structure of the data and identify latent factors influencing the observed variables.

Results: The survey was sent to 6,645 physicians and 11,855 nurses. A total of 483 physicians and 1,359 nurses participated in the survey (10% response rate). The median tenure was over 15 years, and 26.6% had a leadership role. The majority of participants (75.8%) correctly identified the SV as a healthcare professional involved in an adverse event. However, 17.5% were unfamiliar with the term. Both physicians and nurses reported high emotional stress and embarrassment following errors, with 83% reported feeling very stressed after discovering an error. Similarly, feelings of remorse and embarrassment were reported by 82% of participants. Nurses were significantly reported feeling blamed by their supervisors with a mean of 2.94 (SD 1.47 compared to physicians with mean of 2.60 (SD 1.32, $p < 0.001$). Senior staff (over 15 years of experience) constituted 53.4% of respondents, with a higher likelihood of reporting lower stress levels compared to less experienced staff ($p < 0.001$). Non-managerial staff were more likely to report feelings of blame than those in managerial roles, further emphasizing the need for targeted support tailored to job roles. The most desired support path was having a colleague to discuss the event (58% of physicians and 49% of nurses, $p < 0.001$). Only 37.3% of respondents were aware of formal support for second victims. Despite available support, only 15.6% utilized it. The majority (53.5%) reported no support was offered, while 26.3% felt it was unnecessary. These findings underscore the need for proactive outreach and accessible, effective support resources.

Conclusion: Healthcare workers face a significant risk of becoming SV after unexpected medical events, and peer support is preferred. Program directors should prioritize structured peer support initiatives, alongside robust formal systems and open communication, to reduce the emotional toll and foster a resilient healthcare environment. Addressing gaps in resource awareness and refining managerial approaches is essential.

Disclosure of Interest: None Declared

Transforming Healthcare Leadership: Building a Sustainable Quality Improvement Culture amongst Nursing and Midwifery Leaders & Managers in Ghana.: (2113) Juliet Ami Kwadzodeh

J. A. Kwadzodeh ^{1,*}, B. Yeboah ², J. Asiamah ³, L. Annan ⁴ and Leadership in Healthcare Quality and Patient Safety training group

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Leadership development is critical to healthcare quality improvement, influencing patient safety, service delivery, and organizational efficiency. In Ghana, nursing and midwifery leaders play a pivotal role in shaping healthcare outcomes; however, gaps in leadership skills, strategic decision-making, and quality management have been identified as barriers to sustainable improvement. Despite existing efforts to enhance leadership training, there is limited data on the effectiveness of structured leadership development programs tailored to Ghana's healthcare context.

This study explores the impact of **quality improvement (QI) tools** in strengthening leadership competencies among nursing leaders in Ghana.

The objectives are to **analyze leadership gaps, evaluate the effectiveness of structured training programs, and identify key strategies for sustainable leadership development**. The findings are expected to inform future policies, enhance leadership capacity, and improve patient outcomes in Ghana's healthcare system.

How does structured leadership training impact the competency levels of nursing and midwifery leaders in Ghana's healthcare system?

What are the key quality improvement strategies that can enhance sustainable leadership development among nursing and midwifery leaders in Ghana?

Methods:

We applied **quality improvement (QI) tools** to assess and enhance leadership competencies among nursing leaders in Ghana. The study follows a **quasi-experimental pre-and post-intervention design**, with a mixed-methods approach combining **quantitative surveys, qualitative focus groups, and observational assessments**. The intervention includes structured training workshops, mentorship programs, and real-time leadership simulations.

Data collection methods include:

- **Self-reported leadership competency surveys** (pre-and post-training assessments).
- **Direct observational analysis** using a structured checklist to assess leadership behaviors.

Descriptive statistics was used to analyze leadership competency scores.

Ethical Considerations

This study adheres to ethical research principles. Ethical approval was not obtained. Informed consent was obtained from all participants before data collection. Participation was voluntary, and confidentiality was maintained

Results: Results

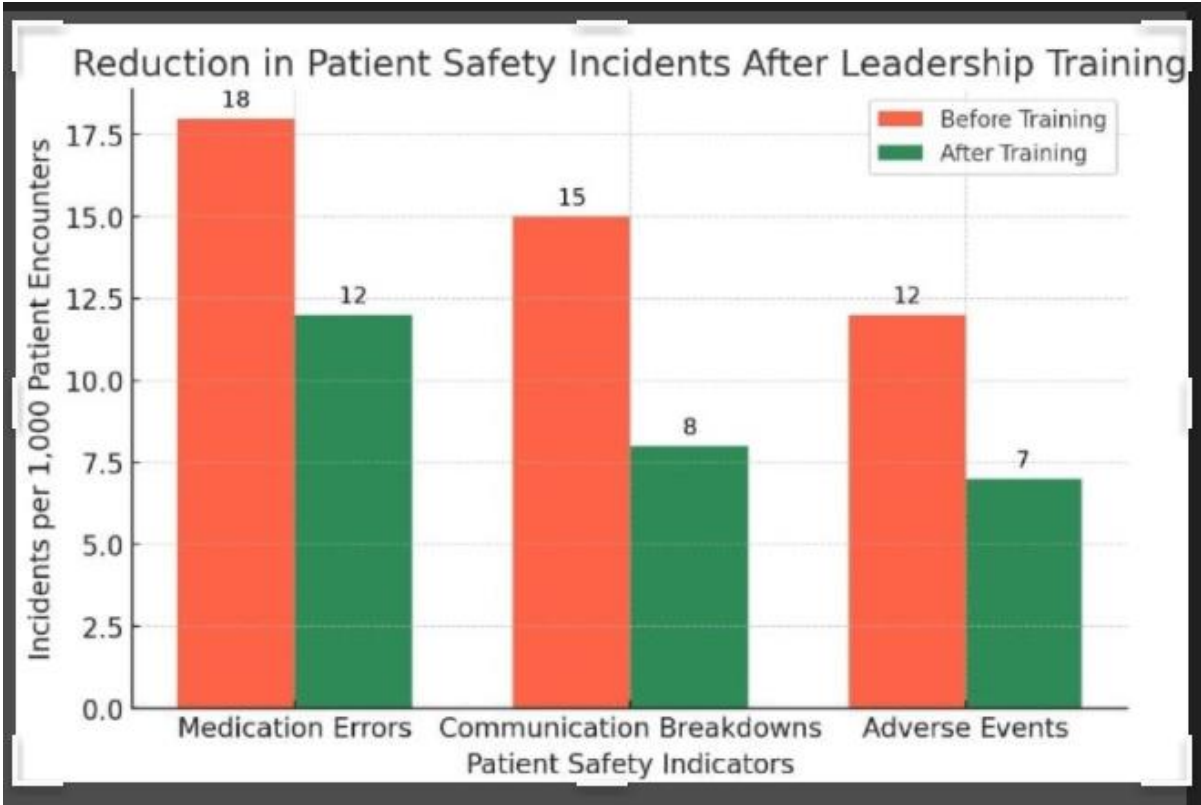
Impact of Leadership Training on Competency Levels

A **pre-and post-intervention survey** was conducted among **120 nursing leaders** across various healthcare institutions in Ghana. The survey assessed leadership competencies using a **5-point Likert scale** (1 = Poor, 5 = Excellent) **Significant improvements** were observed across all leadership competency domains ($p < 0.001$). Quality improvement (QI) knowledge had the highest percentage increase (+57.1%), indicating a major knowledge gap before the intervention.

Association Between Leadership Training and Patient Safety Outcomes- we analyzed hospital-reported incident data from 10 participants of the training over 1 month and ongoing

Unintended Effects and Challenges- Some nursing and midwifery leaders reported **higher stress levels** due to additional responsibilities pre-training

Image:



Conclusion:

The study demonstrates that structured **leadership training significantly improves nursing leaders' competencies**, leading to **better patient safety outcomes** in Ghanaian healthcare facilities. However, **institutional support** and ongoing mentorship programs are crucial to sustaining these gains and overcoming challenges.

Recommendation

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Disclosure of Interest: None Declared

Development of national competency goals for patient safety.: (1787) Axel Ros

ISQUA2025-ABS-1787

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: The rapid advancement of healthcare underscores the need for educational programs to uphold patient safety and care quality. Ensuring sustainable, safe care requires strengthening and maintaining patient safety competence among healthcare staff. The WHO Global Patient Safety Action Plan 2021-2030 calls for integrating patient safety education into healthcare training. In Sweden a National Action Plan for Increased Patient Safety emphasizes the necessity of continuous competence development to ensure patient safety. In 2021, the Swedish National Board of Health and Welfare evaluated the 2011 WHO Patient Safety Curriculum from a Swedish perspective. While deemed valuable, the evaluation identified a need to incorporate recent safety science and adapt to Sweden's healthcare and education systems. This

presentation outlines the development of Swedish national competency goals in patient safety within a structured competency framework.

Methods: The National competency goals for patient safety were developed by the Swedish National Board of Health and Welfare to enhance knowledge and skills in patient safety. A group of experts were commissioned to work together with officials at the National Board of Health and Welfare to develop the goals in an iterative process from June 2023 to June 2024. The process began with proposing and defining key competency areas based on core patient safety concepts. Competency goals within each area were developed, incorporating feedback from two reference groups. The first group consisted of experts from universities, healthcare, and other safety-related industries. The second group included representatives from educational institutions and healthcare organizations responsible for staff training. Revisions were made based on feedback, leading to the finalization of the competency goals.

Results: In June 2024, the National Board of Health and Welfare published the national competency goals for patient safety on its website. The goals are structured into 15 key competency areas, outlining the necessary knowledge, skills, and attitudes for ensuring patient safety. Each area contains 4–13 specific goals. The competency areas range also includes risk management in specific contexts, such as home healthcare and surgical procedures.

The national competency goals for patient safety are grouped into 15 competency areas:

1. Patient safety: definitions, concepts, and perspectives
2. Responsibilities, obligations, and roles in patient safety
3. System understanding, theories, and frameworks
4. Patients and relatives as co-creators
5. Human performance capacity
6. Teamwork and communication
7. Organizational culture and patient safety
8. Risks and risk awareness
9. Identifying, investigating, and learning from events
10. Monitoring and evaluating patient safety
11. Ensuring safe processes and working methods
12. Technology and patient safety
13. Leading and managing safe care
14. Preparedness and patient safety
15. Risk areas, adverse events, and specific situations

Conclusion: The competency goals form the foundation for development of curricula and learning objectives in patient safety education at universities, other educational institutions, and training programs for healthcare professionals. The framework of competency areas also provides a comprehensive understanding of patient safety as a subject. While implementing these goals may be challenging, patient safety competence is crucial for improving healthcare outcomes. Raising the level of ambition in patient safety education is essential to

align with national goals and to improve patient safety. Although developed in a Swedish context, the goals may be relevant in other countries, thus stimulating international cooperation in competency goals for patient safety.

Disclosure of Interest: None Declared

Lessons learned from co-designing with ethnic minorities to improve their ED experience: (1205) Robyn Clay-Williams

ISQUA2025-ABS-1205

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¹AIHI, Macquarie University, Sydney, Australia

Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Ethnic minorities may not access equitable care in the Emergency Department (ED) if care is not sensitive to their particular communication and cultural needs (Hayba et al., 2023). Using an experience-based codesign approach, we identified two opportunities to improve experience important to both ethnic minorities and ED staff in Western Sydney, Australia: extending communication throughout the ED patient journey and improving knowledge about how the health system works.

Methods: Five co-design workshops were held with users from ethnic minorities and ED care providers. Users were from Arabic, Chinese, Hindi and Korean backgrounds and had visited the ED in the last year. Providers were working in the ED as doctors or nurses. The first two workshops involved users only, with Arabic, Cantonese, Mandarin, Punjabi and Korean translators present to enable users who were not fluent in English to participate. The following three workshops were conducted in English and included a subset of the users and providers. Vignettes were used to elicit empathy and stimulate imagination of the user's situation. Needs and ideas focused on the two codesign issues were captured then sorted and further developed across the workshops. Evaluation forms were filled by participants at the end of each session. The research team shared reflections about their expectations before the series of workshops and how they evolved after the sessions.

Results: A total of 25 users, five clinicians (three ED specialist doctors and two senior nurses), and 11 researchers participated in the workshops. Ideas that emerged from the workshops fell under the categories of general in-language services including in-language services to explain the ED process, post-discharge and follow up, and physical environment of the ED such as wayfinding or culturally appropriate food and beverages. A few ideas were further developed including an electronic display indicating waiting time expectations in the waiting room, and a kiosk to access information and resources. Participants were engaged and generous with their experience and ideas. Managing equal opportunity for participation was more challenging in sessions involving both clinicians and users, particularly where the latter did not have strong English language skills. It required the development of specific facilitation techniques.

Conclusion: Encouraging creative thinking requires time, and skillful facilitation. Involving additional professionals in the sessions such as for example Information Technology experts or designers could spark further creativity and help validate possible solutions.

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Disclosure of Interest: None Declared

Lunchtime

Lightning Talks

HIRA CDM: Medical Data Transformation for Global Collaboration and Innovation: (3372)
Sojeong Park

ISQUA2025-ABS-3372

S. Park ^{1,*}

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Preferred presentation method: 10 Minute Lightning Talk (E-Poster)

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: The Health Insurance Review and Assessment Service (HIRA) provides public access to healthcare data, supporting customized research and patient sample data analysis[1]. However, integrating data across institutions is challenging due to structural variations, terminology differences, and legal restrictions. To address these issues, HIRA transformed its health insurance claims data into a Common Data

Model (CDM). This study introduces the development and application of HIRA CDM, highlighting its role in facilitating global research collaboration and healthcare innovation.

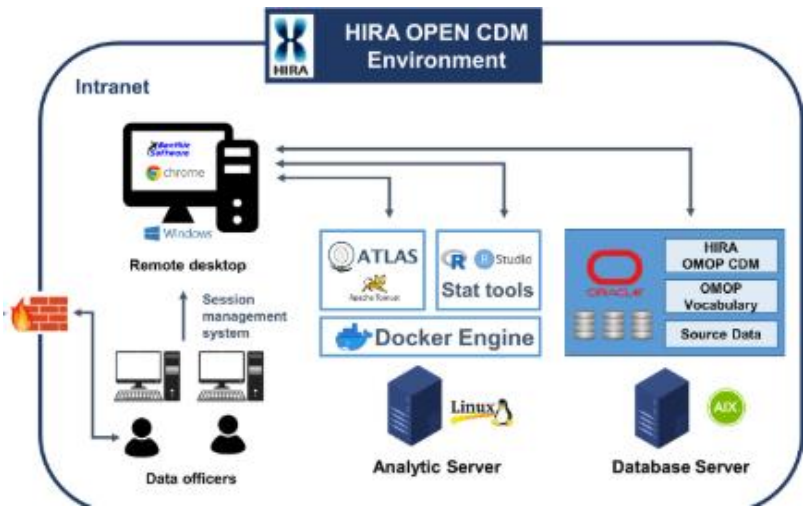
Methods: HIRA CDM was developed based on OMOP-CDM (Observational Medical Outcomes Partnership-Common Data Model) version 5.3.1, structuring claims data into clinical, healthcare system, healthcare economic, medical terminology, and other related tables[2]. The model enables standardized data integration, allowing institutions to conduct distributed research without directly sharing sensitive data[3].

Researchers submit analysis codes to HIRA, where they are executed in a secure internal network by dedicated personnel. This method prevents data breaches while ensuring adherence to predefined research protocols, minimizing the risk of biased results. The quality of HIRA CDM was assessed in April 2024 using OHDSI’s Data Quality Dashboard (DQD), achieving a standardization rate of 97%, completeness of 99%, conformance of 99%, and plausibility of 97%[4].

Results: Since 2018, HIRA has progressively developed CDM infrastructure. In response to the COVID-19 pandemic in 2020, HIRA collaborated with the Ministry of Health and Welfare to establish a CDM database of COVID-19 patients, facilitating rapid epidemiological research[5]. The database was expanded in 2022 to cover claims data for 10 million individuals, and further scaled in 2023 to include data from 56 million individuals[6,7].

HIRA CDM has been widely adopted in research. Following the initial release of COVID-19 CDM data, 32 studies were conducted by domestic and international researchers, leading to multiple publications in high-impact journals. In 2022, 42 research projects from 22 institutions utilized the 10 million-person CDM dataset, while the 2023 expansion led to 40 research project applications from 17 institutions[8]. To date, six studies utilizing HIRA CDM have been published in SCI(E)-indexed journals, demonstrating its significant contribution to medical research.

Image:



Conclusion: With the growing importance of healthcare data sharing, CDM adoption is expanding globally. In South Korea, government initiatives are actively supporting CDM-based research, while international efforts such as the European Health Data and Evidence Network (EHDEN) continue to drive cross-border collaboration[9]. Establishing multinational CDM consortia will be essential for enhancing international healthcare research, enabling data-driven decision-making, and fostering global innovation. HIRA CDM serves as a critical foundation for these efforts, supporting high-quality, privacy-preserving research that informs public health policies and medical advancements.

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Disclosure of Interest: None Declared

Improving Admission Efficiency for Chemotherapy Patients of the Division of Hematology and Oncology Using Team Resource Management: Results from a Single Center: (2745) Ken-Hong Lim

ISQUA2025-ABS-2745

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: The admission process for chemotherapy patients in the Division of Hematology and Oncology at MacKay Memorial Hospital (MMH) faces persistent challenges related to inadequate admission efficiency resulting in prolonged hospital admission wait times. The primary factors contributing to inefficient admission process include limited availability of chemotherapy beds, extended inpatient stays, low pre-discharge order rates, low bed turnover rates, and inefficiencies in inpatient processes. These issues collectively result in patients being unable to receive timely chemotherapy treatment and potentially delaying disease control. Treatment delays also reduce patient satisfaction and negatively impact trust in the healthcare system. Thus, addressing these issues and optimizing inpatient processes and resource allocation is crucial for improving healthcare service quality and patient satisfaction. Team Resource Management (TRM) models have been widely recognized for their potential in improving operational efficiency in healthcare settings. These models emphasize coordinated efforts, effective communication, and streamlined workflows among healthcare professionals. This study aims to investigate the impact of implementing TRM models on improving admission efficiency for chemotherapy patients in the Division of Hematology and Oncology.

Methods: A single-center study was conducted in the Division of Hematology and Oncology at MMH to improving admission efficiency for chemotherapy patients. Study period was November 2023 to October 2024, and admission data from November 2022 to October 2023 was used for comparison. TRM team members first participated in internal hospital courses on medical TRM to learn basic concepts and how to apply TRM module tools.

Our TRM plan focused on the following key performance indicators (KPIs):

Process-oriented goals: 1a. Increase pre-discharge order rate; 1b. Increase same-day chemotherapy initiation rate.

Outcome-oriented goals: 2a. Reduce admission waiting time; 2b. Shorten hospital stay.

Data Collection: Retrospective data were collected before and after TRM implementation.

A one-sample t-test was used to compare the mean values between the two periods. Statistical significance was determined at $P < 0.05$ (two-sided). PSPP (Free Software Foundation) was used for statistical analysis. The Institutional Review Board approval was waived due to its TRM nature.

Results: The mean number of patients per month awaiting admission increased from 192.6 (range 100 to 248) to 219.2 (range 144 to 252, $P < 0.001$) between the two periods. Following the implentation of TRM, the mean pre-discharge order rate per month was significantly higher and the same-day chemotherapy initiation rate was significantly increased from 42% (range 32 to 49%) to 63.7% (range 43 to 72%, $P < 0.001$) and 75.2% (range 70.7 to 78.8%) to 86.9% (range 82.2 to 90.2%, $P < 0.001$), respectively. Significant improvement was also observed in the duration of hospital stay for chemotherapy between the two periods, mean 2.50 days (range 2.25 to 2.87 days) to 2.10 days (range 1.79 to 2.60 days, $P < 0.001$). However, the mean admission waiting time for chemotherapy was singificantly longer despite our TRM efforts, 3.74 days (range 1.97 to 7.41 days) to 5.46 days (range 2.61 to 10.93 days, $P < 0.001$).

Conclusion: We have successfully implemented the TRM plan to improve several KPIs related to admission efficacy for chemotherapy patients of the Division of Hematology and Oncology. We have demonstrates the effectiveness of coordinated team efforts and strategic resource management in a clinical setting. These improvements not only enhanced bed utilization efficiency but also ensured that patients received timely treatment, and might improve their overall care experience.

Disclosure of Interest: None Declared

Childbirth Safety at Risk? The Hidden Impact of Patient Safety Culture on Adverse Events and Best Practices in Brazilian Maternity Hospitals: (3242) Zenewton André da Silva Gama

ISQUA2025-ABS-3242

Z. A. D. S. Gama ^{1 2,*} on behalf of QualiSaúde - Quality in Health Services Research Group, T. M. S. S. Rosendo ¹, C. M. Messias ³, D. Tuller ², R. L. Molina ^{2 4}, K. E. A. Semrau ⁵, C. O. P. O. Saraiva ¹, M. R. D. Freitas ⁶

¹Department of Collective Health, Federal University of Rio Grande do Norte, Natal, Brazil, ²Ariadne Labs, Harvard T.H. Chan School of Public Health and Brigham and Women's Health Hospital, Boston, United States, ³Fluminense Federal University, Rio de Janeiro, Brazil, ⁴Department of Obstetrics and Gynecology, Beth Israel Deaconess Medical Center, Boston, United States, ⁵Ariadne Labs, Harvard T.H. Chan School of Public Health and Brigham and Women's Health Hospital, Boston, ⁶Department of Infectious Disease, Federal University of Rio Grande do Norte, Natal, Brazil

Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Promoting a patient safety culture (PSC) is a widely recommended strategy to reduce the incidence of adverse events in healthcare. The evidence on the association between safety culture and maternal and neonatal outcomes remains limited. This study analyzes the relationship between PSC, adherence to essential birth practices (EBP), and the incidence of adverse events during childbirth hospitalization.

Methods: We led a cross-sectional study across six Brazilian hospitals between November 2022 and February 2024. Data collection was performed individually at each maternity unit, with the safety culture assessment lasting three months and the indicator collection extending over six months. The total study period encompasses the combined durations across all six hospitals.. PSC was assessed with a Brazilian-validated version of the Hospital Survey on Patient Safety from the Agency for Healthcare Research and Quality.

Composite indicators of eight EBP during childbirth (obstetric practices: start of the partogram, presence of a companion during delivery, oxytocin administration in the first minute after birth; neonatal practices: timely umbilical cord clamping, skin-to-skin contact in the first hour after birth, breastfeeding in the first hour after birth, administration of vitamin K, and identification of the newborn with a wristband) and 10 types of Adverse Event Outcomes (AEO) in 2183 births (~360 per maternity hospital) were measured over the same period.

Absolute and relative frequencies of individual and composite essential practices and adverse events indicators were reported per hospital and overall. Spearman's test was used to analyze the relationship between PSC (overall and for each of the 12 patient safety culture dimensions) and the composite obstetric indicators.

Ethical approval was provided by Onofre Lopes University Hospital Committee (5,621,794).

Results: A total of 686 healthcare professionals and leadership participated in the assessment of PSC. Level of patient safety culture varied from 29.5% to 56.4% in the maternity hospitals, indicating a relatively low perception of patient safety. Dimensions Expectations and actions of management/supervision of the unit/service that promote safety, Organizational learning/continuous improvement and Teamwork in the unit/service had positive responses above 50% in five of the six institutions. Dimensions Perception of safety and Non-punitive response to errors obtained results below 50% in the six maternity hospitals.

The results indicate a significant positive correlation to the total EBPs (0.77; $p < 0.05$), and a negative correlation with the indicators of total adverse outcome index for mothers (-0.77; $p < 0.05$), total adverse outcome index for newborns (-0.89; $p < 0.05$); $p < 0.01$), and total rate of adverse outcomes (-0.94; $p < 0.01$). (Fig 1)

Image:



Conclusion: Patient safety culture in maternity hospitals was associated with quality of childbirth care and maternal and neonatal health outcomes.

Disclosure of Interest: None Declared

Preliminary Exploration of Heuristic Algorithms for Optimizing Hospital Bed Assignment: (1922) Meng-Hsun Lee

ISQUA2025-ABS-1922

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¹Department of Medical Administration, Taichung Veterans General Hospital, ²Department of Industrial Engineering and Enterprise Information, Tunghai University, Taichung City, Taiwan

Preferred presentation method: 10 Minute Lightning Talk (E-Poster)

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Efficient hospital bed management is essential for optimizing **patient flow, resource utilization, and care delivery**. Poor assignment practices leads to **delays, unnecessary transfers, and**

inefficiencies, particularly in **capacity-constrained hospitals**. Traditional **rule-based approaches** struggle with **real-time fluctuations** and **complex constraints**.

Heuristic optimization, which involves algorithms that find practical, though not necessarily optimal, solutions to complex problems, offers a promising alternative. This **preliminary study** evaluates four heuristic algorithms—**Bat Algorithm (BA)**, **Particle Swarm Optimization (PSO)**, **Ant Colony Optimization (ACO)**, and **Genetic Algorithm (GA)**—for their feasibility in **hospital bed assignment**.

Methods: This study used real-world data from a **medical center** (April 1, 2024), involving **239 patients awaiting beds** and **199 eligible beds** after screening. For simplicity, **six departments** were selected, comprising **52 patients** and **49 beds**. Due to hospital policy, a **rule-based method** initially assigned **19 patients to 19 beds**, leaving **33 patients** and **30 beds** for heuristic optimization. A **multi-constraint optimization model** was developed, considering patient factors (**gender, department, bed level, and bed location**) and hospital policies (**departmental allocation**). The fitness function imposed penalties for constraint violations and provided bonuses for perfect matches:

- 1. Bed Index Range Violation:** -10 points
- 2. Bed Overlap Violation:** -10 points
- 3. Department-Building Mismatch:** -1 point
- 4. Bed Level Mismatch:** -1 point
- 5. Gender Mismatch:** -1 point
- 6. All Conditions Match:** +1 point

Four heuristic algorithms—BA, PSO, ACO, and GA—were applied to the model. Performance was evaluated based on the **number of successfully assigned patients**, **fitness scores** (reflecting constraint satisfaction), and **computational time**.

Results: The four algorithms exhibited distinct performance in hospital bed assignment.

- 1. GA achieved the highest assignment success**, assigning **30 of 33 patients** with the best **fitness score (-30)**, indicating strong **constraint adherence and efficiency**. The **execution time was 0.8 seconds**, demonstrating a well-balanced approach.
- 2. PSO, despite assigning fewer patients (20/33), was the fastest at 0.3 seconds**, making it **suitable for real-time hospital applications**. Its **fitness score (-51)** suggests **moderate constraint adherence**.
- 3. ACO assigned 27 patients**, with a **fitness score of -73**. However, its **longest execution time (13.8 seconds)** makes it impractical for **real-time decision-making**.
- 4. BA had the lowest assignment success (18/33) but demonstrated the highest constraint compliance (-77)**. Its **execution time (3.5 seconds)** was faster than ACO but slower than PSO and GA.

Table 1. Performance Comparison of Heuristic Algorithms for Hospital Bed Assignment

Algorithm	Assigned Patients (out of 33)	Fitness Score (Higher = Better)	Computation Time (s)	Key Strengths
GA	30	-30	0.8	Best overall performance
PSO	20	-51	0.3	Fastest execution
ACO	27	-73	13.8	Moderate effectiveness
BA	18	-77	3.5	Strong constraint adherence

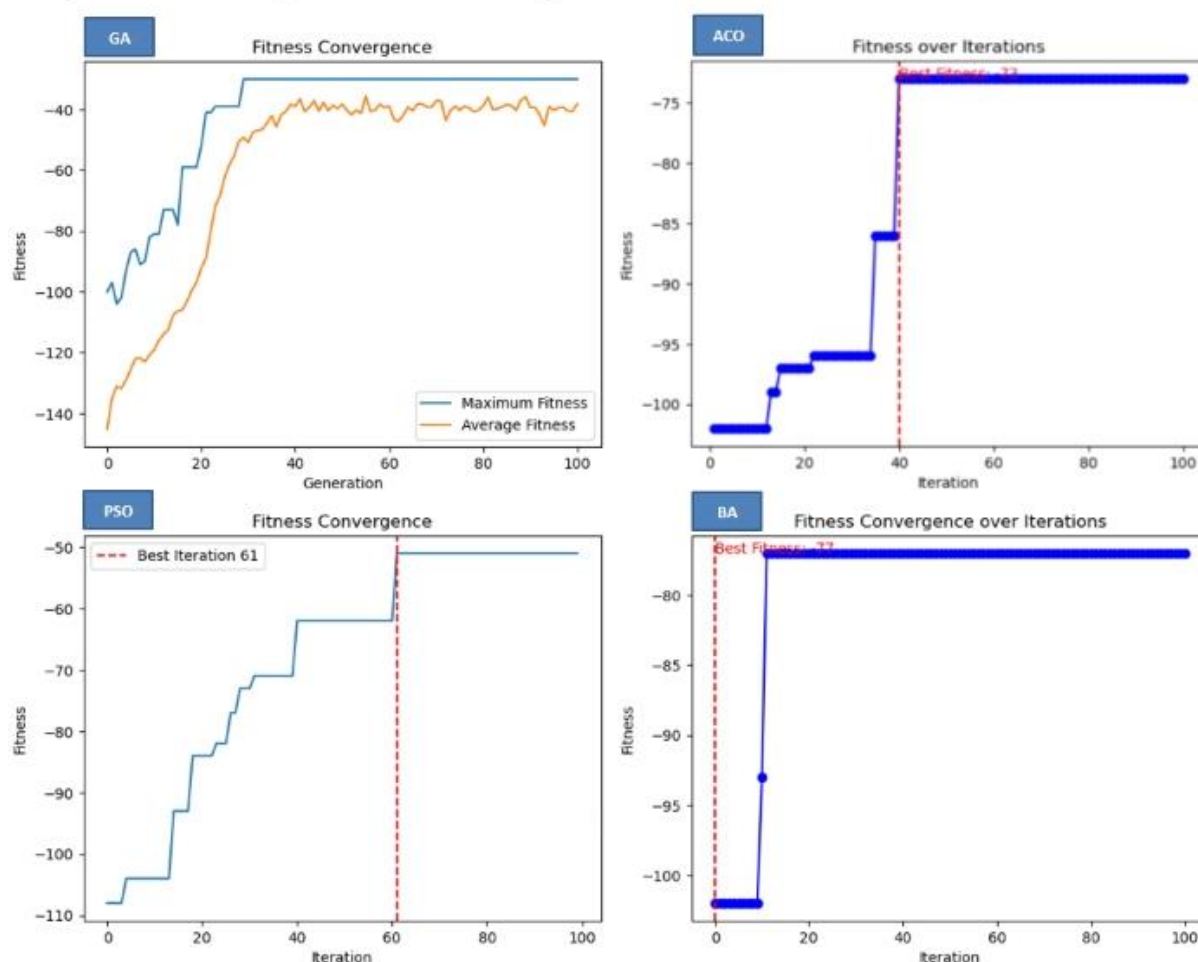
The results (Table 1) indicate **GA offers the best overall performance**, while **PSO provides superior speed**, making it **ideal for real-time applications**. **ACO and BA require further optimization for scalability and efficiency**.

Table 1 metrics, while methodologically sound, may not fully align with practical hospital implementation needs, necessitating additional comparative analysis beyond algorithm performance alone.

The **Fitness Convergence Plot** for the four algorithms is shown in **Figure 1**.

Image:

Figure 1. Fitness Convergence Plot for 4 Heuristic Algorithms



Conclusion: This preliminary study highlights the feasibility of heuristic optimization algorithms for hospital bed management. **GA demonstrated the highest assignment success**, while **PSO provided the fastest execution**, making it **ideal for real-time applications**. **BA and ACO, while effective in constraint handling**, require optimization for large-scale implementation.

Although these results suggest **heuristic-based optimization holds promise**, further validation with **larger datasets and real-time testing** is ongoing throughout 2025.

Future studies should explore **hybrid AI models** integrating heuristic optimization with **machine learning** for improved predictive accuracy. Embedding **real-time optimization algorithms** into **hospital information systems (HIS)** could enhance decision-making.

By leveraging AI-driven bed assignment strategies, hospitals can improve patient safety, resource utilization, and operational efficiency, ensuring timely and equitable care.

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Disclosure of Interest: None Declared

Interprofessional Collaborative Practice and Its Relationship with Patient Safety Culture: A Study in Brazilian Intensive Care Units: (2976) Edenise Maria Santos da Silva Batalha

ISQUA2025-ABS-2976

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Preferred presentation method: 10 Minute Lightning Talk (E-Poster)

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Quality and patient safety in healthcare are influenced by a complex range of factors, including organizational elements like structure and process, as well as human aspects such as team performance. In this context, teams operating within models of interprofessional collaboration have been linked to improved clinical outcomes, higher patient satisfaction, reduced error rates, and greater efficiency, resolution, safety, and quality of care. Despite significant scientific evidence supporting its positive impact, interprofessional collaboration still needs to be more widely implemented within many healthcare organizations, particularly in critical care settings within hospitals. A deeper understanding of how Interprofessional Collaborative Practice-ICP relates to patient safety and to identify which specific elements of ICP may have the strongest associations with patient safety is required to guide targeted interventions aimed at improving quality and safety. Thus, this study aimed to evaluate the relationship between ICP and patient safety culture as perceived by the members of the multiprofessional team in Brazilian Intensive Care Units (ICUs).

Methods: This is a correlational, cross-sectional study with a quantitative approach, conducted as part of a multicenter study employing a sequential explanatory mixed-methods design. This abstract refers to the first phase of the study and was conducted in six ICUs (two general, one cardiovascular, one neurological, one surgical, and one pediatric) at a large public general hospital in Salvador, Bahia, Brazil. The sample consisted of 207 healthcare professionals from the multiprofessional teams, including doctors, physiotherapists, nurses, nursing technicians, pharmacists, speech therapists, nutritionists, psychologists, and social workers. Data collection was conducted using the Collaborative Practice Assessment Tool, which covers eight dimensions, and the Perception of Patient Safety dimension from the Hospital Survey on Patient Safety Culture. Data analysis was performed using Pearson's correlation in the R statistical software. The study adhered to ethical guidelines and was approved by the Research Ethics Committee-REC of the State University of Bahia and the REC of the hospital, the study's setting.

Results: All ICP dimensions were positively associated with patient safety culture, with all associations showing p-values <0.001. This suggests that improving team members' perceptions of ICP within their unit also enhances their perception of the patient safety culture. The ICP dimensions with the strongest correlations to patient safety culture were *Decision-making and Conflict Management* (r: 0.435) and *Communication and Information Exchange* (r: 0.415), followed by *Patient Involvement* (r: 0.384), *General Relationships* (r: 0.343), *Community Linkages and Coordination of Care* (r: 0.331), *Team Leadership* (r: 0.317), and *Mission, Meaningful Purpose, Goals* (r: 0.315). The dimension with the weakest correlation to patient safety culture was *General Role Responsibilities, Autonomy* (r: 0.249).

Conclusion: Professionals who perceived a stronger ICP had a better perception of the patient safety culture in the studied ICUs. Given the strength of the correlations, the importance of greater investments in readiness for shared decision-making within the team, structuring processes for conflict management, effective communication, patient involvement in their care, relationships among team members prioritizing trust and mutual respect, and strengthening the connection with community resources and coordination of care for comprehensiveness is emphasized.

Disclosure of Interest: None Declared

Engaging community in fistula client identification and referral for care and treatment in Makueni County, Kenya: (1599) Christine Kalondu Muia

ISQUA2025-ABS-1599

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Obstetric fistula (OF) is a major burden for women in low- and middle-income countries, particularly in sub-Saharan Africa and South Asia. The World Health Organization (WHO) has estimated that between 50,000 and 100,000 women are affected by new occurrences of obstetric fistula each year. OF is prevalent in less than 1% of women in Kenya which can be attributed to underreporting, stigma, and limited access to healthcare. Since the obstetric fistula patient population is hard to reach, many cases will remain undiagnosed and underreported in the community.

In developing countries including Kenya, many women and girls are silently suffering from obstetric fistula that occur due to early marriage, poor socioeconomic status, lack of access to skilled birth attendants, and limited awareness of obstetric fistula among many others. The condition remains 'hidden' in the community and it is highly associated with myths and misconceptions. Thus, there is need to have a concerted effort at community level to identify and refer suspected fistula cases for care and treatment.

Jhpiego with funding from Johnson and Johnson has collaborated with the Ministry of Health (MoH) Division of Reproductive and Maternal Health (DRMH) and County Government of Makueni Department of Health in establishing a routine fistula repair services to address the surgical backlog of untreated OF and help improve access to OF services

Methods: In collaboration with Makueni county, department of health, several strategies were mapped out for awareness creation, demand generation for routine OF services, demystifying myths and misconceptions and client identification and referral. 1) Engaging community health promoters. 2) Engaging community influencers like religious leaders, community leaders, community gatekeepers. 3) Media engagement including radio, Tv, print and social media platforms.

Results: Since the launch of OF services in Makueni county referral hospital in March 2023, 146 surgeries have been done, with over 1000 suspected clients screened for fistula, and over +30,000 community members have been reached with OF messaging. Other fistula like cases reported include, cystocele/urethrocele(22), Procidentia (6), urethral strictures (4), rectocele (4), stress/urge incontinence (4), rectal prolapse (2), vaginal cyst(1).

Conclusion: Empowering communities with effective skills for identification, referral, rehabilitation and reintegration of women who have suffered fistula and usually remain “hidden” in the community is a critical link in improving access to fistula care hence reducing OF surgical backlog. Awareness creation in health matters related to fistula also provides an opportunity to raise awareness on importance of skilled birth attendance, malnutrition, poverty harmful cultural practices like; early marriage, female genital mutilation. Also provides an opportunity to debunk myths and misconceptions about Fistula

References: World Health Organization 2023

UNFPA 2020-Obstetric fistula and other forms of Female genital fistula

Kenya Demographic Health Survey (KDHS 2022)

Disclosure of Interest: None Declared

DéCLIC: Coordinated and Large-Scale Deployment of Clinical Pathways in a Multisite Swiss University Hospital: (3677) Aimad Ourahmoune

ISQUA2025-ABS-3677

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I confirm that the submission has been approved by all authors: Yes

Introduction: Variability in clinical practices can compromise the quality and efficiency of care. Clinical pathways (CPs), based on best practice recommendations and adapted to the local context, offer a structured solution to standardise patient management. However, their implementation is often lengthy and requires extensive involvement from various hospital services. As part of the hospital's strategic plan, the medical and nursing directorates have made this initiative an institutional priority. The **DéCLIC** programme (**Coordinated and Large-Scale Deployment of Clinical Pathways**) aims to reduce this variability by strengthening interprofessional coordination and continuously improving the quality of care.

Objectives:

- Develop a method for large-scale CP deployment, ensuring that all **50 clinical departments** implement at least one CP by **the end of 2025**.
- **Ensure the sustainable involvement of patients** in the process.
- **Establish clinical indicators** for each CP and ensure their long-term monitoring.

Improve coordination between healthcare professionals and **reduce inappropriate clinical variability**.

Methods: A structured deployment method was developed, tested, refined, and implemented, comprising several key steps:

1. **Selection of the Clinical Pathway:** Proposed by **department heads** based on criteria such as **patient volume, potential for improvement, practice variability, or lack of interdepartmental/interprofessional coordination**, followed by validation from the **medical directorate**.

2. **Formation of a CP Committee:** A **committee led by a medical-nursing leadership team** is established for each CP. The scope is defined, and a **formal agreement** is made, committing teams to specific tasks, **monthly meetings**, and the **inclusion of a patient partner**.

3. Implementation of a Five-Step Methodology:

In parallel, a "**process mining**" approach has been developed to **model real patient pathways** using hospital information system data, enabling **comparisons with planned pathways** (conformance checking).

Results: Since its launch, **DéCLIC has deployed 20 CPs, covering 55% of clinical departments across various sectors, including surgery, acute medicine, rehabilitation, and psychiatry**. Since May 2024, **six CPs have been launched each quarter**, notably for **colorectal surgery, paediatric diabetes, brain tumours, acute confusion, stroke, STEMI, caesarean delivery, hysterectomy, first psychotic episode, geriatric rehabilitation...**

Each CP has implemented an average of **8 improvements** (min 6- max 15).. The initial results indicate a **significant reduction in practice variability** and **improved interprofessional coordination**. For each CP, an **automated indicator report** is shared with **committee members and department managers** and reviewed in **monthly meetings**. Additionally, **95% of CPs have included a patient partner in their committee**.

Conclusion: The **DéCLIC** programme demonstrates that **rapid, large-scale deployment** of CPs is feasible and enables the implementation of **measurable improvements**, supported by **interprofessional collaboration** and **patient involvement**. The integration of **innovative methodologies, such as process mining**, offers promising perspectives for **optimising patient pathways**.

Disclosure of Interest: None Declared

Automated Auditing and System Interoperability: Advances in Continuous Improvement Strategies in the Transfusion Chain at INI/FIOCRUZ Hospital Centre: (2489) Alex Mendonça Chaves

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: The transfusion chain is a complex process that extends from the medical request to post-transfusion follow-up. Failures or inefficiencies at any stage can compromise patient safety and quality, as well as impact hospital costs and operational efficiency. In this context, automated auditing and system interoperability are essential to strengthening haemovigilance, enabling more effective monitoring throughout the entire transfusion chain. The use of Business Intelligence (BI), combined with electronic databases from translational research, accelerates the analysis of quality indicators and optimises decision-making for healthcare managers.

The aim of this study is to evaluate the effect of implementing automated auditing and system interoperability on the continuous improvement of the transfusion chain at the transfusion agency (TA) of the INI/Fiocruz Hospital Centre.

Methods: Study Design and Location

This was a cross-sectional study conducted at the Transfusion Agency (TA) of the INI/Fiocruz Hospital Centre from April 2021 to July 2024. All audits corresponding to the months of April, May, and June of each analysed year were included.

Inclusion Criteria

All audits conducted during the study period. Audited variables:

- Medical request for transfusion (clinical indication, type of blood component, diagnosis, laboratory data, transfusion history, transfusion modality).
- Nursing records (bag number and volume, blood typing, vital signs at the start, during, and at the end, start and end times, complications).

The data were stored in an electronic capture software, RedCap (Research Electronic Data Capture), which provides a specialised workflow for clinical research and translational investigation projects. Subsequently, data analysis was performed on an integrated BI platform, which, through system interoperability via API (Application Programming Interface), enabled the automated and real-time integration of the transfusion chain audit results. After consolidating the information, graphical interfaces were developed on electronic dashboards (web and mobile formats), and corrective actions were implemented with continuous monitoring through the same BI tool, aimed at measuring, analysing, and organising transfusion chain indicators more accurately.

Statistical Analysis

- Comparison of the annual compliance average and evaluation of the increase (%).
- Calculation of compliance percentages by variable and period.

Results: During the analysed period, 2,396 audits were conducted on transfusion processes, with an average compliance rate of 96.64%, surpassing the established target ($\geq 95\%$).

When stratified by year and lower compliance levels, the following observations were made:

- **2021:** The overall average of correct records was 88.2%, with the lowest compliance rates observed in the bag number (72.9%), transfusion type (63.3%), and transfusion reactions (80.0%).

- **2022, 2023 e 2024:** There was an increase of approximately 10.8% in the average compliance rates, reaching 99.1% in 2022, 99.0% in 2023, and 99.2% in 2024.

Breakdown of compliance rates by component:

2022: Bag number (98.3%), transfusion type (99.8%), transfusion reactions (100%).

2023: Bag number (98.2%), transfusion type (100%), transfusion reactions (100%).

2024: Bag number (98.9%), transfusion type (100%), with no occurrences of transfusion reactions during the period.

Image:

AUDITORIA CADEIA TRANSFUSIONAL

Eficiência e Qualidade: 99,2% de conformidade no processo da cadeia transfusional ao longo de 2024

Ano 2024 Mês Todos



Conformidade nos critérios críticos 2024

A cada atos transfusional auditado contém 19 critérios críticos

● Conforme ● Não Conforme



Perspectiva da matriz de critérios críticos na cadeia do processo transfusional

Critério críticos da cadeia transfusional	2021	2022	2023	Abr/24	Mai/24	Jun/24	2024
Antecedentes transfusionais	82,7%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%
Dados laboratoriais	90,0%	98,3%	98,5%	97,0%	97,7%	100,0%	98,3%
Doença de base	99,1%	99,8%	99,5%	100,0%	100,0%	100,0%	100,0%
Hemocomponente transfundido	91,8%	98,9%	99,0%	98,8%	99,4%	100,0%	99,4%
Hora início	91,3%	99,2%	99,5%	99,4%	99,4%	100,0%	99,6%
Hora término	84,4%	98,7%	97,7%	98,2%	97,7%	99,5%	98,5%
Indicação clínica	97,2%	99,8%	100,0%	100,0%	97,7%	100,0%	99,3%
Número da bolsa	81,6%	98,3%	98,2%	98,2%	98,3%	100,0%	98,9%
Procedimentos especiais	84,4%	100,0%	99,4%	100,0%	100,0%	100,0%	100,0%
Reações	80,0%	100,0%	100,0%				
Sinais vitais 15m	88,8%	98,9%	99,2%	99,4%	99,4%	99,5%	99,4%
Sinais vitais fim	84,0%	98,3%	98,4%	98,2%	97,1%	99,5%	98,3%
Sinais vitais início	92,0%	99,1%	99,5%	99,4%	99,4%	100,0%	99,6%
Tipagem sanguínea	90,5%	98,5%	97,7%	97,4%	97,1%	98,0%	97,6%
Tipo transfusão	77,0%	99,8%	100,0%	100,0%	100,0%	100,0%	100,0%
Volume bolsa	88,7%	98,9%	97,7%	99,4%	99,4%	99,0%	99,3%
Conformidade no processo transfusional	88,2%	99,1%	99,0%	99,0%	98,6%	99,7%	99,2%

CRITÉRIO CRÍTICOS DA CADENA TRANSFUSIONAL	ABR/21	MAI/21	JUN/21	2021	ABR/22	MAI/22	JUN/22	2022	ABR/23	MAI/23	JUN/23	2023	ABR/24	MAI/24	JUN/24	2024
ANTECEDENTES TRANSFUSIONAIS	91,0%	90,3%	89,0%	82,7%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%
DADOS LABORATORIAIS	85,5%	89,1%	94,4%	90,0%	97,1%	98,5%	100,0%	96,3%	100,0%	99,5%	97,0%	98,5%	97,0%	97,7%	100,0%	98,3%
DOENÇA DE BASE	98,2%	98,0%	100,0%	99,1%	100,0%	99,9%	100,0%	99,8%	100,0%	97,8%	100,0%	99,5%	100,0%	100,0%	100,0%	100,0%
HEMOCOMPONENTE TRANSFUNDIDO	89,8%	95,4%	90,4%	91,8%	98,8%	99,0%	99,2%	98,9%	100,0%	100,0%	97,8%	99,0%	98,8%	99,4%	100,0%	99,4%
HORA INÍCIO	91,0%	93,1%	89,8%	91,3%	98,8%	99,5%	100,0%	99,2%	100,0%	100,0%	98,0%	99,5%	99,4%	99,4%	100,0%	99,8%
HORA TÉRMINO	84,3%	88,0%	81,2%	84,4%	97,7%	99,5%	100,0%	98,7%	96,7%	100,0%	97,2%	97,7%	98,2%	97,7%	99,5%	98,5%
INDICAÇÃO CLÍNICA	97,0%	94,0%	99,9%	97,2%	100,0%	99,9%	99,2%	99,8%	100,0%	100,0%	100,0%	100,0%	100,0%	99,6%	97,7%	99,3%
NÚMERO DA BOLSA	72,0%	88,3%	84,8%	81,6%	98,7%	99,0%	100,0%	98,3%	98,4%	98,9%	97,8%	98,2%	98,2%	98,3%	100,0%	98,9%
PROCEDIMENTOS ESPECIAIS	88,0%	90,0%	78,1%	84,4%	100,0%	100,0%	100,0%	100,0%	98,8%	100,0%	100,0%	99,8%	100,0%	100,0%	100,0%	100,0%
REAÇÕES	100,0%	100,0%	50,0%	80,0%	100,0%	100,0%	100,0%	100,0%				100,0%	100,0%			
SINAIS VITAIS 15M	89,8%	90,3%	88,8%	88,8%	98,1%	99,0%	100,0%	98,9%	100,0%	100,0%	98,3%	99,2%	99,4%	99,4%	99,5%	99,4%
SINAIS VITAIS FIM	85,5%	88,0%	80,2%	84,0%	96,2%	99,5%	100,0%	96,3%	98,4%	100,0%	97,5%	98,4%	98,2%	97,1%	99,5%	98,3%
SINAIS VITAIS INÍCIO	92,8%	94,3%	89,3%	92,0%	98,1%	99,5%	100,0%	99,1%	100,0%	100,0%	98,9%	99,5%	99,4%	99,4%	100,0%	99,8%
TIPO GEM SANGÜÍNEA	92,2%	91,4%	88,3%	90,5%	97,7%	99,0%	100,0%	98,5%	98,0%	99,7%	98,8%	97,7%	97,8%	97,1%	98,0%	97,6%
TIPO TRANSFUSÃO	63,3%	88,3%	98,0%	77,0%	100,0%	100,0%	99,2%	99,8%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%
VOLUME BOLSA	89,2%	90,0%	88,3%	88,7%	98,1%	99,0%	100,0%	98,9%	97,3%	100,0%	98,7%	97,7%	99,4%	99,4%	99,0%	99,3%
CONFORMIDADE GLOBAL	87,4%	89,8%	87,8%	88,2%	98,4%	99,4%	99,8%	99,1%	99,2%	99,5%	98,8%	99,0%	99,0%	98,8%	99,7%	99,2%
QUANTIDADE AUDITORIA	188	175	197	538	209	125	198	528	244	381	184	789	185	204	172	541

Conclusion: The implementation of automated auditing and system interoperability via BI has had a significant impact on improving record quality and safety in the transfusion chain at the INI/Fiocruz Hospital Centre. The increase in compliance, from 88.2% in 2021 to approximately 99% from 2022 onwards, demonstrates the effectiveness of this approach in identifying and mitigating risks, strengthening haemovigilance. In addition to optimising process efficiency, the integration of technologies enabled more precise, data-driven interventions, fostering a culture of continuous improvement and patient safety. These results establish an innovative and sustainable model for quality management in healthcare environments, with the INI/Fiocruz experience serving as a successful case.

References: BRASIL. Manual para o Sistema Nacional de Hemovigilância no Brasil. [S. I.]: Agência Nacional de Vigilância Sanitária, 2022.

Disclosure of Interest: None Declared

Advancing Economic Analysis in Healthcare: Novel Approaches for Measuring Operational Cost-Effectiveness in the Brazilian Supplementary Health System: (3811) Livia Loami Jorge Ruiz de Paula

ISQUA2025-ABS-3811

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Healthcare systems worldwide face increasing pressure to optimize resources while maintaining high standards of patient care. Traditional cost-effectiveness models primarily focus on the economic viability of specific treatments but often fail to account for the operational efficiency of healthcare providers. This study introduces novel economic analysis routines designed to measure **operational cost-effectiveness**, with a particular emphasis on real-world data collected from over **10,000 patients in the Brazilian supplementary health system**.

Methods: This study employs **Data Envelopment Analysis (DEA)** alongside **quadrant performance mapping**, waste index calculations, and provider variability analysis to assess operational efficiency. Patient-reported outcomes (PROMs) and experiences (PREMs) were collected to support economic modeling. Performance rankings of healthcare providers were established based on efficiency and cost-effectiveness metrics.

Results: The analysis generated key strategic indicators, including:

1. **Waste Index:** Identified inefficiencies, with potential for reducing costs by up to 27%.
2. **Variability Index:** Highlighted inconsistencies in resource utilization across providers.
3. **Quadrant Efficiency Mapping:** Categorized providers based on cost versus effectiveness, helping decision-makers prioritize interventions.
4. **Performance Rankings:** Enabled benchmarking and continuous improvement among providers.

Conclusion: This study presents a **scalable, data-driven framework for measuring operational cost-effectiveness** in real-world healthcare settings. By integrating advanced economic models with real-world data analytics, healthcare providers can identify waste, standardize best practices, and enhance value-based decision-making. These methodologies offer a **powerful tool for policymakers and healthcare managers** seeking to optimize healthcare delivery while ensuring cost-effective, high-quality care.

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Disclosure of Interest: None Declared

Impact of laboratory accreditation on the performance of quality indicators in an International Indicator Benchmarking Program (1213) Ana Gomes

ISQUA2025-ABS-1213

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Laboratory Accreditation Programs play a crucial role in ensuring that laboratories (labs) adhere to quality management systems based on best practices, meeting stakeholders' key requirements. To assess their processes, organizations employ performance monitoring systems, often relying on quality indicators (QI). In Brazil, the Metricare Indicators platform (Metricare), facilitates the benchmarking of QI for laboratories' performance across dimensions and aims to help labs identify improvement opportunities and enhance overall market performance.

Methods: This study, conducted from Jan/22 to Jul/23, focused on 6 essential QIs: Proficiency Test Performance (PTP), Incorrect Reports (IR), Failure to Communicate Critical Results (FCCR), Delay in Outpatient Results (DOR), Sample Recollection (SR), and Patient Satisfaction (NPS). The QI, aligned with IFCC harmonization, were submitted monthly by participating laboratories to Metricare. The performance evolution analysis involved comparing group medians for each QI in a global sample. Labs were stratified in groups based on accreditation status: (A) Accredited by the Brazilian Society of Clinical Pathology and Laboratory Medicine (SBPC/ML); (B) Accredited by other programs; (C) Non-accredited labs. Sigma (σ) metrics were used for all QI, except for the patient satisfaction QI, expressed as a percentage.

Results: Two QI (IR, σ 5.2; SR, σ 3.9) performed similarly across all 3 groups. The remaining 4 QI showcased superior performance by group A. For instance, in the PTP, group A labs exhibited σ 3.7, outperforming groups B (σ 3.6) and C (σ 3.4). The pattern persisted across other QI, including DOR (groups A, B, and C σ 3.7, 3.5,

and 2.7 respectively), FCCR (groups A, B, and C σ 4.6, 3.4, and 4.0 respectively), and NPS (groups A, B, and C percentages, 91%, 88%, and 74%, respectively).

Conclusion: This study underscores the positive impact of laboratory accreditation programs on organizational performance, benefiting patients and stakeholders. Notably, differences in performance among laboratories accredited by different programs highlight the importance of careful program selection. Laboratories should consider these findings when choosing accreditation programs to ensure optimal outcomes and overall excellence.

Disclosure of Interest: F. Berlitz Employee of: Controllab, R. Lopes Employee of: Controllab, L. Balli Employee of: Controllab, B. Santos Employee of: Controllab, D. Jeronimo Employee of: Controllab, A. Gomes Employee of: Controllab, A. Regufe Employee of: Controllab, J. Poloni Employee of: Controllab, C. Galoro: None Declared, W. Shcolnik: None Declared

Optimizing Endometrial Cancer Outpatient Care: A Data-Driven Approach to Operational Efficiency Using PROMs, PREMs, and DEA Analysis: (3829) Livia Loami Jorge Ruiz de Paula

ISQUA2025-ABS-3829

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Endometrial cancer is one of the most prevalent gynecological malignancies, requiring efficient resource allocation and high-quality care to ensure optimal patient outcomes. However, health systems often lack structured mechanisms to measure treatment effectiveness and operational efficiency in real-world settings. This study aimed to implement a technological platform to collect **Patient-Reported Outcome Measures (PROMs)** and **Patient-Reported Experience Measures (PREMs)**, alongside demographic, clinical, and economic data, to enhance decision-making and drive efficiency in an **endometrial cancer outpatient clinic at the Hospital de Amor de Barretos**.

Methods: A total of **493 patients** treated between **January 2020 and December 2023** were included in the study. The platform enabled the **automated collection of PROMs and PREMs**, incorporating indicators such as **quality of life, perceived global effect, pain, satisfaction with treatment, self-efficacy, and adherence to care pathways**. Additional data included **demographic and clinical characteristics, cost and billing data, and laboratory test results**. Using **Data Envelopment Analysis (DEA)**, we quantified **operational efficiency, provider performance, and economic sustainability of treatments**.

Results: Findings revealed **44.8% of expenditures as potentially avoidable waste or opportunities for operational improvement**, indicating substantial inefficiencies in care delivery. **Quadrant analysis classified 33% of cases as high-cost and low-effectiveness**, highlighting the need for targeted interventions to optimize resource use. The DEA-based performance evaluation provided **comparative**

insights on treatment efficacy across different cancer stages and patient characteristics, guiding precision in resource allocation and treatment planning.

Conclusion: This study is **the first in Brazil to implement a real-world efficiency assessment in outpatient gynecologic oncology using AI-driven analytics**. The results underscore the potential of integrating **PROMs, PREMs, and economic analyses to reduce waste, enhance patient-centered care, and support evidence-based operational improvements in oncology outpatient settings**. These findings contribute to advancing value-based healthcare in cancer treatment, demonstrating a scalable model for broader adoption in global oncology care.

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Disclosure of Interest: None Declared

Enhancing Patient Safety through Improved Adverse Event Reporting Systems: A Quality Improvement Initiative in a Private Healthcare Facility within the Greater Accra Region of Ghana": (2206) Mabel Adobea Owiredu

ISQUA2025-ABS-2206

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Ensuring patient safety is a cornerstone of quality healthcare, requiring proactive measures to safeguard patients during treatment (World Health Organization, 2019). In Ghana’s Greater Accra Region,

where private healthcare facilities are pivotal in meeting the population's diverse healthcare needs, the challenge of underreporting AEs is particularly pronounced. These facilities face barriers such as resource constraints, competing priorities, cultural norms, and a lack of standardized reporting procedures. Additionally, inadequate training in AE detection and reporting exacerbates the problem, leading to gaps in accountability and missed opportunities for improving patient safety outcomes. This study aimed to assess the current state of adverse event reporting systems in FOCOS Orthopaedic Hospital and to identify barriers to effective reporting.

Methods: This quality improvement (QI) study employed a combination of document review (2020 to 2021) to evaluate the number of reported AEs, interviews, and quality improvement tools to assess and improve adverse event (AE) reporting in a private healthcare facility. The study focused on identifying barriers to AE reporting and implementing targeted interventions using the Plan-Do-Study-Act (PDSA) framework and cause-and-effect analysis to enhance reporting systems.

Results: Adverse Events Reporting Trends

The implementation of interventions yielded a significant increase in the reporting of adverse events (AEs) over the study period, as depicted in **Figure 1**. The total number of reported incidents grew from seven (7) in 2020 to eleven (11) in 2021, before experiencing a marked increase to forty-seven (47) in 2022 and seventy (70) in 2023.

The number of departments participating in AE reporting also significantly increased from 3 in 2020 to twenty-one (21) departments in 2023.

Image:

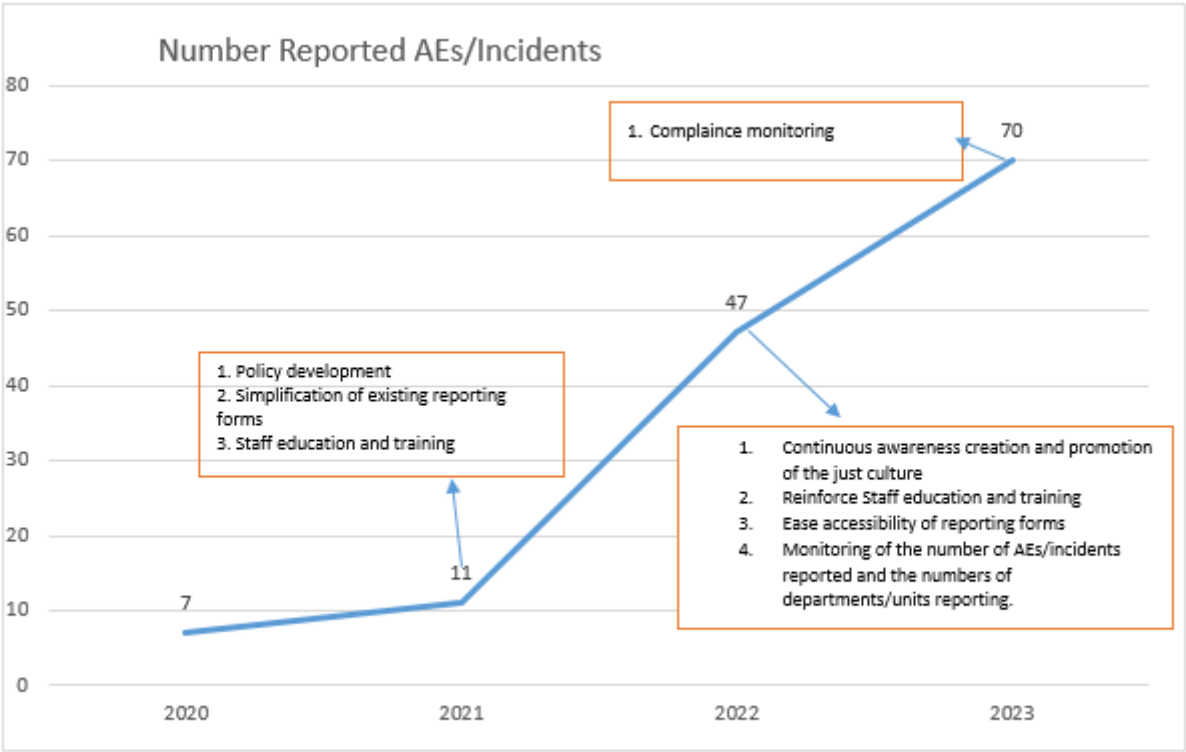


Figure 1: Total number of AEs/ incidents reported per year (2020 - 2023)

Conclusion: The study demonstrates that targeted interventions significantly enhanced adverse event (AE) and incident reporting within the organization. Key strategies, including the development of an incident

management policy, simplification and accessibility of reporting forms, staff education and training, promotion of a just culture, and continuous monitoring, collectively contributed to these improvements.

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Disclosure of Interest: None Declared

Lessons Learned Applying Implementation Research Methods to Improving Quality in NEST360: (2179) Kylie Kelleher Dougherty

ISQUA2025-ABS-2179

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: NEST360 is a multi-country initiative focused on reducing neonatal mortality by improving small and sick newborn care (SSNC) in level-two neonatal units. While traditional quality improvement (QI) methods enhance local systems, implementation research (IR) offers a systematic approach to understanding how interventions are adopted, adapted, and sustained in complex health systems. This abstract presents key lessons from applying IR methodologies to NEST360's improving quality initiatives.

Methods: IR methods and frameworks, including RE-AIM (Reach, Effectiveness, Adoption, Implementation Maintenance), ERIC (Expert recommendations for implementation change) strategies, and Implementation Research Logic Models were applied to better understand and learn from QI and data for action strategies and preliminary outcomes of the work to improve quality and coverage. Data sources included facility assessments, routinely collected programmatic data, and stakeholder interviews across multiple implementation sites in Kenya, Malawi, Nigeria, and Tanzania. The analyses explored cross-cutting barriers and facilitators influencing the adoption of SSNC evidence-based interventions, including hypothermia

prevention, kangaroo mother care, and respiratory support, and mapped QI change ideas to IR strategies to explore similarities and differences. Ethics approval was obtained in all NEST360 countries.

Results: IR methods provided a structured approach to identify barriers and facilitators within and across facilities and countries, strategies, and linked them to outcomes and create knowledge spread to accelerate change. By mapping human resource constraints, governance challenges, and infrastructure barriers to targeted solutions like mentorship, device qualification, and local capacity building, NEST360 identified key strategies that influenced implementation success. Qualitative interviews identified key strategies in high-performing facilities, including engaging mothers, combining structured training with peer mentorship, and routine evaluation of clinical and biomedical data. The work facilitated development of change packages for SSNC with insights from mapping barriers to change ideas and mapping change ideas to ERIC strategies to increase uptake and understanding. NEST360's approach highlighted the importance of QI sustainability by identifying priority actions, such as transitioning QI coaching from NEST personnel to facility staff members.

Conclusion: Using IR methods allowed NEST360 to systematically assess implementation determinants, explore barriers and facilitators to sustainability, and identify and disseminate strategies that can drive improvements in both QI work and SSNC care. IR insights are being used in scale-up of NEST360. Further integration between QI and IR can support sustainable change in this area and similar work in these settings. NEST360 program has provided critical insights into how to accelerate uptake of QI, identifying strategies for implementation of QI as well as the SSNC interventions. This work provides valuable insight into identifying locally effective solutions, such as those found in effective QI projects, and disseminating those solutions to a wider audience, maximizing impact, and driving evidence-informed scale-up of SSNC globally.

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Disclosure of Interest: None Declared

Patient safety in Brazilian hospitals during COVID-19: A mixed-methods study of patient experiences: (2250) Franciely Daiana Engel

ISQUA2025-ABS-2250

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Patient safety is a global priority, and patient engagement is essential to improving safety practices. However, systemic challenges such as staff shortages and resource limitations can compromise safety, particularly in crisis situations like the COVID-19 pandemic. Understanding patient perspectives can

provide valuable insights for enhancing safety measures. This study aimed to analyze the contributing factors to patient safety from the perspective of Brazilian patients hospitalized for COVID-19 treatment.

Methods: This is a concurrent nested mixed-methods study. A cross-sectional study using the Patient Measure of Safety (PMOS) was applied to identify the contributing factors to safety (9 domains), and 293 patients across four Brazilian university hospitals participated. We also conducted a descriptive qualitative study to understand the contributing factors to safety, using a semi-structured interview following the Critical Incident Technique (CIT). For PMOS data analysis, results were derived by averaging responses for all items within each PMOS domain, and higher scores (4 and 5) denote more positive factors to patient safety. The interviews were analyzed using content analysis, guided by the Yorkshire Contributory Factors Framework (YCFF). The integration aimed to embed the qualitative analysis with the quantitative results, describing convergences, divergences, and complementary explanations of the PMOS results.

Results: Quantitative phase: 293 patients responded the PMOS questionnaire. 50,9% (n=149) were female, and the mean age was 53.4 years (SD 15.1). The domains *Communication and teamwork* (mean 4.10 SD (0.51)) and *Organization and care planning* (4.03 (0.56)) were the most favorable contributors for safety, while *Information flow* (3.61 (0.70)), *Staff roles and responsibilities* (3.72 (0.80)) and *Delays* (3.83 (0.79)) were the least favorable. Qualitative phase: 35 patients were interviewed, being 48,6% (n=17) female, and the mean age was 52.1 years (SD 14.2). Patients reported clear communication with the team and attitudes that promote or disrupt patient-staff interaction. However, patients identified deficits in the continuity of information, since the staff did not always have the same information in the care plan. Patients had difficulty identifying who was responsible for their care, failing to distinguish the responsibilities of each team member, and the need to wear Personal Protective Equipment affected the identification of those responsible for their care. By integrating the data, it was possible to identify details of the factors that contribute most or least to patient safety. Infrastructure challenges, such as malfunctioning nursing call bells and understaffing, contributed to delays in care. Patients emphasized the need for standardized and humanized care, as well as improved professional training. Despite challenges, positive aspects such as empathy and teamwork were recognized as essential for a safe hospital environment.

Conclusion: This study highlighted the importance of patient involvement on safety strategies, particularly in resource-limited health systems. Systemic challenges related to communication, staff workload, and infrastructure require targeted interventions.

Disclosure of Interest: None Declared

Strategies for Disseminating Just Culture Policy in a Healthcare System: (2315) Najara Maria Procopio Andrade

ISQUA2025-ABS-2315

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Developing a culture of safety is a core element of many efforts to improve patient safety and care quality. 'Just culture' is defined as processes within organisations that are implemented in order to achieve a fair decision on actions to be taken with individuals involved in either adverse safety occurrences

or near misses. Essential to implementing a 'just culture' is focusing on openness, transparency and learning from adverse events rather than assigning blame. We describe how a Just Culture Policy was implemented in a tertiary hospital in São Paulo – Brazil.

Objective: Increase the percentage identified notifications (target: 75%)

Methods: The following strategies were implemented: Second half of 2021: Creation of the multi-professional working group, review of the Just culture decision algorithm, publication of the Just Culture policy. In 2022: Review of the disciplinary sanctions rules and leadership training. In 2023: Educative campaign for all employees. Many strategies were used: Presentation at meetings, lives, videos and newsletters publications, distance learning training (DLT) with adherence assessment, playful training(Just Game), mobilization of teams through an Instagrammable frame and delivery of gifts.

Results: All proposed actions were implemented. By 12/31/2023, 91.4% of leaders had been trained. Additionally, the following numbers were recorded: 629 views of the live stream, 8339 (86.17%) of employees completed the Just Culture DLT and 1096 actively participated in the Just Game. We identified a sustained improvement in the median notifier identification rate and reaching the defined target, starting in October 2023. In 2024 the percentage of identification of notifications was 78.5% versus 71,31% in 2023.

Conclusion: The process of implementing the Just Culture Policy through an Algorithm was successful and completed within the established schedule. The success of the project can be attributed to: strategic character and priority, meeting a need (meaning), involvement and support from managers, activities that complement each other, playful, dynamic and iterative character, active participation of on-site teams and mutual learning.

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Disclosure of Interest: None Declared

Piloting a Toolkit to Formatively Assess Patient Safety in the Clinical Learning Environment: (3122) Nancy Koh

ISQUA2025-ABS-3122

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: The Accreditation Council for Graduate Medical Education (ACGME) accredits all postgraduate medical education programs for physicians in the US. The ACGME's Clinical Learning Environment Review (CLER) Program conducts periodic site visits to the hospitals and other clinical sites that serve as clinical learning environments (CLEs) for more than 160,000 postgraduate physicians in training. The CLER Program visits a stratified random sample of nearly 300 clinical sites on a recurring basis every 24 months. While the sample is representative of all clinical sites throughout the US, there are over 8,000 unique clinical sites where postgraduate physicians train—a volume that exceeds the CLER Program's capacity to address.

Recognizing this gap, the CLER Program developed a toolkit to provide healthcare executives and postgraduate medical education leaders with a structured and standardized approach to continuously conduct their own assessment of their clinical sites to identify improvement opportunities, innovate, and monitor performance in patient safety. The toolkit will include tools to help clinical sites (1) survey and conduct structured group interviews, (2) conduct walking rounds, (3) synthesize the information collected, and (4) facilitate conversations among healthcare executives and postgraduate medical education leaders to improve their CLEs. The CLER Program convened 10 clinical sites throughout the US to pilot the patient safety toolkit from October 2024 to October 2025. This presentation will share initial lessons learned from early pilot tests, the adjustments made to improve the toolkit, and potential impact of its use.

Methods: A systematic approach was employed in developing the patient safety toolkit to ensure that it yields valid and reliable information. The toolkit is designed, at a minimum, to (1) allow for systematic data collection and analysis to inform continuous improvement in patient safety; (2) facilitate action plans and innovation to address the gaps identified; and (3) be of high utility for healthcare executives, postgraduate medical education leaders, and the broader CLE community.

The aim of piloting the patient safety toolkit is to (1) identify process issues, (2) test content, (3) identify biases and other factors that may impact instrument validity and reliability, (4) correct for issues identified, and (5) ensure that the toolkit is of high utility and feasibility in different clinical settings before widespread use. The 10 clinical sites selected to pilot the toolkit are representative of the larger CLE community.

Results: The feedback gathered from initial testing has yielded information to improve the clarity, relevance, and effectiveness of the toolkit, including (1) correcting for implementation issues, (2) identifying confusing questions, (3) clarifying terms/definitions, and (4) modifying question structures and response options. Overall, initial feedback indicates that the toolkit is performing as intended. Specifically, the toolkit is providing formative information that can help healthcare executives and postgraduate medical education leaders to: (1) assist postgraduate physicians and other learners in understanding a system-based approach to improving patient safety; (2) leverage the knowledge and experience of frontline staff to improve system processes; and (3) proactively assess potential patient safety vulnerabilities.

Conclusion: The information gathered from using the patient safety toolkit can promote reflection and conversations among healthcare executives, postgraduate medical education leaders, and clinical care team members to facilitate ongoing learning and improvements in patient safety. The toolkit can help clinical sites continuously monitor performance over time and make adjustments to optimize their patient safety culture.

Disclosure of Interest: None Declared

ISQUA2025-ABS-3200

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Christian Medical College Vellore is 125 year old, 4000+bedded tertiary reputed teaching hospital with 8959 outpatients, 2200 in-patients daily managed by 14000+ staff. Known for education, patient care and services, the formal process of quality management was initiated in 2007 with primary objective of fine-tuning the systems with accreditation as the byproduct.

In 2008, Quality Management Cell (QMC) was setup under the Director, with a Deputy Director (Quality) and a Quality Manager. It was directly under the director to demonstrate administrative will and commitment; named "Quality Management Cell" and not "Accreditation Cell" as focus is on overall quality management.

It was believed that quality should stem from the heart of the organization and stake holders instead of importing from existing manuals. Policies were carefully drafted to ensure they were original and captured the actual practice and values, even though it was time consuming and greater effort.

Methods: The HUB: The basic philosophy was to leave the ownership of quality with departments and quality team to take on the key role as the HUB/ overall facilitators as opposed to policing role.

The SPOKES: Each department head nominated a middle level faculty as the Department Quality Manager (DQM) which ensures that full support was provided by the head and the DQM were able to implement quality initiatives seamlessly. DQMs were trained as internal auditors with focused training. The 180 DQMs representing departments formed the SPOKES and backbone of quality management initiative.

Results: The whole exercise was undertaken to ensure that the patient safety and quality was maintained at a high level. We have been able to identify and correct several deficiencies in various aspects of patient care and safety. There has been ongoing monitoring of indices to ensure flaws are identified promptly and addressed.

Example of an area that showed poor patient satisfaction due to long waiting time was the hospital pharmacy, particularly OP pharmacy from 1 hour 19 minutes average in 2013. With concerted effort, there has been substantial reduction in the waiting time at the pharmacy (20 minutes in 2017), resulting in improved measures of several patient satisfaction indices and increased utilization of the hospital pharmacy.

Few examples include,

Completeness of Discharge summary has improved from 91% in 2009 to 96% in 2024.

Adherence to surgical safety checklist has improved from 65% in 2010 to 100% in 2024

Adherence to consent being taken for surgical procedures has improved from 56% in 2010 to 99% in 2024

Helped capturing more than 350+ Clinical and non-clinical indicators.

Incidence of sentinel events reduced and culture of reporting increased.

Conclusion: This Hub and Spokes model has helped us overcome many challenges and benefits have been multifold,

- a. Culture of trust as the departments are not threatened but involved in every exercise.
- b. Ownership of the initiative is taken by the departments and look up to QMC for guidance.
- c. Culture of openness has improved as the reports of quality initiatives like audits are shared in the intranet and to all the departments.
- d. Ripple effect on quality culture as the DQMs serve for 2 years and then the next DQM is nominated paving way for others within the departments sensitized to quality management.
- e. Cost effectiveness as the responsibilities are taken over by the DQMs

Disclosure of Interest: None Declared

Impact of Standardization and Auditing on the Safety of Material Processing in Basic Health Units: Enhancing Quality and Care Safety: (2560) Juliana Cajado Gabriel

ISQUA2025-ABS-2560

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: The Material and Sterilization Center (CME) is responsible for processing Health Products (PPS), including cleaning, disinfection, sterilization, packaging, and storage, ensuring their integrity and sterility until clinical use. The qualification of professionals and the standardization of workflows in the CME of Basic Health Units are crucial for patient safety, preventing healthcare-associated infections. This study assesses the impact of institutional strategies aimed at standardizing and systematizing PPS processing through the development of a guiding document, specialized training, and technical visits, analyzing whether these actions enhance the safety and efficiency of the processes.

Methods: The study was carried out between 2023 and 2025 with a longitudinal design. The situational diagnosis was conducted through a questionnaire applied to nurses, complemented by technical visits to the

Material and Sterilization Centers (CME) of the Basic Health Units (UBS), demonstrating the need for process standardization.

After reaching an agreement with the regional technical coordinations, a guiding document was prepared formalizing the processes at the CME, from reception of materials to their availability for use, including all monitoring and control instruments. Based on this document, online training was carried out for the teams involved in processing materials from the 95 UBS (nursing, dentistry and management), with the participation of 210 professionals.

In addition, a video lesson on monitoring the autoclaves used in these services was made available, reaching 346 participants.

Technical audit visits were carried out in 86% of UBS between 2023 and 2024 to verify the implementation of the agreed actions. In 2025, the audit process will continue in a decentralized manner, carried out by the UBS Infection Control Commission, with the application of an institutional checklist every six months.

Results: Access to the Autoclave Manual: 60.7% (2023) → 83.7% (2024) → 88.0% (2025)

Daily supervision in the CSSD: 38.4% (2023) → 67.6% (2024) → 78.7% (2025)

Adequate transportation (closed/identified containers): 68.7% (2023) → 97.9% (2024) → 100% (2025)

Autoclave biological monitoring: 50.0% (2023) → 91.8% (2024) → 97.3% (2025)

Weekly Terminal Cleaning Record: 31.0% (2023) → 57.5% (2024) → 94.7% (2025)

Identification of sterilized/disinfected materials (RDC 15): 70.0% (2023) → 83.6% (2024) → 100% (2025)

Adequate storage of health products: 46.1% (2023) → 72.3% (2024) → 100% (2025)

Tracking of sterilized materials: Not evaluated (2023) → 76.1% (2024) → 96.0% (2025)

Conclusion: The study demonstrated that implementing institutional strategies—including process standardization, preparation of a guiding document, professional training, and systematic audits—positively impacted the compliance of CSSDs at BHUs under HSA management, enhancing process safety and effectiveness. Significant improvements were observed in all indicators, particularly in daily CSSD supervision (+105%), validation of weekly terminal cleaning (+205%), and storage of health products (+117%). These measures reduced the risks of healthcare-associated infections, evidencing that structured interventions based on current regulations strengthen patient safety and care quality. Furthermore, the decentralization of audit processes from 2025 reinforced local responsibility and governance.

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Disclosure of Interest: None Declared

Applications of Federated Learning in Medical Imaging: Toward Smarter Healthcare Systems: (1237) Li Chun Huang

ISQUA2025-ABS-1237

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Preferred presentation method: 10 Minute Lightning Talk (E-Poster)

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: In recent years, the healthcare sector has seen significant advancements through data-driven approaches, especially with the integration of machine learning (ML) and deep learning (DL) technologies. These advancements have reshaped areas like personalized treatment, predictive analytics, and intelligent diagnostics. Medical imaging, in particular, has benefited greatly from these technologies, improving the accuracy and efficiency of diagnosis through applications such as segmentation, classification, and detection. Among the many organs in the human body, the liver is essential for overall health, and accurate liver segmentation in CT scans is critical for diagnosing and monitoring diseases like cirrhosis, hepatitis, and liver cancer. Traditional manual annotation methods are time-consuming and subject to inter-observer variability. Thus, automating this process using machine learning, particularly deep learning models, has become a promising solution. However, challenges remain in data privacy, regulatory compliance, and the need for diverse datasets, which hinder the widespread adoption of these techniques. Federated learning (FL) offers a way to address these issues by allowing multiple institutions to collaborate on training models without sharing sensitive patient data.

Methods: We propose a semi-automatic online federated learning algorithm for annotating liver CT images. Using a teacher-student framework, the algorithm reduces the time required for recognition and annotation. It leverages the 3D-UNet model for liver segmentation and integrates federated learning to enable decentralized training while ensuring data privacy. Pre-training utilized an open dataset of 1,632 liver CT images, annotated by experts. The model was trained using TensorFlow Federated, where each institution trains the model locally and shares model updates with a central server.

Results: The model achieved an initial accuracy of 83% in liver segmentation, which improved after federated learning was implemented. The federated learning framework allowed the model to learn from diverse datasets across institutions, enhancing its generalization capabilities without compromising patient privacy. Local training on institution-specific data enabled personalized updates, further improving the model's accuracy. Federated learning in healthcare enables institutions to collaborate without sharing data, preserving privacy while improving model performance. Integrating FL into clinical workflows can automate routine tasks, reducing radiologists' workload and improving diagnostic efficiency. While challenges like obtaining high-quality annotated datasets and ensuring effective model aggregation remain, federated learning represents a promising solution for secure, data-driven healthcare systems.

Conclusion: This study demonstrates the successful application of federated learning for annotating liver CT images, improving accuracy and preserving privacy. FL has transformative potential in healthcare, offering a collaborative approach to training machine learning models while adhering to privacy regulations. It promises to enhance patient outcomes, operational efficiency, and data sovereignty across healthcare systems.

Disclosure of Interest: None Declared

Evaluation of Hospital Survey on Patient Safety Culture Results According to Employee Position: Results from Türkiye: (1628) Öznur ÖZEN

ISQUA2025-ABS-1628

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Developing and disseminating patient safety culture and determining appropriate methods and techniques to establish this are among the main objectives of the Turkish Healthcare Quality System. This study aimed to evaluate the perception of patient safety culture among employee working in hospitals in Türkiye according to their positions.

Methods: The universe of the study consisted of all employees working in hospitals in Türkiye. Within the scope of the study, the survey link was shared with 1542 hospitals and 1146 hospitals responded. A total of 138,717 data were reached, and the number of completely filled data was determined as 102,293. 73.7% of the sample was reached. The data was collected between September 25 and November 1, 2021. Hospital Survey on Patient Safety Culture 2.0 was used as a data collection tool in the study.

The Patient Safety Culture Hospital Survey 2.0, updated in 2019, has 10 dimensions and 32 statements. Dimensions are teamwork, staffing and workload, organizational learning and continuous improvement, response to errors, support of unit manager's support for patient safety, communication about errors, open communication, reporting of patient safety events, support of hospital management for patient safety, handoffs and information exchange in the hospital.

When calculating the survey scores, negative statements were reverse coded. The survey is evaluated based on the percentage of positive responses from the participants. Therefore, the statements "strongly agree" and "agree" and "always" and "most of the time" were evaluated as positive; the statements "strongly disagree" and "disagree" and "never" and "rarely" were evaluated as negative.

The data obtained after the surveys were collected were analyzed with the IBM SPSS 22.0 program.

Results: The average positive response percentages of the participants were between 54% and 81%, and the overall average positive response percentage was found to be 69%. The highest positive response

percentage was seen in the communication about errors (82%), and the lowest positive response percentage was found in the sub-dimensions of staffing and workload (54%).

The percentage of positive responses to the “Hospital Survey on Patient Safety Culture” by position is given in the Table 1.

Image:

Table 1: Percentage of Positive Responses to the Hospital Survey on Patient Safety Culture by Position

Patient Safety Culture Dimensions	Average Positive Response Rate (%)	SD	Physicians' Average Positive Response Rate (%)	SD	Nurses' Average Positive Response Rate (%)	SD	Other Healthcare Workers' Average Positive Response Rate (%)	SD	Support Staff's Average Positive Response Rate (%)	SD	Managers' Average Positive Response Rate (%)	SD	Other Employees' Average Positive Response Rate (%)	SD
Leadership	81	4	80	4	80	5	84	5	80	5	88	5	88	4
Staffing and Workload	54	6	50	12	45	12	58	21	52	10	64	24	52	20
Organizational Learning and Continuous Improvement	56	6	59	21	53	23	67	24	65	21	77	20	64	21
Response to Error	55	8	48	15	51	15	57	15	53	13	71	12	51	15
Unit Manager's Support for Patient Safety	70	8	64	7	65	8	69	8	67	8	86	7	67	7
Communication About Errors	82	0	73	4	81	2	82	3	81	1	92	1	80	2
Open Communication	73	7	66	5	71	7	76	6	71	6	86	1	70	5
Reporting of Patient Safety Events	63	9	41	7	56	1	67	7	64	7	79	7	65	7
Hospital Management's Support for Patient Safety	67	11	56	5	57	7	65	7	70	7	86	4	70	7
Handoffs and Information Exchange in the Hospital	75	7	68	7	81	3	70	3	73	3	86	1	75	3
Overall Average	69	10	62	11	66	11	69	9	67	9	82	9	67	10

SD: Standard deviation

Conclusion: Staffing and workload is the biggest common problem in all positions in the employees working in hospitals. Policy makers, in particular, have a great responsibility to ensure that the number of employees is appropriate in terms of both quantity and quality.

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The Agency for Healthcare Research and Quality (AHRQ) **Surveys on Patient Safety Culture® (SOPS®) Hospital Survey**. Accessed from: <https://www.ahrq.gov/> Accessed at:15.Feb.25Conflict of interest statement

Disclosure of Interest: None Declared

Impact on Safety, Efficiency, and Quality of Patient Care with Automation of a Medication Supply Chain Process in a Hospital in Brasília, Brazil: (2534) Cristiane Resende da Silva

ISQUA2025-ABS-2534

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Preferred presentation method: 10 Minute Lightning Talk (E-Poster)

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: The hospital medication supply chain is a multidisciplinary process consisting of interdependent steps. These steps range from acquisition and prescription to delivery and administration of medications. Given its complexity, this process is susceptible to human error, such as patient identification errors, medication delivery errors, and delays that can compromise patient safety and quality of care. In this context, the medication delivery stage stands out as a critical point, requiring a high level of efficiency to ensure that patients receive the correct medications, in the right dosage and at the right time, without delays. Automation technologies have become essential tools to improve the management of the hospital medication supply chain, optimizing the workflow and minimizing the probability of human error. Moreover, the automation of the medication delivery process can reduce patient waiting time and free up healthcare professionals for more complex and strategic activities. This study aimed to evaluate the impact of deploying an automated system for medication delivery on patient care safety, efficiency, and quality.

Methods: A pilot study was conducted to implement an automated medication delivery system in a hospital in Brasília, Brazil, using an autonomous robot. The pilot study was carried out under real conditions, with deliveries made from the Central Pharmacy to two nursing stations in the hospital. Data were collected over 3 months before and 3 months after the implementation of automation. The variables analyzed included medication delivery time, maximum delivery capacity per 24-hour shift and impact of automation on other strategic activities, assessed through the replenishment time of automated dispensing cabinets in the Intensive Care Unit (ICU). Statistical analysis was used to compare the data before and after automation, using a paired t-test performed with Microsoft Excel software.

Results: The automation of medication delivery resulted in a significant gain in process efficiency. The average delivery time was reduced from 21.97 minutes to 10.93 minutes, resulting in an efficiency gain of 50.23% ($t = 63.64$, $p < 0.001$). With automation, the maximum delivery capacity reached from 54 to 109 deliveries per 24-hour shift, representing an approximate 101.85% increase in productivity ($t = -63.64$, $p < 0.001$). This is equivalent to the monthly workload of six employees. Moreover, 2 employees were replaced by automation and reassigned to the task of replenishing the electronic dispenser in the ICU, resulting in a reduction in the average replenishment time from 60 minutes to 15 minutes. Thus, automation provided a 75% efficiency gain in another medication dispensing process ($t = 127.28$, $p < 0.001$).

Conclusion: The implementation of automation has proven to be effective in optimizing the medication delivery process, resulting in a significant reduction in the average delivery time and a notable increase in the capacity to transport medications. This optimization ensures that patients receive the correct medications, in the right doses and at the right times, contributing to the safety and effectiveness of the treatment. Additionally, automation has made it possible to optimize the team's working time, freeing up staff to perform other essential activities. These results indicate that the implementation of automation in the medication

supply chain can contribute to improving the safety, efficiency, and quality of patient care in the hospital evaluated in the study.

Disclosure of Interest: None Declared

Excessive cesarean sections and cesarean sections without information or consent as a possible form of obstetric violence in Mexico. Results of a national survey: (2964) Pedro Jesus Saturno-Hernandez

ISQUA2025-ABS-2964

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Obstetric violence, the unauthorized control over women's bodies and reproductive processes by medical personnel, is a grave violation of women's rights. This includes the authoritarian use of procedures such as cesarean sections. Mexico, with one of the highest rates of cesarean sections globally, is a stark example of this issue. The overuse of cesarean sections, especially when performed without explanation or explicit consent, is a direct infringement on women's reproductive rights. This study aims to highlight the prevalence of cesarean sections as a form of obstetric violence in women aged 15 to 49 years, using data from the National Survey on the Dynamics of Relationships in Households (ENDIREH) 2021.

Methods: We analyze the information provided by 19,318 women who responded to the section on obstetric care of the ENDIREH, a nationally representative survey. Using the reported data, we estimate the rate of cesarean sections, place of care (public or private sector), information received by the woman, and the request for consent.

Results: The cesarean section rate was 43.4% (40.4% in the public sector, ranging by institution from 37.9 to 65.1%, and 70.9% in the private sector). In all cases, the rates are well above the expected rate of around 15%. 8.1% of women were not informed about the need for a cesarean section, and 7.7% did not give their consent. In the latter cases, 86.0% of cesarean sections were authorized by a family member; no one explicitly authorized the rest. 76.4% of cesarean sections performed without explicit consent were performed in the public sector.

Conclusion: The high rate of cesarean sections in Mexico, as reported by the women who underwent the intervention, is a clear indication of the need for better obstetric practices. Our results underscore the crucial need for monitoring and ensuring the appropriateness of cesarean sections. A significant portion of these procedures is likely unnecessary, particularly in the private sector. The unjustified practice of cesarean sections, which could be considered a normalized exercise of obstetric violence, must be addressed. It includes thousands of women who are not informed of the need for the intervention or asked for their consent.

Disclosure of Interest: None Declared

Hospital-Based Clinical Nutritionist Practice: Systematization of Nutritional Care: (2829) Esla Lessa Borba

ISQUA2025-ABS-2829

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Malnutrition is a prevalent issue in hospital settings, contributing to increased morbidity, prolonged hospitalization, and elevated healthcare costs. Comprehensive nutritional care—comprising early nutritional risk screening, detailed evaluation of nutritional and metabolic status, continuous monitoring, personalized dietary prescription, and targeted discharge guidance—is essential for optimizing patient recovery, well-being, and quality of life.

Methods: Since June 2023, a multidisciplinary team coordinated by clinical nutritionists implemented a structured protocol for nutritional care within a hospital environment. The protocol included nutritional risk screening within 24 hours of patient admission, in-depth nutritional and metabolic assessments, formulation of individualized dietary prescriptions, development of therapeutic plans, and comprehensive educational guidance upon discharge. Key performance indicators were established, including the adequacy of administered enteral nutrition volume, the percentage of patients screened within 24 hours (target: 80%), and the rate of nutritional re-evaluations (target: 75%). Data were prospectively collected from clinical records and analyzed using descriptive statistical methods. All procedures were conducted in accordance with ethical standards and received approval from the appropriate institutional review board.

Results: Implementation of the systematic approach resulted in significant improvements in nutritional care delivery. The adequacy of enteral nutrition volume increased from the targeted 80% to 90.6%. Nutritional risk screening within 24 hours was achieved in 87% of cases, exceeding the predefined target. Furthermore, the rate of nutritional re-evaluations reached 76.2%, marginally surpassing the expected benchmark. These outcomes indicate that early detection and ongoing monitoring of nutritional risk are associated with improved clinical management and patient recovery.

Conclusion: The findings of this study demonstrate that a structured, multidisciplinary approach to nutritional care—anchored by clinical nutritionists—enhances the quality and effectiveness of patient management in hospital settings. Improved adherence to screening and re-evaluation protocols directly correlates with better clinical outcomes, reduced malnutrition-related complications, and elevated patient quality of life. This evidence supports the integration of comprehensive nutritional care as a standard practice in healthcare institutions.

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Disclosure of Interest: None Declared

An expert-led qualitative content analysis of the literature to identify guiding principles for the application of Human Factors in healthcare: (3383) Angela Lucia O'Dea

ISQUA2025-ABS-3383

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Human factors (HF) is acknowledged as a crucial approach to enhancing patient safety and quality of care.¹ Yet there is still confusion in as to what constitutes a high quality HF intervention. Adherence to the core principles of HF in the published literature is rare.² There is a need for guidance to support practitioners of HF in healthcare to conceive and design HF interventions that live-up to the fundamental principles underpinning the discipline of HF. The objective of this study was to identify guiding principles for the conduct of HF in healthcare.

Methods: An expert-led, inductive, qualitative content analysis of the published literature was undertaken following the process described by Kyngäs (2019).³

The review team consisted of an expert panel of experienced and knowledgeable HF academics, and a HF professional practitioner working in the health service.

Data Sources included electronic data bases (MEDLINE, CINAHL, Web of Science and PsycINFO), reference searching and GoogleScholar. Searches were undertaken in November 2023 and updated in July 2024. **Search terms** used were 'Human factors and healthcare' and 'Human factors and patient safety'.

Paper selection: Purposive sampling was used to select papers that were clearly relevant to the practice of HF in healthcare. Reviews, commentaries, letters, and theory articles were chosen that commented on the state of science of HF in healthcare, or provided guidance on best practice in the conduct of HF in healthcare.

Results: In total, 26 articles were included in the review. Four process and four practice principles for the application of HF emerged from the literature. These are:

Process principles

1. scientific approach, ensuring analysis and investigation precede implementation and evaluation.
2. ecialists who have expertise in the use of the theories, methods, tools and techniques of HF.

3. participatory approach by collaborating with interprofessional and interdisciplinary stakeholders, including human factors specialists, throughout analysis, design, implementation, and evaluation.

4. oriented. HF goes beyond training, technology, investigation and analysis, the goal is change and improvement.

Practice principles

1. solutions to address local and contextual needs.

2. user-centred design principles when designing and implementing interventions.

3. systems model to ensure all relevant elements and interactions are considered in intervention design.

4. interventions on multiple outcomes considering including safety, performance, wellbeing and sustainability.

Conclusion: There have been no previous efforts to synthesis the literature into guidance for the application of HF in healthcare. These eight guiding principles will support both professional and non-professional practitioners and researchers in the design, implementation and evaluation of HF in healthcare.

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Disclosure of Interest: None Declared

Afternoon

Lightning Talks

Implementation of Strategies to Reduce Door-to-ECG Time in Patients with Chest Pain at an Urgent Care Unit: (2958) Tatiane Florentino

ISQUA2025-ABS-2958

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Cardiovascular diseases cause approximately 17.9 million deaths annually worldwide and could reach 25 million by 2030 (WHO). In Brazil, it is estimated that 400,000 Brazilians will die from these diseases by 2025¹. The electrocardiogram (ECG) is essential for diagnosis and monitoring, enabling the early detection of asymptomatic cardiac abnormalities. Its rapid and periodic execution aids in preventing severe events, reducing morbidity and mortality. The aim of the study is to increase compliance with door-to-ECG time within 10 minutes by 90% over one year.

Methods: An exploratory cross-sectional study conducted in an Urgent Care Unit in São Paulo from January 2024 to December 2024. The team involved included nurses, doctors, a receptionist, IT staff, medical coordination, and the unit manager. An analysis of Door-to-ECG time was carried out for the period from January to December 2023, with the indicator calculated as follows: Door-to-ECG time (10 min) = (Number of ECGs performed within 10 minutes / Total number of ECGs) × 100. In January 2024, the Ishikawa tool was applied, brainstorming sessions were conducted, and improvement opportunities were identified in the following areas: self-service kiosk and triage, emergency room, material resources, medical and nursing staff, and interdepartmental communication. Based on the analyses, an action plan was developed to every fragility identified in overall sectors.

Results: The average Door-to-ECG time within 10 minutes in the year prior to the intervention (2023) was 75%, with a first-semester average of 71% and a second-semester average of 79%. In 2024, after the implementation of the action plan, the following measures were introduced: team training, acquisition of materials (wheelchairs, two ECG devices, a triage room equipped with an ECG), exam reports available within four minutes, establishment of a new patient flow for chest pain cases, and the implementation of the Safety Huddle. From January to December 2024, the average Door-to-ECG time within 10 minutes improved to 85%, with an 85% average in the first semester and 86% in the second semester. There was a 10% increase in compliance with the Door-to-ECG time within 10 minutes compared to 2023. In November and December, the compliance rates reached 91% and 93%, respectively, exceeding the proposed target.

Conclusion: The implementation of strategies and the systematization of processes are essential to reducing Door-to-ECG time, facilitating the early identification of STEMI. This reduction in time enables thrombolysis to be performed within the optimal therapeutic window, contributing to decreased mortality and associated complications.

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Disclosure of Interest: None Declared

Comprehensive Chemotherapy Safety Protection Network: From Traditional Care to Intelligent Innovation: (1390) YU WEI HSU

ISQUA2025-ABS-1390

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Chemotherapy drugs are highly toxic and require careful management to ensure the safety of patients, healthcare staff, and the environment. To address these risks, we developed the "Comprehensive Chemotherapy Safety Protection Network", a system that integrates digital technology with innovative safety measures. This framework transforms traditional services into a tech-driven model, enhancing drug management, occupational safety, and overall protection. It also provides a scalable solution for global healthcare systems.

Methods: Our safety network is structured into three key domains: patient safety, medication safety, and personnel safety, each with specific strategies:

1.Patient Safety

- Standardized chemotherapy prescriptions: Uniform reviews and verifications to reduce errors.
- Independent prescription system: Dedicated system for accurate chemotherapy prescribing.
- Authorization procedure: Physicians undergo specialized training before prescribing chemotherapy.
- Intelligent chemotherapy prescription verification system: 22 advisory alerts and 19 mandatory checks reduce prescription errors.
- Barcode-assisted workflow: Tracks medication from preparation to administration.
- Smart chemotherapy compounding and management system: Automated verification(24 safety checks) and real-time tracking across drug preparation, compounding, packaging, and dispensing.
- Medication traceability: Comprehensive tracking system ensures proper drug flow and prevents errors.

2.Medication Safety

- Refrigerator temperature monitoring: Dual-layer monitoring with alarm for temperature deviations.
- Medication box positioning alarm: Alerts if chemotherapy drugs are left outside proper storage.
- Smart drug stability alerts: Alerts for timely administration based on drug stability.
- Refrigerated medication notification: Prioritizes refrigerated chemotherapy drugs to prevent mishandling.

- AI pump verification system: AI verifies infusion pump settings for accurate drug administration and stability.

3. Personnel Safety

- Health maintenance for personnel: Regular health screenings and work restrictions to prevent exposure.
- Smart Clip for IV bag: Secure locking device ensures safety during chemotherapy administration.
- AR360 training: Augmented Reality training for pharmacists to reduce exposure risks and improve skills.

Results: The results of each domain are as follows:

1. Patient Safety

- Prescription error rate maintained at 0.01-0.03% (International benchmark: 0.1-24.6%).
- Chemotherapy compounding errors Reduced from 4 to 0 after SCCMS implementation.
- Infusion pump rate errors eliminated (International benchmark: 0.6-3.8%); administration time reduced from 8 minutes to 2.8 minutes (65% reduction).

2. Medication Safety

- Zero temperature-related drug disposal incidents due to effective refrigerator monitoring.
- Medication box positioning alarm system prevented chemotherapy drug wastage, reducing disposal costs from \$6,000 to \$0.
- Chemotherapy infusions exceeding stability limits reduced from 2.9% to 0.13% (International benchmark: 0.5-7.5%).

3. Personnel Safety

- 100% compliance with health maintenance measures for chemotherapy staff.
- Workflow efficiency improved: SCCMS streamlined 53.5% of preparation steps, reducing prescription preparation time by 27% (890s → 650s).
- IV connector disconnection incidents eliminated from 8 to 0 after Smart Clip implementation.
- AR360 training reduced teaching stress (62%) and interference (51.9%), also improved learning effectiveness (4.3/5).

Conclusion: Our "Comprehensive Chemotherapy Safety Protection Network" enhances chemotherapy treatment safety and efficacy for patients while fully protecting chemotherapy staff from drug exposure risks. It streamlines medication management, ensuring accuracy at every step. The goal is to provide high-quality chemotherapy services and a safe working environment for healthcare professionals. This model offers a scalable, intelligent approach to chemotherapy safety that can be applied globally. Future efforts will focus on cross-institutional validation and international collaboration to establish global best practices for chemotherapy safety standards.

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Disclosure of Interest: None Declared

Safety during handoff in the post-anesthesia care unit: scoping review: (2984) Ana Maria Müller de Magalhães

ISQUA2025-ABS-2984

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Preferred presentation method: 10 Minute Lightning Talk (E-Poster)

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Perioperative care should consider the displacement of the patient between the different environments and teams involved in the anesthetic-surgical procedure. Approximately 300 million surgeries are performed annually worldwide, which indicates the magnitude of the need for constant review of practices involving these patients¹. The adequate care transfer communication plays a crucial role in determining the patient's therapeutic plan, and it is necessary to choose or develop a transfer model adapted to the care provided in the Post-Anesthesia Care Unit (PACU) and its structural characteristics². The aim in this review was to map studies that tested an intervention orienting patient transfer to PACU and identify outcomes related to care safety.

Methods: Scoping review guided by the JBI Handbook recommendations with the Preferred Reporting Items for Systematic Reviews and Meta-Analysis extension for Scoping Reviews (PRISMA-ScR). The Population, Concept, and Context (PCC) framework was used to develop the research question and the inclusion and exclusion criteria in databases without date parameters. The review protocol was registered in the Open

Science Framework (doi.org/10.17605/OSF.IO/M2FYN). The full study article was published in the Journal of Advanced Nursing (doi.org/10.1111/jan.16673).

Results: The systematic search identified 182 records. After reading their titles and abstracts, 49 studies were read in full. The final sample consisted of 17 texts published between 2013 and 2024. It is important to highlight that no studies have been conducted in South American countries. The main elements evaluated in the implementation of interventions to guide patient transfer to the PACU related to patient safety were: increase in the number of transferred information; higher rates of professional satisfaction with teamwork; presence of surgical professionals; questions from the receiver and adequacy to the instrument. Also was identified a pause to monitor the patient before the transfer and reduction of omitting information; interruptions; distractions; task errors; hypoxemia; nausea; vomiting and excessive pain.

Conclusion: The variables evaluated after the interventions to promote a structured patient transfer to the PACU have the potential to guide the development of quality assessment indicators. Considering the increase in complexity for perioperative care, the investigation of patient transfer processes to the PACU can provide support for the management of surgical practices and contribute to improving patient safety and the experience of the health professionals involved.

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Disclosure of Interest: None Declared

Cost-Effectiveness Project: Reduction of Hospital Organic Waste and its Environmental and Financial Impact of a Private Hospital in Recife/PE: (2999) Stheffany Simões de Assunção

ISQUA2025-ABS-2999

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Preferred presentation method: 10 Minute Lightning Talk (E-Poster)

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Hospital organic waste presents a significant challenge for waste management due to its contaminated and potentially hazardous nature. Bioconversion is a technology that uses microorganisms to convert organic waste into valuable products, such as biogas and compost. This study aimed to evaluate the effectiveness of Bioconverte's bioconverter equipment in reducing hospital organic waste, as well as its environmental and financial impact.

Methods: he study was conducted at Santa Joana Hospital Recife, by the Waste Commission starting in January 2023, with the installation of the BC17 ECO2 model from Bioconverter. The organic waste generated by the equipment was collected and processed through a combination of microorganisms and controlled conditions to convert the waste into biogas and compost. The effectiveness of the equipment was assessed by measuring the reduction in the volume of organic waste.

Results: The organic waste reduction project achieved significant results in 2023, with a 38% reduction (with an average waste generation in the previous period of 33.44 tons, and after the installation of the equipment, 20.72 tons) in the amount of waste sent to landfills and a 29% reduction (with the average annual cost in 2022 being approximately R\$ 88,783, reduced to R\$ 63,360 in 2023) in total costs for treating organic waste. These results demonstrate the project's effectiveness in minimizing negative environmental impact and contributing to financial sustainability and improved health within the institution.

Conclusion: With the monitoring of the project and the implementation of effective technology, it was possible to achieve a reduction in hospital organic waste sent to landfills, contributing to the minimization of negative environmental impact, which reduces the amount of greenhouse gases emitted during waste decomposition. Additionally, there was a reduction in costs for organic waste treatment, allowing these resources to be allocated more efficiently, contributing to the financial sustainability of the service.

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Oliveira, M. et al. (2018). Análise da viabilidade econômica e ambiental do uso de equipamentos bioconversores em hospitais. Revista de Gestão Ambiental, 11(1), 34-45.

Disclosure of Interest: None Declared

Analysis of the relationship between early morning rounds and adverse events in the ICU: (2245) Stheffany Simões de Assunção

ISQUA2025-ABS-2245

G. T. H. F. T. M. H. F. Gustavo Trindade ^{1,*}, A. H. R. D. V. D. F. Arthur Faria ¹, M. A. C. G. Marcos Gallindo ¹, C. E. F. F. Carlos Eduardo Ferraz ¹, A. F. D. M. C. Ana Flávia Campos ¹, D. F. D. O. A. Danielle Ferraz ¹, R. N. D. S. B. Rayssa Barros ¹, R. L. D. A. N. Renato Leitão ¹, F. B. D. M. D. F. Fabíola Fonseca ¹, D. L. D. S. Diana Lira ¹, C. B. D. C. Cláudia Bezerra ², J. L. P. D. S. Leonardo Pereira ²

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Adverse events occur in up to 10% of hospitalized patients, significantly affecting average length of stay, morbidity, mortality, and costs. The majority of these events are preventable and stem from various factors, including inadequate safety processes within the institution, ineffective training, inattention, and work overload. Research indicates that nursing staff are the most involved in these events, primarily due

to continuous work hours, the number of night shifts, and staffing levels relative to bed count and patient complexity, alongside human fallibility. The literature demonstrates that night shifts adversely affect the physical, cognitive, and health conditions of professionals, thereby increasing the risk of adverse events. Moreover, in the ICU, where the workload and physical and mental demands are heightened, these risks escalate. It is essential to develop strategies for enhanced patient surveillance and safety, such as implementing a routine of early morning rounds by doctors, nurses, and physiotherapists, aimed at frequent reassessments of all patients, thereby contributing to monitoring and oversight in conjunction with the efforts of nursing technicians.

Methods: This study analyzes notifications of total, serious, and adverse events associated with the loss of invasive devices, reported through Epimed, as well as the performance of dawn rounds, documented in FORMS, during the period from January 2022 to December 2024, pertaining to the ICU - Intensive Care Center of Hospital Santa Joana Recife. Statistical analysis was conducted using the Chi-square test.

Results: Of the 1,467 notifications made between January 2022 and December 2024 regarding the ICU, 514 (35.0%) were attributed to adverse events (488 mild and moderate; 94.9%). Among these, 132 (25.7%) occurred at night (118 mild and moderate; 89.4%). Structured early morning rounds commenced in September 2023, resulting in 1,635 rounds conducted (30.8% by physicians, 33.3% by nurses, and 35.9% by physiotherapists), reflecting a protocol adherence rate of 56.5%. Of the rounds performed, 155 (9.5%) identified complications necessitating intervention or adjustments to prevent clinical deterioration. Analyzing the data in two distinct periods—January 2022 to August 2023 (prior to rounds) and September 2023 to December 2024 (subsequent to rounds)—the total number of ICU notifications increased by 7.6% (monthly averages of 39.4 vs. 42.4), indicating an enhancement in the safety culture. Additionally, the incidence of adverse events during night shifts decreased by 14.1%, with serious events comprising 25.4% in the first period (18 of 71) and 13.1% in the second (8 of 61), resulting in an absolute reduction of 5.6% in these cases. Regarding events associated with invasive devices, there was a 13.3% reduction in nighttime notifications (15 vs. 13), alongside a 28.6% decrease in the absolute number of vascular catheter losses. No statistical analysis revealed a significant difference.

Conclusion: Conducting rounds during the early morning hours enhances patient surveillance, facilitating the identification of necessary interventions or adjustments prior to clinical deterioration, and is likely associated with a reduction in Nighttime period, general adverse events, severe adverse events, and loss of invasive devices. A longer observation time and greater adherence from teams in conducting rounds are needed for more robust conclusions.

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Disclosure of Interest: None Declared

Benefits of Implementing the Energy Management System in the Public Hospital in Brazil Amidst Climate Change: (3249) Bruna Steiner

ISQUA2025-ABS-3249

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¹Quality & Safety, ²Hospital Engineering, Hospital Estadual de Diadema, Diadema, Brazil

Preferred presentation method: 10 Minute Lightning Talk (E-Poster)

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: The increasing global consumption of energy and its negative environmental impacts have been widely discussed by both academics and practitioners, including in the health sector. Hospitals are major energy consumers, leading to higher operating costs and environmental harm. Energy management in hospitals is crucial for contributing to environmental sustainability. This paper aims to describe the results of implementing an energy management system(EnMS) in a public hospital in Brazil, highlighting the benefits and barriers of this initiative.

Methods: The Hospital Estadual de Diadema conducted an in-depth analysis of energy consumption (electricity, natural gas, and diesel oil) from 2018 to 2024 to consolidate its overall energy usage. The study estimated equipment consumption using technical data from manufacturers, factoring in equipment power ratings and monthly operating time. Significant Energy Use was identified as any equipment that accounted for 2% or more of the hospital's total energy consumption. Furthermore, production data and ambient temperature measurements were analyzed using Pearson's correlation coefficient, revealing a significant correlation of 0.68 between total energy consumption and the average temperature. Based on these insights, an Energy Baseline was established, serving as the foundation for the hospital's energy review. This provided the framework for defining short-, medium-, and long-term goals, including plans for future investments in the hospital's energy system. In addition, not only presenting the evolution of the HED EnMS, which was certified according to the ISOs 50001:2011 requirements in 2018, but also the changes and other relevant points related to the certification migration following the ISOs 50001:2018 requirements, certified by an official external audit body, TIV NORD in Germany, for the migration from ISO 50001:2011 to ISO 50001:2018, whose changings the standard fully meeting the requirements were recommended. This fact highlights the resilience of the System in the face of the climate changes faced.

Results: The implementation of the Energy Management System at the hospital resulted in several key benefits:

- A 13% reduction in natural gas, 16% in electricity, and 61% in diesel oil consumption, corresponding to 6,273m³/year, 22,645.87kWh/year e 6,273 L/year, respectively.

- A 2% reduction in overall energy use, referring to 4,479.26kWh/year, despite a 1.5°C rise in average temperature (describe in figure 1)

These outcomes were triggered by other systematic actions, such as:

- Online monitoring of energy consumption, enabling quick detection of deviations and immediate corrective actions.
- Improved visibility of the energy matrix and identification of high-consumption equipment for optimization.
- Energy evaluation in equipment purchases, balancing performance and cost to generate savings.
- Rational planning for new electrical loads and increased climate change awareness for staff, patients, and the community.
- Effective waste management following the principles of reducing, reusing, recycling, and rethinking.
- Integration of climate impact considerations in risk management and promotion of conscious energy consumption culture.
- Regulatory compliance with a focus on reducing greenhouse gas emissions and improving resilience to climate change.

Image:

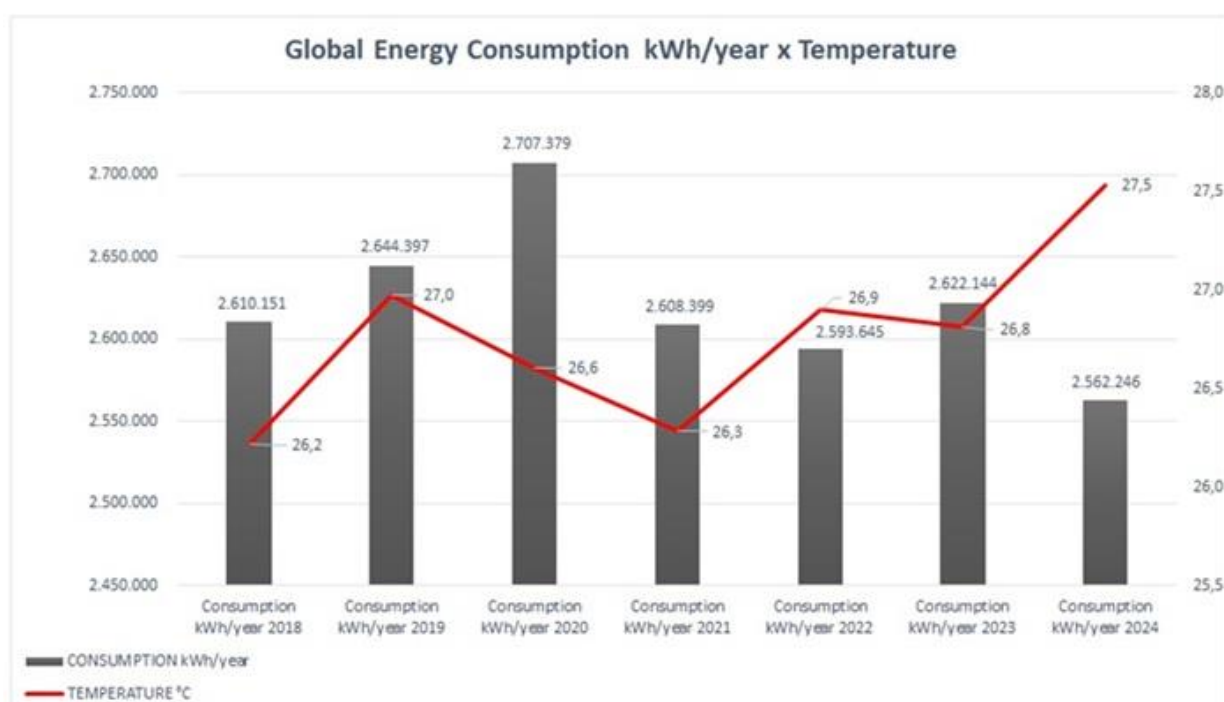


figure 1: Global Energy Consumption X Temperature 2018-2024

Conclusion: The implementation of the Energy Management System at Hospital Estadual de Diadema was crucial in optimizing energy use and reducing environmental impacts, especially in light of growing concerns about climate change. Through a detailed analysis of energy consumption patterns, the hospital made changes based on historical energy use data, seeking more energy-efficient practices and achieving significant results in reducing environmental impacts. Fostering an organizational culture focused on the rational use of resources and stakeholder awareness is essential for building resilient energy management systems capable of mitigating the effects of climate change.

Disclosure of Interest: None Declared

Does Long-Term Care Menus Balance Climate Impact and Nutritional Quality? An Exploratory Study from Italy: (1753) Andrea Conti

ISQUA2025-ABS-1753

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¹Department of Translational Medicine, Università del Piemonte Orientale, Novara, Italy

Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

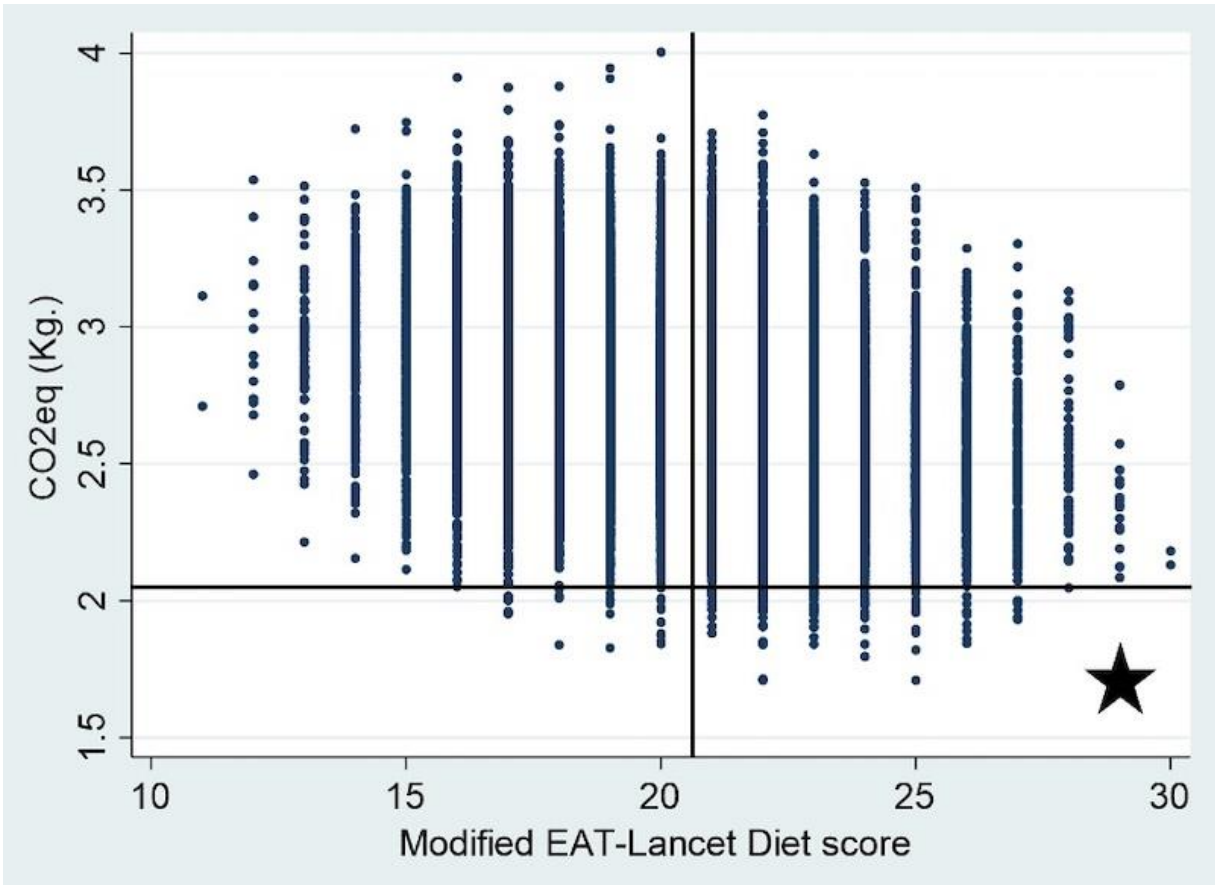
Introduction: The quality of food provided in healthcare facilities is a pivotal aspect of patient care, directly influencing nutritional intake, outcomes, and overall patient satisfaction. Proper nutrition plays a fundamental role in preventing malnutrition and reducing complications. Healthcare facilities food services face significant challenges, including balancing diverse dietary needs, ensuring food safety, minimizing waste, and enhancing the overall dining experience for patients. Although there is a growing recognition of the importance of food quality in such settings, an equally critical yet often overlooked dimension is its environmental impact. Indeed, despite healthcare institutions serve millions of meals annually, research on the sustainability of food services within hospitals and long-term care facilities remains limited. Sustainable dietary models, such as the EAT-Lancet Commission Planetary Health Diet (PHD) offer a framework to improve both human health and environmental sustainability. By optimizing meal plans to align with sustainable nutrition principles, healthcare systems can reduce their carbon footprint while enhancing the quality of care through improved dietary standards. Despite the potential benefits, no studies have specifically evaluated the environmental impact of meals served in nursing homes—a critical gap given their role in long-term patient care. This study aims to assess both the carbon footprint (CF) and adherence to PHD in meals served at an Italian nursing home.

Methods: We conducted a comprehensive assessment of meal offerings by analyzing a random sample of 20,000 possible menu combinations, reflecting typical daily servings available at the nursing home. The CF was estimated using life cycle assessment methodology, while adherence to PHD was evaluated using the Modified EAT-Lancet Diet Score. Threshold values were set at 2.027 kgCO₂eq/day for CF and a score of 23 for adequate alignment with PHD recommendations. Additionally, we examined menu compositions across multiple days by evaluating permutations based on dish selection flexibility.

Results: Our findings revealed substantial variability in both CF and PHD adherence among different meal configurations, with only a small proportion (Figure – Black star indicates healthier combination with low CO₂eq) meeting both sustainability and nutritional benchmarks simultaneously. Mean GHGEs were 2.64 and 2.82 kg of CO₂eq for spring/summer and autumn/winter daily menus, respectively. Most (95%) of permutations ranged between 2.18 and 3.29 kg of CO₂eq. The menus for both seasons (spring/summer and autumn/winter) had MELDS scores ranging from 12 to 29. The spring/summer menu had a median score of 20, while the autumn/winter menu had a median score of 21. Our results shows the association between the MELDS and the carbon, with most of the menus that were above the CO₂eq cutoff. Only a few of them were both adherent to the PHD and produced low emissions. Moreover, we also noted a strong, inverse association

between the CF and the adherence to the PHD, suggesting that healthier menus tend to generate lower CO₂ emissions.

Image:



Conclusion: This is one of the first studies assessing both environmental impact and nutritional quality in nursing home food services. Healthier meals were associated with lower carbon emissions, underscoring an opportunity to align dietary models with sustainability goals. Moreover, our results shows that only a small part of the combinations is aligned with dietary and environmental recommendations. Therefore, there is room to improve both aspects at the same time, not only providing benefits to residents but also reducing the environmental impact. Given the variability in carbon footprints across menu options, targeted modifications could significantly lower GHGE and enhance patient-centered care. Future efforts should focus on developing sustainable food procurement policies that consider cost-effectiveness, patient preferences, regulatory constraints, and staff training.

References: Conti A, Opizzi A, Binala JG, Cortese L, Barone-Adesi F, Panella M. Evaluation of the Climate Impact and Nutritional Quality of Menus in an Italian Long-Term Care Facility. *Nutrients*. 2024;16(17):2815.

Disclosure of Interest: None Declared

Green Quality Standards to Digitally Assess and Improve Climate-Change Awareness, Resilience and Sustainability of Healthcare Facilities in Kisumu, Kenya: (3191) Aafke de Graaff

ISQUA2025-ABS-3191

¹Research & Learning, ²SafeCare, PharmAccess Foundation, Amsterdam, Netherlands, ³SafeCare, PharmAccess Kenya, Kisumu, Kenya, ⁴Advocacy, PharmAccess Foundation, Amsterdam, Netherlands, ⁵SafeCare, PharmAccess Kenya, Nairobi, Kenya, ⁶Quality of Care, PharmAccess Foundation, Amsterdam, Netherlands

Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

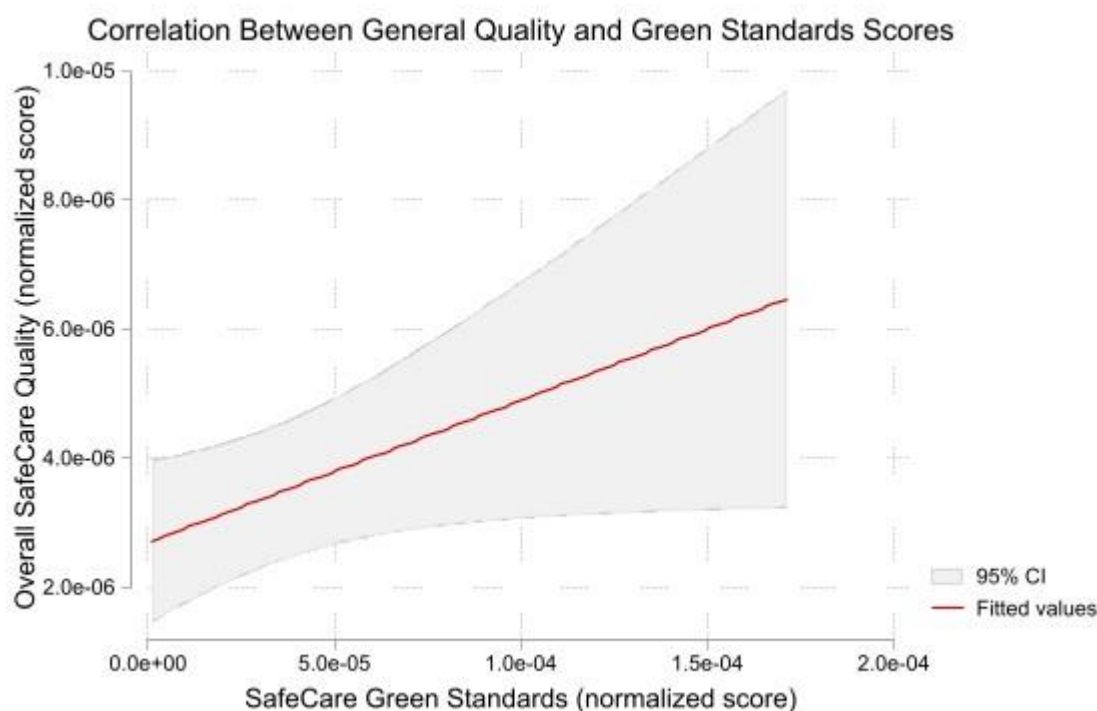
I confirm that the submission has been approved by all authors: Yes

Introduction: Despite contributing minimally to global emissions, low-income countries suffer the severest impacts of climate change. Extreme weather events and the increased prevalence of climate-sensitive diseases underscore the importance of building climate-resilient healthcare systems in these settings. Also, healthcare facilities are an important source of environmental pollution. We have previously found that digital quality improvement (QI) tools can meaningfully contribute to assessing in real time facilities' epidemic preparedness, especially in hard to reach areas.¹ Here we tested a similar intervention, this time to evaluate the climate-change awareness, preparedness and sustainability of healthcare facilities in East Kenya, to identify quality gaps and bring technical assistance to improve their climate-resilience and reduce their environmental footprint.

Methods: In January 2025, we used SafeCare Green Standards (SGS) to digitally evaluate climate resilience and sustainability of 24 healthcare facilities in Kisumu County, Kenya. SGS includes 14 key green criteria based on results of a systematic review of the literature, and are an extension of the ISQua/IEEA-accredited SafeCare standards that are used in 25 countries and performed over 13,000 quality assessments.² Results of this baseline SGS self-assessments were immediately available in dashboards, and all facilities received a tailored QI plan afterwards. SGS and overall SafeCare quality scores range from 0 to 100. We performed non-parametric tests to compare SGS scores between facilities, and a Pearson correlation between SGS and overall SafeCare quality scores.

Results: SGS scores ranged from 18 to 71 (out of 100), with a mean score of 44.0. There were no significant differences in SGS scores between urban and rural facilities. County hospitals had a slightly higher average SGS score (49.3) compared to other facility levels, but the difference was not statistically significant ($P=0.2$). We found a moderate positive correlation between overall SafeCare quality and SGS scores (correlation coefficient=0.4) (Figure 1). At the baseline assessment, the top three fully compliant criteria (out of the 14) were: presence of a patient referral system to centers closest to patient residence, policies ensuring data collection in the Integrated Disease Surveillance and Response (IDSR) system, and a process in place to ensure local procurement when possible; and the most frequent non-compliant criteria were: policies and procedures to monitor wastewater before discharge into the sewer system, telemedicine services, and policies promoting the use of biodegradable materials (e.g., plastics).

Image:



Conclusion: In this set of facilities with experience using a QI methodology, we were able to pilot the SGS for a gap analysis, support facilities to improve their sustainable quality practices, and provide technical assistance. These results indicate that overall good quality of care is correlated with better climate resilience of facilities, and that improvements are needed to reduce the environmental impact of these healthcare centers. We have planned a climate resilience reassessment of these centers 3 and 6 months after this initial assessment, and a survey among providers to be conducted before the 3-month follow-up to obtain their input and perceptions related to their experience working with the SGS. The results of these analyses will be shared and of great value for health authorities to extent such evaluations to other facilities/counties and improve the climate resilience of their healthcare system.

References: 1. Gomez-Perez GP, de Graaff AE, Dekker JT, Agyei BB, Dada I, Milimo E, et al. Preparing healthcare facilities in sub-Saharan Africa for future outbreaks: insights from a multi-country digital self-assessment of COVID-19 preparedness. *BMC Health Serv Res.* 2024;24:254.

2. Johnson MC, Schellekens O, Stewart J, van Ostenberg P, de Wit TR, Spieker N. SafeCare: An Innovative Approach for Improving Quality Through Standards, Benchmarking, and Improvement in Low- and Middle- Income Countries. *Jt Comm J Qual Patient Saf.* 2016;42:350-71.

Disclosure of Interest: G. Gómez-Pérez Employee of: PharmAccess Foundation, the organization that has developed the SafeCare quality improvement methodology discussed in this abstract., J. Dekker Employee of: PharmAccess Foundation, within the SafeCare department that developed the quality improvement methodology discussed in this abstract., A. de Poli Employee of: PharmAccess Foundation, within the SafeCare department that developed the quality improvement methodology discussed in this abstract., E. Ogolla Employee of: PharmAccess Kenya, within the SafeCare department that developed the quality improvement methodology discussed in this abstract., M. S. Ommeh Employee of: PharmAccess Kenya, within the SafeCare department that developed the quality improvement methodology discussed in this abstract., J. Misiko Employee of: PharmAccess Kenya, within the SafeCare department that developed the quality improvement methodology discussed in this abstract., S. van Mens Employee of: PharmAccess Foundation, the organization that has developed the SafeCare quality improvement methodology discussed in this abstract., M. Olulo Employee of: PharmAccess Kenya, within the SafeCare department that developed

the quality improvement methodology discussed in this abstract., T. F. Rinke de Wit Employee of: PharmAccess Foundation, the organization that has developed the SafeCare quality improvement methodology discussed in this abstract., A. de Graaff Employee of: PharmAccess Foundation, within the Quality of Care department that developed the SafeCare standards discussed in this abstract.

Building Climate-Resilient Health Systems: Policy Gaps and Implementation Challenges in Nepal: (3528) Shophika Regmi

ISQUA2025-ABS-3528

S. Regmi ^{1,*}, B. Bhatta ¹, B. Sharma ¹, A. Rijal ¹, Y. P. Joshi ², S. Baral ¹

¹Research and Innovation, HERD International, Kathmandu, ²Faculty of Science, Health and Technology, Nepal Open University, Lalitpur, Nepal

Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Background

Nepal ranks as the fourth most vulnerable country to climate change, facing increasing extreme weather events and escalating health risks. While national-level policies have been developed to address these challenges, translating the policies into effective action remains a challenge. The understanding and preparedness of subnational stakeholders is critical in building climate-resilient health systems, yet limited evidence exists on the capacity of local health systems to respond to climate change related health risks. This study aimed to review existing national policies on climate change and their intersection with health, explore stakeholders' understanding and perspectives on climate change particularly at subnational level, and assess the preparedness of local health systems to address climate-related health risks.

Methods: Methods

We used a mixed-methods approach, including a policy and literature review and qualitative data collection through 32 key informant interviews in three municipalities of Bagmati, Lumbini and Karnali Provinces in Nepal. Stakeholders interviewed represented health, environment, WASH, infrastructure, agriculture, and livestock sectors from both national and subnational levels.

Results: Results

Nepal has developed multiple policies in alignment with international commitments to address climate change related health risks. These policies emphasize capacity-building, integrated preparedness, and adaptation measures. However, they lack clear implementation pathways for building a climate-resilient health system. Findings reveal a significant gap in awareness and understanding among subnational stakeholders regarding federal policies, primarily due to inadequate orientation and guidance for implementation. Furthermore,

climate change has yet to be prioritized in annual health plans due to gaps in knowledge and capacity, resource constraints, and budgetary inflexibility. The assessment further indicates that local health systems exhibit low resilience to climate risks and their impacts.

Conclusion: Conclusion

Despite the existence of key federal policies addressing climate change related health challenges, their effective translation into subnational action remains limited. Critical gaps persist in communicating climate-related information and strengthening implementation at the local level. Additionally, subnational health systems remain under-resourced and ill-prepared to tackle the evolving climate crisis. It is imperative to bridge these gaps by enhancing policy communication, providing targeted support, and strengthening local health systems preparedness to build climate resilience.

Disclosure of Interest: None Declared

Sustainability: The Role of Certification in Building Climate-Resilient Healthcare Systems: (2121) Gilvane Lolato Lolato

ISQUA2025-SES-2121

G. L. Lolato ^{1,*}, F. Leite Gastal ¹, P. Góes da Cruz ¹, A. Ruggiero ¹, R. Nakamoto ¹

¹Accreditation, ONA, São Paulo, Brazil

Proposed Session Duration: 45 Minutes

Session Description: Climate change is one of the greatest global challenges today, directly impacting healthcare systems. The healthcare sector is responsible for 4.4% of global greenhouse gas emissions, making it a key player in both the problem and the solution to the environmental crisis. To mitigate this impact, it is essential to strengthen climate resilience and adopt sustainable practices within the sector. Healthcare accreditation, through methodologies such as that of the Organização Nacional de Acreditação (ONA), plays a strategic role in incorporating environmental guidelines, promoting operational efficiency, and enhancing sustainability in healthcare services.

Session Format: Total Duration: 60 minutes

- 1. Introduction & Context Setting (10 minutes)**
- 2. Presentation 1: The Role of Accreditation in Sustainability (15 minutes)**
- 3. Presentation 2: Best Practices & Challenges in Implementation (15 minutes)**
- 4. Interactive Panel Discussion & Q&A (15 minutes)**
- 5. Closing Remarks & Key Takeaways (5 minutes)**

Target Audience: - **Senior Healthcare Managers & Executives** – Hospital administrators, CEOs, and decision-makers responsible for implementing accreditation standards and sustainability policies.

- **Healthcare Accreditation Bodies & Regulators** – Representatives from national and international accreditation organizations, including ONA and ISQua.

- **Policy Makers & Government Officials** – Professionals involved in shaping healthcare sustainability regulations and environmental policies.

- **Sustainability & Environmental Officers in Healthcare** – Specialists responsible for implementing green practices in healthcare facilities.

- **Clinicians & Healthcare Professionals** – Doctors, nurses, and allied health workers interested in integrating sustainable practices into daily operations.

- **Hospital & Healthcare Facility Managers** – Operational leaders who oversee infrastructure, waste management, and resource efficiency.

- **Researchers & Academics** – Experts studying the intersection of healthcare, climate change, and accreditation standards.

- **Healthcare Technology & Infrastructure Developers** – Industry professionals working on sustainable healthcare solutions, including energy-efficient technologies and green building design.

Objectives: Explore how accreditation promotes sustainability and climate resilience through standards established in its methodology

Research: This study is based on the analysis of the ONA Methodology standards for Healthcare Service Organizations and the collection of data on certifications that have already incorporated environmental and climate aspects. The guidelines from the Brazilian Accreditation Manual – 2022 Version were assessed, covering over 1,400 accredited organizations and 3,848 evaluations conducted between January 2022 and June 2024. Additionally, documents such as the ISQua Green Paper on Sustainable Health Systems were analyzed to identify the best practices and challenges in implementing environmental measures within the accreditation process.

Data analysis revealed that 85% of the evaluated organizations achieved full compliance with waste management and safe disposal criteria, while 78% demonstrated adherence to energy efficiency guidelines and the rational use of natural resources. Regarding the implementation of sustainable governance strategies, 65% of organizations showed partial compliance, indicating the need for improvement and standardization in institutional policies. These findings reinforce the importance of accreditation as a monitoring tool and a driver of continuous improvement in the environmental agenda within the healthcare sector.

The inclusion of sustainability criteria in healthcare accreditation manuals promotes a structural transformation in accredited organizations. Among the key advancements identified are: Natural Resource Management: Guidelines for the rational use of water and energy. Waste and Safe Disposal: Proper segregation, recycling, and waste tracking. Equipment Efficiency: Lifecycle assessment, obsolescence management, and environmental impact mitigation. Climate Risk Management: Contingency plans for natural disasters and health crises. Governance and Sustainable Leadership: Encouraging a culture of socio-environmental responsibility.

Additionally, barriers to the implementation of sustainable measures were identified, mainly due to regulatory gaps and the need for greater engagement from healthcare professionals and managers.

Implemented Initiatives & Pilot Projects

- ONA-Certified Green Hospitals Initiative (2023-Present)

- A pilot program assessing how ONA-accredited hospitals incorporate sustainability measures.
- Tracks compliance with energy efficiency, waste reduction, and water conservation protocols.
- São Paulo State Sustainable Hospitals Program
 - A policy initiative that incentivizes healthcare organizations to meet sustainability benchmarks in exchange for funding support.
 - Linked to accreditation performance as a driver for compliance.
- HCWH-Latin America Carbon Footprint Reduction Program
 - A project working with hospitals to measure and reduce greenhouse gas emissions, aligning sustainability with accreditation requirements.

Suitability: This session, "Accreditation and Sustainability: The Role of Certification in Building Climate-Resilient Healthcare Systems," is highly relevant to ISQua's mission of improving healthcare quality and safety through accreditation, policy innovation, and global collaboration. It aligns with ISQua's priorities by addressing how accreditation frameworks can be leveraged to drive sustainable healthcare transformation, a topic of growing urgency given the impact of climate change on global health systems.

1. with ISQua's Themes & Audience Interests

- Accreditation as a Driver of Quality and Sustainability: The session explores how accreditation standards can integrate environmental and climate resilience criteria, positioning sustainability as a fundamental component of healthcare quality.
- Global Relevance & Policy Innovation: By drawing on international best practices, research, and accreditation models, the session offers insights applicable across diverse healthcare systems.
- Practical Solutions & Evidence-Based Approaches: The presentation is backed by quantitative data from accreditation assessments, real-world case studies, and policy initiatives, ensuring practical takeaways for healthcare leaders.

1. Potential with ISQua Audiences

- Senior Healthcare Managers & Policymakers: Provides strategies to integrate sustainability into healthcare governance and decision-making.
- Accreditation Experts & Regulators: Discusses how accreditation methodologies (such as ONA, JCI, and ISQua frameworks) can evolve to include environmental sustainability.
- Hospital Administrators & Sustainability Officers: Showcases successful initiatives and best practices in waste management, energy efficiency, and climate adaptation.
- Academics & Researchers: Offers an evidence-based discussion on accreditation and sustainability, highlighting opportunities for further study.

1. e & Thought-Provoking Format

- Engaging Panel Discussion: Expert perspectives on sustainability challenges and opportunities within accreditation frameworks.
- Audience Participation: Q&A session and interactive discussion to encourage knowledge-sharing and cross-sector collaboration.

- Practical Takeaways: Attendees will gain actionable insights to drive sustainability within their own accreditation frameworks and healthcare institutions.

1. Session Matters Now

With healthcare responsible for 4.4% of global carbon emissions, sustainability is no longer optional—it is an urgent priority. This session brings a timely and solution-focused approach to the ISQua conference, offering a unique perspective on how accreditation can act as a catalyst for sustainable change.

By highlighting how environmental responsibility can be embedded into healthcare accreditation, this session directly supports ISQua’s broader mission of driving healthcare excellence worldwide.

Have you presented this session at a Conference before including ISQua?: Yes

If yes, what year and where?: 2022 and 2023

Disclosure of Interest: None Declared

Beyond Compliance: Evaluating the Real-World Impact of Accreditation on Healthcare Quality and Safety—A Systematic Review: (1877) Tina Janamian

ISQUA2025-ABS-1877

T. Janamian ^{1 2,*}, S. Martin ^{1 3}, S. Janamian ^{1 3}, D. Chua ³, A. Kirkegaard ³, T. Johnson ⁴

¹Australian General Practice Accreditation Limited, ²Adj Associate Professor, University of Queensland,

³University of Queensland, ⁴Inala Primary Care, Brisbane, Australia

Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: Yes

If yes, what year?: 2024

I confirm that the submission has been approved by all authors: Yes

Introduction: Accreditation is internationally recognised as both an assurance and driver of healthcare quality and safety. As an external evaluation mechanism, accreditation aims to standardise healthcare practices, enhance patient safety, and improve system efficiency. Despite widespread implementation across over 70 countries, the causal evidence for accreditation’s impact remains complex, influenced by variations in assessment methodologies, health system contexts, and outcomes measures. This systematic review evaluates the effectiveness of accreditation on healthcare quality and safety, explores its alignment with the Quintuple Aim framework, and identifies contextual barriers and facilitators influencing its uptake and success.

Methods: A comprehensive systematic review was conducted using Medline (Ovid), Embase, CINAHL, and Scopus, covering studies published from 2014 to 2024. Eligible studies assessed accreditation’s impact on patient-facing healthcare services in high-income countries and defined accreditation as a structured, cyclical quality improvement process involving external peer review. Studies focusing solely on certification or licensing were excluded. Data extraction captured study characteristics, methodologies, key outcomes, and quality assessments using the Johanna Briggs Institute critical appraisal tools. Findings were mapped against the Quintuple Aim framework, evaluating effects on population health, patient experience, cost efficiency, clinician well-being, and health equity.

Results: Analysis of 100 studies demonstrated that accreditation significantly improves organisational systems and processes across various healthcare sectors. A key driver of impact is the promotion and reinforcement of patient safety, which translates into measurable improvements such as reduced 30-day mortality, higher survival rates, and shorter hospital stays. However, evidence on broader health system outcomes—including patient satisfaction, cost efficiency, clinician well-being, and health equity—remains inconsistent and poorly documented. Key facilitator of accreditation success includes financial incentives and a flexible, continuous quality improvement approach, rather than a rigid compliance-driven model. Conversely, barriers such as ambiguous standards, excessive bureaucracy, and documentation burdens often divert resources from direct patient care, limiting accreditation's overall effectiveness.

Conclusion: Accreditation plays a meaningful role in strengthening healthcare quality and patient safety, yet its broader systemic impact varies depending on implementation, adaptability, and healthcare context. While it fosters organisational improvement and patient safety culture, further research is needed to evaluate its influence on patient experience, economic sustainability, workforce well-being, and health equity. Policymakers should prioritise a dynamic, improvement-driven accreditation model that balances standardisation with practical, context-sensitive implementation strategies to maximise healthcare system performance and resilience

Disclosure of Interest: None Declared

Qualifying the Healthcare Provider Network: A Unimed-BH Quality Improvement Initiative: (3492) Maria Carolina de Toledo Sivieri Moreno

ISQUA2025-ABS-3492

M. C. D. T. S. Moreno ^{1,*}, V. Giudice ², A. Costa ³, T. M. D. S. Brasil ⁴, E. P. Pontes ⁴, I. C. D. G. Silva ⁴

¹Superintendence, ²CEO, ³CSO, Grupo IBES, Sao Paulo - SP, ⁴GERE, UNIMED BH, Belo Horizonte - MG, Brazil

Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Healthcare systems face challenges in ensuring consistent quality, safety, and efficiency across extensive provider networks. Audits are important for quality improvement and can be based on routinely available information, such as administrative databases, electronic patient records or medical registries, or they may be based on purposefully collected data from medical records or direct observations. Unimed-BH, one of the largest health cooperatives in Brazil, manages variability in care delivery and patient safety outcomes among its network providers as a critical issue. To be part of the program, each provider must present a specific set of attributes according to the type of establishment to which it belongs.

Objectives

This study aimed to design, implement, and evaluate a structured quality improvement program (Unimed-BH Healthcare Excellence Seal) to enhance provider quality performance, within the Unimed-BH network. Participation of healthcare providers in the program is voluntary.

Methods: IBES Accreditation Institution carried out the assessment of the conformity of the 40 healthcare organizations with the Requirements of the Unimed-BH Healthcare Seal of Excellence Manual, through a

team of 11 IBES Accreditation Surveyors from August to November 2024. The program's rating criteria are defined by 3, 4 or 5 stars, with 5 being the highest qualification score, according to the provider's degree of compliance with the manual's standards. The initiative involved a multi-phased approach: (1) surveyors training according to the program and standards methodology; (2) training and engagement of providers through collaborative workshops focused on quality criteria; (3) development of audit survey tailored to providers' organization, including clinical audits and feedback from healthcare professionals and patients; and (4) holding of a ceremony to deliver Certificates, with the respective financial benefit from the Unimed-BH to the certified organizations.

Results: In 2024, 100% of the network providers that joined the program demonstrated compliance with quality standards and were awarded according to the number of stars achieved in the evaluation process. Currently, the program involves providers from the hospital, oncology, radiotherapy, nephrology and pathological anatomy groups. 56% of the providers evaluated received the maximum award with 5 stars, 37% were recommended with 4 stars and 7% with 3 stars. There was an increase in progress when compared to 2023, where 26% of the services achieved 5 stars, 33% achieved 4 stars and 7% achieved 3 stars. Providers reported greater engagement in improvement processes, suggesting an safety culture.

Image:



Conclusion: The quality improvement program successfully standardized care delivery, enhanced patient safety, and promoted excellence across the Unimed-BH provider network. The results highlight the value of auditing interventions combined with leadership engagement and use of monitoring tools. This model offers a scalable approach for other integrated healthcare systems aiming to improve network-wide performance.

References: Jamtvedt G, et al. Improving healthcare quality in Europe: Characteristics, effectiveness and implementation of different strategies. European Observatory on Health Systems and Policies; 2019. No. 53.) 10.

Disclosure of Interest: None Declared

[Integrating specific AI-systems criteria in the French accreditation of healthcare facilities: \(2703\) Isabelle Dorleans](#)

ISQUA2025-ABS-2703

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: The use of artificial intelligence (AI) systems in care is rapidly growing within hospitals and clinics, whether as part of medical devices (MDs) in clinical decision support systems or as non-medical technologies (AI-assistants). In the absence of an HTA assessment for the majority of these systems, users might use AI systems without fully understanding their performance or limitations, or, conversely, might hesitate to use them for the same reasons.

At the same time, the European Union regulation on AI (EU AI Act) was definitively adopted in 2024 and is gradually being set up. In addition to CE-marking for MDs, the EU AI Act introduces a proportionate risk-based approach to AI regulation, with a gradual scheme of requirements and obligations depending on the level of risk posed to health, safety and fundamental rights. Software as a MD will be classified as high-risk AI systems with tailored requirements for both providers and deployers.

In this context, the French National Authority for Health (HAS) has broadened the digital risk management strategy, initiated in 2024, within the 6th certification cycle for healthcare facilities, applicable from September 2025.

Methods: In addition to the full review of the accreditation standards, a specific working group was set up to define the new criteria and their associated assessment elements. This group was made up of surveyors, IT experts and healthcare professionals.

A draft of the guide was released for public consultation, allowing all stakeholders to contribute.

Results: Two criteria relating to the use of AI systems in care were included in the updated version of the accreditation manual:

- one dedicated to the use of MDs in medical procedures, (e.g. in the field of radiology or pathology);
- an advanced criteria dedicated to the use of digital technologies without a medical purpose, to improve the organisation of care (e.g. AI-assistant able to draft medical documents).

The assessment items include, among others, the need to map the AI systems used within the facility, and an analysis of their impact (e.g. data transfer), the implementation of a technology selection process involving all the relevant stakeholders in the facility (IT, legal teams, etc.) and the provision of accurate information to patients and the implementation of a quality control process of the results given by AI systems when needed by the EU AI Act.

Conclusion: These two new criteria aim to help hospitals, clinics and healthcare professionals adapt to the increasing integration of AI in healthcare, while also anticipating the implementation of the EU AI regulation. The first visits will take place in September 2025, providing an opportunity to obtain valuable feedback from facilities.

Disclosure of Interest: None Declared

What is required to establish, sustain and make effective an accreditation program in a LMIC?: (1444) Dilantha Dharmagunawardene

ISQUA2025-ABS-1444

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Hospital accreditation programs are implemented in Low- and Middle-Income Countries (LMICs) to enhance quality and safety (Q&S) practice, policy and culture. Nevertheless, there is no reported consensus on best methods to establish and sustain effective accreditation programs in complex LMIC implementation contexts. The study aim was to investigate what is required to establish, sustain and make effective an accreditation program in LMICs, and to explore innovative strategies employed by LMICs for this purpose.

Methods: This study employed in-depth interviews to elicit and synthesise the perspective of global accreditation stakeholders. There were 14 participants from international accreditation and funding agencies and 14 representatives from LMIC national accreditation agencies. Interviews, between 45-90 minutes, held in English, were completed in January-February 2025. The interview guide utilised topics drawn from the ACES-GLEAM framework, which identifies enablers, barriers and characteristics to establish accreditation programs (1). Qualitative data were analysed thematically. Ethics approval for the study was granted from the Griffith University Human Research Ethics Committee, Australia (Approval Number 2024/403).

Results: The findings were categorised into factors contributing to establishment, sustainability and effectiveness (Table 1), and innovative strategies used by LMICs in program establishment and implementation. There was a high level of consensus in perceptions regarding these factors between international and national level representatives.

Establishment characteristics of reported accreditation programs were similar between international and national accreditation programs, due to the influence of the International Society for Quality in Healthcare External Evaluation Association (IEEA) International Accreditation Program. The one exception was a program still evolving, which is following the IEEA program principles of establishment, with a view to seeking future recognition by the IEEA.

International participants highlighted the importance of national level buy-in and ownership of the accreditation programs, whereas national level representatives emphasised the need for affordability, as enablers. Similarly, national and international stakeholders held different opinions on need to use context-specific standards for LMICs. Global stakeholders reported that standards should be the same in all settings to enable minimum QA and also QI across national boundaries. Conversely, national stakeholder believed

that context-specific standards should be used, in alignment with the IEEA RUMBA Principes (Relevant, Understandable, Measurable, Beneficial and Achievable). Additionally, some international and national level stakeholders were in favour of financial incentives, whereas others from both groups were not.

Stakeholders described effectiveness mainly in relation to achieving processes or outcomes related to Q&S practice and culture. Stakeholders highlighted the value of commitment of leaders, integration with quality improvement and clinical outcome measurement with robust information systems, and availability of multi-disciplinary and participatory structures for quality management in achieving effectiveness.

Most stakeholders linked sustainability to program resilience to withstand financial constraints, and representatives of international accreditation agencies linked it to the ability of IEEA re-accreditation. Efforts on training and learning, multi-stakeholder engagement, capacity building, resource availability, focusing on continuous quality improvement, and established quality culture were mentioned as key factors for sustainability by stakeholders.

National level participants from well-established accreditation programs in LMICs mentioned innovative strategies employed in program establishment and implementation: use of digital tools and platforms; step-wise implementation; learning and benchmarking through networking; training of hospital staff as surveyors who will in turn facilitate accreditation implementation as in-hospital consultants; and virtual surveyor training.

Table 1: Characteristics of Accreditation Program Establishment and Contributory Factors of Sustainability and Effectiveness in LMICs elicited by the Participants

ACES-GLEAM Parameter and Description	Characteristics of the Accreditation Program
Antecedent influences (Factor that occurs before the establishment and has the power to effect on the establishment of an accreditation program)	- System issues emerging due to crisis and emergencies (Ebola, HIV/AIDS) - Health system related Quality and safety issues - Variations in hospital practices - Consumer demands with rising socio-economic status - Medical Tourism - Mismatch between legislations and actual practice
Contextual Factors – Barriers (A set of circumstances and characteristics or unique factors that impede and challenge the establishment of an accreditation)	- Inadequate resources - Lack of competencies and capacity in accreditation - Staff turnovers - Lack of ownership and buy-in for the program - COVID Pandemic - Resistance to change - Non-availability of Data
Contextual Factors – Enablers (A set of circumstances and characteristics or unique factors that support and facilitate the establishment of an accreditation)	- Support from the local leaders and international agencies - Gradual or step-wise establishment and implementation - ISQua technical support - Affordability - Awareness and engagement of patients / people - Rewards and Incentive systems

	- Social Marketing
Standards (A desired level of performance against which actual performance is measured)	- Initial phase composed of exploring existing evidence and review of literature and national regulations - Developed with multi-stakeholder participation - Some programs – Adaptation to the local context with the technical support from international agencies and informed by the global evidence base - Pilot-tested in selected organizations - Divided opinions between national and international stakeholders on the value of context-specific versus global standards
Surveyors (External peer reviewer of performance against standards)	- National level clinicians and health staff who had experience in quality related activities - Trained by international or national level accreditation agencies - Training program consisted of theory-based and practical training with/ without virtual methodologies
Stimulants (Financial and other strategies useful to promote and sustain accreditation programs)	- Divided opinions on use of monetary incentives - Linkages with insurance reimbursements were the most common monetary incentives - Recognition and Branding as the commonest non-monetary incentives
Survey Management (Directing and coordination of external peer review of standards)	- Done by independent accreditation bodies - Includes survey scheduling, surveyor allocation, communication with accrediting organizations
Governance and Legislation (Laws, ordinances, regulations, policies and operating and controlling systems related to the programs)	- Successful programs had - High degree of independence - Robust linkages with legislation either as parliament acts, policies, circulars etc. - Governance structures with permanent, full-time staff - Time-tested, standard procedures and systems
Execution of Survey (Conduction of external peer review of performance against standards)	- Mainly composed of - Self-assessment prior to the survey - Accreditation survey with defined methodology - Awarding of accreditation for a defined period
Assessment and Monitoring (Assessment of the degree of success in meeting the goals and expected results of an accreditation program)	- No robust or routine formal evaluation of outcomes were done in most programs - Donor funded programs had evaluations at the end of the projects - Process evaluations are done in most programs with feedback from partner organizations and other stakeholders
Parameter	Contributing Factor
Effectiveness	- Leadership commitment and minimizing staff turnovers

	- Buy-in and engagement from all the stakeholders including patients - Facilitation of quality improvement rather than inspections during surveys - Linking with Quality Improvement and clinical outcomes - Integrated measurement frameworks and robust Information Systems - Availability of multi-disciplinary and participatory structures for quality management - Infrastructure readiness - Standardization of accreditation implementation processes (including monitoring and communication systems) - Facilities for learning on quality improvement and accreditation
Sustainability	- Availability of resources especially funding - Substantial efforts on training and learning - Local capacity building (internal surveyors, technical capability, financial) - Buy-in and engagement from all the stakeholders - Established quality culture with a focus on Continuous Quality Improvement - Non-reliance on individuals and or donors - Credibility of and standardization of implementation systems and processes - Patient and people engagement - Being a part of overall national strategic quality direction or policy - Use of incentives

Conclusion: Global accreditation stakeholders assert there are multiple factors contributing to the establishment, effectiveness and sustainability of accreditation programs, which can be used to guide LMICs. A key message was that agencies ‘bundled’ several factors together to achieve their goals. Furthermore, there were multiple innovations that were employed simultaneously to overcome their main barrier of resource constraints.

The identified factors for sustainability and effectiveness can be useful for accreditation stakeholders in their accreditation initiatives in LMICs. The knowledge generated provides lessons that can be adopted and adapted for implementation for establishing and implementing accreditation programs sustainably and effectively in LMICs.

References: 1. Dharmagunawardene D, Avery M, Bowman P, Greenfield D, Hinchcliff R. Factors Influencing the Establishment of Hospital Accreditation Programs in Low- and Middle-income Countries: A scoping review. Health Policy And Planning. 2025.

Disclosure of Interest: D. Dharmagunawardene Other: International assessor for Australian Council on Healthcare Standards (ACHS) International, D. Greenfield: None Declared, M. Avery Other: International assessor for Australian Council on Healthcare Standards (ACHS) International, P. Bowman: None Declared, R. Hinchcliff: None Declared

Adapting an international accreditation system to regional regulations and practice.: (1980) A. Lee

ISQUA2025-ABS-1980

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: The Shenzhen Hospital Accreditation Research Center (SHARC) was established as an independent third-party hospital accreditation organization in 2020. Its aim is to establish an accreditation programme, based on China's National standards and aligned to international best practice. The Chinese International Hospital Accreditation (CIHA) standards thus designed is an effective drive for promoting patient safety, and continuous quality improvement. This set of standards for hospitals accreditation was accredited by ISQua EEA in 2022. The first region to use CIHA standards was Shenzhen in 2023, followed by Guangzhou in 2024, and Hong Kong in 2025. As Hong Kong has different legislation and professional practices, it was necessary to introduce local adaptation. This was to ensure that that CIHA can be applied with pragmatic approach while maintaining the principal intent of the standards.

Methods: The CIHA consists of 3 chapters, 16 sections, 61 criteria and 186 clauses. Each clause specifies the elements required for compliance. Fifty-eight of the clauses have been identified as fundamental, which require full implementation and compliance by hospitals. Chapter 1 examines hospital functions and roles, Chapter 2 patient safety, clinical services and quality and Chapter 3 hospital management.

A task group of 36 experts and stakeholders was established to review all 186 clauses. The group was divided into 6 sub sections so that all clinical and managerial specialties were represented. The leaders of each sub section and senior representatives from the Hong Kong Hospital Authority took part in discussions. Commencing in April 2023 and culminating in September 2024, a total of 10 meetings were held.

Results: Through repeated iterations, consensus were built on the changes needed. All 186 clauses were kept with no alteration to intent. Differences were identified in 94 (50%) of clauses. These adaptations were due to differences in legislation, dialect, job titles and names of policies. The proportion requiring adjustments was higher among the clauses on governance and management [45/63 (71%)], compared with those on clinical care, patient safety and quality improvement [43/109 (39%)]. Of the 58 fundamental clauses, 36 (62%) required adjustment.

The CIHA – Local Adaptation Version has since been used for two hospitals in Hong Kong. Training of surveyors was conducted to ensure that all involved were well-informed about the local regulations and targets, together with the flexibility allowed in assessing compliance. The on-site hospital surveys were completed smoothly and excellent feedback was received from respective Hospital Chief Executives and the Hong Kong Hospital Authority.

Conclusion: With concerted efforts to study the healthcare related legislation and regulations in Hong Kong, successful local adaptation of CHIA has been achieved. Our experience has demonstrated that CIHA

standards could be applied to other countries/regions with different systems. With the vision to make CIHA universally applicable, further attempts to facilitate efficient adaptation is now on-going.

Disclosure of Interest: None Declared

Successful Control of a *Serratia marcescens* Outbreak in a University Hospital using a Bio-Disinfection Strategy: (3124) Viviane Maria de Carvalho Hessel Dias

ISQUA2025-ABS-3124

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Preferred presentation method: 10 Minute Lightning Talk (E-Poster)

Have you presented this abstract at an ISQua Conference before?: No

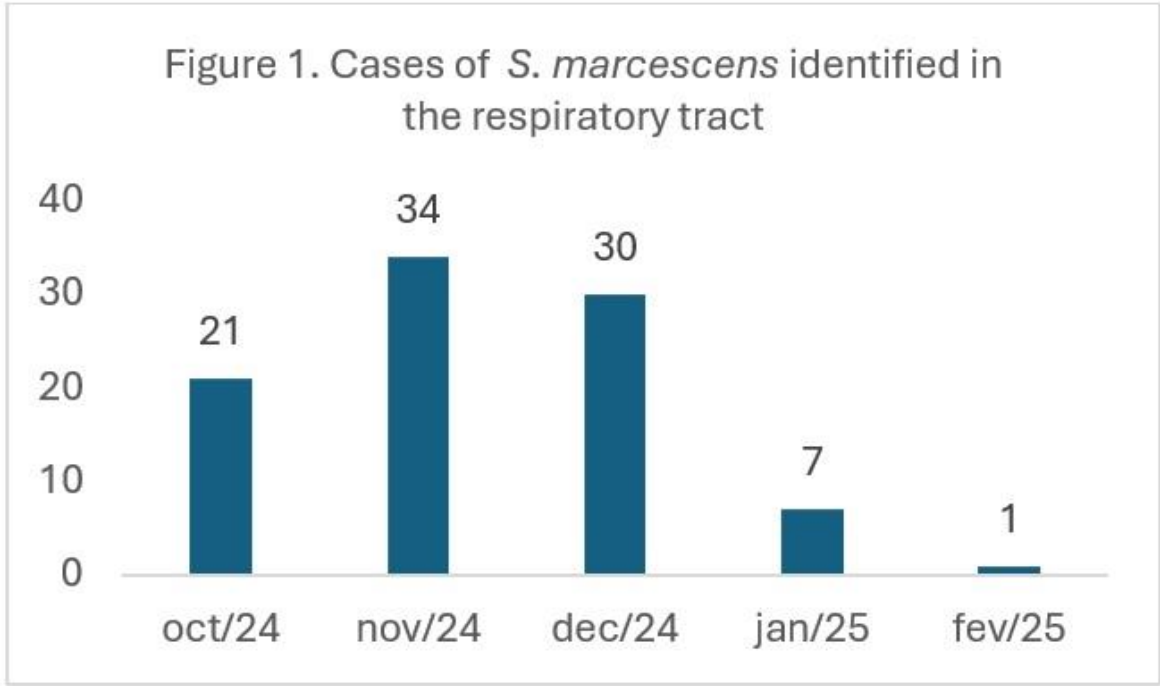
I confirm that the submission has been approved by all authors: Yes

Introduction: *Serratia marcescens* has been described as an important pathogen related to outbreaks in the hospital environment, especially in intensive care units (ICUs). Inadequate disinfection of surfaces and medical equipment, contamination of solutions and a remarkable ability to form biofilms are the main factors related to outbreaks involving this microorganism. The aim of this study is to present the process of investigating and controlling an outbreak of *Serratia marcescens* in a university hospital.

Methods: The hospital has 207 beds, 30 of which are of ICU, distributed over three different units. The hospital attends an average of 5,078 patients – day in a month and is a reference in traumatology. On October 18th, 2024, the microbiology laboratory notified the Infection Control and Prevention Team (IPC) of the unexpected occurrence of several positive results from respiratory samples for *S. marcescens* susceptible to carbapenems, but resistant to the other classes tested. From this point on, the IPC team developed a spreadsheet for monitoring cases, communicated the situation to the National Health Surveillance Agency (ANVISA) and established a flow for sending strains to the State Public Health Reference Laboratory (LACEN-PR) for clonal study using molecular typing by Infrared Spectroscopy (IR Bio Typer R) and Whole-Genome Sequencing in partnership with the LABSUR - Laboratory of Bacteriology Applied to Single Health and Antimicrobial Resistance of the Oswaldo Cruz Institute. To investigate the possible source, samples of the oral antiseptic, surface disinfectant and the hospital's water reservoir were taken for microbiological study. As an intervention measure, the IPC team recommended removing the patients from each of the three ICUs to a temporary location to allow for ICU repair maintenance, changing all the taps and carrying out terminal bio-disinfection by nebulizing with 6% hydrogen peroxide dry steam and silver ions. Patients were then removed from the first ICU on December 18th, 2024, and sequentially from the other two units. The bio-disinfection process was carried out on January 3rd, January 23th and February 11th, 2025 respectively in each of the three ICUs.

Results: Between October 18th, 2024, and February 28th, 2025, 94 patients with *S. marcescens* were identified in tracheal aspirates (77), bronchoalveolar lavage (16) and sputum (1), with most cases (71) occurring in patients admitted to the ICUs (76%). The tests conducted to detect contamination in the oral antiseptic, water supplies and surfaces were negative. The clonal study and Whole-Genome Sequencing showed the presence of three clusters possibly belonging to a single clone, which revealed a similar resistance mechanism with the presence of the bla-OXA 101 gene, a weak class D oxacillinase, in all the isolates from the three clusters. With the start of the ICU bio-disinfection process, the number of cases decreased considerably when comparing the months in the analysis period respectively (21, 34, 30, 7, 1 cases) as shown in Figure 1. The strain identified in the single patient in February 2025 was susceptible to all the classes of antimicrobials tested, unlike the previous cases, and probably no longer belongs to the outbreak.

Image:



Conclusion: The detection of this outbreak was timely and efficient, given the attention of the microbiology laboratory. Despite the exhaustive investigation, the source of the outbreak was not definitely achieved, however, the intervention carried out by removing patients from the ICUs for maintenance and bio-disinfection had a positive impact on reducing the appearance of new cases. Reports such as this can help other institutions that may experience similar situations.

References: Van Goethem S, et al. Genomic epidemiological analysis of a single-centre polyclonal outbreak of *Serratia marcescens*, Belgium, 2022 to 2023. Euro Surveill. 2024 Nov;29(48):2400144. doi: 10.2807/1560-7917.ES.2024.29.48.2400144. PMID: 39611205; PMCID: PMC11605797. Vetter L, et al. A Hospital-wide Outbreak of *Serratia marcescens*, and Ishikawa's "Fishbone" Analysis to Support Outbreak Control. Qual Manag Health Care. 2016 Jan-Mar;25(1):1-7. doi: 10.1097/QMH.0000000000000078. PMID: 26783861; PMCID: PMC4721213.

Disclosure of Interest: None Declared

A quality improvement initiative to optimize infection control through ADKAR - change management framework and andragogy in tertiary care hospital in Southern India: (3369)

Charan Raj Mede

ISQUA2025-ABS-3369

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Preferred presentation method: 10 Minute Lightning Talk (E-Poster)

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Change in infection control often involves what change management literature calls "first order" change: having an organisation improve something it already does. Infection control is an essential entity in hospital which directly affects the hospital performance through infection rates which may affect bed turnover, antibiotic burden, and out of pocket expenditure to the patient. Successful implementation of training program in Infection Prevention and Control (IPC) practices plays an important role to bring a sustainable change in the IPC practices, integrating proven management practices and andragogy techniques is essential.

Methods: The baseline assessment (pre-intervention) was done quantitatively by calculating baseline data on Hospital Acquired Infections (HAI) rates, surveys to assess staff awareness, desire, knowledge, ability and reinforcement and observational audits of infection control practices.

In the intervention phase, ADKAR was implemented in multiple steps, split into achievable goals. Awareness was created among healthcare workers through campaigns highlighting the risks and impact of hospital-acquired infections and the benefits of infection control practices. This was followed by creating a desire through the involvement of study participants and emphasizing personal benefits. Knowledge delivery was achieved using the Principles of Andragogy like self-directed learning methods and activities such as simulations and scenarios. Ability was enhanced by encouraging learners to apply this knowledge immediately on the job and through additional materials like checklists, worksheets, and standard kits.

In the post-intervention phase, quantitative data on HAI rates and follow up focus group interviews with staff was done to gather feedback on the intervention and any observed changes in practice. Quantitative data analysis was done through calculation of mean for survey responses, comparative analysis with paired t-tests of pre & post intervention survey results. HAI rates were compared through multivariate regression models after adjusting for potential confounders. For qualitative analysis, thematic analysis was done to identify common themes related to barriers, facilitators and perceptions of interventions effectiveness and triangulation was done to cross validate findings from qualitative and quantitative data to provide comprehensive understanding of interventions impact.

Results: For the study results, mean scores of awareness, desire, knowledge, ability and reinforcements were calculated on a scale of 1-5 for pre & post intervention data and paired t-test showed statistically significant improvements in all five ADKAR components ($p < 0.001$). It was also observed that there was a statistically significant drop in the hospital acquired infection rates like Surgical Site Infection (SSI) rates and Catheter Associated Urinary Tract Infection (CAUTI) rates from 2.5 to 1.5 per 100 procedures ($p = 0.02$) & 3.0 to 1.8 per 1000 catheter days ($p = 0.01$) respectively.

Image:



Conclusion: The study demonstrates that an ADKAR change management framework implementation using Principles of Andragogy paves a concrete plan in implementation of infection control practices. The statistically significant results shows positive reception of the intervention, a definitive change management framework and a scope for further improvement through similar intervention.

Disclosure of Interest: None Declared

Analysis of antibiotic prescriptions for outpatient respiratory diseases in South Korea: (1838) Yeseul Eom

ISQUA2025-ABS-1838

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Preferred presentation method: 10 Minute Lightning Talk (E-Poster)

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Antibiotic resistance is a serious public health problem worldwide, affecting not only patients' health but also social and economic issues such as increased medical costs. To promote appropriate antibiotic prescriptions and manage antibiotic resistance, the Health Insurance Review & Assessment Service(HIRA) evaluates antibiotic prescriptions used in outpatient settings across all medical institutions and discloses the results. This study aims to analyze the status of antibiotic prescriptions for outpatient respiratory diseases over the past 10 years.

Methods: The analysis data utilized health insurance outpatient claim data. The evaluation target is the entire medical institution. The antibiotic prescription rate for acute upper respiratory tract infection (J00~J06) and acute bronchitis (J20~J22) over the past 10 years from 2014 to 2023 was analyzed. The antibiotic prescription rate was analyzed in detail by medical institution type, patient age, and department.

Results: The current status of antibiotic prescription rates for outpatient respiratory diseases in Korea over the past 10 years is shown in Figure.

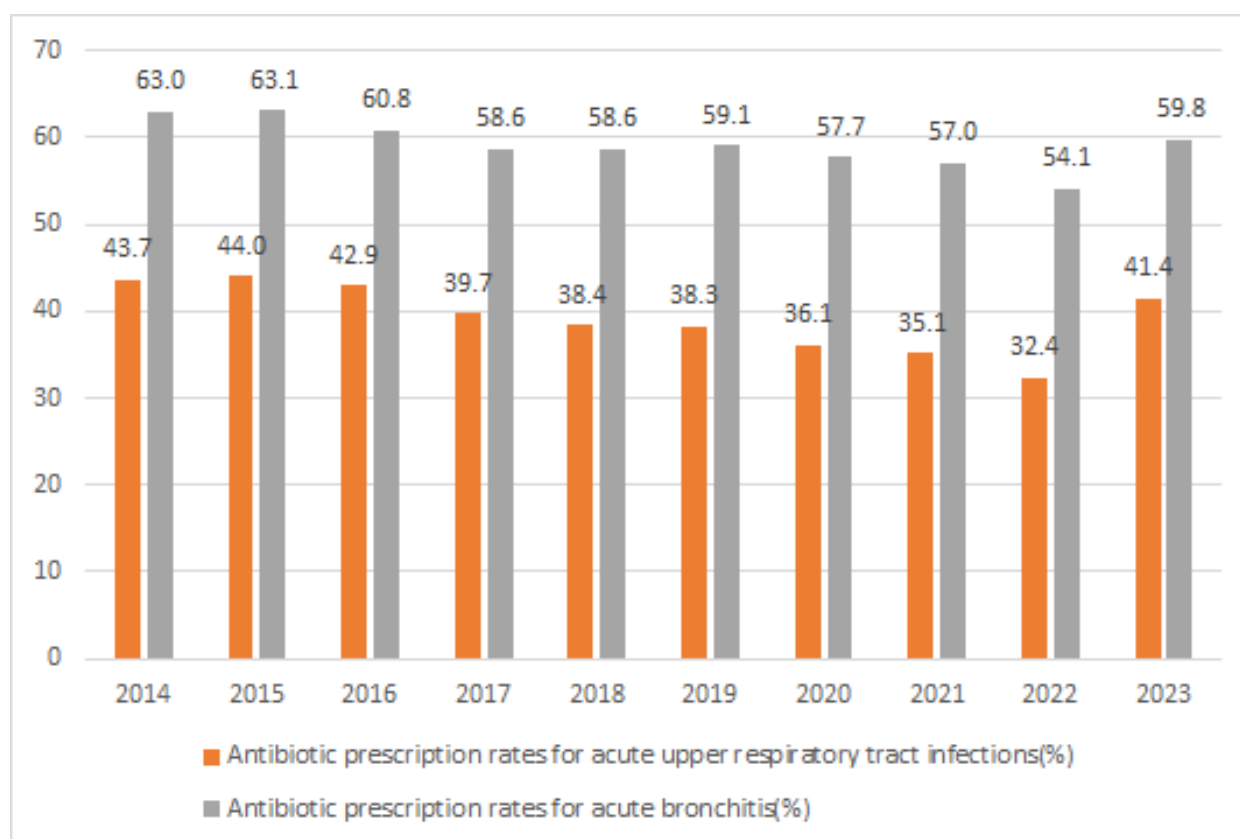
The rate of antibiotic prescriptions for acute upper respiratory tract infections steadily decreased from 2014 to 2022, but increased in 2023 after the declaration of COVID-19 endemicity, showing a 27.8% increase compared to the previous year. The rate of antibiotic prescriptions for acute bronchitis also showed a downward trend from 2014 to 2022, but increased in 2023, showing a 10.5% increase compared to the previous year. When comparing the number of visits to hospitals and clinics due to acute upper respiratory infections and acute bronchitis before and after COVID-19, it was about 120 million from 2014 to 2019, which was a similar level every year. However, between 2020 and 2022, when COVID-19 occurred, the number of treatments decreased to about 41% of the pre-COVID-19, and then recovered to the level of treatments in 2023.

By medical institution type, the antibiotic prescription rate increased in hospitals and clinics in 2023 compared to 2019, and by age, it increased in those under 18 years old. By department, it increased in pediatrics and otolaryngology in 2023 compared to 2019.

Factors		Antibiotic prescription rates for acute upper respiratory infections			Antibiotic prescription rates for acute bronchitis		
		2019 (A)	2023 (B)	B-A	2019 (A)	2023 (B)	B-A
Medical institution type	tertiary general hospitals	10.6%	4.4%	-6.2%p	28.7%	8.9%	-19.8%p
	general hospitals	32.1%	32.8%	0.7%p	47.2%	46.7%	-0.5%p
	hospitals	48.4%	51.0%	2.6%p	52.9%	58.5%	5.6%p
	clinics	37.7%	40.9%	3.2%p	60.0%	60.1%	0.1%p
Patient age	0~6 years	40.2%	48.7%	8.5%p	57.4%	62.7%	5.3%p
	7~18 years	38.8%	42.9%	4.1%p	60.0%	61.7%	1.7%p
	19~64 years	39.9%	40.4%	0.5%p	63.6%	60.1%	-3.5%p
	over the age of 65	26.4%	27.2%	0.8%p	48.8%	44.3%	-4.5%p

Department	Pediatrics	36.1%	43.6%	7.5%p	57.5%	61.8%	4.3%p
	ENT	42.2%	46.6%	4.4%p	76.4%	73.9%	-2.5%p

Image:



Conclusion: The antibiotic prescription rate for outpatient respiratory diseases has been continuously decreasing, but has increased since the COVID-19 outbreak. It was analyzed that changes in quarantine policies and occurrence of respiratory diseases during the COVID-19 period had an impact. HIRA needs to continuously provide feedback of antibiotic prescriptions to medical institutions and support quality improvement more actively. In addition, academia and the government need to work together to educate medical professionals on the proper use of antibiotics and improve awareness among the general public.

References: Pharmaceutical benefits assessment result report(2023) published by HIRA, HIRA claims data.

Disclosure of Interest: None Declared

Implementation of a Rational Use of Antimicrobials Program in Primary Health Care in the Municipality of São Paulo: A Proposal from the Infection Control Commission of the Health Care Network (2898) Marta de Oliveira Ramalho

ISQUA2025-ABS-2898

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Antimicrobial resistance (AMR) is one of the greatest challenges to global public health, significantly impacting the quality, safety, and efficacy of treatments. Primary Health Care (PHC) plays a crucial role in addressing this resistance, as there is concern over a potential rise in the prevalence of infections caused by community-acquired resistant microorganisms. It is important to note that most antimicrobial prescriptions occur outside of the hospital setting, particularly in PHC services, and the highest consumption of these medications is observed in the general community. Therefore, several international organizations emphasize the importance of developing clinical protocols for the treatment of community infections, contributing to the reduction of indiscriminate antibiotic use and improving the quality of treatment. The Infection Control Commission of Health Care-Related Infections (CCIRAS) of the social health organization Associação Saúde da Família, in São Paulo, proposed the implementation of a rational use of antimicrobials program to improve the management of these medications, aiming for therapeutic efficacy and reduced resistance. The objective of this study was to describe the implementation of a rational use of antimicrobials program in PHC, focusing on monitoring prevalent infections relevant to public health, such as syphilis and tuberculosis, as well as the creation of clinical protocols for the most prevalent bacterial infections.

Methods: The program was developed in four main stages:

1. Establishment of the CCIRAS;
2. Definition of monitoring indicators for tuberculosis and syphilis;
3. Implementation of ceftriaxone dispensing protocols;
4. Development of antimicrobial protocols for the most prevalent bacterial infections in PHC.

Results: The implementation of monitoring indicators for tuberculosis and syphilis care during pregnancy was carried out through the completion of electronic forms, resulting in:

- Adherence Rate to Treatment Directly Observed (TDO): 72%;
- Rifampicin Resistance Rate: 3.6%;
- Adequate Treatment Rate for Pregnant Women with Syphilis: 86.4%;
- Adequate Treatment Rate for Sexual Partners: 75%.

Since ceftriaxone is the broad-spectrum antibiotic most dispensed in PHC, its use is restricted to treating infections caused by *Neisseria gonorrhea*, specifically for urethritis, cervicitis, or pelvic inflammatory disease

(PID). Thus, internal workflows were established for each health-care unit, as well as barriers to mitigate the risks of incorrect dispensing, achieving an Adequate Use Rate of Ceftriaxone of 91.5%. Subsequently, to rationalize and reduce inappropriate and indiscriminate use of antimicrobials, an expert institutional committee was formed to create protocols for the most prevalent bacterial infections: acute pharyngitis; acute otitis media; acute rhinosinusitis; community-acquired pneumonia; exacerbation of chronic obstructive pulmonary disease; urinary tract infection; skin infections; diabetic foot ulcers and sexually transmitted infections. These protocols were subjected to public consultation with all doctors in the network, and their management will be based on monitoring the dispensing of antimicrobials in each service.

Conclusion: The implementation of the rational use of antimicrobials program in PHC proved to be an effective strategy to improve care quality, reduce microbial resistance, and ensure patient safety. This report reinforces the importance of proper antimicrobial management in PHC for the sustainability of health systems.

Disclosure of Interest: None Declared

A Study on the Application of Lean Methodology to Enhance the Process Flow of Emergency Medicine Department in a Tertiary Care Hospital: (3615) Reenu Poojitha Kalangi

ISQUA2025-ABS-3615

R. P. Kalangi ^{1,*}, C. R. Mede ¹, L. B. Nori ¹ and Dr. N. Sai Nikhil Goud, Dr. Sachin Biradar

¹Hospital Administration, Nizam's Institute of Medical Sciences, Hyderabad, India

Preferred presentation method: 10 Minute Lightning Talk (E-Poster)

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: This study focuses on the application of Lean methodology to optimize the process flow within the Emergency Medicine Department (EMD) of a 1500-bed tertiary care super-specialty hospital. The EMD globally faces significant challenges, including overcrowding, long waiting times, and inefficiencies in patient care. Lean methodology, initially developed for the manufacturing sector to eliminate waste and improve process efficiency, was applied to identify and address bottlenecks in the EMD process flow, ultimately enhancing patient outcomes and the quality of care.

Methods: A cross-sectional, interventional study was conducted over a period of one year, involving observation of 380 patients in pre and post intervention phases of 3 months each, interventional phase of 6 months. Data on time of patient arrival, admission, diagnostics, shifting and discharge were collected. Value Stream Mapping (VSM) was used to identify value-added and non-value-added activities, highlighting bottlenecks in the process flow.

In the intervention phase, the following measures were implemented to enhance the efficiency: optimized ambulance management, increased triage efficiency through NELS training and standardized triage protocols, implementation of fast track systems, efficient bed management, establishment of dedicated transfer teams, adoption of communication tools and handover checklists, provision of access to radiology console in emergency, introduction of pre-admission counseling and support, development of emergency

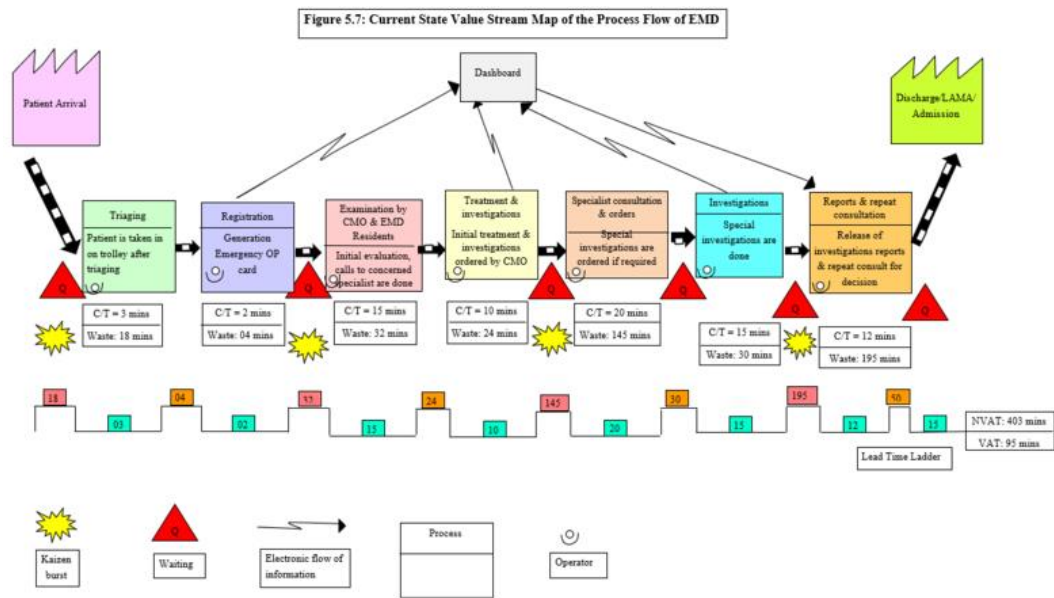
policies and protocols, overlapping shifts and standardized handover protocols, development of SOP for EMD. The study also incorporated inputs from EMD doctors and nurses through Nominal Group Technique.

In the post-intervention phase, all parameters analyzed during the pre-intervention phase were reassessed, and the impact of Lean interventions on process efficiency and patient care was evaluated using independent T-test.

Results: The study identified several bottlenecks, including delays in triage, bed availability, diagnostic procedures, and patient transfers. The average length of stay for patients under observation was 498 minutes. Key issues included limited trolley/bed availability, inadequate staffing, inefficient handing over techniques and delays in diagnostic tests and admissions. The current state VSM revealed a value-added time of 95 minutes and non-value-added time of 403 minutes, which was reduced to 213 minutes with targeted interventions.

The non-value-added time was significantly reduced from 403 minutes (SD=96 mins) to 213 minutes (SD=43 mins) post-intervention ($p<0.05$).

Image:



Conclusion: The application of Lean methodology in the EMD significantly improved process efficiency and reduced patient wait times by almost 52.8 %. By addressing identified bottlenecks, the study demonstrated enhanced patient care and operational efficiency. Recommendations include continuous training, regular process audits, and technology integration to sustain improvements. The findings underscore the value of Lean principles in optimizing emergency department operations, leading to better patient outcomes and increased efficiency of Emergency Medicine Department.

Disclosure of Interest: None Declared

Enhancing Inpatient Medication Safety with an Intelligent Design Integrating Human Factor Technology and Lean-Green Approach: (2455) Ching-Hua Huang

ISQUA2025-ABS-2455

Preferred presentation method: 10 Minute Lightning Talk (E-Poster)

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Medication errors is one of the most common incidents in healthcare institutions, usually ranking top 3 in Taiwan. It is crucial to prioritize the perspective of clinical users by developing and adopting intelligent software and hardware solutions to create a user-friendly human-machine interface for enhancing patient medication safety as well as reducing workload for healthcare professionals. Herein, we would present a quality improvement program to achieve a safer and more efficient medication administration process.

Methods: This quality improvement program was conducted in a tertiary referral center, which comprised of a total of 1,140 beds and handled an average of approximately 140,000 inpatient prescriptions per month in 2024, in middle Taiwan. A multidisciplinary team, including physicians, pharmacists, information technology engineers, and nurses, was organized to perform quality improvement by adopting a lean approach with a focus on human-centered design and eco-friendly paper reduction. Initially, real-time observations were conducted from the point of prescription issuance to that of medication administration. Each step was carefully examined to identify vulnerable points for improvement. The improvement strategies implemented were as follows: (1) Designing a Pharmacist Medication Service App – The traditional paper-based workflow for pharmacists dispensing and reviewing unit-dose (UD) long-term medications was replaced with a tablet-based interface. This wireless solution was expected to enhance mobility and efficiency for pharmacists. (2) Automated Detection and Comparison of Patient Medication History – A system was developed to automatically detect and compare patients' pre-hospitalization long-term medication records. It was designed to alert physicians and pharmacists to evaluate whether these medications should be continued during hospitalization. (3) Automating the Medication Return Process – Instead of printing daily paper lists of unused inpatient medications for nurses to manually return them to the pharmacy, a system was designed to automatically track each patient's medication status. Unused or expired prescriptions are flagged for return, allowing nurses to verify and confirm them in the system. Once confirmed, the return list would be seamlessly integrated into the pharmacist's interface for final review and approval.

Results: A comparative analysis of improvement benefits was conducted, using June–October 2023 as the pre-improvement period and January–May 2024 as the post-improvement period: (1) Reduction in Dispensing Error Rate – Decreased from 0.00614% to 0.00598%, achieving a 2.6% improvement. (2) Reduction in Online Prescription Return Rate – Dropped from 17.2% to 2.2%, achieving an 87.2% improvement. (3) Reduction in Pharmacists' Work Environment Noise Levels – Maximum noise levels decreased from 81.8 dB to 45.4 dB, achieving a 22.6% improvement. (4) Efficiency in New Patient Medication Review – The time required per patient was reduced from approximately 15–30 minutes to 10–20 minutes. (5) Paper Savings – An average of 140.9 kg of paper saved per month.

Conclusion: With the help of the intelligent design integrating human factor technology and lean-green approach, we have comprehensively optimized medical personnel workflows, thereby enhancing work efficiency and medication safety. By systematically implementing these solutions, we have also achieved “Environmental, Social, and Governance”-driven paperless operations, leading to the formation of a green healthcare ecosystem with sustainable development.

Disclosure of Interest: None Declared

Application of Lean methodology to improve cataract surgery quality and efficiency: (3157)

YI CHEN

ISQUA2025-ABS-3157

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¹Department of Quality Management, ²Department of Nursing, ³Department of Ophthalmology, ⁴Department of Pharmacy, ⁵Division of Medical Affairs, Cathay General Hospital, Taipei, Taiwan

Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Amid the post-pandemic shortage of healthcare personnel, ensuring surgical safety and enhancing efficiency have become pressing concerns for hospitals. The outpatient cataract surgery process was previously complex, adversely impacting surgical efficiency and causing an average daily delay of 40.2 minutes, which led to patient complaints. This project seeks to optimize the outpatient cataract surgery process by utilizing Process Cycle Efficiency (PCE) as the primary performance indicator, aiming to increase PCE to 25% and establish a high-efficiency outpatient surgical model.

Methods: A project improvement team was established to implement Lean management principles, comprising members from the ophthalmology, nursing, pharmacy, medical affairs, and quality management departments. In April 2024, the team conducted on-site observations involving 30 patients, documenting the entire process from the ophthalmologist's prescription to the patient's postoperative discharge. A total of 32 time points were recorded and analyzed.

According to Lean management principles, time was categorized into Value-Added (VA) and Non-Value-Added (NVA) activities. Prior to the improvements, the VA time was 34 minutes, whereas the NVA time was 263 minutes, resulting in a PCE of 11.5%.

In June 2024, the project team utilized a checklist to audit the performance of 124 cataract surgeries, identify the root causes of inefficiencies, and develop a cause-and-effect diagram. Using the Pareto principle, the key issues identified were: (1) patients were required to personally collect and transport surgical medications, (2) the complex billing process for cataract surgery, and (3) the excessive variety of ophthalmic drug kits used by surgeons. Based on these findings, the team introduced several improvement strategies: (1) optimizing medication management and distribution for cataract surgeries, (2) simplifying patient billing procedures, and (3) consolidating ophthalmologists' cataract surgery drug kits.

This study is observational and does not involve any interventions. As the study does not involve patient privacy or identifiable data, an ethics review was deemed unnecessary following consultation with the Institutional Review Board.

Results: A comparison between the pre-improvement period (Q2 2024) and the post-improvement period (Q4 2024) showed an increase in PCE from 11.5% to 25.1%. After the improvements, the average total waiting time was reduced from 175 minutes to 86 minutes ($P < 0.05$). Likewise, the walking distance was reduced from 419.5 meters to 259.4 meters, reflecting a 38.2% decrease.

No surgical scheduling delays occurred due to patients' failure to complete preoperative preparations, preventing an estimated \$163.2 in daily operating room losses. Paper consumption was significantly reduced, saving an estimated 24 reams of A4 paper annually, which corresponds to a reduction of 648 kg in carbon emissions.

Notably, the volume of cataract surgeries increased by 35%, and patient satisfaction with the surgical process improved from 80 to 86 points on a 0–100 scale (where 0 represents the worst and 100 the best satisfaction level).

Conclusion: The implementation of Lean management significantly improved the efficiency of cataract surgery. By fostering cross-disciplinary collaboration and adopting a patient-centered approach, unnecessary waiting and transportation times were minimized, thereby enhancing overall surgical quality. This optimization not only facilitated improved postoperative patient education but also enabled the delivery of safer and more efficient surgical care within limited resources.

Disclosure of Interest: None Declared

Quality of Life in Norwegian Long-Term Care Services for Older Adults: An Interview Study Using the Adult Social Care Outcomes Toolkit (ASCOT): (2186) Lisa Victoria Burrell

ISQUA2025-ABS-2186

L. V. Burrell ^{1,*}, M. K. R. Sogstad ¹

¹Department of Health Sciences in Gjøvik, The Centre for Care Research, Gjøvik, Norway

Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Quality improvement, policy development, priority setting, and assessments of cost-effectiveness in long-term care (LTC) services have suffered from a lack of information on quality of care, and there is a need for tools to evaluate service outcomes. Since LTC services aim to be person-centered and developed in collaboration with service users, measuring quality from the care recipient's perspective is essential. Measures of care related quality of life (CRQoL) contribute information on how effective the services are at meeting the needs of care recipients, maintaining their everyday functioning, and adapting the services to individual preferences. The Adult Social Care Outcomes Toolkit (ASCOT) is a measure of CRQoL from the user's own perspective. ASCOT was developed to measure the impact of care services on all the aspects of care recipients' QoL that may be affected by the services and is applicable across diagnoses and services.

The objective of this study was to describe CRQoL in Norwegian nursing homes, sheltered housing and home-based services using ASCOT and assess the contribution of these services to CRQoL.

Methods: Data were collected in three Norwegian municipalities from October 2022 to January 2024. We interviewed 185 people in nursing homes, 138 people in sheltered housing, and 148 people receiving home-based services with the ASCOT interview. ASCOT measures both the current CRQoL and the expected CRQoL in the hypothetical absence of services. The CRQoL gain is the difference between current and expected scores and measures the direct impact of services on CRQoL. Data were analysed with descriptive statistics.

The study received ethical approval from the Regional Committee for Medical and Health Research Ethics in Norway. Raters evaluated care recipients' consent before and during the interview.

Results: The summed score for current CRQoL was 18.6 (SD: 3.5, possible range 0-24) in nursing homes, 19.6 (SD: 3.3) in sheltered housing, and 19.0 (SD: 3.7) in home-based services. Care recipients reported higher CRQoL for the basic domains of food and drink, personal cleanliness and comfort, accommodation cleanliness and comfort, safety, and the dignity domain than for the higher order domains of social participation, activity, and control over daily life. Many care recipients reported unmet needs for social participation, activity, and control over daily life.

The expected CRQoL mirrored anticipated differences in the need for care between service types, since the expected CRQoL was lowest for nursing home residents and highest for home-dwelling care recipients. Moreover, all services significantly improved CRQoL for all domains, and the CRQoL gain increased with increasing service intensity.

Conclusion: Norwegian care recipients who live in nursing homes or sheltered housing, or receive home-based services had high CRQoL. This can be attributed to high scores on the basic domains and the dignity domain, whereas the current CRQoL was lower in the higher order domains social participation, activity, and control. The novel insight gained from this first study using ASCOT in Norway can aid further quality improvement, service development and priority setting by highlighting the need for improvements in social relations, meaningful activity and control.

Disclosure of Interest: None Declared

Local Adaptation, Global Impact: Qmentum connects Care, Workforce, and Sustainability.: (3220) Adriana Freitas

ISQUA2025-SES-3220

A. Freitas ^{1,*}, M. Morais ¹

¹QGA, São Paulo, Brazil

Proposed Session Duration: 45 Minutes

Session Description: Qmentum is a healthcare accreditation methodology developed 65 years ago in Canada, aimed at promoting continuous improvement in care quality. In Brazil, it was introduced in 2006, becoming a reference for healthcare organizations seeking excellence. With flexible and scalable standards, Qmentum is present in over 14,000 locations in 40 countries, covering all five continents. The Qmentum Global methodology offers adaptable standards, robust survey methods, and a customer support model provided by experts with over 15 years of experience, including co-creating solutions. This

approach fosters integrated learning, data-driven improvements, and innovation, aligning with local needs while driving measurable and sustainable outcomes. Its core pillars—Governance, Person-Centered Care, and Workforce—ensure that organizations not only meet quality and safety requirements but also promote a healthy and sustainable work environment. In Brazil, Qmentum has already recognized 417 organizations as accredited, standing out as an essential tool for the transformation of the healthcare sector. Looking to the future, Qmentum continues to evolve, integrating innovative and sustainable practices to address global healthcare challenges, connecting care, workforce, and sustainability in different contexts.

Session Format: - **Main Presenter (25 min):** Introduction and general overview of the Qmentum methodology, its core pillars (Governance, Person-Centered Care, and Workforce), and its global impact. Emphasis on the model's adaptability across different contexts, supported by successful case examples.

- **Co-Presenter (20 min):** Practical application of the Qmentum methodology in healthcare organizations. A real-world case study illustrating the challenges and benefits of implementation, including its impact on patient safety, workforce experience, and healthcare system sustainability.

- **Format:** Interactive panel discussion with an expository presentation, incorporating case studies and audience engagement through a Q&A session at the end.

Target Audience: Healthcare Managers and Leaders

Accreditation and Quality Professionals

Physicians, Nurses, and Multidisciplinary Team

Researchers and Academics

Objectives: This work presents the Qmentum methodology, focusing on its adaptability to local contexts, sustainability, and healthy work environments. It explores how its core pillars – Governance, Person-Centered Care, and Workforce, drive continuous improvement and shape the future of healthcare accreditation

Research: The Qmentum methodology, based on decades of research and evidence, improves healthcare quality by integrating local needs with global standards. Its focus on continuous improvement, supported by data analysis, drives measurable outcomes across healthcare systems. Key policy drivers include international accreditation standards and regional policies promoting sustainability and quality. In Brazil, Qmentum aligns with government goals to enhance care quality and create healthy work environments, supporting global initiatives like the UN's Sustainable Development Goals (SDGs). Pilots and initiatives, especially in Brazil, demonstrate how Qmentum's flexible standards address challenges like governance and workforce sustainability, ensuring relevant and sustainable improvements.

Suitability: This session presents the Qmentum methodology, an innovative and flexible approach to accreditation, promoting quality and sustainability in healthcare systems. Focusing on three essential pillars—Governance, Person-Centered Care, and Workforce—Qmentum stands out for its ability to integrate global practices into local contexts, generating significant and measurable impact. Furthermore, the session offers a unique opportunity for participants to explore how Qmentum can be applied in different realities, encouraging the exchange of experiences and the construction of collaborative solutions. Does it have any exclusive features that could attract participants?

1. **Global Adaptability with Local Impact:** The Qmentum methodology is unique in its ability to adjust to specific characteristics, offering tailored solutions that respect local cultures, realities, and standards while maintaining global quality standards.

2. **Integrated Approach:** Unlike other methodologies, Qmentum integrates three essential pillars—Governance, Person-Centered Care, and Workforce—into a single framework, providing a comprehensive view of accreditation.
3. **Focus on Sustainability:** At a time when sustainability is a global priority, Qmentum stands out by incorporating environmental, social, and corporate practices, aligning with the current demands of healthcare systems.
4. **Networking and Collaboration Opportunities:** The session will encourage the exchange of experiences and ideas among participants, creating a space for collaborative discussions and future partnerships.

Innovation and the Future of Accreditation: By exploring how Qmentum is shaping the future of accreditation, the session offers insights for professionals who seek to stay updated with trends and innovations in the field.

Have you presented this session at a Conference before including ISQua?: No

Disclosure of Interest: None Declared

Day 3 – Wednesday 15th October

Morning

Short Orals

The development and preliminary evaluation of a co-designed digital intervention using social connection to support young people waiting for mental health treatment: (3368) Lindsay Dewa

ISQUA2025-ABS-3368

L. Dewa ^{1 2,*}, E. Mullins ^{1 2}, A. L. Neves ¹, M. Di Simplicio ³, E. Brooks-Hall ⁴, N. Jackson ⁴, Y. Neisi ⁴, C. Sims ⁴, P. Aylin ¹

¹School of Public Health, Imperial College London, ²NIHR Imperial Biomedical Research Centre, ³Department of Brain Sciences, Imperial College London, ⁴Co-researcher, London, United Kingdom

Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Referrals to mental health services are at an all time high, and young people (YP) waiting for mental health treatment are often left feeling isolated without support. Face-to-face support is difficult to access. Current digital tools to support young people's mental health have potential to provide support but they are often not co-designed, personalised, or focused on supporting YP while waiting for treatment. A new, co-designed digital intervention to support YP while waiting for treatment is urgently needed. Digital technology aimed to promote social connection can address this gap and reach many YP to reduce deterioration while waiting, is low cost, and scalable.

Project objectives:

1. To co-design a new digital intervention for social connection to support young people aged 16-25 years while waiting for mental health treatment
2. To undertake a preliminary evaluation of the intervention by assessing the acceptability and feasibility of the new digital intervention

Methods: We worked in partnership with 4 co-researchers to co-produce this research by abiding by the five principles of co-production. Co-design methodology was supported by the co-researchers, designers, and researchers. The co-researchers were involved in all research stages. We followed a Design Diamond approach to co-design the new digital intervention in four stages: Discover (exploring the problem), Define (co-creating the brief), Develop (generating ideas and creating prototypes), and Deliver (focusing the final prototype) across 8 co-design workshops from May to December 2024 with 6 co-designers with lived experience of waiting for mental health treatment. Nine professional stakeholders attended 3 workshops. Feedback was generated across all workshops, coded/thematically analysed, and reported back to all involved. Co-researchers were trained to co-facilitate the co-design workshops and were involved in all workshop planning meetings. We used our co-produced conceptual framework¹ of the key components and indicators for digital social connection to guide workshop discussions.

In June 2025, we will conduct a preliminary evaluation of the digital intervention prototype to assess the digital solution's feasibility and acceptability via semi-structured interviews with YP and healthcare professionals. Ethics will be obtained from the Imperial College Research Ethics Committee. Interviews will be transcribed and coded across the trained co-researchers and researchers and analysed via a co-produced thematic analysis.

Results: Discover – The main themes from stakeholders were that user journeys in accessing and waiting for treatment were complex, the system was hard to navigate, services were fragmented and non-integrated, poor communication exists, young people felt neglected and not listened to, the waiting time is too long, and there are accessibility issues and a lack of personalisation.

Define – Four main themes were identified:

1. Prevention strategies to support young people so they don't reach crisis point (e.g., self-management tools)

2. Having different services that YP interact with know what they've been through so YP don't have to repeat their history
3. Feeling empowered: understanding mental health and the healthcare system better
4. Knowing that they are not alone, are feeling heard, and that others have gone through similar experiences

Develop – The main themes of discussion were: the importance of providing safe spaces, relating and connecting with others on waiting lists to facilitate social connection, YP expressing themselves/having conversations, transparency, and support that feels personalised and unique in the form of storytelling and guidance through videos and group activities.

Deliver – Co-researchers decided our intervention should be an app format due to its accessibility, familiarity, and ability to provide on-the-go support. The final app prototype focused on personalisation (including questions about users symptoms, risk factors, previous help received), and considered app features, functionality (e.g., considering an 'incognito' mode), content (e.g., experts with lived experience emphasizing their expertise), and app engagement and safety (e.g., safety monitoring).

We will present the co-designed app prototype, and discuss preliminary evaluation results and any unintended consequences found. Evaluation results are expected in September 2025.

Conclusion: Providing a digital intervention to YP while they wait for mental health treatment that targets social connection and social support and is co-designed by YP can increase the likelihood that the intervention is relevant, engaging, accessible, and scalable. The app is likely to enhance clinical practice by providing support and reducing the deterioration of symptoms in YP while waiting for mental health treatment.

References: 1. Dewa LH, Lawrance E, Roberts L, et al. Quality Social Connection as an Active Ingredient in Digital Interventions for Young People With Depression and Anxiety: Systematic Scoping Review and Meta-analysis. *J Med Internet Res* 2021;23(12):e26584. doi: 10.2196/26584

Disclosure of Interest: None Declared

Patient Journey of an Emergency Service focused on Patient-Centered Care: A Co-Production and a Transdisciplinary Approach: (3675) Mario Carvalho Batista

ISQUA2025-ABS-3675

M. C. Batista ^{1,*}, A. Honore ², M. Boeger ³, A. Bancatelli ⁴, R. Amorim ⁵, L. Pereira ⁶

¹TI, ²Facilities, Hospital São Camilo SP, ³Consultant, Hospitalidade S/C, ⁴Quality, ⁵Medical management, ⁶Management of care practices, Hospital São Camilo SP, São Paulo, Brazil

Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: This study highlights the relevance of transdisciplinary action in the co-creation of services aligned with patients' needs. In an emergency service, integration between areas optimizes processes, adds value to the experience and promotes greater safety and efficiency in care.

Methods: Mapping the processes of the Adult Emergency Room using the Value Stream Map identified weaknesses and impacts on time management. The main bottleneck identified was the total patient journey time, which reached 6 hours, above the target of 4 hours. Analysis using the Ishikawa tool revealed 58 weaknesses in the 6Ms: material, method, manpower, mother nature, machinery and measurements.

The mystery shopping methodology was applied to assess the patient's experience, in addition to quantitative and qualitative analysis considering service times (totoem, triage, registration, anamnesis, medication, exams, reassessment and discharge) and SLAs of internal and external service providers, such as the exams laboratory, environmental services and valet parking. The team reviewed three months of Customer Service records, mapping expectations, risks and critical points of the journey.

The improvement involved the analysis of flows and processes, focusing on transdisciplinary communication and integration between services. Contingencies for system outages, communication between the pharmacy and nursing, notification of environmental services during a cleaning crisis and identification of patients expected to return within 72 hours were reviewed.

Operational areas (Clinical, Nursing, Diagnostics, Pharmacy, Customer Service, Maintenance and Property Security) and corporate areas (HR, IT, Marketing and Quality) participated in the project.

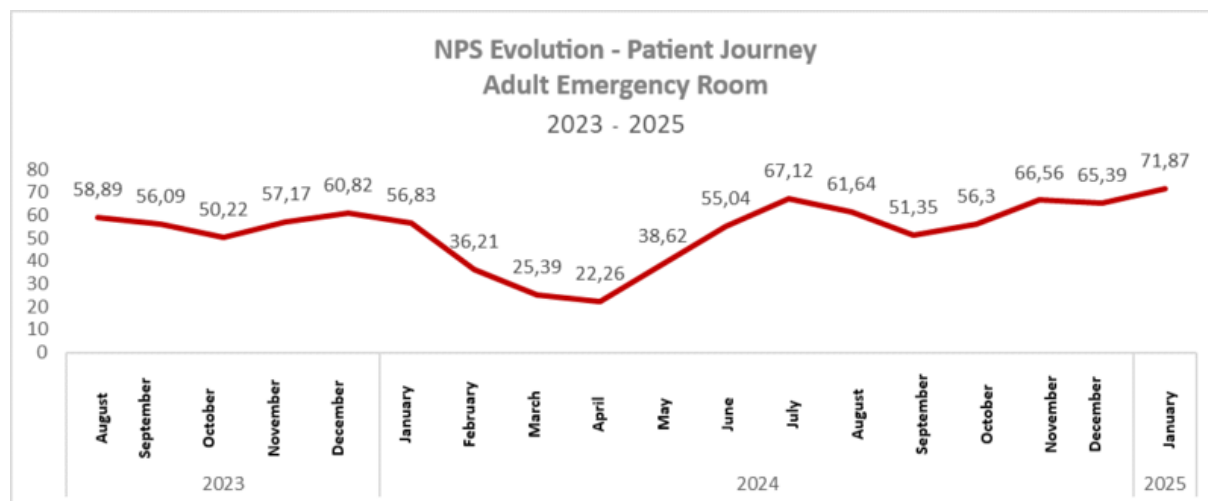
89 macro actions were defined, of which 76 remained active:

- 46% (35) improvements in electronic medical records and time tracking.
- 26% (20) review of internal flows.
- 28% (21) training, team reinforcement, communication and adjustments to the physical structure.

Results: After implementation, the NPS (Net Promoter Score), which was below 50, showed significant improvement, approaching the target of 76 as of May 2024, even in the face of the dengue epidemic that increased the demand for care.

The patient journey in the Adult Emergency Room, previously 6 hours, approaches the target of 4 hours. The teams began to monitor this indicator in real time, allowing continuous adjustments to minimize variations and maintain expected performance.

Image:



Conclusion: : Collaboration between areas allowed a comprehensive revision of the physical structure, processes and service model. Strategic alignment and constant monitoring of indicators were fundamental to the success and continuity of the improvements observed.

Disclosure of Interest: None Declared

Development and Early Pilot Testing of a Patient-Centered Hypertension Care Intervention (BP Sawa) in Nairobi, Kenya: (3858) Madeline Pesec

ISQUA2025-ABS-3858

M. Pesec ^{1,*}, I. Miller ¹, S. Payne ¹, S. Kiptiness ², R. Korom ², J. Ross ¹

¹Primary Health Care, Ariadne Labs, Boston, Massachusetts, United States, ²Penda Health, Nairobi, Kenya

Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Hypertension prevalence is rising globally, with low- and middle-income countries experiencing a disproportionate burden of morbidity and mortality [1]. In Kenya, only 22% of individuals diagnosed with hypertension receive treatment, and just 11% achieve blood pressure control [2]. Despite high private healthcare utilization across all income levels, hypertension management in private primary health care settings faces significant challenges, including inadequate training, low health literacy among patients, and weak referral systems [3]. Penda Health, a large private primary health care provider in Nairobi, operates 16 clinics serving over 450,000 low- and middle-income patients annually. In 2023, fewer than 3% of hypertensive patients at Penda received treatment, underscoring the urgent need for improved hypertension care. In response, Penda Health partnered with Ariadne Labs to develop and pilot BP Sawa, a patient-centered hypertension care management program integrating evidence-based clinical guidelines, provider training, real-time data monitoring, and patient engagement strategies.

Methods: BP Sawa was developed using a co-design process incorporating input from patients and Penda Health staff, including providers, nurses, front-desk staff, lab technicians, pharmacists, nutritionists, and medical specialists. The intervention design was informed by 49 semi-structured interviews assessing patient

needs, priorities, and attitudes, followed by a patient journey mapping process to ensure alignment with real-world care challenges.

During the six-month pilot, both qualitative and quantitative analyses assessed feasibility, acceptability, and early effectiveness. Post-intervention, approximately one dozen interviews evaluated acceptability, while a pre-post analysis examined changes in provider and patient behavior. This project was reviewed by Mass General Brigham Institutional Review Board and determined not to be human subject research.

Results: The BP Sawa intervention includes four core components, (1) standardized evidence-based clinical practice guidelines for providers (2) provider training in the clinical practice guidelines (3) a hypertension monitoring dashboard to guide clinic managers and central quality improvement staff (4) mHealth Patient Support with SMS messaging and telephone follow-ups to reinforce adherence and facilitate proactive care. The BP Sawa pilot, conducted at four of Penda Health's 16 clinics, was well received by staff, providers and patients. All trained providers recalled key concepts and reported increased commitment to hypertension diagnosis and treatment. Providers and staff demonstrated correct blood pressure measurement, and program materials were consistently displayed in clinics. Between July and December 2024, 5,921 patients were identified with elevated blood pressure, with 42% receiving a follow-up blood pressure check, up from 9% pre-pilot. Additionally, 42% of patients received follow-up calls, and 56% received WhatsApp messages, both increasing from 0% pre-pilot. The proportion of hypertensive patients on guideline-directed medications rose from 52% to 75%. Despite its success, challenges included clinic closures due to political unrest and staff movement between pilot and non-pilot branches, which disrupted care at pilot clinic's. Penda Health plans to expand the intervention to all clinics in the coming months to address these issues.

Conclusion: The BP Sawa pilot demonstrated feasibility and effectiveness in improving hypertension care in Kenya's private primary health care sector. The intervention increased patient follow-up, provider adherence to treatment guidelines, and engagement in hypertension management. These findings highlight the role of patient-centered design in strengthening noncommunicable disease care and the potential of private primary care clinics to expand equitable hypertension management in low-resource settings.

References: [1] Mills, Katherine T., Joshua D. Bundy, Tanika N. Kelly, Jennifer E. Reed, Patricia M. Kearney, Kristi Reynolds, Jing Chen, and Jiang He. 2016. "Global Disparities of Hypertension Prevalence and Control: A Systematic Analysis of Population-Based Studies from 90 Countries." *Circulation* 134 (6): 441–50. <https://doi.org/10.1161/CIRCULATIONAHA.115.018912>.

[2] Mbau, L., R. Harrison, W. Kizito, et al. 2022. "Case Identification, Retention and Blood Pressure Control in Kenya." *Public Health Action* 12 (2): 58–63.

[3] Walcott-Bryant, Aisha, William Ogallo, Sekou L. Remy, Katherine Tryon, Winnie Shena, and Marloes Bosker-Kibacha. 2021. "Addressing Care Continuity and Quality Challenges in the Management of Hypertension: Case Study of the Private Health Care Sector in Kenya." *Journal of Medical Internet Research* 23 (2): e18899. <https://doi.org/10.2196/18899>.

Disclosure of Interest: None Declared

Implementation of priority care protocol for patients with disabilities (PwD) in a general public pediatric hospital in southern Brazil: (3006) Lisiane Pereira

ISQUA2025-ABS-3006

Preferred presentation method: 10 Minute Lightning Talk (E-Poster)

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: People with disabilities (PwD) face several barriers to access health services. The current legislation in Brazil, the Statute of the Person with Disabilities, guarantees the right to priority care. However, the implementation of this priority still presents challenges. In order to qualify the care centered on the needs of this population and, consequently, reducing the complaints received regarding the fragilities in the journey of patients with disabilities, service flows have been established for an inclusive and safe pathway care for these patients. The implementation of the prioritization protocol for PwD is expected to decrease their waiting time for care. **Objective:** To describe the implementation of the priority care protocol for people with disabilities in a general pediatric hospital fully funded by the Brazilian Unified Health System (SUS) in southern Brazil, addressing its impacts on accessibility and quality of care.

Methods: This is a descriptive study about the implementation of a care pathway for PwD in a public pediatric hospital. Firstly, a multidisciplinary group was established involving the hospital management, Social Participation and Diversity, and Information Technology to develop a protocol based on a review of current legislation and analysis of care flows. The implementation of the document took place in 2024, with the aim of ensuring priority and adapted care for patients with disabilities, promoting humanized, safe and efficient care. Another strategy was the signaling in the electronic system using a specific symbol next to the patient's name to identify them as having a disability. A multisensory space was implemented to welcome children with disabilities in the main reception and emergency area, along with adjustments to the signage for preferred seating. The six-month period in 2024 was analyzed, considering the inclusion of the signaling for PwD in the computerized system and the implementation of the protocol within the institution. The variables chosen to evaluate the effectiveness of the protocol were stratified from the institution's Business Intelligence related to emergency care, specifically the average waiting time at reception and the average waiting time for a medical consultation for the general public and PwD patients.

Results: Since the implementation of the protocol in May 2024, there has been an improvement in the identification and prioritization of PwD at the main entry points of the Hospital. The adaptation of care flows has optimized the average waiting time for these patients. Regarding the average waiting times in the emergency department, it is noted that the waiting time at reception for PwD patients was reduced by 41% (4.79 minutes) compared to the general public (7.98 minutes). Meanwhile, the average waiting time for a medical consultation decreased by 57% (12.79 minutes) compared to the general public (29.99 minutes). These significant reductions demonstrate the effectiveness of the implemented protocol, highlighting the prioritization of PwD patients in the emergency service.

Conclusion: The implementation of the priority service protocol for PwD in this institution contributed to the inclusion and improvement of hospital care, aligning with current legislation. The project demonstrated the importance of structured actions to ensure accessibility, equity, quality, safety, and humanization in the care of these patients, serving as a model for other health institutions.

Disclosure of Interest: None Declared

Frequency of cesarean and vaginal delivery in Mexico (2010-2022). Evolution, measurement problems, and disparities between subsystems: (2950) Pedro J. Saturno-Hernandez

ISQUA2025-ABS-2950

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: The frequency of the different forms of pregnancy resolution can be considered a generic indicator of the quality of obstetric care, particularly a rate of cesarean sections well above or much below what is expected according to the WHO good practice estimates. Mexico has an estimated rate of cesarean sections that is among the highest in the world and a segmented health system that favors differentiated practices according to the various segments. These include various types of public health insurance and the private sector. Segmentation also affects an information system in which there is no single source to know the frequency of the kind of birth. The objective of this study is to analyze the evolution of the frequencies of cesarean and vaginal deliveries (2010-2022), in general, and by subsystems, using and comparing various official sources of information.

Methods: We analyze data from three official databases with information on the type of delivery: a) the Automated Subsystem of Hospital Discharges (SAEH); (b) the Birth Information System (SINAC); and c) the Health Statistics of Private Establishments (ESEP). We estimate from all of them the rates of cesarean section and vaginal delivery and their trends, nationally and by sub-sector (public: different social security schemes for formal workers, and public system for the population without social security, all of them with their network of facilities), and the private sector.

Results: No database contains all births. Additionally, the rate of cesarean section and vaginal delivery varies by source. The most complete estimate can be calculated from the data provided by SINAC, although it does not include births with dead products, which are in the SAEH, which has information on only a part of the public sector. According to SINAC, the national cesarean section rate has been increasing during the study period (44.9% in 2010, 52.3% in 2022), with significant differences between the public subsectors (ranging from 37% for population without social security to 69.6 for insurance for civil servants and 76.2 for Mexican Petroleum workers), and an even greater rate in the private sector (83.7%) in 2022.

Conclusion: The information system for obstetric care is deficient. Still, the most reliable data, based on birth certificates, show a sustained increase in cesarean section rates, reaching figures up to five times higher than recommended. The significant disparity between segments of the health system is very unlikely to be due to different needs but is clearly system-dependent. The rate of cesarean sections in the private sector is striking, but also in some subsystems of the public sector, with much higher rates in specific social security schemes. The figures are incompatible with good obstetric practice. Our results support the urgent need for a strategy to improve the quality of obstetric care.

Improving access to quality and equitable HIV healthcare services for all populations in Malawi – how did we foster the digital health ecosystem in a resource-limited country from 2002 to 2024?: (2714) Joseph Tsung-Shu Wu

ISQUA2025-ABS-2714

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¹Pingtung Christian Hospital, Pingtung, Taiwan

Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: Yes

If yes, what year?: 2023

I confirm that the submission has been approved by all authors: Yes

Introduction: Access to antiretroviral treatment (ART) is vital for people living with HIV/AIDS (PLWHA). High-quality HIV care depends on accurate, longitudinal patient data, while aggregated ART service data informs equitable service planning. In resource-limited settings like Malawi, paper-based systems were the norm. Recognising the need for digital transformation, Malawi started its ecosystem to embrace the usage of electronic tools and digital systems for health programs in 2000, coinciding with its national ART scale-up program started in 2004. The International Medical Service Program was established to foster a sustainable digital health (DH) ecosystem for improved care delivery.

Methods: We established a collaborative Malawi working relationship to consolidate and synthesise international and local resources from Taiwan 23 years ago (2002 to 2025). The program launched a dedicated HIV clinic, Rainbow Clinic, in one of the central hospitals in Malawi in 2004 and built and implemented an HIV/AIDS care system with an electronic data system (EDS) from 2000-2007. Since 2008, formed a cooperation working relationship with Luke International Norway with a formal memorandum of understanding to continue the development work in Malawi. From 2009 to 2012, an HIV Cross-Border Patient Forum was formed in the SADC Region to tackle HIV care issues and stimulate ideas for using digital solutions. We started an education and research capacity-building project at Mzuzu University. We continued and launched community-based projects from 2009-2012, co-develop and roll-out National electronic medical records system (NEMRS) for ART with a local organisation, scale-up community projects with fundraising activity in Taiwan, and escalated the health information system (HIS) development and teaching project with the Christian Hospital Association of Malawi (CHAM) facilities and Mzuzu University, with the Norwegian government support through the Norwegian Churches Aid (NCA). Simultaneously, the second team from our hospital have been active members of the country's HIS and DH technical working group, providing Architecture, Data Standards, Equity, mHealth and relevant planning and policy advisories. We launched an International Health Intern program in 2011 to cultivate human capital internationally and expanded to Local Health Intern Program in 2014 to enhance local capacity building. Following the national strategic plan, we continued to co-develop and roll out the NEMRS with implementing partners with various funding sources in the country, established the country's health information exchange (HIE) infrastructure and assisted the DH development for community health. We assisted with Ebola outbreak preparedness and led disease

surveillance system strengthening using digital solutions since 2015. During the COVID-19 pandemic, we supported the Ministry of Health with built and innovative digital health solutions for responses.

Results:

Results: The program's initial development of ART EDS provided needed patient-level data for quality care and program management for 4 facilities with 14,875 HIV patients and 172,772 encounter records by the end of 2009. The capacity-building project cultivated more than 360 local and 120 international students for DH and HIS. The domestic DH workforce was created the nation's HIE was built to support DH solutions for all PLHIV (#=2,316,875, Q3 2024).

Conclusion: Conclusions: Commitment, familiarity with the local context and flexibility are critical factors in fostering the DH ecosystem to provide suitable and sustainable DH solutions in resource-limited countries.

Disclosure of Interest: None Declared

Screening our way to Equity: Improving Cervical Cancer Screening Outputs Through Service Integration at Primary Health care Units, North Eastern Ethiopia: (3348) Zekarias Seife Bashaye

ISQUA2025-ABS-3348

Z. S. Bashaye ^{1,*}, H. Abdi ¹, B. Abera ¹, T. Dana Darebo ², A. Kedir ³, A. Girum ², B. Kifle ⁴, M. Yenealem ², E. Abate ³, T. Hiwot ³, I. Shemsedin ⁵, B. Teklewold ⁶

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

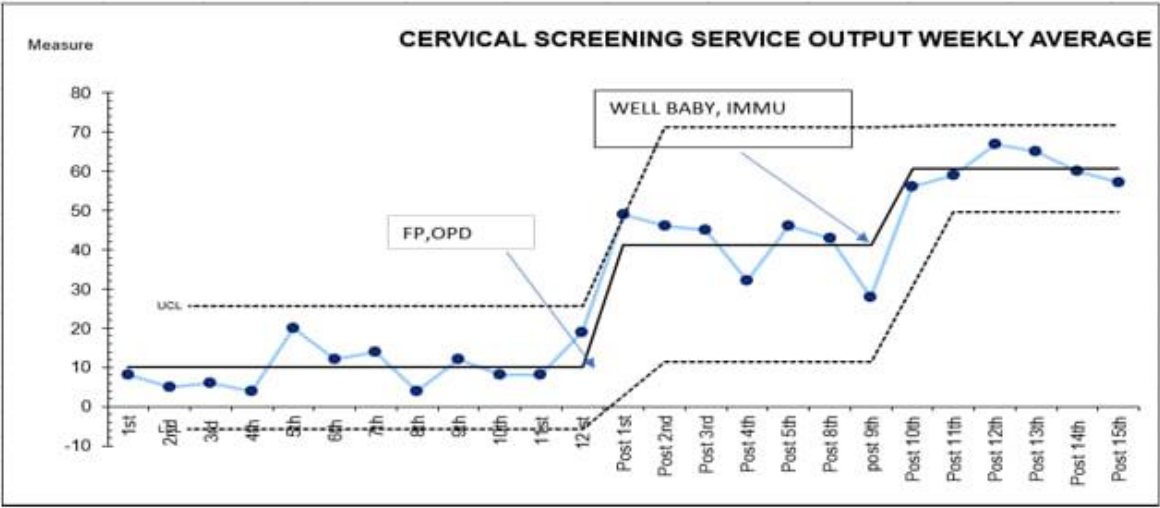
Introduction: Cervical cancer typifies health inequity with more than 85% of related morbidity and mortality occurring in women of low socioeconomic status in developing countries. A woman in Thailand with cervical cancer has a 58% chance of survival, in sub-Saharan Africa she has only a 21% chance. The reality in Ethiopia is no different. In Ethiopia cervical cancer is the second leading cause of cancer death among women. A study found that the rate of cervical screening in Ethiopia is extremely low estimated to be around 2.9%. Integration of cervical screening services has been shown to increase the rate of screening. If Ethiopia is to achieve the ambitious milestone of eliminating cervical cancer as a public health problem by 2030, it is of paramount importance to ensure no eligible women leaves care facilities without being offered and screened for cervical cancer. This improvement project aims to increase average weekly Cervical screening from 10 to 50 in the pilot health center it is conducted through enhanced service integration.

Methods: The intervention constituted linking all eligible women who visit the health center for family planning well-baby, immunization clinics and other outpatient medical care to cervical screening unit. Weekly data auditing was instituted to improve linkage between cervical screening unit and other service areas. The outcome measure was weekly number of women screened while percentage of eligible women screened from those who attended the aforementioned clinics were taken as process measures. Statistical Process Control software QI-Charts v. 1.0.39 was used to analyse data after weekly data was entered on excel. I-

chart was selected for analysis and chart phasing was employed to look for performance improvement. Ethical clearance was not required.

Results: Weekly average of number of women screened at the health center jumped from 10 to 41 in 9 weeks. The average number further increased to 61 after the integration of well-baby and immunization clinics. Percentage of women linked and screened from family planning and regular outpatient clinics on a weekly basis reached 78% and 71%. This led to increase in weekly positive detection rate from zero to 4.

Image:



Conclusion: Shifting from the existing passive posturing of the health system to cervical screening to one of active, provider initiated, and integrated approach in Gugufu health center led to significant increment in both the number of women screened and the detection rate of cervical lesions. These findings underscore the notion that it is possible to improve the detection and early treatment of cervical cancer in resource limited rural primary care settings through enhanced intra-facility service linkage.

Disclosure of Interest: None Declared

Using participatory research to address gender norms of female close to community healthcare providers in fragile settings: a cross-country analysis: (3485) Wesam Mansour

ISQUA2025-ABS-3485

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Female close-to-community (CTC) healthcare providers play a vital role in delivering essential healthcare services, particularly in fragile and underserved settings. However, they face significant gendered

challenges stemming from restrictive norms, power imbalances within health systems, and sociocultural expectations that limit their effectiveness and agency. This study synthesises cross-country experiences from Lebanon and Nepal, exploring how participatory action research (PAR) and co-production approaches can address harmful gender norms, enhance the agency of female CTC providers, and promote a more equitable and inclusive health system. The study identifies key enablers and barriers, providing actionable insights to strengthen the role of female CTC providers and support sustainable community-level health system resilience.

Methods: This study employed qualitative interviews, focus group discussions (FGDs), reflective meetings, and participatory workshop reports to analyse the experiences of female CTC providers, community members, and key health system stakeholders in Lebanon and Nepal. Data were thematically analysed using a Community-Based Participatory Research (CBPR) framework to understand contextual influences, partnership dynamics, and the design, implementation, and outcomes of interventions. Key themes included contextual enablers and barriers, group dynamics, and strategies for institutionalising CTC providers within health systems, with cross-country analysis identifying similarities and differences between the interventions in Lebanon and Nepal.

Results: The analysis highlighted co-production and implementation of an intervention as a dynamic process involving power-sharing, mutual learning, trust-building, and the integration of local knowledge. Through the PAR approach, female CTC providers co-created gender-sensitive interventions that changed community perceptions, enhanced stakeholder engagement, and created spaces for open dialogue to address harmful gender norms and power relationships within the community and the health system. In Nepal, they co-created a film aimed at challenging local perceptions and engaging communities, while in Lebanon, they co-developed a support group to advocate for women's empowerment, recognition, and policy inclusion. Despite challenges such as weak accountability and limited inclusivity within health systems, local leadership, community trust-building, and co-learning approaches proved essential in overcoming these barriers, ensuring the success of the interventions.

Conclusion: This study highlights the transformative potential of the PAR approach in fragile settings, demonstrating how amplifying female CTC providers' voices and fostering collective action can challenge harmful gender norms and strengthen health system resilience. Co-production, through equitable partnerships, enhances the role of female CTC providers, improves service delivery, and promotes sustainable, gender-inclusive healthcare. The study emphasises the need to embed CTC providers in co-designed interventions and institutionalise participatory approaches for their recognition as key stakeholders. Strengthening policies, financial support, and equitable partnerships is essential for scaling and sustaining these efforts to improve community health outcomes.

Disclosure of Interest: None Declared

Safety Starts with Knowledge: Championing Patient Safety via Children's Books: (2860) Lais de Holanda Junqueira

ISQUA2025-ABS-2860

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¹Elsevier, Amsterdam, Netherlands, ²Sociedade Brasileira para a Qualidade do Cuidado e Segurança do Paciente, Rio de Janeiro, Brazil, ³World Patients Alliance, WASHINGTON, DC, ⁴Mothers Against Medical

Error, Lexington County, United States, ⁵Hospital de Clinicas de Porto Alegre, Rio Grande do Sul , ⁶Cambucá, Rio de Janeiro, Brazil, ⁷Alzheimer's Pakistan, Lahore, Pakistan, ⁸Community Health and Information Network, Kiwenda, Uganda

Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Patient safety is a critical global concern in public health. Annually, approximately 134 million adverse events occur in hospitals in low- and middle-income countries, resulting in at least 3 million deaths attributable to unsafe care (World Health Organization - WHO, 2023). Unsafe care ranks among the top 10 causes of death and disability worldwide (WHO, 2019). These statistics underscore the urgent need for enhanced patient safety measures.

Educational interventions targeting children have demonstrated efficacy in fostering long-term behavioral change. Specifically, children who receive education on recycling are more likely to adopt sustainable behaviors and can influence their families to do the same. (Knickmeyer, 2020).

This project aims to elevate awareness of patient safety through a series of children's books, educating children aged six to twelve about fundamental patient safety principles to cultivate a culture of safer care in the future.

Methods:

The World Patients Alliance (WPA), Elsevier, and the Elsevier Foundation collaboratively developed a series of five children's books aimed at fostering early comprehension of patient safety concepts. The texts employ narrative storytelling and illustrative elements to effectively convey essential safety principles in an engaging format. These resources are freely accessible online in English, Portuguese, Afrikaans, Khmer and Hindi, with further translations planned to enhance linguistic inclusivity. Additionally, the availability of audiobooks and flipbooks—donated by the South African Cystic Fibrosis Association—serves to broaden overall accessibility.

Ethical oversight was maintained by ensuring that the content is both age-appropriate and culturally sensitive.

Results:

Since its inception, the children's book series has demonstrated significant reach and engagement. The host webpages recorded 2,863 visits from 49 countries. Furthermore, event-based activities yielded notable participation, with 1,054 attendees representing 124 countries at the WPA launch event in South Africa and 950 participants at the SOBRASP event in Brazil. Additionally, 250 printed copies were distributed to children and educators, and independent initiatives have emerged in regions such as Zorko, Ghana, and Rio de Janeiro, Brazil. Digital engagement metrics include 746 views for the flipbook versions on YouTube and 8,534 impressions on social media posts related to the series. These preliminary data indicate substantial organic reach. Future research will focus on expanding accessibility and evaluating adherence to patient safety practices and the subsequent impact on community education.

Image:



Conclusion: This children's book series marks a notable advancement in enhancing health literacy and patient safety awareness among young audiences. By introducing these concepts at an early age, the initiative seeks to establish a foundation for a future in which safe healthcare practices are the norm. This approach has the potential to contribute to global health improvements by equipping the next generation with fundamental knowledge of patient safety. Further research is required to assess the effectiveness of the books in improving patient safety literacy among children.

References: Doris Knickmeyer, Social factors influencing household waste separation: A literature review on good practices to improve the recycling performance of urban areas, Journal of Cleaner Production, Volume 245, 2020, ISSN 0959-6526. <https://doi.org/10.1016/j.jclepro.2019.118605>.

<https://elsevierfoundation.org/patient-safety-children-books/>

<https://www.worldpatientsalliance.org/patient-safety-stories-books/>

Disclosure of Interest: None Declared

Assessment of Laterality in Musculoskeletal Imaging Diagnostic Exams: Impact on Patient Safety: (3530) Adriano Tachibana Adriano

ISQUA2025-ABS-3530

C. B. D. S. Souza ¹, A. T. Adriano ^{2,*} on behalf of Brazilian College of Radiology and Imaging Diagnosis, M. S. Marcela ¹, H. C. J. Henrique ², J. L. S. S. Z. Jovita ²

¹Certification, Brazilian College of Radiology and Diagnostic Imaging, ²Certification, Brazilian College of Radiology and Imaging Diagnosis, São Paulo, Brazil

Preferred presentation method: 10 Minute Lightning Talk (E-Poster)

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Correct identification of laterality in imaging exams is an essential factor to ensure accurate diagnoses and avoid clinical errors that could compromise patient safety. Patient Safety Goal 1 – Correct Patient Identification, established by the World Health Organization (WHO), reinforces the importance of ensuring that all exams are performed on the correct patient and in the correct anatomical area, including laterality. In addition, Goal 4 – Safe Surgery highlights the need for accurate marking of the anatomical side in exams, as identification errors can result in incorrect surgical procedures.

In the Imaging Diagnostic Accreditation Program (PADI), laterality assessment is performed in a structured manner, ensuring that both images and reports follow strict quality standards. PADI is the only accreditation in the world that assesses the quality of imaging exams before auditing accreditation standards, ensuring that the service already meets fundamental technical criteria before even moving forward with certification.

Objective

This study evaluates the conformity of laterality in magnetic resonance imaging (MRI), computed tomography (CT) and musculoskeletal X-ray examinations, analyzing the accuracy of identification of the anatomical side in the images and medical reports, according to international patient safety guidelines.

Methods: Sixty-three magnetic resonance imaging, computed tomography and musculoskeletal X-ray exams were analyzed, taken from the AMBRA platform, which consolidates imaging exams from services accredited by PADI. The evaluation considered the correct identification of laterality in both the acquired images and the medical reports, classifying them as "Adequate" or "Inadequate". The quality assessments of the exams are performed by radiologists, according to the quality guidelines and assessment instrument structured by the scientific committee of the Brazilian College of Radiology and Diagnostic Imaging.

Results: Among the 63 exams evaluated, 61 (97%) presented correct laterality in the images, while 2 exams (3%) failed to identify the anatomical side. In the medical reports, 62 exams (98%) recorded adequate laterality, while only 1 exam (2%) presented an error in the description of the side. Of all the exams evaluated, only the shoulder exam presented inadequate laterality both in the images (4% inadequacy) and in the medical report (2% inadequacy). The other exams presented 100% compliance in the evaluation of laterality in the images and medical report.

Image:



Correct laterality_
Image



■ Adequate ■ Inappropriate

Correct laterality_
Medical Report



■ Adequate ■ Inappropriate

Conclusion: Correct identification of laterality in imaging exams is crucial to avoid clinical errors and ensure diagnostic safety. The high compliance rate found reinforces the effectiveness of the PADI quality audit, which assesses the accuracy of exams even before the audit of accreditation standards, ensuring that only services aligned with good practices proceed to certification. However, considering the importance of laterality in Patient Safety, it is recommended to implement more rigorous verification protocols, in addition to ongoing training for radiology teams. Technologies such as artificial intelligence and safety checklists can be applied to further improve the correct identification of laterality, reducing risks and strengthening the culture of safety in diagnostic imaging services.

References:

- Technical guidelines for the evaluation of magnetic resonance imaging exams, CBR, 2022.
- Technical guidelines for the evaluation of computed tomography exams, CBR, 2022.
- World Health Organization. International Patient Safety Goals.
- Padi Accreditation Program Standards, CBR, 2022.
- <https://padi.org.br/normas-e-diretrizes/>

Disclosure of Interest: None Declared

Development and Evaluation of a National Quality and Safety Signals System for Maternal and Infant Health: (2895) Eilish Mcauliffe

ISQUA2025-ABS-2895

E. Mcauliffe^{1,*}, L. Hendrick², T. McDonnell¹, B. Ertugrul¹, J. Dullat¹, E. Hogan², G. Moore², M. O'Dowd²

¹UCD IRIS Centre, School of Nursing, Midwifery and Health Systems, University College Dublin, ²National Quality and Patient Safety, Health Service Executive, Dublin, Ireland

Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Despite investment in data collection, data management and reporting to inform service delivery and improvements, the ability to monitor and respond to healthcare quality and safety risks or intervene early to prevent harm remains a challenge. Fragmented data limits the ability to optimise learning and improvement. National Quality and Patient Safety (NQPS) in the Health Service Executive, Ireland's public healthcare system, aimed to develop a Quality and Safety Signals System (QSS) to integrate, analyse and display quality, safety, and operational data from multiple datasets to maximise insights on the quality and safety of maternity and neonatal services in Ireland. The World Health Organization (WHO) recommends that an evaluation plan adapted to the local context should ideally be developed before a surveillance system is implemented. This paper describes how research and evidence has informed the development of QSS and a QSS Evaluation Framework (QSSEF) through a collaboration between HSE-NQPS and UCD IRIS Centre.

Methods: The research was underpinned by evidence synthesis, co-design and inclusive stakeholder engagement. **Phase 1** used co-design to identify meaningful indicators to monitor quality and safety in maternal and infant health. This phase included: 1) review of literature/dashboards used internationally to identify measures; 2) workshops and surveys with a Clinical Advisory Group to determine relevant measures of quality and safety in maternity and neonatal services; 3) workshop with a panel of service users to review shortlisted measures; 4) workshops with women from the Roma Community to ensure views of migrant women were incorporated; 5) stakeholder engagement conclusion workshop. **Phase 2** focused on the development of a comprehensive evaluation framework. Initial programme theories were developed based on a literature review, stakeholder consultations with the programme designers, project documents, and project meetings of the QSS team. These were tested through theory-driven interviews with project workstream members, offering deeper insights into how and why the QSS development processes work in practice across different QSS workstream settings. The formulation of the QSSEF then incorporated elements from WHO and CDC surveillance system evaluation guidelines. Ethical approval for this work was obtained from both the Health Service Executive and University College Dublin.

Results: A comprehensive set of 32 metric families (categorised as: health system management (e.g. compliance with guidance and standards); antenatal care and outcomes, maternal care outcomes, neonatal care and outcomes, and infant feeding) was developed for inclusion in the QSS. In developing the QSSEF, the initial scoping review and interviews produced 12 programme theories to explain the mechanisms by which the system development and implementation worked. Through prioritisation and further interviews, 4 theories emerged providing in-depth explanatory statements on a) triggers of change, b) co-design with

subject matter experts, c) system design, and d) data governance. The final QSSEF is structured into: Inputs – the resources required to implement the QSS; Activities – what staff do with these resources; Outputs – tangible products resulting from these activities; Outcomes – changes that occur due to the outputs and activities; and Impacts – long-term outcomes that represent the ultimate goals of the QS system.

Conclusion: This presentation will summarise the research methods informing the development of a QSS to integrate, analyse and display quality, safety, and operational data from multiple different datasets maximising insights on the Quality and Safety of Maternity & Neonatal services. The stakeholder engagement and co-design processes resulted in a comprehensive set of meaningful metrics. The QSSEF draws upon WHO and CDC surveillance system evaluation guidelines, ensuring that the findings reflect international best practice. The conceptual scientific foundation provided by QSSEF addresses a gap in current international guidelines in relation to quality and safety surveillance systems. Through the provision of a tailored, comprehensive framework with equal emphasis on shared responsibility and learning at all levels of the healthcare system, it has the potential to inform effective QPS surveillance and system evaluation in other countries.

Disclosure of Interest: None Declared

Improving quality and patient Safety in the perioperative care: The SAFEST project: (3637) Carola Orrego

ISQUA2025-SES-3637

C. Orrego^{1,2,*}, P. Sousa³

¹Avedis Donabedian Research Institute, ²Universitat Autònoma de Barcelona, Barcelona, Spain, ³Nova National School of Public Health, Lisbon, Portugal

Proposed Session Duration: 45 Minutes

Session Description: The European Commission estimates that 8% to 12% of hospitalized patients in the EU experience adverse events, with surgical-related complications among the most frequent.

While significant efforts have improved surgical safety in recent decades, most initiatives have focused on hospital-based processes. However, research shows that 53% to 70% of surgical errors occur outside the operating room, highlighting the need for a broader approach.

This session will explore how the **SAFEST project** enhances patient safety across the entire perioperative journey—preoperative, operative, and postoperative. The project integrates:

- **Stakeholder-driven recommendations**, developed with patients and healthcare professionals from diverse disciplines and countries.
- **A prioritization process**, guided by frontline professionals
- **A quality improvement collaborative**, implemented in 10 hospitals across 5 European countries
- **A comprehensive evaluation**, assessing processes, clinical outcomes, and patient-reported measures

By sharing key lessons learned and practical tools developed through SAFEST, this session will foster discussion on barriers, facilitators, and strategies for advancing surgical safety in real-world settings.

Session Format: 15 minutes presentation per speaker with some interactive exercises during the presentations (materials and cases will be shared)

Target Audience: Policy makers, health care managers, health care professionals, researchers, quality specialists, caregivers, patients and citizens.

Objectives: Identify how to use implementation research focused on quality improvement strategies to enhance perioperative patient safety.

Understand how SAFEST project evaluates process measures, clinical outcomes, and patient-reported outcomes to ensure a holistic approach to surgical safety.

Research: SAFEST project aims to enhance perioperative care quality and patient safety by establishing and implementing widely supported evidence-based perioperative patient safety practices to reduce surgical adverse events.

The project is a mixed-methods hybrid type III implementation study supporting the development and adoption of evidence-based practices through a Quality Improvement Learning Collaborative (QILC) in co-creation with stakeholders.

The project is being conducted in 10 hospitals and related healthcare facilities of 5 European countries.

We assess the level of adherence to the evidence-based practices, as well as surgical complications incidence, patient-reported outcomes and contextual factors influencing the implementation of the patient safety practices.

The project includes different phases: 1) Development of patient safety practices in perioperative care; 2) Guided self-evaluation of standards based on the patient safety practices; 3) Identification of priorities and actions plans; 4) Implementation of a Quality improvement Collaborative strategy; 5) Evaluation of the strategy effectiveness; 6) Patient empowerment for patient safety.

Towards the end of the project, a call for participation will be launched to allow other hospitals to self-evaluate against the standards.

Suitability: The proposed topic is suitable as a conference session because it allows the audience to go through different types of quality components, including a systematic review of patient safety practices, reaching consensus with a broad group of multidisciplinary team, developing core outcomes for evaluation, designing standards for self-evaluation and then tailoring the process to the specific hospitals priorities while using a robust evaluation system including PROMs and PREMs.

The session will also share the SAFET experience of engaging patients, caregivers, and patients' representatives in the different phases of the project.

Have you presented this session at a Conference before including ISQua?: No

Disclosure of Interest: None Declared

Strengthening the implementation of individual patient tracking sheets to improve continuity in HIV care in Nkurenkuru District, Namibia.: (1914) Helvi Nangombe Amukwaya

ISQUA2025-ABS-1914

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¹International Training and Education Centre for Health (I-TECH)-Namibia, ²Ministry of Health and Social Services (MoHSS), Namibia, Windhoek, Namibia

Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: In July 2022, Namibia launched the Standard Operating Procedure (SOP) for Tracing and Post-tracing Activities for Clients Receiving Anti-Retroviral Treatment (ART). A key tool included in the SOP is the use of individual patient tracking sheet booklets to improve the retention rate for clients on ART. In December 2023, Namibia's Nkurenkuru District reported a retention rate of 90.7%, which was below the national target of 95%. A quality improvement (QI) project was undertaken to identify factors contributing to suboptimal performance and to improve retention in HIV care in Nkurenkuru District.

Methods: A district QI team employed a root cause analysis to assess factors contributing to poor implementation of the individual patient tracking sheet and inform the selection of change ideas. Change ideas implemented included in-service training and one-on-one coaching to healthcare providers (HCPs), establishing a clear reporting system, developing a standardized data collection tool, and strengthening collaboration with community-based service providers. Change ideas were initially rolled out in January 2024 across five health facilities and then across the remaining 9 health facilities in the district in May 2024. Routine data from the electronic patient monitoring system were used to measure retention in HIV care, defined as the proportion of ART clients active in care among all clients on ART. District-level retention in HIV care was analyzed and monitored monthly from December 2023 through July 2024.

Results: Over the initial roll-out period, district-level HIV retention rate improved from 90.7% (4350/4796) in December 2023 to 94.6% (4436/4688) in April 2024. After change ideas were implemented across all district facilities, the retention rate further improved from 94.8% (4419/4659) in May 2024 to 95.2% (4428/4654) in July 2024.

Conclusion: The QI project resulted in improved implementation of the Tracing and Post-Tracing Activities SOP and improved HIV retention among People Living with HIV in Nkurenkuru District. Addressing knowledge gaps, establishing clear reporting processes, and providing adequate supervision can support improvements in retention in HIV care.

References: MoHSS- Namibia Standard Operation Procedure for Tracing and Post Tracing Services for Patients on Antiretroviral Therapy, July 2022. MoHSS Directorate of Special Programmes Windhoek: Republic of Namibia 2022.

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Disclosure of Interest: None Declared

Institutionalizing Quality of Care for Women and Children's Health in Congo, Malawi, and Namibia: Approaches and Lessons Learnt: (1641) Elom Otchi

ISQUA2025-ABS-1641

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Globally, 4.5 million mothers and newborns die annually mainly from preventable causes, majority in LMICs. High-quality health systems could prevent 1 million newborn and half of maternal deaths each year globally. The WHO outlined a Vision for improving quality of care (QoC) for mothers and newborns, operationalization of which is ongoing in countries in 2016. This study looked at approaches and lessons learnt in institutionalizing QoC for maternal and newborn health in Congo, Malawi and Namibia.

Methods: This was a qualitative study that used observation, Key Informant Interview (KII) and Focus Group Discussion (FGD) for data collection. Visited 20 health facilities in the three study countries- 6 were tertiary/referrals and secondary level respectively and eight (8) primary level; undertook sixteen (16) FGDs with an average of eleven (11) participants and interviewed twenty-two (22) respondents whose roles were service delivery (*doctors, nurses, public health officers etc*), partners, and administration/policy (*medical directors, district directors etc*). Data was analyzed thematically along the WHO Health Systems Building Blocks using NVivo 14.0.

Results: Ninety percent (90%) of the facilities visited were government owned while the remaining 10% were Faith based. Seven (7, 35%) of the facilities in Malawi and Namibia were QI learning sites. Overall, notable approaches used in institutionalizing MNH QoC include development and implementation of National Healthcare Quality Policies and Strategies (NQPS), use of Standards, and health systems strengthening. Lessons learnt: availability of NQPS facilitates a systematic implementation of any QoC program; and sustainable financing is core.

Conclusion: Systematic implementation of an NQPS approach is critical for scaling up and integrating QoC interventions into the health systems in the WHO Africa region. This review demonstrated marked differences in QoC between countries that had developed and were implementing NQPS and those that were not.

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Disclosure of Interest: E. Otchi Consultant for: NA, A. W. Muriithi: None Declared, J. Kayita: None Declared, T. Nkurunziza: None Declared

Employing a team-based process flow chart to sustain high viral load monitoring rates among paediatric HIV clients at Rundu State Hospital, Namibia from 2020-2024: (2485) William Bakari

ISQUA2025-ABS-2485

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Timely viral load monitoring (VLM) has been recognized as crucial for managing people living with HIV (PLHIV) on antiretroviral therapy (ART). In Namibia, the proportion of paediatric HIV clients receiving timely VLM per national guidance (every 6-months for clients aged 19 years and below) remains below the national target of 95%. We used a team-based quality improvement (QI) approach to develop a process flowchart to standardize and streamline paediatric VLM at Rundu Hospital, Namibia to improve and sustain VLM above 95%.

Methods: In November 2020, a QI team identified low VLM among paediatric clients. To address issues related to VLM processes and improve VLM to above 95%, the team brainstormed an improved VLM flowchart including: (1) Appointment reminders via phone/SMS a week before appointments; (2) VLM eligibility verification and recording upon arrival; (3) Blood samples drawn and barcodes affixed to patient records; (4) Result tracking within 1–2 weeks; (5) Missed appointment follow-up calls/SMS; (6) Results entered into records and electronic systems before filing; (7) Biweekly data quality assessments (DQAs); (8) Enhanced care for high viral load (>40 copies/mL) clients, followed by repeat tests after three months of good adherence; and (9) Monitoring suppressed viral load (<40 copies/mL) clients at six-months. The number and proportion of paediatric HIV clients receiving VLM per national guidance were calculated monthly using routine programmatic data from the electronic patient management system and analysed descriptively from November 2020 through May 2024 to assess achievement and sustainment of the 95% target.

Results: Paediatric VLM at Rundu Hospital increased from 41% (180/440) in November 2020 to 99% (315/317) in May 2024. From January 2022 through May 2024, achievement above 95% was sustained with performance peaking at 100% (304/305) in September 2023.

Conclusion: The standardized and streamlined VLM process ensured that paediatric clients eligible for VLM were not overlooked, all VLM results were accurately documented, and missed opportunities for VLM were swiftly identified and addressed. Rundu Hospital's success demonstrates how a QI-driven approach can achieve and sustain high VLM rates among paediatric clients, providing a replicable model for similar settings.

Disclosure of Interest: None Declared

Change management, beyond adverse event reporting.: (2437) Matias Dellachiesa

ISQUA2025-ABS-2437

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: The purpose of event reporting is to record undesirable situations and seek to generate systemic changes that will prevent their recurrence. Its power lies not in the accounting of harm, but in the significance of the organizational culture. A higher number of events doesn't indicate greater insecurity, but rather a culture that learn from its mistakes.

As a result, we set out to demonstrate how the reporting of adverse events can help us to bring about a cultural change by achieving the following goals:

- **Goal #1.** *To Increase event reporting rate:* more reporting does not indicate greater insecurity, but rather the need for people to work on events to prevent their occurrence.
- **Goal #2.** *To proportionally decrease the number of anonymous reports:* a lower number of anonymous reporters indicates people's confidence in the system.
- **Goal #3.** *To proportionally increase the number of reports classified as incident and/or error with respect to those classified as damage and/or centinel events:* identifying and working on incident and error situations allows us to establish robust systems that prevent them from evolving into serious events.

Methods: A pre-post study was performed in a private hospital in Buenos Aires between 1/1/2018 and 31/12/2024, authorized by the ethics committee (#1197), implementing the following actions:

- 2018_Diagnosis

- Survey to find out the reasons for non-reporting.

- 2019_Institutionalization

- Creation of quality and people safety management.
- Presentation of quality indicators at General Management meetings.
- The annual patient safety day was implemented, where the progress made in the management of adverse event reports was presented.

- 2020-2023_Promotion and broadcasting

- Training. Athenaeums, on-the-job training and training-learnings were conducted to reach all personnel.
- Communication. Weekly newsletters, posters and the monthly results of the management of adverse event reports were published on the web and ward bulletin boards.Trivia and quiz games were conducted about adverse event reporting management.
- Referral program. Quality referents were identified by areas to promote the reporting of adverse events.

For the analysis of continuous data, a two-tailed ANOVA was used, with a Dunns post hoc test; qualitative data were analyzed using a Chi-Square test.

Results: A retrospective study (1/1/2018-31/12/2024) of 9,006 reports was conducted to assess the impact of improvement actions on quality and safety culture.

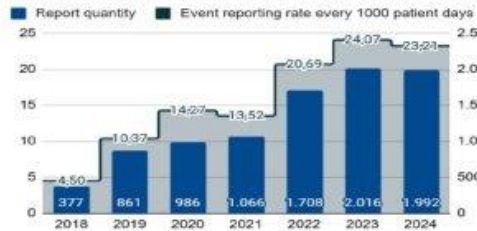
	- Goal #1. <i>To Increase event reporting rate</i>		- Goal #2. <i>To proportionally decrease the number of anonymous reports</i>			- Goal #3. <i>To proportionally increase the number of reports classified as incident and/or error with respect to those classified as damage and/or sentinel events</i>		
Year	Event reporting rate every 1000 patient days	p value vs 2018	% Reports from identified users	% Anonymous reports	p value vs 2018	% Incident and/or error	% Damage and/or sentinel events	p value vs 2018
2018	4,50	NA	83,78%	16,22%	NA	81,40%	18,60%	NA
2019	10,37	<0,0001	85,94%	14,06%	0,34	83,94%	16,06%	0,48
2020	14,27	<0,0001	84,45%	15,55%	0,8	85,00%	15,00%	0,16
2021	13,52	<0,0001	87,48%	12,52%	0,078	82,44%	17,56%	0,67
2022	20,69	<0,0001	89,36%	10,64%	0,0034	87,31%	12,69%	0,0067
2023	24,07	<0,0001	90,87%	9,13%	0,0006	90,49%	9,51%	0,00027
2024	23,21	<0,0001	91,82%	8,18%	0,0001	89,58%	10,42%	0,00041

Image:

Change management, beyond adverse event reporting

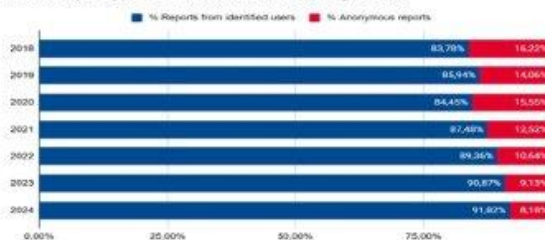


- **Goal #1.** To Increase event reporting rate: more reporting does not indicate greater insecurity, but rather the need for people to work on events to prevent their occurrence.



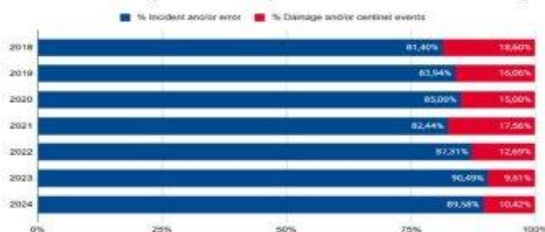
Year	Report quantity	Length of stay (Patient days)	Event reporting rate every 1000 patient days	p value vs 2018
2018	377	83.848	4.50	NA
2019	861	83.016	10.37	<0.0001
2020	986	69.078	14.27	<0.0001
2021	1,066	78.847	13.52	<0.0001
2022	1,708	82.570	20.69	<0.0001
2023	2,016	83.753	24.07	<0.0001
2024	1,992	85.809	23.21	<0.0001

- **Goal #2.** To proportionally decrease the number of anonymous reports: a lower number of anonymous reporters indicates people's confidence in the system.



Year	% Reports from identified users	% Anonymous reports	p value vs 2018
2018	83.78%	16.22%	NA
2019	85.94%	14.06%	0.34
2020	84.45%	15.55%	0.8
2021	87.48%	12.52%	0.078
2022	89.36%	10.64%	0.0034
2023	90.87%	9.13%	0.0006
2024	91.82%	8.18%	0.0001

- **Goal #3.** To proportionally increase the number of reports classified as incident and/or error with respect to those classified as damage and/or sentinel events: identifying and working on incident and error situations allows us to establish robust systems that prevent them from evolving into serious events.



Year	% Incident and/or error	% Damage and/or sentinel events	p value vs 2018
2018	81.40%	18.60%	NA
2019	83.94%	16.06%	0.48
2020	85.00%	15.00%	0.16
2021	82.44%	17.56%	0.67
2022	87.31%	12.69%	0.0067
2023	90.49%	9.51%	0.00027
2024	89.58%	10.42%	0.00041

Conclusion: - Organizational commitment, together with an accurate diagnosis of the causes, made it possible to target promotion and dissemination activities that proved effective in improving the culture.

- The increase in the reporting rate shows the cultural change in which employees understand that the importance of reporting is not to count the damage, but to be able to work on the deviations that have occurred in order to avoid their recurrence.

- The decrease in the proportion of anonymous reports indicates that employees have confidence in the system to deal openly with adverse situations that have occurred.

- The proportional increase of reports classified as incidents and/or errors over those classified as damage and/or sentinel events shows how the organization anticipates in the analysis and treatment of incidents and/or errors, generating actions that prevent their evolution into more serious events.

References: - Holzmüller CG, Pronovost PJ, Creating the web-based intensive care unit safety reporting system. J Am Med Inform Assoc. 2005 Mar-Apr;12(2):130-9. doi: 10.1197/jamia.M1408. Epub 2004 Nov 23.

Disclosure of Interest: None Declared

Lunchtime

Lightning Talks

Building effective academic-clinical partnerships for evaluation in healthcare: Insights from the NIHR ARC Northwest London Evaluation Learning Network: (1573) Grazia Antonacci

ISQUA2025-ABS-1573

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: External evaluation is crucial for improving healthcare quality and ensuring accountability, yet conducting rigorous evaluations within healthcare settings presents significant challenges. This study examined the experiences of the NIHR Applied Research Collaboration North West London's Evaluation Learning Network (ELN), which supports local health service evaluations and builds evaluation capacity across the region. We aimed to identify key challenges in external evaluation partnerships and develop practical solutions to enhance evaluation effectiveness in healthcare settings. The study focused on understanding how external evaluation partnerships can be structured to balance academic rigour with operational realities while maintaining independence and driving quality improvement.

Methods: We conducted a qualitative study of the ELN's five-year experience in delivering external evaluations across diverse healthcare settings. The study examined the work of ARC NWL's multidisciplinary evaluation team, which brings together professionals with diverse backgrounds, including clinical practice, industrial engineering, implementation science, and project management. Data collection included a review of project documentation from over twenty commissioned evaluations spanning various healthcare contexts, including acute care, community services, and integrated care pathways. We conducted structured workshops and in-depth interviews with the ARC NWL evaluation team members to explore their experiences in delivering external evaluations and building evaluation capacity across the healthcare system. We employed thematic analysis and NVivo software to analyse the qualitative data, focusing on identifying patterns in evaluation challenges and successful strategies for academic-clinical partnerships. The analysis examined factors affecting evaluation quality, stakeholder engagement, methodological rigour, and sustainable capacity building.

Results: Our analysis identified ten key challenges in conducting external healthcare evaluations. Operational barriers included complex contracting processes, data sharing restrictions, and ethical approval requirements, which often delayed or compromised evaluation timelines. Resource constraints emerged as

significant, with limited budgets restricting dedicated evaluation roles and short evaluation windows hampering robust study designs. Stakeholder-related challenges included difficulties in participant recruitment and engaging diverse stakeholders under significant operational pressures. A crucial finding was the tension between maintaining evaluation objectivity and meeting commissioners' expectations, particularly when funders had vested interests in outcomes.

The study revealed several successful strategies for enhancing external evaluation effectiveness. Strategic solutions included establishing overarching contracts with healthcare organisations to streamline processes, developing comprehensive data-sharing agreements, and creating flexible evaluation frameworks that anticipate operational challenges. Building relational capacity through sustained partnerships proved essential for overcoming institutional barriers. The study highlighted the importance of early stakeholder engagement, clear communication of evaluation objectives, and realistic timeline planning that accounts for healthcare system complexities.

Image:

1	Contracting Process	• Challenge: Complex processes and low prioritisation delay or disincentivise evaluations. • Strategy: Establish broad contracts and /or fast-track procedures with key organisations.
2	Data sharing	• Challenge: Lengthy data-sharing agreement processes lead to delays and sub-optimal evaluation methods. • Strategy: Set up comprehensive data-sharing agreements with key organisations.
3	Ethical requirements	• Challenge: Lengthy process can compromise evaluation timeliness and threaten quality. • Strategy: Establish overarching ethics frameworks with key organisations.
4	Data availability and access	• Challenge: Lack of usable data compromises evaluation validity. • Strategy: Verify data availability and usability before contracting.
5	Short evaluation windows	• Challenge: Short windows limit robust study designs. • Strategy: Synchronise evaluation and intervention timelines; start with formative evaluations.
6	Participant recruitment	• Challenge: Challenges in recruiting lead to delays and limited data. • Strategy: Identify project champions and engage clinical teams early.
7	Stakeholder engagement	• Challenge: Difficulties in involving diverse, pressured stakeholders. • Strategy: Accommodate schedules and use familiar language.
8	Limited budgets	• Challenge: Tight budgets restrict dedicated evaluation roles. • Strategy: Share resources across projects.
9	Conflicting incentives and success metrics	• Challenge: Academics' incentives are mainly for high-impact research. • Strategy: Introduce incentives for academics to support real-world evaluations.
10	Evaluation objectivity	• Challenge: Tensions between sponsors' interests and evaluator's commitment to research independence. • Strategy: Managing potential conflicting expectations from the outset.

Conclusion: External evaluation in healthcare requires carefully structured partnerships that balance academic rigour with operational realities. Our findings demonstrate that successful evaluation partnerships depend on robust institutional frameworks, transparent processes for maintaining evaluation independence, and strong stakeholder relationships. We recommend developing standardised yet flexible evaluation frameworks that can accommodate healthcare complexity while maintaining rigorous standards. Healthcare organisations should invest in sustainable evaluation infrastructure, including dedicated resources and streamlined processes for external evaluators. Future developments should focus on building evaluation capacity within healthcare organisations while maintaining the independence and objectivity necessary for credible external assessment.

The study has significant implications for improving external evaluation practices in healthcare settings. It suggests that evaluation frameworks should be adaptable to post-Covid realities while maintaining standards, and that technology can be leveraged to support more efficient evaluation processes. Healthcare

organisations and external evaluators can use these insights to develop more effective partnerships that drive quality improvement while ensuring accountability.

Disclosure of Interest: None Declared

An evaluation of the Global Trigger Tool method: teams' ability to reproduce adverse event findings within hospitals: (2783) Hanne Narbuvoild

ISQUA2025-ABS-2783

I. F. Tvette¹, E. T. Deilkås^{2,3}, L. R. Neef¹, W. P. Patrono², H. Narbuvoild^{2,*}, M. Haugen¹

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³Unit for Health Services Research, Akershus University Hospital, Loerensskog, Norway

Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Global Trigger Tool (GTT) is a retrospective review method where inpatient medical records are randomly sampled and reviewed by trained GTT teams to identify and monitor adverse event (AE) rates over time. Tracking AEs over time is a useful way to indicate if targeted changes result in improved patient safety. The method presupposes that the teams are consistent in their record reviews. The objective of our study was to examine several teams' ability to reproduce their findings from a previous review. There is no consensus in the GTT literature regarding this reproducibility.

Methods: Eight teams from six Norwegian hospitals applied the GTT method to a total of 958 randomly selected inpatient medical records. Each inpatient record was previously reviewed in 2016-2018 and then reexamined in 2023. We estimated the teams' agreement between the previous and new ratings, with focus on the teams' reproducibility for rating the presence of at least one AE or not. The teams' ratings of the number of AEs and the AE severity level were also considered. We computed and compared several well-known agreement measures. The study was approved by Regional Committees for Medical and Health Research Ethics in Norway. The participating hospitals' Data Protection Officers have given their approval.

Results: Overall there was good to very good agreement between the teams' previous and new ratings for the presence of at least one AE or not. The unadjusted agreement for all teams together was 84.9%, and on team level it ranged between 76.7% and 89.2%. The agreement for all teams together, adjusted for agreement by chance, ranged from Fleiss' κ : 0.673 (0.625 – 0.722) to Gwet's AC1: 0.718 (0.674 – 0.762). At team level, we found some differences in the reproducibility of the presence of at least one AE or not. The ability to reproduce previous findings on the number of AEs and AE severity level varied more across teams.

Conclusion: Our findings support the use of the GTT method as a tool for identifying and monitoring AE rates within hospitals over time, with the aim of reducing patient harm. It appears to be more challenging to obtain good consistency when rating the number of AEs and AE severity level than the presence of at least one AE or not. We believe there is a need for better training and auxiliary resources for the teams if the goal is to improve the reproducibility of the number of AEs and AE severity level.

Disclosure of Interest: None Declared

Stress and Stress Management in Home Care Services: Comparing Workers and Leaders: (2027) Kristian Ringsby Odberg

ISQUA2025-ABS-2027

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¹Center for care research, department of health science , ²Department of Health Sciences in Gjøvik, NTNU, Gjøvik, ³SHARE – Centre for Resilience in Healthcare, Faculty of Health Sciences,, University of Stavanger, Stavanger, Norway

Preferred presentation method: 10 Minute Lightning Talk (E-Poster)

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Stress is a significant factor affecting the well-being and performance of both workers and leaders in home care services. Understanding sources of stress and the strategies employed to manage is important to improve the work environment and ensuring high-quality care. This study explores the differences and similarities in stress experiences and stress management between workers and leaders in Norwegian home care services.

Methods: We collected data from 20 leaders and 30 health care workers in home care services across four municipalities in Norway, through focus group and individual interviews. Interviews were conducted during work hours at their respective sites. We performed a content analysis and identified where these two groups diverge and converge in their views on stress, its sources, and their coping mechanisms.

Results: Sources of Stress: Workers and leaders both experience significant stress, but the sources differ. Workers face stress primarily due to time pressure, unpredictability, and resource shortages. They often feel overwhelmed by the number of tasks and the need to prioritize some over others. Leaders, on the other hand, experience stress related to administrative responsibilities, recruitment challenges, and managing absenteeism. They are often burdened by the need to ensure adequate staffing and support for their teams.

Stress Management Strategies: Workers and leaders employ various strategies to manage stress, but their approaches differ. Workers rely heavily on practical collaboration and mutual support among colleagues. They often help each other with tasks and share the workload to alleviate individual stress. Workers tend to adopt more immediate, practical solutions to manage stress, such as adjusting their schedules, reprioritize tasks and using reminder notes. They often rely on creative solutions and being flexible to handle variations that causes stress. Leaders, however, focus on long-term, systematic solutions, such as strategic planning, implementing clear procedures, providing staff training, resource allocation and creating a supportive work environment with open communication to mitigate stress. Both workers and leaders see the value of technology in service delivery, but their perspectives differ. Workers appreciate tools that facilitates day-to-day task performance but are concerned about maintaining human contact with patients. While the leaders more strongly focus on the strategic use of technology to reduce stress by implementing new tools and processes to improve efficiency.

Conclusion: The study highlights several key differences between workers and leaders in their experiences and management of stress. Workers appreciate practical, hands-on solutions while leaders prioritize structural and long-term strategies to reduce stress and improve overall efficiency. Understanding the different perspectives and approaches to stress management between workers and leaders is useful in future quality improvement efforts. By addressing the unique needs and stressors of both groups, it is possible to create a more supportive and efficient work environment.

Disclosure of Interest: None Declared

Strengthening Healthcare Workforce Leadership and Governance to Achieve Quality Care and Universal Health Coverage in Africa: Learnings from a multi-country leadership program: (2447) Sonu Goel

ISQUA2025-ABS-2447

S. Goel ^{1,*}, N. Bhatnagar ¹, K. Upadhyay ¹, A. Sharma ¹

¹Community Medicine and School of Public Health, PGIMER, Chandigarh, India

Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Africa faces critical healthcare challenges, with only 42% of people in sub-Saharan Africa having access to essential primary healthcare (PHC) services, and progress toward Sustainable Development Goals (SDGs) remains slow. Leadership capacity among healthcare professionals is essential for strengthening PHC, ensuring quality care, and advancing Universal Health Coverage (UHC). Empowering health workers to take an active role in shaping future of healthcare requires leadership that is respectful, trustworthy, and compassionate. In turn, such leadership can create conditions necessary to transform approaches to quality, relevant for evolving healthcare landscape. The International Public Health Management Development Program (IPHMDP), launched in 2016, aims to enhance leadership skills among healthcare professionals, ensuring quality service delivery and sustainable health system improvements. This study evaluates the program's impact on developing leadership competencies that drive healthcare quality and governance.

Methods: In this cross-sectional study, 80 participants from 11 African countries completed a structured Leadership Competencies Questionnaire (LCQ) (based on the Medical Competency Leadership Framework (MCLF) before and after their participation in IPHMDP. The study targeted healthcare professionals, including doctors, public health practitioners and other healthcare workers. The LCQ comprised 30 questions, focusing on 5 core leadership domains: demonstrating personal qualities, working with others, managing services, improving services, and setting direction. Participants rated their perceived competencies on a Likert scale from 1(very poor) to 5(very good) and assessed perceived importance of each competency, with ratings from 1(unimportant) to 5(very important). Quantitative data were analyzed using SPSS version 27. Paired t-tests were employed to compare pre- and post-course competency levels, while regression analysis examined relationship between perceived importance of skills and changes in competency levels. Statistical significance was determined at a 95% confidence interval.

Results: A total of 80 respondents completed questionnaire, with 47% female, 58% aged between 30-40 years, and 45% holding a PhD or higher qualification. Majority (86%) were employed in the public health sector. 39% participants were clinicians, 25% public health professionals, and 14% nurses. Notably, 77% of respondents had never received formal leadership training prior to the course. The statistically significant (<0.001) improvement between pre-posttest was observed in all domains, specifically in working with others, particularly in areas of problem-solving and program management. Among self-perceived importance ratings, 81% of participants rated setting direction, improving services, and working with others as 'very important'. Regression analysis revealed a significant relationship between perceived key domains and observed post-course changes in skill levels.

Conclusion: Capacity building initiatives such as IPHMDP demonstrates a significant impact in strengthening healthcare leadership and governance, leading to improved PHC and contributes to UHC in Africa. By equipping healthcare professionals with essential leadership competencies, the program fosters sustainable improvements in service quality, efficiency, and workforce management. Scaling such leadership initiatives is essential for ensuring resilient healthcare systems and achieving international quality benchmarks.

Disclosure of Interest: None Declared

Implementation of the Systematic Approach for Incident Reporting in Nineteen Healthcare Services: (3548) Jaqueline Ferreira da Silva

ISQUA2025-ABS-3548

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Patient safety is a fundamental aspect of healthcare delivery. Reporting and investigating safety incidents are essential tools for identifying their causes and root issues, allowing for the implementation of corrective actions to prevent the recurrence of adverse events. This study aims to describe the implementation of a systematic approach for reporting, investigating, assessing, analyzing, and managing safety incidents in ten new services within a healthcare institution, with the goal of enhancing patient safety and reducing the occurrence of adverse incidents.

Objectives:

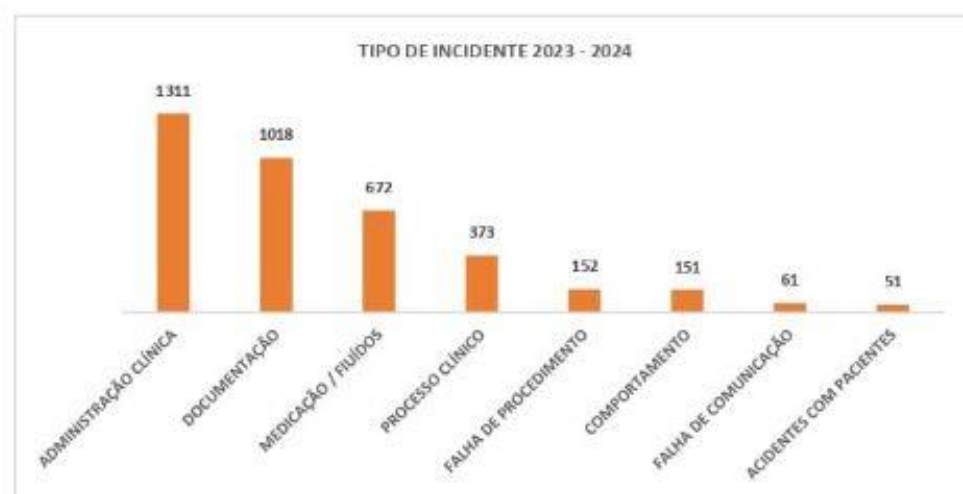
- Describe the implementation of a systematic approach for reporting, investigating, and managing safety incidents in ten new services within a healthcare institution.
- Identify the outcomes of the systematic approach correction in terms of patient safety and reduction of adverse incidents.
- Share lessons learned and recommendations for other institutions seeking to implement a systematic approach for reporting, investigating, and managing safety incidents.

Methods: systematic approach was developed based on the guidelines of the World Health Organization (WHO) and the Joint Commission International (JCI). The implementation process involved extensive training for the patient safety team. A standardized form was used for reporting and investigating incidents. Incident analysis was conducted using the Root Cause Analysis (RCA) methodology.

Results: The systematic approach was discontinued in July 2023, and by December 2024, a total of 3,651 incidents had been recorded across the institution's ten new services. The analysis of these incidents revealed the following classification distribution:

- 48.5% of incidents were classified as "CIRC. RISCO" (high-risk situations with the potential for severe harm, but without actual occurrence)

Image:



Conclusion: The implementation of the systematic approach for incident reporting, investigation, and analysis across the institution's nineteen services, initiated in July 2023, has proven to be an effective strategy for enhancing patient safety. Data collected up to December 2024 indicate that most reported incidents were classified as "CIRC. RISCO" and "NEAR MISS", demonstrating that the system successfully identified and mitigated incidents before they could cause significant harm to patients.

As additional outcomes, an improvement in the quality of care provided and greater awareness of the

importance of patient safety were observed, particularly within the healthcare units. Based on Root Cause Analysis (RCA) recommendations, corrective measures were implemented to reduce the recurrence of similar incidents in the future.

In summary, the implementation of this systematic approach represents a significant step toward continuous improvement in patient safety, aligning with international best practices and proving effective in fostering a culture of safety within the institution.

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(2) World Health Organization, "Patient Safety".

(3) BMJ Quality & Safety, "Implementation of a Patient Safety Program in a Healthcare System".

Disclosure of Interest: None Declared

Transforming Health Education: Curriculum Integration of "Caring for the Caregiver" for Person-Centered, Humane and Equitable Care.: (2622) Maria Peniche Lozano

ISQUA2025-ABS-2622

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Preferred presentation method: 10 Minute Lightning Talk (E-Poster)

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: La educación para la salud ha priorizado tradicionalmente las competencias técnicas, dejando en un segundo plano la formación en autocuidado profesional, la seguridad psicológica y la conciencia de equidad y diversidad en la atención. En este estudio se presenta la integración curricular de la unidad didáctica "**Cuidar al Cuidador**", un espacio académico diseñado para promover el **Cuidado Centrado en la Persona (ACP)**, aplicándolo no sólo al paciente, sino también al profesional en formación. Se utilizaron la **Indagación Apreciativa (IA)** y **entrevistas semiestructuradas**.

Methods: Métodos: Estudio cualitativo con enfoque participativo, utilizando la **Indagación Apreciativa** y la **entrevista semiestructurada** como herramientas clave para explorar las percepciones de los estudiantes.

Población:Estudiantes de ciencias de la salud que participaron en la unidad didáctica "**Cuidando al Cuidador**" como parte de un programa de educación para la salud.

Estrategia de análisis: Se realizaron **entrevistas semiestructuradas** para explorar experiencias, creencias y percepciones sobre el autocuidado, los sesgos inconscientes y su relación con la seguridad del paciente. Se utilizó el **análisis temático** para identificar los patrones emergentes y reflexionar sobre su impacto en la práctica clínica.

Se utilizó como referencia metodológica el **marco de la Psicología del Cambio del IHI** (Hilton y Anderson, 2018) para analizar la transformación de la percepción de los estudiantes sobre su rol profesional.

Consideraciones éticas: Se garantizó el anonimato y un espacio seguro para la libre expresión de las experiencias y necesidades individuales

Results: Resultados; Mayor conciencia sobre el autocuidado y su impacto en el cuidado, El 90% de los estudiantes afirmó que aprender sobre el autocuidado en esta unidad didáctica transformó su percepción sobre la calidad y seguridad del paciente. -Se generó un cambio en la forma en que los estudiantes perciben la salud mental y el bienestar emocional como parte esencial de la práctica clínica.

Identificación y cuestionamiento de sesgos inconscientes -El ochenta por ciento de los estudiantes identificó al menos un sesgo inconsciente en su percepción de los pacientes y compañeros de clase. - Se alentó la reflexión sobre cómo estos sesgos pueden afectar la equidad en la atención de salud y la toma de decisiones clínicas.

Personalización del aprendizaje y participación activa: La Indagación Apreciativa permitió a los estudiantes identificar lo que consideraban fundamental en su formación y estos hallazgos se integraron en el currículo, alineándolos con los principios de la ACP. - Se promovió el reconocimiento del paciente y del profesional como **Personas completas**, fortaleciendo la comunicación y la toma de decisiones compartidas.

: Impacto en la cultura organizacional: El ochenta y cinco por ciento de los estudiantes destacó que este espacio curricular les permitió reflexionar sobre su rol como futuros profesionales y la importancia de promover entornos clínicos más humanos. -Se fortalecieron valores como la **empatía, la seguridad psicológica y el trabajo en equipo**, generando un impacto positivo en la percepción de calidad en la atención sanitaria.

Image:



Conclusion: Conclusión

La integración curricular de la unidad didáctica **"Cuidado del Cuidador"** demuestra que el **Cuidado Centrado en la Persona** no solo debe aplicarse en la relación con el paciente, sino también en la **formación del profesional de la salud**. Al reconocer el autocuidado como un componente esencial de la seguridad y la calidad de la atención, los estudiantes desarrollan una perspectiva más humana y equilibrada de la práctica clínica.

Este estudio destaca la importancia de diseñar currículos flexibles y adaptativos, donde los estudiantes participen activamente en la construcción del conocimiento. El reconocimiento y análisis de **los sesgos**

inconscientes en el aula permitió a los estudiantes reflexionar sobre cómo estos prejuicios pueden influir en el cuidado de la salud, promoviendo una cultura de mayor equidad y respeto en la relación médico-paciente y en el trabajo en equipo.

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Disclosure of Interest: None Declared

Implementation of the Long Peripheral Venous Catheter: (2991) Stheffany Simões de Assunção

ISQUA2025-ABS-2991

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Preferred presentation method: 10 Minute Lightning Talk (E-Poster)

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Ultrasound and new catheters improve patient care safety and quality, but they require a specialized team for insertion and management. We present the results of the implementation of the Long Peripheral Venous Catheter (LPVC) by the Catheter Team (CT) of Hospital Santa Joana Recife (HSJR), Brazil.

Methods: This is a retrospective, non-randomized study evaluating all catheter insertion requests received by the CT from January to December 2024. HSJR has 125 beds, including 30 adult ICU beds and 20

pediatric/neonatal ICU beds. The CT consists of one physician and five nurses, performing ultrasound-guided punctures for Peripherally Inserted Central Catheters (PICC), Centrally Inserted Central Catheters (CICC), and Arterial Catheters (AC). Data were collected from the CT database without patient identification.

Results: A total of 852 requests were received, including 422 (49.5%) for LPVC, 419 (49.2%) for central access, and 11 (1.3%) that were contraindicated. Antibiotic therapy was the primary indication for both PICC/CICC (84.0%) and LPVC (37.7%). The ICU accounted for 58% of PICC requests, while hospital wards made 44% of LPVC requests. First-attempt success rates were 91.6% for PICC, 85.7% for LPVC, and 100% for both CICC and AC. There was a 47.8% reduction in phlebitis cases and a 47.6% reduction in contrast extravasation incidents.

Conclusion: The rational selection of catheters and the use of ultrasound are essential for venous preservation. A specialized team for ultrasound-guided punctures reduces costs, minimizes complications, and enhances patient experience with greater accuracy.

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Disclosure of Interest: None Declared

Enhancing Patient Outcomes by Improving Nursing Hours Per Patient Day (NHPPD) in a Tertiary Care Hospital: (3169) Ashraf Imtiaz

ISQUA2025-ABS-3169

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: The Evercare Hospital Lahore, a 128-bed tertiary care facility, faces challenges in maintaining optimal nurse-to-patient ratios, especially in critical care units. Nursing Hours Per Patient Day (NHPPD) is a critical metric used to plan staffing levels, ensure adequate nursing resources, and enhance patient outcomes. This quality improvement project aimed to optimize NHPPD to improve care quality, nurse satisfaction, and operational efficiency.

Methods: The initiative followed a structured methodology:

1. **Assessment:** Baseline NHPPD data from January to September 2023 were collected and analyzed across various units. Factors such as patient acuity, staffing levels, and nurse workload were identified.

2. **Interventions:** Strategies included individualized NHPPD targets for critical care units, salary enhancements, and a shift to 12-hour schedules for ICU staff. Real-time dashboards and monthly audits were introduced for continuous monitoring.

3. Implementation: Reallocation of nursing hours from low-census units to critical care units was conducted, ensuring efficient resource use without compromising patient safety.

4. Evaluation: Post-intervention NHPPD data from January to September 2024 were analyzed, focusing on patient outcomes, staff satisfaction, and efficiency.

Results: The NHPPD target increased from 8.71 to 11.22 in critical care units. Post-intervention analysis showed improved patient satisfaction, enhanced clinical outcomes (e.g., reduced adverse events like falls and infections), and better staff retention due to improved working conditions.

Conclusion: Optimizing NHPPD positively impacted patient safety, clinical outcomes, and nurse satisfaction. This initiative demonstrates that targeted interventions and data-driven decisions can sustainably improve care delivery and operational efficiency in a tertiary care hospital.

Disclosure of Interest: None Declared

Mortality savings following a national program for diabetes care: a prophecy fulfilled: (2198) **Jacob Dreier**

ISQUA2025-ABS-2198

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: In a 2008 paper (1), the authors estimated that a national program for diabetes care would prevent 4,218-4,803 deaths over the period 2001-2020, due to improvements in Hb A1c and LDL control in people with diabetes. The present study's goal was to retrospectively examine the differences between the estimated mortality (1) and the actual mortality from diabetes based on current data up to 2020.

Methods: Diabetes prevalence and performance data were obtained for 2012 and 2020 from the database of the National Program for Quality Indicators in Community Healthcare. Data on average HbA1c levels was obtained from the Israel Center for Disease Control. The estimated number of deaths was calculated based on the increase in population and the prevalence of diabetes in adults (18+ years old), assuming no change in case-fatality rates, Hb A1c control and LDL control, vs. the actual changes measured. These changes were compared to the authors' estimates in 2008.

Results: Diabetes prevalence increased from 3.15% in 2001 to 6.53% in 2020. During this period, the Israeli population increased from 6.44 million to 9.22 million. Over this period the average Hb A1c decreased from 8.13% to 7.00 (compared with our projection of 7.4%). The proportion of patients with well-controlled Hb A1c (<7%) increased from 41.6% in 2001 to 53.8% (we estimated it at 50%). The proportion of patients with diabetes and LDL-cholesterol <100 mg/dl increased from 41.6% to 59.8% (vs. our estimate of 63%). As a result, the case-fatality rate of diabetes decreased from 1.24% in 2001 to 0.43% in 2020. The number of deaths in 2020 (N=2,596) was only 3% higher than in 2001 (N=2,515). If Hb A1c and LDL-cholesterol levels

in 2020 remained identical to 2001, the increase in population and diabetes prevalence would lead to an expected number of 7,438 deaths, had the case-fatality rate unchanged (i.e. a tripling of the number of deaths). Therefore, 4,839 deaths were prevented (as compared to out 2008 estimate of 4,922 prevented deaths).

Conclusion: Despite a 1.5-fold in the size of the Israeli population and a doubling of the prevalence of diabetes, the number of deaths in patients with diabetes increased by merely 3.2% over a period of 19 years. This can be attributed to improvements in diabetes care as indicated by improved HbA1c and LDL management that have caused in a drastic fall in case fatality rates resulting in 17,632 fewer lives lost from 2001-2020. However, the huge increase in prevalence of diabetes is extremely alarming and should be dealt with by public health measures.

References: 1. Dreiherr J, Ginsberg G, Rabinowitz G, Raskin-Segal A, Weitzman R, Porath A. Estimation of mortality savings due to a national program for diabetes care. Eur J Intern Med, 2008; d11:10.1016/ejim2008.09.003

Disclosure of Interest: None Declared

Optimizing Emergency Department Efficiency Using Discrete Event Simulation: (3390) Gabriel Faria De Oliveira

ISQUA2025-ABS-3390

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Emergency departments (EDs) are critical in healthcare, often facing overcrowding, resource constraints, and unpredictable patient inflows. Efficient patient flow management is key to ensuring timely care, reducing wait times, and improving hospital operations. However, traditional queue-based strategies often fail to capture hospital dynamics, increasing inefficiencies. This study leverages Discrete Event Systems (DES), particularly stochastic P-timed Petri nets and Max-Plus Algebra, to model and optimize ED processes. These mathematical tools enable a realistic representation of patient flow and resource allocation, allowing hospitals to anticipate delays and implement evidence-based improvements.

By integrating an analytical model with a stochastic simulation, we provide quantifiable insights into ED efficiency, helping managers reduce wait times, optimize staffing, and improve operations, ensuring a safer, more responsive healthcare system.

Methods: This study evaluates an emergency hospital system using stochastic P-timed Petri nets, max-plus algebra, and discrete-event simulation to model patient flow dynamics. Arrival rates follow an exponential distribution, and Markov Chains are applied for steady-state probability calculations.

A two-step approach was used:

1. Analytical Model: A deterministic model was first developed using balance equations and Markov Chains to estimate steady-state probabilities. This model provided baseline performance metrics, including average waiting time, queue length, and service rates, serving as a benchmark for validation.
2. Stochastic Simulation: To capture real-world variability, a stochastic max-plus simulation was conducted, running 10 iterations of 10,000 patients each, with a 1,000-patient warm-up period. This step incorporated random fluctuations in arrival and service times, enhancing the model's accuracy.

Computational analysis was performed using Python and ScicosLab. Since the study is computational and does not involve real patient data, no ethical approval was required, but best practices for scientific rigor and reproducibility were followed.

Results: The study confirms the effectiveness of stochastic P-timed Petri nets and max-plus algebra in modeling and optimizing hospital emergency services. The analytical model established baseline estimates for waiting times, queue lengths, and service rates, which were validated through stochastic simulations. The results showed that waiting times and queue lengths increased significantly under high-demand conditions, confirming the system's sensitivity to arrival rate variations and resource availability.

The Figure illustrates the stochastic P-timed Petri net model designed to simulate patient flow through triage and medical care in an emergency department. In this model, transitions (T) represent events that alter the system state, while places (P) correspond to different stages in the patient journey. The process begins with T_u , where patients arrive at P_0 , the entry node. To regulate entry, P_7 ensures that only one patient enters triage at a time, while P_{15} performs the same function for medical care. Once admitted, patients wait in a queue for medical attention at P_2 (triage) or P_{10} (medical care). The queue capacity is limited by P_6 (triage) and P_{14} (medical care), restricting the number of patients in line.

When a patient is selected for treatment, T_t (triage) and T_2 (medical care) direct them to P_3 and P_{11} , marking admission to triage and medical consultation, respectively. The T_c transition initiates the triage consultation, moving the patient to P_4 , while T_{c2} initiates the medical consultation, moving the patient to P_{12} . The system's service capacity is determined by P_5 (triage) and P_{13} (medical care), defining the number of patients that can be attended to simultaneously. Once triage is complete, the T_d transition moves the patient to medical care, and after consultation, the T_{d2} transition allows the patient to exit the system, marking the completion of their journey.

By structuring the patient journey through this Petri net model, it becomes possible to analyze waiting times, resource allocation, and system efficiency under different conditions. The integration of stochastic elements and max-plus algebra provides a precise estimation of patient flow and system performance, making this model a valuable tool for hospital decision-making and resource optimization.

The dynamic behavior of the system depicted in Figure 4 is modeled using Tropical Algebra (Max-Plus Algebra), as represented by the following equations:

$$a_2(k) = V_{a2} \otimes (d_1(k) \oplus a_2(k-1) \oplus c_1(k-2))$$

$$c_2(k) = V_{c2} \otimes (a_2(k) \oplus d_2(k-1))$$

$$d_2(k) = V_{d2} \otimes c_2(k)$$

The Max-Plus Algebra framework is particularly effective for modeling discrete event systems (DES), where operations such as synchronization and sequencing are fundamental. In this formulation, the max operator ($\oplus$) selects the latest occurring event, ensuring that processes proceed only when all required conditions are met, while the addition operator ($\otimes$) represents the accumulation of time delays throughout the system.

By applying Max-Plus Algebra, it is possible to construct a mathematical representation that precisely models event timing, constraints, and dependencies within the system. This framework allows for accurate performance evaluation, prediction of system behavior, and optimization of scheduling strategies, making it particularly useful for emergency department operations. The equations define patient flow through recursive relationships, enabling a systematic analysis of delays, resource limitations, and synchronization effects, which are critical for improving hospital efficiency and patient care.

In this study, λ_a (lambda a) represents the patient arrival rate, a key variable affecting hospital performance. As λ_a increases, more patients arrive in a given time period, leading to longer waiting times and greater pressure on hospital resources. Additionally, the Analytical Model Difference column in the tables represents the discrepancy between the analytical model predictions and the stochastic simulation results using max-plus algebra. This difference demonstrates the high accuracy of the analytical model, as its estimates closely align with the stochastic simulation results, confirming the robustness of the proposed methodology. To quantify these effects, Table I presents the mean waiting times for triage and medical care, along with confidence intervals and the difference between the analytical and stochastic models.

Table I: Max-Plus Model - Simulation Results for Triage and Medical Care

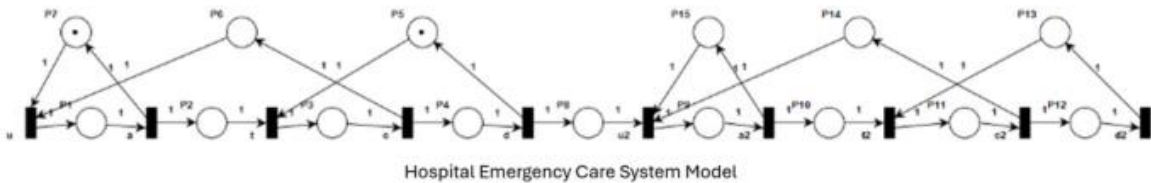
λ_a	Category	Mean Time (s)	Confidence Interval	Model Difference (s)
0.1	Triage	0.116091	0.112839 - 0.119343	-0.00318
0.1	Medical Care	0.234907	0.227264 - 0.242549	-0.00218
0.2	Triage	0.248084	0.224111 - 0.249349	-0.00258
0.2	Medical Care	0.514334	0.494548 - 0.533113	-0.00258
0.4	Triage	0.463549	0.452899 - 0.474190	-0.00318
0.4	Medical Care	1.179017	1.146563 - 1.210654	0.258764
0.6	Triage	0.682744	0.670653 - 0.694837	-0.00317
0.6	Medical Care	1.876232	1.829822 - 1.922642	0.68812
1	Triage	1.008185	0.995939 - 1.020431	-0.00662
1	Medical Care	2.48942	2.284920 - 2.692383	1.373356
2	Triage	1.422917	1.407954 - 1.437880	-0.00675
2	Medical Care	2.857714	2.844524 - 2.870904	1.156962

Queue lengths were directly correlated with arrival rates and resource allocation, reinforcing the need for optimized scheduling and triage strategies. The results indicate that higher patient arrival rates (λ_a) lead to a non-linear increase in waiting times. The difference between models remained within an acceptable range,

validating the robustness of the approach. Additionally, the computational cost for both the analytical model and the stochastic simulation was remarkably low, demonstrating the efficiency of the proposed method. The analytical model required less than 0.009 seconds to compute, providing instantaneous estimations, while the stochastic simulation was completed in under 20 seconds, even when incorporating variability and multiple iterations. This computational efficiency ensures fast scenario testing and real-time decision-making, making it a feasible and practical tool for hospital management.

These findings highlight the importance of strategic resource allocation and optimized scheduling in emergency services. Adjusting staffing and triage processes during peak hours reduces waiting times and system congestion, while a more dynamic triage system enhances service rates and prevents bottlenecks. This study demonstrates the practical application of stochastic modeling in optimizing emergency department efficiency, providing data-driven insights to support hospital decision-making and improve patient care quality.

Image:



Conclusion: This study confirms that stochastic P-timed Petri nets and max-plus algebra are powerful tools for optimizing emergency department efficiency. The analytical model accurately predicted waiting times, queue lengths, and service rates, which were validated through stochastic simulations. The findings highlight that strategic resource allocation and patient flow optimization significantly reduce delays and congestion. By leveraging data-driven insights, hospitals can enhance operational efficiency, improve patient safety, and ensure timely care delivery, ultimately fostering a more resilient and responsive healthcare system.

References:

[1] C. G. Cassandras and S. Lafortune, Introduction to Discrete Event Systems, Springer Science & Business Media, 2008.

[2] C. A. Maia, Discrete Event Systems: Basic Models, Department of Electrical Engineering: School of Engineering - UFMG, 2021.

Disclosure of Interest: None Declared

Enhancing Medication Safety: The Impact of South Korea's Drug Utilization Review System: (2774) Seyoung Hwang

ISQUA2025-ABS-2774

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Preferred presentation method: 10 Minute Lightning Talk (E-Poster)

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: The Health Insurance Review and Assessment Service (HIRA) of South Korea has implemented a comprehensive Drug Utilization Review (DUR) system to promote safe and appropriate medication use across the healthcare system. Medication misuse, including duplicate prescriptions, contraindicated drug interactions, and inappropriate dosing, poses significant risks to patient safety. This study evaluates the effectiveness of HIRA's DUR service in preventing medication misuse, improving prescription behavior, and enhancing pharmaceutical safety. The DUR system provides real-time alerts to healthcare professionals during the prescription and dispensing processes, ensuring compliance with safety regulations established by the Ministry of Food and Drug Safety (MFDS).

Methods: This study conducted a quantitative analysis of the DUR system's impact on medication safety by examining the effectiveness in preventing potential medication misuse through the number of notifications generated compared to total prescriptions entered, and the number of prescription modifications and reasons for changes. Changes in prescription behavior were assessed by comparing modifications before and after DUR intervention. The study also evaluated the impact of the non-face-to-face prescription blocking function introduced in 2024 by analyzing prescription patterns before and after its implementation and the number of instances of prescription misuse prevented, particularly for controlled substances such as narcotics and obesity medications.

Results: The analysis demonstrated the DUR system's significant role in enhancing medication safety. It prevented duplicate prescriptions and contraindications, monitoring 8,582 drug-drug interaction combinations with 616,222 alerts, 2,877 age-related contraindicated drugs with 945,869 alerts, and 18,796 pregnancy-related contraindicated drugs with 528,389 alerts. The system also monitored duplicate efficacy groups, generating 52,900,165 alerts, and duplicate identical components across 2,795 medications with 71,287,824 alerts. Patient safety-related prescription precautions included 85 safety-related caution medications generating 12,049,662 alerts, 6,560 dose-related caution medications with 2,352,821 alerts, 412 duration-related caution medications with 1,589,760 alerts, 2,329 splitting caution medications with 555,090 alerts, 1,687 elderly-related caution medications with 41,752,474 alerts, 4,986 cost-effective dosing recommendations generating 817,714 alerts, and 1,500 medications with warnings related to approved labeling, triggering 171,344 alerts. Among 140 million prescriptions reviewed, 11 million resulted in modifications, yielding an 8.0% prescription change rate. The non-face-to-face prescription blocking function introduced in 2024 successfully prevented 3 million instances of prescription misuse, particularly for narcotics and weight-management medications.

Conclusion: This study underscores the effectiveness of HIRA's DUR system in preventing medication misuse and promoting pharmaceutical safety in South Korea. The system's ability to generate real-time alerts and facilitate two-way information exchange between medical institutions enhances patient safety and supports healthcare providers in optimizing prescription practices. The success of the non-face-to-face prescription blocking function further highlights the potential of DUR in addressing specific medication-related challenges. As the system

evolves, it is expected to play a critical role in maintaining and advancing medication safety standards in Korea's healthcare system.

Disclosure of Interest: None Declared

Lean Methodology Assisting in the Optimization of Overall Efficiency in the Surgicenters of a Quaternary Hospital in Recife/PE: (2266) José Gonçalves Alves Neto

ISQUA2025-ABS-2266

J. G. Alves Neto ^{1,*}, C. de Souza Leão ¹, A. Augusto de Araújo Pita ¹, J. Milena Gomes dos Santos Gonçalves ², A. Lira Pernambuco ¹, J. Thadeus Souza Costa de Páscoa ¹, L. Daiana Rodrigues Vitor Ribeiro ¹, J. Samarone Nascimento de Lima ¹, L. Otávio Rodas Ferreira de Almeida ¹, F. Anchiele Carvalho da Silva ¹

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Surgicenter efficiency is crucial for optimizing resources and improving the quality of healthcare delivery. Indicators such as surgery cancellation rates, operating room utilization hours, surgical production index, and the number of surgeries performed as planned are essential for evaluating the effectiveness of a surgical block. In this context, Lean Methodology (LM), which aims to eliminate waste and maximize value for the patient, has been widely used to improve processes in hospital environments, including surgical blocks. The application of LM tools, such as value-stream mapping and process standardization, can significantly contribute to both the efficiency and quality of care. This study was intended to implement LM-based interventions to optimize efficiency in surgical block.

Methods: An intervention study was conducted over a period of one year. Initially, a multidisciplinary working group was created to map the entire surgical scheduling flow, from patient admission to discharge, using the *Makigami* tool. This tool allowed for the identification of all points that did not add value to the process. Subsequently, several interventions were implemented: the introduction of electronic surgical scheduling, restructuring of the surgical scheduling center, a pre-surgery briefing 24 hours before procedures, structuring patient admission times according to the surgical schedule, a panel with a map in the admission reception, revision of the blood reserve protocol, a report on reasons for surgical cancellations by specialty, and the implementation of *Kamishibai* within the surgical block. All staff members involved were trained in each of these processes.

Results: Through the implemented policies, the following outcomes were achieved in subsequent years: a 475% increase in the overall efficiency of the surgical block, a 303% increase in scheduling efficiency, a 38% reduction in cancellations, an 8% increase in the institution's revenue from elective surgeries, and the complete elimination of elective surgeries without prior notice. Additionally, the nursing team was optimized, resulting in reduced human resource costs.

Conclusion: The actions implemented, both in the field of technology and in the training and improvement of human resources, were essential to achieving results in a high-complexity unit. These actions had a direct

impact on the quality of care and the rational use of resources, even allowing for expanded surgical production.

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Disclosure of Interest: None Declared

Impacts of Implementing a Skin Care Committee in a High-Complexity Hospital in the Interior of Pará: Benefits in the Treatment of Traumatic and Extensive Injuries: (2658) Iara DO NASCIMENTO Pantoja

ISQUA2025-ABS-2658

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: The proper management of skin lesions, especially in high-complexity hospitals, is essential for patient recovery, particularly for those with extensive traumatic injuries. Skin lesions, such as pressure ulcers, infections, and complex wounds, are common in hospital settings, resulting in complications that can prolong hospitalization and negatively impact patients' quality of life (Bates-Jensen et al., 2019). The implementation of a Skin Care Committee (SCC) in hospital units is a recognized strategy to optimize care, reduce these complications, and promote a multidisciplinary approach to wound treatment. The CCP's role aims to establish a standardized care plan, train healthcare professionals, and consequently improve clinical outcomes and patient satisfaction (Liu et al., 2020).

This study aims to evaluate the benefits of implementing a Skin Care Committee (SCC) at the Public Regional Hospital of Caetés, located in the interior of the state of Pará. The aim is to highlight the impact of this committee on improving the quality of skin care, preventing complications associated with skin lesions, and accelerating the recovery process of patients, especially those with trauma and extensive injuries.

Methods: A retrospective analysis was conducted on patients treated at the Regional Public Hospital of Caetés over a 12-month period, with a special focus on those who presented extensive traumatic injuries. The implementation of the Skin Care Committee (SCC) involved the creation of an exclusive team dedicated

to the committee, complemented by a multidisciplinary support team composed of doctors, nurses, physiotherapists, nutritionists, and other healthcare professionals. Clinical protocols were established for the prevention of pressure injuries and the treatment of complex injuries, based on evidence-based practices. The effectiveness of the CCP was evaluated by comparing complication rates (such as infections and pressure injuries), recovery time, length of stay, and patient satisfaction levels, before and after the implementation of the committee.

Results: The implementation of the Skin Care Committee (SCC) resulted in a significant reduction in complications associated with skin lesions. There was a 30% decrease in infection cases and a 40% reduction in the incidence of pressure injuries. Moreover, an improvement in wound healing time was observed, with a 15% reduction in the average hospitalization time for patients with extensive injuries. The healthcare team demonstrated greater confidence in skin care practices, and patient satisfaction increased significantly, reflecting the improvement in care and clinical outcomes.

Conclusion: The creation of a Skin Care Committee in trauma-profile hospitals, especially in rural areas, has proven to be an effective strategy to improve the management of skin injuries, reduce complications, and accelerate patient recovery. The multidisciplinary approach, combined with the standardization of care, generated significant clinical results, in addition to contributing to the humanization of care, promoting a better experience for patients. Given the observed benefits, the implementation of specialized committees is highly recommended, particularly in hospitals with limited resources and high demand for patients with extensive injuries, to improve the quality of care and long-term outcomes.

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Disclosure of Interest: None Declared

Collaborative Quality Improvement Methodology for Accreditation: A Strategy for Continuity, Consistency and Team Engagement.: (1294) Joyce Caroline Dinelli Ferreira

ISQUA2025-ABS-1294

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Accreditation is an effective way to standardize processes, reduce waste, and improve the quality of care and patient safety. The institution where this study was conducted holds 25 certifications for different services, with the main one being the Joint Commission International (JCI)¹, first obtained in 1999. The cycles between audit visits require ongoing monitoring and continuous improvement to maintain

accreditation. One of the challenges is to keep the team engaged and compliant with quality standards. Given this context, the objective of the intervention was to develop a continuous preparation model, translating accreditation standards into accessible language and encouraging employee engagement.

Methods: The Collaborative Quality methodology was developed in a healthcare service based in São Paulo, consisting of one large hospital and six advanced units. It was built on two theoretical-methodological frameworks: the Institute for Healthcare Improvement's Improvement Model² and the applied Agile Scrum Methodology³.

The methodology involved the following strategies: definition the work team; structuring and training the roadmap diagram by chapter of the accreditation manual; mapping opportunities and diagnostics by standard and measurement element; structuring results with compliance percentages, scores by chapter and standard; distributing findings in the JCI Safer® Matrix¹ according to scope and probability of harm; structuring action plans by prioritization; virtual learning sessions with educational books; team engagement strategies through educational quizzes, onsite tracer checklists, quiz and tracer compliance dashboards, gamification, and recognition of employees with top ratings; and periodic communication and celebrations with Quality.

Results: The Collaborative Quality Methodology was developed as part of the institutional preparation for the 8th JCI Reaccreditation cycle in 2021 and was applied again in the 9th cycle in 2024. In this implementation, we had a team of 468 employees in 2021 and 713 in 2024.

During the mapping of the 1,250 measurement elements, we recorded 226 partially compliant and 32 non-compliant elements in 2021. In 2024, 305 partially compliant and 33 non-compliant elements were identified. A total of 400 action plans were developed in 2021, and 525 in 2024.

The learning sessions, held biweekly with one chapter covered per meeting, reached 1.301 employees in 2021 and 4,868 in 2024. The recordings were made available on the institutional website, expanding the reach of the content.

Participation in the quizzes was also significant, with 29.800 employees involved in 2021 and 28.589 in 2024.

In 2024, the tracer application by onsite leadership reached a total of 4.104 audits, and interactive games were conducted with the participation of 1.671 employees.

Conclusion: The collaborative quality improvement methodology, used as the foundation for preparing for the reaccreditation visit, promoted greater involvement of leaders in identifying opportunities and creating improvement plans. Employees demonstrated preparation and confidence when responding to auditors, making the visit process smoother, with engaged and participative teams showing comprehensive knowledge of the accreditation requirements. This strategy contributed significantly to the success of the accreditation in 2021 and 2024. In both cycles, there were no "non-compliance" findings, with 23 and 28 items recorded as "partially compliant," respectively. Additionally, we maintained the absence of findings in the critical zone of the JCI Safer® Matrix and were reaccredited with merit by the JCI.

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2. Langley GJ, Moen RD, Nolan KM, Nolan TW, Norman CL, Provost LP. Modelo de Melhoria: uma Abordagem Prática Para Melhorar o Desempenho Organizacional. 1^a ed. São Francisco: Jossey-Bass; 2011.

Disclosure of Interest: None Declared

ISQUA2025-ABS-2660: Juan Antonio Gallarday: Improving Emergency Room Efficiency for Low-Complexity Patients: A Cost-Effective Consulting Room Solution

ISQUA2025-ABS-2660

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: The COVID-19 pandemic highlighted inefficiencies in emergency care, particularly for low-priority patients (triage levels 4 and 5), who often face prolonged waiting times due to the prioritization of more severe cases. Addressing this issue requires targeted solutions that optimize patient flow without significant infrastructure investment. This study evaluates the impact of a dedicated low-complexity consulting room in a private hospital in Lima, Peru. This intervention, requiring only one room and one physician, aimed to streamline care for non-urgent patients, improving efficiency without compromising quality. Using the DMAIC framework, we assessed the intervention's effectiveness through a two-phase analysis: an initial 2-month evaluation followed by a 7-month extended study, comparing patient flow metrics from May to December 2024 against the same period in 2023.

Methods: This study employed the DMAIC (Define, Measure, Analyze, Improve, Control) methodology to evaluate the impact of a low-complexity consulting room intervention. The evaluated period consisted of a daily schedule from 3 PM to 9 PM, staffed by a single physician within the existing emergency department. We conducted a two-phase analysis: an initial study comparing May to June 2024 against the same period in 2023, followed by an extended evaluation from May to December 2024 versus 2023. We compared key performance indicators, including time from triage to attention, admission to discharge, and overall patient flow. Since the data did not follow a normal distribution, we used the Mann-Whitney U test to assess statistical significance.

Results: The initial 2-month study revealed a 50% reduction in triage-to-attention time and a 25% reduction in admission-to-discharge time. The extended 7-month analysis confirmed continued improvements, with a 22% reduction in triage-to-attention time, a 13% reduction in admission-to-discharge time, and a 24% reduction in admission-to-triage time. These findings demonstrate the intervention's sustained impact despite a slight decrease in efficiency over time. Importantly, these improvements were achieved without additional personnel or infrastructure investment.

Image:

Year	N Pop	Month Range
2023	730	May to June
2024	713	May to June
% Change	-2%	

Patient Stage	Minute Difference	% Change	P-Value
Triage to Attention	-9.575	-50%	< 0.000
Attention to Discharge	1.142	4%	0.461
Admission to Discharge	-16.667	-25%	< 0.000

Year	N Pop	Month Range
2023	2843	May to Dec
2024	3135	May to Dec
% Change	10%	

Patient Stage	Minute Difference	% Change	P-Value
Triage to Attention	-3.4	-22%	< 0.000
Attention to Discharge	0.4	1%	0.56
Admission to Discharge	-7.867	-13%	< 0.000
Admission to Triage	-1	-24%	< 0.000
Admission to Attention	-4.7	-22%	< 0.000

Conclusion: This study demonstrates that implementing a dedicated low-complexity consulting room can significantly reduce emergency room wait times for non-urgent patients. The intervention achieved sustained improvements in patient flow with minimal resource investment, requiring only an existing room and one physician. While the impact slightly decreased over time, the overall efficiency gains remained substantial. Future research should explore the underlying factors contributing to the decline in impact and evaluate complementary strategies to further optimize emergency care delivery.

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Disclosure of Interest: None Declared

Unlocking Access: The Impact of Continuous Quality Improvement on Advanced Access in Primary Care: (3484) Isabelle Gaboury

ISQUA2025-ABS-3484

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Improving access to primary health care is among top priorities for many countries. Advanced Access (AA) is one of the most recommended models to improve timely access to care. Over the past 15 years, the AA model has been implemented in Canada, but the implementation of AA varies substantially among providers and clinics. Continuous quality improvement (CQI) approaches can facilitate organizational change, such as AA implementation. The general aim of this study is to analyze the implementation and effects of CQI cohorts on AA for primary care clinics. The specific objectives are to: 1) document and compare structural organizational changes and processes of care related to AA within study groups (intervention and control); and 2) Assess the effectiveness of CQI cohorts on AA outcomes.

Methods: A cluster-controlled trial was conducted to comprehensively and rigorously evaluate 48 multidisciplinary primary care. 24 clinics from the intervention regions received the CQI intervention for 18 months, including three iterative activities designed to achieve the clinic's improvement objective:: 1) reflective sessions and problem prioritization; 2) plan-do-study-act cycles; and 3) group mentoring. A fully trained QI coach delivered the intervention using a hybrid meeting model. Clinics in the control regions received an audit-feedback report on access. Control clinics were paired to the intervention clinics based on their roster size and teaching mission. Complementary qualitative and quantitative data reflecting the quintuple aim were collected over the intervention period, including the third next available appointment (3NAA), relational continuity, availability for urgent consultations, no-show rates, and provider well-being.

Results: Three clinics from the intervention group did not complete the trial (one drop-out, two clinics closed). Four control clinics received a CQI intervention to improve AA on month 14 of their follow-up and were therefore removed from the control group for their final 4 months of follow-up. The average 3NAA at baseline was 8.4 days in the intervention group (range 1 to 17) and 9.8 days in the control group (range 2 to 19). 10 clinics in the intervention group improved their average 3NAA by 40% on average compared to 2 clinics in the control group (average improvement 30%). 18 clinics maintained a stable 3NAA throughout the follow-up period (7 intervention vs. 11 control). Key changes implemented in the intervention clinics included the development of an orientation algorithm, revision of provider schedules based on AA principles, and optimization of interprofessional collaboration. Support from the QI coach and access to weekly indicators emerged as key drivers of the intervention's success. Further results of the qualitative interviews will be presented.

Conclusion: This study highlights the potential of QI approaches in supporting the implementation of AA in primary care clinics. Key organizational changes, including workflow optimization, provider schedule adjustments, and interprofessional collaboration, were instrumental in improving access. Variability in outcomes across clinics underscores the complexity of AA implementation and the influence of contextual factors and the need for close follow-ups with a QI coach. These findings reinforce the value of CQI in driving system-level change, while emphasizing the need for tailored support and ongoing monitoring to maximize the long-term impact of AA initiatives in primary care.

Disclosure of Interest: None Declared

Construction of an Audit Tool for Mandatory Practices Required by the Canadian Accreditation Model: (3337) Nicole de Melo Viana Taumaturgo

ISQUA2025-ABS-3337

N. D. M. V. Taumaturgo ^{1,*}, L. Paes ¹, J. Siqueira ¹

Preferred presentation method: 10 Minute Lightning Talk (E-Poster)

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Auditing in patient quality and safety has become an essential tool for diagnosing non-conformities, identifying improvements, and recognizing strengths. When conducted systematically and with proper instrumentation, it allows for an accurate evaluation of institutional processes. The QMENTUM methodology uses the Tracer model, which is based on following the path of a patient, product, or process from start to finish, ensuring a comprehensive approach. Furthermore, the structure of Required Organizational Practices (ROPs) guides the adoption of basic quality and safety requirements, adapting to the institutional profile and providing an internationally recognized standard of excellence.

Methods: The study was conducted in an urgent care unit located in the state of Amazonas, in the context of preparation for international accreditation. A gap in measuring the progress of ROP implementation was identified, which prompted the development of an audit tool. The tool was structured into six axes: Safety Culture, Communication, Medication Use, Workforce/Professional Life, Infection Control, and Risk Assessment. Twenty-nine ROPs applicable to emergency services were selected, subdivided into items that attest to compliance (meets or does not meet), with a description of the respective observation areas. The tool was applied after 12 months of initial implementation, with quarterly reapplication scheduled for continuous monitoring.

Results: The adherence rates obtained by axis were: 80% for Safety Culture, 78% for Communication, 80% for Medication Use, 96% for Workforce/Professional Life, 89% for Infection Control, and 64% for Risk Assessment. The main weaknesses identified were: incident management (Safety Culture), use of dangerous abbreviations (Communication), medication reconciliation (Medication Use), inadequate use of the quarterly safety report for improvements (Workforce/Professional Life), effectiveness of the sterilization process (Infection Control), and prevention of VTE, wounds, and skin lesions (Risk Assessment).

Conclusion: The development and application of the audit tool allowed for the objective measurement of progress in ROP implementation, facilitating the identification of weaknesses and the implementation of corrective actions. The results highlight the relevance of auditing as a tool for evaluating the effectiveness and efficiency of mandatory practices, contributing to the continuous improvement of quality and safety in the unit. The quarterly application of the tool will consolidate a cycle of continuous evaluation, essential for maintaining and improving the quality standards required by the Canadian accreditation model.

References: Aliança Global de Qualidade. (sd). *Manual Qmentum: Práticas Organizacionais Obrigatórias (ROPs)*. Recuperado de <https://hotmart.com/pt-br/marketplace/produtos/manual-qmentum-rops-praticas-organizacionais-obrigatorias/S80477042W>

Disclosure of Interest: None Declared

Identification Game as a Strategy to Improve Adherence to Correct Identification of Pediatric Patients: (3008) Lisiane Pereira

ISQUA2025-ABS-3008

Preferred presentation method: 10 Minute Lightning Talk (E-Poster)

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: The correct identification of patients is the first step in ensuring safe care. It is a complex process, as it involves the entire healthcare team and must occur throughout the patient's care process. The nursing team plays a significant role in this process, as they continuously monitor the patient and are responsible for almost all of their bedside care (BOPSIN; RIBAS; SILVA, 2019). **OBJECTIVE:** To describe the experience of conducting an identification game with the healthcare teams of a large pediatric hospital in southern Brazil as a strategy to improve the identification rate of hospitalized patients and, consequently, enhance the teams adherence to this international patient safety goal.

Methods: This is a descriptive study that aimed to analyze the results obtained after the implementation of the identification game in a general pediatric hospital fully funded by the Brazilian Unified Health System (SUS) in southern Brazil throughout 2023 and 2024, comparing the results of the correct patient identification indicator before and after the intervention. The indicator for identifying hospitalized patients is obtained through routine monthly identification collection at the institution, applied to all hospitalized patients on the chosen date. During this time, the team and families are informed about the importance of the proper use of identification wristbands by patients, as well as the importance of confirming the data present on them by the healthcare team.

Results: From the monthly collections, an average of 73% of hospitalized patients were correctly identified in 2023. To improve this indicator, the identification game was designed and implemented with the teams from the three work shifts of the institution. All units participated, competing against each other to achieve the best rate of identified patients. Each month, the units scored points based on the presented indicator, and at the end of the year, the top three units received a symbolic award for their teams from the three work shifts. In 2024, we achieved a correct identification rate of 94% for patients, a 21% increase compared to the previous year.

Conclusion: The identification game proved to be an important strategy to engage healthcare professionals in maintaining correct patient identification to prevent incidents. The significant increase in the indicator reflects not only the commitment and teamwork towards pediatric patient safety but also the awareness of patients and families through health literacy-based actions.

References: BOPSIN, Patricia dos Santos; RIBAS, Elenara Oliveira; SILVA, Débora Monteiro da. Capítulo 7 - Identificação do Paciente. In: BOPSIN, Patricia dos Santos; RIBAS, Elenara Oliveira; SILVA, Débora Monteiro da. Guia Prático Para Segurança do Paciente. Porto Alegre: Moriá Editora. 1º edição. 2019. p: 113 - 124.

Disclosure of Interest: None Declared

Strengthening Workforce and Governance in Healthcare Accreditation: A Data-Driven Cultural Transformation through the Denison Model (2021-2024), Lesson learned from Thailand: (2887) Ake-chittra Sukkul

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Organizational culture plays a critical role in the effectiveness of healthcare accreditation bodies. Since its establishment in 2009, the Healthcare Accreditation Institute (HAI) has prioritized fostering a culture of innovation and learning. To systematically assess and enhance its culture, HAI conducted the Denison Organizational Culture Survey in 2021, 2022, and 2024. This paper explores the results across these three years to assess cultural strengths, areas of improvement, and their correlation with employee engagement and institutional performance.

Methods: Organizational Context

The Healthcare Accreditation Institute (HAI) is an accreditation body in Thailand with 75-80 permanent staff members. Approximately 50% of the workforce consists of support staff, while the remainder is divided into technical or quality professionals staff and management personnel. The percentage breakdown is as follows:

- Support Staff: 60%
- Academic Professionals: 20%
- Management and Leadership: 20%

HAI also operates with a network of part-time surveyors who conduct accreditation assessments. While HAI has a small number of full-time surveyors, the majority of surveyors work on a part-time basis, contributing their expertise alongside their professional roles in healthcare institutions. This structure presents unique challenges in ensuring alignment between internal culture and the broader accreditation ecosystem.

Methodology

- HAI employed the Denison Model, which evaluates four key cultural traits: **Mission, Adaptability, Involvement, and Consistency**. Surveys were distributed to employees across various divisions, with participation rates of 75 employees (2021), 73 employees (2022), and 76 employees (2024).
- Additionally, an Employee Engagement Survey was integrated to measure motivation, passion, and alignment with the organization’s goals. Results were analyzed to identify Improve, Monitor, and Sustain cultural drivers, ensuring targeted interventions.

Results: 1. Overall Cultural Evolution (2021-2024)

- **Mission and Strategic Direction:** Consistently strong across all years, with over 90% of employees understanding and aligning with HAI’s strategic goals.
- **Adaptability and Innovation:** Notable improvement from 2021 to 2024, with increasing scores in organizational learning and customer focus.

- **Involvement and Empowerment:** While employee empowerment scores remained stable, teamwork and coordination improved significantly in 2024.

- **Consistency and Core Values:** A decline in core values alignment (-12% from 2022 to 2024) was observed, indicating potential challenges in reinforcing organizational ethics and leadership integrity.

2. Employee Engagement Trends

The Employee Engagement Survey revealed fluctuating levels of enthusiasm and motivation:

- **2022:** Overall engagement at 30th percentile, with challenges in empowerment and strategic clarity.
- **2024:** Engagement rose to 65th percentile, showing a notable increase in enthusiasm and organizational pride but persistent gaps in sustained motivation.

3. Key Cultural Drivers of Engagement

Areas for Improvement

- **Empowerment:** Employees still feel limited in their ability to impact decision-making (26th percentile, 2022; marginal improvement in 2024).
- **Coordination & Integration:** Improved but still ranks lower (24th percentile in 2022; moderate gains in 2024).
- **Strategic Intent:** Employees desire clearer alignment between daily work and long-term strategy (24th percentile in 2022, slight rise in 2024).

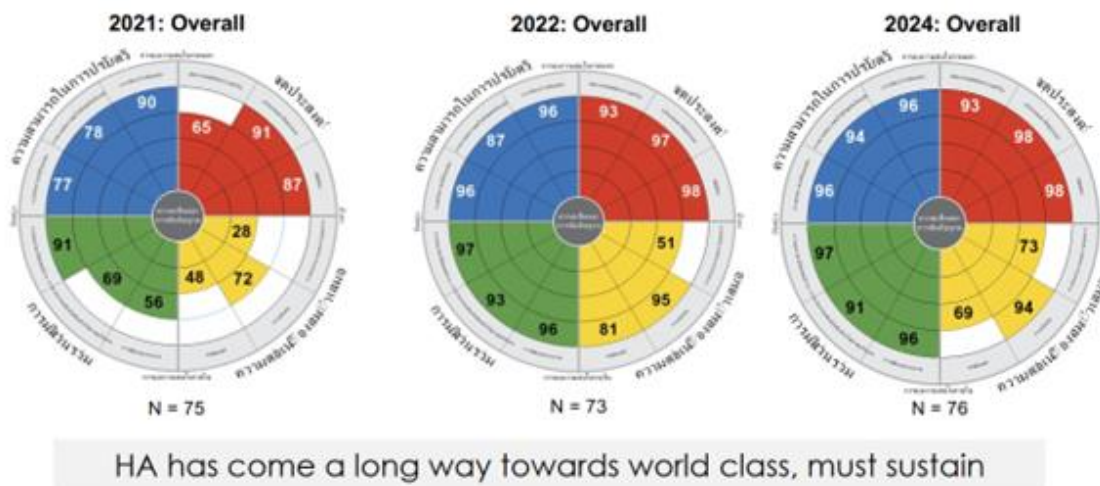
Areas to Monitor

- **Vision & Organizational Learning:** Employees recognize the importance of learning but need more structured knowledge-sharing mechanisms.
- **Team Orientation:** Improved but requires further reinforcement.

Areas to Sustain

- **Core Values:** Though declining, they remain among the top strengths.
- **Agreement & Conflict Resolution:** Employees value a collaborative work environment.
- **Customer Focus:** Strong alignment with HAI's mission to enhance healthcare quality.

Image:



Conclusion: Proposed Actions:

- **Leadership Training:** Reinforce ethical decision-making and role modeling of core values.
- **Employee Engagement Strategies:** Implement more personalized career development plans.
- **Cross-Division Collaboration:** Foster greater synergy between departments to enhance coordination.

By leveraging these insights, HAI can further solidify its culture as a foundation for continuous quality improvement and innovation in healthcare accreditation.

References: Denison, D.R. (2019). The Denison Organizational Culture Model. Ann Arbor, MI: Denison Consulting.

Disclosure of Interest: None Declared

The Effectiveness of Primary Health Care (PHC) in Reducing Hospitalizations for Primary Care-Sensitive Conditions to PHC Among the Elderly: (2922) Caroline de Faria Fontes

ISQUA2025-ABS-2922

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Hospitalizations for Primary Care-Sensitive Conditions (PCSC) are a key indicator of the effectiveness of PHC services. Among the elderly, these hospitalizations often stem from preventable complications of chronic diseases, such as heart failure, chronic obstructive pulmonary disease, and diabetes, which could be treated in outpatient settings. The high rate of such hospitalizations leads to increased healthcare costs and a decreased quality of life for the elderly. Therefore, the role of well-structured PHC services is crucial in preventing complications and reducing avoidable hospitalizations. Since 2014, the

São Francisco Xavier Foundation, through the health operator Usisaúde, has been providing supplementary primary care services under the Usifamília program, which adopts a comprehensive, patient-centered care model with a strong emphasis on disease prevention and health promotion.

The goal of this study is to present the outcomes of Usifamília's interventions and their impact on reducing hospitalizations for primary care-sensitive conditions to PHC among the elderly.

Methods: This is a cross-sectional study using secondary data extracted from the institutional database. A quantitative statistical analysis was performed, consistent with a descriptive study, and the indicator measured was the rate of hospitalizations for avoidable causes—defined as primary care-sensitive conditions—among individuals aged 60 or older who were enrolled in the program.

Results: Recipients aged 60 or older represent over 40% of the population served by Usifamília. Since its inception, the program has established comprehensive and longitudinal care, with a proactive approach to early detection and management of chronic conditions, as well as preventive interventions carried out by a multidisciplinary team that includes family physicians, nurses, nursing technicians, nutritionists, and pharmacists. One of the key performance indicators monitored by the program is the PCSC rate. This indicator serves as a

measure of PHC effectiveness and an indirect gauge of its efficiency. In 2024, the hospitalization rate for sensitive conditions to PHC among elderly patients in the Usifamília program was 18%. For context, studies indicate that in Brazil, the PCSC rate among the elderly was 54.33% in 2000 and, with the expansion of Family Health Teams, it decreased to 34.19% in 2018, highlighting the impact of primary care within the public health system.

Conclusion: The high rate of avoidable hospitalizations among the elderly in Brazil underscores the need for efficient and effective PHC services. The Usifamília program demonstrates that structured, patient-centered, and multidisciplinary primary care can significantly reduce hospitalizations for sensitive conditions to PHC in supplementary healthcare. Reducing such hospitalizations not only enhances the quality of life for the elderly but also decreases complications associated with hospitalization and lowers healthcare costs for the system.

References: Knabben, Julia Juttel, et al. Tendência temporal das internações por condições sensíveis à atenção primária em idosos no Brasil [Temporal Trends in Hospitalizations for Primary Care-Sensitive Conditions in Brazil]. *Revista Pesquisa em Fisioterapia* 2021;11(4):798-806. <http://dx.doi.org/10.17267/2238-2704rpf.v11i4.4168>.

Brazil. Ministry of Health. Ordinance No. 221, of April 17, 2008. Lista Brasileira de Internações por Condições Sensíveis à Atenção Primária [Brazilian List of Hospitalizations for Primary Care-Sensitive Conditions]. Official Gazette of the Federative Republic of Brazil, Brasília, DF, 2008.

Disclosure of Interest: None Declared

Integrating non-clinical supports into care: Social prescribing referral pathways for mental health, wellbeing, and psychosocial improvement: (2182) Samantha Spanos

ISQUA2025-ABS-2182

Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: The World Health Organization has emphasised that greater cross-sectoral collaboration and community-based service provision is critical for addressing growing mental health needs across the globe. Social prescribing (SP) involves person-centred integration of non-clinical supports into health care and is increasingly recognised as a valuable model of integrated care for improving mental and psychosocial health. The aims of this review were to identify the breadth, range, and type of SP referral pathways, and to evaluate their effectiveness on mental health, wellbeing, and psychosocial outcomes.

Methods: Four electronic databases (Medline, Embase, PsycINFO and Scopus) were searched for empirical studies of referral pathways to community-based SP interventions aimed at improving mental health and wellbeing. Data from quantitative and qualitative studies published since 2010 were extracted, including details about healthcare providers, linkage processes, settings and activities associated with the referral pathways, as well as a range of mental health, wellbeing, and psychosocial outcomes. Quantitative data were narratively synthesised, and qualitative data were thematically analysed.

Results: Across the 30 included studies, 27 SP interventions and two main referral pathways were identified, involving providers across health, community, social, and voluntary care sectors. Almost all studies ($n=27$, 90%) reported on SP referral through primary care, typically initiated by general practitioners but also involving practice nurses, allied health professionals and mental health professionals. Direct referral from a care provider to an SP intervention was most common ($n=21$, 67%) and was often followed by assessment and support from a community or social care worker. Indirect referral from a care provider to a link worker ($n=10$, 33%) involved in-depth consultation prior to linkage with suitable interventions. A range of community activities were referred and evaluated, encompassing arts, sports and exercise, nature-based activities and social groups. Quantitative outcomes ($n=21$, 70%) most frequently measured were wellbeing, anxiety, depression and quality of life. Findings were mixed, and widely varying methodological approaches limited study comparability. Qualitative outcomes ($n=16$, 53%) were mostly associated with social interactions (e.g., increased sense of belonging) and self-concepts and feelings (e.g., increased sense of purpose).

Conclusion: This review highlighted the diverse range of cross-sector SP approaches to mental health care, adding to the global conversation about the common building blocks and elements of integrated care. High heterogeneity in the quantitative evidence base limits conclusive inferences about effectiveness, and standardised measurement frameworks aligned with the core aims of SP are needed to build capacity for research translation into practice and policy. In addition, rigorous qualitative assessments are critical for understanding how context influences outcomes, and these should be built into research designs that aim to demonstrate the value of integrating non-clinical supports into care.

Disclosure of Interest: None Declared

Optimization of Case Management in Outpatient Mental Healthcare Services Using Python:
(2269) Lucas Ito Suguikawa

L. I. Suguikawa ^{1,*}, T. Takara ¹, C. Esper ¹, A. Santos ², M. Colognese ³

¹Medical Coordination, ²Director, ³Nursing Management, AME Psiquiatria, São Paulo, Brazil

Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Treatment dropout is one of the primary healthcare risks in outpatient mental health services. According to the WHO [1], the dropout rate reaches 45.1% in middle- to high-income countries. Factors such as the chronic nature of mental disorders, impaired insight into the morbid state, stigma, psychophobia, and financial difficulties contribute to this scenario. Regardless of the causes, it is evident that managing this risk is essential for the effectiveness of therapeutic interventions and patient safety. AME Psiquiatria is an outpatient mental health service that, as of August 2021, had 773 out of its 5075 (15.2%) patients who had not attended a psychiatric evaluation for more than 90 days.

As a result, by the end of January 2025, we reduced the number of nonadherent patients to 297 (6.3%) out of 4085 patients. In conclusion, the implementation of an ETL process and prioritization algorithms using Python significantly improved the efficiency of case management at AME Psiquiatria. By leveraging open-source tools and iterative improvement cycles, we achieved a substantial reduction in nonadherent patients, enhancing the efficiency of case management without additional financial investment. This project demonstrates how data-driven approaches can optimize healthcare operations and improve patient outcomes, serving as a model for similar initiatives in mental health services.

Methods: To optimize case management, we initiated the structuring of an ETL (Extract, Transform, and Load) process using data from Electronic Health Records (EHR) and the scheduling regulation system to build a relational database (SQL). From this database, algorithms were developed to prioritize cases and deliver patient information quickly to case managers. The first version of the project began in March 2022, and by January 2025, after four PDSA (Plan-Do-Study-Act) improvement cycles, the program included sending messages via a messaging app to schedule consultations for active patients who do not have a future appointment scheduled.

This project involved the clinical leadership of the service, who studied the Python programming language and utilized open-source libraries such as Pandas, SQLite3, and Matplotlib to structure the database and perform the necessary analyses. All project code was written using an open-source IDE, meaning there was no need for investment in proprietary software or hardware.

The biggest challenge was achieving a cultural shift within the case management team, who were used to working in an analog manner with handwritten notes about their patients, to incorporating into their routine the patient selection based on data analysis.

Results: As a result, by the end of January 2025, we reduced the number of nonadherent patients to 297 (6.3%) out of 4085 patients.

Image:



Conclusion: In conclusion, the implementation of an ETL process and prioritization algorithms using Python significantly improved the efficiency of case management at AME Psiquiatria. By leveraging open-source tools and iterative improvement cycles, we achieved a substantial reduction in nonadherent patients, enhancing the efficiency of case management without additional financial investment. This project demonstrates how data-driven approaches can optimize healthcare operations and improve patient outcomes, serving as a model for similar initiatives in mental health services.

References: 1. J. Wells, "Dropout from Outpatient Mental Healthcare in the World Health Organization's World Mental Health Survey Initiative," *The British Journal of Psychiatry*, January 2013.

Disclosure of Interest: None Declared

An Exploration of Hospital Prescribers' Perceptions of Design Features of Electronic Health Record Systems and the Impact on Decision-Making: A multi-site qualitative study: (1440)
Nouf Alaboud

¹Research Department of Practice and Policy, University College London School of Pharmacy, ²Centre for Medicines Optimisation Research and Education, University College London Hospitals NHS Foundation Trust, ³Centre for Medication Safety and Service Quality, Imperial College Healthcare NHS Trust, London, United Kingdom

Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Electronic health record (EHR) systems are widely adopted worldwide. Hospital prescribers are at the forefront of patient care and rely heavily on EHR systems for various tasks. Their daily interactions with EHR systems make their feedback invaluable in identifying strengths and areas needing improvement. However, there is limited evidence regarding hospital prescribers' perspectives on different EHR system designs and their impact on prescribing decision-making. This study aimed to explore hospital prescribers' opinions and experiences of different designs of EHR systems and their impact on prescribing decision-making in a hospital setting.

Methods: This study was conducted in two large NHS teaching hospitals in London with well-established EHR systems. Semi-structured interviews were conducted with pharmacy, nursing, and medical prescribers. All completed a pre-interview survey that gathered demographic data and previous experiences in clinical practice and with EHR systems. Audio recordings of the interviews were transcribed verbatim and analysed using the inductive thematic analysis approach outlined by Braun and Clarke. The study was approved by the UCL research ethics committee (Project ID 21517.001).

Results: Thirty-four hospital prescribers (13 medical and 21 non-medical) participated. Of these, 74% (n=25) were female, 44% (n=15) were 31-40 years old, 59% (n=20) worked in both outpatient and inpatient settings. Participants expressed that electronic prescribing is a key feature that allows users to prescribe anytime and anywhere. Prescribing workflow in EHR systems varies depending on the user's profession and the clinical setting. Participants noted that the system's interface and functionality may vary for users and across hospitals despite using the same EHR system. Participants reported that EHR systems influenced their communication with other staff and patients. The interviews identified three key groups of factors—system, user, and environment—that were perceived to influence prescribing decisions with various consequences for users, patients, and organisations. The most frequently reported consequences of poorly designed systems were time burden and medication errors. In addition, participants expressed that involving them in EHR design could improve usability and acceptance of these systems in clinical practice. They reported major issues related to EHR system technical and training services, including prolonged reporting and resolution processes for system issues, insufficient time for training, and the necessity for more practical training. Participants also provided suggestions to improve system design and content. The most reported suggestion was a direct link to clinical guidelines from the prescribing window, offering tailored recommendations based on patient data. Furthermore, participants preferred being trained by and providing feedback to someone with in-depth knowledge of the system and clinical workflow. Overall, experiences with the EHR system were largely consistent among prescribers of different professions in the two hospitals.

Conclusion: Hospital prescribers agree that EHR systems are useful tools; however, improvements in design are needed to enhance their usability. Participants suggested integrating patient data, linking to clinical guidelines, and tailored prescription recommendations into EHR systems could support better prescribing

decisions. Additionally, they perceived that well-designed, intuitive EHR systems aligning with clinical workflows could enhance care quality, staff satisfaction, and system usability. Further research is needed to explore users' experiences with different EHR system designs to help system suppliers and healthcare organisations develop, evaluate, and optimise these systems effectively.

Disclosure of Interest: None Declared

Technology-Assisted Holistic Child Development Promotion Model: A Decade of ROR Implementation in Taiwan: (1819) Yu-Da Chen^v

ISQUA2025-ABS-1819

Y.-D. Chen ^{1 2,*}

¹Department of Family Medicine, Taipei Medical University Hospital, ²School of Medicine, College of Medicine, Taipei Medical University, Taipei, Taiwan

Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Local surveys indicate that developmental delay prevalence among children in remote Taiwan reaches 27%, far exceeding the global average of 6-8% reported by WHO. Particularly post-COVID-19, increased reported cases underscore the need for comprehensive child development promotion. In 2014, the AAP emphasized early literacy as an essential component of pediatric care. This study examines Taiwan's implementation of the evidence-based Reach Out and Read (ROR) model since 2015, integrating telemedicine and LENA language analysis to enhance early childhood intervention, language development, parent-child interactions, and social adaptability.

Methods: This study reviews the ROR Taiwan program, including medical personnel training, clinical reading prescription adoption, and technology use in child development. Medical education training was conducted at a university-affiliated hospital in northern Taiwan, targeting medical students in child development assessment and early literacy promotion. Faculty members underwent advanced training at Boston Medical Center, incorporating lectures, online courses, rural outreach practicums, and clinical observations. OSCE assessments and written examinations evaluated participants' competencies.

LENA language analysis was conducted in a remote northern Taiwan region, collecting data from 0-6-year-old children to assess feasibility for language development risk assessment. Data on ROR implementation and social return on investment (SROI) were obtained from ROR Taiwan's nonprofit reports, leveraging service records and impact analysis.

Results: Training results showed significant improvements, with 47 trainees increasing assessment accuracy from 53.3% to 76.7% ($P < .005$), and 124 trainees demonstrating enhanced confidence ($P = 0.04$, $OR = 11.5$). ROR expansion has successfully established 122 collaboration sites, serving 5,691 children and distributing over 5,000 books annually, integrating early literacy into Taiwan's healthcare and education policies. Telemedicine-supported shared reading sessions for remote island preschools reduced carbon emissions by 4.3 metric tons annually, reinforcing telemedicine's feasibility and sustainability.

Regarding technology-assisted decision-making, LENA analysis included 217 recordings from 33 children. Children in the top 25% quartile of adult word count (AWC) received 2.65 times more words (506.96) than those in the bottom 25%. Child vocalization count (CVC) differed by 2.36 times (103.9 words), and conversational turn count (CTC) varied by 2.47 times (14.72 turns). These findings align with teacher observations, suggesting LENA's utility as a screening tool for early language intervention in remote areas.

In terms of social impact, multilingual educational materials, including early literacy milestones, were developed in Indonesian, Vietnamese, and Khmer to support diverse families. SROI analysis revealed strong economic and social benefits, with an annual carbon reduction of 4.3 metric tons. The program's total investment of approximately USD 140,000 generated an outcome value of USD 2,240,000, yielding a 15.82 social return ratio. Key contributions include enhanced vocabulary acquisition, increased attention spans, ROR's integration into Taiwan's healthcare system, improved parental guidance using picture books, and increased efficiency in medical health education.

Conclusion: This study confirms the adaptability and efficacy of the ROR model in non-Western settings and presents strategies to address developmental disparities in remote and underserved communities. Collaboration between healthcare institutions and community organizations, coupled with technology integration, improves early literacy access, fosters parent-child engagement, and enhances child development outcomes. The program has received SNQ national quality certification, affirming its implementation quality. Findings provide a reference for other nations developing early literacy initiatives, highlighting the importance of healthcare-education integration in shaping future global child development policies.

Disclosure of Interest: None Declared

Preventing Accidental Decannulation in Tracheostomy Inpatients: (2176) Kakoli Roy

ISQUA2025-ABS-2176

K. Roy^{1,2,*} on behalf of The working group involved in the project included senior physicians from Intensive Care and Ear, nose Throat department as well as nursing leadership and frontline nurses from the mentioned departments along with staff from respiratory therapy., D. A. A. M. Elhakeem³, D. A. H. C. Chanda⁴

¹Quality and Patient Safety, Ambulatory Care Center, ²Risk Management, Hamad Medical Corporation, ³ENT, Ambulatory Care Center, ⁴Intensive care Unit, Hamad Medical Corporation, Doha, Qatar

Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

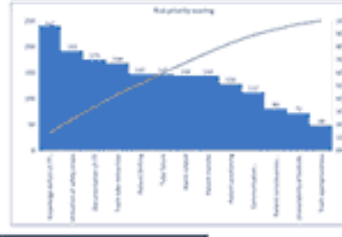
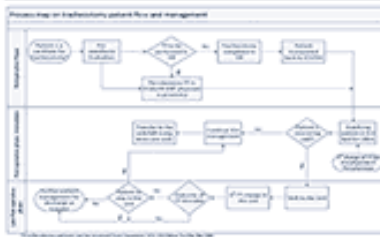
Introduction: Tracheostomy tube (TT) removal is typically a planned process once the underlying condition necessitating the procedure has resolved. Accidental decannulation (AD), is the unintentional removal of a tracheostomy tube from the stoma, it can be life-threatening, even in stable patients. Preventing AD in hospitalized patients is particularly critical for those requiring long-term mechanical ventilation or airway support. The need for a proactive solution to prevent AD in the Ambulatory Care Center (ACC) was prompted by three sentinel events occurring in similar ICU setting. The facility established under Hamad Medical Corporation in 2018, primarily caters to an outpatient population but also includes four inpatient units and Intensive Care Unit (ICU). With the increasing volume of head and neck surgeries in the facility, the management of AD in the acute post-surgical period was identified as a significant risk by the Ear, Nose, and Throat (ENT) team, given its potential for fatal or near-fatal outcomes. The project aimed to implement targeted interventions, including staff education, increased monitoring, and reinforced tracheostomy protocols, to improve airway management. By fostering vigilance and standardized practices, these strategies significantly reduced AD risk, improving patient safety and clinical outcomes.

Methods: A systematic approach identified and prioritized failure modes, assessed their impact, and implemented proactive solutions to prevent accidental decannulation (AD). A skilled team defined the project scope, analyzed risks, and enhanced patient safety through standardized protocols and vigilance. Key interventions included securing tracheal devices, staff education, regular assessments, proper positioning, and interdisciplinary collaboration. Standardizing the TT tube at the corporate level streamlined exchanges, minimized brand variations, and ensured clear physician orders. Additional measures included cuff pressure monitoring, sedation score standardization, improved surgical-ICU communication, and leadership identification during transfers. A 1:1 nurse-to-patient ratio was maintained until the first tube change. Policies on restraint, refresher training, staff prioritization, and manual handling were reinforced for optimal tracheostomy management.

Results: Efficient collaboration between ICU intensivists and ENT surgical team. The progress of the project is monitored through effective handover, bedside checklist, refreshing education and training as well as customized system changes in Clinical Information system documentation related to Tracheostomy. 0 cases of accidental decannulation from project implementation in Jul 2021 till Dec 2024. There was 1 reported case of tracheostomy tube blockage which was deliberated and discussed in Mortality committee between ACC – ICU team and ENT surgeons. The team has effectively formulated Key risk indicator related to tracheal decannulation and adverse event related to tracheostomy, this is monitored in the inpatient unit as well as intensive care unit which covers the tracheostomy population of the hospital.

Image:

RISK PRIORITY SCORING



SIGNPOSTS

- Conceptualization of the topic
- Discussion on TMEA scope and setup.
- Formulating the team
- Gantt chart, Process flow, brainstorming
- Formulating Cause and effect diagram
- Failure mode, RPN scoring, Action plan
- Monitoring and Evaluation Education

Change in risk priority scoring



Changes implemented through FMEA

Risk priority areas	Change implemented
Documentation	Operative Tracheostomy (Trach) procedure Notes customization for ENT Surgeons. Proposed and approved OS changes passed through Change board committee to reflect relevant tracheostomy documentation.
Tracheostomy tube related	Standardization of the TT tube in corporate level To provide a list of tubes for exchange Minimize the number of TT brands available by making it a stock item. Clear physician's order to keep cuff inflated or deflated To determine - Cuff pressure and Tie tightness
Sedation of patient Interdisciplinary agreement on sedation score	Awareness and accessibility to the scoring status. Re-establishing the communication between surgical and ICU team. Identified team leader during patient transfer and or shifting . Nurse: patient ratio minimum of 1:1 till the first change of tube performed. Assessment for restraint.
Inadequate use of bedside checklist. Knowledge deficit related to tracheostomy procedure, management and guideline from physicians and nurses.	Training and refresher for staff on tracheostomy management. Identified coordinator to oversee staff prioritization for the course Education for physician and nurses on existing CPG Virtual Manual handling training completed by staffs
Decannulation risk during transfer and shifting	Change in practice to check the cuff prior to patient transfer/shift (If deflated and pt. not on speaking valve, then it should be inflated to withhold the tube in place). - Nurse: patient ratio minimum of 1:1 till the first change of tube performed - Nurses and RT will complete safe handling skills (e- module) - Identified team leader during patient transfer and or shifting
Communication related to Tracheostomy tube	Pre and post insertion checklist. Modification of Operative notes and bedside percutaneous TT notes. Documentation on restraints available in OS. Communication regarding Desired sedation level

Monitoring through Implementation of Key Risk Indicators(2022-2024)



Project team:
Project Oversight: Ms. Khadija K. Muhammad AGD-Quality and patient safety
Facilitator: Ms. Sukali Roy-Quality and patient safety
Physician Lead: Dr. Amy D. Hultman, Dr. Anshul Muscarello
Nursing lead: Ms. Abdul Mohid, Ms. Emaan Mohid, Ms. Andrius, Ms. Omnia Mohid
Respiratory Therapist: Ms. Noor Al Huda Al Jabri
Auditor members: Nursing Informatics and GIS
Acknowledgements: Dr. Abdul Salam Al-Ghazali
Dr. Aisha Yasmin R. S. Lanoie
Majid Sultan M.A. Al-Abdulla

References

1. Ashida, A., Aoyagi, T., Udagawa, M., Iwashita, H., Ohtsuka, M., Akashi, M., et al. Accidental deceleration following placement of a tracheostomy tube. *Respir Care* 2012; 57(10):1019-25. doi: 10.4187/respcare.02012.07
2. Ohtsuka, M., Ohtsuka, A., Suganuma, S., Ashida, A., Iwashita, H., Ashida, M., et al. Accidental Deceleration Of Tracheostomy Tubes – Case Series. *J Korean Coll Surg* 2016; 82(4):333-338. doi: 10.29333/jkcs.2016.82.4.333
3. Ohtsuka, M., Ashida, A., Suganuma, S., Ashida, A., Iwashita, H., Ashida, M., et al. Deceleration following tracheostomy for gubbing in mechanical ventilation. *J Intensive Care Med* 2016; 31(4):363-366. doi: 10.1177/1073298116639076

Conclusion: A structured approach to preventing AD improved patient safety and clinical outcomes. The Ambulatory Care Center implemented tracheostomy tube securement, staff education, standardized protocols, and interdisciplinary communication, eliminating AD cases since July 2021. Customized Clinical Information System (CIS) changes, standardized documentation, and reinforced protocols strengthened airway management. Collaboration among ICU intensivists, ENT surgeons, and nursing staff ensured continuity of care. Continuous training, protocol optimization, and ongoing monitoring remain essential to sustaining improvements and further enhancing patient safety in tracheostomy management.

References: 1.White AC, Purcell E, Urquhart MB, Joseph B, O'Connor HH. Accidental decannulation following placement of a tracheostomy tube. *Respir Care*. 2012 Dec;57(12):2019-25. doi: 10.4187/respcare.01627. PMID: 22613579.

2.Omokanye HK, Dunmade AD, Segun-Busari S, Afolabi OA, Habeeb OG, Adegboye MB, Alabi BS. Accidental Decannulation OF TRACHEOSTOMY TUBES - Case Series. *J West Afr Coll Surg*. 2016 Jan-Mar;6(1):108-118. PMID: 28344941; PMCID: PMC5342618.

Disclosure of Interest: None Declared

Afternoon

Short Orals

Health services and climate change - Time for action: (1500) Philip Crowley

ISQUA2025-SES-1500

P. Crowley ^{1,*}

¹Health Services Executive Ireland, Dublin, Ireland

Proposed Session Duration: 60 Minutes

Session Description: This session will refelct on the current climate crisis facing the world with up to date data on the nature of that challenge. It will share an understanding of how health care harms the environment and how the provision of healthcare is impacted by climate change, with examples. It will lay out a national approach across an entire health system to tackling the climate impact of health in Ireland and reflect on 3 years of experience attempting to promote and drive appropriate action in a health service, to protect the planet. The session will promote learning on the obstacles to engaging health care on climate change and on the inequitable contributions to and impacts of climate change between high income and low and middle income countries.

Session Format: Presentation for 25 minutes,

Table based discussion on implications for one's own health service 20 Minutes

Feedback and discussion 15 Minutes

Target Audience: Senior health care managers, policy makers, clinicians and patients

Objectives: 1. Clarity on the urgency of action on climate change and understanding of the bi-directional relationship health care and climate change have.

2. Learn about a national health services approach to tackling the impact of health on climate change and the obstacles to tackle the challenge

Research: 1. Lancet commission and wider literature on climate change and health

2. National Strategy in Ireland to combat health care's impact on climate harm
3. 2025 template for action at the level of every healthcare institution in Ireland
4. Irish Government Climate Action plan
5. Decarbonisation roadmap for the Irish health services' 4,300 buildings
6. Staff and patients communication plan to promote action on climate change
7. Environmental regulator's assesement of progress in Ireland in reaching our climate targets

Suitability: "Climate change is the single biggest health threat facing humanity" WHO 2021

Recent lancet commission data showing irreversiable impacts of global warming on planetary sustainability underline the importance of action on climate change. The fact that health care would be the 5th largest global greenhouse gas emitter if it were a country. Ireland is one of a small number of countries who have a national health care policy to tackle climate change. We have learnt many things about implementing the actions needed since the plan's publication in November 2023 and sharing our approach and learnings will be helpful for clinicians, patients, senior managers and policy makers who have the will to promote and particpate in action in their healthcare setting to tackle the harm healthcare is doing to our planet.

Have you presented this session at a Conference before including ISQua?: No

Disclosure of Interest: None Declared

The ESG principles: a New Path to Innovation in the Accreditation Journey: (2353) Raquel Rodrigues Nakamato

ISQUA2025-ABS-2353

R. R. Nakamato ^{1,*}, G. Lolato ¹, F. Leite Gastal ¹, P. Góes Cruz ¹, A. Minervo Ruggiero ¹, C. Leal Deister Machado ¹

¹ONA - Organização Nacional de Acreditação, São Paulo, Brazil

Preferred presentation method: 10 Minute Lightning Talk (E-Poster)

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: The healthcare sector, historically focused mainly on healthcare, now faces the need to integrate ESG (Environmental, Social and Governance) principles. Issues such as climate change, social inequality and business ethics pose new challenges and require a greater commitment to sustainability. Health accreditation, in addition to certifying quality and safety, can drive innovative and responsible practices, promoting a positive impact on the environment, society and governance of organizations.

Methods: This study is based on the analysis of standards established by the ONA Methodology (National Accreditation Organization) for Healthcare Service Provider Organizations and on data collection from

evaluations carried out between January 2022 and June 2024. The guidelines of the Brazilian Accreditation Manual - 2022 Version were evaluated, considering more than 3,000 evaluations conducted in 1,500 health organizations. The analysis focused on key requirements related to the ESG pillars and their respective levels of conformity: Exceeds, Complies, Partially Complies, Does Not Comply and Does Not Apply. In addition, ONA initiatives aimed at sustainability and international documents, such as the ISQua Green Paper on Sustainable Health Systems, were examined to identify good practices and challenges in implementing ESG criteria in the accreditation context.

Results: The data show a promising scenario, though with important challenges. In the Environmental pillar, the rational use of resources showed 89% compliance, while waste management was at 78%, indicating the need for greater control. In the Social pillar, employee well-being had high adherence (87%). However, socio-environmental responsibility is still a point of attention, with 58% compliance. In the Governance pillar, compliance and ethical conduct demonstrated strong commitment (88%), but clinical governance showed 56% compliance, showing room for improvement.

Conclusion: The analysis reinforces that accreditation drives the adoption of ESG practices in health, although also emphasize opportunities for improvement. A critical point is the high rate of requirements marked as "Does Not Apply", especially in governance (up to 37% in some cases). This categorization may reflect failures in the interpretation of criteria, indicating the need for surveyors training to ensure greater accuracy in the assessment. The integration of ESG practices in the accreditation journey represents a significant advance for sustainability in the health sector. The results demonstrate that ONA has encouraged the adoption of more responsible standards, even with the persistent challenges. The continuous improvement of evaluation criteria, combined with the training of surveyors, can further strengthen this movement. Thus, we reinforce the importance of engaging organizations and the health community in building a more sustainable, innovative, and resilient sector.

References: Brazilian Accreditation Manual. 2022 Edition. Results of ONA evaluations (2022-2024). ISQua. Green Paper on Sustainable Health Systems. Available at: <https://isqua.org/resources-blog/isqua-green-paper.html> [07/02/2025].

Disclosure of Interest: None Declared

Environmental Impact of Surgical Care Pathway: A Case Study of Laparoscopic Splenectomy: (3205) Naomi Ndunge Muindi

ISQUA2025-ABS-3205

N. N. Muindi ^{1,*}, L. Boone ¹, E. Cadena ¹, T. V. Geldorp ¹, E. Kieckens ², J. Dewulf ¹

¹Ghent University, ²Ghent University Hospital, Ghent, Belgium

Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

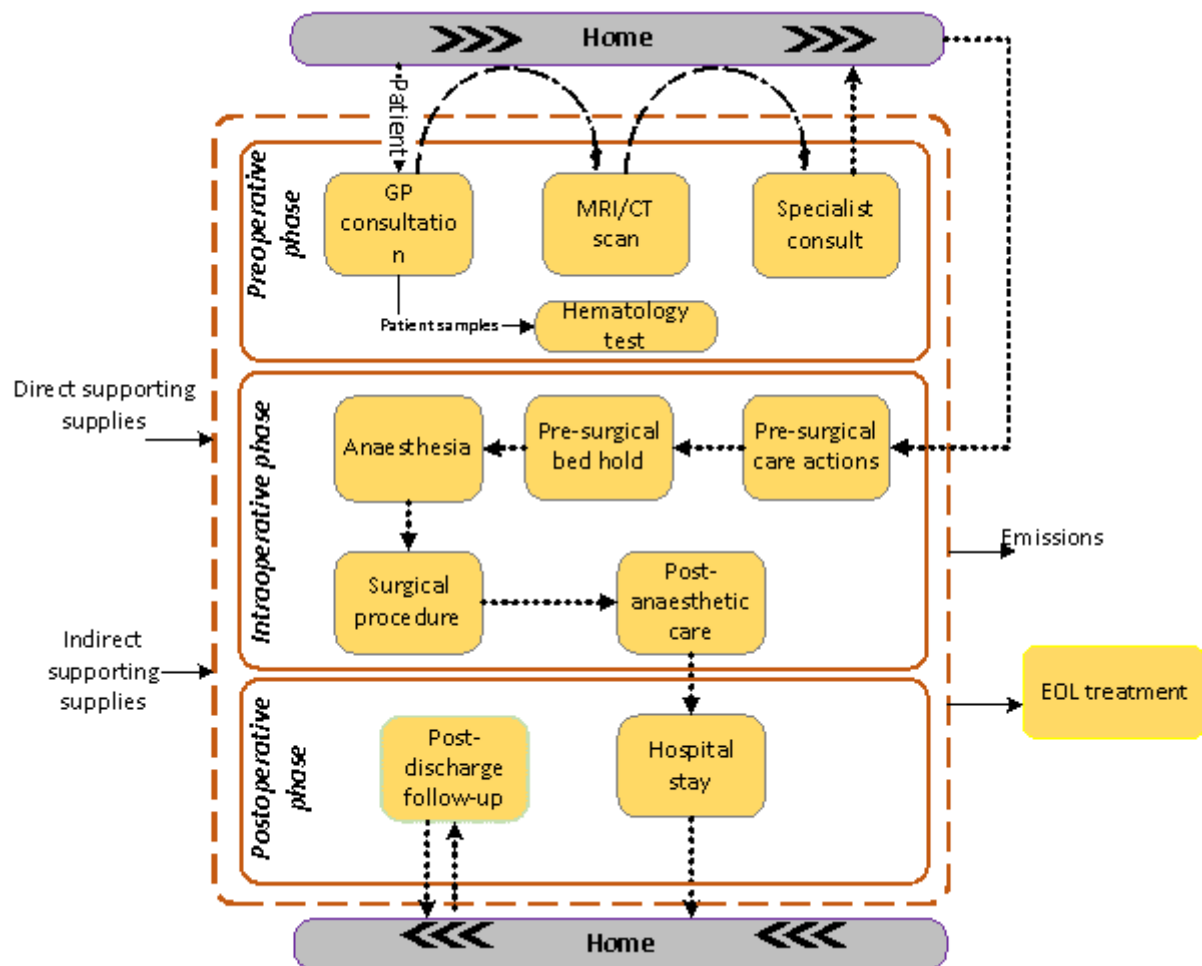
Introduction: The healthcare sector plays an important role in preserving human health and well-being. However, it accounts for about 4-5% of the global greenhouse gas emissions. The surgical care pathway is a major source of healthcare-related emissions and waste generation. Rapid technological advances in the

healthcare sector have occurred in the operating room (OR), leading to a shift in surgical techniques. In the last 30 years, laparoscopic surgery has become the preferred method over open surgery for different surgical operations. Laparoscopic surgery has numerous advantages over open surgery, such as smaller incisions, shorter hospital stay, minimal pain, and less complications. Despite these advantages, the environmental sustainability of laparoscopic surgery is questioned due to the increasing use of single-use devices (SUDs) and consumables. Previous studies have conducted the environmental impact evaluation of laparoscopic surgery by considering only the narrow boundaries of the intraoperative period (i.e. anesthesia and surgery), without consideration for preoperative and postoperative stages, which may contribute significantly to the environmental impact of surgical care pathway. Therefore, the objective of this study is to (1) map out the surgical care pathway for laparoscopic splenectomy including all pathway elements and (2) evaluate the environmental impacts of the entire surgical care pathway (preoperative stage, intraoperative stage and postoperative stage), using life cycle assessment (LCA). Hotspots within the three stages of surgical care pathway will be identified and recommendations for creating sustainable healthcare systems will be given. This study is part of the Horizon Europe project, Digital Health in the Circular Economy (DiCE, grant agreement: 101060184), which aims to develop circular and ecofriendly solutions for various digital health devices. The sustainability of these devices is evaluated from a system perspective, i.e. including the entire care pathway within which these devices are used.

Methods: This study evaluates the environmental impact of laparoscopic splenectomy, taking into account the entire surgical care pathway: preoperative, intraoperative and postoperative stages using LCA. The boundaries encompass material and energy flows required within the entire surgical care pathway of laparoscopic splenectomy. The functional unit was defined as “an adult patient undergoing laparoscopic splenectomy procedure in Belgium”. Several indicators were selected for the LCA, namely climate change, fossil resource use, freshwater ecotoxicity, particulate matter formation, human toxicity and water use, using the Product Environmental Footprint (PEF) method.

Results: The Figure illustrate a simplified surgical care pathway process map of laparoscopic splenectomy. A summary of the activities within each operative stage were identified and included in this analysis. It should be noted that the quantitative results of this study are still under investigation and final results will be available before the commencement of the conference. However, the initial analysis suggests that apart from the OR, preoperative and postoperative stages require substantial use of single-use instruments and consumables. Patient travel to and from hospital during preoperative and postoperative follow-up, length of stay in hospital and postsurgical resource use could contribute significantly to the environmental impact of the surgical care pathway.

Image:



Conclusion: This paper aimed to map out the surgical care pathway for laparoscopic splenectomy case and evaluate the environmental impacts of the three operative stages. This study identifies hotspots within the surgical care pathway so that informed and targeted strategies may be designed to improve the environmental sustainability along the care pathway. The initial results show the importance of going beyond the intraoperative stage to including preoperative and postoperative stages as well to truly understand the impact of surgical procedures on the whole surgical pathway. Since laparoscopic surgery has numerous benefits over open surgery, the next step for this study would involve comparing the environmental impacts of laparoscopic surgery and open surgery by including the three operative stages in the analysis.

Disclosure of Interest: None Declared

Training Surveyors: development and challenges in the Brazilian Accreditation System: (2128) Gilvane Lolato Lolato

ISQUA2025-ABS-2128

G. L. Lolato ^{1,*}, F. Leite Gastal ¹, P. Góes da Cruz ¹, G. Santos ¹, L. Siqueira ¹

¹Accreditation, ONA, São Paulo, Brazil

Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: Yes

If yes, what year?: 2022 and 2023

I confirm that the submission has been approved by all authors: Yes

Introduction: Surveyors are essential to the Brazilian Accreditation System (SBA), ensuring the quality and safety of healthcare services. The growing demand for accreditation in Brazil requires an increasing number of well-trained surveyors capable of conducting certification processes effectively. The Surveyors Development Program of the National Accreditation Organization (ONA) aims to prepare professionals for this strategic role, promoting continuous training and strengthening assessment methodologies.

Methods: Objective: This study analyzes the evolution of the ONA Surveyors Development Program, identifying advances and challenges in assessor training and presenting strategies for improvement.

Method: A quantitative analysis was conducted on the number of candidates enrolled in the Surveyors Training Course and the ONA Proficiency Exam, as well as the growth of active surveyors in the SBA from 2022 to 2024. Additionally, key challenges faced and strategic actions planned for 2025 were assessed. Data sources included the ONA Administrative Panel and institutional records.

Results: The number of enrollments in the Surveyors Training Course increased from 372 in 2023 to 502 in 2024, driven by the expansion of Certified Accredited Institutions (IACs) that is responsible to survey the organizations and the accreditation project of 480 Primary Healthcare Units (UBS) that involved the São Paulo Municipal Health Department. The number of candidates for the Proficiency Exam consequently grew, rising from 185 in 2023 to 197 in 2024. Consistently high pass rates (98-100%) on the Proficiency Exam demonstrate the effectiveness of the training program. The Surveyors Development Program has ensured that all new surveyors are trained within the standards of excellence required by ONA.

Opportunities for improvement: Refine the usability of the ONA website and store, impacting on students' experience in registration and course access. Optimize the information system to improve the fragmentation to track students and their progress in the program.

Actions for 2025: To address these challenges and improve surveyors training, ONA has structured a set of strategic actions to be implemented for the upcoming year: Establish a continuous schedule of online courses, ensuring greater predictability in training. Develop a new web site, making the user experience more intuitive and functional. Create a dedicated landing page for in-company courses, facilitating access to personalized training. Updating content, including the new Manual for Healthcare Providing Organizations (OPSS), version 2022 and the Qualification Seal version 2020 and review and enhance existing course content, making it more engaging and dynamic.

Image:



Conclusion: The increase in the number of qualified surveyors has accompanied the expansion of accreditation in Brazil, contributing to the continuous improvement of healthcare services. However, operational and technological challenges need to be addressed to optimize the surveyors training journey.

The planned strategic actions for 2025 aim to improve student experience, strengthen the regulation of consultants and consulting firms, and make courses more accessible and attractive. These initiatives are expected to contribute to the consolidation of the Surveyors Development Program and to the evolution of accreditation in the country.

References: Guidance Standard 14, Consultants recognized by ONA. Brazilian Accreditation System ONA. ONA Administrative Panel. Updated on 01/17/2025.

Brazilian Accreditation System - Reports and Indicators, 2024.

Disclosure of Interest: None Declared

Enhancing Healthcare Quality: Evaluating the impact of Virtual Surveys: (2124) Gilvane Lolato Lolato

ISQUA2025-SES-2124

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¹Accreditation, ONA, São Paulo, Brazil

Proposed Session Duration: 60 Minutes

Session Description: The Brazilian Accreditation System (SBA/ONA) plays a crucial role in ensuring healthcare quality and patient safety through structured evaluation processes. With the introduction of Virtual Surveys, the system has evolved to improve efficiency, accessibility, and cost-effectiveness while maintaining rigorous accreditation standards.

This session will explore the implementation, methodology, and impact of Virtual Surveys in Brazil, including the development of technical frameworks, risk analysis, and integration into the ONA Integrare System. Since its adoption in 2020, ONA has conducted 1,878 accreditation assessments, with 376 virtual surveys, 153 hybrid assessments, and 1,349 on-site surveys.

Key findings demonstrate that Virtual Surveys reduce financial and logistical barriers, expand accreditation access to remote areas, and accelerate decision-making. Currently, 2,076 healthcare organizations in Brazil are accredited, including 16.6% of all hospital beds.

Attendees will gain insights into the successes, challenges, and future opportunities of digital accreditation tools, as well as best practices for integrating virtual assessment models into healthcare quality frameworks.

Session Format: Expert Presentation – Detailed insights on Virtual Survey methodology and outcomes.

Case Studies & Comparative Analysis – Evaluation of virtual, hybrid, and on-site accreditation results.

Interactive Discussion & Q&A – Addressing implementation challenges, lessons learned, and future developments.

Strategic Roadmap – Future directions for integrating digital accreditation models.

Target Audience: Healthcare Accreditation Bodies & Regulatory Agencies – Policymakers, auditors, and industry leaders.

Hospital Administrators & Quality Managers – Professionals overseeing accreditation processes.

Healthcare IT & Innovation Experts – Developers of digital assessment tools for virtual accreditation.

Public and Private Healthcare Organizations – Institutions seeking to optimize accreditation through technology.

Academics & Researchers – Scholars in patient safety, quality management, and digital transformation in healthcare.

Objectives: Examine the role of Virtual Surveys in optimizing healthcare accreditation.

Explore the potential for AI and automation in refining virtual assessment.

Identify best practices for implementing Virtual Surveys

Compare virtual, hybrid, and on-site survey results to evaluate methodological effectiveness.

Research: Data from the Brazilian Accreditation System (SBA/ONA), including 1,878 accreditation surveys (2020-2024).

ONA Integrare System reports on Virtual Survey efficiency and implementation.

Comparative evaluation of cost, accessibility, and decision-making speed among virtual, hybrid, and on-site surveys.

National Registry of Health Establishments (CNES) 2025 data, mapping the geographic distribution of accredited institutions.

International accreditation guidelines (ISQua, IAF/ISO) for remote assessment standards.

Suitability: This session is highly relevant to healthcare professionals, policymakers, and accreditation experts seeking innovative solutions for scalable, cost-effective, and efficient accreditation processes. By combining empirical research, case studies, and strategic discussions, the session will:

1. Demonstrate the effectiveness of Virtual Surveys in maintaining accreditation standards.
2. Showcase real-world applications of digital accreditation models.
3. Identify challenges and opportunities in transitioning to virtual healthcare assessments.
4. Provide recommendations for integrating AI and automation into future accreditation models.

This discussion will serve as a blueprint for organizations worldwide looking to enhance accreditation accessibility and sustainability through digital innovation.

Have you presented this session at a Conference before including ISQua?: Yes

If yes, what year and where?: 2022 and 2023

Disclosure of Interest: None Declared

GAHAR's Trailblazing Journey: Accreditation, National Quality Indicators, and Sustainable Healthcare: (1794) Ahmed Taha

ISQUA2025-SES-1794

A. Taha ^{1,*}, M. Al-Tehewy ^{2,*}, E.-S. ElOkda ^{2,*}, R. Medhat ³

¹Chairman, ²Board member, ³Technical office, GAHAR, Cairo, Egypt

Proposed Session Duration: 60 Minutes

Session Description: This session highlights the transformative role of the General Authority of Healthcare Accreditation and Regulation (GAHAR) in advancing healthcare quality and sustainability in Egypt. Through its groundbreaking initiatives, GAHAR has set a benchmark for accreditation processes, the development of national quality indicators in collaboration with the World Health Organization (WHO), and pioneering efforts in promoting sustainability and green hospital practices. Attendees will gain insights into these projects' methodologies, challenges, and successes, underscoring their impact on improving healthcare standards and fostering a greener, more resilient healthcare system.

Session Format: Presentations:(60 min session) 3 presentations 20 min each

Title: Collaborative Excellence: GAHAR and WHO's Journey in Developing National Quality Indicators.

Ahmed Taha, Head of GAHAR, Egypt

Title: Aligning Stakeholder Feedback with Healthcare Accreditation Standards: The GAHAR Experience

Mahi AL-Tehewy, GAHAR Board Member

Title: Green Healthcare Leadership: GAHAR's Experience in Promoting Sustainability and Green Hospitals

Sayed Elokda, GAHAR board Member

Target Audience: Senior healthcare managers, policymakers, quality professionals, accreditation experts, and patients

Objectives: GAHAR advances accreditation through a stakeholder-driven approach, collaborates with WHO on National Quality Indicators to enhance healthcare outcomes, & promotes sustainable hospital practices. fosters global knowledge exchange, inspiring best practices in accreditation, quality, & sustainability.

Research: GAHAR Handbook for Hospital Accreditation Standards (2025 version)

GAHAR Green Healthcare facility standards

Egypt Healthcare Indicators (Moashir Masr)

Law no 2 for the year 2018(law of Universal health insurance coverage in E Egypt)

Suitability: GAHAR's Trailblazing Journey: A Compelling Session for ISQua 2025

The International Society for Quality in Health Care (ISQua) conference attracts a global audience of healthcare leaders, policymakers, accreditation experts, and quality improvement professionals. GAHAR's session aligns seamlessly with ISQua's mission by showcasing accreditation advancements, data-driven

quality measurement, and sustainable healthcare practices—three pivotal areas shaping the future of healthcare worldwide.

GAHAR's experience offers valuable insights into how a national accreditation body can evolve, innovate, and collaborate to drive healthcare transformation. The session detailing Egypt's expertise provides a real-world case study that can inspire similar initiatives globally, particularly in low- and middle-income countries seeking to strengthen their healthcare systems.

Potential to Engage ISQua Audiences

1. Innovative Accreditation Practices:

- The presentation on stakeholder-driven accreditation updates offers a practical model for continuous improvement, which resonates with accreditation professionals and policy developers.
- Attendees will learn about Egypt's unique approach to ensuring hospital standards evolve with sector needs.

2. National Quality Indicators – A Model for Data-Driven Improvement:

- GAHAR's collaboration with WHO in developing National Quality Indicators (NQIs) provides an evidence-based method for monitoring and improving healthcare performance.
- The discussion will appeal to those interested in metrics, accountability, and health system strengthening.

3. Sustainability in Healthcare – A Timely Global Priority:

- Green and sustainable healthcare is gaining traction worldwide. GAHAR's leadership in integrating sustainability into accreditation is a pioneering effort that aligns with global climate goals.
- Attendees will benefit from practical lessons on implementing green hospital practices.

4. Global Knowledge Exchange & Inspiration:

- The session offers an interactive platform for discussing challenges, solutions, and success stories with international accreditation bodies, policymakers, and healthcare leaders.
- It fosters a collaborative environment to explore best practices in accreditation, quality measurement, and sustainable healthcare.

Have you presented this session at a Conference before including ISQua?: No

Disclosure of Interest: None Declared

Quad A's Unique Accreditation Approach: Mastering the Global Balancing Act: (1546) Emily Pound, Tom Terranova, Muddrik Anwar

ISQUA2025-SES-1546

E. Pound ^{1,*}, T. Terranova ^{2,*}

Proposed Session Duration: 60 Minutes

Session Description: As healthcare systems become more complex, accreditation must balance global consistency with local adaptability to drive meaningful quality improvements. This session, led by Quad A, explores how external evaluation, accreditation, and technology can work together to enhance patient safety, accountability, and continuous improvement.

Key discussion points include:

- **Reconciling Standardization and Complexity:** How Quad A maintains global quality benchmarks while allowing flexibility for diverse healthcare environments.

- **Accreditation as a Driver of Improvement:** The role of structured evaluations in identifying gaps, fostering accountability, and sustaining long-term quality advancements.

- **Leveraging Technology for Inclusive Assessments:** How Quad A's Patient Safety Data Reporting (PSDR) system converts survey data into actionable insights, enabling data-driven decision-making in the development and implementation of standards across the global healthcare landscape

Aligned with ISQua's mission to enhance global healthcare quality and safety, this session highlights how Quad A's accreditation approach supports diverse healthcare systems through innovation and adaptability. Quad A's accreditation framework is built to prioritize patient-centered care, safety, and equity in healthcare evaluation.

Session Format: 1. Introduction and Session Overview (5 minutes)

- Welcome and Speaker Introduction
- Overview of Session Learning Objectives
- Audience Polling Question to Gauge Familiarity with Accreditation Challenges on Global Scale

2. Presentation (45 minutes)

- **Reconciling Standardization and Complexity** (15 minutes)

- **Key Focus:** How to balance global quality benchmarks with the flexibility needed for diverse healthcare settings seen across the globe

- Examples of differing approaches to accreditation within different healthcare settings
 - How flexibility in approach to accreditation based on setting fosters better patient outcomes

- **Interactive Component:** Attendees submit keywords that come to mind when considering the challenges of implementing accreditation standards from an international accreditor based outside their home country

- **Accreditation as a Continuous Drive of Improvement** (15 minutes)

- **Key Focus:** Educating on how the accreditation process serves as a tool for identifying performance gaps, promoting accountability among colleagues, and sustaining quality improvements by integrating the accreditation process into daily workflows.

- **Real World Example:** Discuss findings from Dr. Samuel Lin's recent research on the correlation between compliance with accreditation standards and reduced VTE incidence

- **Interactive Component:** Invite 1-2 attendees to share insights on how accreditation has influenced their organization and its impact on quality improvement.

- **Leveraging Technology for Inclusive Survey Assessments** (15 minutes)

- **Key Focus:** Describe how data collection in Quad A's proprietary Patient Safety Data Reporting (PSDR) system has enabled facilities worldwide to enhance protocols based on data-driven insights, ultimately reducing adverse events and improving patient safety.

- **Interactive Component:** Conduct a poll to gather insights on the type of feedback participants receive during their current survey process if they are practicing within an accredited facility

3. Open Q&A Discussion and Closing Remarks (10 minutes)

- **Live Q&A:** Attendees ask final questions and share reflections on presentation materials

- **Closing Remarks**

- Summary of key insights from the session

- Final thoughts on advancing the accreditation process to be a more inclusive global healthcare initiative

- Invitation for continued dialogue and collaboration beyond the conference

Target Audience: This session is designed for healthcare accreditation professionals, senior healthcare managers, policy makers, quality improvement specialists, clinicians, and healthcare administrators involved in external evaluation, accreditation, and patient safety initiatives. It is particularly relevant for those seeking to enhance quality standards, navigate international accreditation challenges, and leverage technology-driven assessment tools to drive continuous improvement in healthcare systems.

Objectives: Participants will learn to balance standardization & complexity in accreditation, understand how Quad A's PSDR system is used to obtain data-driven insights, & navigate international accreditation challenges. The session fosters global collaboration, driving patient safety and quality advancements.

Research: This session is built upon evidence-based research, regulatory frameworks, and real-world initiatives that shape accreditation and external evaluation in global healthcare.

1. Research & Standards Development Process

- **Regulatory & Clinical Research-Based Standards** – Quad A's accreditation standards are developed through clinical research and alignment with international regulatory guidelines.

- **Country-Specific Adaptations:**

- In the United States, standards development is based on Centers for Medicare & Medicaid Services (CMS) literature, ensuring alignment with national regulatory requirements.

- In Dubai, accreditation standards reflect Dubai Health Authority (DHA) guidelines, incorporating region-specific healthcare policies and best practices.

- **Evidence-Based Development:** Quad A's clinical team conducts research during the standards development process, ensuring scientific validity and real-world applicability.

- Featured Research: This presentation will also include insights from Dr. Samuel Lin's white paper, *The Key to Preventing a Common Postoperative Complication*, which highlights the critical role of structured accreditation processes in improving patient outcomes and reducing surgical risks.

2. Policy & Regulatory Frameworks:

- Global Accreditation Alignment: Quad A ensures its accreditation standards integrate key policies from major regulatory bodies worldwide, fostering harmonization and adaptability across healthcare systems.

- Quality & Safety Compliance: Quad A's accreditation framework aligns with international patient safety initiatives to enhance accountability and performance monitoring.

3. Implemented Initiatives & Technology Integration:

- Quad A's Global Accreditation Programs – Implementation of accreditation models across diverse healthcare settings, balancing standardization with local adaptability.

- Technology-Driven Surveying with PSDR – How Quad A's Patient Safety Data Reporting (PSDR) system helps facilities transform survey data into actionable insights, improving patient outcomes and regulatory compliance.

By combining research-driven standards development, policy alignment, and technology-enabled evaluation, Quad A's accreditation approach ensures a structured yet flexible model for driving quality improvement worldwide.

Suitability: This session is highly relevant to ISQua's audience, addressing the evolving role of accreditation, external evaluation, and technology in improving global healthcare quality. It explores how Quad A's accreditation framework adapts to diverse healthcare systems, incorporating insights from CMS (USA), DHA (Dubai), and international regulatory bodies. Featuring Dr. Samuel Lin's white paper, *The Key to Preventing a Common Postoperative Complication*, it highlights research-backed accreditation practices that enhance patient safety. The session will also showcase Quad A's Patient Safety Data Reporting (PSDR) system, demonstrating how data-driven insights improve compliance and performance monitoring.

To maximize engagement, the session includes live polling on accreditation challenges, real-world case studies, and an interactive Q&A panel. With practical takeaways for healthcare leaders, policymakers, and accreditation professionals, this session offers valuable strategies for implementing patient-centered, technology-supported accreditation models worldwide, aligning directly with ISQua's mission.

Have you presented this session at a Conference before including ISQua?: No

Disclosure of Interest: E. Pound Employee of: Director of Education at Quad A, T. Terranova Employee of: CEO of Quad A

Measuring nurses' and older patients' perspectives on and experiences of missed nursing care in an acute hospital setting in Ireland: (2707) Anna Connolly

ISQUA2025-ABS-2707

Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Nurses play a vital role in healthcare delivery and contribute to patient safety by providing direct patient care. Staff and resource shortages and increased care demands contribute to missed nursing care. The regular omission or delay of care compromises patient safety and is associated with poor patient outcomes. Older patients are particularly vulnerable to missed nursing care due to their complex care needs and when the demand for nursing care exceeds supply, adequate care may not be delivered. Missed nursing care impacts overall quality and safety within healthcare however as it is experienced by patients, the patient voice must be heard and acknowledged. In order to improve patient safety and healthcare quality, the prevalence, contributing factors and impact of missed nursing care must be considered by hospitals.

Objectives

- To estimate the prevalence, contributing factors, and impact of missed nursing care in an Irish hospital setting, and how it is experienced by both nurses and patients.
- To explore and compare nurses' and patients' perceptions of missed nursing.

Methods: The MISSCARE Survey and MISSCARE Survey-Patient were used to measure nurse and patient perspectives of missed nursing care. The survey instruments were adapted and co-produced with the nursing executive from the participating hospital. Registered nurses and patients aged over 65 years old who were admitted for over three days to in-patient adult wards were eligible for participation. Nurses were asked to indicate the frequency of and potential reasons for missed nursing care. Using likert scales, areas such as communication, timeliness, and the provision of basic nursing care were measured from the patients' perspective. The data were analysed using IBM SPSS Statistics version 29.

Results: A total of 151 nurses and 145 patients participated in the surveys. Of the patients, 96 (66.2%) were male and 45 (31%) were female and the mean age was 75.1 years old. The most frequently patient-reported missed nursing care activities included repositioning in bed, mouth care and ambulation and the most frequently reported adverse events were hospital-acquired infections (20%). Of the nurses, 21 (13.9%) were male and 129 (85.4%) were female and the mean age was 37.7 years old. Of the 117 (77.5%) staff nurses and 33 (19.2%) nurse managers and nurses in senior roles who participated, 45 (29.8%) received their basic nursing education in Ireland and 105 (69.5%) trained elsewhere. The mean score for missed nursing care according to the nurses was 3.97 ± 0.72 with the most frequently missed items including interdisciplinary conferences, mobilisation, mouth care, responding to call lights within 5 minutes and setting up meals for patients who can feed themselves. Overall, shortfalls in labour resources were reported by nurses to be the most significant contributors to missed nursing care with a mean score of 1.75 ± 0.67 .

Conclusion: This is the first study in Ireland to measure missed nursing care from both nurse and patient perspectives. The identification of the most frequently missed care activities and key factors that influence missed nursing care highlights key target areas for improving patient safety and healthcare quality. Furthermore, the need to develop a more sustainable approach to measuring missed nursing care is evident from this research. A more compact measurement tool is required to enable continuous monitoring of missed nursing care in hospital settings.

The Second Victim Phenomenon in Italian Community-Based Psychiatric Services: A Cross-Sectional Survey Study: (2716) Andrea Conti

ISQUA2025-ABS-2716

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¹Department of Translational Medicine, Università del Piemonte Orientale, Novara, Italy, ²Doctoral Program in Sports and Health—Patient Safety Line, Universitas Miguel Hernandez, Elche, Spain, ³Anteo Impresa Sociale, Biella, Italy

Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Second Victim Phenomenon (SVP) refers to the psychological and emotional distress experienced by healthcare professionals following a patient safety incident (PSI). While most studies focus on hospital settings and clinical staff, limited evidence exists regarding the impact of SVP in community-based psychiatric services, where patient care is mainly delivered by non-clinical professionals such as social workers and educators. Our study aims to explore the SVP in this context, assessing the prevalence, characteristics, and support needs of second victims among professionals working in community-based psychiatric services in Italy.

Methods: An Italian-translated version of the SeViD (Second Victims in German-speaking Countries) questionnaire was proposed in October 2024 to both healthcare and non-healthcare professionals (e.g., psychologists, educators, social workers, nurses, and administrative staff; total population: 370 subjects) employed in the community-based psychiatric services (e.g., communities, cooperative apartments, daycare centres) managed by an Italian not-for profit healthcare company (Anteo Impresa Sociale, Biella, Italy). Participation in the survey, which was delivered online, was anonymous and voluntary.

Results: A total of 40 workers (11% of the overall population) participated in the survey. The majority were female (58%), with a mean age of 43.4 years. Most respondents were educators (48%), social workers (23%), and nurses (13%), primarily employed in psychiatric communities within teams of 10–20 professionals. Only 33% of participants were aware of SVP, while the majority (78%) identified themselves as second victims. Support following an adverse event was reported by 72.5% of respondents. The most frequently reported incidents were patient aggression (52%) and unexpected patient death or suicide (22%). Recovery within one week was reported by 28% of participants, while 13% indicated that they had not recovered at all. The most prevalent severe reactions included loss of concentration (33%) and depressive symptoms (25%). Providing safety information was

considered the most effective intervention (62.5%), followed by legal support (47.5%). Conversely, the opportunity to take leave after an event was perceived as ineffective by 61.5%.

Conclusion: As far as the authors know, this is the first study investigating SVP in community-based psychiatric mental health services. Overall, the results align with current literature, highlighting that the vast majority of participants have experienced being a second victim. Moreover, since most respondents were non-clinical professionals, our study shows that SVP is not limited to healthcare workers (e.g., doctors and nurses) but can potentially affect all individuals involved in various aspects of patient care. Consistent with the characteristics of this setting, patient behavior was the primary determinant of SV occurrence. However, unexpected patient death or suicide accounted for one in five incidents, suggesting that such contexts—traditionally considered less complex than hospitals—may present a significantly underestimated severe PSI occurrence risk and, consequently, an increased prevalence of the SVP. Notably, more than one in ten reported not having recovered at all, underscoring the potential long-term psychological impact of SVP and highlighting the need for structured support strategies tailored to this workforce. Additionally, the low awareness of SVP emphasizes the necessity of targeted educational initiatives and institutional support programs. In conclusion, we encourage further research on SVP beyond hospital settings, including non-healthcare workers involved in patient care processes.

Disclosure of Interest: None Declared

Structure of a High-Reliability Dashboard to Support Governance of Quality and Patient Safety: (3315) Paola Bruno de Araujo Andreoli

ISQUA2025-ABS-3315

P. B. D. A. Andreoli ^{1,*}, F. Pinho ¹, J. Santos ¹, E. Fazio ¹, H. Fernandes ¹

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: In recent years, improving performance in quality and safety (QS) in hospitals has become increasingly important. Concerns have arisen that senior leadership prioritizes patient safety and quality in the same way they handle finances and external performance standards. Research indicates that institutions where leadership demonstrates focus on quality and safety, engages in quality improvement (QI), and regularly reviews performance are associated with better healthcare outcomes. For these efforts to be effective, it is essential to structure control panels for monitoring QS indicators. These dashboards must meet specific requirements: provide content aligned with user needs, be easily understandable, allow for customization, and display accurate and updated data. However, many hospitals fail to develop these dashboards due to a lack of experience and expertise, which undermines their use in decision-making processes.

This study aims to present the development of a dashboard and an index to monitor quality and safety performance for senior leadership and the board of directors in a philanthropic hospital in São Paulo.

Methods: A performance analysis and conceptual alignment of various quality and safety indicators were conducted using a case study method to achieve a consensus on the indicators to be included in the

dashboard and the high-reliability index. All indicators were required to meet four criteria: 1. a history of monitoring for at least 24 months; 2. validation of data and technical documentation; 3. the ability to be compared with national or international benchmarking; 4. the potential for nearly zero occurrence reduction. Following this, a calculation method was proposed to compile the index result, resulting in a single number for senior leadership to track, with adjusters based on the need to prioritize specific indicators.

Results: Consensus among quality and patient safety experts at the institution selected seven indicators that met all the proposed criteria. Only the "damage rate" indicator did not meet all criteria, as it lacked national or international benchmarking; however, it was retained in the dashboard due to its importance for patient safety.

The proposed dashboard was initially developed in a table format, which later evolved into the version below.

Through the development of this dashboard, we were able to meet critical requirements for the availability of indicators, such as alignment with user needs and, most importantly, ensuring that the design is understandable for different user profiles, displaying accurate, complete, updated, valid, and reliable data. The analyses are performed based on trend graphs, and the targets are set through control charts compared with the best results established in benchmarks.

Conclusion: Conclusion

The construction of a high-reliability dashboard for monitoring quality and patient safety performance proved to be an effective tool for supporting governance in hospital management. Structuring indicators with clear, validated criteria contributes to more accurate decision-making by senior leadership and the board of directors. The implementation of trend graphs and comparison with national and international benchmarks provides a comprehensive view of hospital performance, allowing for continuous adjustments and improvements in care quality. The ongoing development of dashboards and training teams for their proper use is essential to ensure that patient safety and quality remain a priority, contributing to a more efficient and safer healthcare system.

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Disclosure of Interest: None Declared

Keeping Neonates Warm: A Bundle of Low-cost Quality Improvement Innovations to Reduce Hypothermia at Admission for Inborn Babies in a Level 5 Referral Hospital in Kenya, 2025: (2391) Hannah Nungari Mwaniki

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Neonatal hypothermia is a leading cause of neonatal morbidity and mortality in low- and middle-income countries. Available evidence shows that for every 1°C decrease in admission temperature, there is a 28% increase in neonatal mortality, hence maintenance of neonatal temperature at admission is a key determinant of neonatal survival. In a study conducted recently in Kenya, 17.5% of neonates (out of 8,391), had hypothermia at admission. The Newborn Essential Solutions and Technologies (NEST360), an international alliance of experts working to end preventable newborn deaths across five countries has identified the reduction of hypothermia as one of the priority interventions to reduce mortality. This study describes low-cost innovations developed by one of the alliance-implementing facilities in Kenya to reduce neonatal hypothermia at admission.

Methods: A level 5 Hospital Multidisciplinary Quality Improvement Team (QIT) selected neonatal care quality and coverage problems from the NEST-Implementation Tracker dashboard. They used the prioritization matrix to rank quality improvement problems in their unit. High rate of neonatal hypothermia at admission was identified to be top priority. They designed a Quality Improvement project to increase the percentage of normothermic newborns at admission from a baseline coverage of 57% to 85% within 24 weeks of intervention. A thorough root cause analysis was done using "five whys and fishbone" approach. Change ideas were developed to tackle the prioritized root causes, which focused on people and processes. The process measures included educating mothers on the right delivery package, delayed bathing of mothers, prewarming baby's clothes before birth, maintaining the room temperature during delivery and warm transportation of babies from the labour ward to the newborn unit which were implemented in four PDSA cycles.

Results: With the support of the hospital leadership, its change ideas were successfully implemented between July 2024 and January 2025. QIT ensured that 100% of mothers in the labour ward had their baths delayed by initiating skin-to-skin contact and immediate breastfeeding. To promote proper newborn clothing, a demonstration pack was introduced in antenatal care clinics to educate mothers on appropriate attire, including hats and socks. All neonatal clothing (100%) was prewarmed in the labour ward and theatre before delivery and cesarean sections, ensuring optimal temperature for the newborns. To maintain room temperature, NEST360 prepared a temperature monitoring checklist that was used to monitor and record temperature in the labour ward during every shift. During transportation, 70% of the babies were clothed with prewarmed clothes and carried in a lateral position. To improve staff behaviour, targeted mentorship and peer-to-peer learning were done weekly. Staff who maintained the warm chain were also rewarded. As a result, the hospital increased the proportion of normothermic babies' improvement from the baseline coverage of 57% to 77% among inborn admissions over the implementation period. A significant trend was realized.

Image:

Annotated run charts-Out come measure

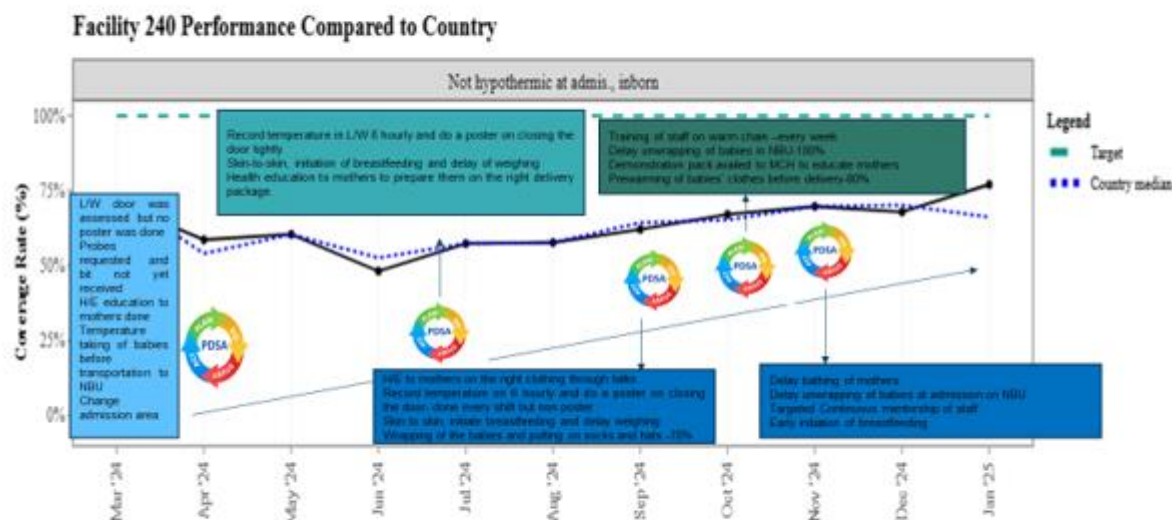


Figure 1: Annotated Chart

Conclusion: Hypothermia at admission is a major concern in resource-restrained settings. Low-cost QI interventions are effective and easy to implement. They may contribute substantially to reduction of neonatal mortality in such settings.

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Disclosure of Interest: None Declared

Integration of Telemedicine Good Practices of Proadi-SUS in Emergency Care: Impacts on the Quality of Care for Cardiology Patients: (3745) Ivanise Freitas Silva

ISQUA2025-ABS-3745

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Cardiovascular diseases are recognized by the World Health Organization (WHO) as the main cause of death worldwide. Among the most common cardiac pathologies, acute myocardial infarction (AMI) stands out, characterized by the sudden reduction or interruption of blood flow to the heart, which results in approximately 360 thousand deaths annually in Brazil. The Proadi-SUS Good Practices project aims to support public institutions in developing strategies and interventions that improve the quality of care and patient safety.

Methods: This is an experience report based on the results obtained in two Emergency Care Units (UPAs) in Fortaleza – Ceará, managed by the Viva Rio Social Organization, on the impacts of integrating Telemedicine into cardiological care through the Good Practices Program – PROADISUS. The period analyzed covers February 2024 to February 2025. The project is structured around three main axes: early diagnosis, clinical decision support and monitoring of cardiovascular emergencies, using connected and interactive tools to optimize care. The implementation occurs through electrocardiograms (ECG) with reports issued remotely by specialist doctors from Associação Beneficente Syria Hospital do Coração -HCor and Beneficência Portuguesa de São Paulo - BP, who also provide clinical support via teleconsultation whenever there are altered findings in the exam.

Results: The generation of 10,504 reports, with 39.94% showing changes and 3.97% classified as critical, reinforces the importance of early detection of cardiac abnormalities through technology. The identification of 228 cases of Acute Coronary Syndrome (ACS) and arrhythmias demonstrates the fundamental role of Telemedicine in assessing risk and providing timely care. A notable aspect was the agility in treating serious cases, with all patients being classified and treated within ten minutes, which directly reflects the reduction in the time between the identification of the condition and the necessary intervention. Furthermore, the carrying out of 109 remote medical consultations and the analysis of 198 clinical studies indicate specifically specialized support, contributing to more assertive and informed decision-making. The high hospital transfer rate (43.75%) among patients treated reinforces the effectiveness of Telemedicine in identifying those who require a more intensive level of care, reducing the risk of complications and improving the prognosis.

Conclusion: The implementation of the Program proved to be a strategic element for the qualification of cardiological care in Emergency Care Units (UPAs). In addition to enabling rapid issuance of reports 24 hours a day, the program offers support for medical decisions through specialized second opinions and continuous monitoring of cases. The integration of the electrocardiogram (ECG) with a remote report issued by HCor cardiologists brought greater agility to the flow of care, allowing patients to be referred to the referral hospital in a timely manner.

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Disclosure of Interest: None Declared

A Process Improvement Study on the Turnaround Time of Planned Admission in the Admission Service Department: (2158) Mark Joffrey Cubos

ISQUA2025-ABS-2158

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: No

I confirm that the submission has been approved by all authors: Yes

Introduction: Delays in admission have been a consistent patient complaint for many years. At a tertiary academic medical facility in Quezon City, Philippines, the average direct admission turnaround time from October to December 2020 is 18 minutes, which is 3 minutes beyond the new target threshold of 15 minutes. Based on the Press Ganey® survey for inpatient services, 85.8% of the negative comments (January 2019 to October 2020) were due to long waiting time at the Admissions Service. In terms of “Admission Speed,” the institution scored 85.6, which is 2.4 points below the corporate target of 88.0 (October to December 2020). Hence, the Executive Vice President and Chief Hospital Operations Officer tasked a project team to investigate the reasons behind the long cycle time during the admission process.

The primary metric of the project is the Planned Admission Turnaround Time that is measured from the time the patient arrives at the Admissions Service office until the patient leaves the Admissions Service office. With this, the project team aims to improve operational efficiency by decreasing the planned admission turnaround time (TAT) from 18 min to 15 min by December 2021. Then the secondary metric of the project is

the express admission rate is measured by dividing the total number of express admission to the total number of planned admission, multiplied by 100. With this, the project team aims to improve operational efficiency by increasing the number of express admission from 60% to 85% by December 2021.

Methods: This quality improvement initiative project utilized the Plan-Do-Study-Act (PDSA) framework. The focus of this project were patients with planned admission. The project team utilized various tools for the identification and verification of root causes such as the Fishbone Diagram, Pareto Chart, Normality Testing, Fit Regression Model, and the Multi-Vari Chart. Through the fishbone diagram, the possible causes were identified as follows: (1) unplanned admissions were delayed; (2) unavailable Bedside Nurse Coordinator for vital signs; (3) unavailable letter of authorization from the health maintenance organization (HMO); (4) unavailable Admitting Orders; (5) rewriting of Admitting Orders; (6) the Nursing Unit requests for vital signs first before escorting the patient; and (7) longer processing for New Patients.

To address the identified root causes, the following solutions have been acted upon: (1) Express Planned Admission; (2) Vital Signs Training; (3) dedicated staff for Planned Admissions (also called Planned Admission Officer); (4) HMO Concierge Cares; (5) improved process map; and (6) updating of the policies.

Results: The post-implementation average Planned Admission Turnaround Time (TAT) is 7.13 minutes, which is a 10.12-minute decrease compared to the baseline of 18.12 minutes and is 7.87 minutes below the target threshold. Additionally, the post-implementation average Express Admission is 94% (2024), which constitutes a 34% increase compared to the baseline of 60% and is 9% above the target of 85%. With these results, the primary and secondary objectives have been met.

Conclusion: In conclusion, the improvements done to the admission process resulted in increased patient satisfaction, reduced risk of delays in provision of care and treatment due to long admission waiting time, faster direct admission times, and an increase in positive feedback. Due to the process efficiency that led to patient satisfaction, the number of cancelled admissions decreased by 80% compared to the first year of project implementation. To ensure sustainability, the project team's future plans include a project focusing on unplanned admissions, incorporating the process improvements into the hospital's policy on admission of patients, developing a Skills Checklist for Vital Signs Assessment, and mandating that all new Admissions Staff to undergo Vital Signs Training.

Disclosure of Interest: None Declared

Enhancing Emergency Delirium Management and Reducing Restraint Rates in Elderly Patients: A Multidisciplinary Integration Approach: (2642) Hsiuhsia Weng

ISQUA2025-ABS-2642

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Preferred presentation method: 15 Minute Oral presentation

Have you presented this abstract at an ISQua Conference before?: Yes

If yes, what year?: 2023

I confirm that the submission has been approved by all authors: Yes

Introduction: Delirium is a critical challenge for elderly emergency department (ED) patients, leading to prolonged hospitalization, increased mortality, and frequent use of physical restraints. Restraints worsen cognitive decline and increase complications such as pressure ulcers and agitation-related injuries. Between January and July 2024, 74 of 2,811 elderly ED patients were restrained due to delirium, with a 2.63% restraint rate. Additionally, delirium patients required 6.019 extra nursing hours per day, straining medical resources. This study evaluated a structured, multidisciplinary delirium management framework designed to reduce restraint rates, improve patient outcomes, and optimize workforce efficiency.

Methods: This study was based on a systematic literature review and team collaboration. Key factors affecting delirium in the ED included insufficient delirium care by emergency staff, lack of standardized procedures, environmental disturbances, and challenges in medication management. From October 1, 2024, to December 31, 2024, the following interventions were implemented: 1. Screening of high-risk patients: systematic screening using ISAR and Brief CAM for early detection. 2. Environmental modifications: noise reduction, circadian lighting adjustments, and orientation aids to enhance cognitive stability. 3. Medication Optimization: Pharmacists led reconciliation to reduce inappropriate benzodiazepine (BZD) prescriptions and introduce safer psychiatric alternatives. 4. Multidisciplinary collaboration: Emergency physicians, geriatricians, psychiatrists, pharmacists, and nurses ensured timely assessment and intervention. 5. Nursing training and simulation: Nurses received structured simulation training to improve delirium recognition and implement non-pharmacological interventions.

Results: The impact of the interventions was evaluated over a 2-month data collection period (January 1, 2025–February 28, 2025), during which the following significant improvements were observed:

- Restraint reduction: Only 11 out of 922 elderly patients required restraints, lowering the rate to 1.19%, representing a 54.68% improvement.
- Medication optimization: Medication reconciliation was performed for 11 out of 16 patients, leading to a 68.75% reduction in benzodiazepine (BZD) use and a decreased risk of drug-induced delirium.
- Delirium recovery: 12 patients transitioned from Brief CAM positive to negative, confirming the effectiveness of early screening and intervention.
- Reduced workload: nursing time per patient per day decreased from 6.019 hours to 2.68 hours, a 55.47% reduction.
- Environmental impact: noise control, circadian lighting adjustments, and patient engagement strategies improved patient satisfaction and time orientation. Overall environmental satisfaction increased from 66.57% to 76.88%.

Image:

Summary of Key Improvements

Measure	Pre-Intervention (Jan–Jul 2024)	Post-Intervention (Data Collection: Jan–Feb 2025)	Improvement
Restraint Rate (%)	2.63	1.19	↓ 54.68%
Nursing Time per Patient per Day (hours)	6.019	2.68	↓ 55.47%
BZD Use Reduction (%)	0	68.75	↑ 68.75%
Delirium Improvement (CAM+ to CAM-)	0	12	↑ 12 cases
Patient Satisfaction with Environment (%)	66.57	76.88	↑ 10.31%

Conclusion: A structured, multidisciplinary approach significantly reduced restraint use, improved medication safety, and alleviated nursing workload. By integrating standardized screening tools, environmental modifications, and interdisciplinary collaboration, delirium progression can be mitigated. This model is replicable and applicable to a broader hospital setting. The findings highlight the importance of multidisciplinary teamwork in transforming delirium care. Future efforts should expand this framework beyond the ED, enhance staff training, and establish systematic follow-ups to ensure sustained improvements.

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