Human factors, ergonomics and patient safety

“Health care delivery systems are complex by design and prone to errors. Human factors are a core element in most cases of harm, operating in systems where procedures and practices are poorly designed.”

Resolution of WHA 72, 29 May 2019
WHO CC and patient safety network

- Design and pilot of the Global Knowledge Sharing Platform (GKSP)
- Organize international collaborative projects
- Design Practical and easy-to-implement solutions for improving safety

HFE and support to the organization

Designing Scenario-based visual clinical pathways

Adaptation WHO material for healthcare operators

Usability evaluation and poster for the use of PPE
Communication in homecare

Scenario based indications for Home care facilities
Community Engagement

HFE on the Fly

Active walking reporting

Proactive assessment of risks emerging from reorganization of services

Zipper function: Updating operational procedures and make sure the correct message arrive to the line

Monitoring the correct application of infection prevention practices

Training related to the use of PPE
HFE solutions

- Safety walkround to illustrate updating new procedures and verify their correct and appropriate application
- Training / Simulation of dressing and undressing for new hires and all healthcare professionals
- PPE counter
- Frontline Support Algorithms (PPE)
- Design of corporate procedure documents to facilitate the reading and identification of essential information elements
- Hospital team with quality and safety network to support the management of territorial medical team and home care facilities

Adverse events reporting during covid19

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1024 reports
648 M&M and 195 audit
118 focused on covid (18,20%)
HFE and Infection Control

**Strengths**

- Creation of active collaborations with structures such as infectious diseases and prevention and occupational medicine
- Sharing of hand hygiene procedures among various actors including existing CRM
- Where the collaboration existed, it has become tighter and more effective (sense of belonging) (e.g. tracking of PPE dressing and undressing)

**Points of weakness**

- Involvement of CRM in the variable IPC team based on local situations
- Construction of ad hoc reporting for case tracking and PPE possible only manually
- Univocal centralization on Medical Directions unbalances the participation and distribution of information

**Threats**

- In an emergency situation, level of ambiguity of unclear roles first increases
- Overcoming the logic of good practices and introducing STANDARDS of prevention and management of infectious risk

**Opportunities**

- The direct line with the infectious disease specialist worked as appropriate
- Sharing of procedures for identifying infected patients for isolation procedures and use of PPE
- Ability to structure collaborations with AID at the level of supervision and working groups. In contexts that are smaller in size and less dispersive, collaboration has been productive

Are healthcare organization ready for next emergency?

**ECDC preparedness checklist tool**


De-briefing with the Clinical Departments in all the healthcare trusts

**Analysis by key dimension**

- **Dimension 1: Human resources**
- **Dimension 2: Medicines and vaccines**
- **Dimension 3: Physical infrastructure**
- **Dimension 4: Sanitation**
- **Dimension 5: Health financing**
- **Dimension 6: Coordination**
- **Dimension 7: Health information**
Co-editors: Sara Albolino, Pascale Carayon, Sue Hignett

Topics:
- SEIPS – HFE systems approach
- Embedding HFE in health care
- HFE design of medical devices and health IT
- Human-centered design
- Risk management and communication
- And more...
Thank you
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