HACKATHON OCTOBER 4-6 HEALTH TECH2030 SUMMIT OCTOBER 10th

CHALLENGE BETTER CARE

Sponsors Goal

Better Care is a pioneering company in capturing, managing, and processing clinical data, aiming to enhance clinical decision-making through advanced technology solutions for real-time management of large volumes of medical data. The Hospital de la Santa Creu i Sant Pau, has a comprehensive approach to humanized care that includes patients' families and the active involvement of family members in the care process, respecting their needs and opinions in decision-making related to the patient's care.

Both sponsors' goal in this Innovation Challenge is to drive innovation in healthcare communication, particularly in stressful environments like ICUs, reflecting their commitment to enhancing the quality of communication between ICU staff and patients' families, ensuring that information is delivered clearly, empathetically, and effectively.

The problem

Communication in **Intensive Care Units (ICUs)** is a critical challenge. ICUs are **intense and stressful environments** for both patients and their families. Properly informing the families about the patient's medical situation is crucial for ensuring a clear understanding, providing emotional support, and maintaining trust. Studies have shown that poor communication increases stress and anxiety among family members, negatively impacting their well-being. For instance, research indicates that approximately 70% of family members experience high anxiety due to inadequate communication in ICUs [1, 2]. This anxiety can adversely affect the health and well-being of family members and potentially the patients themselves, as family stress can impact the overall care environment. Effective communication strategies, such as structured communication frameworks and regular family meetings, have been shown to alleviate some of this anxiety and improve satisfaction with the care provided [3].

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The context

Currently, ICU communication relies primarily on face-to-face interactions and phone calls, which can be inconsistent and stressful for both medical staff and families. Various hospitals have attempted to implement structured communication protocols and family liaison roles, with mixed results. Some successful approaches have included the use of dedicated communication teams and digital tools to provide regular updates. However, there is still a significant need for a comprehensive system that addresses the diverse needs of different family profiles and ensures clear, respectful, and empathetic information delivery [4].

The challenge

Develop an efficient and empathetic technological communication system that meets the needs of diverse family profiles in intensive care units (ICUs), ensuring that information is conveyed comprehensively and respectfully.

Goals of the Solution

- Improve the quality of communication between ICU staff and family members.
- Increase family satisfaction with the information received.
- Reduce family anxiety and stress.
- Ensure that all families receive clear, accurate, and empathetic information, regardless of their profile.

Idea words

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Innovative digital tools, Real-time update platforms, Mobile applications, Secure messaging systems, Clarity and accessibility of information, Human-centered care.

References

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- 2. Naef, R., von Felten, S. & Ernst, J. Factors influencing post-ICU psychological distress in family members of critically ill patients: a linear mixed-effects model. BioPsychoSocial Med **15, 4 (2021).**
- 3. Duarte, G., & Tavares, C. (2022). The impact of family communication on the well-being of patients in critical care: A systematic review. Journal of Critical Care, 67, 52-60.
- 4. **Rosenberg, M. A., & McCulloch, J. A. (2023).** The impact of structured communication and digital tools on family satisfaction in the ICU: A systematic review. Critical Care Medicine, 51(6), 1202-1210.