



ID 13

Use of Artificial Intelligence tools in supporting decision-making in hospital management

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Insights from a Qualitative Study with Hospital Managers in Portugal







Purpose

Explore Al's role in enhancing hospital management decision-making in Portugal.

Objectives:

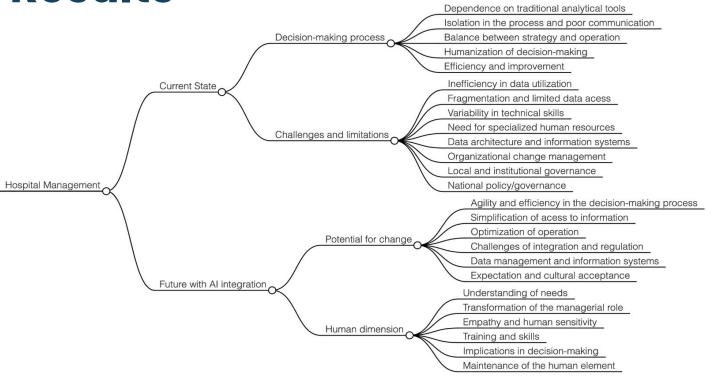
- Analyze current decision-making practices.
- Describe the potential of AI integration in hospital management
- Explore perceptions of hospital managers regarding Al use.
- Identify challenges and determinants of successful AI integration.

Methodology:

- Qualitative, exploratory approach.
- 15 semi-structured interviews with diverse Portuguese hospital managers.
- Ethical integrity and confidentiality ensured by informed consent and approval from NOVA-ENSP Ethics Committee.
- Data anonymization, thematic coding, and analysis until thematic saturation.











- **Complex organizational model:** Clinical, administrative, technical, and logistical services.
- **Communication and data fragmentation:** Multiple isolated systems complicating effective decision-making.
- Manual and inefficient processes: Dependence on outdated data handling methods.
- Skill and competence gaps: Need for enhanced data literacy and specialized skills.
- **Resistance to organizational change:** Cultural and governance barriers hindering innovation.

"The efficiency is zero... it's all very manual." (E7)





- **Emerging AI trends:** Predictive analytics, real-time decision support, integrated data platforms.
- •Operational transformation: Shift towards automated, data-driven management.
- •Improved data infrastructure: Consolidation and seamless interoperability.
- •Role evolution: Managers transitioning from operational to strategic roles through Al-enabled processes.

"Al could instantly respond to operational questions." (E1)



Future with Al Integration: Human Dimension

- Maintaining human-centric decision-making: Al as a supportive, not substitutive, tool.
- **Ethical integration:** Addressing privacy, empathy, and ethical governance concerns.
- **Cultural and organizational adaptation:** Leadership fostering an innovation-friendly environment.
- Collaborative implementation: Inclusive management practices to ensure smooth integration.

"Al should always be an instrument to aid, never to replace decisionmaking." (E6)







- Ethical and human-centered integration
- Organizational readiness and cultural adaptation
- Urgency and opportunity for AI adoption

"Al should always be an instrument to aid, never to replace decision-making." (E6)



THANK YOU



"Al is one of the most disruptive tools that will enable significant management evolution." (E13)





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