



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 AI'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 AI 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.

Results



Results

Current state of decision-making

- **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- **Manual and inefficient processes:** Dependence on outdated data handling methods.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)

Results

Future with AI integration: potential for change

- **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 AI-enabled processes.

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

Results

🌟 Future with AI Integration: Human Dimension

- **Maintaining human-centric decision-making:** AI 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.

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

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Key Messages

- **Strategic and operational transformation**
- **Ethical and human-centered integration**
- **Organizational readiness and cultural adaptation**
- **Urgency and opportunity for AI adoption**

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

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THANK YOU



“AI is one of the most disruptive tools that will enable significant management evolution.” (E13)



THANK YOU

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