



Al-powered interoperability, driving efficiency optimisation, and preventing readmission

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Key Points

- Implementation challenges of AI in healthcare settings
- Interoperability issues within New Zealand's healthcare system
- Data quality, privacy, and consent considerations
- Staff adoption and resistance to new technologies
- Potential use cases for AI in different healthcare contexts

Discussion Items

AI Implementation and Adoption Challenges

The discussions revealed significant challenges in implementing AI within New Zealand's healthcare system:

- Infrastructure limitations were highlighted as a major barrier, with participants noting that many healthcare facilities struggle with basic connectivity issues. One participant mentioned, "We're not even WI-Fi ready" and described working in buildings where connectivity is unreliable.
- Cultural resistance to change was identified as a significant obstacle. Healthcare professionals are often reluctant to adopt new technologies due to concerns about accountability, workflow disruption, and time constraints. As one participant noted, "Clinicians are the roadblock" to technology adoption.
- The fragmented nature of New Zealand's healthcare system creates additional challenges. Despite the consolidation of District Health Boards, there remains significant variation in systems and processes across different regions and healthcare providers.
- Participants emphasised that AI solutions must demonstrate immediate time savings to gain acceptance. One participant stated, "Everything has to be less clicks than it is now" for healthcare professionals to embrace new technologies.







Interoperability and Data Quality

Interoperability emerged as a critical foundation for effective AI implementation:

- The lack of standardised systems across primary and secondary care creates significant barriers to information sharing. One GP described the frustration of not having access to patient notes from other providers, noting that "there is no cloud-based general national database."
- Data quality issues were highlighted, particularly regarding demographic information. One participant mentioned that population data for Pacifica people is of poor quality, leading to inaccurate reporting of health outcomes.
- The need for standardisation was emphasised, with participants suggesting that New Zealand needs a more unified approach to health data. One participant described the current situation as "20 different sets of innovation going on" with none of it aligning.
- Several participants advocated for a "temporary dictatorship" approach to standardisation, arguing that strong central leadership is needed to overcome the tendency for different regions to insist on their unique requirements.

Privacy, Consent, and Ethical Considerations

Participants discussed various approaches to managing patient consent and data privacy:

- The complexity of obtaining meaningful consent was highlighted, with one participant noting that "consent is not ticking a box or signing your name. Consent is a conversation."
- The challenge of managing consent for evolving AI systems was discussed, with participants noting that frequent requests for updated consent could make patients suspicious.
- Participants debated the merits of opt-in versus opt-out models for data sharing, with some suggesting that an opt-out approach (as used in Australia's My Health Record) might be more effective.
- The importance of transparency was emphasised, with participants suggesting that patients need to understand how their data will be used and the benefits of sharing it.







Potential Use Cases for AI in Healthcare

Participants identified several promising applications for AI across different healthcare contexts:

- Administrative tasks such as documentation, billing, and appointment scheduling were seen as low-hanging fruit for AI implementation. One participant described how nurses currently spend valuable time manually extracting billing information from medical notes.
- Clinical decision support, particularly for chronic disease management, was identified as a valuable application. Participants discussed how AI could help identify patterns in patient data that might indicate deteriorating conditions.
- Improving discharge processes was highlighted as a critical area for improvement. One participant described how junior staff often complete discharge summaries quickly, leading to poor information transfer and patients "falling off a cliff" after leaving hospital.
- Enhancing communication between primary and secondary care was seen as a key opportunity, particularly for conditions like stroke where continuity of care is essential.
- Reducing diagnostic overshadowing for people with mental illness was mentioned as a potential benefit, with AI potentially providing more objective analysis of symptoms.

Next Steps

- Develop a unified communication strategy around AI implementation to ensure consistent messaging across the healthcare sector.
- Prioritise infrastructure improvements to ensure healthcare facilities have the basic connectivity required for digital solutions.
- Focus initial AI implementations on administrative tasks that can demonstrate immediate time savings for healthcare professionals.
- Establish clear guidelines around data sharing and patient consent to build trust in AI systems.
- Invest in education and training to help healthcare professionals understand the benefits of AI and how to integrate it into their workflows.







Challenges

- Limited resources and funding constraints make it difficult for many healthcare providers, particularly in primary care, to invest in new technologies.
- The lack of standardisation across different healthcare systems creates significant barriers to interoperability.
- Cultural resistance to change within healthcare organisations slows adoption of new technologies.
- Concerns about accountability and liability when using AI for clinical decisionmaking.
- Balancing the need for patient privacy with the benefits of data sharing for population health.

Additional Notes

Participants emphasised the importance of a step-by-step approach to Al implementation, starting with simple applications that demonstrate clear benefits before moving to more complex clinical applications. There was general agreement that leadership is crucial for successful technology adoption, with organisational leaders needing to champion Al initiatives and create a supportive environment for change. The discussions also highlighted the tension between centralised control and local innovation, with participants recognising the need for both standardisation and flexibility to meet diverse healthcare needs across New Zealand.

