

The Relevance of AI in Medical Information: Transforming Communication, Compliance, and Care



Artificial intelligence (AI) is rapidly reshaping the landscape of Medical Information (MI), offering transformative potential across communication, content generation, compliance, and customer service. As organisations strive to deliver timely, accurate, and personalised information to patients and healthcare professionals (HCPs), AI is emerging not just as a tool, but as a strategic partner.

Promising Applications: Speed, Insight, and Quality

One of the most promising uses of AI in MI is its ability to reduce response times. AI-assisted content search and automated response generation enable faster, more consistent answers to medical queries. Looking ahead, one of the greatest opportunities lies in personalised MI response generation. By analysing historical customer interactions, AI could identify frequently asked questions, generate key content themes, and even draft tailored responses for human review.

The hope is AI can unlock deeper insights, by mining call transcripts and enquiry summaries, supporting organisations to identify trends, and make data-driven decisions that improve customer service and business strategy.

AI could also be applied to enhance quality assurance by automating the identification of adverse events (AEs) and product quality complaints (PQCs), mapping decision trees to ensure correct processes are followed, and performing quality assurance review with speech to text software.

Linked closely to both quality and insights is sentiment analysis, where AI can notify management of calls where anger, frustration or even gratitude are detected, driving improvement through positive feedback and identifying potential gaps in training or processes.

Navigating Regulation and Compliance and Ensuring Accuracy, Ethics, and Oversight

Despite its potential, AI adoption in MI faces several hurdles.

As AI becomes more embedded in our industry, these tools are bringing new regulatory challenges, so ensuring the accuracy and reliability of its outputs is crucial. Clinical nuances, language complexities, and context are difficult for machines to grasp fully, making human oversight essential. **Transparent AI systems** that explain their decision-making processes, **combined with an AI design** that addresses the potential for bias in training data and “human-in-the-loop” workflows, are vital to maintaining compliance and fairness.

Organisations must uphold data privacy standards (e.g., GDPR), pharmacovigilance requirements, and ethical safeguards for patient and HCP facing applications. Building and understanding these guardrails early balances innovation with safety and caution.

With an ongoing focus around sustainability and carbon footprint, **responsible use of AI remains at the forefront**, with organisations evaluating the benefits of AI use with environmental impact.

Healthcare is deeply personal and the need to have a human delivering a customer service that has a personal connection based around empathy and emotional intelligence is something AI cannot currently simulate.

Trust and Culture

It is natural, as humans, to fear that which is unfamiliar. With this in mind, to embed AI successfully, leaders must invest in education to overcome employee hesitance and fear of job displacement. Change management strategies should include transparent communication, so all involved understand AI's capabilities, limitations, and implications, identifying key promoters within to deliver hands-on training, and provide opportunities for staff to shape AI projects. Empowering teams to see AI as an augmentation not a replacement can foster a culture of innovation and will likely see adoption accelerate.

Choosing the Right AI Partners

A constant evaluation of whether to develop AI solutions in house or to work with a partner will be something organisations are facing more and more. If the vendor path is chosen, look for partners with a strong market presence, ensuring they can operate within regulatory frameworks and demonstrate transparency in their algorithms and data handling practices. **Trust is built not just on technology, but on shared values and accountability.**

The Road Ahead

In the short term, AI will primarily augment MI functions, driving efficiencies and taking on repetitive low-risk tasks. AI adoption in even a portion of day-to-day work supports MI professionals by complementing expertise and allowing focus to engage more meaningfully with customers and positively impact healthcare outcomes.

Whilst human oversight remains essential in data input, training, and on high-risk outputs (such as medical responses), some low-risk tasks may eventually be fully automated.

AI is changing rapidly, and we already see generations where AI tools are consulted before a doctor, driving change in how health information is accessed. Whilst there are currently barriers to overcome, it is unknown what regulations will look like in the future. It is possible we could see increased reliance by healthcare professionals on AI in terms of research, diagnostics, and treatment which would shift the industry landscape as we know it.

As we look ahead, it is impossible to predict how AI may affect the state of any industry, let alone MI, but we remain both cautious and excited for what the future holds in elevating human potential and shaping the future of healthcare.

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