

Navigating the Promise and Perils of Generative AI in Healthcare





THE PROMISE AND PERILS OF GENERATIVE AI

The US healthcare system is clogged by outdated practices and overwhelming bureaucracy, much like a body struggling with unseen plaque. This silent buildup—our technical debt—is quietly driving up costs and blocking fresh innovations, trapping our healthcare in a constant cycle of administrative inefficiency.

If spending is climbing without commensurate improvements in health outcomes, where is the money going? A large portion is being swallowed up in healthcare bureaucracy and administrative waste. There has been dramatic increase in administrative jobs compared to clinical roles. Physicians are spending more time record-keeping than on direct patient care, creating bureaucratic friction and inefficiencies that continue to bog down the healthcare system.

There's plaque in the arteries of healthcare, a technical debt that needs to be paid down. If generative artificial intelligence (AI), like ChatGPT, is naively applied to current convoluted workflows, the healthcare industry runs the risk of entrenching the status quo rather than enabling meaningful change.

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The recent innovations in generative AI highlight the immense potential of this technology. It may efficiently automate repetitive clinical paperwork, like denial of coverage letters, with minimal physician input. This could alleviate administrative burden and enable clinicians to devote more effort toward high-value tasks.

At the other end of the spectrum, scaling up thoughtless AI implementation risks reinforcing outdated practices rather than catalyzing progress. Consider what happens in this example:

1. A physician writes a prompt to generate text of a letter
2. The AI outputs text
3. The physician tweaks the text and adds the patient's name
4. The text becomes an image to fax
5. The fax machine sends the image
6. The insurer's fax machine receives the image
7. The insurer converts it back to text
8. An administrator reads the text and manually enters it into a database



**GUIDING
PRINCIPLES FOR
RESPONSIBLE AI
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In the aforementioned workflow, only the physician and the final database provide value. The rest is wasted effort and outdated technology piled on top of itself. Simply inserting AI to generate text only perpetuates the surrounding inefficient processes.

GUIDING PRINCIPLES FOR RESPONSIBLE AI INNOVATION

To fully harness AI's potential while evolving outdated models, it's imperative to have guiding principles in place:

- Remember there are limits to AI. It predicts likely continuations, but it does not innovate or reason. Generative AI lacks human creativity and critical thinking. Understanding these limits is vital.
- Engineer transparent systems (not black boxes) that patients and clinicians can understand and trust. Instead of complex AI architectures, focus on intuitive systems that provide visibility into reasoning behind recommendations.
- Thoughtfully curate training to avoid perpetuating biases, mistakes, and misinformation. There is a real risk that bad actors could poison training-data sources with misinformation. An ethical duty exists to vet data sources and exclude problematic content.
- Apply AI initially to augment human capabilities before pursuing automation. Tools like GitHub Copilot can improve programmer productivity without replacing programmers entirely. This human-centered assistance is ideal.
- Maintain patient-centric mindsets focused on service, empathy, and holistic care. Envision AI applications like personalized chatbots that understand patients' needs and preferences. The emphasis should always remain on patients.
- Prioritize innovations that simplify processes to empower the people behind them. Innovations like automating clinical documentation can reduce repetitive work and empower clinicians to focus on service delivery. AI should simplify, not complicate.
- Commit to equity as an explicit goal, ensuring unbiased access and reducing disparities. AI innovations should proactively address systemic inequities, like discrepancies in access to mental health resources.



**THE FUTURE
POTENTIAL**

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Guided by the aforementioned principles, AI could enable a future where:

- Documentation happens in the background, freeing clinicians to focus more on patients
- Patients receive personalized education materials tailored to their needs
- Interactive apps collect patient data seamlessly and securely with minimal burden
- Complex health concepts are illustrated and communicated for broad access
- Research is accelerated by uncovering connections in vast datasets
- Clinical education is enhanced through conversational simulated patients
- Signals and images are synthesized into expert analysis and recommendations

Remember that we have still only scratched the surface of AI's potential to transform medicine and enhancing human lives. And to fully realize this potential, we must apply technology thoughtfully and ethically.

THE ROLE OF PIONEERS

As an industry pioneer, Klick Health is uniquely positioned to responsibly advance AI innovation in healthcare. With over 26 years at the nexus of health and technology, Klick combines deep expertise with an entrepreneurial mindset.

Klick's development of transparent AI systems, grounded in robust data management, demonstrates its commitment to ethical AI. At this critical juncture, Klick's balanced approach to innovating with care and wisdom can help life sciences companies illuminate the path forward to an AI-enabled healthcare future we all want.

**Looking to learn more on navigating the promise of generative AI?
Get in touch to discuss how Klick's Applied Sciences team can help
make AI technology work for you.**



We welcome your questions
and feedback. Please contact:

Michael Chambers
SVP, Opportunity Creation
mchambers@klick.com