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Revolutionizing Population Health

The Role of Generative AI

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In our daily conversations with health care leaders, it is enlightening how open they are to new ideas to drive better health outcomes at lower cost for individual patients and across populations. This quest for improvement makes them curious about technology, new science, and the art of human behavior. Lately, one of the hottest discussion topics is a topic that is also hot in the popular news – Generative Artificial Intelligence (Gen AI) seems to be on everyone's mind. In the case of health care leaders working on population health, Gen AI is like an approaching ship on the horizon in the fog. We can't quite see it, but we know it will be upon us soon.

The truth is that Gen AI is already here, but what we hear from population health leaders is uncertainty about its value and what its risks are in application toward improving population health outcomes.

What exactly is Gen AI?

How is it different from other forms of AI? And how can health care leaders apply Gen AI to population health initiatives?

Gen AI can create new content from prompts, criteria, and connected information and tailors the output based on the audience. Other forms of AI typically do not generate new creative content, but instead recommend or automate decisions based on algorithms; many times, these algorithms grow more accurate and "smarter" over time as more data are ingested.

Applications of Gen AI to Population Health

- **Patient communication:** Personalizing patient education materials by ingesting data about patients—including where they live, how they communicate, their past behaviors, their health conditions, and their potential health needs and risks—to produce tailored communications that encourage health actions, informed decisions, and preventive care.

- **Care manager support:** Create an initial care plan considering patient factors such as health history and risk factors to guide care managers on detailed approaches to support patients.

- **Utilization management acceleration:** Creating complete prior authorization submissions by determining submission requirements and cross-referencing them with patient medical records and generating appropriate narrative support.

- **Value-based contract portfolio management:** Summarize complex value-based contracts automatically to synthesize strategic focus areas for performance and integrate analytic targets.

Other values of Gen AI in supporting population health management will continue to arise as new use cases are being enabled at a rapid pace. But health care leaders are being cautious about adopting and scaling AI projects because of the risks. The importance of trust and security is *heightened* in health care, where patient data is so personal and sensitive, and where the outputs of the model could impact the quality of care a patient receives.

To get consumers and clinicians confident in using Gen AI in health care, leaders must establish guardrails to protect against hallucinations and build trust.

Privacy and data security concerns may limit interest in using public Gen AI models. This means that custom-built private models will likely be more attractive in general in health care. Even when privacy and security measures are taken, the ambiguity around how Gen AI models are trained—and the reliability of its outputs—will likely restrict initial use cases to those producing guidance to clinicians and administrators rather than automated support directly to patients.

Becoming an early leader in Gen AI adoption may look different from one organization to the next. A few things that ring true—regardless of how tech-savvy an organization is—are the importance of a strategy, plan, and roadmap as well as determining concrete steps to prioritize use of Gen AI in population health efforts. Picking one use case to build out and prove the concept is also very important – trying to spread attention and effort over too many use cases can dilute progress. Taking stock of the organization's starting point as far as data and integration are concerned is also critical. It's difficult to map out a path to the goal of Gen AI without knowing where the starting point is. Finally, many health care organizations are deriving value from a wide range of new applications of AI that isn't classified as Gen AI. A dedicated cross-cutting AI governance structure can be helpful to engage key leaders while building trust for all forms of AI (including Gen AI) for anyone who will come in contact with it.

Don't let the hype of Gen AI dissuade you from taking it seriously. There is real value in integrating Gen AI (and other forms of AI) into your population health approaches and gaining real world experience can serve your organization well in the future.

Reach out for a conversation

To learn more about how your organization can utilize Gen AI to bolster population health capabilities, please contact:

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If you are interested in learning more, we invite you to read the other Deloitte articles referenced in this piece:

The Implications of Generative AI for Businesses

https://www2.deloitte.com/us/en/pages/consulting/articles/generative-artificial-intelligence.html

Building Trustworthy Generative AI

https://www2.deloitte.com/us/en/pages/consulting/articles/trusted-generative-ai.html

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