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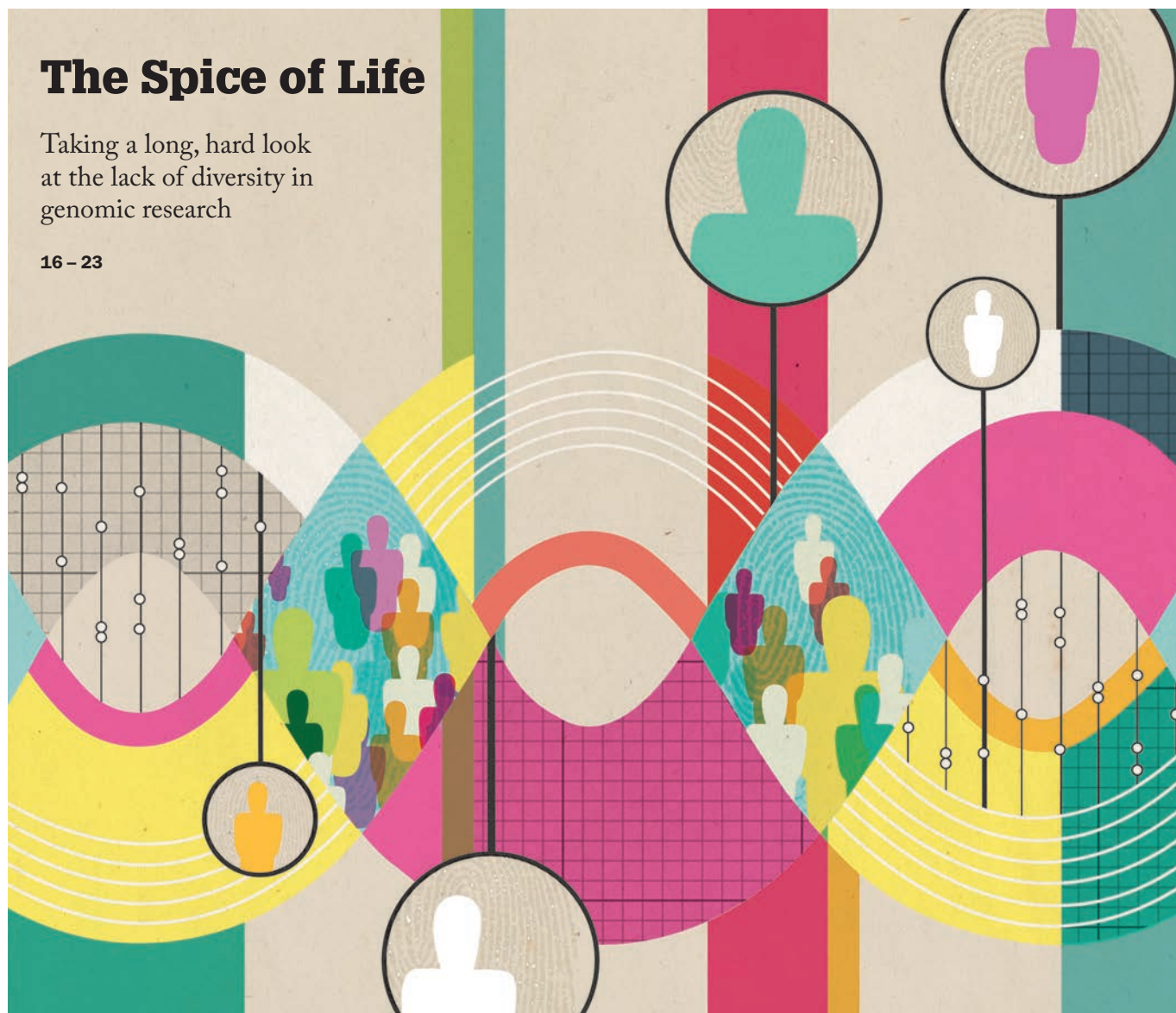
The Spice of Life

Taking a long, hard look
at the lack of diversity in
genomic research

The Limits of Automation

Augmented intelligence for better prior authorization outcomes

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Several major health insurers across the USA have been implementing prior-authorization processes or some form of a laboratory benefits management program. These insurers are admitting that they lack the laboratory medicine expertise to determine medical necessity, so they are putting the responsibility back on the providers to minimize fraud and abuse within the industry. That move, in turn, is leading to more effort for already overworked staff members, who must handle the burdensome task of a seemingly endless number of manual insurance verifications and prior authorizations.

Many see completely automated solutions as the answer to this problem, but – despite all the advances in artificial intelligence (AI) – a machine simply can't do it all. AI exists to help humans make better decisions, not to automate 100 percent of a task. Decision-making, as it applies to the healthcare industry, still requires human intelligence and human empathy. As a result, providers should be looking to "augmented intelligence."

The American Medical Association says that "augmented intelligence" reflects the enhanced capabilities of human clinical decision-making coupled with AI's computational methods and systems. Make no mistake – we need AI in healthcare because the industry is swimming in data. As a result, the value proposition with the most potential is to provide a tool that can take the data, make sense of it, and present it in a way that allows people with knowledge and empathy to make the best decisions. The outcome very much needs to be a product of human determination.

The best outcomes in healthcare are the result of good intelligence and great execution. With advances in technology, AI is able to take administrative processes, such as prior authorization or revenue cycle management, off the plates of people who have more important jobs to do. Such systems can help us make better decisions while continuously learning from the data previous experiences have yielded.

In my opinion, digital labor will upend the healthcare processes – but in a positive manner. AI will accelerate current employee expertise, augment decision making, reduce manual processing costs and risks, increase consistency of output, and develop continuous self-learning processes. The best platforms to manage the healthcare revenue cycle will combine robotic automation, AI, and deep domain expertise – otherwise known as human intelligence – to assist practices with prior authorization, coding, and billing needs.

The robotic automation component is designed to handle the administrative "grunt work," which results in significant reductions in process cost with improved quality.

The AI component is designed to continuously learn and improve from all data and interactions to provide prescriptive insights for decision-making, while increasing process transparency. Notably, predictive models are inherently simple to build, but difficult to maintain. Why? Because none of our healthcare processes remain stable enough to use the data and patterns that are produced.

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Practices need a solution that seamlessly integrates the process and constantly accesses the latest and most relevant data. And that's why AI must be prescriptive and not just predictive; predicting the outcome without the ability to explain (black box AI) is limiting – particularly in healthcare, where we need to better understand machine rationale before applying it.

Lastly, the human component is required to make the decisions robotic automation and AI cannot. Only people with empathy and knowledge of each unique situation can tailor a patient's experience to their individual context and needs. Those practices seeking completely automated solutions for prior authorization or LBM programs should instead look to a solution that does not remove the human intelligence factor. Many general-purpose AI solutions are nothing more than spot analytics solutions branded as AI, which require significant investments with uncertain results. Someday, AI may evolve to the point of completely automating the prior authorization process – but, until that day, practices should look to incorporate human intelligence for better decision making and outcomes.