Taming the healthcare data monster

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Many healthcare organizations are overwhelmed by the explosive growth of digital information, much of which lies beyond the reach of traditional automated tools, making management even more onerous.

But there's good news: Intelligent Document Processing (IDP) can harness medical data and put it to work, helping healthcare providers make faster, better-informed decisions—and ultimately, improve patient outcomes.

Making sense of healthcare data

Managing health information is difficult not only because of its immense volume, but because it comes in multiple formats scattered across different departments. Think electronic health records, scans, lab results, insurance claims—and yes, even in 2025—handwritten clinical notes. Much of this information is stored in unstructured formats like scanned images or PDFs, making it inaccessible to search engines and traditional automation tools.

Generative artificial intelligence (gen AI) opens the door to a new world of possibilities. Intelligent Document Processing uses gen AI to understand the nuances of medical terminology and coding, extracting relevant insights from previously hidden, unstructured data. By analyzing vast sets of both structured and unstructured information, it can make accurate decisions and execute healthcare workflows, reducing costs and saving staff hours of tedious work.

Generative AI in action

Generative AI can match prior authorization criteria to incoming requests and issue approvals in seconds, accelerating patient access to care. It can also manage billing and coding, in turn improving accuracy and reducing claim rejections. These and other medical workflows can be automatically embedded with strong data security protections and compliance enforcement. And of course, automating processes reduces manual errors, helping improve quality of care.

The experience of a busy healthcare provider illustrates how IDP can transform productivity and help scale operations. Nurse practitioners at the organization were spending three hours on every patient to manually read and summarize their histories—some of them running to 500 pages in length—for physicians. The nurses created 40 of these summaries every month, taxing their time and keeping them away from patients. While practice leaders wanted to scale the summary volume to thousands per month, such a feat was considered operationally impossible.

The organization engaged RapidScale and Amazon Web Services (AWS) for help. By implementing IDP genAI solutions to automate patient summaries, RapidScale and AWS reduced creation time to one minute per patient or less, letting nurse practitioners get back to focusing on patients, and providing better clinical information for doctors.

RapidScale has extensive experience orchestrating complex processes like these across the healthcare spectrum, helping accelerate workflows and scale them easily and affordably on AWS. In addition to analyzing health records, RapidScale's solutions extend to genetic information and data from wearable devices—allowing organizations to craft dynamic, personalized patient wellness plans.

To learn how generative AI can improve operations at your organization.