



WHITE PAPER

How Healthcare Organizations Can Work Smarter Not Harder by Leveraging Automation



Creating Revolutionary New Efficiencies in Healthcare

U.S. healthcare costs continue to rise faster than inflation while clinicians struggle with burnout and low job satisfaction rates. At the same time, demand for services is growing as patient populations age, chronic conditions increase in prevalence and individuals try to catch up on deferred care so that they can deliver the high-quality care their communities need.

Mounting costs and resource constraints are putting pressure on healthcare providers to eliminate operational inefficiencies. As the recent wave of hospital closures and cutbacks makes clear, provider organizations’ very survival depends upon their ability to do more with less without sacrificing care quality.

Fortunately, emerging technologies—such as AI and automation—show enormous promise in solving these problems by making operational and administrative workflows more efficient. Such technology-driven efficiency gains can reduce costs, improve employee productivity, reduce administrative burden, and free up time, which stakeholders can then invest in ensuring that their organizations are delivering top-quality care to the patients who need it the most.

Digitally transforming workflows like revenue cycle management can improve cash flow while automating processes like medical coding can reduce manual effort and improve coding quality — and make it easier to meet CMS standards for data interoperability.

In the past, IT staffing shortages have held many provider organizations back from implementing innovative solutions to create these efficiencies. Lean IT teams haven’t had time to manage new deployments or even to prepare data for integration. Today, however, end-to-end service offerings are available that can not only ready your organization’s data, plan and carry out the deployment— and ensure that it’s running smoothly, but also manage the entire business process on your behalf. This way, your organization can enjoy all the benefits of the implementation (including cost savings) without needing to invest upfront in hiring and retaining additional technical talent. This model puts digital modernization within reach for all provider organizations, whether they’re large health systems, hospital networks, or small physician groups.

In this white paper, we’ll take a deep dive into two specific business processes in healthcare provider operations. We’ll explore how AI and automation can create revolutionary new efficiencies in each of them.





Infusing Intelligent Automation Across the Entire Patient Journey

Data is the lifeblood of every healthcare organization. Placing a digital data exchange platform at the center of administrative workflows allows for interoperability across all of them. This approach supports data standardization that can power automation across the entire enterprise. It also supports compliance with the HL7/FHIR interoperability standards, which CMS has mandated that all healthcare organizations, including providers, adopt to facilitate information exchange. Provider organizations can begin their digital modernization journey by identifying existing operational processes and workflows that require repetitive, manual effort. These are places where robotic process automation (RPA) can be implemented. Simple decision trees can be digitized and automated using a cognitive rules engine, while more complex ones can leverage predictive or prescriptive analytics. By starting with the most straightforward use cases and adding more complex ones over time, the organization can lay a foundation of success and then build upon it. It can also progressively expand its reliance upon an enterprise architecture that's HL7/FHIR-compatible. This not only allows for seamless data exchange across the organization but also facilitates interoperability with external stakeholders (particularly payers).

The digital data exchange platform can power a broad array of operational workflows and business processes within provider organizations. These include autonomous and computer-assisted medical coding, accelerating medical coding while improving quality and reducing costs. The platform can also enable automated revenue cycle management, adding enormous efficiencies across cash flow and collections workflows. Integrating these services into the platform paves the way for adopting smart healthcare analytics, supporting enterprise-level business intelligence that enables the organization to do more with its data.

Let's take a closer look at these capabilities.

Uplevel Coding Accuracy and Quality with Autonomous and Computer-Assisted Medical Coding

Medical coding, which consists of assigning standardized codes to diseases and procedures in encounter notes and other clinical documentation, is foundational for effective healthcare administration. In the past, it has involved having skilled professionals spend significant amounts of time on repetitive manual tasks, work that many would describe as “monotonous and error-prone.” These qualities make it highly amenable to automation through large language models (LLMs) and natural language processing (NLP) technology.

Provider organizations can leverage clinical data analytics to automate the coding process. Autonomous or computer-assisted coding (CAC) systems can ingest medical charts and patient progress notes and automatically identify diagnoses within this unstructured data. The solution can then assign appropriate ICD-10 diagnosis codes to each record. They can also determine which procedures were performed and assign them CPT/HCPCS procedure codes. Though autonomous coding can achieve accuracy rates of 80% and above, the records will remain available for review by human coders to ensure that all are error-free.

Integrating autonomous or computerassisted coding (CAC) systems with the organization’s digital data exchange platform facilitates interoperability, allowing for better collaboration among stakeholders within the organization and across the entire healthcare ecosystem. This prepares the organization for a future of ever-evolving regulatory frameworks, growing data volumes and increasingly complex therapeutics.

Automating medical coding can:

- **reduce error rates**, ensuring that code assignment is uniform, consistent and in line with the most recent version of regulatory guidelines
- **accelerate processing**, saving time and human effort
- **enhance scalability** in support of greater operational agility

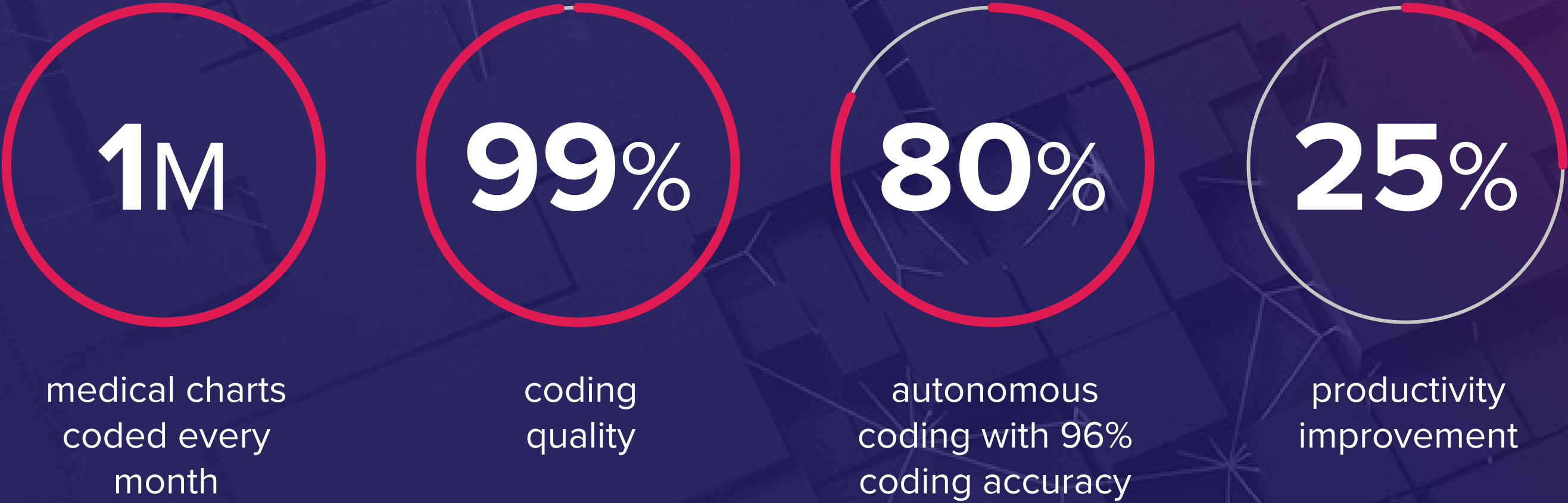


Implementing new automated medical coding solutions can be tricky for resourceconstrained teams, but turning to an industryleading medical coding as-a-service solution makes it easy to take advantage of the full array of benefits that these systems can deliver. The service provider can translate your organization’s electronic medical record (EMR) data into HL7 format so that it can be onboarded into the platform for processing by the algorithms. Medical coding as-asevice is not a no-touch process. Instead, the provider can supply human auditors to review transactions. While 80-85% will be auto-coded, everything that needs human review will be reviewed, and 100% of the transactions will remain available for audit.

With this approach, a process that used to take three to five days can now be completed in one to two. The result is that medical coding professionals can be far more productive while focusing their time and efforts on complex cases that require human judgment to resolve. This reduces burnout, making on-the-job tasks more varied and interesting. It also improves revenue cycle management, allowing for faster billing with quality to improve cash flow, minimize denials and shorten time-to-reimbursement.

Focus on patient care instead of managing the complexities of coding

Sutherland Global offers a comprehensive outsourced medical coding as-a-service solution, where certified medical coders with deep expertise in code assignment, regulatory guidelines and payer submission processes work together with AI and machine learning (ML) to handle the entire coding process from end to end.





Streamline End-to-End Revenue Cycle Management with Smart Automation

Many hospitals and health systems struggle to stay profitable amidst reimbursement cuts. Intelligent revenue cycle management (RCM) can help provider organizations overcome this challenge by optimizing their cash flow to improve financial health and long-term sustainability.

In particular, improving the management of accounts receivable (AR) can decrease write-offs and claim denials, accelerate reimbursement, save time and labor and reduce errors. Digitizing RCM as an end-to-end business process can speed and smooth collections while enhancing claim status and coverage visibility.

Implementing a smart revenue cycle management platform starts with the right data foundation: a digital data exchange platform that can ingest data from various systems across the organization. This platform is supported by a multi-tenant-enabled accounts receivable (AR) workflow platform with configurable and

analytics driven work queues. This data foundation enables the implementation of robotic process automation (RPA) and electronic data interchange (EDI).

Leveraging analytics-driven segmentation, provider organizations can review outstanding AR inventory and automatically group accounts into two categories: insurance claims and self-payers. Accounts in each category will be analyzed according to different criteria. Those that are to be paid by insurers can be scored according to the probability of denial, end-to-end claim status disposition and other issues. Self-pay accounts can be scored by guarantor type, credit score, service type and size of balance due as well as the guarantor's employment status and other demographic information. These analyses will yield propensity-to-pay scores.

With these scores at hand, accounts can be prioritized for follow-up based on the likelihood that those communications will result in prompt payment. Some, such as insurance claims with >90% propensity to pay, may not require a touch because they'll be paid anyway within a given

time window. Others, such as self-pay claims with <30% propensity to pay, may be more time- and labor-efficient to simply write off, since the likelihood of collecting the fee is so low.

Propensity-to-pay modeling can automatically sort invoices into categories. Then, RBA bots can perform many of the workflow steps for each category, saving additional time and reducing the need for human effort.

These include:

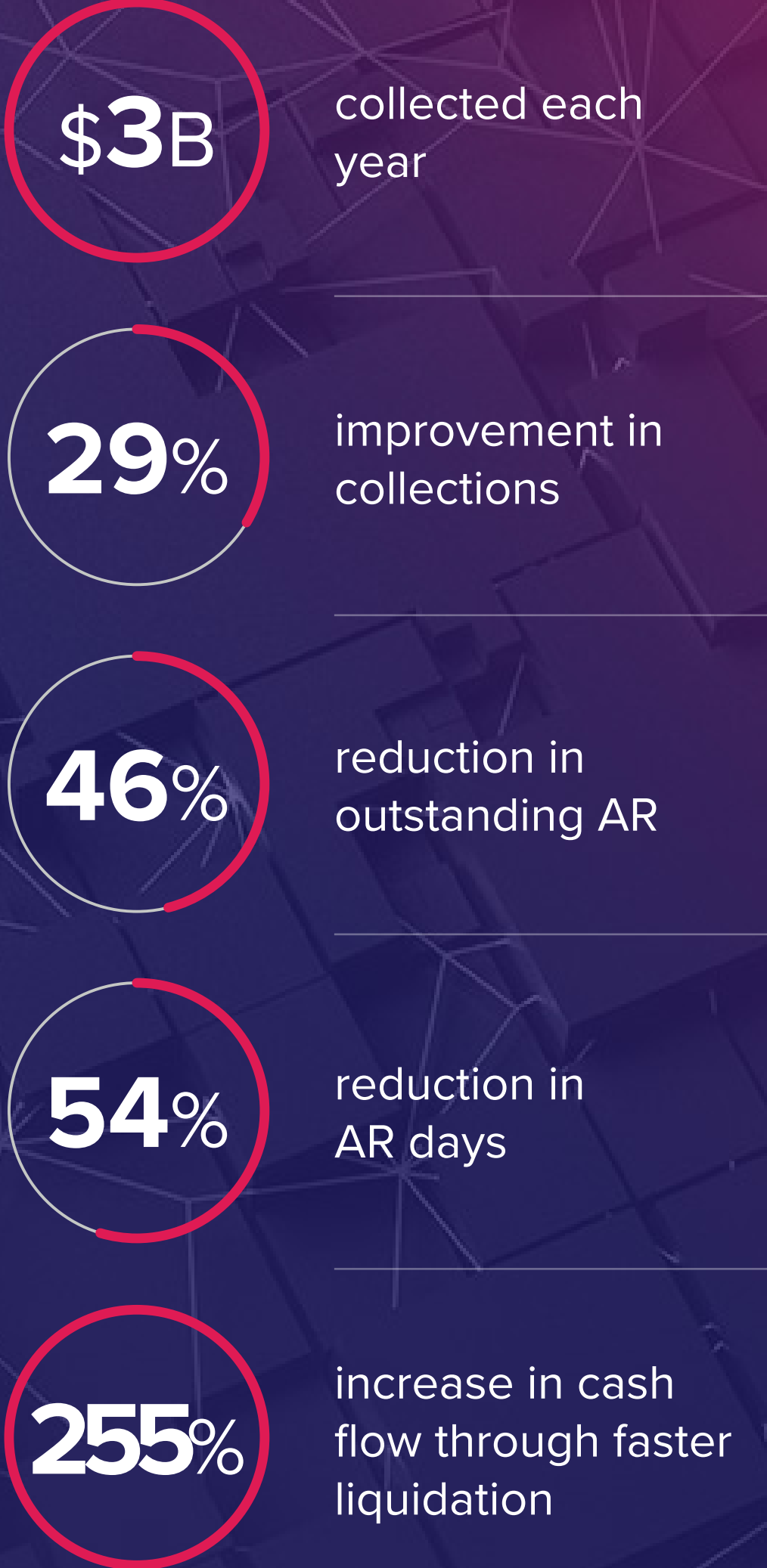
- No pay rebill
- Denial review
- Payer change
- Appeals process initiation
- Patient outreach

Overall, this approach to RCM can significantly reduce the number of days that accounts are outstanding while driving process efficiencies. This is a prime example of how healthcare providers can work smarter, not harder, to achieve more robust financial health by building more efficient operational workflows.

Setting up smart automation for revenue cycle management can be time-consuming and demands technical expertise. Provider organizations that partner with an expert who can deliver this entire business process as a service will find that many, if not all, implementation obstacles have been removed.

Improve cash flow and collections to boost your organization's financial health

Comprehensive RCM services, including billing and AR follow-ups, are available as an end-to-end service offering from industry-leading providers, including Sutherland Global. Automating these processes creates unprecedented efficiencies for provider organizations while driving better cash flow with less administrative effort.



CONCLUSION



The healthcare landscape may never have been more in need of transformation than it is today. From staffing shortages to margin pressures, provider organizations must overcome obstacles by creating operational efficiencies that will enable them to continue delivering high-quality, patient-centric care to their communities. By allowing digital technologies and automation to take over time-consuming manual processes, providers can free up administrators to focus on highvalue tasks and better-supporting clinicians. Turning to a trusted partner like Sutherland Global can put this transformation within reach for provider organizations of all types and sizes. Sutherland is an experience-led digital transformation company with deep domain knowledge in healthcare and a strong customer focus. With extensive experience driving innovation and transformation for healthcare clients, Sutherland can execute entire business processes on their behalf, or supplement internal teams with right-sized digital engineering services, technology and platforms.

[Learn More](#)

¹ Source: American College of Emergency Physicians, “More Hospitals Are Closing. Why?,” January 2024.

Unlocking Digital Performance. Delivering Measurable Results.

At Sutherland, we are a leading global business and digital transformation partner. We work with iconic brands worldwide in Healthcare, Insurance, Banking & Financial Services, Communications, Media & Entertainment, Technology, Travel & Hospitality, Logistics, Retail, Energy & Utilities industries. We bring our clients a unique value proposition through market-leading technology and business process excellence. Leveraging our advanced products and platforms, we drive digital transformation, optimize critical business operations, reinvent experiences, and pioneer new solutions, all provided through a seamless “as a service” model. For each company, we tailor proven and rapid formulas to fit their unique DNA. We bring together human expertise and artificial intelligence. In short, we do digital chemistry. It unlocks new possibilities, great client partnerships, and transformative outcomes.