The Future of Patient Information Management Services
From the digital front door to the digital back office

Competition for patients is changing the way the healthcare industry provides care as fee-for-service gives way to value-based care reimbursement. Consequently, managing financial processes from the beginning of the patient journey through payment and revenue recognition is an essential component of the patient experience as well as profitability.

What follows is a detailed review of revenue cycle management (RCM) and opportunities for improvement that result in more accurate information, accelerated processing, and increased revenue.

"Our customers have repeatedly told us that automation and advanced capabilities to perform backend workflow remotely is now a matter of survival," said Rory Fitzpatrick, Partner Executive for Healthcare at Ricoh USA, Inc. "One thing the pandemic has revealed is that revenue cycle management and health information management have depended for far too long on antiquated workflows that undermine rather than support interoperability, automation, and resilience."

In a recent deep dive on the future of patient information management services, Fitzpatrick, along with his Ricoh colleague Braj Thakur, Senior Manager, Portfolio Marketing,

> **One thing the pandemic has revealed is that revenue cycle management and health information management have depended for far too long on antiquated workflows that undermine rather than support interoperability, automation, and resilience."**
>
> **RORY FITZPATRICK** | Partner Executive for Healthcare | Ricoh

Healthcare; and Mutaz Shegewi, Research Director for Worldwide Provider IT Transformation Strategies, IDC, outlined the challenges traditional RCM faces. They also discussed how three forces – digital transformation, the pandemic, and a rapidly expanding ecosystem – are redefining RCM's role in healthcare from a backend billing function to an end-to-end patient information management system.

Challenges of traditional RCM

Shegewi said that RCM traditionally was positioned as a post-service, payer-facing process divorced from healthcare delivery itself. But today, this model is under pressure from the movement toward value-based care, high-deductible health plans and consumerism, declining market share and profit margins, and, above all, technological innovation.

"Digital transformation is the approach by which enterprises drive change in their business models and ecosystems by leveraging digital competencies," Shegewi explained. "It's all the interdependencies of big data, cloud technologies, mobile and social networking technologies, catalyzed by innovation accelerators such as the internet of things [IoT], cognitive computing and AI, for example."

While the industry began its digital transformation journey well before COVID-19, he said, it primarily applied these advances to clinical data and systems. Few healthcare organizations have deployed the same technologies to the revenue cycle.

Thakur agreed with that assessment. Traditional RCM remains heavily dependent on manual, resource-intensive processes prone to costly backlogs, delays, and errors. "Unfortunately, it's a very common situation across thousands of hospitals and health organizations," he said, adding he sees "multiple intakes, diverse sources of unstructured data, and disparate systems lacking any interoperability. In the best case, it leads to delayed payments, and in the worst case, lost information, lost revenue, and an inability to provide effective and timely patient care."
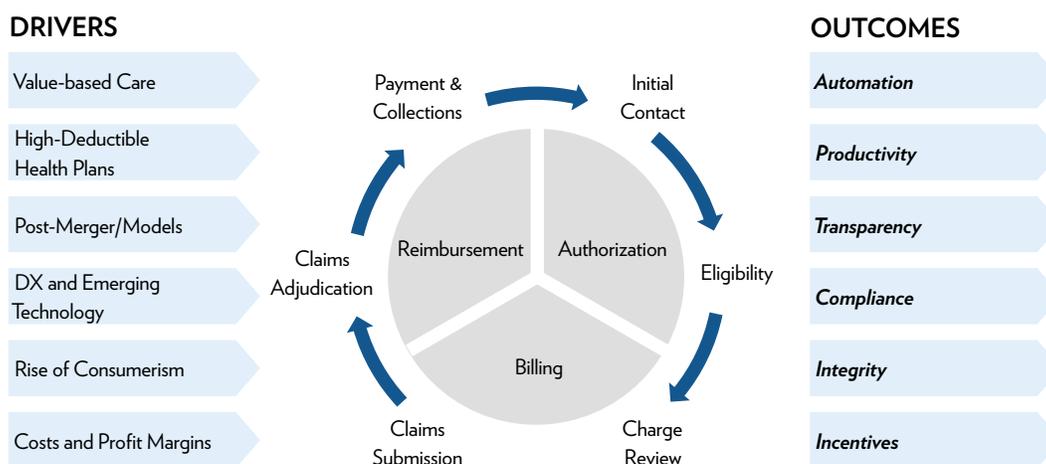
The pandemic accelerator

Fitzpatrick said the pandemic revealed the fragility of a system that remained dependent on the four pillars of 20th-century technology: manual data entry, scanning, faxing, and printing. When the pandemic forced healthcare workers out of the back office and into the home office, he said, customers began asking how they could apply new digital technology "to develop low-cost, low-risk solutions that could enable remote work and lay the foundation for systemwide business resiliency."

Shegewi believes this attitude constitutes the next new normal in healthcare.

"What was truly remarkable to see during the COVID-19 pandemic was how two years of digital transformation got accomplished in those first two months," he said. He also noted researchers at IDC who conducted a survey during the pandemic found that 93.6% of healthcare respondents were continuing to invest in digital transformation to close technology gaps, mitigate the pandemic's impact, take market share, or introduce disruptive new business models.

Figure 1. Traditional revenue cycle is under pressure

DRIVERS

- Value-based Care
- High-Deductible Health Plans
- Post-Merger/Models
- DX and Emerging Technology
- Rise of Consumerism
- Costs and Profit Margins

Payment & Collections · Initial Contact · Authorization · Eligibility · Billing · Charge Review · Claims Submission · Claims Adjudication · Reimbursement

OUTCOMES

- *Automation*
- *Productivity*
- *Transparency*
- *Compliance*
- *Integrity*
- *Incentives*

Source: Shegewi, M., and Sundaram, B. April 2020. *Next-Generation Revenue Cycle*. IDC Perspective. https://www.idc.com/getdoc.jsp?containerId=US44357318

"That tells me that healthcare regards digital transformation as necessary for survival," he said. "And while the traditional revenue cycle management model was under pressure long before COVID-19, … it has become fairly straightforward to see that RCM needs to be reinvented. Revenue cycle management must adapt to the current and future context to better support clinical, operational, and financial integration across the service – not only to optimize revenue and denial prevention, but also to improve the experiences of patients and staff, as well as the resiliency and future readiness of the organization."

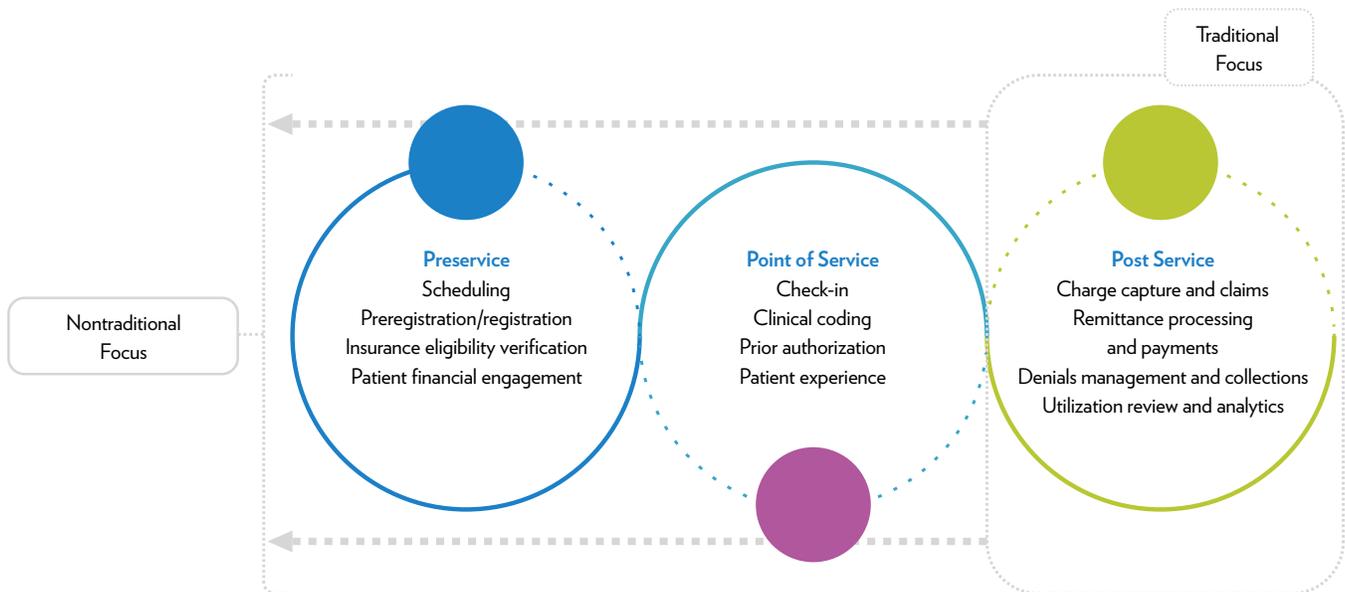## Unlocking the digital front door

Under prevailing fee-for-service models, RCM typically exists as a post-service, payer-facing process detached from care delivery. But Shegewi predicts the rise of a next-generation, end-to-end RCM model that spans the patient journey, beginning with pre-service digital engagement.

"With value-based care and risk-based reimbursement, health systems need to shift the current paradigm of focusing on post services to the holistic, end-to-end revenue cycle management approach to optimize revenue and value-based care incentives," Shegewi said.

An end-to-end revenue cycle that begins at "the digital front door" meets patients at the pre-service and point-of-service stages. And with that, Shegewi says, comes a higher likelihood of enabling better documentation, coding, engagements, experiences, data capture, digitization, and automation of processes. The critical outcome is the emergence of workflows that bridge the divide between revenue cycle and clinical documentation.

"Nontraditional revenue cycle management is not just a backend initiative," Shegewi said. "It can happen end-to-end through the right mix of technologies and capabilities across the service in a way that meets the patient where they are and empowers all staff through a holistic approach."

Figure 2. Revenue cycle needs to change its focus

Traditional Focus

Nontraditional Focus

Preservice
Scheduling
Preregistration/registration
Insurance eligibility verification
Patient financial engagement

Point of Service
Check-in
Clinical coding
Prior authorization
Patient experience

Post Service
Charge capture and claims
Remittance processing
and payments
Denials management and collections
Utilization review and analytics

Source: Shegewi, M., and Sundaram, B. April 2020. *Next-Generation Revenue Cycle*. IDC Perspective. https://www.idc.com/getdoc.jsp?containerId=US44357318

Building the digital bridge

That's the approach Ricoh helped pioneer with a major university health system on the West Coast – one with more than $4 billion in net patient revenue. Each day, Thakur said, the RCM team received 20 boxes of physical documents from various sources that needed to be sorted, scanned, indexed, and matched to patients in the electronic health record (EHR). This highly manual process could take as long as 15 minutes per document, and the system routinely experienced a two-week backlog. This caused delayed procedures, claims denials, missed audit timelines, and revenue leakage.

Thakur and his team recommended an end-to-end automation solution built on decades of handling and processing large volumes of unstructured healthcare data and a proprietary data governance framework. The system securely scanned all documents to a repository in real-time, extracted structured data, and intelligently matched the documents to patient records within the EHR for specific episode of care. The results? A process that once took 15 minutes to complete shrank to five minutes or less, and the document processing backlog was cut from two weeks to two days or less.

"We built a digital bridge integrating their RCM system [with the EHR] by automating their unstructured data processing and providing structured data, which the RCM system can intelligently use," Thakur said. "Workflow has improved significantly, weekslong backlogs have been eliminated, and there's been a significant reduction in errors while providing new auditing, reporting, and tracking capabilities for compliance."

In addition, the health system experienced a 90% reduction in local scanning and paper consumption, using a browser-based workflow that enabled remote work during the pandemic.

And with the digital bridge in place, Thakur said the health system plans to expand its use to other workflows, departments, and facilities within the health system or IDN.

"This is an example of the direction in which revenue cycle management is moving," Shegewi said. "For the time being at least, it's a marriage between traditional and nontraditional capabilities, but that ultimately should emerge towards nontraditional, end-to-end capabilities that will ultimately better serve not just the organization and staff, but also patients, as well."

Revenue cycle management should be an end-to-end process, starting at the digital front door. Watch this On-Demand Webinar to learn more from the experts.

RICOH
imagine. change.

About Ricoh
Ricoh USA is an information management and digital services company. As part of a global leader, we create competitive advantage for over 1.4 million businesses, including 84% of the Fortune 500. We bring people, processes, and technology together to solve problems for companies large and small. At the forefront of innovation, we use a wide range of systems, platforms, and image technology to make data accessible to people faster and with more insight than ever before. We harness the power of information and unlock potential.