



RPA in Healthcare

Challenges and Opportunities

Introduction

The healthcare provider market is characterized by substantial costs, encompassing labor, supplies, and investment decisions aimed at fostering a robust quality and IT strategy. According to the Pittsburgh Post-Gazette, fixed costs constitute two-thirds of a hospital's expenses, while one-third is variable and would decline with reduced patient footfalls.

To maintain financial Health, healthcare organizations must meticulously plan and develop effective processes and policies. Skillful management of the revenue cycle is pivotal in achieving these objectives.

Healthcare revenue cycle management involves the financial processes that healthcare facilities employ to oversee the administrative and clinical functions associated with claims processing, payment, and revenue generation. This encompasses the identification, management, and collection of patient service revenue.



The revenue cycle is focused on minimizing revenue leaks, expediting the realization of AR, reducing bad debt accumulation, and optimizing cash flow. This requires a well-coordinated series of tasks and activities. Robotic Process Automation (RPA) has emerged as a potent strategy, effectively eliminating repetitive manual tasks such as data entry, insurance verification, and reconciliation prone to human errors.

RPA facilitates the creation, deployment, and management of robots (bots) that simulate human actions when interacting with digital systems and software.

Through the implementation of RPA, healthcare providers can enhance resource management and time allocation, enabling a more concentrated effort on patient care, operational efficiency, and doctor-patient communication. Additionally, the strategic deployment of automation can uncover opportunities for workflow optimization, reducing human errors, and streamlining business processes.



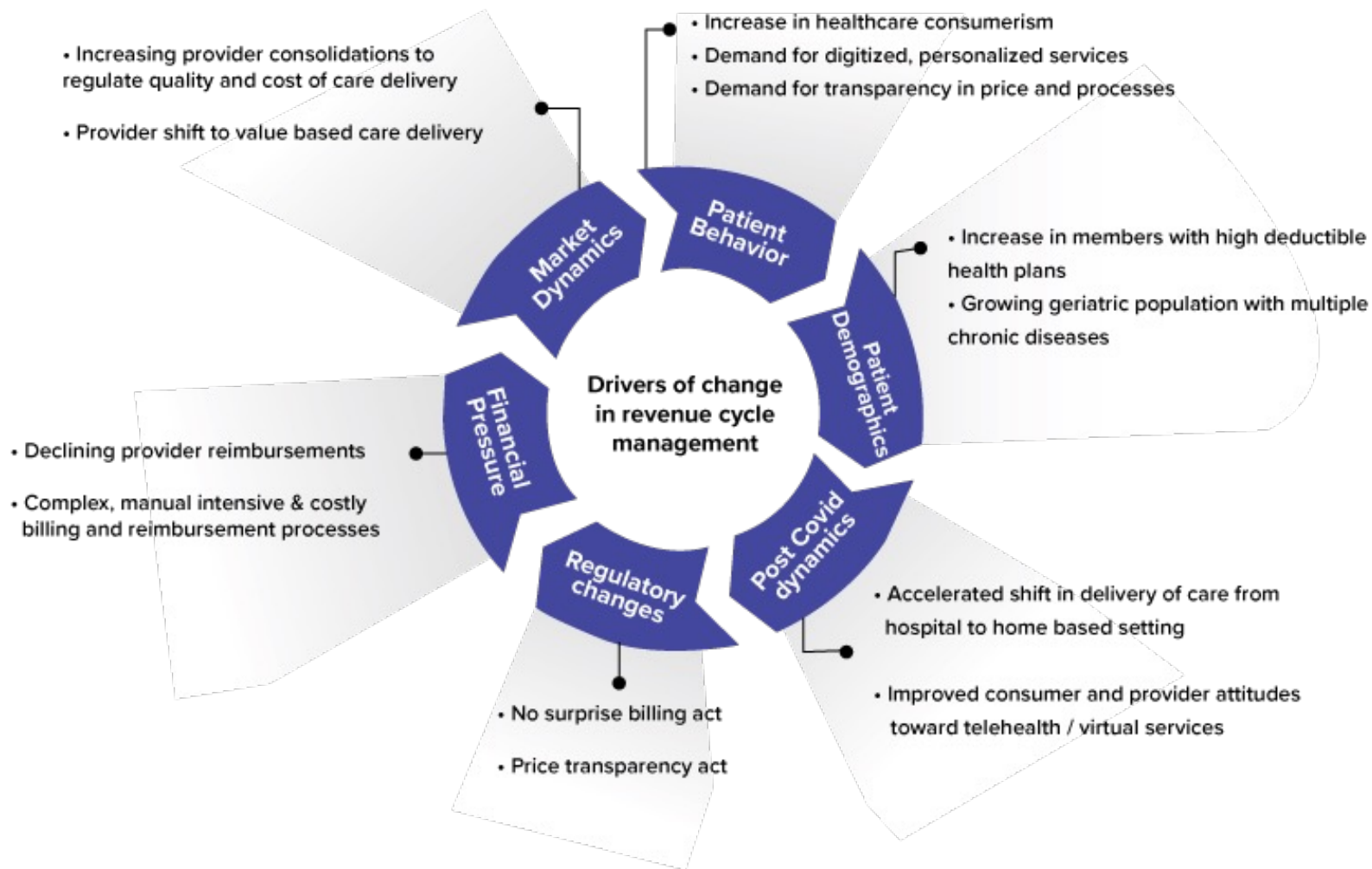
Understanding the challenges and how RPA fits the narrative

Healthcare operations are often strained by ever-growing challenges with non-digitized processes, outdated legacy systems, and complex legal regulations. Players with stakes in the healthcare industry are exploring RPA to drive operational quality and efficiency faster than ever before.

Physicians or providers face the challenge of providing affordable care to patients despite mounting annual increases in care delivery and administrative costs. Preventing and reducing unpaid claims, improving point-of-service collections, maintaining healthy accounts receivable, and reducing inefficient coding and billing processes can all significantly impact profit margins

Also, the landscape has been ever-evolving, and over time, it has become imperative for stakeholders to investigate efficient, viable, economic, and accurate solution sets that can be scaled up and are future-ready.





More than 95 percent of medical practice leaders reported inefficient billing processes, with the majority needing to implement backend efforts to reconcile bills by the end of the year.

In general, RPA fits in the solution matrix as it targets to streamline workflows, in turn making organizations more profitable, flexible, and responsive. It helps yield employee satisfaction, engagement, and productivity by eliminating repetitive, voluminous, and error-prone tasks.

RPA can be rapidly implemented to push digital transformation, automate workflows and minimize wastage.

Trends and Opportunities

RPA has emerged as one of the top trends in healthcare. Providers and healthcare systems are actively evaluating their processes for RPA healthcare use cases and are trying to identify the necessary information to implement in their hospitals' RCM.

Given the prevailing landscape of RPA trends, substantial evaluation is directed toward-



Patient access, scheduling, and registration

Providers are exploring the potential of RPA to streamline front-office tasks, leading to reduced wait times. RPA can help provide better insights from billing and health data communication to consumers. It can make functions such as network participation identification, member verification, and automated appointment alerts more efficient.



Claim management and billing processes

RPA can help with huge charges, reconciliation, charge sheets, and data-oriented tasks where manual entries and analysis are required. This is one area of focus for mid to large-sized settings with footfalls in 150+ visits a day. Implementation of RPA can solve entry issues, generation of daily reports and trends can be easily done, and charge lag days can be reduced.



Denials management

Denials is a time-consuming and tedious process, with significant Appeal rejection rates. RPA with application of AI/ ML can help with identify denial reason, timely appeals, expedite resubmission, and follow-up.



Remittance Automation

The reconciliation of payments in EHR with ERAs, loading and recording of associated remit codes, follow-up on insurance underpayments, balancing sequestration amounts, and validation of e-Pays against the reimbursement rates are areas where IPA can save significant effort and regulate workflows to be more efficient and traceable.



Dataset Loading

RPA can facilitate periodic updates to the Reference and compliance datasets like LCD, CCI, 3M CGS, CPTs, IMO, Fee schedules in the RCM apps or EHR modules through file transfer protocols (FTPs); RPA can also help in dataset offloading/ Onloading of outbound/ inbound files through automated batch processes for Bad Debt, collections files, claim files communicated through Clearinghouses.

RCM Use Cases

- **Making Release of Information and Auth Process Efficient:**

Automation to intake standard data, create and complete a release of information, manual work can be minimized as the same steps are required- every time this activity is done.

- **Automate Medical Coding**

Reduce errors and efforts while coding manually. This will help in the reduction of coding errors, efforts to make corrections, and billing days (AR).

- **Claims Denial**

Huge predicament in healthcare organizations: 80% of denials are avoidable, IPA can be deployed for released claims and historic data to create clean claims, will drive reduction in AR days, denial prevention, and timely appeal.

- **Intelligent Automation of Payment Posting**

Cash posting automation to accelerate the cash realization process by automating data retrieval, reconciliation, and posting. This can lead to reduction in TAT, enhanced accuracy, and FTE optimization.

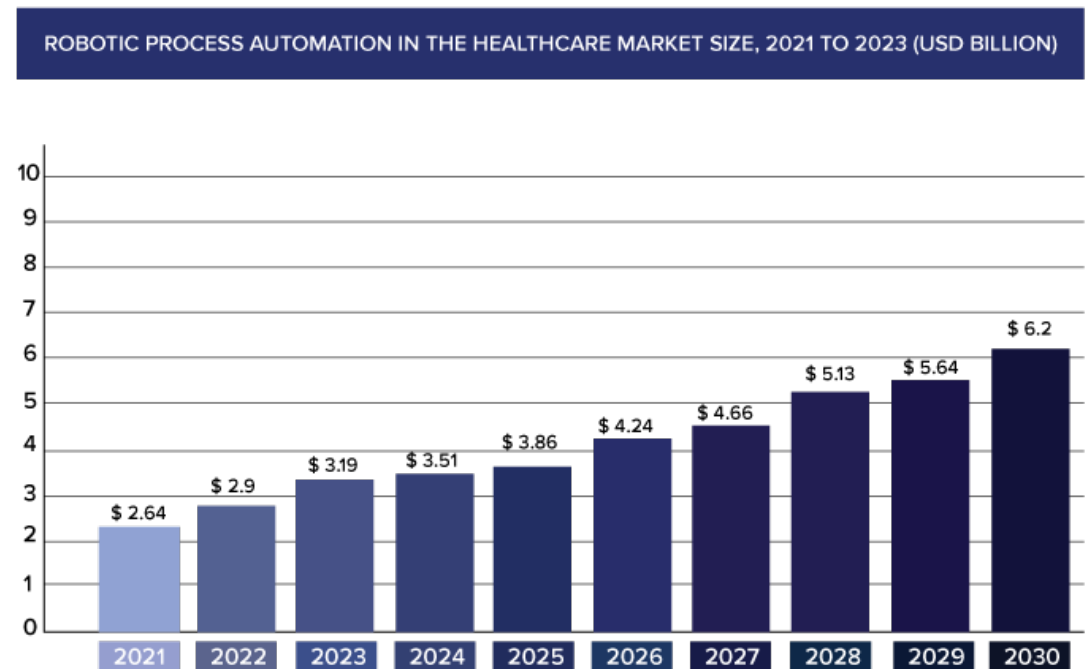
Starting RPA journey and cultivating RPA culture

The global robotic process automation in healthcare market size was evaluated at USD 2.9 billion in 2022 and is expected to hit around USD 6.2 billion by 2030 with a registered CAGR of 26.01% from 2022 to 2030.

COVID-19 increased the demand for a digital workplace across industries, opening additional opportunities for RPA suppliers to gain market share.

Organizations have been trying to keep up with the innovation required to survive and thrive in the rapidly evolving times. Implementing RPA is a tough investment decision given the thin margins of operation providers have and the strict requirements they need to adhere to. It is tricky and expensive to build up RPA infrastructure, acquire right skills or train existing staff, and deploy RPA in the targeted domains.

The platforms and the license structure for automation bots constantly change, and crucial flexibility is not always built into bots.



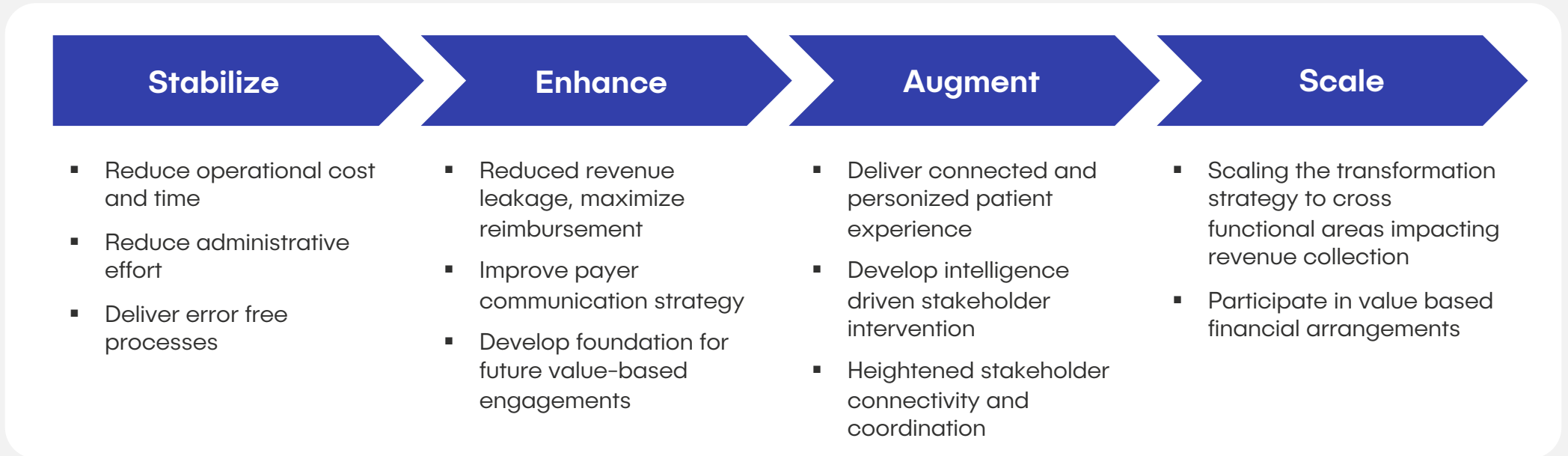
Evaluate if RPA is the right path for you

RPA might not be the best course of action for your organization at a certain point in the journey. Each organization should consider its unique needs, existing technologies, data, processes, and ability to drive and adapt to change. You can refer to the questions below to evaluate opportunities and discover processes that can be good candidates for RPA:

1. Can the process be broken down to granular independent tasks?
2. Can it be further broken into decisions and business rules?
3. Does the process require human intervention, like critical thinking, to be marked done?
4. Is the data structured, standardized, accurate, and accessible to RPA bots?
5. How much total labor time is required in the current process that could be eliminated or redeployed through automation (the ROI factor)?
6. What is the impact to patients? Could it result in higher patient satisfaction?
7. If RPA is a viable option, does it provide a complete solution, or are complementary tools?
8. Can the application be scaled and implemented across the organization to deliver greater value?



The next phase would be to sketch out and define the transformative RPA strategy based on the business goals and move through the incremental stages-



It is particularly important to evaluate organizational readiness through a well-designed assessment. It helps answer most of the initial questions and evaluate the choice for RPA. It also outlines, discovers multiple channels, and benchmarks the efforts required to:

- Onboard different Line of Businesses and identify Quick Wins for initial phases.
- Specify Industry-specific use cases and value realization.
- Ensure commitment from LoBs to realize expected ROI.
- People should be aligned with the vision; this helps in establishing the RPA culture.
- Processes, SOPs, blue book needs to establish. Maintained and adhered to RPA activities.

References:

1. [What Is Healthcare Revenue Cycle Management?](#)
2. <https://www.uipath.com/rpa/robotic-process-automation>
3. <https://www.r1rcm.com/news/what-is-revenue-cycle-management-in-healthcare>
4. <https://www.precedenceresearch.com/robotic-process-automation-in-healthcare-market>
5. <https://www.huronconsultinggroup.com/insights/rpa-optimize-healthcare-revenue-cycle-operations>
6. <https://simplefractal.com/use-cases/healthcare/revenue-cycle-management/>
7. <https://www.r1rcm.com/news/what-is-revenue-cycle-management-in-healthcare>
8. <https://www.infinx.com/blog/7-key-rcm-metrics-healthcare-analytics-improve-collections/>

Authored By:

Shradha Doshi, Head of Customer Success Team - Provider Market, CitiusTech

Kuldeep Pawar, Sr Healthcare Consultant, CitiusTech

To learn more about this contact us at

[sales@citius.tech.com](mailto:sales@citius.tech)

visit our website

[www.citius.tech.com](http://www.citius.tech)

