



RPA Automation & Calculating ROI

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Agenda

RPA & Hyperautomation in Healthcare

Identifying & Prioritizing RPA Opportunities

Calculating Cost Savings & ROI





RPA & Hyperautomation in Healthcare

Market dynamics are affecting the healthcare industry and driving a greater need for rapid advancements in innovative technology

Resource Constraints:

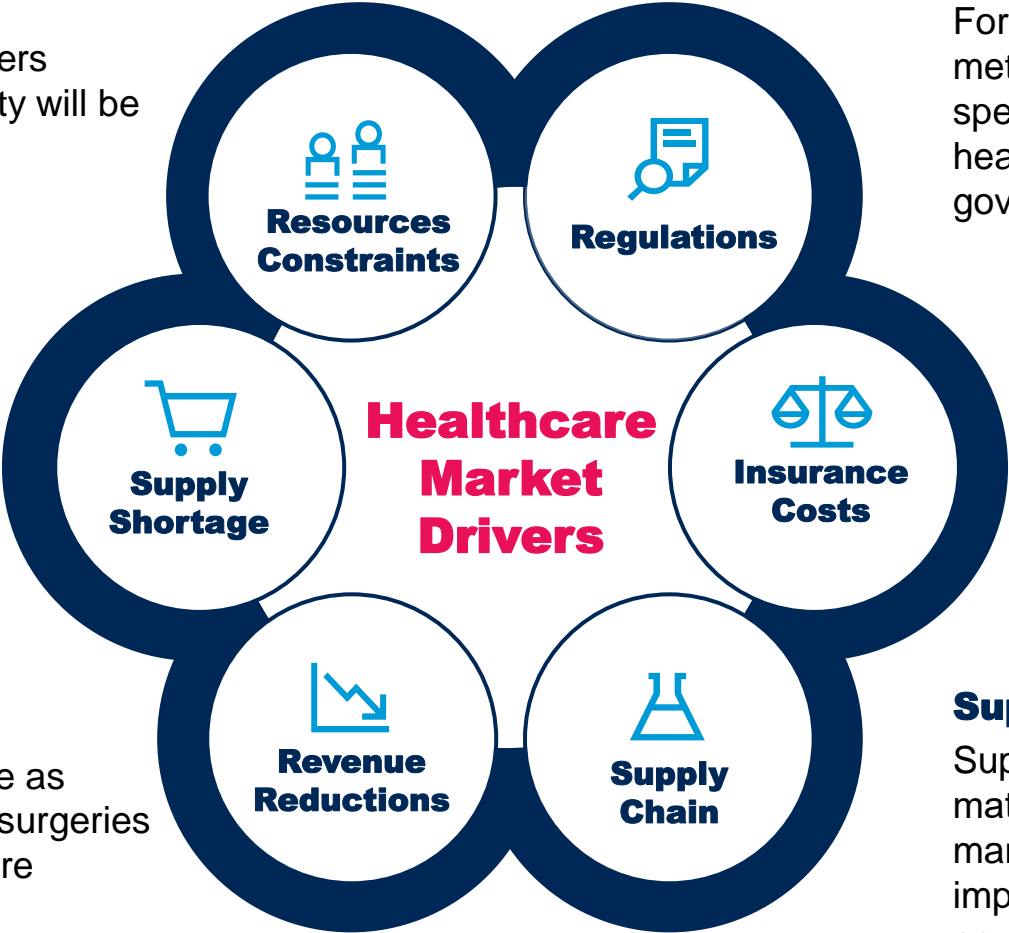
Hospitals, clinics, and first responders already operating at or near capacity will be overwhelmed.

Supply & Equipment Shortages

Critical shortages will become the norm: routine drugs, durable medical equipment, medical devices, protective personal equipment, nurses and clinicians are all in short supply today.

Revenue Reductions

Providers are seeing falling revenue as disruptions occur and non-elective surgeries and routine procedures and visits are postponed.



Insurer Regulations:

For insurers, common cost containment methods such as limiting care access to specific providers will be harmful to public health – and will likely run afoul of emerging governmental mandates to open networks.

Insurance Market Valuation:

Medical expense increase may exceed reinsurance or government subsidy thresholds – and will affect market valuation for insurance plans.

Supply Chain Disruptions

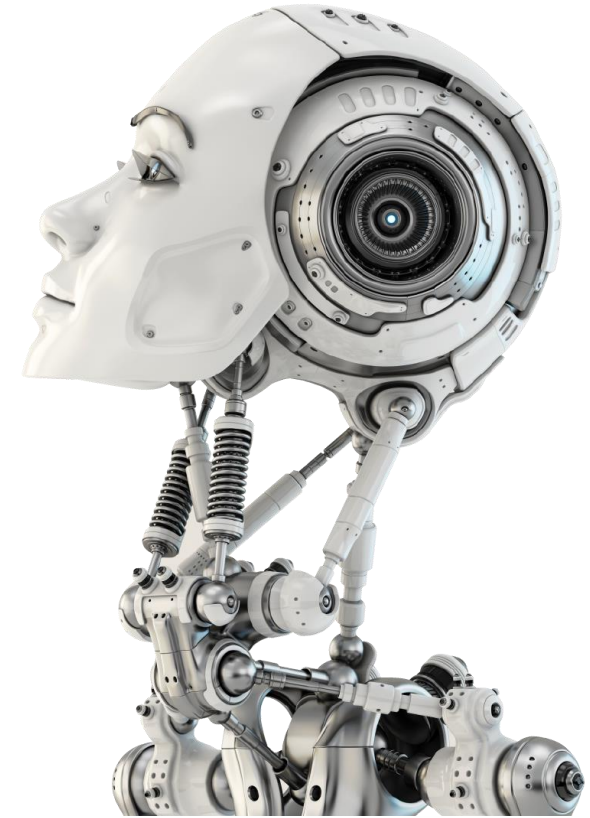
Supply chain disruptions affect raw materials for drugs; life science companies' manufacturing and distribution facilities, and impact the availability of manufacturing equipment as well as PPE and lab instruments for R&D.

RPA is one digital innovation among several hyperautomation tools and technologies

Hyperautomation involves the orchestrated use of multiple technologies, tools, or platforms

Inclusive of, but not limited to:

- Robotic Process Automation (RPA)
- Chatbots/Conversational Platforms
- CoRPA/iBPMS/iPaaS
- Event-Driven Software
- Process Mining/Discovery Tools
- Process and/or task automation tools
- Machine Learning
- Artificial Intelligence



Business driven hyperautomation

An approach in which organizations rapidly identify, vet and automate as many approved business and IT processes as possible through a disciplined approach.

Top performing healthcare organizations are leveraging RPA, and the “New Normal” is accelerating the need to scale

A Perfect Storm Driving the Need for Automation in Healthcare. Why act NOW?

- Rapid **Market Maturity** of RPA & Complementary Technology
- **Low entry barrier**: Dropping of **cost** of tools, capital expense, **time** to implement and payback period

Supply



Trigger Event

- Increased focus on **revenue** preservation, **margins** and **speed** due to COVID-19
- Public health risk needs reduced reliance on manual processes

Demand



- **Resource constraints** in Healthcare drive the need for **increased capacity and bandwidth**
- Reduce process and technical **debt**

Gartner expects RPA to be a significant win in the near future for healthcare enterprises



Fifty percent of all U.S. healthcare delivery organizations will invest in robotic process automation by 2023, up from 5% today.



By reducing the costs associated for various processes, RPA can lead to a direct impact on healthcare organizations' **bottom lines**.



By 2024, organizations will lower operational costs by 30% by combining automation tech with process redesign



Success stories from other sectors, such as manufacturing and banking, have further fueled already **hyped RPA in healthcare** with high hopes to achieve the same or even better outcomes in improving efficiency and cost saving.

Healthcare Hype Cycle Innovation Profiles Enabled By Automation

Emerging Technologies that Incorporate Automation



The endgame includes the broad application of smart advisors, virtual customer assistants, virtual personal assistants and Internet of Things (IoT) signal processing.

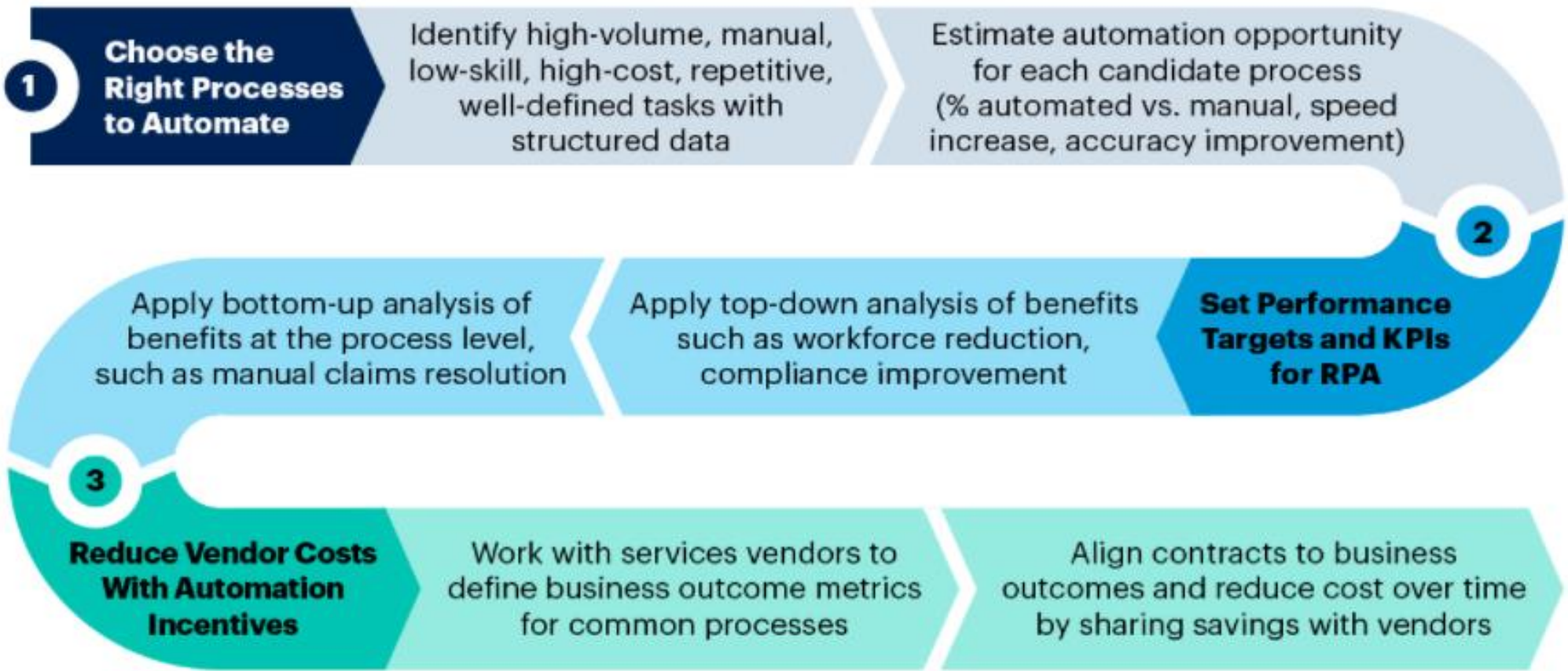
It won't be long before end-to-end **automation becomes an expectation**, rather than an outlier, and digital is simply business.



Identifying & Prioritizing RPA Opportunities

Healthcare organizations spend more than their peers in other industries on IT operations

Cost Optimization with RPA



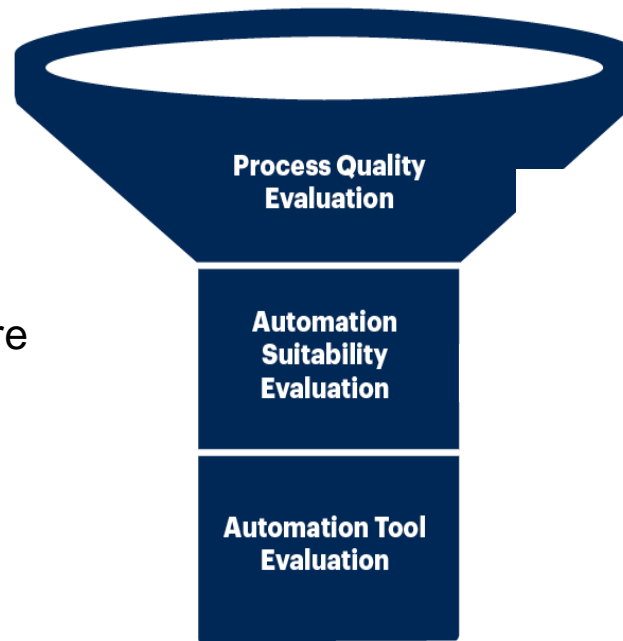
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Process discovery guidelines to identify RPA opportunities

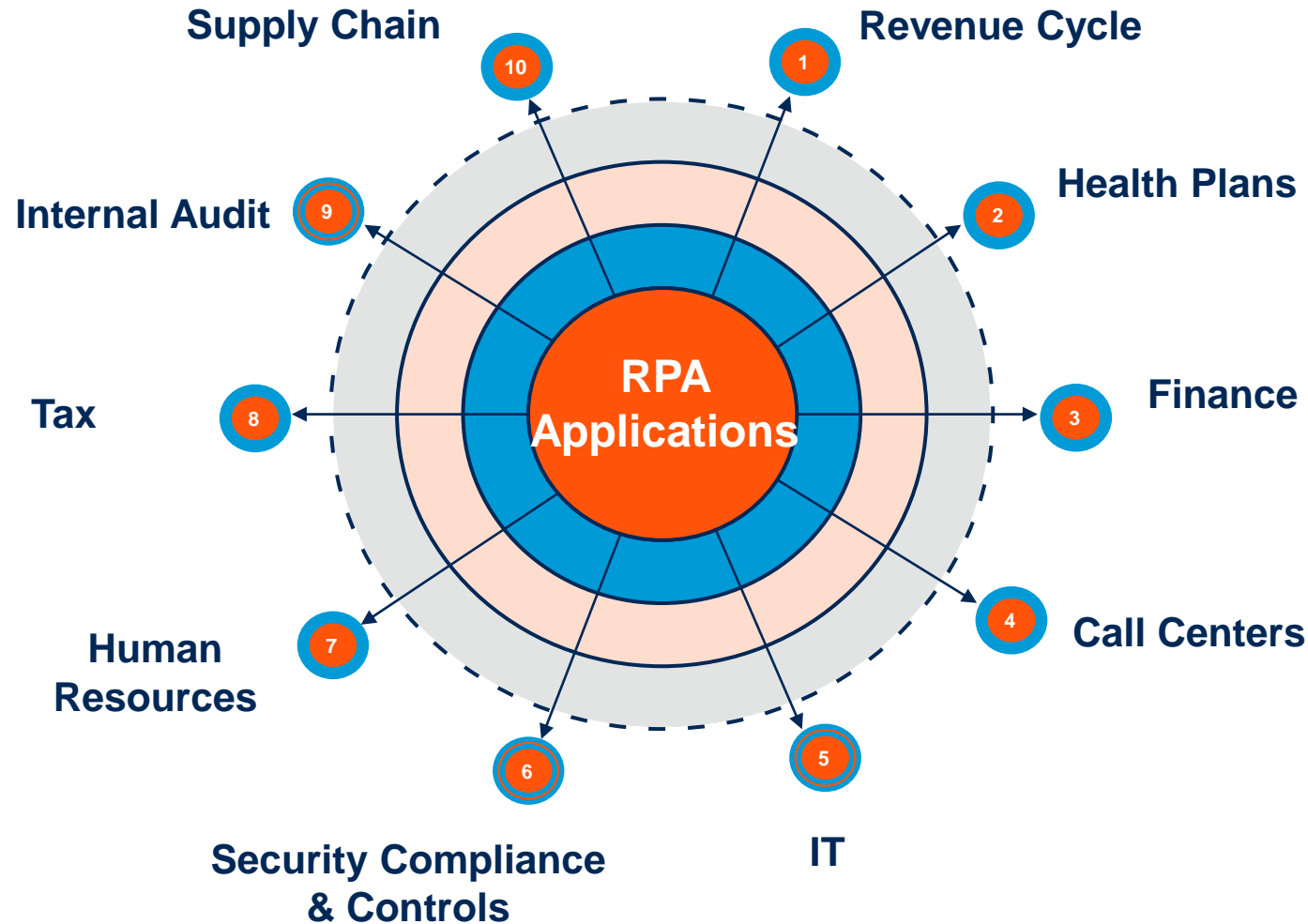
The following guidelines should help identify the **initial list of processes** from a department's full list that may be potential candidates for further RPA evaluation:

1. Processes that require **integration of data or moving data** from one place to another
2. Processes and/or sub-processes that are **administratively heavy and repetitive**
3. Processes where the effort to complete each step in the process is **highly manual and time consuming**
4. Processes that include **high volume transactions** that have to be completed manually by several FTEs (e.g. Provider directory update requests, overpayments, accounts payable/receivable, etc.)



- **Low skill, high cost** — *monthly processing of government program enrollment data load*
- **Well-defined rules** — *government program eligibility determination*
- **High volume** — *electronically submitted claims processing*
- **Repetitive** — *customer service call disposition*
- **Structured data** — *HIPAA X12 transactions (such as 834 and 278), spreadsheets or flat files*
- **Manual** — *provider call center record retrieval across claims, provider network management and utilization management systems*
- **Routine** — *provider data load*
- **Stable** — *general ledger entries*

Each business unit in healthcare organizations has an opportunity for RPA and its many applicable use-cases



Identifying applicable use-cases will require connecting IT closely with the business

- Due to a lack of clear awareness, the demand for RPA solutions will not always be evident by category.
- The IT roles will not always have the specifications and requirements clearly laid out in a RFP-ready format.
- The need for RPA will be identified when analyzing overall departmental or organizational performance.
- Therefore it's important to closely connect individual departments, IT and business roles.

Sample RPA Use Cases for Healthcare Payers

Risk Adjustment and Revenue Management

- RPA – Aggregating data from disparate systems to facilitate risk score analysis
- AI – Reviewing clinical documentation to identify overlooked revenue opportunities

Appeals and Grievances

- RPA – Process claim appeals from the provider and generate correspondences per outcome of appeal
- RPA – Automating claim reversals, claim adjustments and claim refunds
- RPA – Process coverage determination appeals (e.g. prior auths, quantity limits, step therapy etc.)

Claims

- RPA - Automating the claims adjudication process performed by back-office personnel
- RPA – Manage and update claim edits
- RPA – Automating reimbursement for manual clean claims using OCR technology

Clinical Management

- RPA - Automating the utilization management review process; evaluate medical necessity and appropriateness of services and treatment
- RPA – Leverage automation to collect clinical outcomes data for reporting purposes
- RPA – Managed and updated health plan clinical guidelines

Customer Service

- Chatbots – Provide answers for most common inquiries (e.g., benefits, claims)
- AI – Integration of customer interaction points with health care system to anticipate member / provider needs to reduce inbound inquiries

Strategic, Market, Product Planning

- RPA – Network Adequacy data validation and Regulatory Filing
- AI – Customer Data Aggregation and Reporting to support strategic planning

Network Development and Management

- RPA – Automating the provider credentialing process
- RPA – Leverage automation to collect health population statistics for predictive analytics
- RPA – Automating the fee structure implementation
- RPA – Manage and update provider directory

Sales

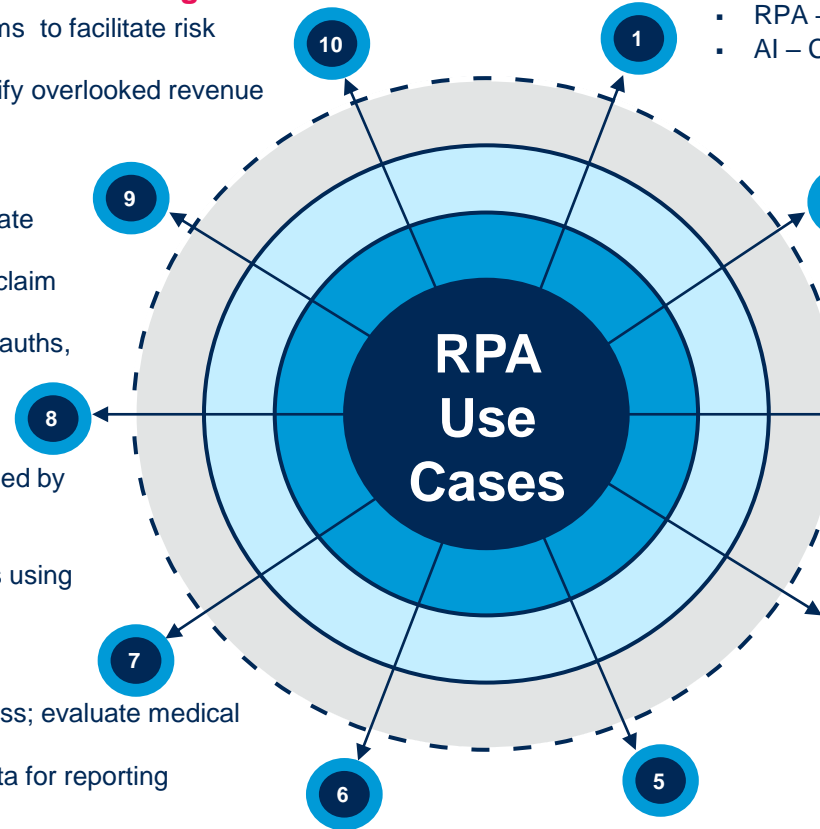
- Chatbot - Direct to Consumer sales for Individual and/or Medicare products
- RPA - Calculation and processing of rebates
- RPA – Download detailed sales data and calculation of commissions
- RPA – Production and e-fulfilment of contracts

Case Installation

- RPA – Data validation from sales, product, and benefits platforms to confirm sold specifications
- RPA - Data transfer from sales, product, and benefits platforms into operations systems

Enrollment and Eligibility

- RPA – Perform real-time eligibility and benefits updates to master file to prevent member reimbursement for lapsed coverage
- RPA – Automating eligibility verification of supplemental coverage to determine COB
- RPA – Production of e-fulfilment of enrollment materials



Use Cases and Discrete Processes That Are Good Candidates for RPA

Use Case	Discrete Process Examples	KPI Examples
<i>Claim Validation</i>	<ul style="list-style-type: none">• Verification• Eligibility• Entitlement• Reconciliation	Automate 50% of the current volume of manually processed claims
<i>New Member Acquisition</i>	<ul style="list-style-type: none">• Eligibility• Account Setup• Enrollment	Automate 95% of eligibility determinations
<i>Member Service Interaction</i>	<ul style="list-style-type: none">• Retrieving billing information• Processing address changes• Generating templated communications	Reduce customer service call time by 50%
<i>Provider Data Management</i>	<ul style="list-style-type: none">• Credentialing new providers• Loading provider contracts• Processing directory updates	Reduce provider credentialing by 50%



Calculating Cost Savings & ROI

A high-level business case is needed to show estimated business cost savings potential for each process identified on the RPA list of opportunities

Data Inputs for the business cost savings calculation:

1. **Monthly transaction volume** – Average monthly volumes reported based on a 8 to 12 month period.
2. **Time to perform process (mins)** – Total time to complete the end-to-end process by a single FTE at an average speed.
3. **Average blended salary (Annual)** – Average salary figure based on staff mix and inclusive of benefits.
4. **Automation achievable factor (%)** – Percentage of the process that can be automated. Estimates are set at 50% (Low), 75% (Med), 100% (High).

Business cost savings calculation methodology:

STEP 1: Calculate **annual hours saved**

$$\left(\text{Monthly Transaction Volume} \times \text{Time to perform process in minutes} \right) / 60 \times \text{X\% Automation achievable factor} = \text{Annual Hours Saved at X\% Automation}$$

STEP 2: Calculate **estimated annual savings** potential

$$\text{Annual Hours Saved at X\% Automation} \times \left(\text{Average Blended Salary Annual} / 2,080 \text{ hours per year} \right) = \text{Savings Potential in \$/year based on X\% automation}$$

Estimate Automation ROI to Strengthen Your Business Case

To execute the roadmap beyond POCs and pilots, you will have to provide ROI justification for increased investment, so you must establish goals for each project along the way. Start lean with candidate operational processes aligned with high-value KPIs to gather momentum and set specific targets.

Healthcare Payers

High-value processes and KPIs include:

- Average cost per claim processed — Reduce by \$2 in six months.
- Average claims settlement cycle time — Reduce by 10 days in six months.
- Autoadjudication rate — Increase by 3% in six months.
- Claims closure rate — Increase by 5% in six months.
- First electronic remittance advice accuracy rate — Increase by 10% in six months.

Healthcare Providers

High-value processes and KPIs include:

- Claim denials — Reduce by 15% in six months.
- Claim rejections — Reduce by 10% in six months.
- Patient flow — Improve bed turnaround time by 10% in six months.
- Clinical laboratory — Decrease turnaround time for nonemergency exams by 5% over six months.

SAMPLE Business cost savings calculations

#	Process Name	Monthly Transaction Volume	Time to perform process (min)	Estimated Savings Potential -\$/Year (Low)	Estimated Savings Potential - \$/Year (Mid)	Estimated Savings Potential - \$/Year (High)
6	Initiation of adjustments and closures of files	10284	3.33	\$67,941.00	\$101,911.50	\$135,882.00
10	Development file tracking	231	120.00	\$64,823.00	\$97,234.50	\$129,646.00
1	Letter creation and closure of appeals files	3472	7.50	\$44,568.00	\$66,852.00	\$89,136.00
3	Reopening adjustment (received on new forms)	2790	7.50	\$44,191.00	\$66,286.50	\$88,382.00
9	Daily inventory reports	84	12.00	\$24,223.00	\$36,334.50	\$48,446.00
2	Reconsideration case files - prepare/send to QIC	1304	6.00	\$11,585.00	\$17,377.50	\$23,170.00
8	Monthly reporting for CMS (2592)	42	180.00	\$1,439.00	\$2,158.50	\$2,878.00
7	935 identification (Overpayment Appeals)	640	7.50	\$1,307.00	\$1,960.50	\$2,614.00
4	CERT website process of requesting records, notification of appeal and decisions	975	2.22	\$904.00	\$1,356.00	\$1,808.00
5	Automate Debt Recovery and PE reopenings	22	13.00	\$103.00	\$154.50	\$206.00
Total Year 1 Savings				\$261,084.00	\$391,626.00	\$522,168.00
Total Year 3 Savings				\$783,252.00	\$1,174,878.00	\$1,566,504.00

Assumptions:

1. % of process that can be automated is estimated at 50% (Low), 75% (Med) and 100% for (High)

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Open Discussion



*Are there any questions
you would like to discuss
with Gartner today?*



Thank You

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