



Robotic Process Automation

**Optimize Healthcare Revenue
Management Operations with RPA**

Speaker



Jason Hergenrader
Solution Strategy Manager

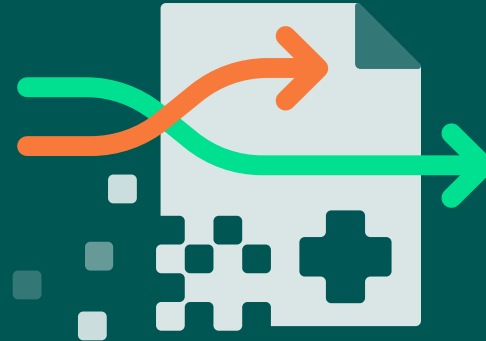
Agenda

1. When and why to consider RPA?
2. What is Robotic Process Automation (RPA)?
3. How RPA can be leveraged to reduce cost
4. Results

The Healthcare Revenue Cycle Process Needs to Become Smarter

Lower reimbursements and costs
are further impacting already
thin margins

Human resource intense processes
need to be re-evaluated to
reduce cost-to-collect



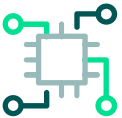
Hiring is becoming more difficult
due to the labor market changes

“Because we have always done it that way”
is no longer cost effective

Point Solutions Can Help **Optimize the Revenue Cycle** when used properly



Automation can drive tremendous **cost savings**



Enterprise level mindset is important to evaluate opportunities in all departments... but don't try to boil the ocean



Maximize your **patient accounting system**

- Patient accounting system capabilities are under-utilized

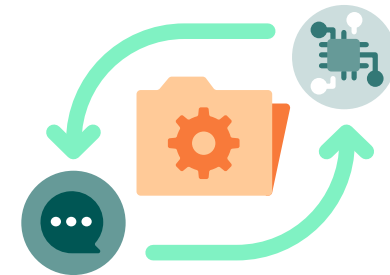


Ensure you have buy-in from **leadership and teams** doing the work



When to use **integrated point solutions**

- Lack of PAS functionality
- Lack of content
- IT constraints prohibiting change



Different Levels of Point Solution Integration and PAS Enhancement

LEVEL 1

Widespread Adopted Integrated Solutions

- ✓ Review existing solutions and identify gaps
- ✓ Many solutions need optimization to maximize ROI

LEVEL 2

Content Integration to Enhance the PAS

- ✓ Claim status must be used properly to provide value
- ✓ Work with PAS expert team/vendor to ensure maximized content adoption

LEVEL 3

Robotic Process Automation to Reduce Manual Effort

- ✓ RPA can be used to augment human labor at a fraction of the cost
- ✓ Opportunities for RPA across the revenue cycle

Robotic Process Automation
technically speaking RPA technology
is finally where we need it to be

01

80s – early 90s

- Basic scripting tools
- DOS based systems
 - Notes posting
 - Simple cash posting

02

Mid 90s – 2000s

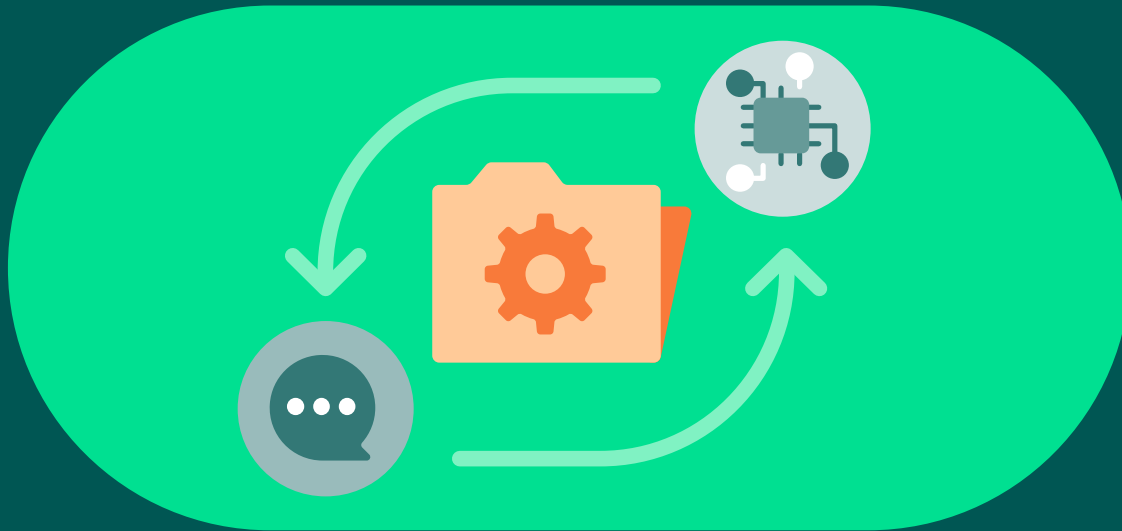
- Windows functionality
- More advanced tools like Boston Workstation
- Early web-scraping

03

2010s and beyond

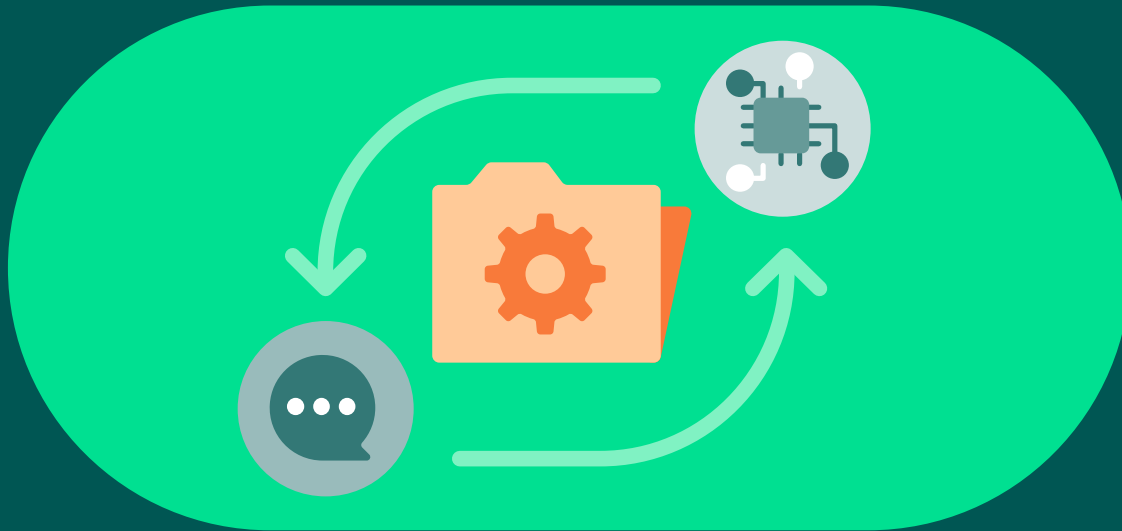
- More sophisticated solutions
- Interaction directly with objects in the UI
- Advanced unattended bot orchestration platforms
 - Micro-bot management
- Leverage AI to enable robust automation

Robotic Process Automation 101



- ✓ RPA is a software program that performs automated, repetitive, pre-defined tasks. Bots typically imitate or replace human user behavior. They operate much faster than human users.
- ✓ The bot performs the task using the same interface a human worker would.
 - Clicks, opens, and closes applications
 - Types, uses keyboard shortcuts
 - Uses full mouse functionality
 - Left/Right click
 - Multi-select, click and drag
 - Logs into payer websites
 - Bots have their own credentials
 - And more

Robotic Process Automation 101



- ✓ RPA is a software program that performs automated, repetitive, pre-defined tasks. Bots typically imitate or replace human user behavior. They operate much faster than human users.
- ✓ The bot can make logical decisions like a human worker would;
 - Use logic to determine proper action in a process
 - Gather data from multiple systems
 - Use Optical Character Recognition (OCR) to extract data from images
 - Combine data and logic to complete complex processes

How do we leverage RPA technology?



✓ An RPA initiative can lead to development of new disruptive solutions that:

- Improve current processes
- Expand your ability to 'think outside the box'
- Introduce completely new ways to solve problems
- Enable advanced resource models for Revenue Management

Bot Example: Sending Medical Records

Health Information Management routinely responds to requests for medical records from payors which is very time-consuming and payor-specific

Manual process

- ROI team receives request, determines what information is needed, accesses EHR, prints to PDF and sends records

Automated process

- nThrive bot (with NLP) reads request, determines what information is needed, accesses EHR, prints to PDF and sends records

RESULTS
Improved productivity
Improved A/R



15 minutes to
30 seconds
time savings

for bot to retrieve
requested records:

900%
SAVINGS

A Bot in Action

ICN/DCN Bot Wor... Refresh View Retrieve More Rows Arrange Columns Search Save As...

Drag a column header here to group by that column

Account N...	Billing Sequ...	Claim ID	Claim Type	EOB Attac...	Export Dat...	ICN/DCN	Last Note - ...	MRN	Patient DOB	Patient Fir...	Patient Las...	Patient Sex	Payer ID	Payer Name
>		2514410	Test				Replicar...	210991 0...	10/11/1978	REBECC	ALBERT	F	06201	MEDICARE ..
			Test				Replicar...	207761 0...	12/02/1975	DAVID	DAVIDSON	M	66705	QUARTZ - ...
			Test				Replicar...	206431 0...	02/04/1975	DAVID	DAVIDSON	M	00000	WC SECURA
			Test				Replicar...	210991 0...	08/20/1977	ALYSON	COOPER	F	00562	BLUE PLUS ...
			Test				Replicar...	206431 0...	12/11/1963	DAVID	DAVIDSON	M	00562	BLUE PLUS ...
			Test				Replicar...	414031 0...	11/11/1963	REYMON	COOPER	F	39026	UMR - UT
			Test				Replicar...	241731 0...	07/01/1968	THOMAS	WILSON	M	VAPC3	TRIWEST H..
			Test				Replicar...	414031 0...	11/11/1963	REYMON	COOPER	F	39026	UMR - UT
			Test				Replicar...	204761 0...	02/07/1962	ALICE	HALL	F	06201	MEDICARE ..
			Test				Replicar...	414031 0...	04/21/1963	REBECC	DAVIDSON	F	66705	QUARTZ
			Test				Replicar...	204761 0...	02/07/1962	ALICE	HALL	F	06201	MEDICARE ..
			Test				Replicar...	414031 0...	11/11/1963	REYMON	COOPER	F	39026	UMR - UT

Edit Claims...
Validate Claims...
Combine Claims...
View Claims...
Hold Claims...
Bulk Update Claims...
Add Note...
Add Follow-up Date...
View
Print
Export to Excel
CCA
Assign...
Unlock...
Move
Copy to Incomplete...
Send Alert...
Refresh View

Grid
Selected Rows

RPA Can Automate Across the Revenue Cycle

- ✓ Eligibility research and validation
- ✓ Medicare MBI lookup
- ✓ Medicaid # lookup
- ✓ Coverage discovery
- ✓ Auth submission/tracking
- ✓ Notice of admission
- ✓ Pre-bill charge write-offs
- ✓ Work patient accounting pre-bill work queues*
- ✓ Loading fee schedules
- ✓ Charge reconciliation to dept systems
- ✓ Pre-bill document submission/fax
- ✓ Working patient accounting or billing claim edit work queues
- ✓ Missing ICN/DCN claim edit resolution
- ✓ Secondary claim COB billing edit resolution
- ✓ Late charge validation pre-bill
- ✓ Work claim rejection work queues in billing system or patient accounting system*
- ✓ Workers Comp medical records submission to Jopari
- ✓ Clearinghouse remit file retrieval
- ✓ Work patient account system denial queues*
- ✓ Work denials requesting medical records
- ✓ Medicaid remit data extraction
- ✓ False Variance correction due to incorrect plan code
- ✓ Credit backlog cleanup
- ✓ Cash/Adjustment posting issue resolution
- ✓ Notes Posting

* Patient accounting system work queues could be for any system: Epic, Cerner, Meditech, CPSI, NextGen, Athena, etc.

How do we leverage RPA technology?

Use Case Example

✓ Working a Claim Follow-up Queue

- Log into patient accounting system
- Open follow-up work queue
- Select first account and capture patient and claim data
- Log into payer website and search for status of claim
- If claim is paid: capture payment data and log check data on account and reassign account to appropriate person
- If claim is pending: post comment on account and set follow-up date for 14 days (up to 3 times) before sending to collector
- If claim is denied: post comment with denial info and assign account to denial analyst
- If claim is not on file: post comment and assign account to biller

Bot Example: Claims Management – missing ICN/DCN

Most Claims Management clients adjust claims due to late charges or doing changes

Manual process

- Need to send a new XX7 for rebills
- Rebills hold and wait for ICN/DCN
- Billers periodically assess to see if ICN/DCN is available
- Typically weekly, bi-weekly or monthly

Automated process

- FinThrive bot checks for the ICN/DCN
- Finds it, puts it on the claim and sends claim
- Daily

RESULTS

Improved productivity
Improved A/R



3 minutes and 14 seconds

Average time for billers to work each XXY claim looking for an ICN/DCN

16.7 seconds

Average time for bot to work each XX7 claim looking for an ICN/DCN

How do we leverage RPA technology?

Use Case Example

- ✓ Resolve and post unposted remit batches in the patient accounting system
 - Open remit batch in PAS, open remit reports
 - Identify and post PLB adjustments
 - Review secondary EOBs that might cause credits
 - Compare adjustments, payments, patient liability to balance
 - Remove adjustments that would create credit
 - Resolve remaining account balances when Medicaid is paying as secondary
 - Ensure account plan matches plan being posted
 - Generate claims that do not exist
 - Post batch

How do we leverage RPA technology?

Use Case Example

✓ Resolve Secondary COB Billing Edits

- Search for secondary claim in the billing system
- Review edits to determine edits are COB related
- Look for EOB in billing system or in document management system
- Extract primary payment data from EOB, populate claim, and resolve edits
- Crossover claims – determine if they should be billed
 - Check balance in patient accounting system
 - Check secondary payer website for claim on file

Bot Example: Patient Access – Medicare/Medicaid eligibility

Patient Access can be laden with keying errors that cause downstream denials

Manual process

- Registrar selects incorrect Medicare/Medicaid managed care plan
- Not detected until the claim is denied

Automated process

- FinThrive bot checks every Medicare/Medicaid registration to determine if MCO is present based on eligibility (271)
- If present, bot identifies the MO plan and gathers the needed registration information to update the account prior to billing

RESULTS

Front end use case fixes
back end problem

Reduced denials

Medicare and Medicaid Eligibility Scrub Bot	
AVG. LABOR SAVINGS	1.8–3 FTEs
ROI	263–438%

Experience Story

Organizational Profile

- Top 100 Rural and Community Hospital in the U.S.
- Established 1894
- 49 acute beds
- 110 bed long term care facility, 60 apartment assisted living facility
- Urgent care clinic
- Number of multi-specialty clinics including therapy and rehab
- 1,000+ employees, 350+ volunteers
- 25 people in the business office

Organizational Objectives

- Automate lengthy manual processes
- Eliminate inconsistencies across team members
- Address issues with staffing limitations and inability to backfill positions
- Reduce mundane tasks for team members to increase team happiness
- Reduce new hire orientation and training costs
- Ensure there would not be any unintended consequences

Discoveries Along the Way

- It really CAN do the job in far more scenarios than we thought
- Mapping out manual processes identified inconsistencies and created standardizations
- Staff skeptical at first but 'all-in' once they were confident in the automation
 - Bot recording helped get staff on board
- We can have control over the process, no worries about a Robot Apocalypse
- Processes automations are fluid and will evolve over time as business changes

Deployed Bots

Cash Posting Bot

- Works open remit queue in Cerner to post remits for ~30 payers
- Post PLB interest payments
- Review secondary payments/adjustments and remaining balanced to ensure secondary adjustments are properly handled
- Validate and correct health plans for payment/adjustment posting

Rebill ICN Bot

- Works in FinThrive Claims Management
- Searches for original claim EOBs to capture original claim ICNs needed for rebilled claim
- Populates the original ICN onto the rebill claim to resolve claim edits and completes claim for billing
- Allowed for review of late charge process to reduce effort

Past Due Account Bots

- Work initial claim follow-up work queue in Cerner for 7 payers
- Go to payer website and check claim status
- Paid: notate check info on account and reassign account to cash poster for review of missed/last payments
- Pending: post comment on account and set follow-up date for 14 days (up to 3 times) before sending to insurance specialist
- Denied: post comment with denial info and assign account to denial analyst
- Not on file: post comment and assign account to biller

Remit Pickup Bot

- Picks up 835s and paper remits from payer websites and FinThrive Claims Management and places them in network folders
- High staff satisfaction due to elimination of mundane tasks

Results

- Remit Pickup and Cash Posting Bots
 - 4 cash posters reduced to 2 cash posters – 7.4% Staff Reduction
- Past Due Accounts Bots
 - .25 FTE currently with expectation to get to 1 FTE as team fully adopts – 4% Staff Reduction
- ICN Bot
 - .25 FTE – 1% Staff Reduction
- 12.4% reduction in FTEs – Bots do not need to be paid benefits
- Significant reduction in paper printing cost for cash posting
- Staff able to move to remote and office space reduced by ½
- Automated process standardization has reduced human errors



Where to Start

- ✓ **IDENTIFY A FEW HIGH VALUE AND LOW COST/RISK AUTOMATION OPPORTUNITIES TO BEGIN**
 - Internal teams may have ideas
 - A consultant or vendor can assist with identification
 - Process design is key. You do not want to make a bad process faster
- ✓ **DETERMINE THE BEST APPROACH**
 - PAS optimization or integrated point solution
- ✓ **WORK WITH VENDORS TO DESIGN AND DEPLOY AN INTEGRATED SOLUTION**
 - Think outside the box
- ✓ **ADOPTION IS KEY**
 - New content might disrupt workflow or provide no value if not utilized properly
 - Automation benefit will not occur without a change in business process
 - Important to have a system and process expert involved to ensure full adoption and ROI realization

Thank you