

From Patient-to-Payment,™ nThrive empowers health care for every one in every community.®



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The power to thrive.
To grow and develop successfully.
To flourish and succeed to the nth degree.

nThrive Robotic Process Automation

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Speaker 



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Agenda



- When and why to consider RPA?
- What is Robotic Process Automation (RPA)?
- How RPA Can Be Leveraged to Reduce Cost
- Results

The Healthcare Revenue Cycle Process Needs to Become Smarter

Lower reimbursements and cost 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**



Maximize your **patient accounting system**

- Patient accounting system capabilities are under-utilized



When to use **integrated point solutions**:

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



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



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

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



➡ 80s – early 90s

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



➡ Mid 90s – 2000s

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

➡ 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 payor 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 Cycle 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

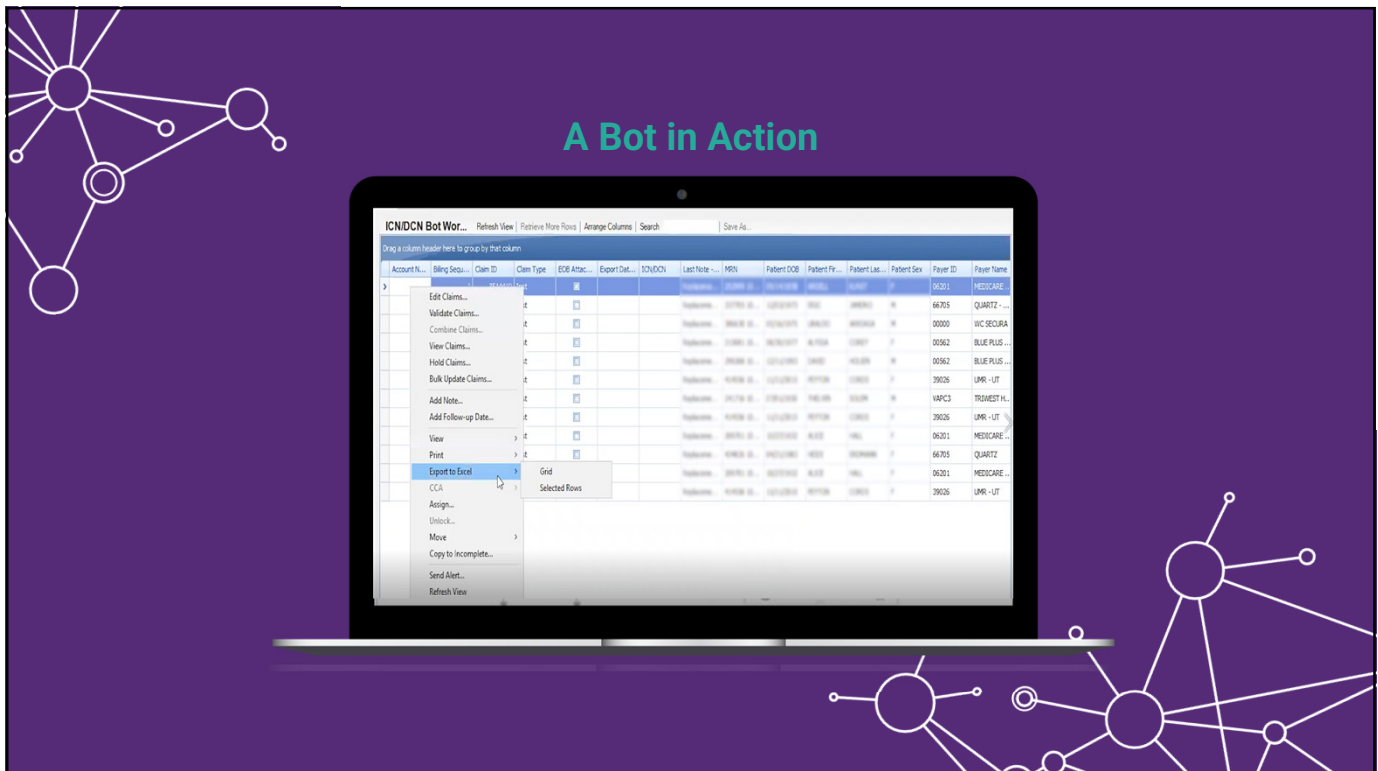
Improved productivity
Improved A/R

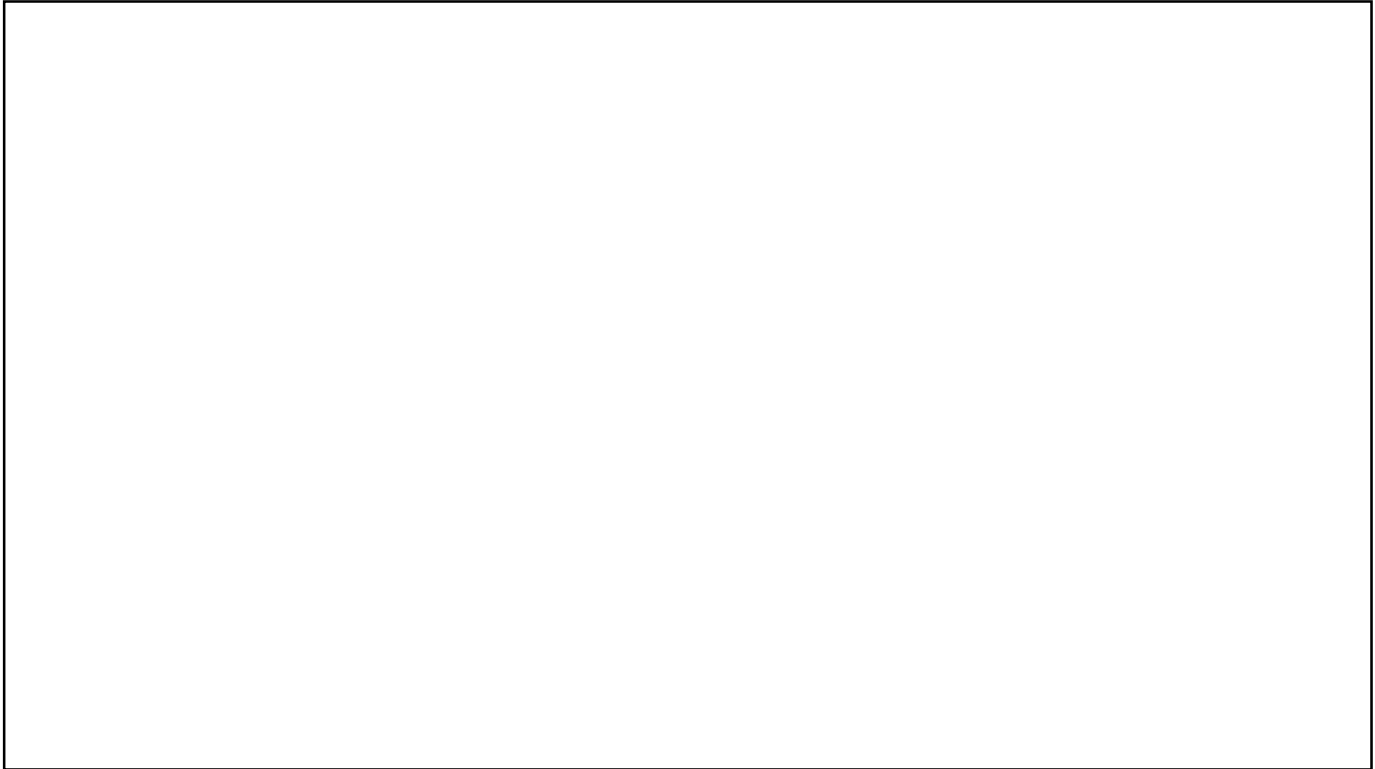


15 minutes to
30 seconds
time savings

for bot to retrieve
requested records:

900%
SAVINGS





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 payor 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 coding 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

- ✓ nThrive 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 XX7 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 payor 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

- ✓ nThrive bot checks every Medicare/Medicaid registration to determine if MCO is present based on eligibility (271)
- ✓ If present, bot identifies the MCO 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 recordings 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 balance to ensure secondary adjustments are properly handled
 - Validate and correct health plans for payment/adjustment posting
- Rebill ICN Bot
 - Works in nThrive 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/lost 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 nThrive 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



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