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Robotic Process Automation in Healthcare
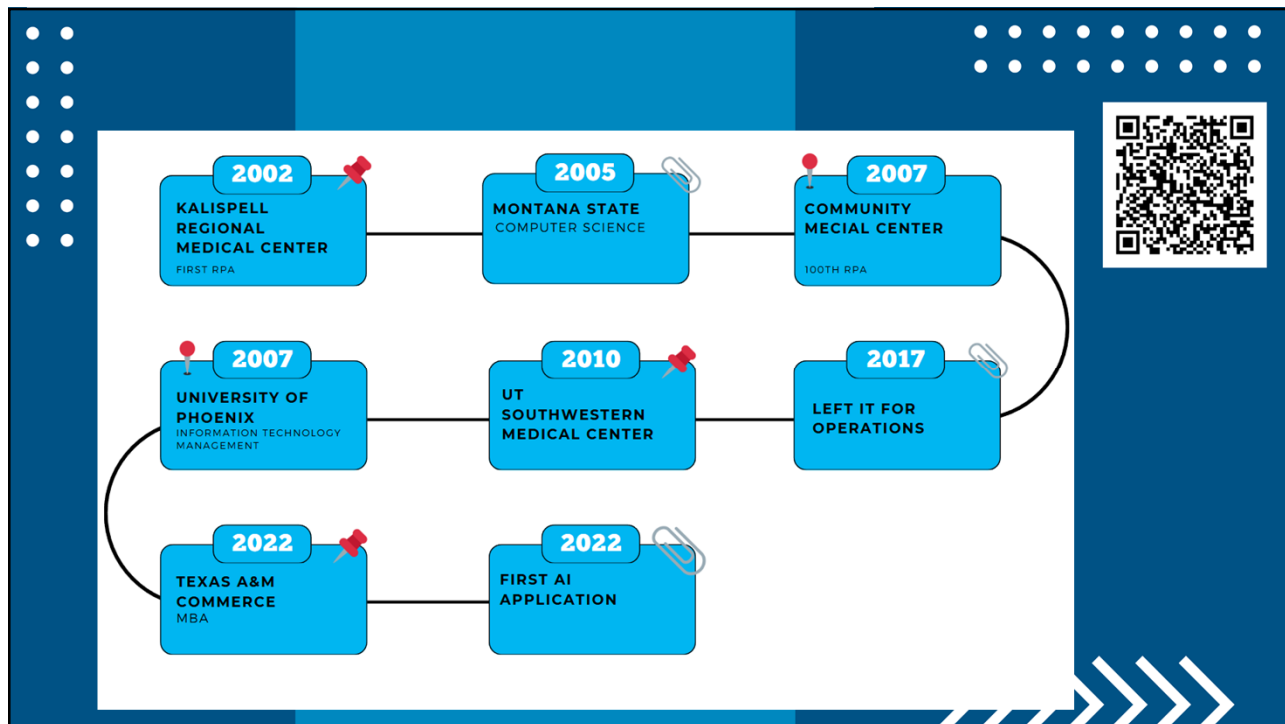Transforming Operations for the Future

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Where are you at in your current RPA Journey?

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Robotic Process Automation in Healthcare What is RPA?

- What is RPA?

This is Bob

Bob works in Healthcare Revenue Cycle

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Robotic Process Automation in Healthcare
What is RPA?

▪ Bob's Workflow

EMR Data
- Claims
- Payments
- Dashboards
- AR Days

Emailed Items
- Reports
- General Ledger
- Budget

Excel Items
- SQL Reports
- Daily Generated Files

Enters all this into Excel

	A	B	C	D	E
1	Organization	Name	Payment Amount	Claim Amount	Payment Date
2	UTSW	The Name	0.12	1200	1/3/2025
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					

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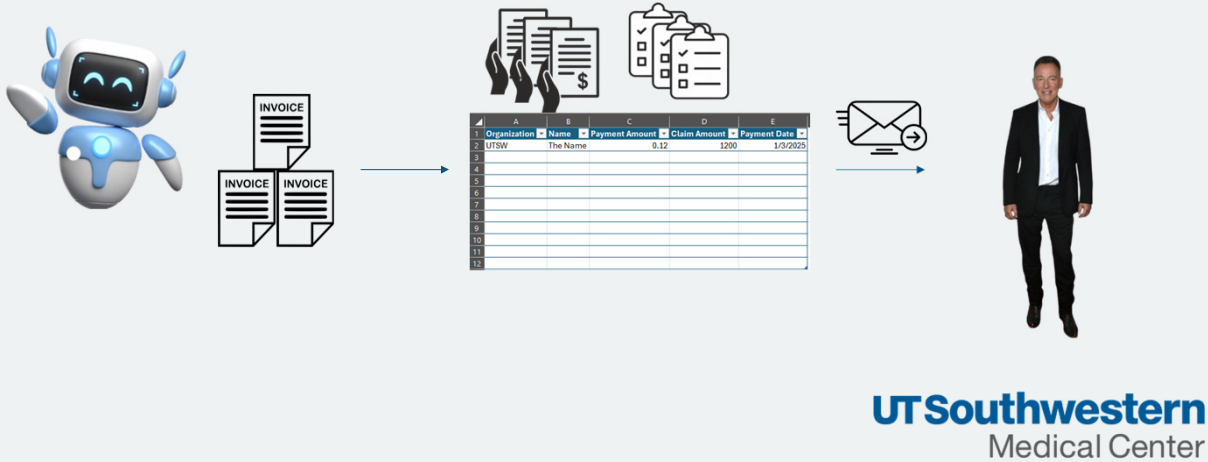## What is RPA?

▪ Bob then send this to the Boss

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Robotic Process Automation in Healthcare
What is RPA?

- Bob has found Robotic Process Automation!

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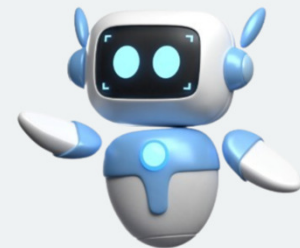# Robotic Process Automation in Healthcare
So what is it exactly?

What it is:
- Software developed by humans to replicate tasks
- Tool for assistance of Repetitive Tasks
- Simplification Devices

What it is not:
- Not a physical form robot
- Not a replacement for Human Workforce
- Not a critical thinking machine

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Robotic Process Automation in Healthcare
Key Benefits of RPA in Healthcare

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Robotic Process Automation in Healthcare
UTSW 5 Year Roadmap

5 YEAR ROADMAP

FY-YEAR 2022	FY-YEAR 2023	FY-YEAR 2024	FY-YEAR 2025	FY-YEAR 2026
• Pilot Automation • Research • Install Freeware • ROI	• Choose Software • Hire Developer • Build 5 Automations • Develop Department	• 10 Automations • Hire 2nd Developer • Virtual Machines • AI Azure Server	• Machine Learning • 2 AI Builds • 10 Automations • Hire 3rd Developer	• 2-3 AI Builds • 10 Automations • Community Builds

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Robotic Process Automation in Healthcare
Awesome, So What Do We Automate?

- Inventory your Processes (SOP Library)
- Evaluate Tasks Using Key Criteria
  o Repetitiveness
  o Time Consumption
  o Complexity vs. Standardization
  o Risk or Error Rate
  o Impact on Productivity
  o Cost-Benefit Analysis
- Prioritize Potential Automation Projects
- Conduct a Proof of Concept (Pilot program)
- Refine and Scale
- Measure Results and Continuously Improve <-- We are here

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Robotic Process Automation in Healthcare
SOP Library

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Robotic Process Automation in Healthcare
SOP Library

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Robotic Process Automation in Healthcare
Return on Investment Toolkit

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Slide 19

Robotic Process Automation in Healthcare Prioritization Grid

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Slide 20

How do you measure the success (ROI) of RPA in your Org?

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Great, Mike what did you Automate?

- Medicaid Look up
  - o 18,000 Patients looked up monthly between 4 staff members
  - o Time to look up a patient ranged from 2 – 7 minutes (average of 3.5)
  - o We broke down the cost, 260 working days 137 tasks per day (35,620)
    - Annual Salary 55,000
    - 55,000 / 36,620 is roughly $1.54 a task
    - Monthly FTE savings is $22,000
- EKG Charge Modifications
  - o Review EKG charges – Determine Modifier (Same Day/Provider)
  - o Time to complete 1 minute
  - o Volume 27000 a month
    - Task breakdown is $1.90
    - Monthly FTE savings at $25,000

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Robotic Process Automation in Healthcare
Automation Program Overview (Jan 2025)

Automations by Lifecycle Phase
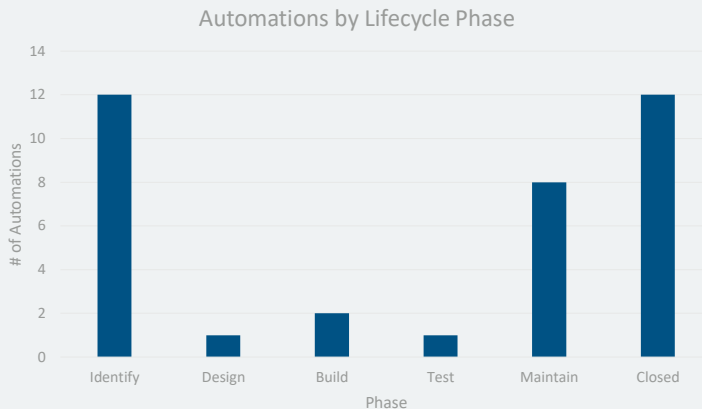
- **Program Goal:** 10 new automations live by 8/31/2025
- **Program Health**: **On Track**
- **Key use case updates**:
  - o **NOA**: ROI approved by Operations Leader and has been moved into "design" phase - estimating starting development in early January
  - o **Claim Status - UHC:** currently in testing, targeting go live week of 12/16
  - o **On deck use cases for design**: appeal statusing, appeal correspondence, PHHS coverage updates, PB claim status
- **Key program updates**:
  - o **Analytics**: emailed Operations for automation specific productivity standards to refine ROI FTE savings
  - o **Maintenance strategy**: Integrated maintenance incidents and ticketing process into Teams - will improve management and tracking of issues
  - o **SLA**: finalized Automation Team:Operations SLA - ready to present to Operations

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Robotic Process Automation in Healthcare
ROI to Date (Jan 13, 2025)

AUTOMATION_NAME	2019	2020	2021	2022	2023	2024	2025	Total
TMHP Medicaid	$44,000.00	$264,000.00	$264,000.00	$264,000.00	$264,000.00	$264,000.00	$22,000.00	**$1,386,000.00**
Chaco/Paco				$84,000.00	$252,000.00	$252,000.00		**$588,000.00**
EKG Charge Modifier					$2,986.80	$253,650.00	$11,715.40	**$268,352.20**
Referrals Epic						$36,536.50	$3,286.25	**$39,822.75**
Interface Errors						$34,616.15	$1,135.05	**$35,751.20**
MSA Redistribute					$226.00	$5,386.00		**$5,612.00**
Referrals Availity						$2,255.00	$176.00	**$2,431.00**
MSA Offset					$398.00	$612.00		**$1,010.00**
Medical Record Epic Download						$709.65	$78.85	**$788.50**
Medical Record Epic Post Note						$344.45	$16.60	**$361.05**
PB Adjustments						$183.00		**$183.00**
Medical Record Availity Upload						$161.85		**$161.85**
HB Adjustments						$36.00		**$36.00**
Total	**$44,000.00**	**$264,000.00**	**$264,000.00**	**$348,000.00**	**$519,610.80**	**$850,490.60**	**$38,408.15**	**$2,328,509.55**

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In one word or short phrase, name the biggest challenge your organization faces in implementing RPA

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Robotic Process Automation in Healthcare
Current Barriers

Barrier	Details	Impact	Recommendation	Addressed in IR Initiative?
Unreliable machines	Frequent, unanticipated power outages at Brookriver. VMs were included in the budget but funds have not been allocated	Automation downtime with difficulty anticipating resolution timeframe. Operations must manually work accounts to avoid delays and backlogs once machines are back online	Utilize virtual machines rather than remoting into machines at Brookriver. Michael received approval on this request but has run into fund allocation delays	Yes
Access barriers	Cannot install extensions (e.g. google authenticator for multi factor authentication) on Managed machines	Automations involving Availity must run on unmanaged machines (not recommended)	Approve google authenticator as an extension on selected machines for automation program	Yes
Epic build delays	There have been delays in tickets for Epic optimizations that impact volume inflow for our existing or new automations (e.g. PB and HB medical records)	Very low ROI for PB medical records automation and inability to move forward with HB medical records automation	Prioritize ticket with Epic IR due to positive impacts on automation return	Yes
Workflows lacking standardization	Lack of standardization in targeted workflows (e.g. free text diagnosis codes impacting NOA and referrals automations)	Low ROI/not a candidate for continued pursuit	Prioritize process improvements and standardization efforts when surfaced by automation program. Assign a resource for automation team to work with on PI efforts	No

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Questions?

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Michael Laukaitis
Michael.laukaitis@utsouthwestern.edu

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