Transforming Patient Care

Geisinger

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Director of Intelligent Automation

About myself

Been a team member of the Innovation and Intelligent Automation Hub (IAH) team since 2020

One of the founding business architects for the automation team.

Instrumental in shaping the organization's automation landscape and optimizing processes to improve patient care and operational efficiency.

Served as a performance innovation consultant within Geisinger's best practice team prior to automation

Hold three master's degrees in information technology, organizational management with a specialization in hospital administration and in business analytics.

Have a strong foundation in automation technologies, Lean Six Sigma methodologies.

Agenda

- Introduction to Geisinger's automation program
- Advice for getting started
- Unique challenges
- Best clinical automations to get started
- High ROI / value clinical automations
- Q+A

Geisinger and The Steele Institute

Geisinger Health System

A renowned integrated healthcare delivery system with approximately 26,000 employees, including 1,700+ physicians, spanning 10 hospital campuses, Geisinger College of Health Sciences conducts more than 1,400 clinical research studies, and a health plan serving more than half a million members.

On March 31, 2024, Geisinger became the first member of Risant Health, a new nonprofit charitable organization created to expand and accelerate value-based care across the country.

The Steele Institute for Health Innovation

Established in 2018, develops transformative, scalable, and measurable solutions to improve health outcomes and reduce costs through innovative, human-centered design.

The institute leverages Geisinger's assets, such as clinical and genetic data, a culture of innovation and integrated system, to solve the defining health problems of our time by accessing new capabilities in AI, machine learning, data analytics and automation.

Intelligent Automation Hub

The IAH has successfully implemented numerous automated solutions, resulting in significant operational cost reductions and enhanced efficiency. Utilizing advanced technologies, the IAH has accelerated operational efficiency, reduced full-time equivalent (FTE) needs, and educated the organization on leveraging automation to improve patient care and staff productivity.

2024

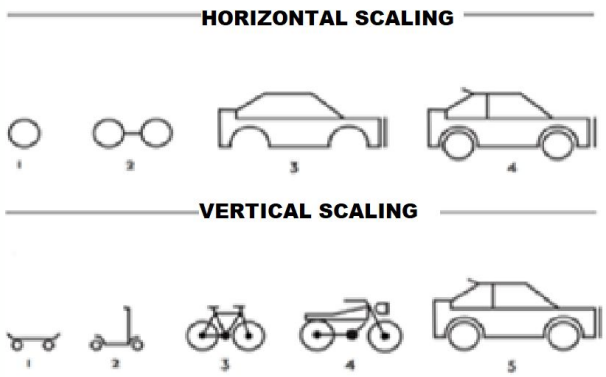
~150 automations, including:

- Unattended and Attended RPA
- Communications Mining
- Low Code Apps
- Document Understanding
- Tableau
- Microsoft 365

Annualized benefits:

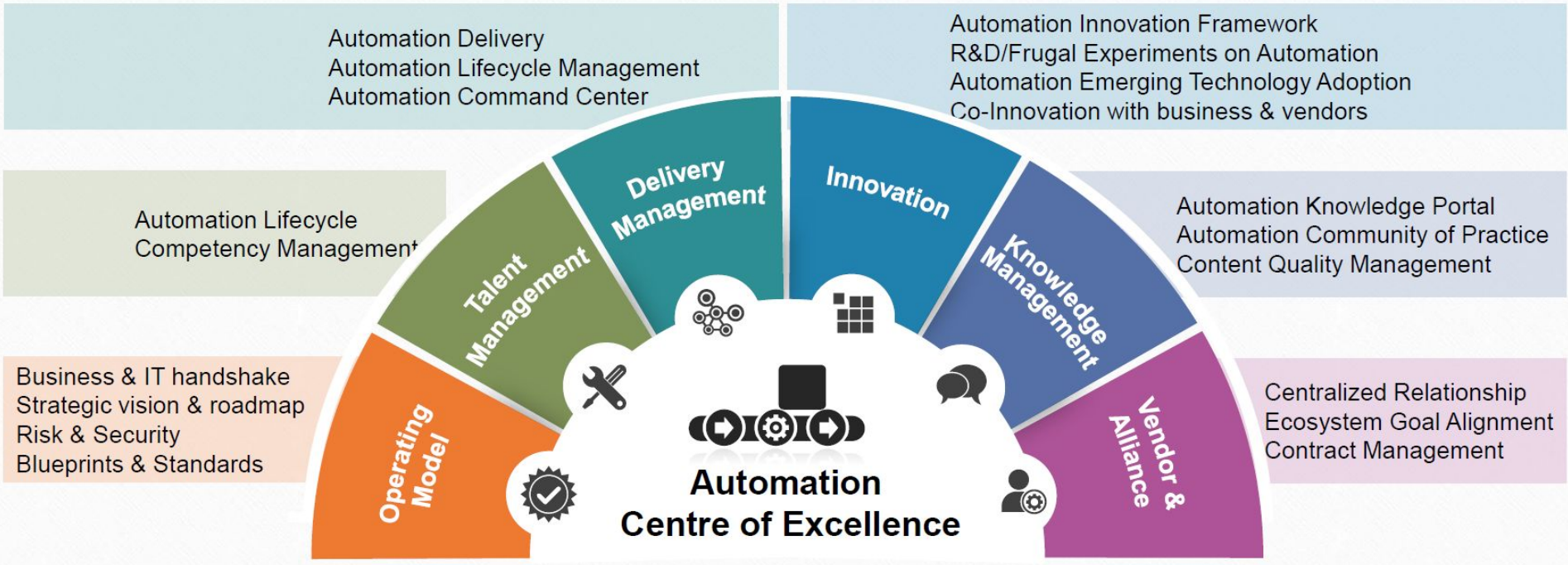
- **$12M+ ROI** including cost avoidance, cost savings and revenue generation.
- **230K+ hours** including staff time avoidance and savings
- **300+ intakes** for evaluation and solutioning

Culture of Innovation



Geisinger Automation COE

IAH is the hub that provider the required structure, governance and discipline to achieve business goals with automation



Our Stakeholders

Innovator	Early Adopter	Early Majority	Late Majority	Laggards
Clinical Automations	GHP (Health Plan)	Health Information Management	Finance and Accounting	Supply Chain
Care Management	Revenue Cycle Management	Radiology	School of Medicine and Nursing	Health Information Technology (HIT)
Pharmacy	Contact Center		Human Resources	
			Marketing	
			Quality Safety	

What we look for

Emphasis on the importance of selecting and prioritizing the use cases

Projected Annual Realized Benefits

- Cost Savings
- Cost Avoidance
- Revenue Generation

Prioritization Matrix

- Does it align with stakeholders' business strategy?
- Is it scalable?
- What is the time sensitivity?
- What are the financial benefits?
- Is it viable long term?
- What is the complexity?
- What is the stability?

How to start

Get help where you need it

Start with contract staff that have the skills and understanding of automation to build your initial automations.

Start your team small and have your contract employees train and guide them.

Utilize your vendor's resources to assist you with training and implementation of your first projects.

Get your organization on board

Get a buy in from 'influential' stakeholders to be your promoters and supporters

Train/Train/Train – connect with department leaders and excite them with the art of the possible

Do not start with complex automations.

Gather proven use case ideas and approach your stakeholders. It may be hard for them to come up with automation ideas - be proactive.

Ensure to have specific milestones and sign offs for your automation journey.

Partner with finance as calculating savings. Emphasize the financial benefits you will bring to your organization.

Challenges to overcome when starting

Fear of overwhelming the existing applications (fear of Epic EHR crashing due to bots, etc.)

Fear of employees losing their jobs due to automation

Fear of the ‘unknown’ – not trusting bots can do humans tasks

Fear of data security / privacy concerns

Limitations of allowing bots in certain applications that required reviews and approvals

Getting buy-in from different committees

Finding the ‘right’ use cases with high ROI

Educating our staff to understand the “art of the possible” when working on solutions

Beyond the financial impact

For Clinicians

Automation technology in clinical care helps reduce the challenges of monotonous tasks and increases the time nurses/providers can spend with patients

- Examples: Nursing chart audits, automation of well child patient instructions, signing of necessary referral prior to specialty visits, in-basket refill management

It also optimizes several important operational processes

- Example: Upcoming ICU bed availability project that will create flag for physicians to downgrade patients to a MED surg bed as soon as patient qualifies

For Patients

Automation has improved the efficiency and accuracy of health care delivery

- Examples: Act112 letters, no-show letters, well-child visit instructions, claim submissions

Powerful use cases we will explore

No Show Alerts

You can identify patients that no show for their appointments and send them alerts using their communication preferences (text, call, letters, mychart, etc.) and educate them on the importance of cancelling and rescheduling. You can also provide them the opportunity to reschedule from the alert.

Nursing Audits

Automating compliance audits for patient charts

- Suicide Watch
- Violent Restraints
- Non-Violent Restraints
- Nursing Weight Audits
- And more

Nursing Audits

Automation Revolutionizing Clinical Decision Support (CDS) at Geisinger

Background: This automation initiative aims to revolutionize nurse auditing by ensuring timely completion and upholding stringent quality standards.

What it does: Digital algorithms are assigned to navigate electronic health records (EHRs) almost in real-time to identify patients under specific conditions, such as those requiring non-violent restraints or those on suicide watch. These algorithms then check for necessary orders and flowsheet completions per policy requirements to determine compliance.

Automations streamline the review of admitted patients, identifying and addressing missing information, and ensuring it's promptly accessible online. This enables real-time access for nursing leadership. Compliance dashboards offer valuable insights into audit compliance rates across various units, hospitals, and regions, empowering nurse leaders to support documentation compliance within the EHR, thus enhancing patient safety.

200K+ hours saved
1M+ transactions

Nursing Audits Continued

Speed and Compliance

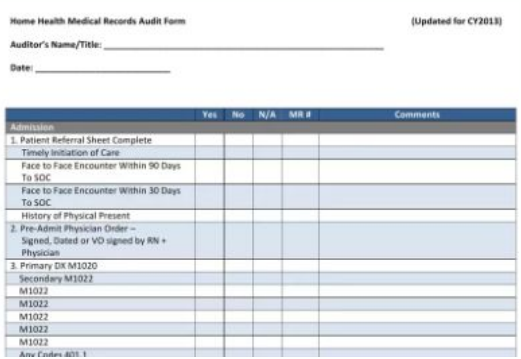
Individual chart audits are completed close to real-time

Enables the organization to achieve a nearly 100% completion rate in quality audits

RPA eliminates delays and errors inherent in human manual processes

Standardization

A standardized method for completing each chart audit (all patients in all hospitals) ensures consistency and adherence to high-quality standards across the board



Home Health Medical Records Audit Form (Updated for CY2013)

Auditor's Name/Title: _____

Date: _____

	Yes	No	N/A	MR #	Comments
Admission					
1. Patient Referral Sheet Complete					
Timely Initiation of Care					
Face to Face Encounter Within 90 Days To SOC					
Face to Face Encounter Within 30 Days To SOC					
History of Physical Present					
2. Pre-Admit Physician Order – Signed, Dated or VO signed by RN + Physician					
3. Primary DX M1020					
Secondary M1022					
M1022					
M1022					
M1022					
M1022					
M1022					
Any Codes A01.1					

Workforce

Enables nursing managers and leaders to focus their time and expertise on initiatives to improve patient outcomes

Job satisfaction by removing routine tasks

Questions and answers

Geisinger