

Super Powers of Artificial Intelligence

How a digital workforce is transforming operations and impact at MedStar Health

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Today's Agenda

- MedStar Health background
- The case for change: identifying the need for intelligent automation
- Identifying & building a successful partnership
- Accelerating value with a digital workforce
- Case studies: Driving results and transformation across the enterprise
- Paving the way forward: impact, cultural change, and lessons learned

Patient Financial Services Overview (PFS)

Centralized in 1997

Revenue cycle operations:

- 10 Acute Facilities

- 53 outpatient locations in
National Rehabilitation Network

435 Employees



MedStar Health



THE NEED FOR INTELLIGENT AUTOMATION

GETTING STARTED WITH ROBOTIC PROCESS AUTOMATION (RPA)

The symptoms of inefficiency



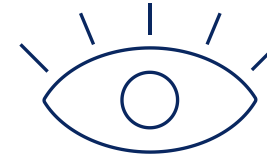
The cure?
A **digital employee**
powered by *artificial
intelligence*.

Designed to operate as
an **analogous human**,
interacting with systems
and people, and
integrated into our
workforce

BRAIN
(Machine Intelligence)



EYES
(Computer Vision)



HANDS
(RPA)

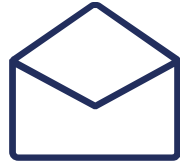


Knowledge and Compassion **Focused on You**

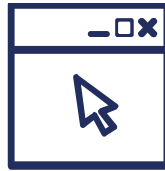
A few things RPA can do ...



Fill in or
complete form



Open email and
attachment



Scrape data from
the web



Collect social
media statistics



Connect to
system APIs



Log into
applications



Make
calculations



Copy
and paste



Follow “if/then”
decisions/rules



Read and write
to databases



Extract structured
data from docs



Move files
and folders

WHY RPA?



Speed



**Labor efficiency
and savings**



**Capacity
creation**



**Increased accuracy,
quality and stability**



**Financial
impact**



**Improved analytics
and insights**

IDENTIFYING AND BUILDING A SUCCESSFUL PARTNERSHIP

5 Questions to ask when evaluating automation vendors

1

What economic value can I expect from your solution?

2

How will your team prevent your technology from going offline?

3

How does your solution support continuous improvement when workflows, processes and policies continuously evolve?

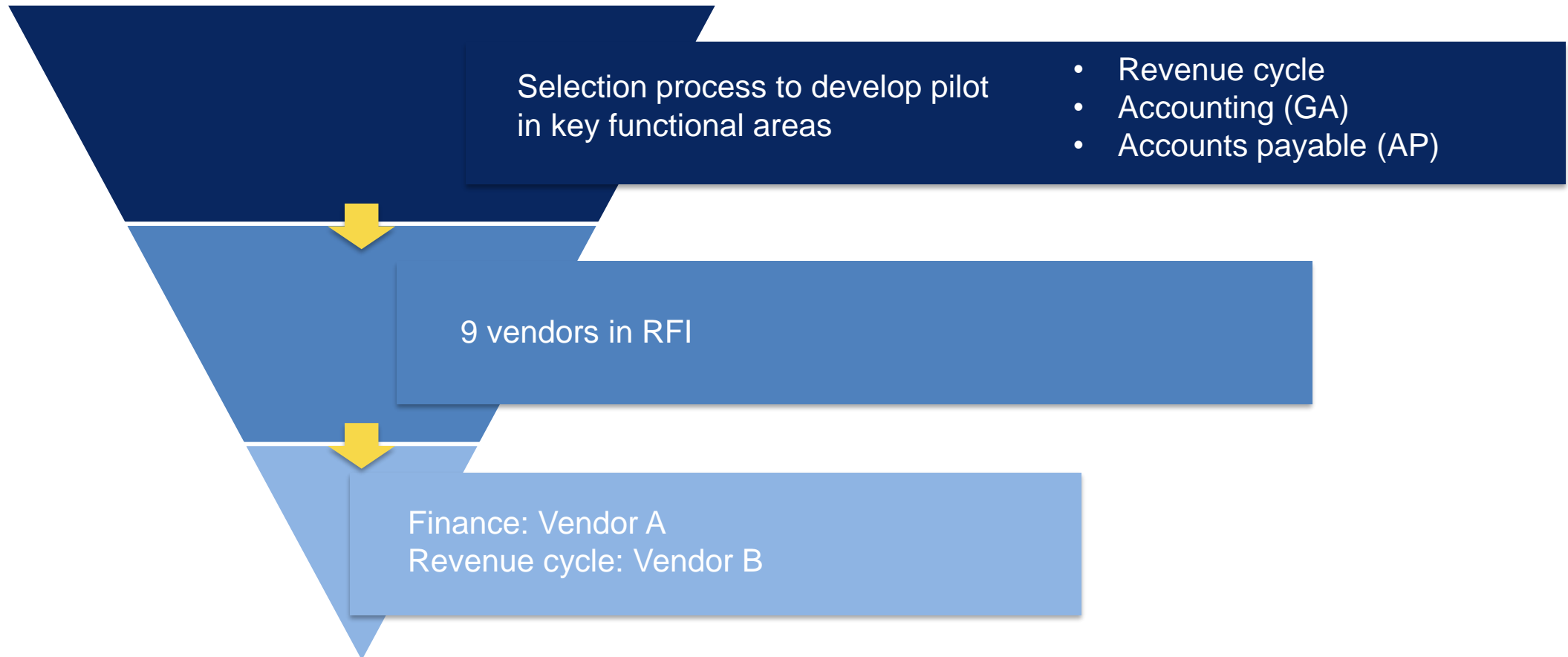
4

How will your solution get smarter over time?

5

What strategies have you worked with your customers on to repurpose existing staff?

We began our journey through a pilot in finance and identified two front runners for our initial deployment



MedStar Health Partners

FINANCE

Vendor A

- Pure RPA
- Choice of RPA software
 - Selected 1 primary vendor
- Separate fees for annual licenses, development, and support of bots
- Engagement also focused on governance, opportunity prioritization

REVENUE CYCLE

Vendor B

- RPA, CV, + Machine Intelligence
 - Deep learning and global awareness enables RPA to get smarter over time
- AI as a Service
 - Proprietary software
- All-inclusive fee includes development, support, and performance improvement
- Unlimited 'run time' or capacity
- Healthcare expertise and HIPAA compliance

CRAFTING A ROADMAP TO DRIVE SUSTAINABLE VALUE

We worked with our partners to chart our automation roadmap - with the goal of achieving quick wins and accelerating value creation



What makes a strong automation candidate?

HIGH VALUE

High value automations generate significant value to the business

Capacity Creation

Process Quality Improvement

Cycle Time Improvement

Customer Impact

Other Value Levers

HIGH EASE OF IMPLEMENTATION

Low complexity automations are simpler to design, configure, and maintain

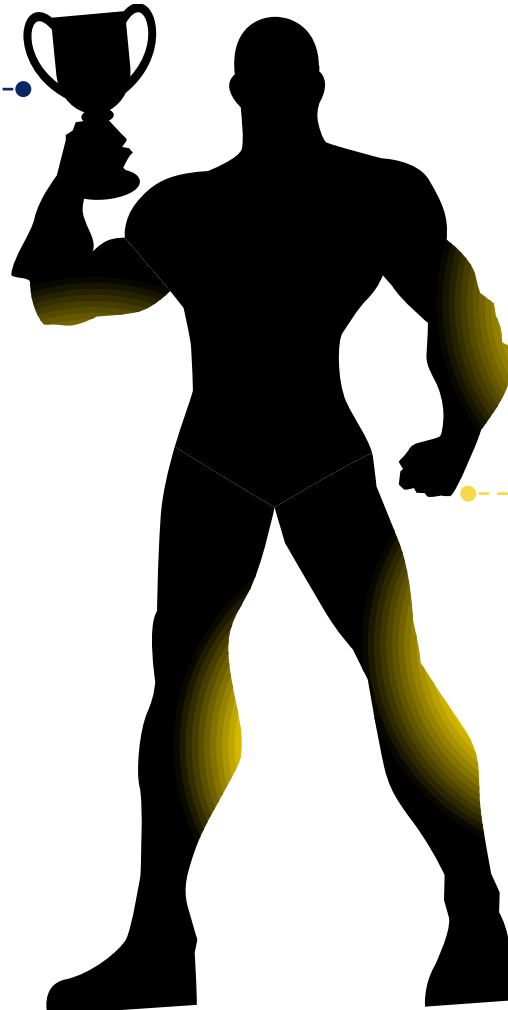
Data Integrity

Rule Objectivity

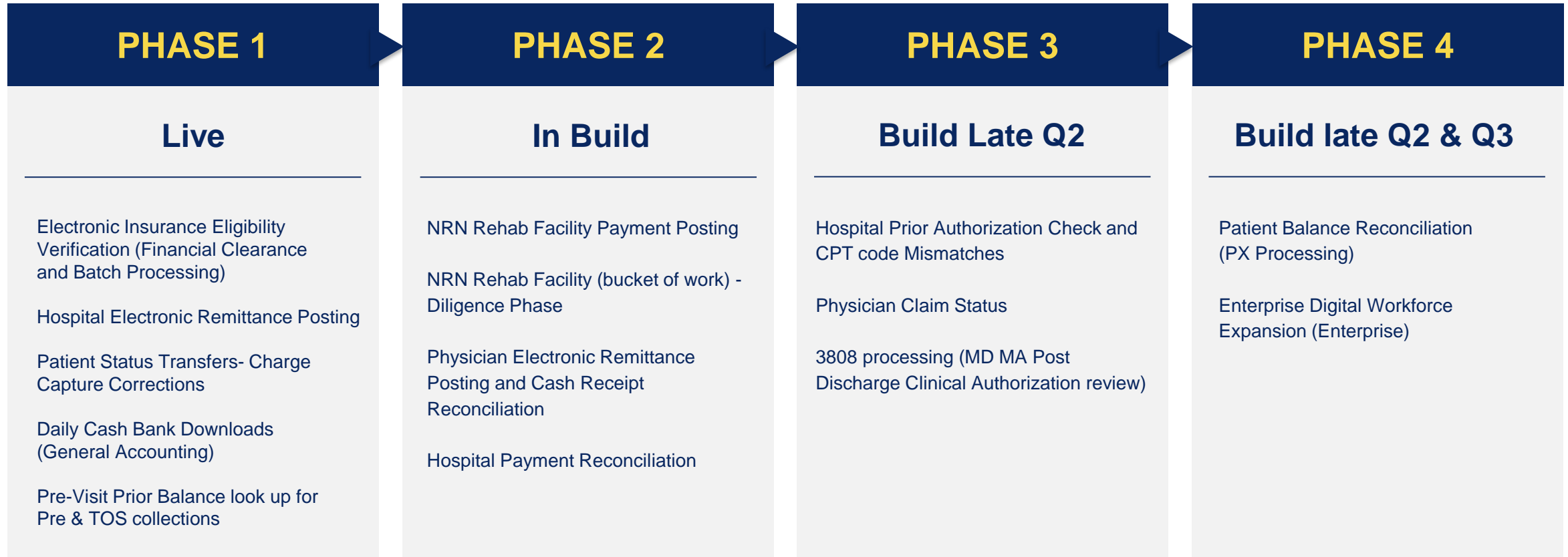
Process Delivery

Process Simplicity

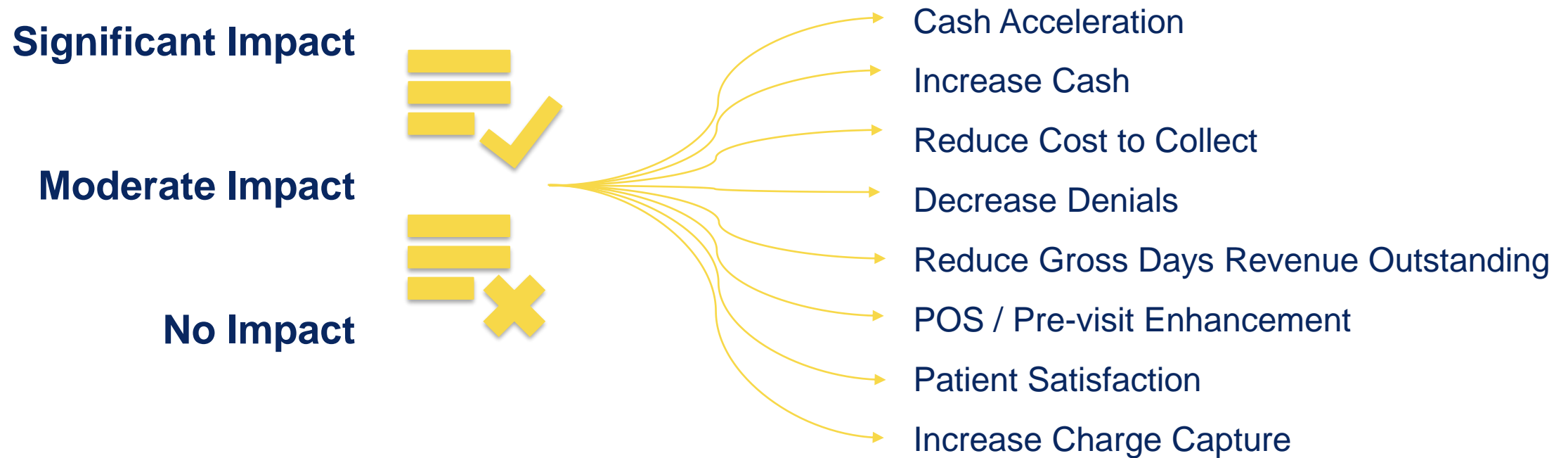
Applications



Medstar's Revenue Cycle Roadmap



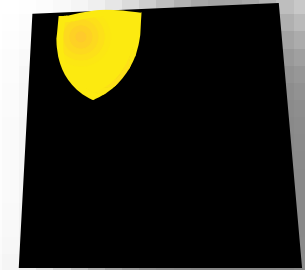
For our revenue cycle implementation, setting baseline KPIs helped us prioritize and set improvement targets - aligning on post-implementation expectations



DELIVERING RESULTS AND TRANSFORMATION ACROSS THE REVENUE CYCLE

TWO CASE STUDIES OF AUTOMATION IN ACTION:

- 1 CHARGE CORRECTIONS
- 2 835 CASH POSTING, RECONCILIATION & ZERO REMITS



Case Study 1: Automation in Action

Charge Corrections/Patient Status Transfers

THE CASE FOR CHANGE	BENEFITS OF A DIGITAL WORKFORCE
Labor inefficiency <i>high cost to collect</i>	Working 24/7 in 10 facilities
	250,000+ transactions in 3 months
	Reallocated 2 FTE
Missed revenue	\$4.7M inpatient pharmacy revenue improvement
	Reduced late charge billing
Compliance risk	Reconciliation daily with 99% accuracy rate
	Billing compliance

Case Study 2: Automation in Action

835 Electronic Remittance Processing (Wires, Lockbox and Zero Remit)

THE CASE FOR CHANGE	BENEFITS OF A DIGITAL WORKFORCE
Processing time for 835 ERAs	24 hours ➡ 90 minutes
Labor inefficiencies	4 FTE backlogged ➡ 4 FTE repurposed to higher value work Ability to process all zero balance remits
Burden from multiple payers	20% reduction in payment issue forms over 3 months
Delays in receiving split bank reports	3 hour advanced receipt of bank reports across facilities

PAVING THE WAY FORWARD: IMPACT, CULTURAL CHANGE, AND LESSONS LEARNED

MedStar Overall Results with RPA



HARD SAVINGS

\$1.1M annual savings
(net of fees) in pilot

25 FTEs reduced
in the FY20 budget



PRODUCTIVITY GAINS

Time to impact: first **revenue cycle**
go-live within a month

Digital workforce up to **60x**
faster than humans

Expanded capacity to do new work

MedStar Overall Results with RPA

As of fiscal year end 2019, the RPA bots have ...

3,000

Worked hours

5,000+

Processed
journal entries

900

Completed account
reconciliations

575+

Researched vendor
statements

250

Validated and uploaded
AP spreadsheets

198k

Processed eligibility
transactions

1,100

Average charge
capture transactions

90%

Processed
electronic payments

... in less than 4 months!

CULTURE

RPA requires organizational transformative change on a great level, and this involves changing the culture of an organization to one that **embraces and manages change** and **engages stakeholders and employees** every step of the way.

– Booz Allen

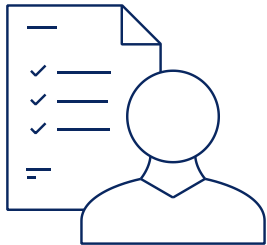
Proactively managing an evolving workforce

“No one was hurt in the making of this movie”



SMART BUDGETING

Planned for staffing budget reduction due to anticipated digital workforce impact



JOB REALLOCATION

Staff impacted were provided opportunity to transition to new roles with PFS
PFS Held job fair to help employees find exciting, higher value work

Our keys to success

MANAGEMENT & GOVERNANCE

Change agent champion

Leadership engagement

Strategy for **staff augmentation**

Forward-looking **budget projections**

ENGAGEMENT & COMMUNICATION

Staff involvement from the start and empowered to identify opportunities

Roadshow for awareness and use case ideas

Town halls

Job fair to help identify higher value work for staff

Feedback mechanisms & sharing

PROCESS OPTIMIZATION

Roadmap planning & prioritization

Quick wins with high volume repetitive processes

Optimize first, then build

Agile methodology

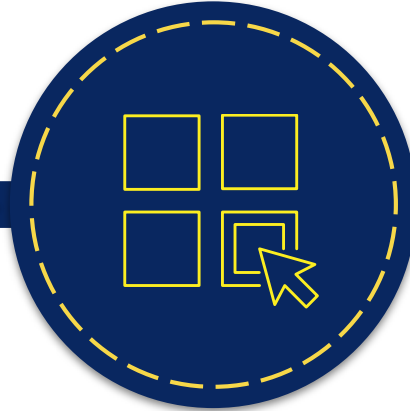
Lessons Learned



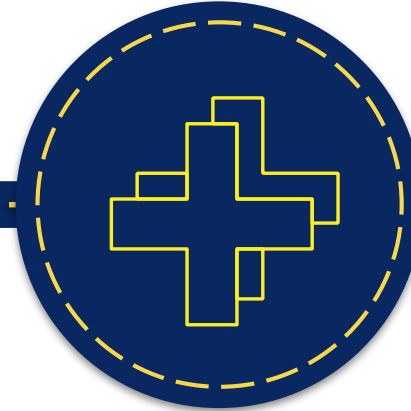
Look for digital
workforce
opportunities



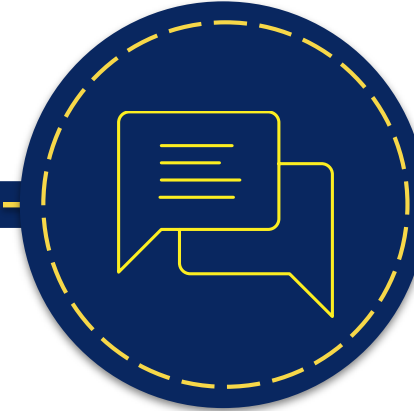
Bring people
along - change is
a journey



Optimize and
standardize



Give bots
some TLC



Partner
with IT

What's next for MedStar Health?

- Build and deploy remaining phases of initial automation plan
- Identify and assess other candidate processes for automation (CPAs) in revenue cycle and expand across enterprise
- Enhance existing digital workforce analytics
- Continue to train digital workforce to take on more work and advance capabilities