

2023 VIZIENT CONNECTIONS SUMMIT

TOGETHER
we will soar

SEPT. 18–21, 2023
WYNN, LAS VEGAS

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Chipping Away to Stop Sepsis

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Panelists

Caitlin Vander Neut, MSN, RN, CNRN

Senior Business Intelligence Analyst

Soonyip Alec Huang, PharmD

Senior Business Intelligence Developer

Stephanie O'Reilly, MSPT, MBA

Manager, Enterprise Quality and Safety Data Analytics

Jefferson Health, Philadelphia, Pa.

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**Kristina Poole, MS, RN** <sup>1</sup>

Clinical Specialist, Sepsis Coordinator

**Miriam Fischer, MD, FACEP** <sup>1,2,3</sup>

Attending Emergency Medicine Physician, Sepsis Physician Lead

**Tony Calabria, MA, CPHQ, CSSBB** <sup>2,3</sup>

Senior Director, Hospital Quality Programs and Clinical Quality

<sup>1</sup> MedStar Washington Hospital Center; <sup>2</sup> MedStar Institute for Quality & Safety; <sup>3</sup> Georgetown University School of Medicine

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# Learning objectives

- Describe evaluation methods for identifying patients at higher risk of mortality.
- Discuss the use of existing communication technologies to automatically alert care providers to patients identified as possibly septic.
- Discuss clinical practice guidelines to enable advanced practice providers to work at the top of their licensure.

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# Chipping Away to Stop Sepsis

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4,615 Credentialed physicians
(2,141 are employed)

9,300 Nurses (full/part time)

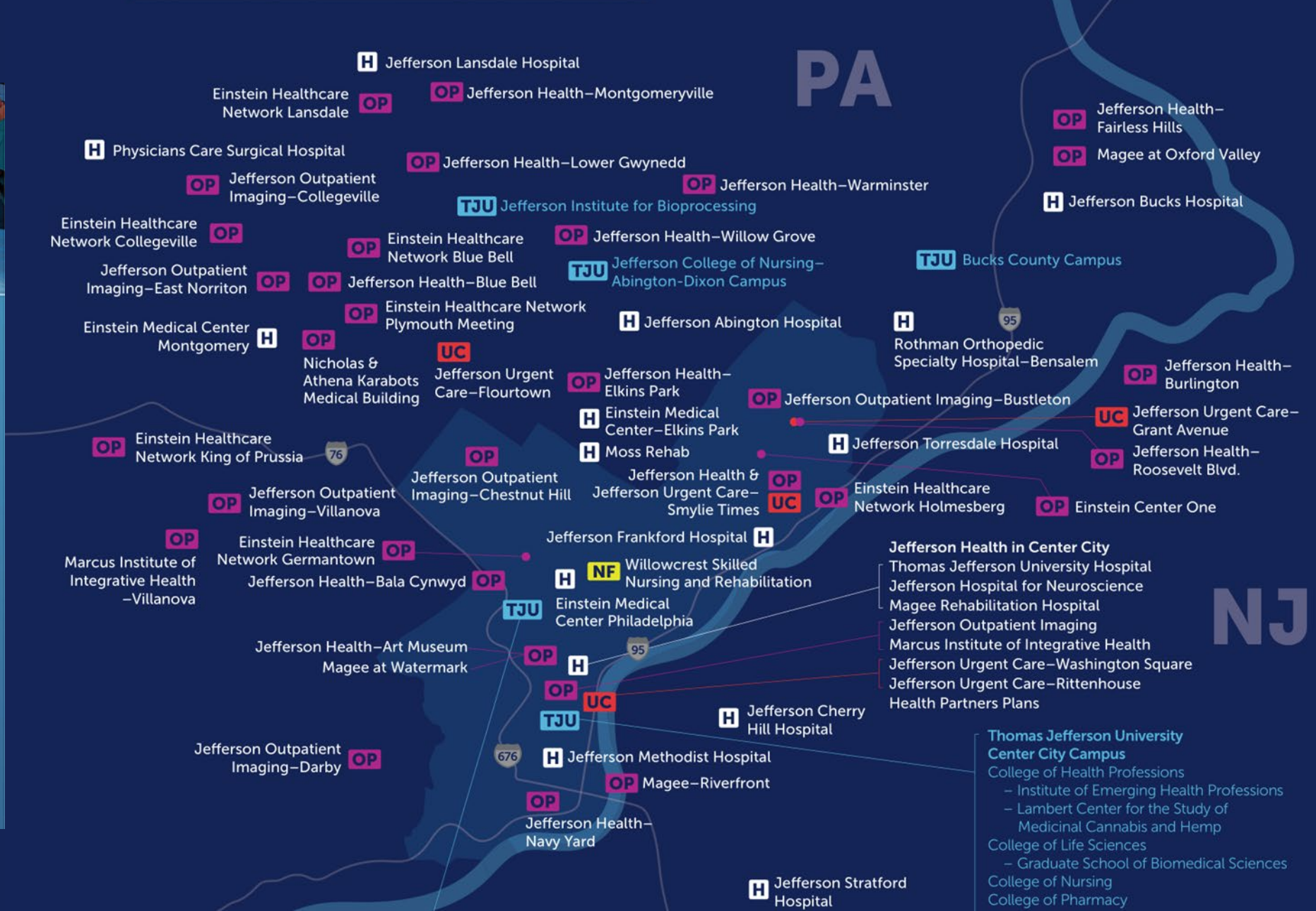
50+ Outpatient and
urgent care locations

4 Magnet®
designations

- Albert Einstein Medical Center
- Jefferson Abington Hospital
- Jefferson Health – New Jersey
- Thomas Jefferson University Hospitals

5.6 million
Outpatient visits

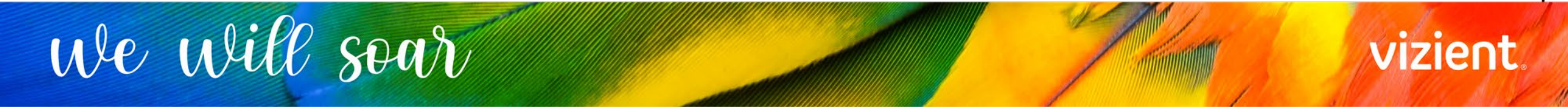
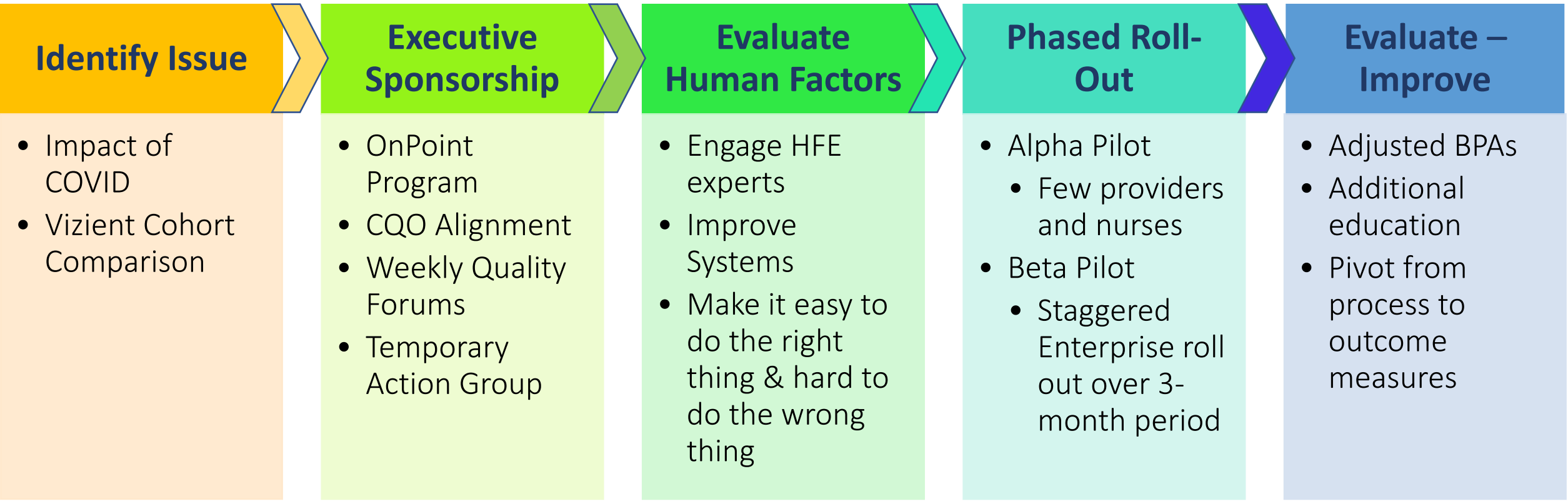
Data is FY22 – updated January 2023



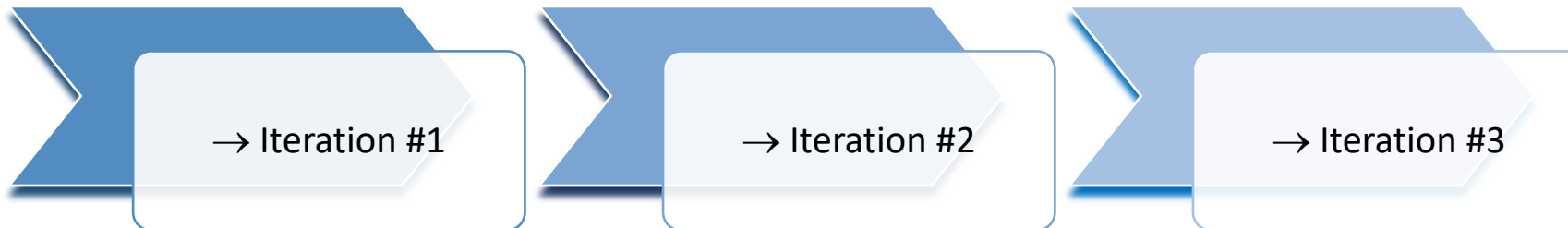
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Call to action



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- **Human Factors Experts**
 - Decrease cognitive load
 - Sepsi the Owl
- **Process Changes within EHR**
 - BPAs
 - Navigators
 - Checklists
 - Order Sets

⚠ This Patient has two or more SIRS or qSOFA Criteria. NOTIFY PROVIDER IMMEDIATELY

Sepsis Definitions **Sepsis BPA Workflow**

1. NOTIFY PROVIDER immediately to evaluate the patient
2. Go to the **SEPSIS NAVIGATOR LINK BELOW**, open and complete the Sepsis Screening
3. If ED Provider is unavailable, you may enter the prechecked orders from the Sepsis ED Order Set per policy.



#SepsisSmart

Recent Patient Data

	11/17/2021
	1722
Pulse:	120 !
Temp:	105 °F (40.6 °C) !

[Sepsis Navigator](#)

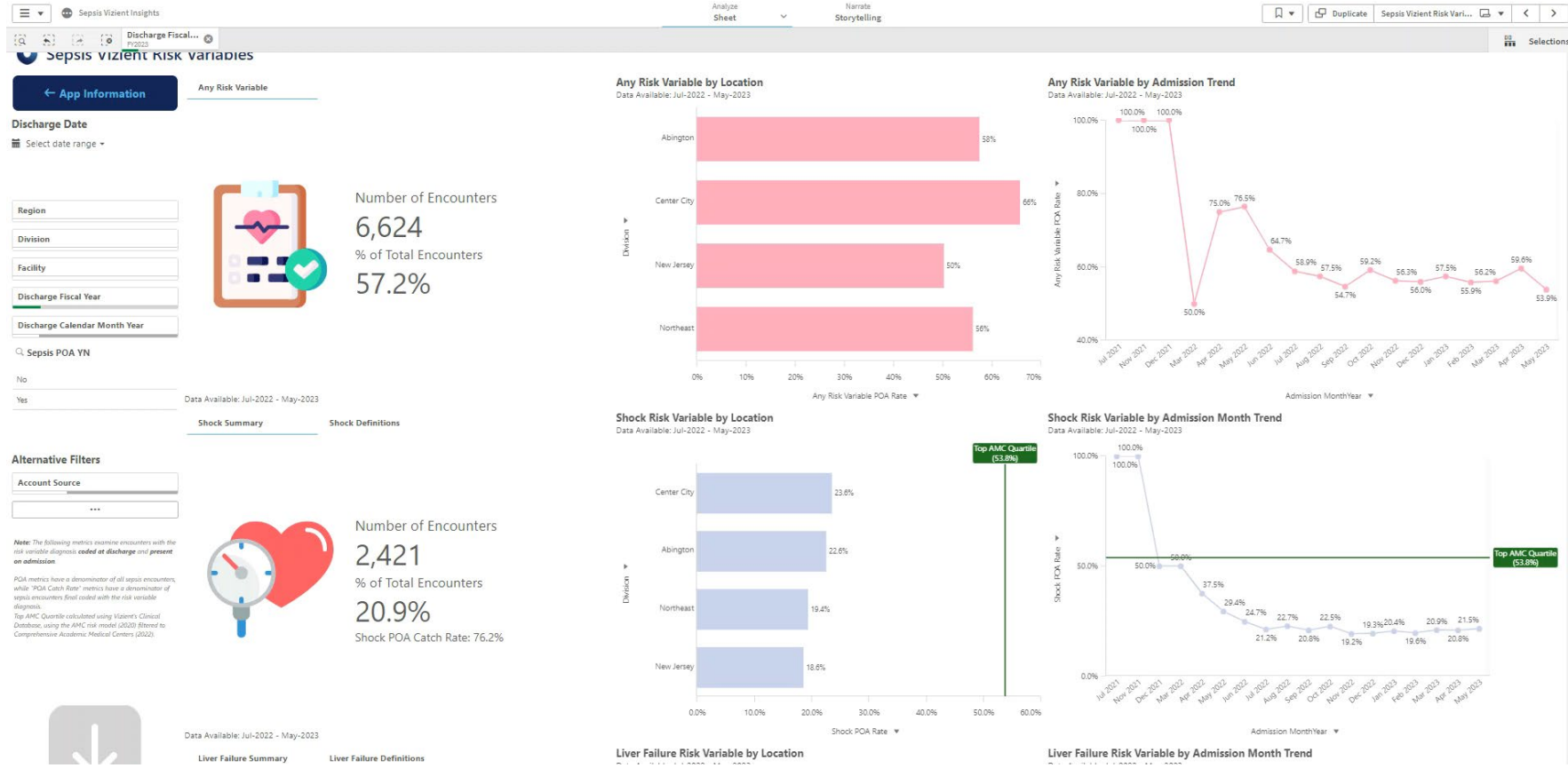
Acknowledge Reason



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Sepsis Vizient insights



O/E Outcome Measures

- Mortality
- LOS

Improving Accuracy of the “E”

- Risk variable capture
- Top quartile benchmarks

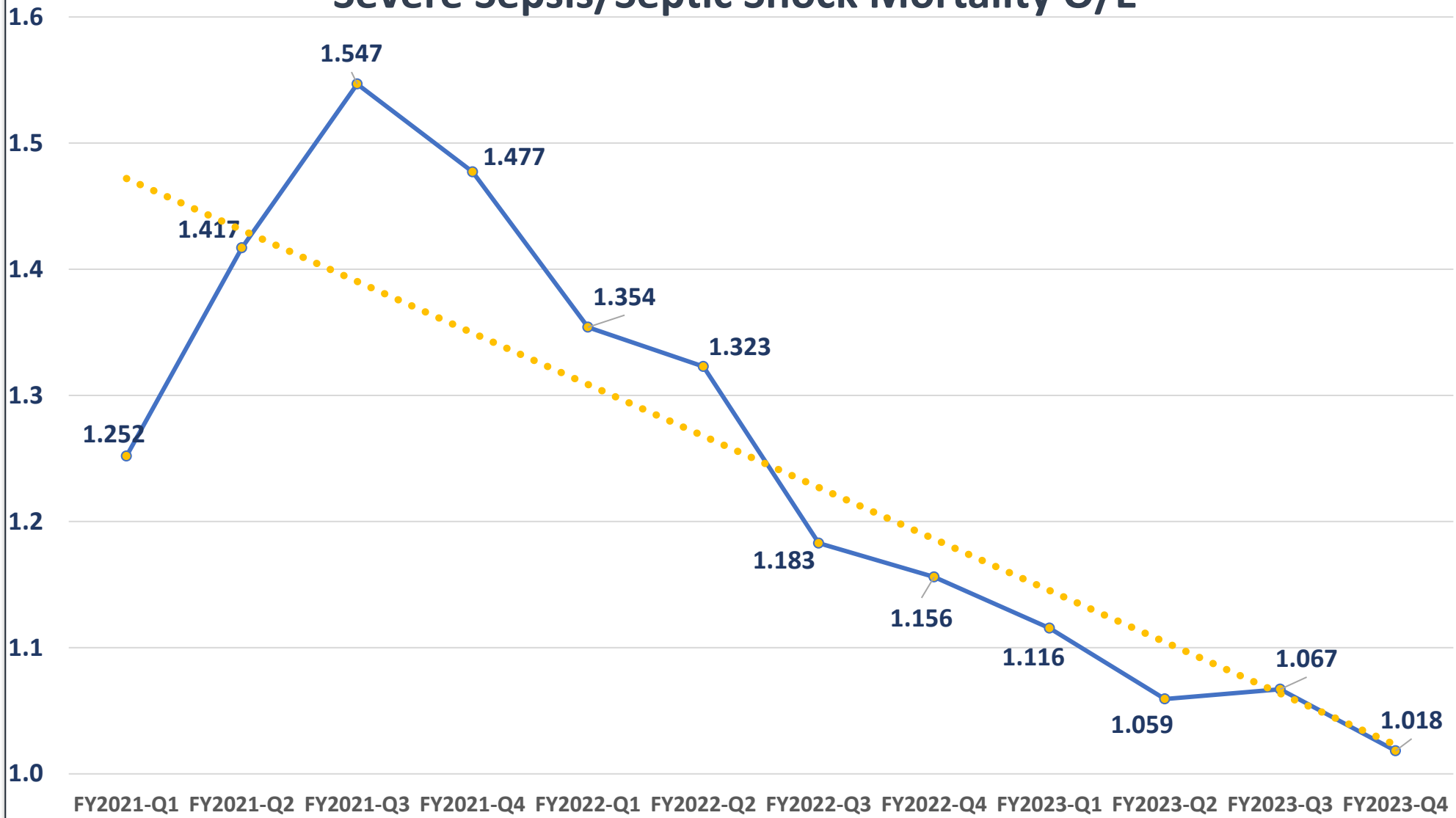
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Severe Sepsis/Septic Shock Mortality O/E



Does not include Einstein

600+
Lives Saved
between FY21 and FY23*

~\$30M
Cost Avoidance
between FY21 and FY23*

25%
Sepsis Mortality Reduction
between FY21 and FY23*

* FY23 represents 11 months (Jul – May); data has been annualized

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MedStar Health

WE ARE ADVANCING

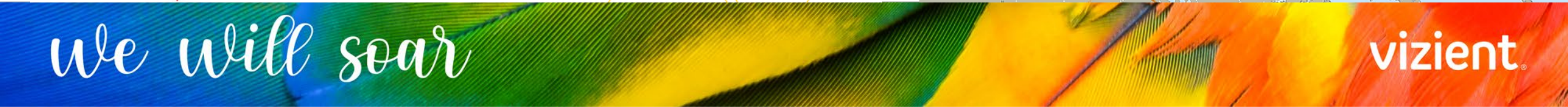
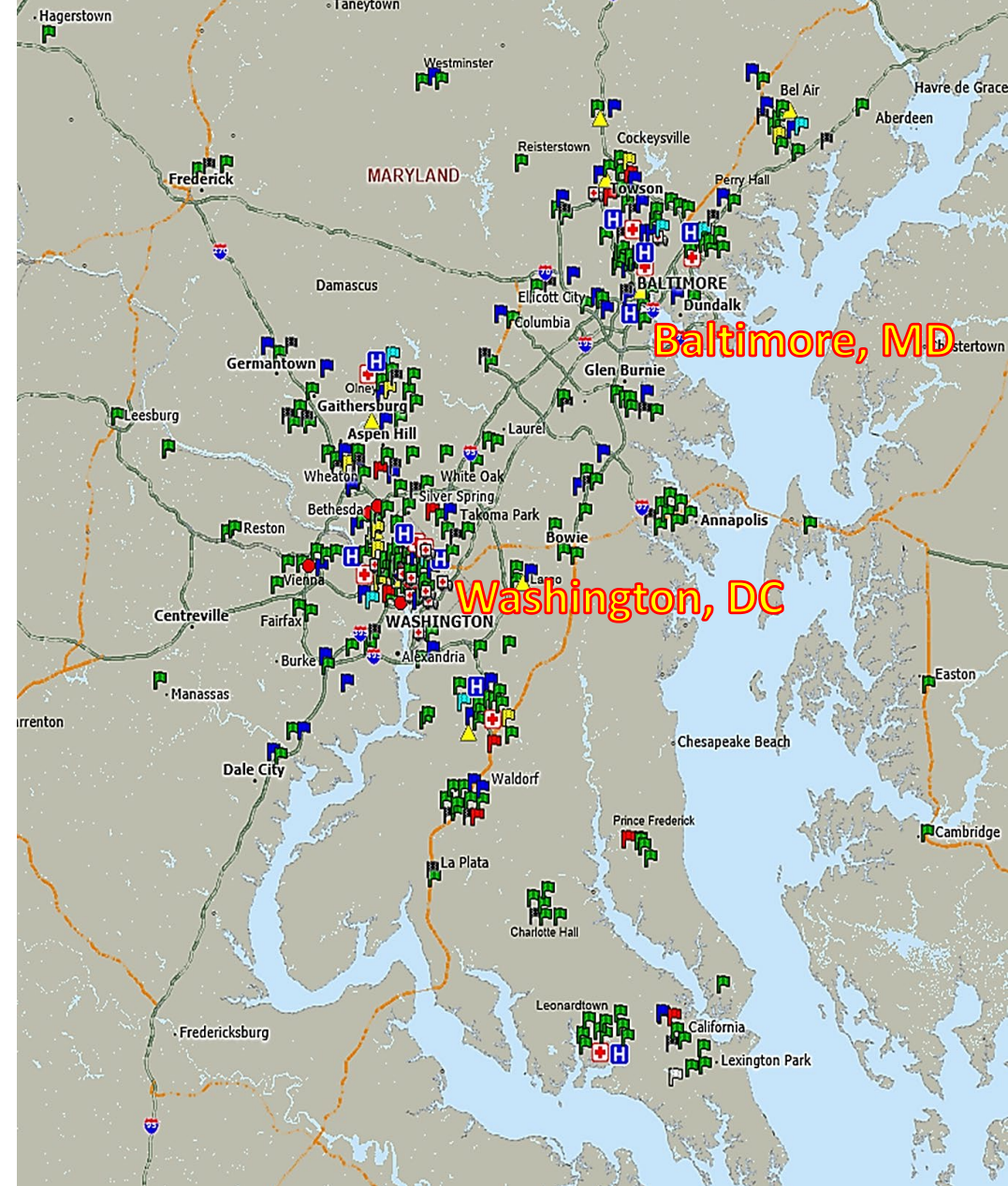
HEALTH

Discover.
Innovate.
Learn.



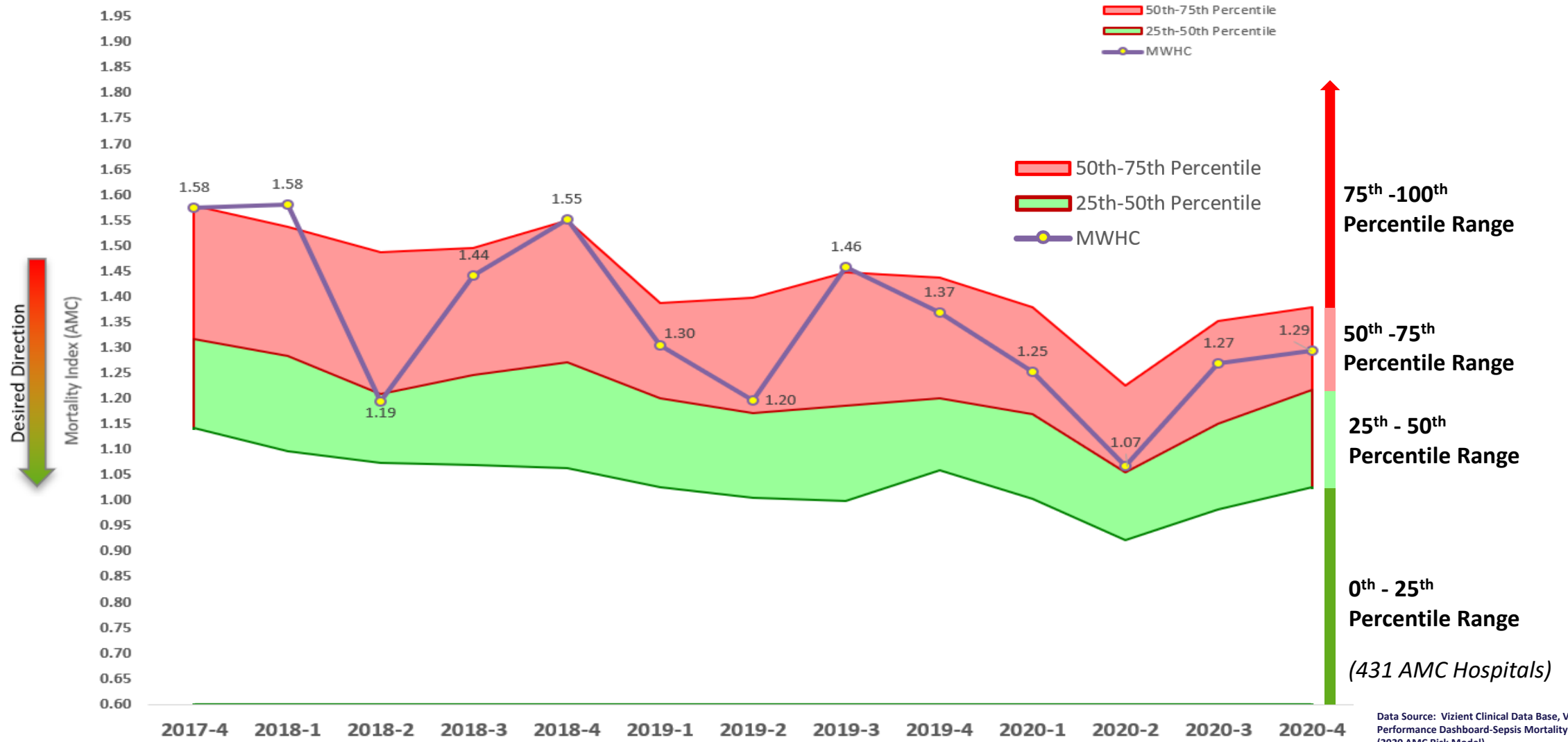
The only non-profit health system in the country covering teams in each of the **five major sports leagues**

Home to the **largest** center for human factors in a healthcare system

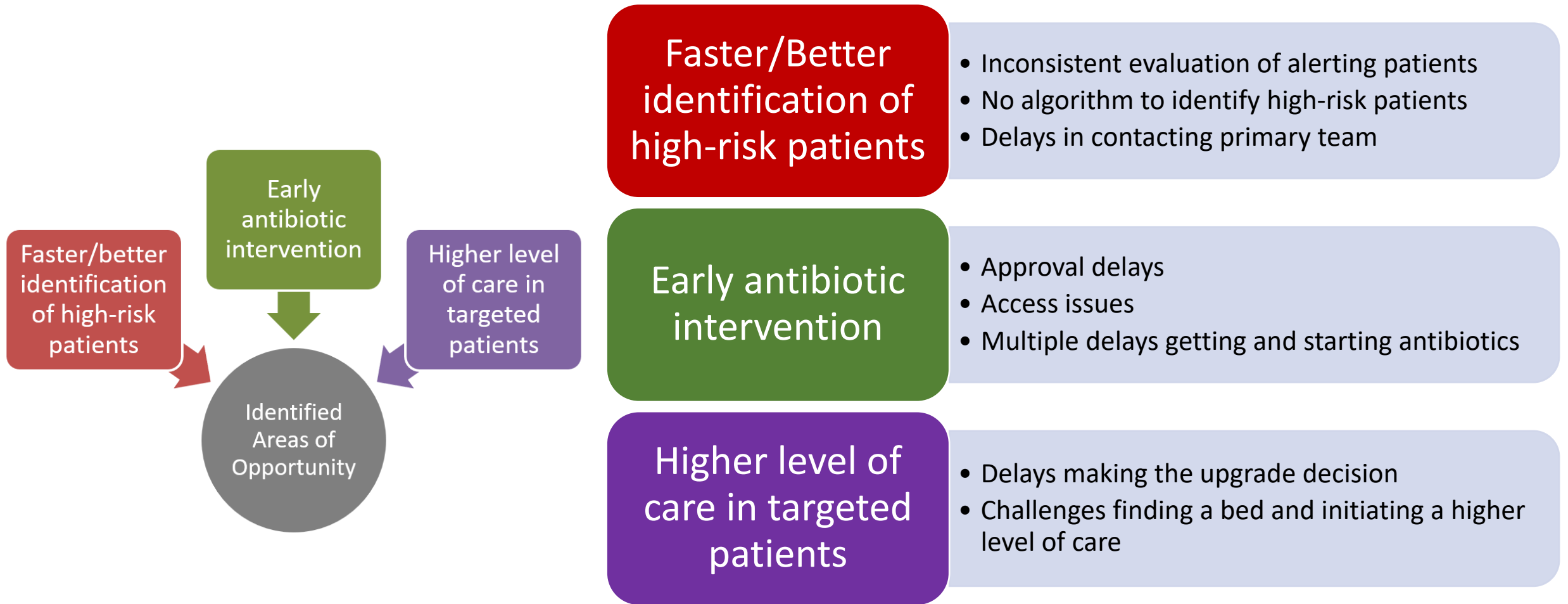


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VIP sepsis mortality (AMC comparison)



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Workflow redesign – Changes and innovations



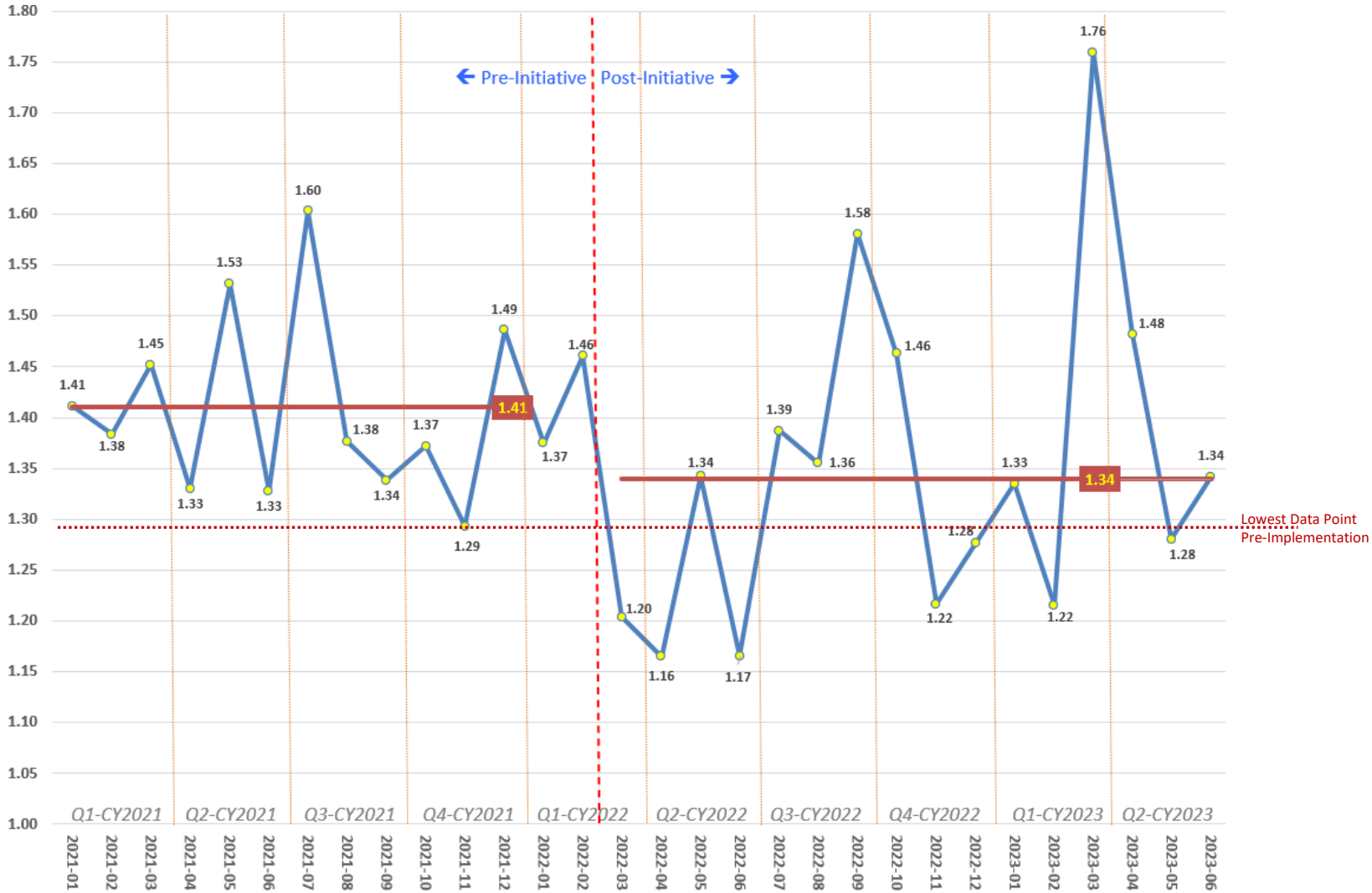
* High-risk Patients: qSOFA+ and/or lactate ≥ 4 .

Area of Opportunity	Change in Workflow	Innovation
Faster/better identification of high-risk patients <small>(qSOFA: quick Sequential Organ Failure Assessment)</small>	Primary MD receives sepsis alert	Created a technological pathway to automatically notify primary teams of a sepsis alert
	Implement a bedside risk-stratification assessment for all alerting patients: qSOFA – A validated tool for predicting non-ICU patient mortality	A screening assessment for the RN to complete is embedded in the EHR
	A lactate is rapidly completed by the bedside team after a Sepsis/SIRS alert	Wrote, implemented, and educated to the new sepsis response protocol
	Add an alert for a documented +qSOFA screen/lactate ≥ 4	Created a technological pathway to notify all potential team members of a newly identified high-risk patient
Early antibiotic intervention	Sepsis RN is responsible for executing initial sepsis care	Wrote and implemented a sepsis response protocol identifying clear roles and responsibilities for each key stakeholder
	Empower the sepsis provider to initiate sepsis resuscitation care if they deem appropriate without primary team consultation	The new sepsis response protocol allows all to practice to the top of their license
	Administer antibiotics without waiting for cultures	Defined one attempt for blood culture collection as two sticks and to continue culture collection attempts for 1hr post antibiotic initiation
	First line antibiotics available on nursing units	
	Pharmacy Team involvement in sepsis response, focused on high-risk patients	
	Develop pathway to expedite IV access and antibiotic administration	Developed and implemented an automatic blood culture order for high-risk patients
Higher level of care in targeted patients	Sepsis provider contacts ICU triage for high-risk patients	The new sepsis response protocol includes algorithms for various scenarios
	ICU triage assumes role of searching for ICU bed	Streamlined process for escalating the level of care

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VIP sepsis mortality (Pre & post-implementation)



Estimated Lives Saved

35

(Post-Implementation Period: Mar-2022 to June-2023)

Data Source: Vizient Clinical Data Base, Vitals in Performance Dashboard-Sepsis Mortality Index (2020 AMC Risk Model)

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Open dialogue

We invite your questions at the microphones

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Lessons learned and key takeaways – Jefferson Health



Lessons learned

- Iterative approach - don't let perfect be the enemy of good
- Data starts conversation - good discussion leads to new ideas and new data
- Be flexible - when something doesn't work, pivot your plan

Key takeaways

- Defining time-zero shouldn't stop you from getting started
- Work with frontline staff to fit the EHR to the clinical workflow
- High sensitivity upfront, increase specificity overtime

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Lessons learned and key takeaways – MedStar Health

Lessons learned



Incorporate a Lean Daily Management System into life cycle of project



Understand the governance processes for implementing new policies & technology



Plan for sustained education as well as workflow management



Include frontline subject matter experts



Consult with clinical subject matter experts



Encourage innovative [out of the box] thinking



Incorporate efficiencies [specifically timesaving] conspicuously into the work

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Questions?



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MedStar Health

It's how we **treat people.**

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