Applying a Total Systems Approach in Healthcare

Jonathan L. Gleason MD
Executive Vice President, CCO, Prisma Health

OBJECTIVES

- Understand the implications of the current inflexion point of human-machine teaming in clinical operating systems.
- Describe the proactive and reactive approaches to the integration of systems engineering into continual redesign of complex sociotechnical environments within healthcare.
- Understand the overarching framework within which human factors engineering can be optimally applied to healthcare environments.

Brief Background…

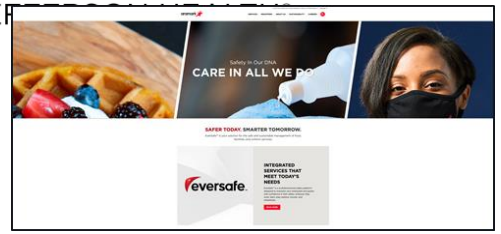
CARILION CLINIC

Jefferson

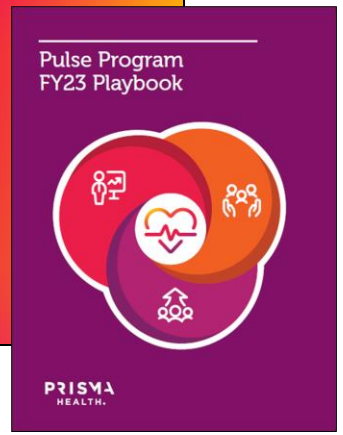
HOME OF SIDNEY KIMMEL MI

eversafe OS™

POWERED BY ARAMARK & JE



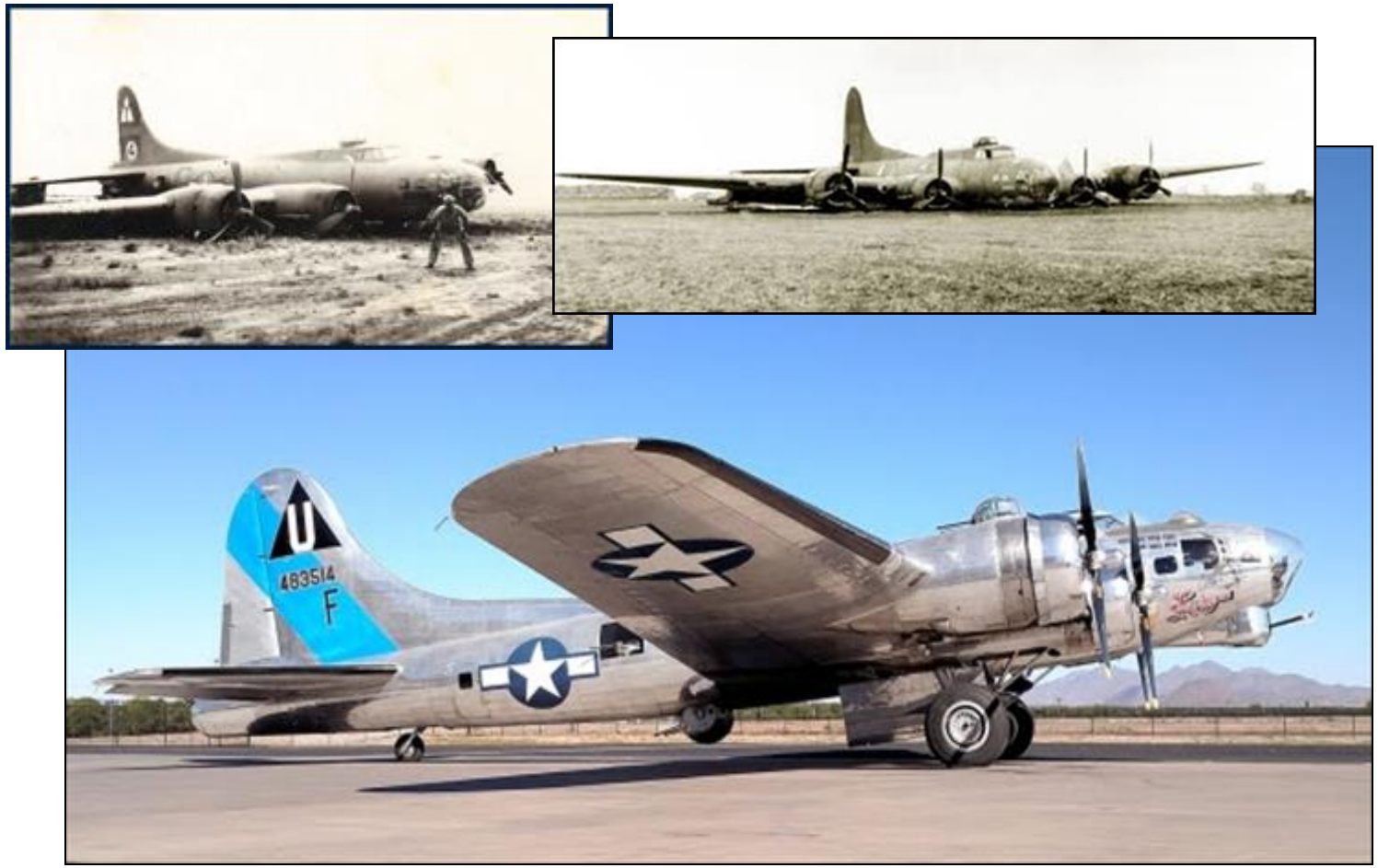
PRISMA HEALTH℠



Core Concept #1

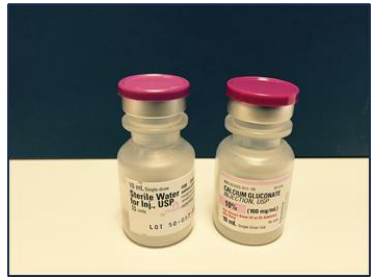
Healthcare is Sociotechnical Work

Let's Start With a Story…



What is the impact of the *SYSTEM*?

There was nothing wrong with these pilots



What is the impact of the *SYSTEM*?

DELTA

- OR? -

BOEING

Transformation Approach must Evolve with Healthcare…

People

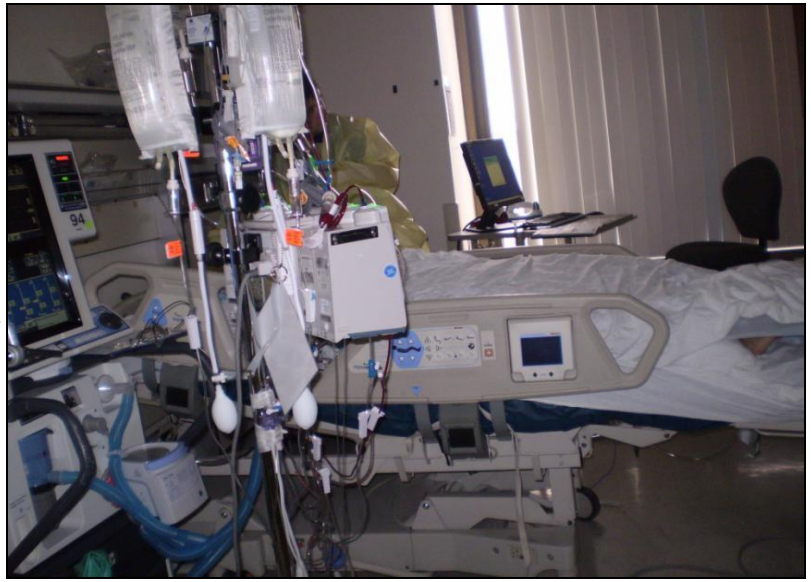
Tools

Culture

People

Tools

Systems



Operating Systems

Systems

Tools

People

Proliferation of Technology

We have been focusing primarily on improving people…

Promoting a Culture of Safety as a Patient Safety Strategy

A Systematic Review

Sallie J. Weaver, PhD, Lisa H. Lubomksi, PhD, Renee F. Wilson, MS, Elizabeth R. Pfoh, MPH, Kathryn A. Martinez, PhD, MPH, and Sydney M. Dy, MD, MSc

Abstract Go to:

Developing a culture of safety is a core element of many efforts to improve patient safety and care quality. This systematic review identifies and assesses interventions used to promote safety culture or climate in acute care settings. The authors searched MEDLINE, CINAHL, PsycINFO, Cochrane, and EMBASE to identify relevant English-language studies published from January 2000 to October 2012. They selected studies that targeted health care workers practicing in inpatient settings and included data about change in patient safety culture or climate after a targeted intervention. Two raters independently screened 3679 abstracts (which yielded 33 eligible studies in 35 articles), extracted study data, and rated study quality and strength of evidence. Eight studies included executive walk rounds or interdisciplinary rounds; 8 evaluated multicomponent, unit-based interventions; and 20 included team training or communication initiatives. Twenty-nine studies reported some improvement in safety culture or patient outcomes, but measured outcomes were highly heterogeneous. Strength of evidence was low, and most studies were pre–post evaluations of low to moderate quality. Within these limits, evidence suggests that interventions can improve perceptions of safety culture and potentially reduce patient harm.

Culture vs System

In *Simple* Systems, Outcomes Flow From Culture.

In *Complex Adaptive* Systems, Outcomes Flow From Systems. Culture Also Flows from Systems.

Core Concept #1

Implication

We should adopt a systems-based approach to transformation and culture.

Core Concept #2

Healthcare has adopted a fragmented approach to improvement

QUALITY

SAFETY

EXPERIENCE

EQUITY

POPULATION HEALTH

COST

QUALITY SAFETY

EXPERIENCE EQUITY COST

POPULATION HEALTH

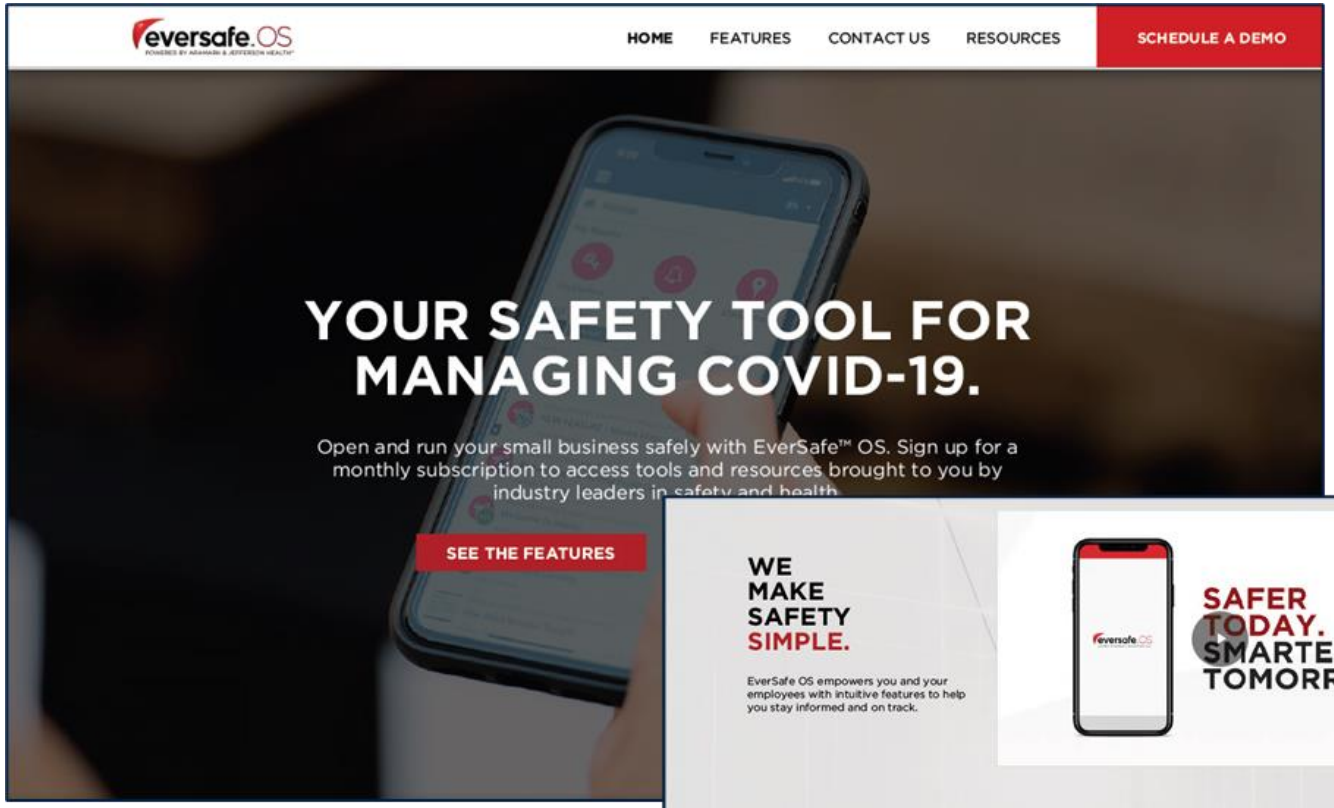
Core Concept #2

Implication

We should *integrate* our management of the Primary Domains of Clinical Outcomes (PDCO): Quality, Safety, Experience, Equity, Cost, and Population Health.

Core Concept #3

Create an awesome experience for your team.



SAXBYS

BOYDS
PHILADELPHIA

oath
PIZZA

RISING ROLL
gourmet café

DI BRUNO BROS.
CULINARY PIONEERS SINCE 1939

ATHENIAN GRILL
BISTRO | MARKET | CATERING

Pulse Program FY23 Playbook

PRISMA HEALTH.

Pulse Program overview

The Pulse Program will enable every team member to participate in meaningful improvement of the care that we provide and the systems that we utilize every day.

Introduction and purpose

The Pulse Program serves as a dynamic learning
team. The Pulse Program integrates quality, safety
value and population health improvement into on
care. Having a dynamic, highly visible system to s
improvement is critical to achieving our purpose.

This program will engage team members and the
meaningful improvement of the care we provide
day. It will also enable all levels of clinical and ope
improve how we are doing within their areas of th

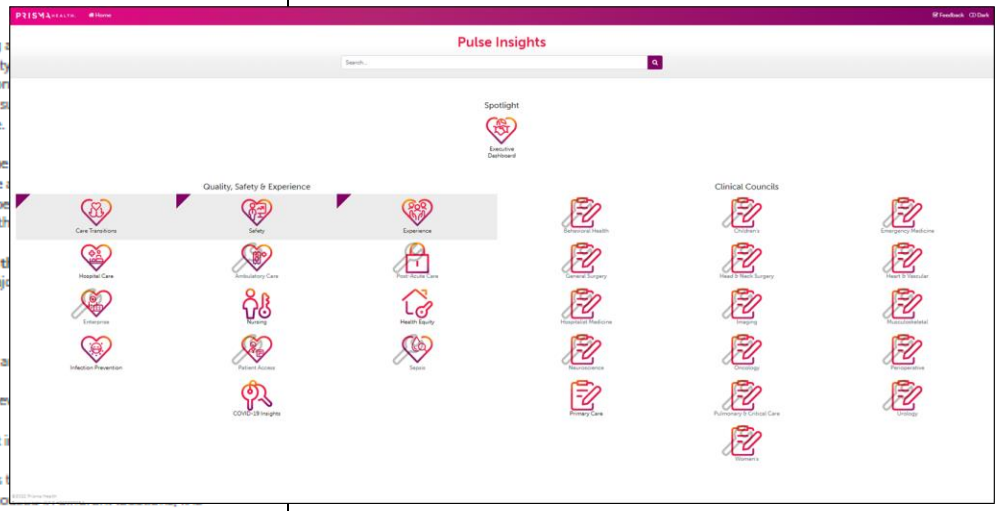
Here's what you should look for and gain from t

- Understanding of the current priorities and majo
  - Safety Management System
  - Experience Management Program
  - Clinical Advancement Program
- Understanding of and access to the programs a
- Understanding of who is doing what
- Understanding of how the Pulse Program will e
  30, 2023)
- Understanding of how team members can get i

We have many best-in-class tools and resources t
because these various tools and resources are ho
difficult for leaders and team members to view and analyze data insights and know where to find resources for improvement. The Pulse Program pulls all these tools and resources together into a single system, making it easier for leaders and team members to understand how we are doing and to access improvement resources that support care delivery and services.

Why? We want to bring it all together:

Additional information on the Pulse Program can be found here.



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JUST CULTURE Algorithm

Pulse Program

Core Concept #3

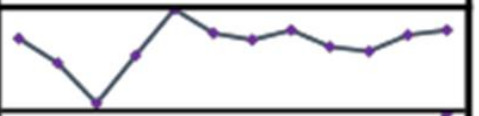
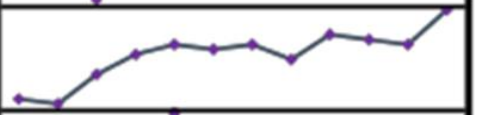
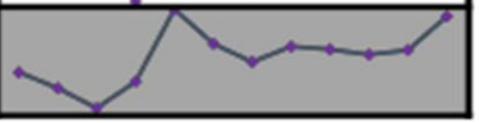
Implication

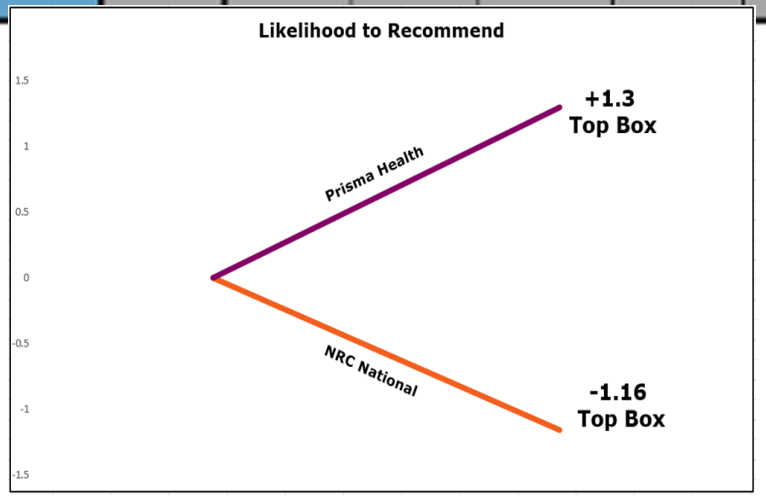
Build a branded and usable total learning system.

Pulse Program: Building our Total Learning System

Jonathan L. Gleason, MD
EVP | Chief Clinical Officer

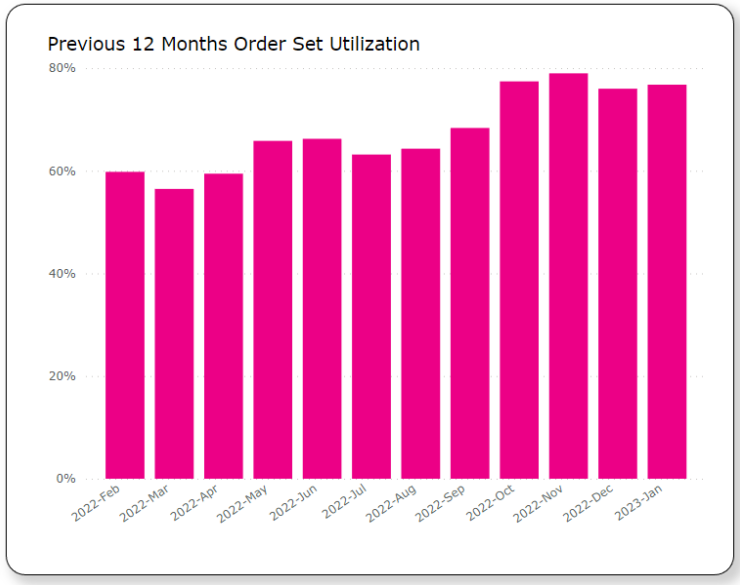
Improving the Patient Experience…

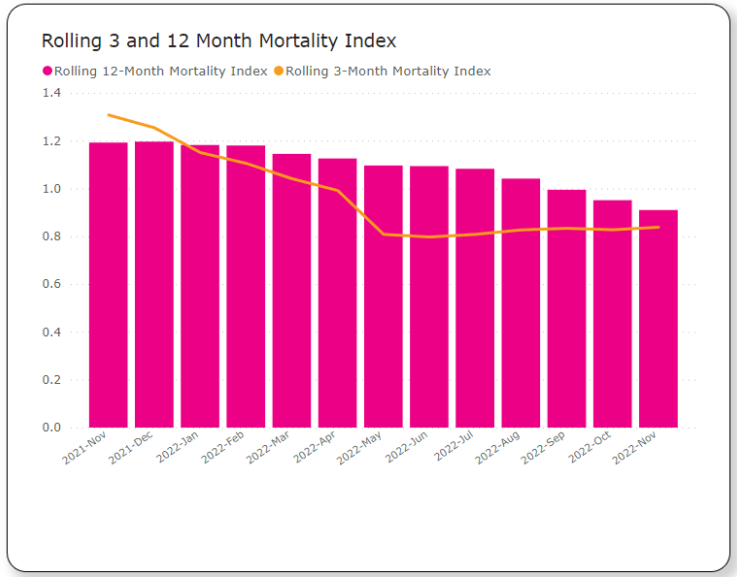
System-Level Metrics	Weight	Baseline		FYTD Performance		FY23 Goal Levels					Rolling 12-month Trend
		Top Box	Rank	Top Box	Rank	Below 1	Entry 2	Target 3	Stretch 4	Superstretch 5	
Acute Care Composite	45%	73.0%	37	75.1%	46	<73.05%	73.05%	73.1%	73.8%	74.6%	
Medical Group-Ambulatory Composite	45%	89.2%	62	90.7%	71	<89.29%	89.29%	89.3%	89.8%	90.4%	
Post-Acute Composite	10%	88.0%	78	89.0%	64	<88.05%	88.05%	88.1%	88.5%	89.0%	
TOTAL COMPOSITE	100%	81.8%	52	83.5%	59	<81.86%	81.86%	81.9%	82.5%	83.2%	



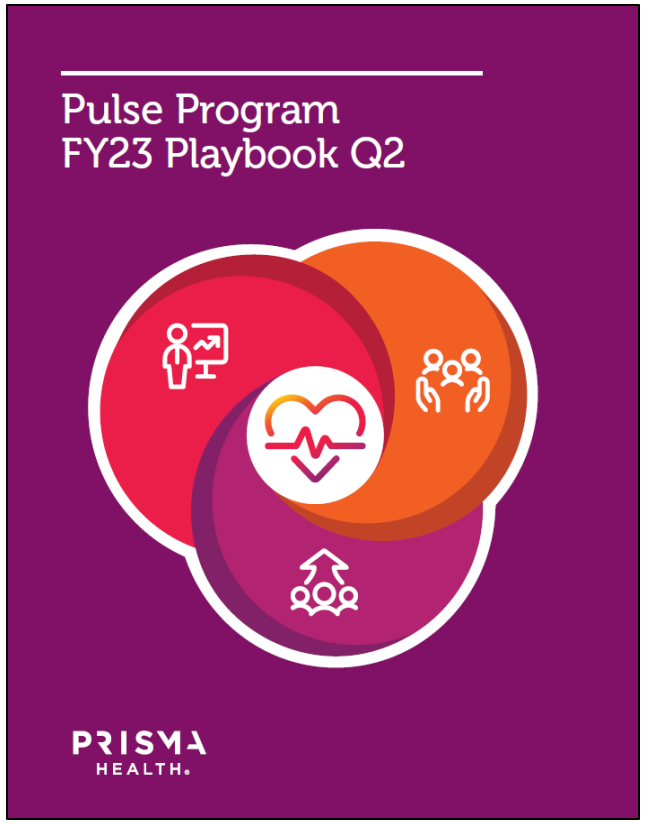
Improving Safety and Quality…

Mortality Observed/Expected (O/E) (excludes hospice)	0.88	0.72	0.82	0.69	10%	12.00	0.85	0.82	0.79	0.77	0.74	0.72	
Sepsis Mortality Observed/Expected (O/E) (excludes hospice)	1.10	0.85	1.00	0.85	10%	12.00	1.04	1.00	0.95	0.91	0.89	0.85	
Readmission Rate (30 day all-cause, unplanned, all-payer, same facility)	9.01%	8.87%	8.87%	7.81%	10%	10.66	8.85%	8.80%	8.81%	8.77%	8.83%	8.87%	
Excess Days (EDAC)	8.30	4.17	7.89	-5.47	5%	4.88	5.10	5.18	4.95	4.97	4.75	4.17	
PSI-90 Composite	0.83	0.76	0.77	0.64	10%	10.73	0.81	0.77	0.77	0.75	0.77	0.76	
Great Catch Event Counts (monthly data)	250	273	275	300	15%	12.00	300	282	259	251	259	273	





System + Culture = Improvement



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PRISMA HEALTH®

JUST CULTURE
Algorithm

Total Systems Approach…

Epic

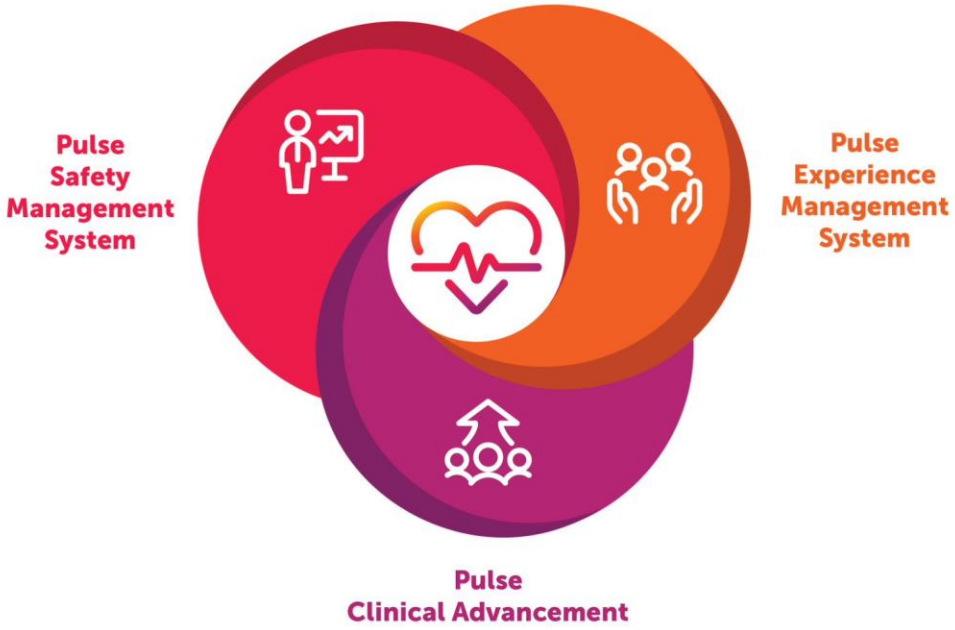
nrc HEALTH

riskonnect.

PREMIER

vizient.

CipherHealth



Pulse Program FY23 Playbook

PRISMA HEALTH.

Table of contents

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Pulse Program overview

Introduction and purpose

The Pulse Program serves as a dynamic learning and improvement system for our team. The Pulse Program integrates quality, safety, experience, health disparities, value and population health improvement into one system that enhances patient care. Having a dynamic, highly visible system to support our culture of learning and improvement is critical to achieving our purpose.

This program will engage team members and the community to participate in meaningful improvement of the care we provide and the systems we use every day. It will also enable all levels of clinical and operational leaders to monitor and improve how we are doing within their areas of the organization.

Here's what you should look for and gain from this Pulse Program playbook:
- Understanding of the current priorities and major work across Prisma Health
  - Safety Management System
  - Experience Management Program
  - Clinical Advancement Program
- Understanding of and access to the programs and tools used for improvement
- Understanding of who is doing what
- Understanding of how the Pulse Program will evolve in FY23 (Oct. 1, 2022–Sept. 30, 2023)
- Understanding of how team members can get involved

We have many best-in-class tools and resources that have helped us improve. But because these various tools and resources are housed in different locations, it is difficult for leaders and team members to view and analyze data insights and know where to find resources for improvement. The Pulse Program pulls all these tools and resources together into a single system, making it easier for leaders and team members to understand how we are doing and to access improvement resources that support care delivery and services.

Why? We want to bring it all together:

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Pulse Technology Stack

Pulse Insights

The place to go to understand how we're doing on the things that matter most

PREMIER NHSN National Healthcare Safety Network nrc HEALTH Epic

Pulse Dash

Prioritized, actionable insights inside of workflow

Epic

Pulse Power

The place to go to report and to give feedback

riskonnect ECRI

PRISMA HEALTH. Home Feedback Dark

Pulse Insights

Quality, Safety & Experience


Safety


Experience


Hospital Care


Ambulatory Care


Post-Acute Care


Enterprise


Nursing


Health Equity


Infection Prevention


Patient Access


Sepsis


COVID-19 Insights


Executive Dashboard

Clinical Councils


Behavioral Health


Children's


Emergency Medicine


Surgery


Heart & Vascular


Hospitalist Medicine


Imaging


Musculoskeletal


Neuroscience


Oncology


Perioperative


Primary Care


Critical Care


Women's


Supportive Care

Sepsis

Summary | Mortality | Order Set Utilization | Lives Saved | 30-Day Readmission

Facility: All

Mortality

0.84

Rolling 3-Month Mortality Index

0.91

Rolling 12-Month Mortality Index

Click for Detail

Order Set Utilization

77%

Previous Month Order Set Utilization

Click for Detail

Lives Saved

FY 2023 Detail

Baseline: 1.04 (O/E)
Target: 1.00 (O/E)
Top Decile: 0.85 (O/E)
(O/E = Observed Deaths over Expected Deaths)
Achieving top decile ***estimates*** 200 lives saved

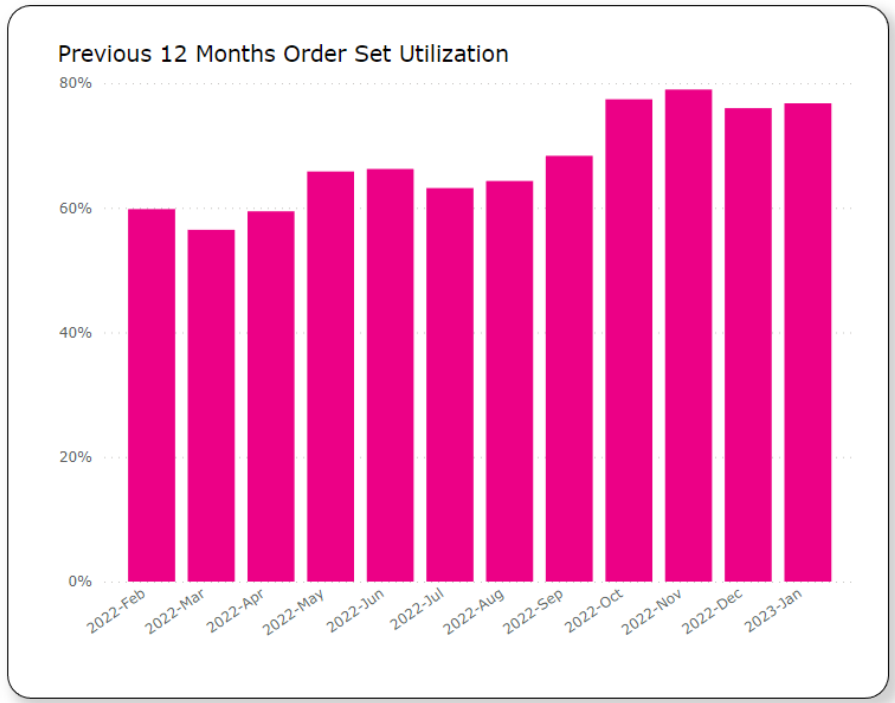
Click for Detail

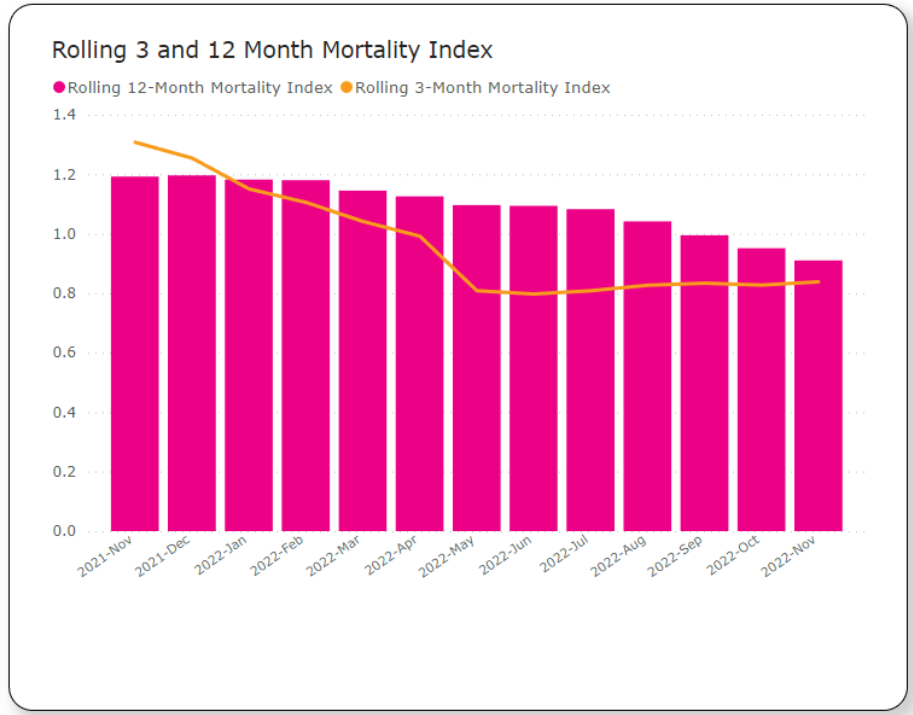
30-Day Readmission %

12.31%

Rolling 12-Month 30-Day Readmission Rate

Click for Detail





Safety Management System

The Pulse Safety Management System is a dynamic learning system that enables all team members to participate in our daily activities to identify and mitigate risks, to improve our safety, and to support people that have been involved in safety events. This learning and improvement system enables our Culture of Safety.

Escalating Tiered Huddle Program
Structured daily management system that escalates from the unit to the executive suite.

Pulse Power
Learning System for people to report potentially unsafe conditions and events.

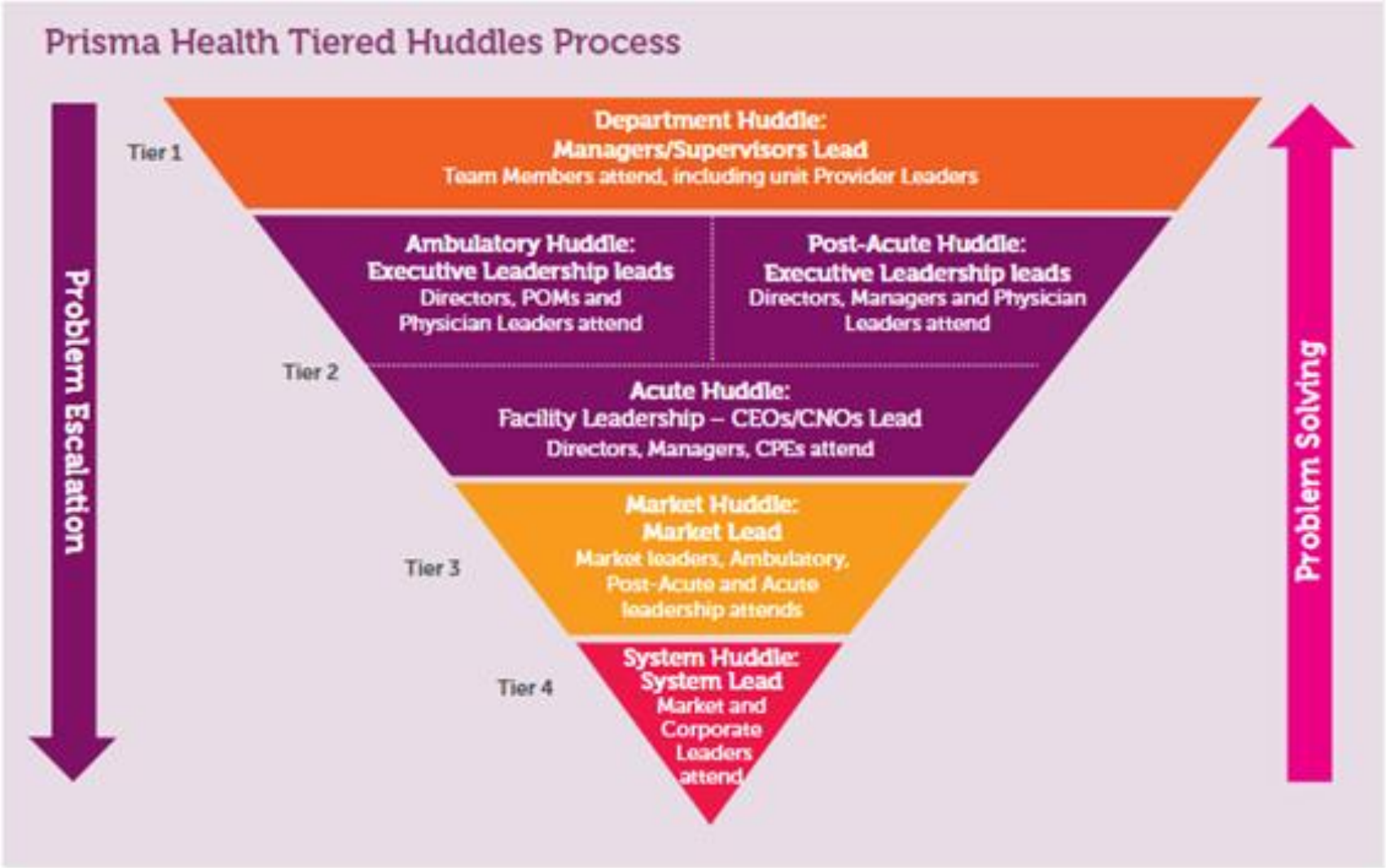
Just Culture Program
Structured program to ensure that our culture is facilitating learning and improvement.

Comprehensive Root Cause Analysis
Structured serious safety event response program.

Peer Support Program
Proactive peer-support program for people that have been involved in a serious safety event.

Patient Advocacy Program
Proactive patient and family support program for people that have been involved in a serious safety event.

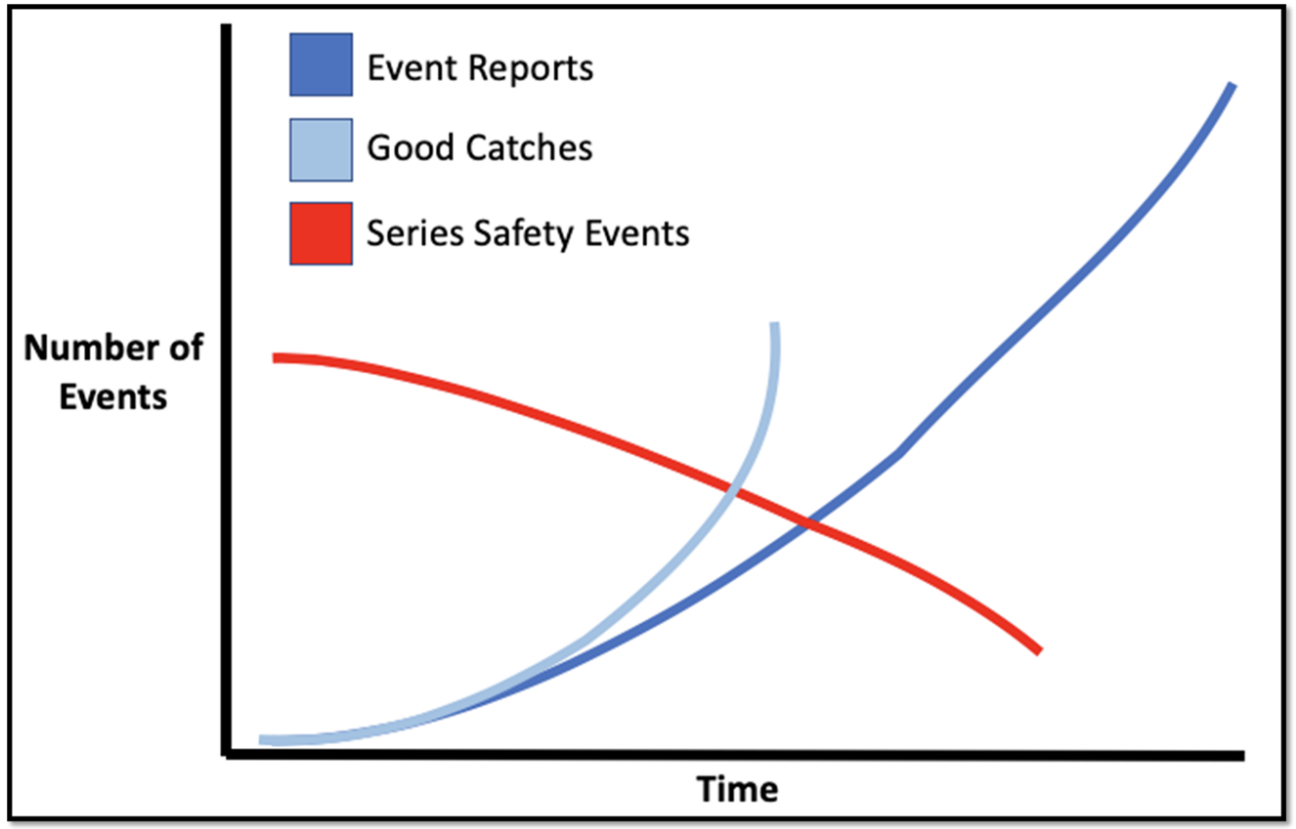
Escalating Tiered Huddle



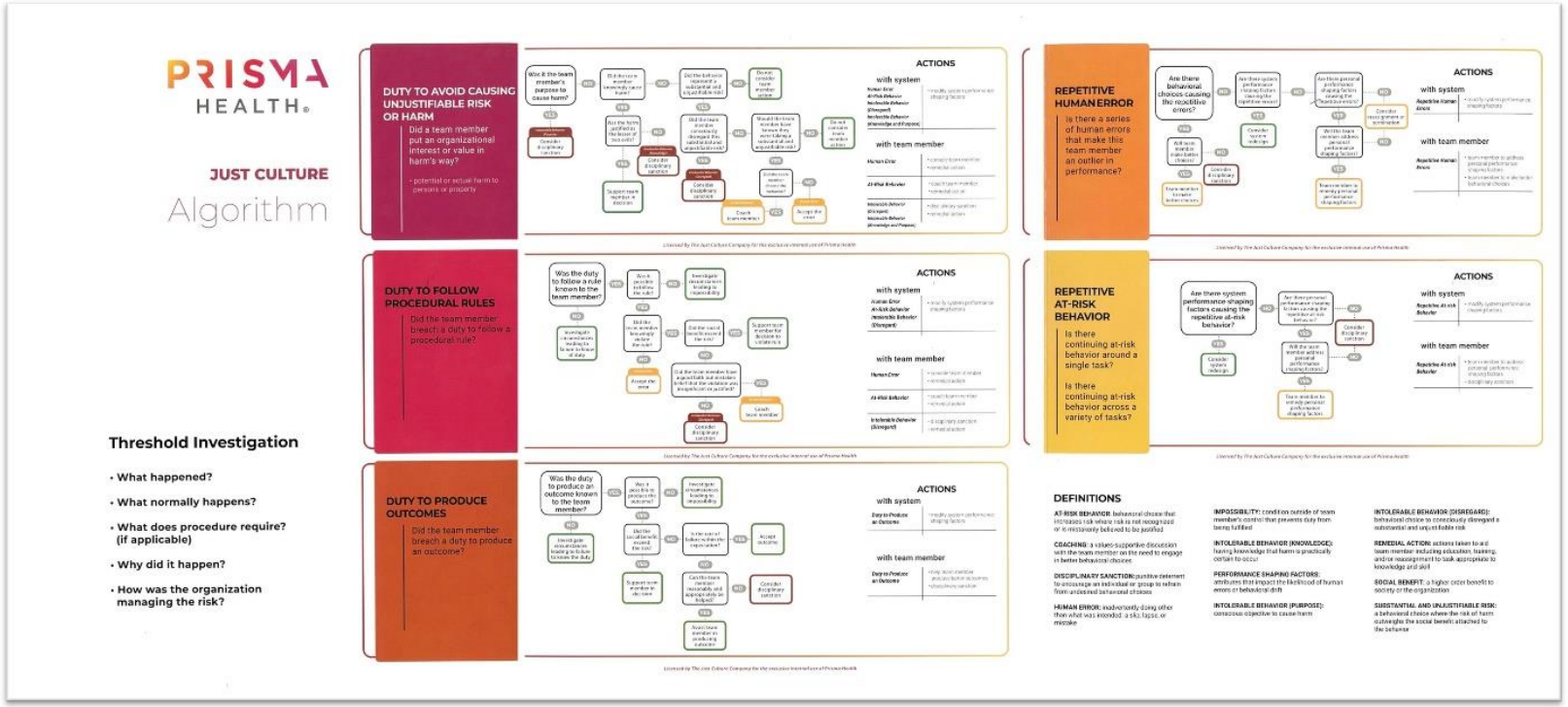
Pulse Power

Learning System for people to report potentially unsafe conditions, safety events, and to tell us how we can improve our systems.

Learning System



Just Culture



Use a Just Culture algorithm to respond fairly and consistently to behaviors

Shift from

focus on <u>severity</u> of events and outcomes to <u>choices and risk</u>

Experience Management Program

Experience Coaching Program

Focused, structured team member, leader and physician direct observation coaching.

Experience Learning Collaboratives

Focused application of the Prisma Health Improvement Methodology to improve Patient Experience.

Pulse Rounding

Standardized patient and team member facing rounding practices to capture insights and improve.

Patient Advocacy

Resolution of patient concerns and proactive rounding to mitigate complaints and grievances.

Patient Voice

Patient Family Advisory Councils and Online Patient Advisory Community partner to co-create our delivery of care and services.

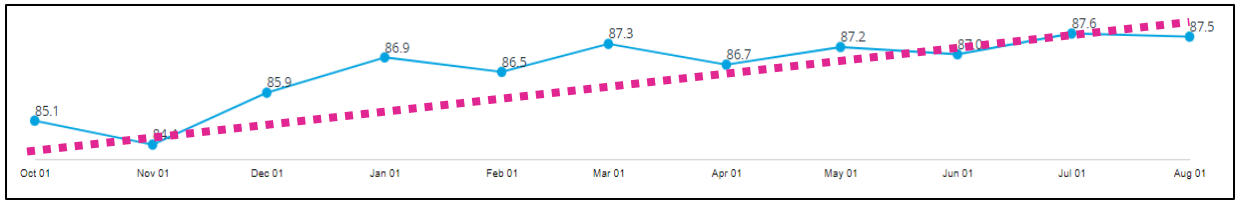
Experience Learning Collaboratives

Experience Learning Collaboratives

Focused application of the Prisma Health Improvement Methodology to improve Patient Experience.

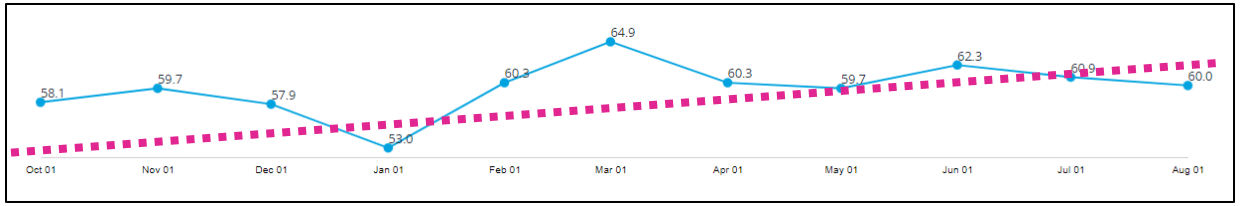
Completed and/or in progress **130+**

OP Testing/Lab



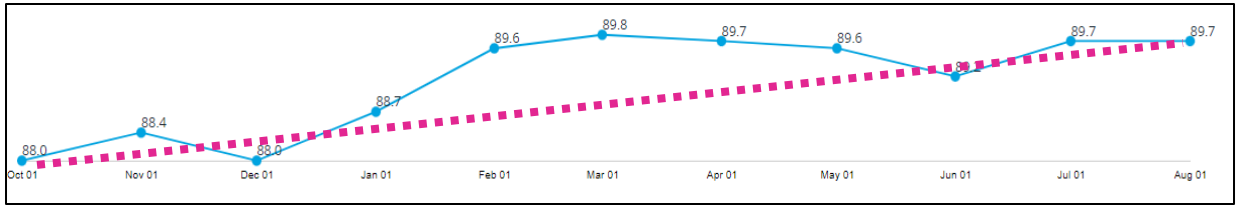
+14 PR

Emergency



+17 PR

Medical Group



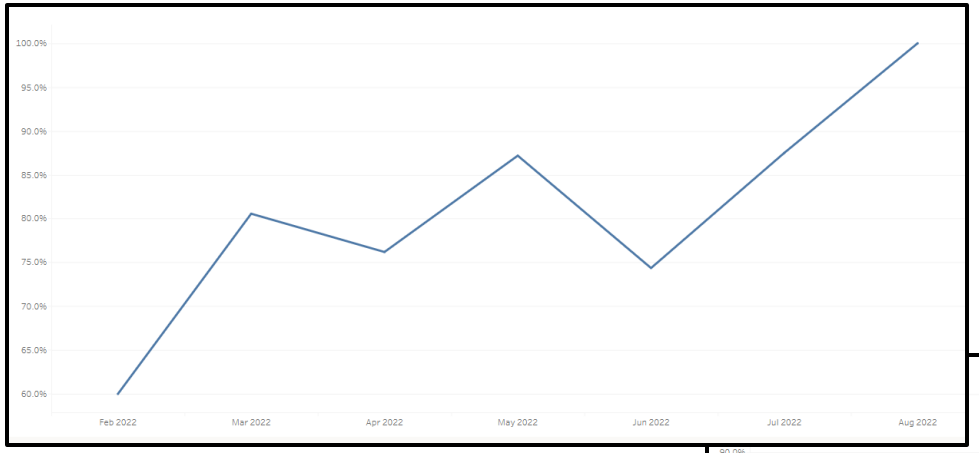
+11 PR

Direct Observation Coaching

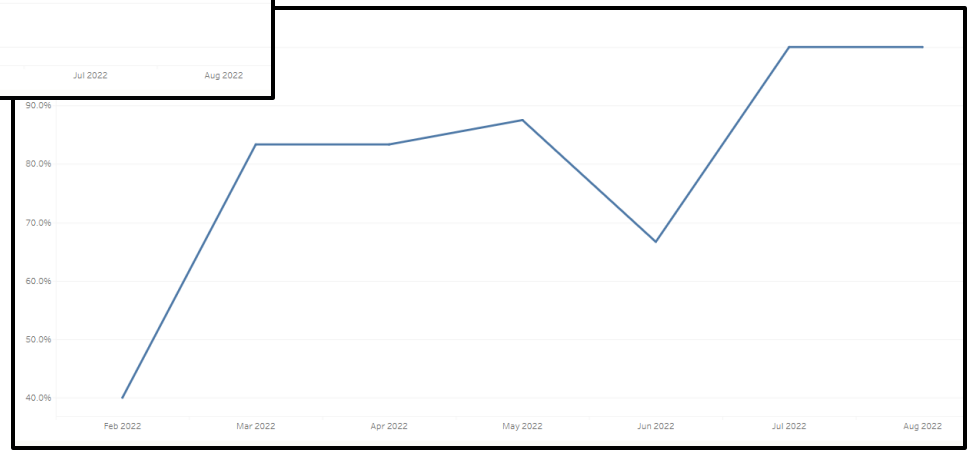
Physician
Direct Observation Coaching

Question-Key Driver	Percentile Rank (PR) Improvement
Recommend Providers office	+18
Knew what to do if had questions	+27

Richland Medical Murray
Direct Observation Coaching



GMH Oncology
Direct Observation Coaching



Pulse Rounding

Learning System for leaders to capture real time care gaps, identify and resolve service recovery opportunities, recognize team members and improve patient and team member engagement.

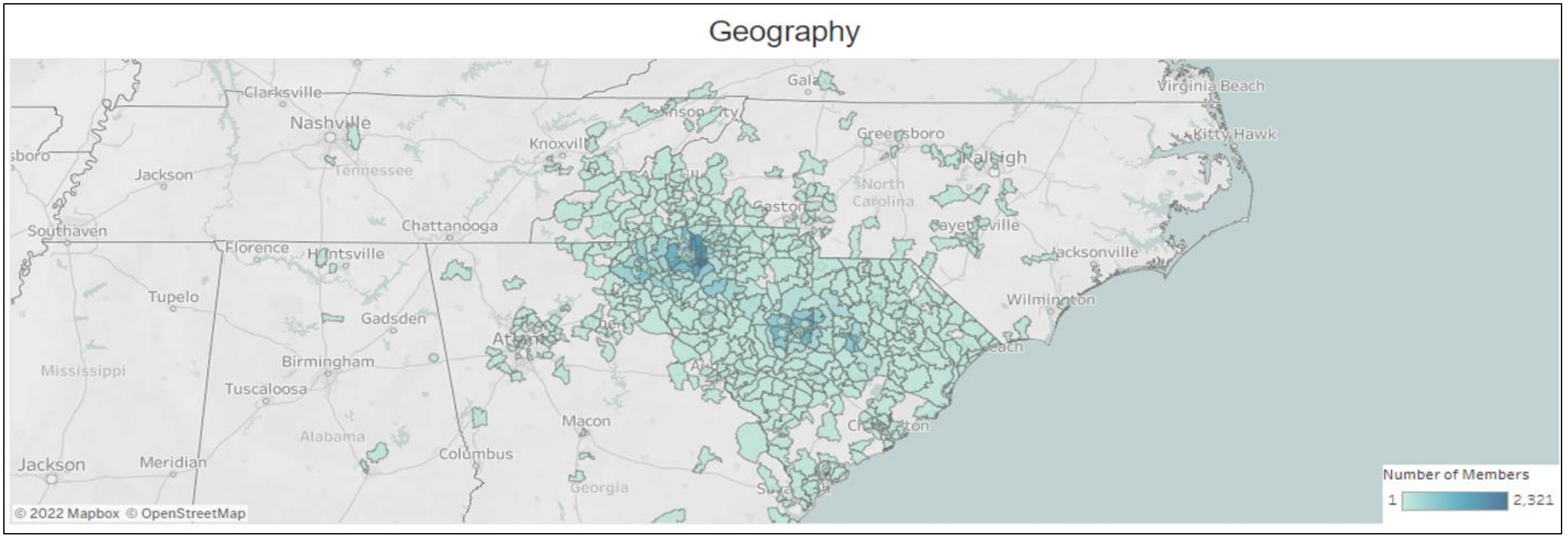
Total Recognitions: 2,318

Rounding activity and opportunity areas

Facility	Patients Present	Number of Patients Rounded On	Percent of Patients Rounded On	Patients with an Opportunity Area Identified	Percent of Patients with an Opportunity Area Identified
BAPTIST COLUMBIA HOSPITAL	458	272	59.4%	107	39.3%
BAPTIST EASLEY HOSPITAL	139	60	43.2%	20	33.3%
BAPTIST PARKRIDGE HOSPITAL	209	123	58.9%	10	8.1%
GREENVILLE MEMORIAL HOSPITAL	1,695	893	52.7%	355	39.8%
GREER MEMORIAL HOSPITAL	239	117	49%	55	47%
LAURENS COUNTY MEMORIAL HOSPITAL	129	73	56.6%	33	45.2%
OCONEE MEMORIAL HOSPITAL	278	206	74.1%	81	39.3%
PATEWOOD MEMORIAL HOSPITAL	265	81	30.6%	4	4.9%
RICHLAND HOSPITAL	1,162	665	57.2%	207	31.1%
TUOMEY HOSPITAL	305	190	62.3%	32	16.8%
Totals	**4,879**	**2,680**	**54.9%**	**904**	**33.7%**

Online Patient Advisory Community (OPAC) Opt-in Through Survey

50,000+



Clinical Advancement Program

The **Clinical Advancement Program** enables clinical experts to collaborate with patients to move the needle on **quality, safety, experience, equity, cost, and population health** across South Carolina.

Clinical Specialty Councils			
Behavioral Health	Heart & Vascular	Nursing	Primary Care
Children's	Musculoskeletal	Oncology	Supportive Care
Critical Care	Neuroscience	Perioperative	Women's

Quality Officer

Midlands physicians | Upstate physicians | Population Health | Nursing | Community Health | inVio Health Network | Digital Health | Patient/ Family member | Process improvement/ Project management | Patient experience | Quality and safety

Foundational Elements

Prisma Health Improvement Methodology (ADTP)

ASSESS
Defining the problem, understanding current state and the voice of the customer, and establishing a baseline to **measure**

DIAGNOSE
Using data and **root cause** analysis to identify the problem and **opportunities** for improvement

PREVENT
Providing the means to measure and **control** the new process on a regular basis and **sustain** the gain

TREAT
Generating, selecting, designing, **testing** and **implementing** improvements

A = ASSESS
D = DIAGNOSE
T = TREAT
P = PREVENT

What about the Culture and TEAM???

OPERATING SYSTEM + LEADERSHIP = RESULTS

TIME

CULTURE

PRISMA HEALTH SM

QUESTIONS?