

PSIs & HACs: Removing the Noise Through Accurate Coding and Documentation



USF Health
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Disclaimer

All vendors, registries and 3rd party products have both positives and negatives

Danielle...

- Does not work for or support ANY vendor, registry or 3rd party product
- Will not provide her opinion of ANY vendor, registry, or 3rd party product
- May speak about a vendor, registry or 3rd party product but only from the standpoint of:
 - It is what we have
 - It is what we use

Tampa General Hospital

WHO WE ARE

As the region's leading safety net hospital, Tampa General is committed to providing area residents with excellent and compassionate health care ranging from the simplest to the most complex medical services.

SHARED PURPOSE STATEMENT

We heal. We teach. We innovate. Care for everyone. Every day.

VISION STATEMENT

TGH will be the safest and most innovative academic health system in America.

Tampa General Hospital

- Academic Hospital

- Tampa General Hospital – Davis Island
 - Academic hospital partnership with USF
 - 982 beds, plus 144 more coming in 2027
 - Level 1 trauma center



- Community Hospitals

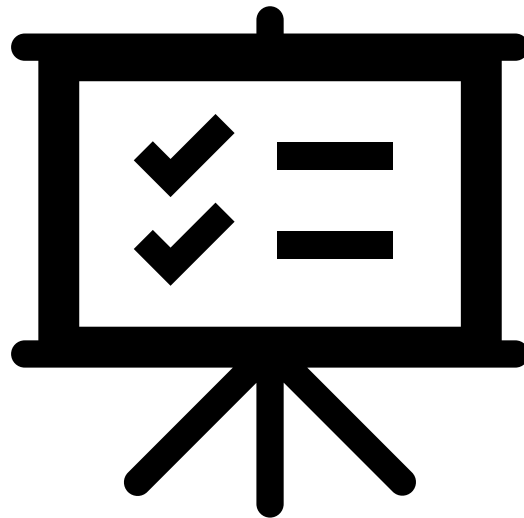
- Tampa General Hospital – Brooksville
- Tampa General Hospital – Spring Hill
- Tampa General Hospital – Crystal River



Objectives

At the conclusion of this presentation, participants will be able to

1. Describe three ways the PSI-90 score impacts hospitals
2. Identify both basic and innovative methods to address PSI-90 challenges



Special Thanks!

Ashley Gray	*Quality Clinical Review Specialist – our PSI savant!
Karen Percent	*Director of Internal Audit – the one who set us in motion!
Dr. Laura Haubner	*Chief Quality Officer – our fearless, dedicated leader!
Diane Lerch	*Director of Coding & CDI – commander of the troops!
Dr. Colleen McIntosh	*Physician Advisor – the one who lit the matches of progress!
Kevin Nebel	*Business Intelligence Analyst – the brain behind the AI!

**CDI Team, Coding Team, 3rd Party Consultant, Physician Advisors, Performance Improvement department, and Business Intelligence;
and our TGH Executive Cabinet for their faith and trust and removal of all barriers!**

Patient Safety Indicators & Hospital-Acquired Conditions

Patient Safety Indicators (PSIs) and Hospital-Acquired Conditions (HACs)

- Agency for Healthcare Research & Quality (AHRQ) established definitions
 - **Clinical complications** defined by **medical coding**
 - Designed to highlight opportunities for **harm prevention**



CMS & HAC Reporting Program

- Impacts **reimbursement**

3rd Party Reporting Companies

- Grade **safety performance**

Call to Action



Spring 2023 Leapfrog Safety Grade

- *Late 2022, CMS stopped suppressing PSI-90 data use allowing Leapfrog and other reporting bodies to utilize the data for safety grading/evaluation.*

Competing priorities...

- COVID epidemic response
- Workforce concerns
- Mortality and Efficiency focuses



Call to Action

Spring 2023 Leapfrog Safety Grade...

- PSI-90 Data from July 2019 – June 2021
- TGH PSI-90 score **1.08** per 1000 cases

Not bad, but how are we with current data??

Per 3rd Party Reporting Vendor...

- PSI performance scored **poorly** among Academic Medical Centers
- **64th Percentile** for Safety Domain (20th percentile = world class)
- Performance appears to be trending **worse**

Uh oh...

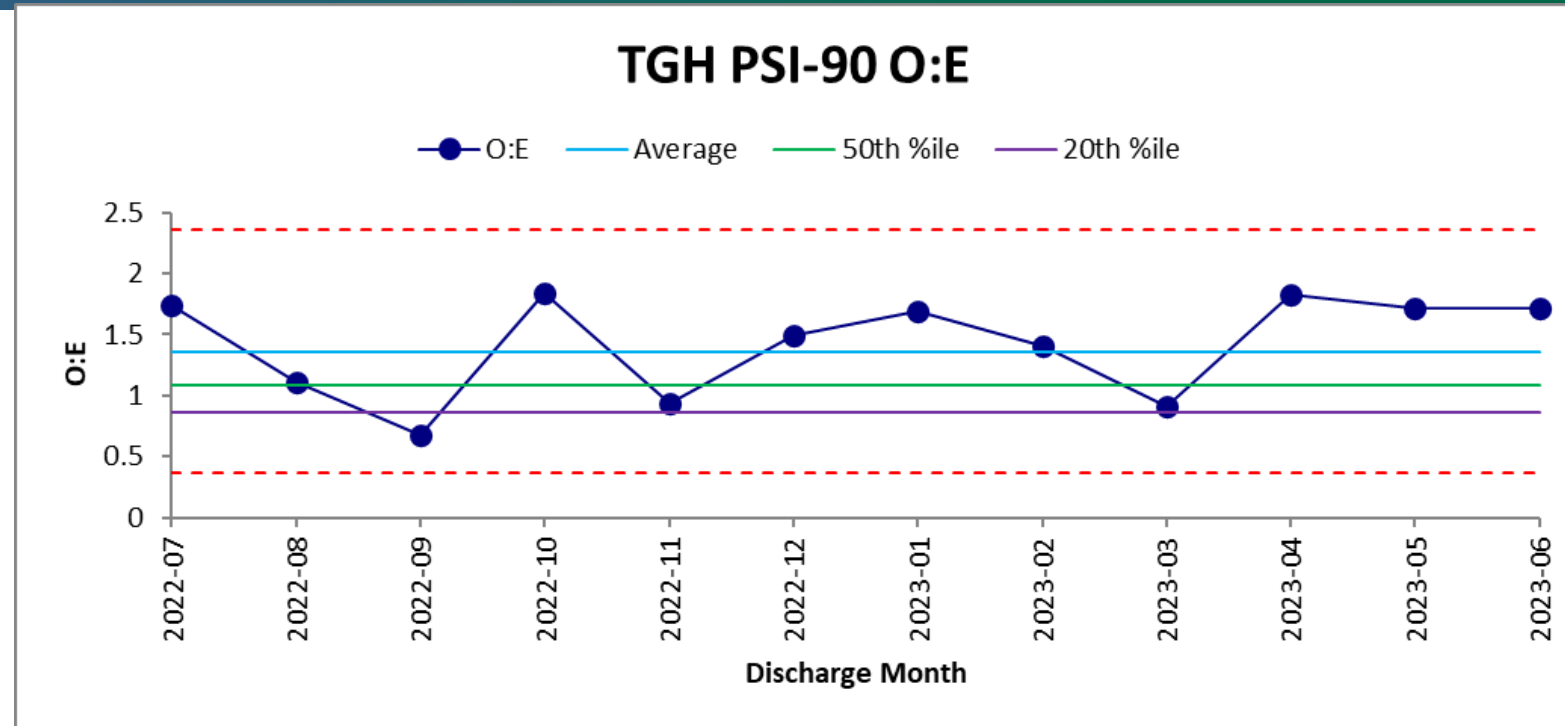


Call to Action

- Internal Audit Team
- 3rd Party Consultant Reviewer

Findings...

- No ownership
- Exclusion codes not positioned correctly
- PSI flags not firing correctly or triggering bill holds for review
- Admit Type and Discharge Disposition inaccuracies
- No clear institutional definitions
 - Example: Respiratory failure vs. Pulmonary Insufficiency; Sepsis



Project Methodology

Institute of Healthcare Improvement Model for Improvement

1. Identify Project Stakeholders

- Executive Sponsor, Process Owner, Key Players

2. Establish Goals & Scope

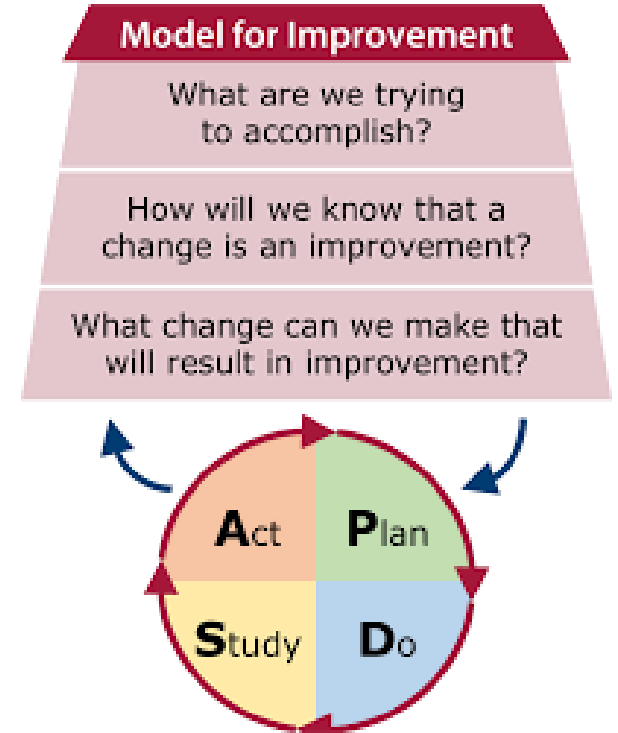
- PSI-90 cases for TGH Davis Island only
- Improve percentile ranking to 50th or better (Start 64th)

3. Explore the Problem

- Technical barriers
- Current projects (avoid redundancies)

4. Plan PDSA Cycles

5. Sustainment Plan



Phase 1 (February 2023 – January 2024)

1. Gather the team
 - Coding, CDI, Consultant, Executive Leadership, Performance Improvement, Internal Audit
2. Remove the Barriers
 - Assign oversight and ownership
 - Quality and Finance are not in competition!
3. Fix the Software
 - PSI flags trigger bill holds
 - Exclusion codes in the top 25 codes
4. Case Review Plan



Phase 1 Outcomes

Consultant Reviewer

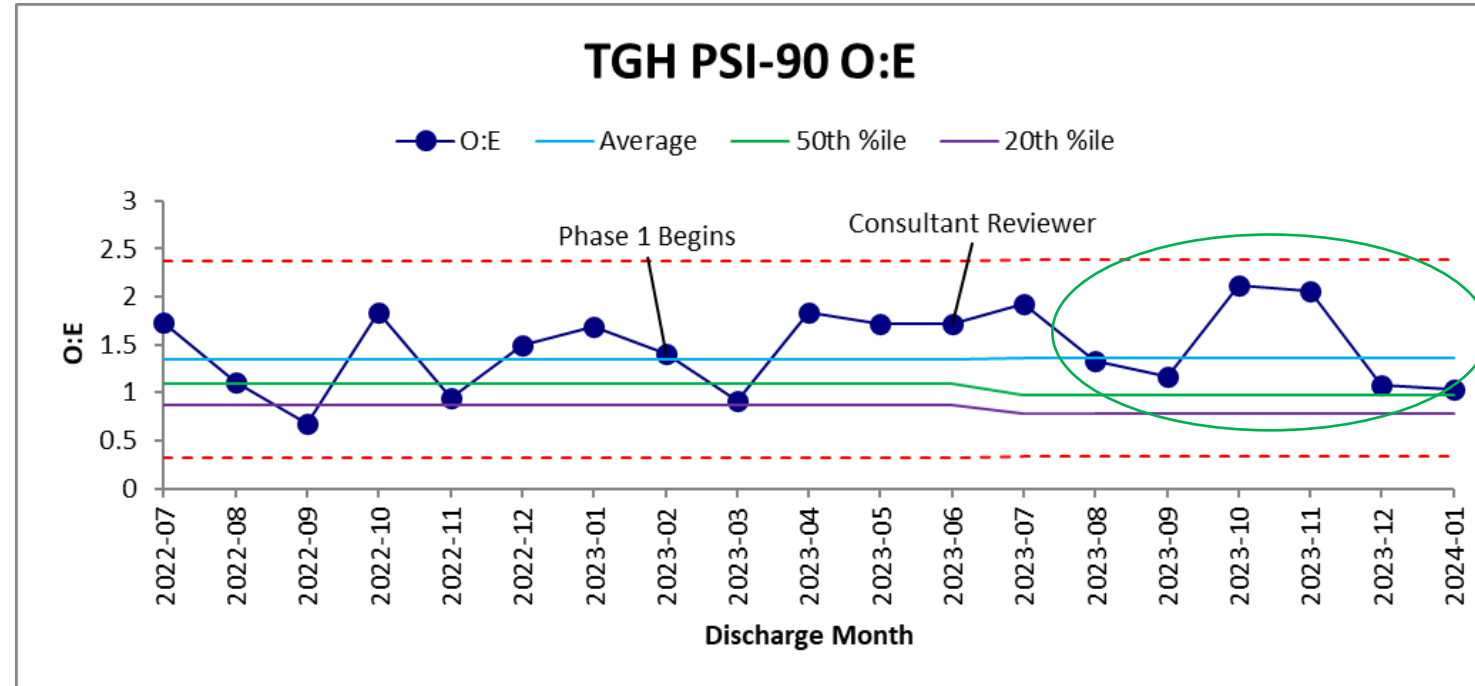
- **12% Case Overturn Rate**

Performance Overall

- Average Observed:Expected Rate stagnant (1.363 to 1.364)
- Percentile Improvement: 64th to 57th

Ultimate Decision:

Need Continuous Oversight



Phase 2 (February 2024 – January 2025)

1. Quality Clinical Review Program
 - Hire Specialist to review ALL PSI-90 cases
2. Leverage AI Tools
 - LLMs to “read” charts & identify opportunities
 - Dashboard to track trends
3. Service Line Involvement
 - Report clinical opportunities
 - Establish institutional definitions
4. Physician Advisor Program
 - Discuss documentation opportunities



**QUALITY CLINICAL
REVIEW PROGRAM**



HAR+PSI Identifier: 00000000 - PSI 3

Date Reviewed by QCRS: —

Care Providers: (0)

Select Involved Providers using the button above

Patient Information Patient Name: Peter Parker Patient Age: 141 Payer: Medicare Advantage MRN: 00000000	Encounter Information Hospital Account ID: 00000000 Admit Type: Urgent Admit Date: 12/31/2099 Admit Source: Self Referral (Non-Health Care Facility Point of Origin) Length of Stay: 0 days Discharge Date: 12/31/2099 Discharge Disposition: LTAC - Long Term Care	Surgery Information Index Surgery Date: 12/15/2025 Index Surgeon: PARKER, PETER - Neurological Surgery Index Surgery: FUSION CERVICAL SPINE Reop Surgery Date: — Reop Surgeon: YOGI, BEAR - Reop Surgery:
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Inclusion Criteria

Inclusion Diagnosis Code: L89.110

Inclusion Diagnosis: Pressure ulcer of right upper back, unstageable

Inclusion Diagnosis Date: —

Summary

Patient Overview Minnie Mouse is a 72-year-old female with a significant medical history of hypertension (HTN), diverticulitis, and skin cancer. She was transferred from an outside hospital (OSH) for the management of a newly diagnosed paraesophageal hiatal hernia. The patient presented with a history of intractable vomiting, abdominal distension, and cramping, which led to the discovery of a large paraesophageal hiatal hernia causing gastric outlet obstruction. Her past surgical history includes a hysterectomy, colonoscopy, cesarean section, and esophagogastroduodenoscopy. The patient is a former smoker and reports current alcohol use of approximately 20 standard drinks per week. [01-29-2100, General Surgery History and Physical]

Admission The patient was admitted to the main hospital from TGH Spring Hill on January 03, 2100, for a higher level of care and surgical intervention. She was initially seen at TGH Spring Hill on January 01, 2100, where a CT scan revealed a large paraesophageal hiatal hernia. Upon transfer, she was admitted to the surgical unit under the care of Dr. Christopher Garnet Ducoin. [01-28-2100, Physician Discharge Summary]

Surgical Information The patient underwent multiple surgical procedures during her hospital stay. On January 30, 2100, she had an open resection of the esophagus and stomach with a gastric pull-up (Ivor Lewis Esophagectomy) with abdominal and intrathoracic dissection, distal 2/3 esophagectomy with pyloroplasty, intra-abdominal omental flap, and bilateral chest tube insertion. This was followed by an exploratory laparotomy and thoracotomy on February 1, 2100, for further resection of the stomach and esophagus with gastric pull-up and bilateral chest tube insertion. These procedures were performed to address the ischemic changes and necrosis found in the distal esophagus and proximal stomach. [02-12-2100, Physician Discharge Summary]

Imaging Information Several imaging studies were conducted to assess the patient's condition. A CT angiogram of the chest on February 1, 2100, revealed a small pulmonary embolism in the right lower lobe. The patient was started on a heparin drip for anticoagulation. A fluoroscopic upper GI series on February 7, 2100, showed postoperative changes from the distal esophagectomy with gastric pull-through without evidence of a leak. The patient also had a transthoracic echocardiogram on January 29, 2100, which showed no cardiac abnormalities but did reveal mild pulmonary artery pressure elevation. [02-01-2100, CT Angiogram Chest; 02-07-2100, Fluoroscopic Upper GI Series]

Discharge Information Ms. Mouse was discharged from the hospital on February 12, 2100, in good condition. She was discharged to home with home health services arranged for tube feeding and physical therapy. Her discharge medications included amiodarone, Eliquis, and other supportive medications. She was instructed to follow up with Dr. Ducoin in two weeks and with cardiology for further management of her atrial fibrillation. [02-12-2100, Physician Discharge Summary]

Additional Information During her hospital stay, the Minnie experienced complications including atrial fibrillation with rapid ventricular response (RVR) and a small pulmonary embolism, which were managed with medications such as amiodarone and Eliquis. She was also at risk for delirium and deconditioning, for which preventive measures and physical therapy were implemented. The patient's postoperative course included careful monitoring of her anticoagulation status and management of her nutritional needs through jejunostomy tube feeds. [02-12-2100, BLUE General Surgery Progress Note]

PRISM AI Tool

(PHI disabled below; no real PHI shown)

Impact PSI Stats

Impact Statistics



646 Total Cases Reviewed



300 Total Cases Excluded



126 Emails Generated
Estimated Time Saved: 1 day 1 hour 12 minutes



12 CDI Notifications Generated

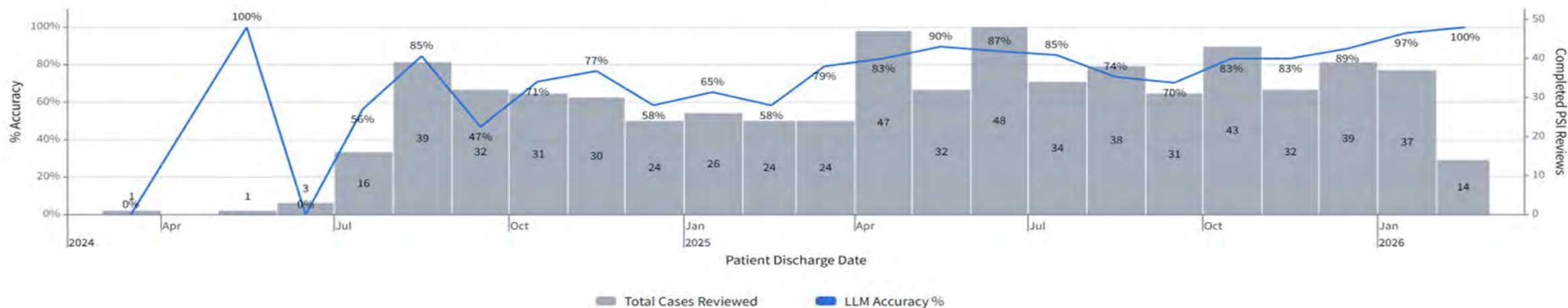
Performance Statistics



75% LLM Accuracy Rate
Goal: 75%

1

LLM Accuracy Over Time



PRISM AI Tool

(PHI disabled below; no real PHI shown)

Impact **PSI Stats** HAC Stats



4 Outstanding



612 Reviewed



322 Included

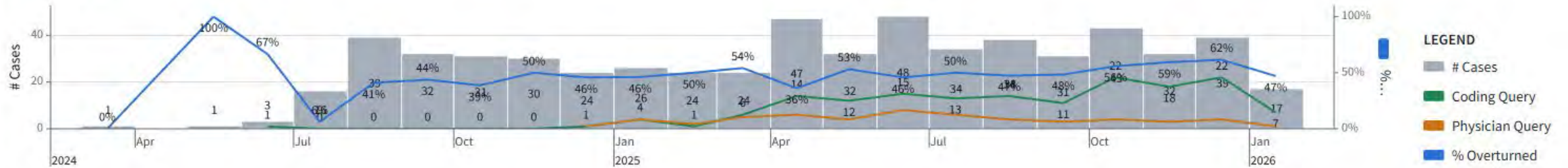


290 Excluded

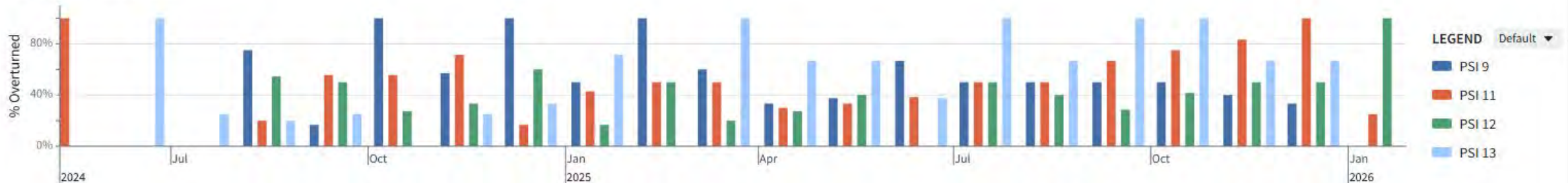


PSI Trend over time **PSI Types over time**

PSI Trends By Month



High Priority PSIs by Month



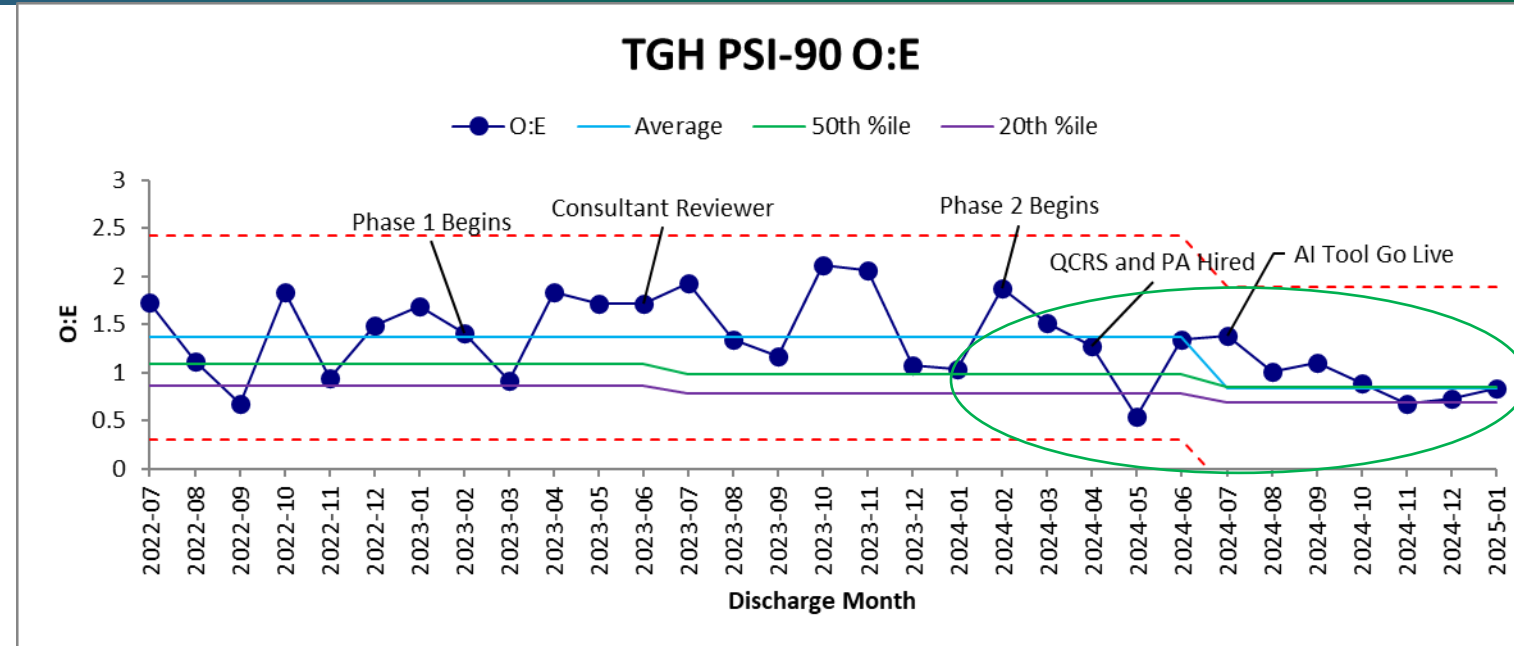
Phase 2 Outcomes

Quality Clinical Review Specialist

- **47% Case Overturn Rate Monthly**

Performance Overall

- Average Observed:Expected Rate improved (1.364 to **0.836**)
- Percentile Improvement:
57th to **33rd**



Ultimate Decision:

Grow program; push more clinical opportunities; enhance AI tool

Program Current State (February 2025 – Current)

QCRS Program

- Hired 2 additional FTEs
- Maintain 45% overturn rate
- Review ALL PSIs and HACs for ALL hospitals
- AI Tool 2.0 Version Go-Live

Physician Advisor Program

- Share all cases to review physician documentation
- Wound Care team reviews all PSI-03s
- Sepsis Response team reviews all PSI-13s

Clinical Improvement Efforts

- Institutional definitions
 - Skin Failure (PSI-03)
 - Pulmonary Insufficiency (PSI-11)
 - Sepsis (PSI-13)
- Admit Type Accuracy
- Documentation Improvements



Program Current State Before('23) and After ('25)

OBSERVED CASES

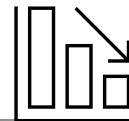
386



157

RATE PER 1000 CASES

2.45



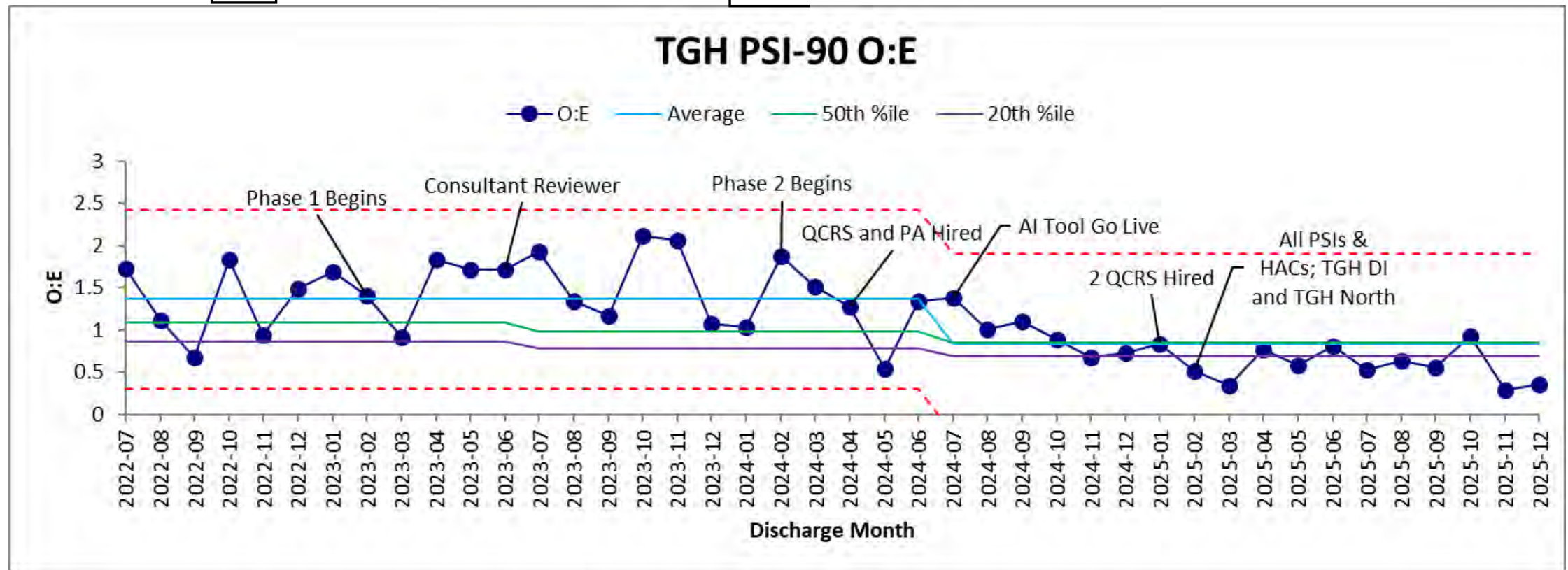
0.98

OBSERVED : EXPECTED

1.53



0.70



Future State

Enhance AI tool to 3.0

Track patients in real time

Reach and SUSTAIN World Class Status



Lessons Learned

Remove the noise FIRST!

- Coding and other technical barriers will prevent you from seeing true clinical concerns

Quality must be the priority!

- Some head-butting with finance can occur; level set early

Build a reliable system at the start!

- Get innovative; try not to rely on ONE person to do it all

Be aware of reporting time frames!

- CMS data is old; find a way to see and report progress as timely as possible

Questions??

THANK YOU FOR JOINING ME!

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