MSQC

MICHIGAN SURGICAL QUALITY COLLABORATIVE

Preoperative Testing for Low-Risk Surgeries 2025 Project Kickoff

January 17, 2025

Project Basis

- Define the extent of routine preoperative testing in low-risk surgeries
- Identify underlying reasons for overuse of preoperative testing in low-risk surgeries
- Interventions to heighten awareness and reduce variation among hospitals
- Eligible sites must have participated in prior project years (2023 or 2024)

Project Approach

- Abstract preoperative testing variables on low-risk surgical cases
- Determine effectiveness of standard protocol defining appropriate use of preoperative testing
- Employ strategies to promote adoption of the protocol
- Analyze MSQC, MVC, and internal data reports to monitor progress.

Project Eligibility

- Low-risk surgical procedures
  - Minor hernia
    - Abdominal hernias less than 3 cm and all inguinal/femoral hernia repairs
  - Laparoscopic cholecystectomy
  - Breast lumpectomy

AND

- **ASA Class = 1 or 2**

AND

- Elective cases only

AND

- CPT code is the intended primary procedure (captured on Surgical Profile tab)

Abdominal Hernias less than 3 cm and all Inguinal/Femoral Hernia Repairs ("Minor Hernia")	
49505	49505: Repair initial inguinal hernia, age 5 years or older; reducible.
49507	49507: Repair initial inguinal hernia, age 5 years or older; incarcerated or strangulated.
49520	49520: Repair recurrent inguinal hernia, any age; reducible.
49521	49521: Repair recurrent inguinal hernia, any age; incarcerated or strangulated.
49525	49525: Repair inguinal hernia, sliding, any age.
49550	49550: Repair initial femoral hernia, any age; reducible.
49553	49553: Repair initial femoral hernia, any age; incarcerated or strangulated.
49555	49555: Repair recurrent femoral hernia; reducible.
49557	49557: Repair recurrent femoral hernia; incarcerated or strangulated.
49591	49591: Repair of anterior abdominal hernia(s) (ie, epigastric, incisional, ventral, umbilical, spigelian), any approach (ie, open, laparoscopic, robotic), initial, including implantation of mesh or other prosthesis when performed, total length of defect(s); less than 3 cm, reducible
49592	49592: Repair of anterior abdominal hernia(s) (ie, epigastric, incisional, ventral, umbilical, spigelian), any approach (ie, open, laparoscopic, robotic), initial, including implantation of mesh or other prosthesis when performed, total length of defect(s); less than 3 cm, incarcerated or strangulated
49613	49613: Repair of anterior abdominal hernia(s) (ie, epigastric, incisional, ventral, umbilical, spigelian), any approach (ie, open, laparoscopic, robotic), recurrent, including implantation of mesh or other prosthesis when performed, total length of defect(s); less than 3 cm, reducible
49614	49614: Repair of anterior abdominal hernia(s) (ie, epigastric, incisional, ventral, umbilical, spigelian), any approach (ie, open, laparoscopic, robotic), recurrent, including implantation of mesh or other prosthesis when performed, total length of defect(s); less than 3 cm, incarcerated or strangulated
49650	49650: Laparoscopy, surgical; repair initial inguinal hernia
Laparoscopic Cholecystectomy	
47562	47562: Laparoscopy, surgical; cholecystectomy
47563	47563: Laparoscopy, surgical; cholecystectomy with cholangiography
47564	47564: Laparoscopy, surgical; cholecystectomy with exploration of common duct
Breast Lumpectomy/Partial Mastectomy	
19301	19301: Mastectomy, partial (e.g., lumpectomy, tylectomy, quadrantectomy, segmentectomy)

Project changes from 2024 to 2025

Goal Description	2024 Project Points		2025 Project Points	Project Changes
	~~New Sites~~	Continuing Sites		
Data collection of ~~95~~ 100% of preoperative testing use	~~3~~	3	3	Increased threshold
~~**Develop/implement a standard preoperative testing protocol for low-risk surgeries (20 points total for new sites; 10 points total for continuing sites)**~~				Retired; must be a continuing site to participate in project
~~Adopt a preoperative testing guideline protocol to implement at your site~~	~~10~~			
~~Adopt clinical decision support tools to embed preoperative testing protocol into practice~~	~~10~~			
In-depth QI analysis of existing protocol and CDS tool implementation from prior year(s) to identify action plan for current project year		10	15	Increased point value
Reduce rate of preoperative testing by 20% as compared to baseline	~~10~~	20	10	Decreased point value
Preoperative testing performed on the day of surgery must have supporting clinical documentation to justify the need for testing (Goal ≥ 90%)			10	New measure
Conduct a minimum of two multidisciplinary meetings with key stakeholders (4 points total)				
Host a project kickoff meeting held no later than March 31, 2025	~~2~~	2	2	n/a
Host at least one follow-up multidisciplinary meeting between July and December 2025	~~2~~	2	2	n/a
Performance Data Monitoring	~~1~~	1	3	Increased point value
~~**Analyze preoperative testing on day of surgery (prior to In Room Time)**~~	~~2~~	2		Retired
Total	~~40~~	40	45	Increased point value
Optional Implementation Points (based on detail of project narrative, tracking log and analysis)	~~0-10~~	0-10	0-10	n/a

Goal #1: Data Collection (3 points)

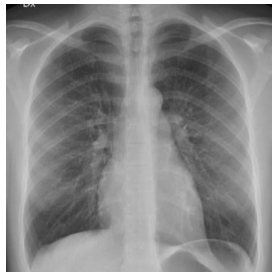
Collect preoperative testing information on **100%** of eligible cases

- Abstract presence/absence of all 9 preoperative tests on every case, and if applicable:
  - Testing date
  - Clinical documentation supporting day of surgery (DOS) testing
- Measurement Period: CY 2025
- Increased value to 3 points (from 1 point)

Goal #1: Data Collection, continued

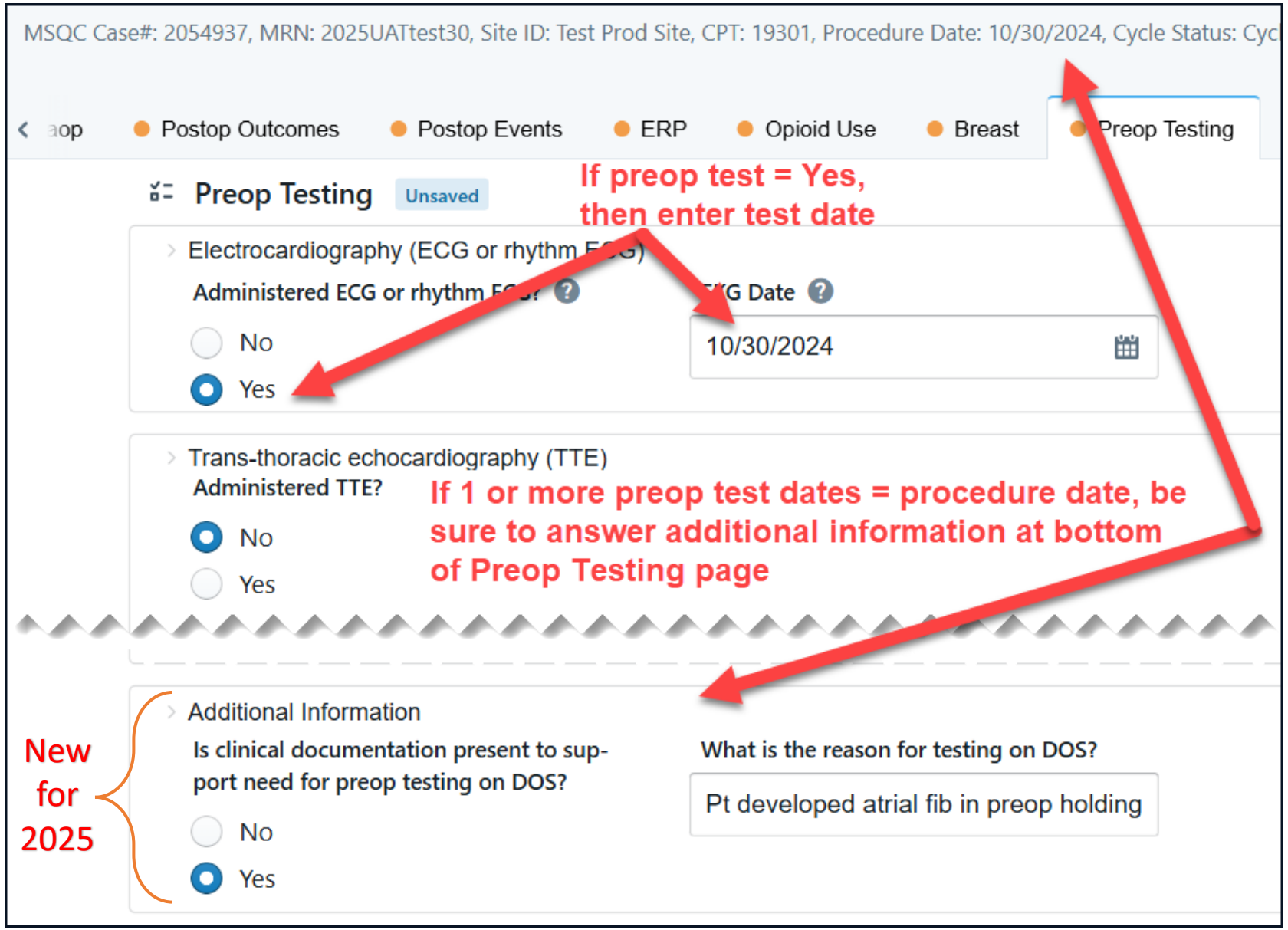
Abstraction of specific preoperative screening tests performed within 30 days prior to the In Room Time

Preoperative Screening Tests	
ECG	Complete blood count
Trans-thoracic echocardiography	Basic metabolic panel
Cardiac stress test	Coagulation tests
Chest Xray	Pulmonary function tests
Urinalysis	

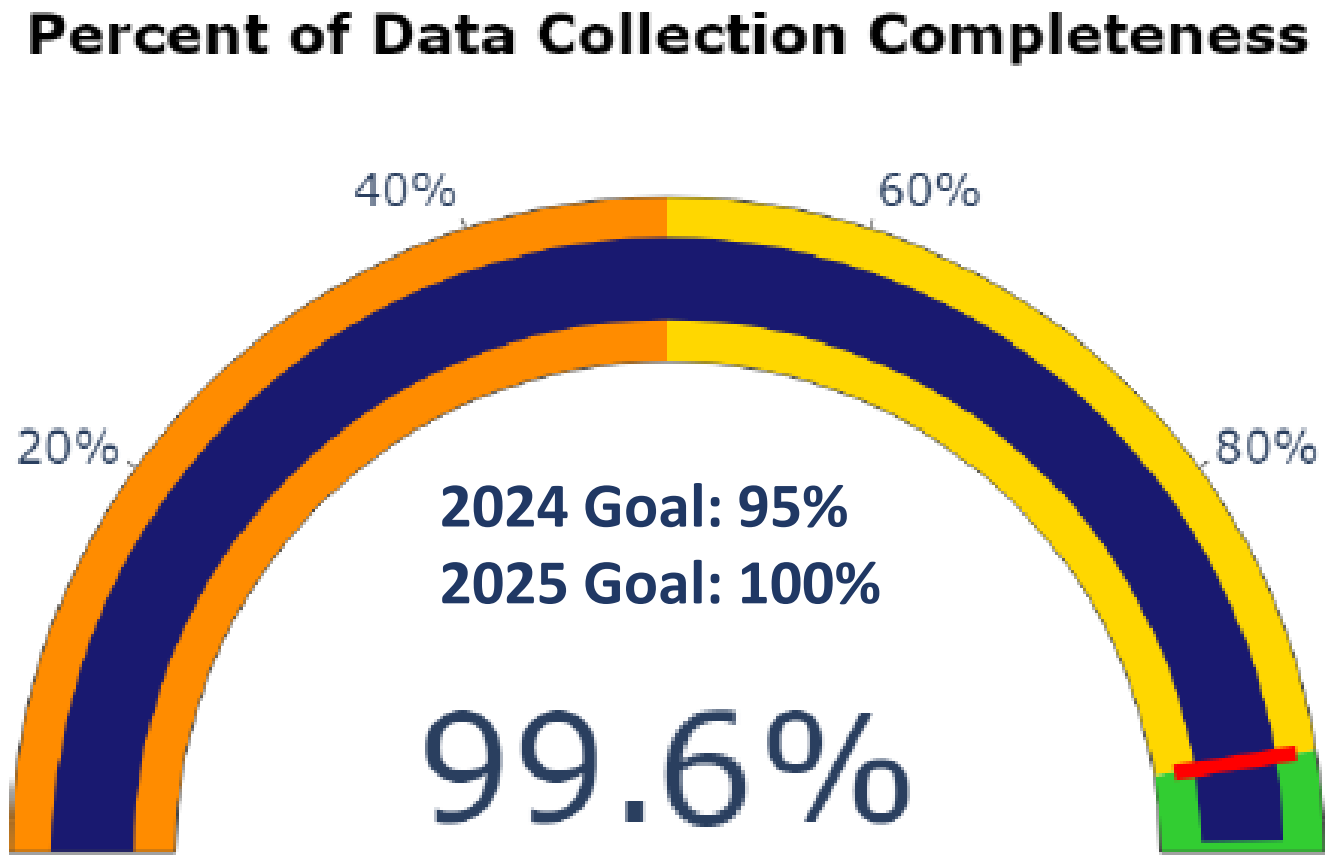


Goal #1: Data Collection, continued

- Capture diagnostic tests performed anytime within 30 days prior to surgery up until In Room Time. **This includes tests performed on the day of surgery.**
- Indicate whether preop test exists (Yes/No), and date of test if present
- Answer variables about supporting clinical documentation if the test was performed on the day of surgery (DOS)



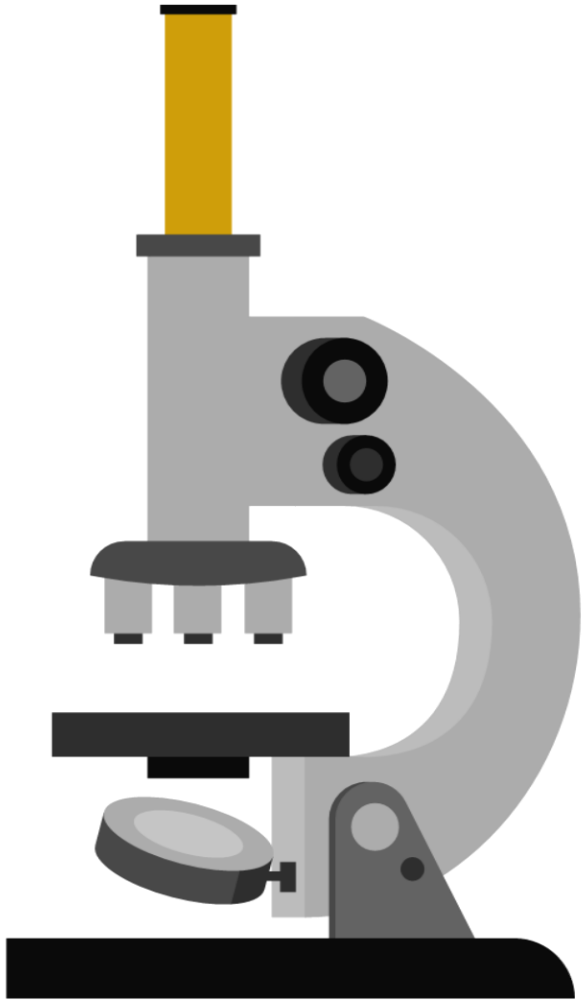
2024 YTD Preliminary* Project Performance



*All 2024 MSQC project sites; completed cases in Workstation as of 12/27/2024

Goal 2: In-Depth QI Analysis (15 points)

- In-depth QI analysis by multidisciplinary team of how protocol and CDS tools used in prior year were modified or implemented differently to improve compliance with reducing preoperative testing.
- QI tool examples: Fishbone diagram, 5 Whys, A3, etc.
- Perform analysis early in the project year, and use results to identify improvement strategy for 2025
- Increased point value to 15 points (from 10 pts)



Goal 3a: Reduce Low-Value Preop Testing (10 points)

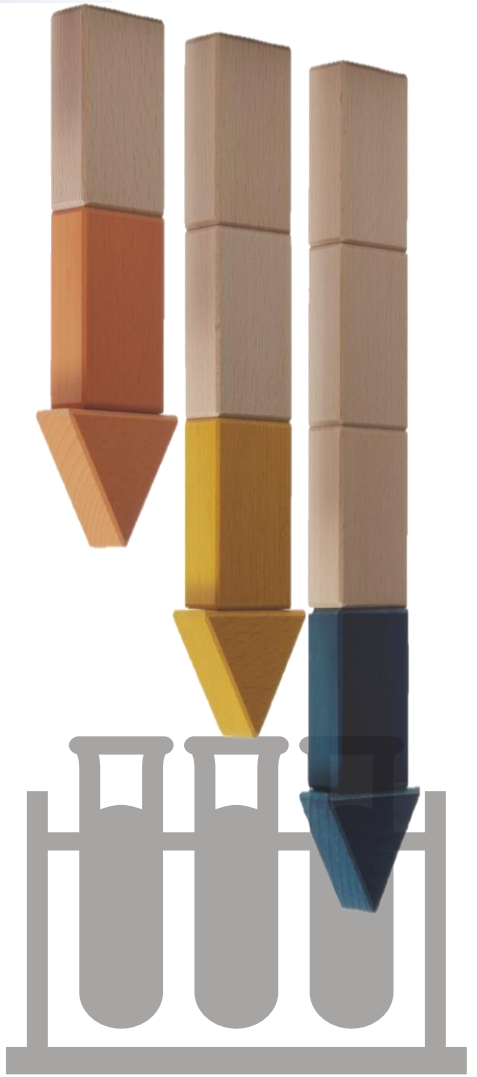
Reduce percentage of cases receiving ≥ 1 of the specified preoperative tests *between 1 and 30 days prior to surgery,* by 20% as compared to site-specific baseline

*Project time periods:

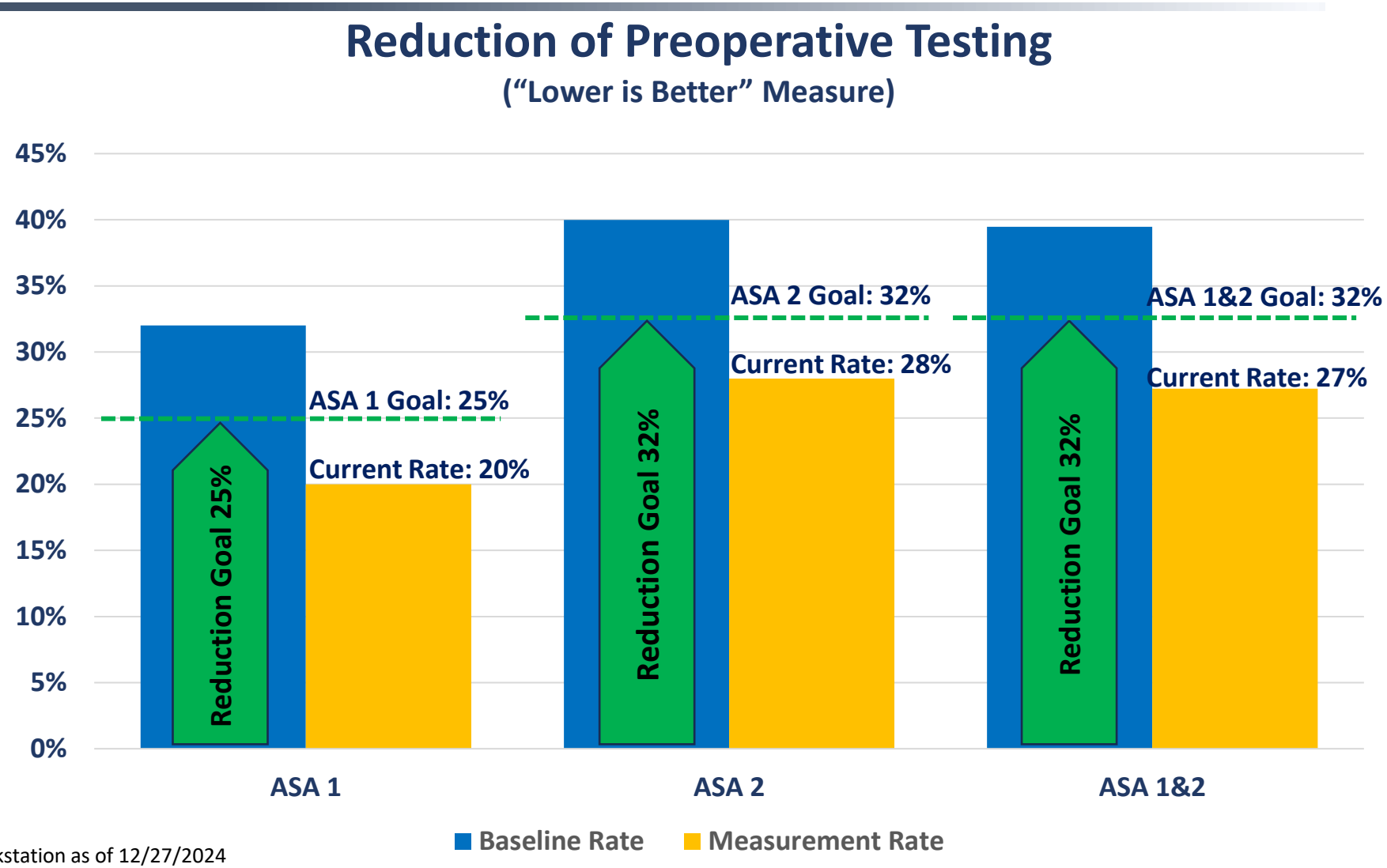
- Baseline period, 2024 sites: **4/1/2024 – 12/31/2024***
- Baseline period, 2023 sites: 4**/1/2023 – 12/31/2023**
- Measurement period, all sites: **4/1/2025 – 12/31/2025**

Point value decreased to 10 points (from 20 points)

*Baseline period for 2024 sites will lock on 4/30/2025



Goal 3a: 2024 YTD* Preliminary Performance



*Completed cases in Workstation as of 12/27/2024

Goal 3b: Day of Surgery Preop Testing Rationale

New measure for 2025

Preoperative testing performed on the day of surgery (prior to In Room time) must have supporting clinical documentation to justify the need for testing

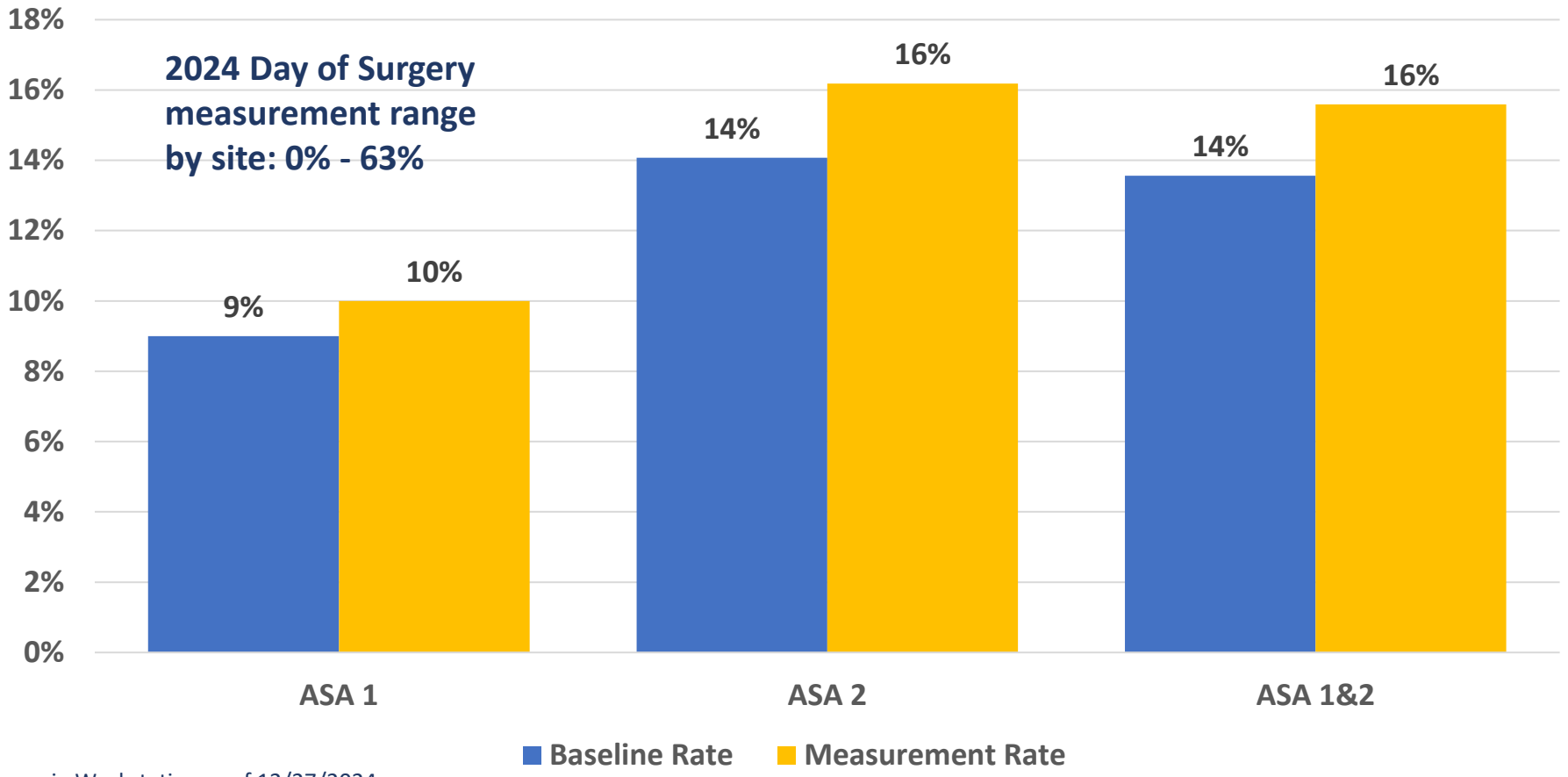
Goal ≥ 90% (10 points)

Baseline period: 1/1/2025 – 3/31/2025

Measurement period: 4/1/2025 – 12/31/2025

2024 YTD* Preliminary Project Performance

Day of Surgery Preoperative Testing
("Lower is Better" Measure)



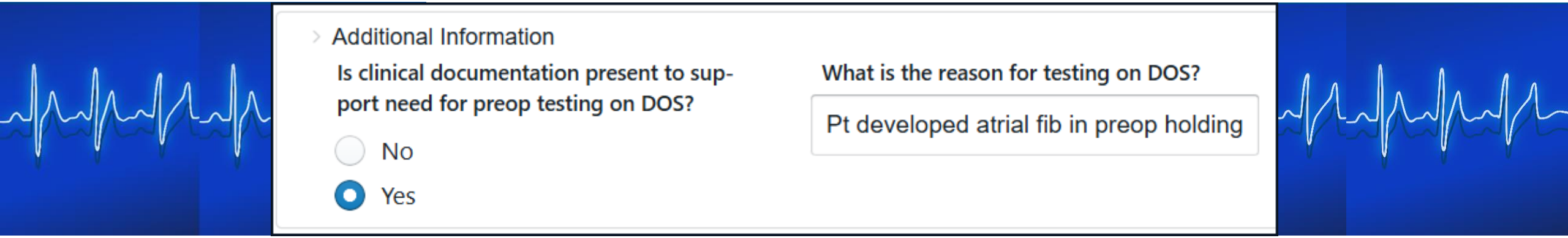
2024 Goal:
No increase, or a decrease from baseline.

Test only when clinically indicated, e.g. sudden onset chest pain; new arrhythmia; abnormal POC lab results

*Completed cases in Workstation as of 12/27/2024

Goal 3b: New Workstation Variables

Captured through use of new Preop Testing tab variables



Occurrence of an unanticipated clinical situation justifies an immediate need for testing*

Examples of Clinical Documentation	
Change in heart rhythm	Sudden respiratory changes
New onset chest pain	Abnormal POC glucose result

*Note: “Protocol” is not sufficient documentation to answer “Yes”

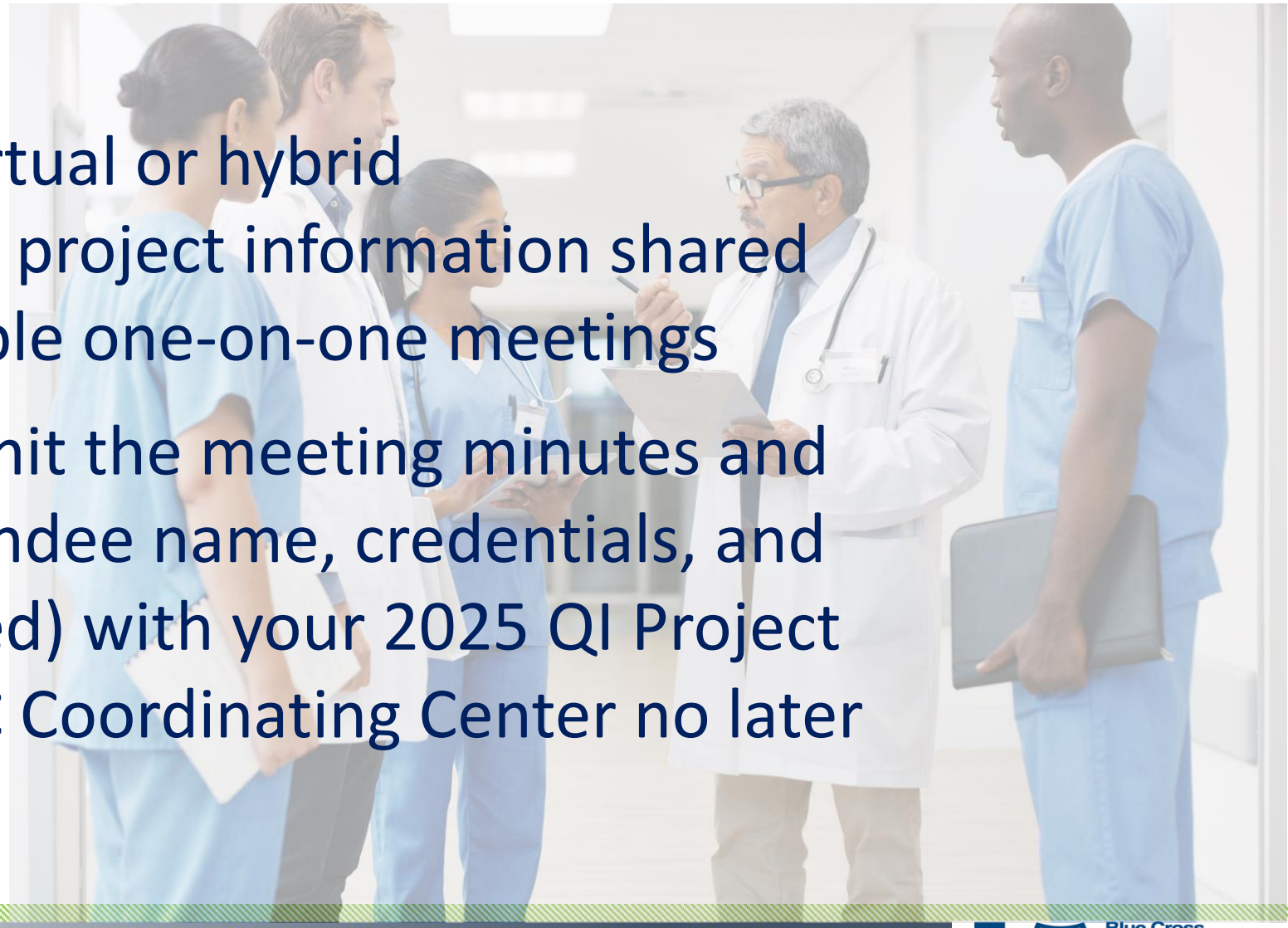
Goal 4: Multidisciplinary Meetings (4 points total)

- Conduct a minimum of two multidisciplinary meetings with key stakeholders to review project requirements, implement project components and monitor project performance.
  - **Goal 4a**: host a project kickoff meeting held no later than **March 31, 2025**. (**2 points**)
  - **Goal 4b**: host at least one follow-up multidisciplinary meeting **between July and December 2025** to discuss protocol implementation, progress and barriers to implementation, and monitoring of compliance data (including MVC and MSQC preoperative testing data). (**2 points**)

Goal 4: Multidisciplinary Meetings , continued

- Required meeting attendees must include:
  - General surgeon
  - Anesthesiologist
  - MSQC/Quality dept representation
- Additional attendees can also include:
  - Hospital's MVC Site Coordinator (if applicable)
  - Primary care provider (PCP)
  - OB/GYN surgeon
  - Pre-operative clinic representative (if applicable)
  - Surgical resident
  - Others as appropriate for your site

Goal 4: Multidisciplinary Meetings, continued



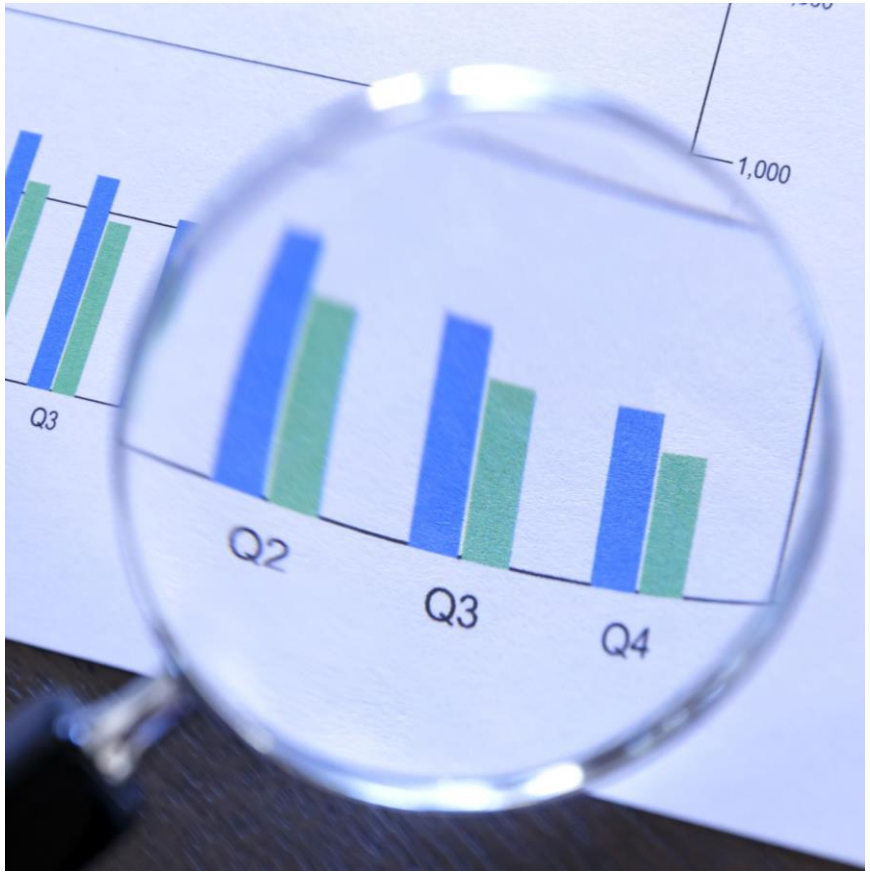
- Meeting formats:
  - Can be in-person, virtual or hybrid
  - Cannot be limited to project information shared over email, or multiple one-on-one meetings
- For each meeting, submit the meeting minutes and attendee list (with attendee name, credentials, and department represented) with your 2025 QI Project Summary due to MSQC Coordinating Center no later than **1/16/2026**

Goal 5: Performance Data Monitoring (3 pts total)

Utilize the MSQC and MVC data reports to monitor your site's progress and identify when program adjustments are necessary.

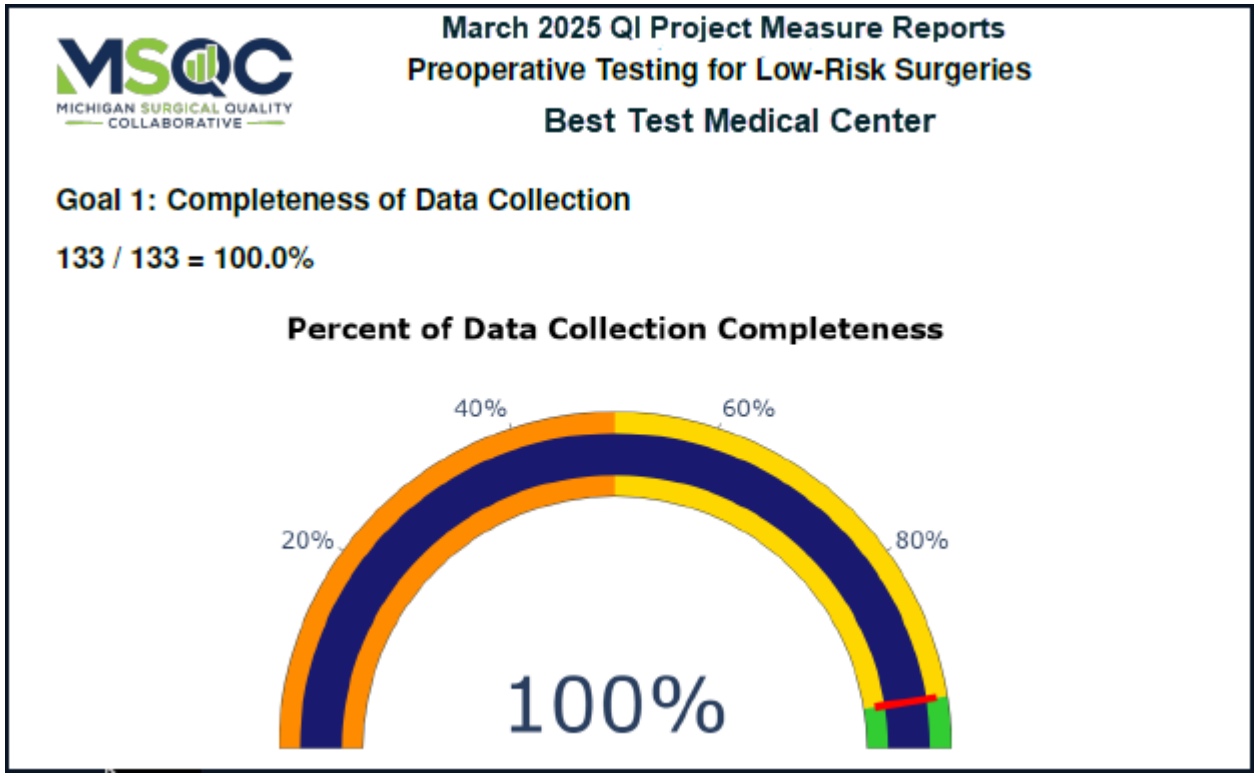
1. **MSQC** – QI push reports distributed to your site's Dropbox folder
2. **MVC** – Data Registry on-demand reports

Increased to 3 points (from 1 point in 2024)



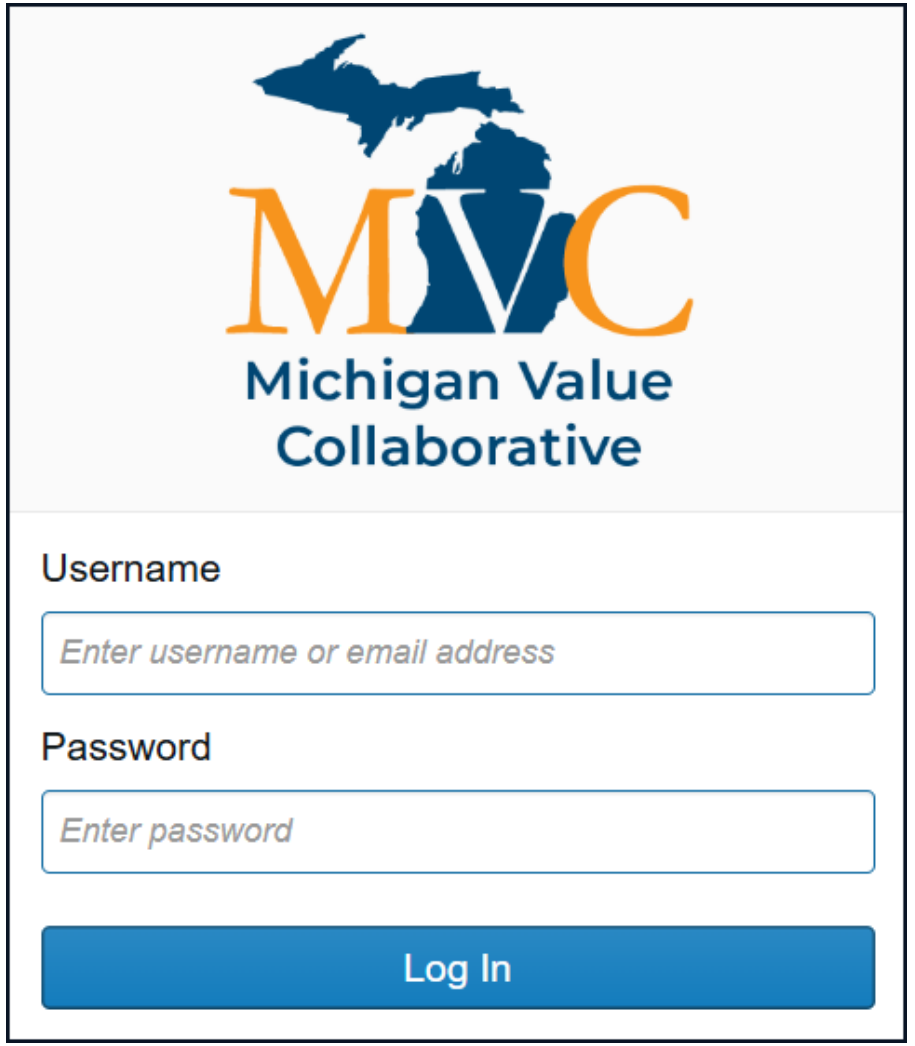
Goal 5a: MSQC QI Push Reports (1 point)

- Distributed to sites via Dropbox account
- Anticipated first release with 2025 data to occur after the end of March 2025
- **Deliverable**: Include documentation in meeting minutes that addresses your data findings and interpretations. Submit with final project summary in Jan.



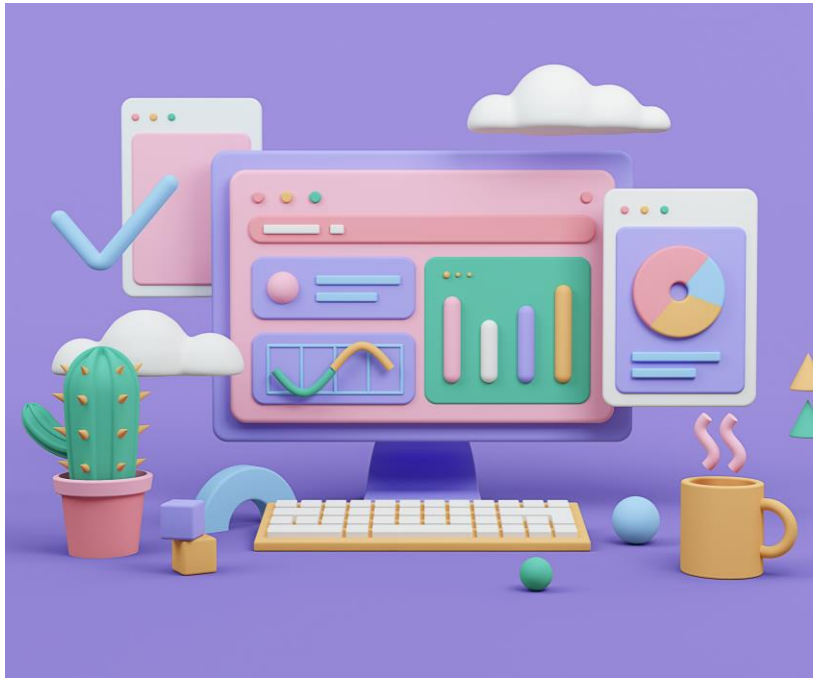
Goal 5b: MVC Registry Reports (2 points)

- On-demand preoperative testing reports available in MVC registry
- Based on claims data
- Download and discuss findings at each multidisciplinary meeting
- Include meeting discussion in minutes that are submitted to MSQC in January 2026; attach each report to submission
- MVC Registry training dates are January 21 and 28, both start at noon.



Goal 6: Annual Project Summary

- Submit annual project summary to MSQC by **1/16/2026**
- Use template available on MSQC 2025 QI page
- Same layout as 2024 template with minor modifications for 2025 requirements
- Describe adoption, implementation, and monitoring of preoperative testing protocol
- Successes, barriers, plans for moving forward with the project



Goal 6: Annual Project Summary, continued

Submit additional documents, including:

- In-depth QI analysis on effectiveness of protocol and clinical decision support tools, to identify action plan for 2025 project (from Goal #2)
- Meeting documents (minutes, participant list) from the project kickoff and subsequent follow-up multi-disciplinary meetings (from Goal #4)
- Feedback on the MVC and MSQC data reports (from Goal #5)

Project Points Summary

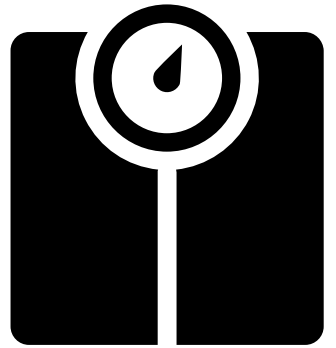
Goal	Goal Description	Points
1	**Data collection of 100% of preoperative testing use**	**3**
2	**In-depth QI analysis of existing protocol and CDS tool implementation from prior year(s) to identify action plan for current project year**	**15**
3	**Reduce the rate of unnecessary preoperative testing (20 points total)**	
3a	Reduce rate of preoperative testing by 20% as compared to baseline	**10**
3b	Preoperative testing performed on the day of surgery must have supporting clinical documentation to justify the need for testing (Goal ≥ 90%)	**10**
4	**Conduct a minimum of two multidisciplinary meetings with key stakeholders (4 points total)**	
4a	Host a project kickoff meeting held no later than March 31, 2025	**2**
4b	Host at least one follow-up multidisciplinary meeting between July and December 2025	**2**
5	**Performance Data Monitoring (3 points total)**	
	Use MSQC QI push reports to monitor performance and share results with the project team at multi-disciplinary meetings.	**1**
	Use MVC data registry reports to monitor performance and share results with the project team at multi-disciplinary meetings.	**2**
	Total	**45**
	Optional Implementation Points (based on detail of project narrative, tracking log and analysis)	**0-10**

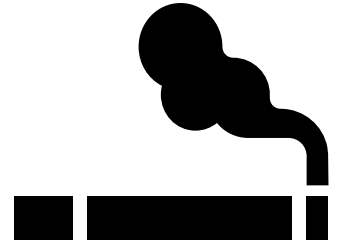
Important Project Dates

Date	Activity/Deliverable
Apr-Dec 2023 Apr-Dec 2024	Baseline period for Goal #3a: Reduce use of preop testing by 20% (date range based on site's most recent Preop Testing project year, either 2023 or 2024)
1/1/2025	Measurement period begins for Goal #1: Complete data collection on all 9 tests (all sites)
3/31/2025	Project kick-off multidisciplinary meeting deadline Baseline period ends for Goal #3b: DOS testing clinical rationale documented
4/1/2025	Measurement period begins for Goal #3b: DOS testing clinical rationale documented
4/30/2025	Baseline period for 2024 sites is locked
12/31/2025	Deadline for hosting second multidisciplinary meeting Measurement period ends (all measures)
1/16/2026	2025 QI Project with Tracking Sheets due to MSQC Coordinating Center
1/16/2026	Measurement period data analyzed by MSQC (all 2025 completed cases)

Collaborative-Wide Measure (CWM)

- Reduce rate of persons with body mass index (BMI) ≥ 40kg/m^2 undergoing elective abdominal hernia surgery to ≤ 11.5 MSQC-All rate, or 10% relative reduction compared to 10/1/2023 – 9/30/2024 collaborative-wide rate.
- Reduce rate of persons with active tobacco use undergoing elective abdominal hernia surgery to ≤ 14% MSQC-All rate, or 10% relative reduction compared to 10/1/2023 – 9/30/2024 collaborative-wide rate.





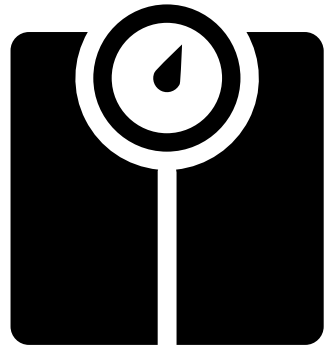
Measurement Period:

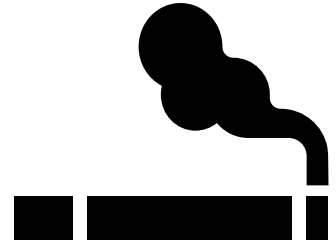
10/1/2024 – 9/30/2025

Measure Performance	Points
Meet both measures	10 points
Meet one measure	5 points
Neither measure met	0 points

Hospital-Wide Measure (HWM)

- Reduce rate of persons with body mass index (BMI) ≥ 40kg/m^2 undergoing elective abdominal hernia surgery to ≤ 11.5% hospital rate, or 10% relative reduction compared to 10/1/2023 – 9/30/2024 hospital rate.
- Reduce rate of persons with active tobacco use undergoing elective abdominal hernia surgery to ≤ 14% hospital rate, or 10% relative reduction compared to 10/1/2023 – 9/30/2024 hospital rate.





Measurement Period:

1/1/2025 – 12/31/2025

Measure Performance	Points
Meet both measures	10 points
Meet one measure	5 points
Neither measure met	0 points

Cancer-Related Variable Documentation (5 points)

- Complete documentation of designated cancer variables:
  - Colorectal Cancer (CRC)
  - Breast
  - Whipple
  - Thyroid
- **Goal**: ≥ 90% (aggregated rate for all variables)
- **Measurement**: January – December 2025

Colorectal Cancer Documentation

Includes all CRC CPT codes that enable the CRC tab

1. **If Positive Surgical Margin** = Yes, **Which margin was positive?** is NOT "Not specified"
2. **TME Grade** is NOT "Not graded" (ICD-10 C20 only, exclusions are local excision 45171, 45172, and rectal cancer in upper 1/3 location cases)

Breast Cancer Documentation

Includes breast CPT codes and cancer/DCIS ICD-10 codes listed in Program Manual

1. **Date of diagnosis known** = Yes
2. **T stage** is NOT “Staging not performed”

Whipple Documentation

Includes all Whipple CPT codes and cancer ICD-10 codes listed in Whipple Neoadjuvant Treatment variable

1. **How Pancreatic Duct Size was determined** is NOT “Pancreatic duct size not measured”
2. **Pancreas Texture** is NOT “Not Reported”

Thyroid Cancer Documentation

Includes thyroid CPT codes and ICD-10 code C73

1. **T stage** is NOT “Not Available”
2. **Size of malignancy/tumor/mass** is NOT “Not Available”
3. **Postoperative surgical pathology results** is NOT “Complete histology unavailable”

Project Resources

- MSQC 2025 Quality Improvement Projects web page
  - Project description
  - Project tracking sheet
  - 2025 PI Scorecard
  - RITE-Size Testing program
  - "Choosing Wisely" testing recommendations
  - United Kingdom NICE (National Institute for Health and Care Excellence) preoperative testing guidelines for elective surgery
  - Links to project tools (Drop the Preop Toolkit, etc.)

ASA Classification System

***American Society of Anesthesiologists (ASA) Physical Status Classification System**

ASA Class I: Normal healthy patient. Non-smoking, no or minimal alcohol use, no acute or chronic disease, normal BMI

ASA Class II: Mild systemic disease without substantive functional limitations. Current smoker, obesity (30<BMI<40), well-controlled DM/HTN, mild lung disease

ASA Class III: Severe systemic disease with substantive functional limitations, poorly controlled DM/HTN, COPD, morbid obesity (BMI ≥40), active hepatitis, alcohol dependence or abuse, pacemaker, moderate reduced EF, ESRD on HD, prior MI, CVA, TIA, or CAD/stents

**May consider EKG if none available within the past ~6 months.

Suggested Further Reading

Berlin, N. L., Yost, M. L., Cheng, B., Henderson, J., Kerr, E., Nathan, H., & Dossett, L. A. (2021). Patterns and determinants of low-value preoperative testing in Michigan. *JAMA Internal Medicine*, *181*(8), 1115-1118.

Cuttitta, A., Joseph, S. S., Henderson, J., Portney, D. S., Keedy, J. M., Benedict, W. L., ... & Mian, S. I. (2021). Feasibility of a Risk-Based Approach to Cataract Surgery Preoperative Medical Evaluation. *JAMA ophthalmology*, *139*(12), 1309-1312.

Baskin, A. S., Mansour, A. I., Kawakibi, A. R., Das, P. J., Rios, A. E., Miller, J., ... & Dossett, L. A. (2022). Perceived Barriers to the De-implementation of Routine Preoperative History & Physicals Preceding Low-risk Ambulatory Procedures: A Qualitative Study of Surgeon Perspectives. *Journal of Surgical Research*, *270*, 359-368.

Ganguli I, Simpkin AL, Lupo C, et al. Cascades of Care After Incidental Findings in a US National Survey of Physicians. *JAMA Network Open.* 2019;2(10):e1913325-e1913325.

Katz RI, Dexter F, Rosenfeld K, et al. Survey study of anesthesiologists' and surgeons' ordering of unnecessary preoperative laboratory tests. *Anesthesia and analgesia.* 2011;112(1):207-212.

Pickering AN, Zhao X, Sileanu FE, et al. Prevalence and Cost of Care Cascades Following Low-Value Preoperative Electrocardiogram and Chest Radiograph Within the Veterans Health Administration. *Journal of general internal medicine.* 2022.

Salar O, Holley J, Baker B, Ollivere BJ, Moran CG. Omitting pre-operative coagulation screening tests in hip fracture patients: stopping the financial cascade? *Injury.* 2014;45(12):1938-1941.

Welch JM, Zhuang T, Shapiro LM, Harris AHS, Baker LC, Kamal RN. Is Low-value Testing Before Low-risk Hand Surgery Associated With Increased Downstream Healthcare Use and Reimbursements? A National Claims Database Analysis. *Clinical orthopaedics and related research.* 2022.

Questions