MSQC

Michigan Surgical Quality Collaborative

2022 Hysterectomy Care QI Project Kickoff Session

January 2022

2022 Hysterectomy QI Project Overview

- All elective hysterectomy patients
- Follows recommendations of the MSQC Hysterectomy Care Pathway
- Preoperative, intraoperative, and postoperative measures
- Additional “deep dive” review of all SSI and Return to ED Related to Surgery cases
- Multidisciplinary meeting to be held by **3/31/2022**
- Implement process to ensure documentation of cases is complete
- Implement a process for reviewing and monitoring uterine surgical specimens without pathology findings
- Adopt hysterectomy surgical approach algorithm

2022 QI Timeline

- Measurement Period for QI measures is 1/1/2022 – 12/31/2022
- 3/31/2022 – must hold multidisciplinary meeting by this date
- 6/30/2022 – New sites to the project must implement template for standardized documentation by this date
- 1/16/2023 – Completed 2022 Hysterectomy Project Tracking Sheet and Narrative Summary Report due to MSQC

2022 Hysterectomy QI Project Changes

- QI 2021 – 2022 Project Changes comparison document
- Individual measure scoring, rather than aggregate measure category scores
- Continuing measures may have different threshold requirements
  - Changes in goal thresholds based on 2021 measure performance
- New or revised measures
  - Smoking cessation counseling – new measure
  - Weight reduction counseling – new measure
  - Postoperative multimodal pain management – revised measure

2022 Hysterectomy QI Project Changes, continued

- Retired measures
  - Intraoperative multimodal pain management
  - Intraoperative nausea and vomiting prophylaxis for PONV
  - M-OPEN prescribing recommendations measure
- New Project Goals
  - Internal quality review of each postoperative SSI or return to ED related to surgery
  - Implement process for reviewing/monitoring uterine surgical specimens without pathology findings supporting the need for hysterectomy
  - Adopt use of hysterectomy surgical approach algorithm

Goal #1: Hysterectomy Preoperative Measures

5 points each (30 points total)

- 1a. Preadmission teaching includes multimodal pain management
- 1b. Smoking cessation counseling (if applicable)
- 1c. Weight reduction counseling (if applicable BMI> 40)
- 1d. Alternative treatments offered / tried / declined, or contraindications documented
- 1e. Glycemic control HbA1c if diabetic, RBS if not diabetic
- 1f. Appropriate antibiotic administered

Goal #1: Hysterectomy Preoperative Measures

1a. Preadmission teaching includes multimodal pain management

- Goal ≥ 90%
- Continuation of measure from 2021 QI project
- Written and verbal education provided to patient
- Preadmission counseling/ teaching (ERP Tab) → Pain Management selected
- Patient education resource materials and MSQC FAQs

Goal #1: Hysterectomy Preoperative Measures, continued

1b. Smoking cessation counseling

- Goal ≥ 80%
- Cases with Tobacco Use within 1 month – Cigarette = “Yes”
- New measure for 2022
- Verbal and written counseling provided
- Can include referral to smoking cessation program
- Preadmission counseling/ teaching (ERP Tab) → Tobacco Cessation selected
- Patient education resource materials and MSQC FAQs

Goal #1: Hysterectomy Preoperative Measures, continued

1c. Weight reduction counseling

- Goal ≥ 80%
- Cases with BMI ≥ 40
- New measure for 2022
- Verbal and written counseling provided
- Can include referral to weight loss program
- Preadmission counseling/ teaching (ERP Tab) → Weight Reduction selected
- Patient education resource materials and MSQC FAQs

Goal #1: Hysterectomy Preoperative Measures, continued

1d. Alternative treatments tried / offered / declined, or contraindications documented, for specific diagnoses

- Goal ≥ 90%
- Continuation of measure from 2021 QI project
- Eligible diagnoses:
  - Adenomyosis, chronic pelvic pain, endometriosis
  - Abnormal uterine bleeding, uterine fibroids
  - Prolapse
  - "Other, not listed above" option in "Indications for Procedure" (new option; consult with MSQC before assigning this option)
- Alternative Treatments to Hysterectomy (Preop Tab) → Yes, or Methods discussed, but not specifically documented selected

Goal #1: Hysterectomy Preoperative Measures, continued

1e. Glycemic control: HbA1c if diabetic* or RBS if not diabetic

- Goal ≥ 80%
- Continuation of measure from 2021 QI project
- Diabetic: only HbA1c qualifies for measure
- Non-diabetic:
  - Random blood glucose
  - Fasting blood glucose
  - POC glucose testing
  - HbA1c
- Document preoperative values in Lab Values Tab
- Preoperative Blood Glucose Values Tips Sheet

*Diabetes Mellitus = Non-insulin or Insulin

Goal #1: Hysterectomy Preoperative Measures, continued

1f. Appropriate Antibiotics Administered

- Goal ≥ 90%
- Continuation of measure from 2021 QI project
- Appropriate antibiotic regimen must be administered
- Measure exclusion criteria
- Appropriate Antibiotic Measure Abstraction Tip Sheet

Goal #1: Hysterectomy Preoperative Measures, continued

Appropriate IV Prophylactic Antibiotics for Hysterectomy (administered within 60 minutes before incision)
Cefazolin 2g (3 g if weight ≥120kg) **AND** metronidazole 500mg[1]
Cefazolin 2 g (3 g if weight ≥ 120 kg)[2]
Cefotetan 2 g[2]
Cefoxitin 2 g[2]
Ampicillin-sulbactam 3 g (ampicillin 2 g/sulbactam 1 g) [2,*] *Due to increasing resistance of Escherichia coli to fluoroquinolones and ampicillin–sulbactam, local population susceptibility profiles should be reviewed prior to use.
[1]Till SR, Morgan DM, Bazzi AA, et al. Reducing surgical site infections after hysterectomy: metronidazole plus cefazolin compared with cephalosporin alone. Am J Obstet Gynecol 2017;217:187.e1-11. https://www.ncbi.nlm.nih.gov/pubmed/28363438 [2]Bratzler DW, Dellinger EP, Olsen KM, et al. Clinical practice guidelines for antimicrobial prophylaxis in surgery. Am J Health-Syst Pharm. 2013; 70:195–283. The entire Clinical Practice Guidelines from the American Society of Healthcare Pharmacists can be viewed here MSQC Hysterectomy Care Pathway (2019)

Goal #1: Hysterectomy Preoperative Measures, continued

- Antibiotic measure exclusions:
  - cases with current antibiotic measure Exception
  - certain Hysterectomy Care Pathway QI exception rationales:
    - not an elective Hysterectomy, or not a Hysterectomy Care Pathway QI Case
    - Allergy
    - Shortage
    - Other MSQC-approved reason

Goal #1: Hysterectomy Preoperative Measures, continued

- If antibiotic administered is not on the recommendation list (e.g., due to allergy, limited supply, antibiotic resistance, etc.):
  - must be documented that the patient is receiving an alternative antibiotic(s) with specific rationale for the decision.
  - Can be documented by the surgeon/anesthesia/other staff in the order, H&P, or the operative report or note.
  - documentation is required that links an allergy (or other situation) and administration of the alternative antibiotic selection
  - One or more of the 5 antibiotic recommendations in the patient allergy list alone will not suffice to answer “Allergy”.
  - if unavailable, you would need to select “reason not approved by MSQC”.

Goal #2: Hysterectomy Postoperative Measures

5 points each (15 points total)

- 2a. Postoperative order for multimodal pain management if discharged on POD 0
- 2b. Postoperative use of multimodal pain management if discharged on or after POD 1
- 2c. Discharge education includes multimodal pain management teaching

Goal #2: Hysterectomy Postoperative Measures

2a. Postoperative order for multimodal pain management if discharged on POD 0

- Goal ≥ 90%
- Revised measure from 2021 QI project
  - Multimodal medication order limited to patients DC on POD 0
- At least 2 non-opioid pain medications ordered within first 24 hours postoperatively
- Multimodal Pain Management ordered within the first 24 hours following surgery? (ERP Tab) → Yes selected

Goal #2: Hysterectomy Postoperative Measures, continued

2b. Postoperative use of multimodal pain management if discharged on or after POD 1

- Goal ≥ 90%
- Revised measure from 2021 QI project
  - Multimodal medication administration required for patients DC on or after POD 1
- At least 2 non-opioid pain medications must be administered within first 24 hours postoperatively

Goal #2: Hysterectomy Postoperative Measures, continued

- Multimodal Pain Management ordered within the first 24 hours following surgery? (ERP Tab) → Yes selected

AND

- All administered medications are abstracted
  - Minimum of two medications entered
  - Acetaminophen will only count once, even if both the oral and intravenous options are abstracted
  - If no medications are administered, must abstract “Postop multimodal not used” option (case will fail measure)

Goal #2: Hysterectomy Postoperative Measures, continued

2c. Discharge education includes multimodal pain management teaching

- Goal ≥ 90%
- Continuation of measure from 2021 QI project
- Only cases with Discharge Destination equal to Home, or Home with Home Health Care
- Postop Teaching/Counseling (ERP Tab) → Pain Management selected

Goal #3: Case Review of SSI and Returns to ED (5 points)

- Review and analysis of all hysterectomy cases with SSI or return to ED related to surgery.
- New project requirement for 2022
- Instructions to identify cases contained in QI Tips and Tricks document
- Most sites will have 1 – 5 cases to review; some may have zero cases
- Must include review of SSI cases where SSI was PATOS.
- Your site may already have an existing process for quality review of cases (infection control, quality dept review) that can be used/adapted for this review.
- AHRQ Surgical Site Infection Investigation Tool (can also download a Word version of the document)

Goal #3: Case Review of SSI and Returns to ED, con't.

- Provide overall findings summary (# cases and overall rate for each category, trends identified, action plans implemented) with QI project submission on 1/16/2023
- Additional SSI resources available:
  - MSQC SSI Toolkit
  - AHRQ Healthcare-Associated Infections Program

Goal #3: Case Review of SSI

Questions to consider when analyzing review findings:

- Are our SSIs primarily due to skin contaminants or enteric organisms?
- Do we have a firm policy to culture all SSIs?
- Is the problem primarily in emergent or elective cases?
- Do we have a policy to use CHG-alcohol as skin prep?
- Does our institution have an evidence-based policy regarding intra-operative blood transfusion?
- Do the SSIs seem localized to particular surgeon, or operating room?
- Do we have a concerted approach to increase bundle compliance?
- Do we need a policy of culturing nares pre-operatively (if high volume of MRSA cases)?
- Are our high-risk patients enrolled in an Enhanced Recovery Program?

Goal #3: Case Review of Returns to ED*

Questions to consider when analyzing review findings:

- Do the returns seem localized to particular reason (pain, bleeding, urinary symptoms, wound issues, N/V, etc.)?
- Are the reasons for return to ED essentially non-urgent, avoidable issues?
- Do we have established discharge criteria that must be met for these potential issues prior to discharging the patient (e.g., void post catheter removal, ability to tolerate oral fluids, understands pain management strategy)?
- Does our patient education content adequately prepare the patient for what to expect related to these issues, and how to seek assistance in the appropriate care setting?
- What time of day/day of week do the majority of these cases occur? Are they during business hours when the office is regularly open?
- Do we have an "after-hours" contact method for patients to use, rather than automatically going to the ED?

*Excludes visits where patient was ultimately admitted as an inpatient to an acute care hospital. Refer to MSQC Program Manual: Presentation to ED or Urgent Care variable definition.

Goal #4: Completeness of Documentation

- Implement/maintain a plan for ensuring completeness of documentation in the medical record
- Documentation template must include:
  - Indications for hysterectomy
  - Alternatives offered / tried / declined before having surgery (if appropriate, in non-cancerous diagnoses)
  - Contraindications to any alternative treatments
  - Preoperative ultrasound/imaging findings (except for prolapse)
  - Planned surgical approach and rationale

Goal #4: Completeness of Documentation, continued

- Continuation of 2021 QI project requirement – sites continuing the project should already have documentation template in use.
- Sites new to hysterectomy project in 2022 must have documentation template implemented no later than June 30, 2022
- Submit template to MSQC with 2022 QI project due 1/16/2023
- Include summary of template development/implementation process, successes, barriers, challenges to implementation in 2022 QI report
- Include revisions made in documentation process to improve adoption of the template

Goal #5: Benign Surgical Specimen Monitoring Process

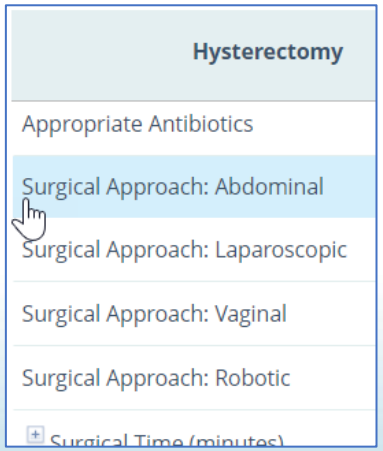
- Implement a process for reviewing and monitoring uterine surgical specimens without pathology findings supporting the need for hysterectomy.
- Guidance note: These cases are those with pathology findings (e.g., normal, unremarkable, physiologic, reactive, or of minor importance) amenable to medical or surgical treatment less invasive than hysterectomy. In general, these changes would rarely require hysterectomy to relieve a patient of symptoms.
- Describe your hospital's process on the 2022 QI Project Report

Goal #5: Benign Surgical Specimen Monitoring Process, con't.

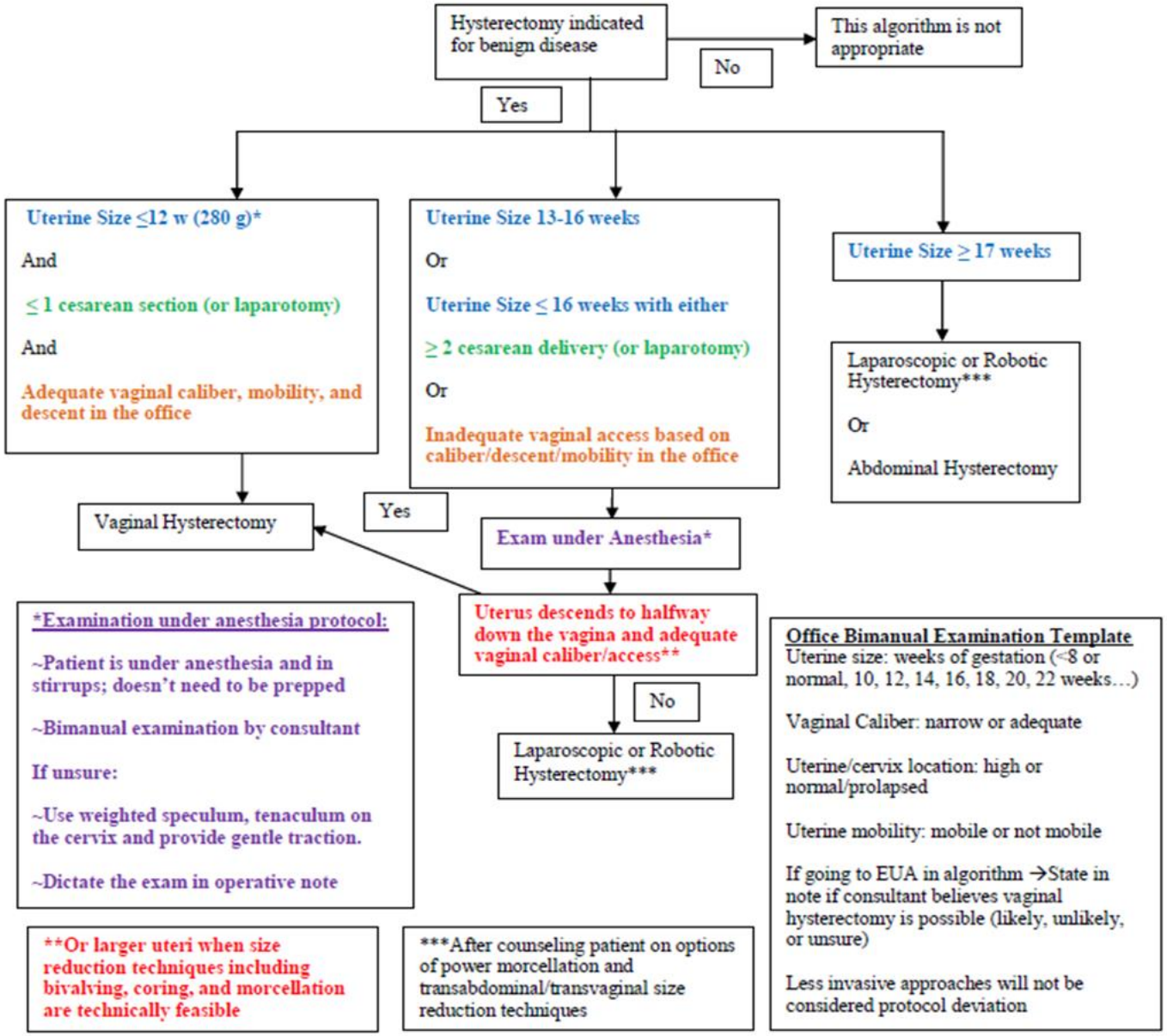
- Provide overall findings summary in QI project report
  - # benign cases identified
  - Benign specimen case rate – can approximate a denominator from Indications for Procedure variable options of:
    - #6 – Adenomyosis, chronic pelvic pain, endometriosis
    - #7 – Abnormal uterine bleeding, uterine fibroids
  - Trends identified via case review
  - Action plans implemented, if any
- Hullfish, Kathie L et al. "The effect of preoperative checklists on final histology and rates of hysterectomy for benign conditions." *Female pelvic medicine & reconstructive surgery* vol. 18,3 (2012): 143-7. doi:10.1097/SPV.0b013e3182523a03

Goal #6: Adopt Surgical Approach Algorithm

- Hysterectomy Surgical Approach algorithm included in the Hysterectomy Care Pathway document (on separate worksheet in the document)
- MSQC May 2019 Hysterectomy Quality Improvement Workshop sessions and resources, including algorithm implementation, exclusions, etc.
- Provide a brief summary of how the algorithm was adopted at your facility
- Hysterectomy Overview dashboard report provides breakdown of surgical approaches for your cases



Hysterectomy Algorithm



https://msqc.org/quality-improvement/msqc-care-pathways/

MSQC May 2019 Hysterectomy Quality Improvement Workshop

Hysterectomy Multidisciplinary Meeting

Conduct and document at least one multidisciplinary meeting by 3/31/2022

- Meeting can be in-person, virtual, or hybrid format
- Attendees to include surgeons who perform hysterectomies, nurses, quality specialists, pathology, anesthesia, pharmacists, other relevant staff
- Topics to address:
  - Discuss/establish the Hysterectomy Care Pathway
  - QI project measures
  - Hysterectomy surgical approach algorithm
  - Standardized template for hysterectomy documentation

Hysterectomy Multidisciplinary Meeting, continued

- Topics to address (continued):
  - Process for benign surgical specimen review
  - Process to identify and review SSI and return to ED cases
  - Review prior year performance and strategize how to sustain and improve performance
  - New sites: discuss how to implement the project
  - Continuing sites: include analysis (PDCA, FMEA, RCA or other QI methodology) for measures that did not meet the goals in 2021, and improvement strategies for 2022.
- Submit meeting documentation to MSQC with 2022 QI Project Tracking Sheet & Summary Report (due 1/16/2023)

Goal #7: QI Tracking Sheet and Narrative Summary Report

- Due to MSQC by 1/16/2023
- May be eligible for additional Implementation Points based on thoroughness and completeness of the Summary
- Take credit for QI work on project measures, standardized documentation development and implementation
- Document throughout year to track progress on measure performance, capture QI implementation efforts
- Meetings, communications, process changes, key dates
- Describe improvement efforts, successes, barriers, challenges

Goal #7: QI Tracking Sheet and Narrative Summary Report, continued

- Include all required documentation/attachments
  - Multidisciplinary meeting documentation
  - Smoking cessation education efforts implemented, smoking cessation materials used, process for connecting patients with smoking cessation services
  - Summary of review findings of SSI and returns to ED related to surgery (Goal #3)
  - Completeness of documentation (Goal #4)
  - Benign uterine surgical specimen monitoring process (Goal #5)
  - Adoption of hysterectomy surgical approach algorithm (Goal #6)

Other QI and Performance Index Scorecard Requirements

- Sampled and incomplete cases ≤ 0.5% of total volume (3 points)
- 30-day follow-up rate ≥ 80% per calendar quarter (max. 3 points)
- Collaborative-Wide Measure: Reduce Excess Oral Morphine Equivalent (OME) Prescribing Across All MSQC Procedures (max. 20 points)

2022 Michigan Surgical Quality Collaborative Performance Index Scorecard Project Time Period: 1/1/2022 – 12/31/2022			
Measure	**Weight**	**Measure Description**	**Points**
5	6	**Completeness of Data (maximum 6 pts available)**	
		Sampled and incomplete cases ≤0.5% total volume	3
		30 day follow-up rate ≥80% for 1st quarter 2022 (Jan – March cases)	1
		30 day follow-up rate ≥80% for 2nd quarter 2022 (April – June cases)	1
		30 day follow-up rate ≥80% for 3rd quarter 2022 (July – September cases)	1
6	20	**Collaborative Wide Measure – Reduce Excess Oral Morphine Equivalent (OME) Prescribing Across All MSQC Procedures***	
		OME excess reduction ≥10% over 2021 baseline OME excess	20
		OME excess reduction 9.0 - 9.99% over 2021 baseline OME excess	15
		OME excess reduction 8.0 - 8.99% over 2021 baseline OME excess	10
		OME excess reduction 7.0 - 7.99% over 2021 baseline OME excess	5
		OME excess reduction <7.0% over 2021 baseline OME excess	0

Sampled and Incomplete Cases ≤ 0.5% (3 points)

- Locked, sampled, incomplete cases cannot exceed 0.5% of total case volume
- Will be calculated on locked cases beginning with OR dates in Q4 2021 through Q3 2022*
- Monitor regularly throughout year using Case List filters
  - Year = 2022
  - Case Status = Sampled
  - Complete Status = No
  - Look for cases that locked prior to current date in Lock Date column

*Q4 2021 cases were excluded from 2021 Project Year Sampled and Incomplete case calculations due to shift in project timelines

30 Day Follow-Up Rate (maximum 3 points)

- 1 point awarded per calendar quarter where follow-up rate ≥ 80%
- Q1, Q2, and Q3 2022* to be calculated at or near the case lock date:
  - Q1 (1/1 – 3/31/2022 OR dates)
  - Q2 (4/1 – 6/30/2022 OR dates)
  - Q3 (7/1 – 9/30/2022 OR dates)
- 30 Day Follow-Up Dashboard report for monitoring
- Denominator: Case Status = Sampled
  Complete Status = Complete
- Numerator: Follow Up Status = Yes

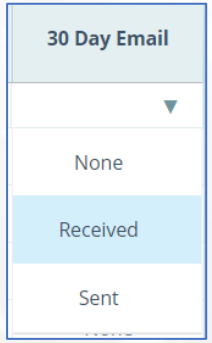
*Follow-up rates for Q4 2022 cases will be monitored in the 2023 QI P4P scorecard due to shift in project timelines

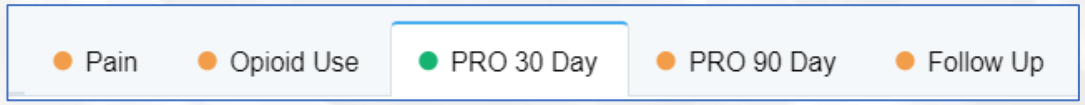
PRO Follow Up Abstraction Workflow Tips

- Upload sample frame prior to, or as soon after POD 30 as possible
- PRO email will be sent as early as POD 31 if the following are entered:
  - Patient first and last name (Demographics tab)
  - Patient email (Demographics tab)
  - Surgeon name (Surgical Profile tab)
  - Death status = No (Surgical Profile tab)
  - Followed for 30 days = No or blank (Follow Up tab)
- Takes advantage of automated PRO survey distribution; patient can respond to PRO even before chart is abstracted by SCQR
- Patient will have better recall to answer PRO questions when surveyed closer to POD 30; patient more likely to be home and available to answer the survey

PRO Follow Up Abstraction Workflow Tips, continued

- Check for patient response in Case List 30 Day Email field = Received
- Emailed survey responses received will auto-populate PRO 30 Day tab
  - Do not edit this tab
- Pain responses will auto-populate Pain tab the day after response received
- Saves SCQR time and effort as compared to hard copy letter and/or phone call process to all patients. Only need to contact those that did not answer emailed PRO survey
- Ensure Registration department is capturing email addresses
  - Can run Source Data Export to monitor if email address is being captured





2022 Collaborative Wide Measure (CWM)

Measure: Reduce excess oral morphine equivalent (OME) prescribing across all MSQC procedures, as compared to 2021 baseline OME excess*

Measurement Period: 1/1/2022 – 12/31/2022

All sites will receive points based on the "MSQC-All" performance as a group, rather than the individual site performance.

CWM Score	Points Awarded
OME excess reduction ≥ 10% of the 2021 baseline OME excess	20 points
OME excess reduction 9.0 – 9.99% over the 2021 baseline OME excess	15 points
OME excess reduction 8.0 - 8.99% over the 2021 baseline OME excess	10 points
OME excess reduction 7.0 - 7.99% over the 2021 baseline OME excess	5 points
OME excess reduction <7.0% over the 2021 baseline OME excess	0 points

*goals may be updated at end of 2021 once more data is available

2022 Collaborative-Wide Measure (CWM), continued

Population:

- All MSQC-eligible procedures
- DC destination of Home, or Home with Home Health Care
- Complete abstraction of DC prescription (opioid type, unit, dose, qty)
- Number of doses taken (collected in 30-day PRO survey)

OME excess = amount of opioid prescribed minus amount consumed

Monitor using Opioid Prescribing Dashboard in Workstation

Measure	MSQC - All - Unadj
Average # of pills prescribed	9.68
Average OME prescribed	72.6
Average OME consumed	41.6
Average OME excess	28.5
% of cases with no opioid prescribed	17.9%
% of cases meeting Michigan OPEN recommendations	89.5%

2022 Collaborative-Wide Measure (CWM), continued

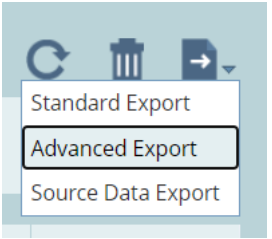
Key Points:

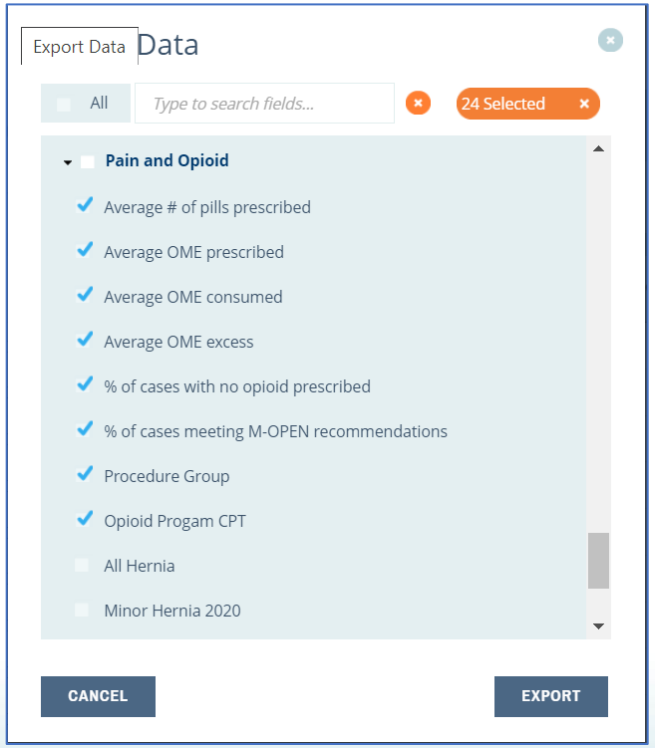
- 30-day PRO Follow-Up is critical for calculating this measure.
- Educate surgery team (surgeons, anesthesia, PAs, NPs, residents) about M-OPEN Prescribing recommendations and multimodal pain management strategies to reduce opioid use.
- Educate patients on multimodal pain management strategies so they know what to expect and how to manage postoperative pain.
- Even cases prescribed opioids within recommended amounts can still have OME excess if patient requires few opioids
- Should prescribe based on individual patient need

Collaborative-Wide Measure, continued

Advanced Export from OME Excess case list will show case-specific OME excess.

- Select Average # pills prescribed measure, select site denominator value, generate Case List, and do Advanced Export.
- This will export all cases prescribed an opioid, whether they returned PRO or not.
- Can review all cases for over-prescribing
- Cases with Quantity Consumed will have OME excess calculated





Resources

- 2022 MSQC QI Initiatives web page
- QI 2021 – 2022 Project Changes comparison document
- CWM & Hysterectomy Care Pathway Measures Reference Sheet ("one-pager")
- Workstation Hysterectomy QI, Opioid Prescribing Dashboard Reports
- QI site visits during 2022
- MSQC Hysterectomy Care Pathway
- MSQC May 2019 Hysterectomy Quality Improvement Workshop sessions and resources
- QI Tips and Tricks document
- Preoperative Blood Glucose Values Tips Sheet
- 2022 MSQC Program Manual: *Follow Up Expectations and Tips*, p. 268

Resources, continued

- From Opioid-Only to "Opioid-Free" – Where Does Multimodal Analgesia Fit In? Edward Mariano, MD, MAS. Presentation at MSQC Virtual Collaborative Meeting with ASPIRE, April 23, 2021.
  - Video and Slides
- Surgical Pain Management: Procedure Specific Evidence. Melanie Simpson, PhD, RN-BC, OCN, CHPN. Presentation at MSQC SCQR Training Day, June 19, 2020
  - Video Introduction and Part 1; Video Part 2; and Slides
- Michigan OPEN Prescribing Recommendations
- Patient education resource materials and MSQC FAQs

Resources, continued

- ASHP Guidelines: Antimicrobial Prophylaxis in Surgery
- Appropriate Antibiotic Measure Abstraction Tip Sheet
- MSQC SSI Toolkit with case review worksheet
- AHRQ Healthcare-Associated Infections Program
- Till, Sara R et al. “Reducing surgical site infections after hysterectomy: metronidazole plus cefazolin compared with cephalosporin alone.” *American journal of obstetrics and gynecology* vol. 217,2 (2017): 187.e1-187.e11. doi:10.1016/j.ajog.2017.03.019 https://www.ncbi.nlm.nih.gov/pubmed/28363438

Resources, continued

- Mahnert, Nichole et al. “Risk Factors for Emergency Department Visits After Hysterectomy for Benign Disease.” *Obstetrics and gynecology* vol. 130,2 (2017): 296-304. doi:10.1097/AOG.0000000000002146 https://pubmed.ncbi.nlm.nih.gov/28697116/
- Hullfish, Kathie L et al. “The effect of preoperative checklists on final histology and rates of hysterectomy for benign conditions.” *Female pelvic medicine & reconstructive surgery* vol. 18,3 (2012): 143-7. doi:10.1097/SPV.0b013e3182523a03 https://pubmed.ncbi.nlm.nih.gov/22543764/

Questions