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Project #07: MSQC Abdominal Hernia Project

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MSQC Abdominal Hernia Project

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MSQC (Michigan Surgical Quality Collaborative) HFJH Team includes: Miranda Adams RN (SCQR), Elizabeth Assenmacher MD (Surgeon Champion), Brooke Brown DO PGY (Resident Champion) Autumn Uyttenhove (Admin Secretary), Amanda Ahrens (CRNA) , Julius Sawyer (CRNA) Nicole Horning MD (Anesthesiologist), Danielle Elswick RN (CNS), Allison Levy RN (Educator), Holly Lockwood RN (CQF11), Oliva Carnagie (Pharmacist), Shawn Obi MD (Chief of Surgery), Jennifer Morse RN (Inpatient Surgical Manager), Kylie Noppe RN (Surgical Services Educator), Stacy Sparks RN (Quality Manager), Autumn Duarte (Surgical Services Educator), Danielle Elswick RN (CNS), Kacey Maloney (Surgical Nurse Manager), Jessica Schmidt RN (CNS)

AIM:

- To improve the care of patients undergoing an abdominal hernia surgery.
- Project goal is to improve multidisciplinary discussions, standardize & improve documentation and implement best practices, therefore improving patient care
- Physician driven, smart phrase templet, was developed to standardize documentation preoperatively, intraoperatively and postoperatively
- Improve postoperative patient outcomes starting in 2021 and continuing into 2024 by encouraging patient to make healthy lifestyle choices and help prevent complications.

PLAN:

- After choosing our project in 2021 We collaborated as a team which included, physicians, nursing, educators, management, anesthesia, and pharmacy to identify areas for improvement to meet our end goal. We identify areas of improvement for pre and postop education, intraoperative multimodal pain management, postop multimodal pain management and intra-op documentation.
- Going into 2022 guidelines became more specific and we identified areas that could be improved upon. As a team we worked on putting everything together and getting the education out to the rest of the staff.
- In 2021-2023, when it was identified that a physician missed documenting hernia information, an email was sent to that physician so that they could edit hernia information in the chart to include the correct data if known. As well as encouraging use of smart phrase in the future to improve documentation going forward.
- In 2024 we will meet as a team and look for ways to help meet our current goal of not performing elective abdominal hernia surgeries on current smokers or those with a BMI >40

DO:

- EDUCATION: Starting in 2021, preoperative documentation didn't include all the education that the physicians were providing in the office, such as multimodal pain management, smoking cessation, and weight reduction. Working with the team a physician driven smart phrase was developed to cut back on documentation time for providers. Going into 2022 we updated our smart phrase to include more information and developed written material that could be sent in EPIC or printed and handed out for patient convenience. This included resources for smoking cessation and weight reduction. Going into 2024 the weight reduction and smoking cessation will be monitored and expanded upon, encouraging patients to actively make a change in their overall health, and improve patient outcomes by encouraging physicians to postpone elective abdominal hernia surgeries until patients have decreased their BMI if >40, and if a patient is willing to quit smoking cigarettes, surgeries will be postponed for 30 days after patient has last smoked.
  - Postoperatively we have developed a smart phrase for multimodal pain management education on the DC AVS. From 2021-2023 the verbiage has been improved upon for clarity.
- DOCUMENTATION: In 2021 intraoperative documentation for size and location of hernia and hernia mesh implantation documentation was lacking. By implementing this project physicians have standardized their care including size and location of hernia and location that mesh was placed. This helps streamline future care for patients who may need other surgeries. We also worked with anesthesia to improve intraoperative multimodal pain management. Working together we improved use of locals and TAPs as well as use of other multimodal medications to help improve patients pain management.

CHECK:

- Preop education on multimodal pain management, smoking cessation and weight reduction was measurements and evaluated throughout the year of 2021 & 2022 with stricter guidelines in 2022. This information was provided to the HFJH MSQC team at our monthly/bimonthly meetings.
- Intraoperative hernia and mesh documentation has been measured from 2021-2023. Data was provided to the MSQC HFJH team to collaborate ideas when areas needed improvement. Also, when a physician missed documenting a size, location or mesh location, they were notified. In the event further education was needed the Surgeon Champion would meet with them to go over the requirements and answer any questions they might have.
- Postoperative multimodal pain education and use of multimodal pain medications, was measured and communicated to the team in 2021-2022
- In 2024 we will be working on preoperative education and follow through for elective abdominal hernia surgeries. If patients have a BMI >40 and is willing, our goal is to start the patients on a weight reduction journey prior to surgery until patient has decreased their BMI <40. Another goal we have is to not perform surgeries within 30 days of smoking cigarettes, for patient willing to quit. We will be educating the patients further of how a higher BMI or smoking, can affect the healing process and put patients at risk of recurrent hernias. And it is recommended that they stop smoking or lose weight before the surgery is performed. We will monitor the data and share with the team at our meetings. Physicians will also be notified via email when a missed opportunity is identified.
- 2021-2023 Postoperatively phone calls were made to patients to identify where areas of improvement can be made, especially regarding pain management by asking a series of questions. This will continue into 2024 with emphasis on physician having conversations around smoking cessation.
- Data was discussed at our team meetings, and ideas were collaborated to identify areas of improvement and ways we could make those changes.

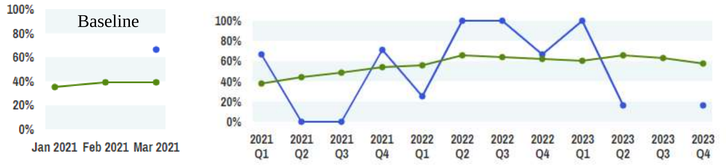
DATA:

Data is collected for a sampling of cases chosen electronically by MSQC

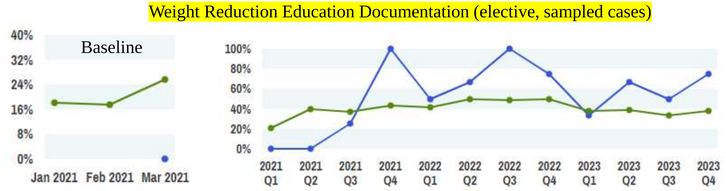
Blue = HFJH Green = All MSQC participating hospitals as a whole

Complete Hernia Documentation Intraoperatively (all, sampled cases)

Smoking Cessation Documentation (elective, sampled cases)



Weight Reduction Education Documentation (elective, sampled cases)



ACT:

- Physicians and Residents are provided information with the changes that would be coming during the new year via email, as well as a presentation where questions could be asked.
- Staff are made aware of changes and areas of improvement by providing education during staff huddles, and surgical educators help develop checklists.
- The HFJH data abstractor, collaborated with other HFHS MSQC abstractors to see what changes their sites were making and sharing these ideas with the HFJH MSQC team if applicable.
- Pocket guides were developed for use by physicians and staff for a quick reference and placed throughout surgical area.

Smart Phrases: Developed for time management and to unify documentation

Patient {IS/IS NOT:22868} diabetic therefore {preop glucose:32984} was checked within the past 90 days and was ***. Based on this {HFHS AMB HE_SHE_THEY:21024108} {IS/IS NOT:22868} a good candidate for surgery.

***Additionally, as the patient's BMI is over 40, {HFHS AMB HE_SHE_THEY:21024108} was advised that {HFHS AMB HE_SHE_THEY:21024108} is at higher risk of potential complication and/or hospital readmission within 30 days. For this reason weight reduction counseling, including diet modification and exercise, was provided for the patient. {high bmi patient wishes to proceed:32985}

***As the patient is a current smoker, smoking cessation was counseled. The risks of continuing smoking, including but not limited to poor wound healing, hernia recurrence and pulmonary complications were discussed with the patient. At this point, {smoking cessation patient wishes to proceed:32986}.

Postoperative pain expectations and management were discussed with the patient in detail. This discussion included encouraging use of alternating tylenol and NSAIDS and limiting narcotic use to breakthrough pain. The risks of narcotic use were also discussed with the patient. The patient verbalized understanding and all questions were answered.

Synoptic Operative Note: Hernia

Patient Name: @NAME@
MRN: @MRN@
DOB: @DOB@
Age: @AGE@
Gender: @SEX@
Procedure Date: @ORDATE@
Provider Name: @ORSURALL@

Record of Operation

Diagnosis and Procedure:

@ORAMBPROCALL@

Pre-operative Diagnosis: @ORDXCPRE@

Post-operative Diagnosis: @ORDXCODE@

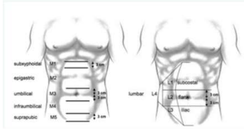
Anesthesia: {Anesthesia:32503}

Procedure:
{Approach:32504} {Hernia Procedure Select:32505}Hernia Repair
Component Separation: {Yes/No:32502} {ANT/POST:32506}

Operative Findings:

Hernia Characteristics
Recurrent: {Yes/No:32502} Number of previous repairs: ***
Hernia diameter (cm): ***
Location: {Hernia Location:32507}

Procedure Details:
Wound classification: {Wound class:32508}
Abdominal Entry
Patient prep and position - The patient was placed in the {Supine or Lateral:32509} position. Venodynes were placed and the patient was prepped and draped in standard sterile fashion.
Operative approach: {Operative Approach:32510}
Adhesiolysis (mins): ***
Excision of old mesh: {Excision of Old Mesh:32512}
Hernia repair
Mesh used: {Yes/No:32502}
Mesh Location: {Mesh location:32513}
Mesh size (cm): ***
Type of mesh: {Type of mesh:32514}
Brand of mesh: ***
Mesh fixation (pick all that apply): {mesh fixation:32515}
Fascia closed:{Yes/No:32502}
Pathology
Specimens sent: {Yes/No:32502}
Fluids
EBL (mL): ***
Closure
Drains (# and location): ***
Fascial closure: {Fascial closure:32516}
Skin closure: {skin closure:32517}
Sponge and instrument count correct: {Yes/No:32502}
Complications: {Yes/No:32501}
I was present for the entire procedure: {Yes/No:32502}



Discharge Instructions:

- Take your prescription medications as directed.
- You should alternate taking Tylenol (acetaminophen) 925mg every six hours and Motrin (ibuprofen) 800mg every six hours. This way, you will take something for pain every three hours.
- You will be given a small prescription of narcotic pain medication (***) to take for SEVERE pain when acetaminophen and ibuprofen are not enough. Some

KEYS TO SUCCESS / LESSONS LEARNED

- Throughout the process we developed a relationship with other departments in the hospital. We collaborated and developed ideas that could work for surgeons, anesthesia, and nursing. These relationships continue, as we work on other projects as well.
- As you can see from the data, we have room for improvement and with the 2024 project we are going to work on bringing those numbers back up as a team. An email with information was sent out in February and we have an in-person meetings scheduled in March to get this information out in a timely fashion to the physicians and other staff. Giving them a chance to ask questions and collaborate as we continue strive to improve patient outcomes.