Original Summary

Medication/Fluid Event (5) - 11-22-2024

Board of Registration in Medicine

File State: New

Owner: Erin Long - QPSD Quality Analyst

Entered Date: 11-22-2024

Fields labeled with an asterisk(*) are required.

Quality and Patient Safety Division

THE MASSACHUSETTS BOARD OF REGISTRATION IN MEDICINE (BORIM), THROUGH ITS PATIENT CARE ASSESSMENT (PCA) REGULATIONS, (243 CMR 3.00-3.14), IS RESPONSIBLE FOR ENSURING THAT ALL MASSACHUSETTS HOSPITALS AND AMBULATORY CLINICS, AS A CONDITION OF DEPARTMENT OF PUBLIC HEALTH (DPH) LICENSURE, HAVE QUALIFIED PCA PROGRAMS. THE REGULATIONS REQUIRE THAT HOSPITALS SUBMIT REPORTS OF QUALITY ASSURANCE ACTIVITIES (243 CMR 3.07) AND REPORTS OF UNEXPECTED PATIENT OUTCOMES KNOWN AS SAFETY AND QUALITY REVIEW (SQR) REPORTS (243 CMR 3.08). THROUGH THE SUBMISSION OF THESE REPORTS, HOSPITALS AND AMBULATORY CLINICS DEMONSTRATE TO THE BORIM THAT THEY HAVE ROBUST SYSTEMS AND PROCESSES IN PLACE TO IDENTIFY ADVERSE EVENTS, CONDUCT INTERNAL REVIEWS, AND IMPLEMENT CORRECTIVE MEASURES TO PREVENT A RECURRENCE AND TO IMPROVE PATIENT CARE.

Date and Facility Site

EVENT DATE AND HCF SITE

Date Event Occured	06-26-2022
File Owner	Erin Long - QPSD Quality Analyst
Site	[redacted]
Facility Type	Acute Care Hospital
Cohort Teams	Acute 40-99 beds

Patient Involved in Event

PATIENT DETAILS

Date of Birth	07-01-1974
Age	47 years
Gender	Male
Race	Black or African American
Ethnicity	African American
Admission Date	06-26-2022

Type of Patient Affected Inpatient

Admitting Diagnosis Abdominal distention and pain

Medication/Fluid

GENERAL INFORMATION ABOUT THE MEDICATION / FLUID EVENT

Medication Event Type Contraindicated

Medication Involved

CLICK ADD TO ENTER MEDICATION DETAILS

Medication(s) Involved
Not Specified

Medication/Fluid Event Details

DETAILS OF THE MEDICATION/FLUID EVENT

Process stage medication/fluid event discovered

Other stage medication/fluid event discovered

Process stage medication/fluid event originated

Other stage medication/fluid event originated

Safety and Quality Review

SAFETY AND QUALITY REVIEW FORM

Type of Report Complete Report

A preliminary report should only be chosen if the investigation and/or report is NOT complete and additional information will be added in the future

Type of Event Type 4

Type 1- Maternal Death related to delivery Type 2- Death in the course of, or resulting from, elective ambulatory procedure Type 3- An invasive diagnostic procedure or surgical intervention performed on the wrong organ, extremity, or body part Type 4- Death or major or permanent impairment of bodily function that was not ordinarily expected as a result of the patient's condition on presentation

Harm Level Temporary harm

NQF Serious Reportable Event (SRE)? Yes

What type of Serious Reportable Event? 4A. Care Management Events - Medication error

Was this patient transferred to another facility

- ○ Yes
- ◉ No
- ○ Not applicable
- ○ Unknown/Unsure

Was there any consideration to transfer the patient to a higher level of care, but an inability to do so?

- ○ Yes
- ◉ No
- ○ Not applicable
- ○ Unknown/Unsure

Facility Staff Involved in Event

Credentialed Health Care Provider Involved

- Internal Medicine physician

Non-Credentialed Health Care Provider Involved

- Registered Nurse (RN)

Narrative of the Event

The patient is a 48-year-old male who was transferred to the ED at Hershey Medical Center on 6/26/22 from Lindt Rehabilitation Center with acute abdominal distention that was tender to palpation and nausea.
PMH includes a motor vehicle accident in January 2022 with fractures of T6-T7 vertebral bodies and acute spinal cord injury with paraplegia. Other history includes asthma and cholecystectomy in 2020.
Medications:
• Gabapentin 300mg three times a day
• Sertraline 150mg daily
• Baclofen 10mg three times a day
• Miralax daily
• Bisacodyl suppository at bedtime
• Albuterol 0.5% Nebulizer 2.5 mg as needed
Allergies: Doxycycline (urticaria), aspirin and NSAIDS (anaphylaxis).
On admission, the patient was assessed as alert and oriented x3. VS 99.6-92-20-148/78. O2 sat 95% on r/a. He is on a bowel program and has a gastrostomy tube for nutrition. Last BM was noted three days prior to admission. CT of the abdomen and pelvis revealed dilated cecum and right colon with decompression near splenic flexure. No evidence of obstruction. WBC 13.6. H&H 12.1/39 plat 179,000. Na 135 K 3.2 INR 1.2. Lactate 1.5. LFTs were WNL. He was seen by the Hospitalist. Gastroenterology was consulted. He was made NPO and treated with IV fluids, Reglan, and potassium replacement. NG tube was placed to low intermittent suction.
The patient was admitted to the medical/surgical unit at 13:10 for observation with differential diagnosis including constipation, acute colonic pseudo-obstruction (Ogilvie's syndrome), and toxic megacolon.
At 14:46 the patient complained of abdominal pain 6/10. The RN retrieved the Ketorolac 15 mg IV that was ordered for every 6 hours PRN. Prior to administering the medication, she asked the patient if he had any allergies to which he responded "Aspirin". The RN then administered the medication. His BP was 140/84 HR 96 RR 20 with 02 saturation of 96%.
At 15:01 the patient was noted to be in severe respiratory distress and was thought to be experiencing an allergic reaction with a respiratory rate in the 30s, wheezing with stridor and increased heart rate to 125. Oxygen saturation was 92%. A rapid response was called, and the patient received Epinephrine 0.3 mg sq x l Solu-Medrol 12S mg IV x l, Benadryl 5O mg IV x I, Pepcid 20 mg IV x 1 and Albuterol nebulizer. The patient continued to have wheezing with stridor and was transferred to the ICU where he continued on Solu-Medrol 60 mg IV every 6 hours,

Benadryl 50 mg IV every 6 hours, Pepcid 20 mg IV every 12 hours. Patient remained in the ICU overnight for monitoring and was transferred back to the medical surgical unit the next day. The patient was able to be discharged back to the Rehabilitation Center on day six after conservative management and resolution of acute colonic pseudo-obstruction.

Internal Review

INTERNAL REVIEW DETAILS

Event Reviewed by

Committees

- PCA Committee
- Peer Review Committee
- Patient Safety Committee

Meetings

- Departmental Meetings

Chairs/Chiefs of Departments/Services

- Other

Individual Reviewers

- Chief Medical Officer
- Chief Nursing Officer
- Chief Quality Officer
- Quality Director
- Chief Operating Officer
- Risk Manager/Director
- Pharmacy Director
- Nurse Manager

If other, please list

Internal Review Findings

- Credentialed Provider Skill/Judgement
- Medication Related
- Non-Credentialed provider skill/judgement

If other, please list

Description of Results of Internal Review

The specialty specific reviewer (Internal Medicine) reviewed the case on 7/13/22. The reviewer identified opportunities to improve knowledge and system-related issues.
• The reviewer noted that the patient had a history of asthma and an allergy to aspirin and NSAIDs which should have prevented an order for NSAIDs. This is a knowledge pause point which should have led to the ordering provider to pause and inquire regarding adverse reactions.
• The reviewer also noted that the notation of allergies in the EMAR did not generate an alert to pharmacy. Only the active selection of the drug severity as "anaphylaxis or severe" would trigger a pharmacy alert. The reviewer recommend changes to the EMR to ensure either a passive system to alert pharmacy or a hard stop within the system.
The pharmacy review occurred on 6/29/22. The Director of Pharmacy, inpatient pharmacist, and the Physician Chair of the Pharmacy and Therapeutics Committee participated in the review.
• In the Medication Management System, when an ordering provider writes an order for a medication to which there is an allergy on the

patient's profile, an alert is generated requiring the ordering provider to choose the reason for overriding the alert before they can proceed with the order.
• The patient had a documented allergy to NSAIDs in his medical record/medication profile. When the admitting Hospitalist ordered Ketorolac, he received an alert requiring the him to choose, from a drop-down list, a reason for overriding the alert, before proceeding with the order. The provider selected "Choice of therapy" to override the order alert.
• Further discussion revealed that there was no hard stop within the CPOE if the reaction was noted to be anaphylaxis. There is a hard stop if the severity of the reaction is noted to be severe, however, severity is not a required field in the CPOE and in this instance, the severity filed was left empty. This was discussed with the hospitalist who could not recall why he left this field blank. Because the alert was not noted as 'severe', no alert was noted in pharmacy once the order was over-ridden. In this case, there was no hard stop triggered. A hard stop requires that the ordering physician or provider must have a discussion with the pharmacist as to risk, benefits and/or alternatives to the medication the ordering physician or provider is attempting to order. If the decision is made to order the medication, the pharmacist can make changes in the CPOE to allow the medication order to be re-written and successfully ordered and processed through pharmacy.
The nursing review occurred on 6/28/22. The CNO, ACNO, Nurse Manager, and Nurse Educator participated in the review.
• The RN reported that she was distracted and, in a hurry, as she was being paged for another patient.
• She did not follow hospital policy when verifying allergies and relied on the patient as a source of information.
• She also did not follow policy regarding scanning the patient's wrist band as she repeatedly attempted to scan it but was unable and therefore overrode the process and administered the medication.

Quality Improvement Measures or Corrective Actions

Safety and Quality Improvement Measures

- Moderate action- Enhanced surveillance and auditing
- Moderate action- Equipment and/or processes standardization
- Moderate action- Other
- Moderate action- Software enhancements
- Weaker action- Education

If other, please list

Description of Quality Improvement Measures or Corrective Action

• Hard stops and forced functions have been implemented into the Medication Management System. Selection of the type of drug reaction will be a required field. When a medication is ordered if any allergy/adverse reaction is documented as "severe" or "anaphylaxis", the order will be stopped during the pharmacy verification process and cannot be processed in the system. There will be an option for "unknown" which is a pause point for the ordering provider.
• The pharmacist will be required to call the ordering provider to discuss possible use or alternative treatment options. The order will be stopped during the pharmacy verification process and cannot be processed in the system when received in the Pharmacy. An alert was sent to all credentialed providers regarding this process. This corrective action was completed with on 7/25/22 and will be monitored for 90 days.
• Hershey Medical Center utilizes a Just Culture model in the review of adverse events. The nurse was very upset after the event and was provided support from the unit's leadership and the employee assistance program (EAP). She was also provided additional support and training

from the nursing educator regarding medication administration and barcode scanning.
• The process for barcode scanning was evaluated and multiple overrides were noted due to the inability to scan the patient's wrist band. Materials management worked with the vendor to change the wristbands which thus far has resulted in a 65% reduction in overrides of this process in the first three months of use. An alert was sent to all nurses regarding the policies for medication administration and barcode scanning. Compliance with barcode scanning will be presented at monthly Patient Safety Council and at monthly Pharmacy and Therapeutics Committee Meetings.

Credentialed Health Care Provider(s) Data and Findings

WHEN APPLICABLE, PLEASE PROVIDE DE-IDENTIFIED PERFORMANCE DATA AND ANALYSIS FOR INVOLVED CREDENTIALED HEALTH CARE PROVIDERS.

Credentialed Health Care Provider Data and Findings

The Hospitalist involved in this event does not have any other cases with regarding quality concerns in their peer review file. Assessment of performance will take place via ongoing monitoring and the peer review process. This physician is not an outlier compared to their peers. Metrics include volume, average CMI, medication reconciliation compliance, patient satisfaction (HCAHPS), average LOS, 30-day readmissions, and mortality rates.

Attachments

ATTACHMENTS

No Attachment

Follow-Up on File

HEALTHCARE FACILITY- USE THIS SECTION TO ADD FOLLOW-UP ONLY AFTER A SUBMISSION HAS BEEN MADE. QPSD WILL ADD FOLLOW-UP TO A SUBMISSION ONCE THE REVIEW IS COMPLETE.

Follow-Up Actions
Not Specified

End of Form