Evolution in Postoperative Pain Management: Implementing a Clinical Pathway in Pain Management for Major Operative Procedures

1 Background

Pain, which some consider the fifth vital sign, is universal and subjective and in need of supportive management. Since surgery is one of the most common causes of acute pain, it is important for providers, especially PACU nurses, to respond to patients’ pain in a timely fashion in order to improve outcomes such as patient satisfaction and discharge length. Recent HCAHPS data from 2013 shows that pain management fell below the 75th percentile for many surgical units at Johns Hopkins Hospital, most likely due to a lack of staff with expertise in pain management. Past patient-reported data suggests that pain management needs to be improved, as pain in postoperative surgical patients is still undermanaged today.2

2 Aim

Our goal is to improve patient satisfaction with pain management in the perioperative setting, as well as decrease the length of stay in the PACU.

3 Methods

The team created a clinical pathway that provided guidance on appropriate pain interventions for opioid naïve and opioid tolerant patients, emphasizing the different types of analgesics needed. Multiple copies of the clinical pathway were printed out and laminated, passed out to the nurses as well as taped onto the wall of the nurses’ station in the 28-bed Weinberg PACU. A survey tool created by Dr. Hanna, chief and director of the Acute Pain Service at JHH, was filled out by the PACU nurses in order to determine patients’ perceptions on their pain management. In addition to this, nurses received three in-person educational sessions by Dr. Hanna, since the key to effective pain management, both for opioid naïve and tolerant patients, were:

1) “How often was your pain well controlled?”
2) “How long did it take before the patient had pain relief after arrival to the PACU?”
3) “What was the duration from time admitted to PACU to the time discharge criteria were met?”

In addition, any barriers to effective pain management were noted in these surveys. The surveys were collected weekly over the month of June 2014, with a goal of having at least 200 surveys completed.

4 Results

Results were compared from past data that began in 2012. Instead of 200 surveys, only 83 were thoroughly completed and sufficient. Based on the results, control of patients’ pain improved for both opioid naïve and opioid tolerant patients (77.61% and 68.75%, respectively). However, percentages for the time it took for pain relief within 30 minutes decreased for both types of patients after May 2013 (43.06% and 63.16%). In terms of discharge length, it decreased for opioid tolerant patients but increased for opioid naïve patients (3 hrs 24 min and 2 hrs and 44 min). The most common barriers that affected pain management were: patients having no floor assignments, having the PES pain orderals, and most importantly, having high PACU admission pain levels.

5 Conclusions

Based on these results, there needs to be a much more consistent flow of pain management in the PACU, preventing the barriers discussed. Although a majority of patients surveyed in June 2014 perceived to always have well-controlled pain, it is important to provide that control on time, within a 30-minute time period. Furthermore, improved interventions to appropriately discharge patients, especially opioid naïve ones, are needed.

6 Future Directions

Since only 83 surveys were thoroughly completed, such a small number may not be representative of the PACU population. Therefore, future directions include continuing this project to seek improvement after June 2014, encouraging nursing staff to gather more thorough surveys (at least 200) that will be much more representative of the PACU population. In addition, it will be beneficial to gather data on the nurses’ perceptions on pain management, especially through a pretest-posttest analysis from their educational sessions.

Knowing the effectiveness of the educational sessions will help determine whether or not more sessions are needed to further improve staff knowledge, both from the nursing and anesthesiology ends, in providing efficient pain management and discharge.

7 References


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