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Multidisciplinary Approach to Improving Pain Management

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On a 30-bed trauma surgical unit in an academic medical center, a best practice group was established. For a first project, we worked on improving the patient's pain experience. The decision was driven by the units Hospital Consumer Assessment of Health Providers and Systems (HCAHPS) pain scores. We had consistently been in the 1st percentile whereas best practice hospital scores were in the 68th percentile for pain. In addition, patients were expressing dissatisfaction with pain care during wound care with physicians. We reviewed the HCAHPS scores and brainstormed possible factors leading to patients' dissatisfaction with their pain care. Staff developed a teaching tool, which included a communication plan for the individual patient's pain plan. Next, we addressed the wound care with the trauma surgeons to develop a better understanding of the problem and identify a solution. The best practice group collaboration meeting became a springboard to address the pain issue for surgical patients through their hospital stays. The nurse manager, educator, pain relief attendant, anesthesia attendant, and 2 trauma surgeons met to discuss how to improve the surgical patient's pain experience. This trauma surgical unit now exceeds the top performers in HCAHPS scores. We have moved from the 1st percentile to the 90th percentile in 5 months.
Key words: *HCAHPS scores*, *pain management*, *teaching tool*, *trauma patients*

IN 1968, Margo McCaffery defined *pain* as "whatever the person experiencing says it is, and occurring when the person says it does."[1] Both the World Health Organization and the International Association for the Study of Pain (IASP) have recognized pain relief as a human right.[2] October 2011 marked the conclusion of the IASP campaign "Global Year Against Acute Pain."[3] The IASP reports that 80% of postsurgical patients experience pain in their postoperative period with the worse pain control found to be after discharge from the hospital. In addition, 50% of postoperative patients receive inadequate pain relief.[3] Hospitals compare Hospital Consumer Assessment of Health Providers and Systems (HCAHPS) scores for pain reveals a median score of 68 percentile for top performers. Our patients are telling us, we have room for improvement in pain management. The Institute of Medicine study on pain published in June 2011 confirms that pain management needs to have a higher priority for health care providers.[4] Utilizing unit-based best practice groups is an effective tool to engage staff and change practice.

On a 30-bed, trauma surgical unit in an academic medical center, a best practice group was established. For our first project, we worked on improving the patient's pain experience. Poorly controlled acute pain can delay healing and prolong hospital stays. Uncontrolled acute pain is associated with the development of posttraumatic stress disorder and chronic pain.[5] The trauma surgical unit's HCAHPS scores had consistently been in the 1st percentile whereas best practice hospitals scores were in the 68th percentile for pain. In addition, patients were

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expressing dissatisfaction with pain care during wound care with physicians.

We reviewed the HCAHPS scores and brainstormed possible factors leading to patients' dissatisfaction with their pain care. Staff hypothesized factors that included differences in some surgeries being more painful than others, patients' lack of understanding of the pain intensity scales, patients' expectations of no pain at all, and a communication issue with the physicians that resulted in patients not receiving premedication for pain prior to wound care.

A retrospective chart review of pain scores correlated with diagnosis did not indicate any surgery more painful than others in the prior 12 months. The best practice group participated in a literature review evaluating best practices in pain management for the trauma surgical patient and tools to measure pain intensity. Our review highlighted the need for a multimodal approach to pain control especially in trauma patients. The group identified that when our pain relief service (PRS) was consulted the multimodal approach to pain control was followed but was not always utilized without the consult. The literature also suggested ketamine infusions were effective in blocking pain transmission in the trauma patient.[6] Finally, we found best practices around pain included communication with patients and their families on their pain plan and tools being used to improve the patients understanding of the pain plan.[7]

Many trauma patients have very complex pain management regimens that can be confusing and overwhelming. Including patients in the process and plan for providing excellent pain control is necessary to empower them to participate and also to build trust between nursing and patients. Staff developed a bedside tool that provides an explanation of the goals of pain control, the numeric pain scale, and the staff's commitment to working with the patient and doctors to ensure patients are as comfortable as possible. The tool was simple; a laminated, reusable letter-style sheet that staff can write out for the patient what medications they can receive on an as-needed and scheduled basis as well as right in the time for the next due dosage (the Figure). Using this tool with patients who have multiple analgesic medications has proved to be very helpful, especially when used consistently with patients who have high amounts of anxiety about pain medications. Even patients who may not have necessarily complicated medication lists are comforted and feel more part of therapy when they have a visual or written reminder.

Our literature review suggested ketamine infusions be part of the multimodal approach to pain control in the trauma patient.[6,8] The PRS was already using this therapy in the critical care units and desired expanding the use to the acute care units. The pain clinical nurse specialists and PRS worked together to ensure the expanded use of this therapy in the acute care surgical units. Today, ketamine infusions are a part of our multimodal approach to pain control.

The wound care issue was addressed by inviting the trauma surgeon to collaborate to develop a better understanding of the problem and identify a solution. Because morning rounds occur at 6 AM daily, it was agreed that the prior evening, the nurses would be informed which patient's wounds the surgery team wanted to view on rounds the next morning. The night shift nurse is then able to premedicate the patient, take the dressing down, and leave supplies at the bedside for the team. The team redresses the wound after assessing it. This simple communication has improved our patients' pain control and nurse satisfaction.

The best practice group collaboration meeting became a springboard to address the pain issue for surgical patients through their hospital continuum.[9,10] The nurse manager, educator, pain relief attendee, anesthesia attendee, and 2 trauma surgeons met to discuss what else could be done to improve the surgical patient's pain experience. The PRS is invited to the resident's orientation on our unit to discuss how the PRS can assist the surgical team, especially with patients with known chronic

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Let us help you manage your pain

Dear Patient,

Management of your pain is very important to us and one of our biggest goals. To help you manage your pain, we will ask you questions about your pain and how well your pain medicine is working.

A type of question we will ask you is to pick a number between 0 to 10 to let us know how much pain you have.

0 1 2 3 4 5 6 7 8 9 10

No pain **Moderate pain** **Worst pain**

Mild pain **Severe pain**

0 means you have no pain. 10 means the worst possible pain

After having a major injury or surgery, we expect you to have *some* pain. We'll work with you to make reasonable pain goals, usually around a "4" or less. In some situations we cannot safely guarantee "0" pain.

We are here to help manage your pain and know that uncontrolled pain is a barrier to healing. In fact, controlling your pain will help you to heal faster and have a better hospital stay.

Pain is different for everyone. Only you can tell us what type of pain or discomfort you're having!! We are here for you! Please feel free to talk to your nurse and make a plan together.

Scheduled Pain Medication

Medication Schedule

As Needed Pain Medication

Medication Next Available At

☐ **Please wake me to ask me about my pain during the night.**

Figure. Bedside pain tool front and back.

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pain, uncontrolled acute pain, or a history of substance abuse. Anesthesia is working closely with the surgical teams to alert them after surgery if they deem that a patient would benefit from a PRS consult with the goal immediately after operative referrals. To address the surgery team's concerns regarding overmedicating patients, we are closely following our rapid response rates and rescue drug administration. To date, we have not seen an increase in either.

The best practice group project to improve the patient's pain experience on the trauma surgery unit was successful. The nurse manager rounds daily on patients and has noted a drop in patients' complaints of unrelieved pain. This unit's HCAHPS scores have improved, since August 2011, we ranked in the 78th percentile—a significant improvement from the 1st percentile. An additional benefit from the project is the improvement in team communication between nursing and physicians. This unit-based best practice group has shown to be an effective tool to engage staff and change practice to improve patient outcomes.

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