Rescue Dose Orders as an Alternative to Range Orders: An Evidence-Based Practice Project

Cassia Yi, MSN, APRN, CCRN, CNS-BC

Relief of pain is a fundamental aspect of optimal patient care. However, pain management in the inpatient setting is often constrained by concerns related to regulatory oversight, particularly with regard to the use of opioid dose range orders. These concerns can inadvertently result in the development of policies and practices that can negatively impact the health care team's ability to deliver optimal and individualized pain management. An evidence-based practice project was undertaken to address concerns about regulatory oversight of pain management processes by changing the way pain was managed in a large academic hospital setting. A novel pain management approach using rescue dose medications was established as an alternative to opioid dose range orders. The use of the rescue dose protocol was successfully implemented. Outcomes included an overall reduction in the administration of inappropriate intravenous opioids and opioid-acetaminophen combination medications, with a subsequent increase in single-entity first-line opioid analgesics. Rescue dose protocols may offer an alternative to opioid dose range orders as a means of effectively managing pain.

Keywords: *pain, pain management, pain assessment, pain scales, range order, rescue dose, order set.*

THE JOINT COMMISSION and the Centers for Medicare and Medicaid Services stress the importance of proper pain assessment and management, underscored by research showing that pain can slow recovery time and increase length of stay and cost of care.[1] Comprehensive pain assessment and reassessment practices are recommended to ensure the effective and safe administration of opioid analgesics for acute pain management.[2] Hospitals are increasingly compelled to develop policies and guidelines that support evidence-based approaches to pain assessment and individualized pain treatment.

The evidence-based practice (EBP) project reported in this article took place at a 400-bed community health system with two campuses serving north and central San Diego in southern California. The health system's Pain Management Task Force (PMTF) supported a plan to evaluate and revise the health system's inpatient pain assessment practices and acute pain treatment guidelines. The reasons for supporting such a plan included the need to address regulatory requirements, patient satisfaction score incentives, patient safety issues, and nursing assessment practices. The incentive was a desire to provide nurses and prescribers with more flexible options than currently existed for managing acute pain.

Cassia Yi, MSN, APRN, CCRN, CNS-BC, is a Clinical Nurse Specialist, Thornton ICU and Sulpizio Cardiovascular Center, University of California Health Systems, San Diego, La Jolla, CA.

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Address correspondence to Cassia Yi, Thornton ICU and Sulpizio Cardiovascular Center, University of California Health Systems, San Diego, Mail Code 7642, 9300 Campus Point Drive, La Jolla, CA 92037; e-mail address: cyi@ucsd.edu.

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The EBP Project

The author, a critical care clinical nurse specialist, attended a pain management symposium in 2013 during which she realized that her health system's policy and guidelines for pain assessment and treatment were not in line with current EBP recommendations. She wrote and presented a proposal for change to the health system's PMTF, and the proposal was later approved. A multidisciplinary team was established and tasked with the evaluation and revision of the current pain policy, assessment practices, and analgesic order sets. The team consisted of the author (hereafter referred to as the EBP project coordinator), bedside registered nurses from all clinical units, advanced practice nurses, physicians, pharmacists, and a nurse and pharmacists from the health system's electronic medical record (EMR) department.

Literature Review

A literature search (2000 to 2014) of PubMed, CINAHL, and specialty databases was conducted to identify best practices. Search terms included "pain management," "acute pain," "breakthrough pain," and "range orders." The search yielded 37 relevant references, which included two clinical practice guidelines and 35 articles or book chapters.

Several conclusions were drawn from the literature. Among them were that pharmacologic analgesic therapy is the mainstay of pain management and patients should be provided with individualized analgesic dosing and titration[3]; pain order sets that provide adequate analgesia may decrease patient morbidity and mortality[4]; and The Joint Commission endorses an individualized multimodal approach to pain management that includes nonpharmacologic and pharmacologic treatments with the goal of reducing opioid dose.[5]

The literature also contains recommendations for the treatment of pain in patients who have underlying painful pathology, but are unable to self-report or demonstrate pain behaviors.[6–8] Several references also recommend anticipating pain and premedicating patients before painful procedures.[6–8] Other pertinent findings were that pain experts and professional pain specialty organizations support the use of as-needed (PRN) opioid dose range orders for the management of acute pain.[3,9] Range orders are considered an important approach to acute pain management because they allow for dose administration dependent on individual patient response.[3,9]

Evaluation of Practices

The multidisciplinary team reviewed current pain assessment practices to evaluate adherence to current EBP recommendations. The pain assessment tools that were being used at the time were appraised.

Two assessment tools, the 0-to-10 Numeric Pain Rating Scale and the 0-to-10 Wong-Baker FACES pain scale, were being used to assess pain in patients who could self-report. Pain intensity ratings of 1 to 3 were considered to indicate mild pain; 4 to 6, moderate pain; and 7 to 10, severe pain on both scales. This practice was retained.

One tool, the Non-Verbal Pain Scale (NVPS),[10] was being used in patients who were unable to self-report. The 0-to-10 NVPS assigns 0 to 2 points per category based on observations of the patient's facial expression, activity, guarding, physiologic symptoms, and respiratory status to yield a total behavioral pain score. The health system had modified the NVPS by assigning pain intensity levels, as described previously, to the total behavioral pain score. However, the multidisciplinary team realized that, although the NVPS is validated for behavioral pain assessment,[10] the practice of assigning a pain intensity score to pain behaviors has not been validated and is not recommended. Pasero[11] noted that no single behavior, or set of behaviors indicates an intensity of pain that is more or less intense than any other behavior or set of behaviors. The team agreed that the use of behavioral pain tools, such as the NVPS, is appropriate to help determine the presence or the absence of pain, but cannot determine the intensity of pain and set forth to change this practice.

The team also evaluated pain management prescribing practices and in particular, the common practice of prescribing and administering pain medications and doses based on the patient's documented intensity of pain for example,