Changing Practice from “Dosing to Numbers” to Survey-Proof Range Orders

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Conflict of Interest Disclosure

• Conflicts of Interest for contributors:
  • Chris Pasero is a paid consultant and member of the speaker bureau for Mallinckrodt Pharmaceuticals.
  • Kathleen Broglio has no conflicts related to this presentation.
  • Debra Drew has no conflicts related to this presentation.
  • Ann Quinlan-Colwell is a paid member of the speaker bureau for non-branded education for Mallinckrodt Pharmaceuticals.

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• Taken in part from “On Being a Scientist: Responsible Conduct in Research”. National Academies Press. 1995.

The Perfect Storm

• The American Pain Society and the 5th Vital Sign Concept
• The Joint Commission Pain Standards
• Surveyor recommendations to replace range orders (e.g., morphine 2-6 mg IV q 2 hrs PRN pain) with the “dosing to numbers approach”, e.g.,
  ▪ Morphine 2 mg IV q 2 hrs for pain ratings 1-3 (or “mild pain”)
  ▪ Morphine 4 mg IV q 2 hrs for pain ratings 4-6 (or “moderate pain”)
  ▪ Morphine 6 mg IV q 2 hrs for pain ratings > 6 (or “severe pain”)
• Widespread prohibition of range orders in hospitals nationwide
Boards of Nursing Query (52% Response Rate)

- “Pain control using range orders is the true essence of nursing care.” (Nebraska)
- “They may be used as long as prescribed by legally authorized practitioner and supported by hospital policy/procedure.” (California)
- “This issue would be driven by facility policy and accreditation standards as well as by healthcare practitioner orders.” (Delaware)
- “Scope of practice is based on nurse’s documented education, experience, skill, training, knowledge, and/or competency. They may be used as long as prescribed by legally authorized practitioner and supported by hospital policy/procedure.” (Missouri)

Problems with “Dosing to Numbers”

- Pain intensity rating is completely subjective and does not produce repeatable findings even within the same individual.
- There is no research showing a specific opioid dose will relieve pain of a specific intensity.
- Disregards ISMP recommendations for well-designed order sets that:
  - Have potential to reduce unnecessary calls for clarifications and questions.
  - Include objective, organization-determined measures that vary based on degree of the presenting symptom.
  - Exclude range orders without objective measures to determine correct dose.
- Prevents nurses from functioning at highest potential.
- Jeopardizes patient safety.

Disregards Other Critical Factors that Influence Opioid Requirement

- Age
- Quality of pain
- Sedation level and respiratory status
- Functional status
- Tolerance
- Drug-drug interactions
- Reaction/response to prior opioid treatment
- Physical and psychiatric comorbidities
- Renal and cardiovascular status
ASPMN Position Statement

“The American Society for Pain Management Nursing (ASPMN) holds the position that the practice of prescribing doses of opioid analgesics based solely on a patient’s pain intensity should be prohibited because it disregards the relevance of other essential elements of assessment and may contribute to untoward patient outcomes, such as excessive sedation and respiratory depression, as a result of overmedication. Administering opioid analgesics based solely on pain intensity can also result in poor pain control from undermedication.”

Current Barriers: Nursing

- Lack of:
  - Understanding of legal consequences of inappropriate medication administration
  - Standardized descriptions of pain intensity
  - Knowledge of spectrum of adverse opioid effects
  - Knowledge multimodal analgesia

Current Barriers: Prescribers

- Variability in training/knowledge/practices of pain management
- Misconceptions related to assessment and management of pain
- Use of standardized order sets
Current Barriers: Institutions

- Leadership lacks adequate knowledge related to:
  - Advances in pain management and changes over time
  - Development and implementation of safe pain management policies that will be accepted by regulators
- Policies that rely on pain severity rating as the cornerstone of pain assessment
- Lack of oversight of variability in pain management prescribing patterns

Implementation of a Solution: Range Orders

- TJC Standard MM04.01.01
  The organization has a written policy that identifies the specific types of medication orders that it deems acceptable for use.
  ✓ Range orders: Orders in which the dose or dosing interval varies over a prescribed range, depending on the situation or patient’s status.

Developing a Strategy for Intentional Implementation of Range Orders

- Identify desired state
- Identify current state
- Ground work
Identify Desired State

• Implementing range orders for PRN medications

Identify Current State

• How are PRN orders currently prescribed?
• Why are they prescribed that way?
• Who are the key people involved?
• What is their reasons for the current prescribing pattern?
• How vested are they in continuing the current pattern?
• If strongly invested, identify why?
• What are the barriers to changing?

Preliminary Work

• Evidence-based literature
• State Board of Nursing
• Current adverse drug events related to prn medications
• Current patient satisfaction ranking
• Scope of “work arounds” of current orders
• Implementation of “work arounds”
• Identify key players in the organization
• Identify positions and vested interests of key players
Example of Implementation

- State Board of Nursing statement
- Institution-specific range order policy
- Nursing-specific range order education
- Monitoring effectiveness of education
- Routine – Random audits and re-education
- Physician and pharmacist education

Continuous Monitoring of Effectiveness - Safety

- Reported adverse drug events
- Naloxone use
- Patient satisfaction reports
- Nursing
  - Audits of knowledge
  - Feedback regarding use
- Prescriber and clinician feedback

Hospitals that Use Range Orders and Pass Surveys

- New Hanover Regional Medical Center, Wilmington, NC
- Tallahassee Memorial HealthCare, Tallahassee, FL
- Northwestern Medicine Central DuPage Hospital, Winfield, IL
- University of California San Francisco Medical Center, San Francisco, CA
- Blessing Hospital, Quincy, IL
- Unity Point Health – Meriter, Madison, WI
- Berkshire Medical Center, Pittsfield, MA
- CHI Franciscan Health System, Tacoma, WA
- William S. Middleton Memorial Veterans Hospital, Madison, WI
- University of Minnesota Medical Center, Minneapolis, MN
- University of Washington Medical Center, Seattle, WA
Examples of Range Orders That Have Passed Survey

- Oxycodone 5-15 mg PO q 4 hrs PRN
- Oxycodone 5-10 mg PO q 4 hrs PRN. Start with 5 mg and may increase to 10 mg if pain is unrelieved. Patient may refuse any dose. Hold if sedation level greater than 2.
- Hydromorphone 0.2-0.5 mg IVP q 2 hrs PRN breakthrough pain from PO pain meds
- Hydromorphone 0.5-1 mg IVP q 2 hrs PRN moderate pain
- Morphine 2-4 mg IVP q 2 hrs PRN moderate to severe pain if enteral not tolerated or effective
- Hydrocodone 5 mg + acetaminophen 325 mg per tablet, 1-2 tablets PO q 4 hrs PRN moderate pain

Avoiding Therapeutic Duplication: Example 1

- Require separate orders for drugs with multiple indications, e.g., one for acetaminophen for fever; one for acetaminophen for pain
- Require scheduled ATC nonopioid foundation (unless contraindicated), e.g., acetaminophen, NSAID, anticonvulsant
- Provide only one option for PRN oral opioid range order
- Provide only one option for PRN IV opioid range order
- Include instructions that IV opioid can be used only for breakthrough pain or pain unrelieved by oral opioid

Avoiding Therapeutic Duplication: Example 2

- Require separate orders for drugs with multiple indications, e.g., one for acetaminophen for fever; one for acetaminophen for pain.
- Require scheduled ATC nonopioid foundation (unless contraindicated), e.g., acetaminophen, NSAID, anticonvulsant
- Provide options for oral and IV opioid range order PRN with instructions to select only one, e.g.,
  - Oxycodone 5-10 mg PO q 4 hr PRN moderate to severe pain
  - Morphine 5-15 mg PO q 4 hr PRN moderate to severe pain
  - Morphine 2-4 mg IV q 2 hr PRN moderate to severe pain
  - Hydromorphone 0.2-0.6 mg IV q 2 hr PRN moderate to severe pain
Responding to Surveyors’ Concerns

Q. How does a nurse know what dose to give within a range order?
A. Our policy guides nurses to give the lowest dose in the range for the first dose. After the patient’s reaction to the lowest dose, the nurse reassesses patient status which guides the next clinical decision: Whether to give more medication within the allotted time interval, refrain from dosing again until the patient has recovered, or collaborate with prescribers to modify the analgesic plan.

Responding to Surveyors’ Concerns

Q. How does a nurse implement a range order that does not specify intensity or descriptors of pain?
A. Nurses use more than the patient’s self report of pain intensity in a complete assessment. The patient’s perceived pain intensity is considered along with the patient’s functional status (e.g. sedation level). The nurse’s clinical decision to implement the order, or call for modification, also considers the patient’s response to previous medications, age, physical and psychiatric comorbidities, and tolerance to the medication.

CAPA® (Clinically Aligned Pain Assessment) Tool: NO Numbers Within Tool

Q. How does a nurse know when a patient has moderate to severe pain?
A. Thorough assessment of a patient who can self-report involves an interactive conversation and observations that encompass:
- Pain intensity,
- The pain’s effect on functional status and sleep, and
- Efficacy of previous intervention
- With complete assessment, the nurse makes a judgment that pain is more than mild and proceeds with treatment.