Reducing Inpatient Opioid Consumption

Creating a Therapeutic Foundation with Breakthrough Analgesia Based on Patient Function

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Conflict of Interest Disclosure

Author's conflict of interest:
• Chad Dieterichs, no conflict of interest
• Peggy Lutz, no conflict of interest

Objectives

1. Identify the fundamental concepts of person-centered, multi-modal pain management.
2. Describe the components included in development of therapeutic activity goals.
3. Discuss the step approach to pain management based on patient function.
Managing Pain in a Time of Opioid Crisis

According to the US Institute of Medicine, 2011, 88% of surgical patients report moderate to extreme pain. 25% of patients having abdominal hysterectomy and 37% of patients having thoracotomy report persistent pain at 4 months. (Newman, 2001)

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Opioid and Pain Management Strategies: FY19

- General pain management principles
- Deprescribing practices for intravenous opioids
- Multimodal pain management order set
- Outpatient pain management strategies

FY18–19 Pain Management Implementation Plan

Objective: To deliver safe, compassionate, evidence-based pain management for the persons we serve, while preventing opioid misuse and abuse, grounded in key principles of the Ascension way—high reliability, enhanced experiences and reduction of care variation.

- Reduce use of intravenous opioids in emergency departments (EDs) by 25%
- Reduce morphine milligram equivalents (MMEs) for inpatients by 25%
- Reduce overall number of opioid pills prescribed by 25%
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Guidelines, Guidelines, and MORE Guidelines

- Guidelines from the CDC for Prescribing Opioids for Chronic Pain
- Wisconsin Medical Examining Board
- Florida Board of Medicine
- ICSI for Chronic Care Excellence Improvement
- American Society for Pain Management Nursing
- American Pain Society
- State of Tennessee Department of Health

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From dosing to numbers...

- Most pain management order sets were not reflective of current evidence-based pain management practice
  - PRN medication orders based on pain intensity score, which may over or undertreat a patient’s pain
  - Minimal use of scheduled non-opioid foundation
- Frequent citations by The Joint Commission regarding therapeutic duplication, nurses practicing out of scope, etc.
- Inconsistent use of integrative therapies

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... to use of a multimodal pain management plan

- Scheduled “non-opioid” foundation
- Defined interdisciplinary Therapeutic Activity Goal (TAG) to drive the plan of care for the physician, patient, and care team
- PRN analgesic dosing connected to patient’s ability to achieve TAG
- Increased use of integrative/complementary therapies
Therapeutic Activity Goal

Definition
- The level of acceptable pain intensity, the level and types of desired activities, and the ability to accomplish other patient-centered functional goals.

Key Points
- Partnership between the multidisciplinary team and the patient/family to establish TAG
- Considers baseline level of function
- Considers mobility, ADLs, psychosocial elements (sleep/rest), treatment plan
- Evolves throughout the patient's hospitalization based on their progress
- Continued assessment of pain scores as a component of TAG

Establishing Therapeutic Activity Goals

- Make goal(s) specific and measurable
- Make goal(s) realistic
- Make goals relevant to the patient's overall treatment goals
- Identify barriers that might interfere with ability to achieve goals and how the patient and care team will address them
- Review TAG during daily multidisciplinary rounds

Patient Involvement: Key to Success

- Validate TAG and acceptable level of pain at the start of each shift and PRN
- Patient education tips:
  - "While it is generally not possible to take away all of your pain, we will do everything possible to manage your pain effectively so you will recover as quickly as possible."
  - "To help you identify your goals, think about the activities and treatments you will do today, including your need to rest and sleep. What level of pain (discomfort) will allow you to do those activities?"
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Therapeutic Activity Goals

<table>
<thead>
<tr>
<th>Dependent</th>
<th>Independent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Needs, analgesia with frequency, dose, side effects</td>
<td>Does not participate</td>
</tr>
</tbody>
</table>

Pharmacological

| Needs, analgesia with frequency, dose, side effects | Does not participate |

Safety

- Reduces duplication of orders; decreases risk of stacking
- Content is standardized for all inpatients
- Providers, nurses, and patients know what to expect

Operational efficiency
Order Set: Foundational Components

- Maintain patient’s home therapies
- Focus on multi-modal treatment
- Opioid for breakthrough pain connected to patients ability to achieve daily therapeutic activity goal
- Limit multiple choices within the same medication class to avoid therapeutic duplication
- Strongly encourage removal of combination opioids to avoid hepatotoxicity with acetaminophen products

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Multimodal Pain Management Plan

- Foundation of pain management: scheduled non-opioids
- First dose: scheduled acetaminophen
- Second dose: scheduled acetaminophen
- Third dose: scheduled acetaminophen

Multimodal Pain Order: Scheduled Non-opioid

- Acetaminophen 1 gram PO q6h
- Acetaminophen 1 gram PO q8h
- Ketorolac 15 mg IVP q6hr x ___ days
- Ketorolac 30 mg IVP q6hr x ___ days
- Ibuprofen 400 mg PO q6h
- Ibuprofen 600 mg PO q6h
- Ibuprofen 800 mg PO q8h
- Celecoxib 200 mg PO q12h
- Naproxen 550 mg PO q12h

PO begins AFTER IV NSAID when ordered
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**Multimodal Pain Order: Scheduled Gabapentin**

**Gabapentin**
- Day 1: 300 mg Oral, qday x 1 day
- Day 2: 300 mg PO q12h x 1 day
- Day 3: 300 mg PO q8h x __days

Gabapentin 300 mg PO q8h
Gabapentin 300 mg PO qday
Gabapentin 100 mg PO q8h

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**Multimodal Pain Order: 2 step PRN Oxycodone**

**STEP 1**
Oxycodone (initial dose)
- 5 mg PO q4h PRN, pain to achieve therapeutic activity goal. Total MAXIMUM dose (Initial + Additional) not to exceed 15 mg in a 4-hour period.
- 10 mg PO q4h PRN ... Total MAXIMUM dose (Initial + Additional) not to exceed 20 mg in a 4-hour period.
- 15 mg PO q4h PRN ... Total MAXIMUM dose (Initial + Additional) not to exceed 25 mg in a 4-hour period.

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**Multimodal Pain Order: 2 step PRN Oxycodone**

**STEP 2**
Oxycodone 5 mg PO PRN, breakthrough pain (additional doses).
Multimodal Pain: PRN IV Opioid

PRN Pain unrelieved by PO pain medication or unable to take PO

- Morphine 2 mg, IV Push, q2h PRN
- Morphine 4 mg, IV Push, q2h PRN
- Hydromorphone (Dilaudid®) 0.25 mg, IV Push, q2h PRN
- Hydromorphone (Dilaudid®) 0.5 mg, IV Push, q2h PRN

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Therapeutic Activity Goal Example

Therapeutic Activity Goal:
Sitting in chair for meals, progressing to walking in the hall for 10 consecutive minutes. Patient and the care team have determined acceptable pain is a 3 (self-reported).

12:00 ASSESSMENT
- Pain level 4 (self-reported); oxycodone 5 mg administered (Step 1)
- Notification to provider of patient not being able to sit on side of bed to eat lunch

12:45 REASSESSMENT
- Patient self-reports pain level of 4 and only being able to sit on side of bed to eat lunch; oxycodone 5 mg administered at 12:55 per orders (Step 2)

13:40 REASSESSMENT
- Patient again self-reports pain level of 4 but can now walk around the room; oxycodone 5 mg administered at 13:50 (Step 2)

* Maximum dose of 15 mg in a 3 hour period has been met.
* Notify provider of patient not being able to meet their TAG; consider use of IV opioid if ordered.

Order revisions 2018

- Limited the number of acetaminophen dose options to encourage maximum dosing at 4 gram daily
- Added gabapentin titration
- Removed long acting opioids
- Removed tramadol and PRN combination opioids
- Removed dosing for opioid tolerant patients
Nursing Clinical Pearls

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**Nursing Clinical Pearls**

- Reframe how pain is assessed. Instead of asking, “what’s your level of pain”, relate the conversation back to the patient’s TAG.
  - “Are you able to participate in therapy (cough and deep breathe, rest with a manageable level of discomfort)”
  - “I know you are hurting. What do we need to do so you can get yourself dressed and brush your teeth”

- Notify provider for increase in Step 1 dose if patient consistently needs Step 2 analgesic to meet TAG

- Pre-medicate for physical/occupational therapy in order to meet TAG.

- Important: If the initial dose has changed, so has the maximum limit.

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**Inpatient Pain Management Process**

- Goal: Safety manage pain so patient can engage in therapy

- Initiate Step 1

- Consultation

- Consider Assessment

- Plan: Increase Step 1

- Notify provider for increase in Step 1 dose

- Pre-medicate for physical/occupational therapy

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**Pilot: Ascension Texas, Seton Medical Center**

- Graphs and charts showing pain management metrics.
St. Vincent's Healthcare

System Target Opioid Use (Mg Morphine Equivalent Per 1000 Patient Days) vs. Patient Pain Scores

33% reduction in opioid use across Ascension St. Vincent's

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Change Management Strategies

- Team approach
- No fear to do the right thing (Physician and Nurse Champion(s))
- Energy
- Project manager
- IT/IS support
- Accurate data collection
- Educator support
Lessons Learned through the Eyes of a Nurse

• Take the time to have a personalized conversation with the patient and truly understand their perspective on managing pain.
• Requires establishing a relationship with the patient, coming to their frame of reference and helping them understand how the plan works.
• Goal setting – conversation is led with empathy and compassion, but setting realistic expectations for what is achievable without oversedation risk and diminishment of patient’s ability to participate in recovery.
• Always discuss pain in relationship to accomplishing their goals for the day and pain management in the context of function.
• Use of communication board and bedside shift report are important tools to communicate what worked and what didn’t.

Next Steps

• System-wide deployment of multimodal pain management plan
• Monitor physician favorites for compliance to order set usage
• Develop national metrics
• Develop national opioid surveillance database
• De-prescribing of IV opioids
• Medical group opioid guidelines

Thank You!