WINNING STRATEGIES FOR PAIN MANAGEMENT PROCESS IMPROVEMENT

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Objectives

- Discuss the links between pain management satisfaction scores and other satisfaction scores.
- Discuss the steps necessary to establish improved pain management in the patient care environment.
If only the square peg fit the round hole!
Pain is subjective!
Why Do We Care?

- Prevalence of chronic pain in North America based on a meta-analysis of studies, estimated to be 8% in children and 11% in adults (Harstall & Ospina, 2003)
  - Ohio 931,000 adults; 231,000 children (CCTF, 2004)

- Chronic pain begins acutely
  - We have allowed acute pain to go under-treated for so long that chronic pain costs our country $120 billion dollars annually (Griffin, 2003)
WHAT ARE WE DOING TO PREVENT CHRONIC PAIN AND TREAT ACUTE PAIN?

- **Physician practices**
  - ETC/Urgent Care practices
    - 70% fibromyalgia patients report trauma preceding the illness
  - Surgical practices – inpatient and outpatient (PHP > 37,000 cases/year)
  - Progressive disease processes

- **Contributing factors**
  - Obesity epidemic
    - Increased physical stress, decreased serotonin/endorphin production
  - Aging population
    - 39 million Americans will be 65+ in 2010
    - 69 million Americans will be 65 + in 2030
  - Quick-fix society
Pain is...

- The number one reason people seek medical advice
- The number one reason people come to the hospital
- The one thing most feared by cancer patients, even more than death
- The reason patients have put off elective surgery for years
Why is pain management so difficult when we have:

- A controlled environment
- 24 hour observation
- Predictable pain
- Access to most medications by most routes of administration
- Access to emergent rescue
248 primary care physicians completed survey, mean age of 41 years

Physician concerns regarding opiate prescribing included:

- Prescription drug abuse (84.2%)
- Addiction (74.9%)
- Adverse effects (68%)
- Tolerance (60.7%)
- Medication interaction (32%)
*What Do We Know About Nursing Decision-making Regarding Pain Treatment?

**Facts**

- Nurses’ reports of pain do not match patient’s report (Idvall et.al., 2005; Barton et.al., 2004; Weiner, 2002; McCaffery & Pasero, 1999)

- Behavior or facial expression - not always changed with chronic or acute pain, may be culturally, emotionally, or environmentally mediated, also affected by cognition
  
  - 44% of elderly with hip fx. & cognitive impairment grimaced with pain (Minnesota, 2000)

- All prn dosing based on nurses decision-making
Decision-making Influences

- **Personal experiences**
  - Upbringing
  - Perceived patient addiction (Elander et al., 2006)
  - Pain experience (Pud, 2004)
  - Moment in time
  - Education (Barton et al., 2004)

- **Cultural/Ethnic**
  - Disparities in all settings, non-Hispanic whites received preferential treatment (Green et al., 2003 – comprehensive literature review)

- **Religious**
  - Belief that pain is a punishment for wrong-doing or is a right of passage
4 in 12,000 (.03%) postoperative opioid-naïve* patients exhibited substance abuse behaviors in a large hospital study (Boston Collaborative Drug Study; Porter & Jick, 1980).

*Opioid-naïve meaning non-narcotic dependent with no history of dependence.
Regulatory and Ethical Obligation to Manage Pain

- **TJC**
  - Press Ganey analysis of >3 million surveys pre and post standards showed significant improvement in patient satisfaction with pain control; 85.2-85.7 (Leddy & Wolosin, 2005)

- **Medical and Nursing Boards**

- **Published Standards of Care**
Joint Commission (JC) Standards

RI. (Ethics, Rights and Responsibilities)

2.160 Patients have the right to pain management

PC. (Provision of Care Treatment and Services)

6.10 The patient receives education and training specific to the patient’s needs and as appropriate to the care, treatment, and services provided.

8.10 Pain is assessed in all patients

PI. (Improving Organizational Performance) 1.10 The hospital collects data to monitor its performance.

EP3. The hospital collects data on the perceptions of care, treatment, and services* of patients, including the following:
  - Their specific needs and expectations
  - How well the hospital meets these needs and expectations
What is going on in your hospital?

- HCAPS Questions – general pulse
  - How often was your pain well controlled?
  - How often did the hospital staff do everything they could to help you with your pain?
  - Correlations with other indicators
  - Populations requiring improvement
- Review of patient complaints related to pain
  - Trending
  - Chart review
- Documentation review
  - Compliance with policies
    - Policies, procedures, order sets should be in compliance with national standards
  - Pain scores
Existing Standards of Care...Using What We Know

- Standards set by national organizations, consensus publications, comprehensive review of EB literature
  - Good until new evidence changes the standard
  - Liability related to not following the standards
  - Example – repeated meperidine use
Examining Patient Satisfaction

- Anxiety was associated with greater pain, worse function, and more use of resources in the first year after TKA (Brander, Gondek, Martin & Stulberg, 2007)

- Preoperative education reduces postoperative pain and increases patient satisfaction (meta-analysis by Oshodi, 2007; Walker, 2007)
Correlations to Patient Satisfaction

- **Pre-operative education** (Niemi-Murola et.al., 2007; Bergman et.al., 2006; Chirveches et.al., 2006; Sauaia et.al., 2005; Sjoling et.al., 2003)
  - Patients more satisfied with interactive computer education vs. pamphlet regarding knee pain (Fraenkel et.al., 2007)

  - Secondary staffing issues (Seago, Williamson, & Atwood, 2006)
Quality of pain control - varying results

- Positive correlation (Gunningberg & Idvall, 2007; Press Ganey, 2006; Leddy & Wolosin, 2005; O’Holleran et.al., 2005)

  ■ Mild levels of pain, 4 or less, did not affect satisfaction but levels at 5 or higher negatively impacted satisfaction (Jensen, Martin, & Cheung, 2005)

  ■ Higher pain scores with decreased function post TKR less satisfied, n=8231 (Baker et.al., 2007)

  ■ ↓ satisfaction post discharge care -stroke patients with higher pain (Ostir et.al., 2006)

- Negative or flat correlation (Niemi-Murola et.al., 2007; Dihle et.al., 2006; Sauaia et.al., 2005 {87% of 62% elderly with moderate to severe po pain were satisfied})
Hospitalized patients, n=1518

Positive satisfaction correlated with

- Availability of physician
- Education regarding pain management
- Regular pain assessment
- Change in treatment plan when pain management not effective
- Waiting less than 10 minutes for pain medications
Correlations to Patient Satisfaction (Perron & Bavier, 2007)

- Outpatient university clinic – n=703
- 40% complete pain relief – correlates
  - Availability of MD*
  - Availability of RN*
  - <10 minute wait for pain medication*
  - Regular assessment of pain*
  - Received education regarding pain and management*

*All correlates that could be applicable for inpatients
Patient Satisfaction with Pain Management

- **Indirect influences improved satisfaction**
  - Creation of pain resource program/pain protocols (Paice et.al., 2006; Chung & Nguyen, 2005; Campbell et.al., 2004 (ED); Deschenes, 2004; Andrs et.al., 2004)
  - Nursing education and patient rounds (Sterman et.al., 2003)
  - Decreased state anxiety after TKA (Sjoling et.al., 2003)
  - Ambulatory surgery (Sharma et.al., 2004)

- **Indirect influences decreased satisfaction**
  - Poor mental health (Short-Form 36 in outpatients with upper limb pain, n=1271) (Palmer et.al., 2006)
  - Increased pain decreased satisfaction with medical rehab. (Berges et.al., 2006)
IDENTIFYING TRENDS FROM AVAILABLE DATA!

What are the obvious findings?
Obvious Repetitive Correlations

- Patient education regarding pain management
  - Interactive education preferred
- Response time to treatment or receipt of pain medication
  - Staffing sensitive
  - Mode of administration
  - Nursing attitude - education
- Mental health/state anxiety
- Quality of pain control
- Availability of pain policies & protocols/pain service/pain resource
- Regulatory influences that influence all of the above
Patient Education regarding Pain Management

- **When, where, and how does it occur?**
  - Physician’s office *prior to scheduling* surgery
  - Pre-op phone call or PAT
  - Time of admission
  - When orders received or *change* occurs
  - Verbal versus computer versus written brochure or pamphlet

- **ALWAYS influences patient satisfaction**
  >20 years of data!
Response Time to Treatment

- <10 minutes (Perron & Bavier, 2007; Bovier, 2004)
- Dissatisfaction increases proportionally to increase in wait times
  - TQPM data collection greatest change when wait time >30 minutes (none of these patients “Very satisfied” with pain management).
  - Wait time <10 minutes or 10-30 minutes had variable results.
Addressing the Response
Time to Treatment

- Medication access
  - Patient administered
    - PCA
    - PCEA
    - Oral PCA
  - Nurse administered
    - Staffing
    - Attitude
    - Access to nurse
    - Education
    - PRN versus scheduled dosing
Mental Health/Anxiety Issues

- Consultation as appropriate
  - Adult ADD treated with Ativan will worsen
- Misuse of opioids as anxiolytics (nerve pills) and/or antidepressants
- Drug dependence – assessment screening
- Education
Quality of Pain Control

- Create policies, procedures, order sets from existing standards of care
  - Improved quality
  - Reduced liability
  - WILL change practice

- Staff education, education, education – less likely to change practice but makes practice change understandable

- Pain Resource/Pain Service
Specifics of Practice Change that affect Quality

- Decrease prn dosing whenever possible unless patient administered*, consider some analgesic ATC
- Use of equianalgesic (conversion) dosing charts
- Use of adjuvant medication (other classes of medications) to target specific type of pain and reduce opioid use
- Anesthesia - Increase use of nerve blocks, epidurals, local anesthetics
- Attitude assessment and adjustment – believing the patient
- Removal of barriers to safe practice – quality review of adverse drug reaction events, MSEC approved naloxone and romazicon use
* PCA-Traditional Management

During the first 12 hours of PCA use, 75% post-op patients (n=60), reported moderate to severe pain at rest with standard doses (Larijani et.al., 2005).

- **Advantages**
  - Patient Controlled Analgesia - quick response, not staffing sensitive
  - Nurse convenience
  - Patient satisfier

- **Disadvantages**
  - Patient falling asleep then awakening with severe pain
  - Too low dose to manage pain
  - Uni-modal analgesia
  - Fear of using continuous mode causing pt. to stay awake to use
  - Safety concerns when family pushes button*

*(Miaskaoski, 2006)
QUESTIONS???