Taking the BITE Out of Pain:
Innovative Bundling of Interventions to Enhance Pain Care Quality

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Julie Castex, MSN, APRN, ANCS-BC, CMSRN
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Ochsner Medical Center
New Orleans, Louisiana

Presentation Objectives

I. Overview an innovative 6-component patient-centered pain management bundle

II. Discuss evidence supporting the BITE Pain Therapy project

III. Describe strategies and resources that any acute care facility can use to implement & measure BITE Pain Therapy project-related outcomes

Acknowledgments

• Co-Investigators
  – Patricia Brandon, RN-BC
  – Laura Martin, DNP, RN
  – Armin Schubert, MD
  – Rene Meadows, MD

• Leadership & Staff Nurses from participating units
  – Gastrointestinal Surgical Stepdown Unit (GISSU)
  – Postoperative Surgical Services Unit (POSS)
  – Transplant Unit (TSU)

• Tulane University Public Service Interns

• Consultant
  – Susan Beck, PhD, APRN, FAAN, AOCN, Professor, University of Utah
Background

• Pain cost > $635B annually
• More than combined cost of
  – Diabetes
  – CV disease
  – Cancer
• IOM pain report recommends
  – Interprofessional collaboration
  – Patient-centered interventions
• Joint Commission (2015)
  – Nonpharmacological options

Bundling Interventions to Enhance Pain Care Quality

• Design – Implementation Science Methodology
• Setting – Medical Surgical Units
• Data Analysis Plan – Interrupted Time Series
• Study Period – October 1, 2014 – September 30, 2016

Supporting Evidence

• Literature review
  – OvidMedline & CINAHL
  – 2003-2014
• 47 articles
  – Complementary therapy
  – Pain management
  – Nonpharmacological therapy
  – Coping
  – Outcomes measurement
• NDNQI Pain Care Toolkit
• Concept of bundling

Evidence to Support Bundle Components

<table>
<thead>
<tr>
<th>Evidence Sources</th>
<th>Patient Education (n=6)</th>
<th>Pain &amp; Coping Assess (n=11)</th>
<th>Pain Records (n=6)</th>
<th>Pain Communication (n=2)</th>
<th>Pharmacological Therapy (n=4)</th>
<th>Complementary Therapy (n=12)</th>
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Goal I
Engaging Patient to Define & Communicate Expectations

Goal II
Engaging Patient to Determine Appropriateness of Pain Interventions
Goal I
Engaging Patient to Define & Communicate Expectations

Pain Rating Scale

Coping Rating Scale

Structured Pain Rounds

White Boards & Clip Boards
*Comfort goal
*Time for next pharm therapy
**Goal II**

**Engaging Patient to Determine Appropriate Pain Interventions**

- **Pharmacologic Therapy**
- **Music Therapy**
  - TV Channel 20
  - Listen to your music
- **Relaxation**
  - Deep breathing
  - Stretching
  - Progressive muscle relaxation
  - Meditation
- **Guided Imagery**
  - Meditate on images on music TV Channel 20
  - Create own images
  - Ask your nurse for instructions
- **Distraction**
  - Read
  - Electronic games
  - Crossword puzzles, word searches
  - Board games
  - Watch TV
- **Ask your nurse about arranging the following therapies**
  - **Music Therapy**
    - Live music in your room
  - **Massage Therapy**
    - Personalized hand massage
  - **Aromatherapy**
    - Essential oils to smell
  - **Positioning**
    - Repositioning
  - **Physical Agents**
    - Heat or cold
  - **Distraction Resources**
    - Crossword puzzles, word searches
    - Checkers/Chess
    - Books
    - Have someone read to you?
  - **Pet Therapy**
    - Pet visit in your room
  - **Ask Volunteer Services, 842-5085 to schedule; availability limited**

**Take the BITE Out of Pain**

**Complementary Therapy Menu**

**Therapies you and your nurse can do now**

**Music Therapy**
- TV Channel 20
- Listen to your music

**Relaxation**
- Deep breathing
- Stretching
- Progressive muscle relaxation
- Meditation

**Guided Imagery**
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Pet Therapy
Pat Brandon, RN-BC
Pain Service Coordinator

Implementation

IRB Approval
- May 2014

Baseline Data Collection
- July 2014

Education
- July & August 2014

Resource Allocation
- September 2014

Go-Live
- November 2014

Data Collection
- Ongoing PDSA Cycles

09/09/2015
**Outcome Measures**

**Pain Care Quality**

- PainCQ® Surveys
  - PainCQ-N © (14 items)
    - Being Treated Right
    - Comprehensive
    - Efficacy of Pain Management
  - PainCQ-I © (6 items)
    - Partnership
    - Comprehensive

- HCAHPS Pain Management Survey
  1. How often was your pain well controlled?
  2. How often was everything done to help with your pain?

Pett et al. (2013). Confirmatory factor analysis of the PainCQ.
HCAHPS. 2012. Available at: http://www.hcahpsonline.org

**Nurse Dose**

**Active Ingredient**

- Education (% RNs > BSN)
- Experience (Avg RN org yrs)
- Skill Mix (% RNs to other)

**Intensity**

- FTEs (RN productive)
- RN:Pt Ratio (RN prod hrs/pt days)
- RN-HPPD (RN prod hrs/pt days)


**Outcome Measures**

**Adherence to Bundle**

- Implementing Pain in Kitty & LuAnn Case Study
  - Implementing Pain in Kitty & LuAnn Case Study
    - Patient Outcomes
      - Pain Score
      - Patient Satisfaction
    - Staff Outcomes
      - Staff Satisfaction
      - Staff Burnout
    - Process Outcomes
      - Pain Management
      - Implementing Pain in Kitty & LuAnn Case Study

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      - Implementing Pain in Kitty & LuAnn Case Study
Bundle Adherence

Busting Myths About Pain

Effective dose administered equivalence using the last converted to oral medication IV pain medication can be effective dose administered equivalence using the last converted to oral medication IV pain medication can be in dose equivalents Oral & IV opioids are equal in dose equivalents IV Hydromorphone & Morphine are equal in dose equivalents

• Annual More
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Inadequate 30% (Institute of Medicine, 2015)

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30% (Institute of Medicine, 2015)

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30% (Institute of Medicine, 2015)
Summary / Conclusion

- Trending outcomes
  - Pain Care Quality
  - Bundle Adherence
  - Nurse Dose

- Dynamic team/staff interaction
  - Timely communication
  - Process improvement

Contact Information

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