DEVELOPMENT OF A PRE-OPERATIVE PAIN RISK ASSESSMENT TOOL

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OBJECTIVES

1. Identify challenges in providing effective pain management in the at-risk surgical patient with pre-existing and/or chronic pain.
2. Describe three different patient characteristics that affect providing adequate pain relief in the surgical patient.
3. Identify ways a pre-operative pain identifier tool can improve multidisciplinary communication in pain management for the at-risk surgical patient.
PAIN MANAGEMENT CHALLENGES

Or Why PACU nurses pull their hair out!!!
Washington, District of Columbia
The United States Capital Building
PAIN MANAGEMENT CHALLENGES

- Pain – the ultimate PeriAnesthesia challenge
- Nurses struggled to provide adequate pain relief using standard post-operative pain regimens
- Patients with pre-existing, chronic pain experienced longer stays in PACU
- Underutilized Acute Pain Service (APS) for perianesthesia patients
**Goals**

- To provide the best possible control of our patients’ post-operative pain
- To improve communication between the patient and the medical team
- To improve our patients’ satisfaction with their pain management
DEVELOPMENT OF THE TOOL

- Consultation with Acute Pain Service Physician
- Literature Search
  - Does a tool currently exist to help identify patients with potential pain management problems?
- Discussion and fact-finding with research resource nurse
- Design Phase
DESIGN OF THE TOOL

- Initial Tool Design

- Repeated multidisciplinary input was obtained from Acute Pain Service, direct-care nurses, nurse leaders and anesthesia providers to design, develop and improve the tool.

- Design reviews/consultations/revisions over the next six months
PERIOPERATIVE PAIN MANAGEMENT RISK TOOL

- Patient description
  - Opioid naïve
  - History of acute pain with low dose and/or short term opioid use
  - History of chronic pain and/or prolonged opioid use

- Current Therapy
  - Patient currently on no pain medication; with limited previous opioid exposure
  - Patient currently on low dose, short-acting PO pain medication for less than 3 months
  - Patient on long-acting pain medication, short acting pain medication for greater than 3 months; history of substance abuse; currently under care of Pain Service Physician or Palliative Care
Pain Management Risk
- Low
- Medium
- High

Recommendations
- Communicate patient risk with anesthesia care team during pre-op handoff of care
- Acute Pain Service notification of pain management risk criteria
- Surgical team notification of pain management risk criteria
We combined the Pre-Operative Pain Risk Identifier Tool – with the Koivuranta et. al. Tool for Identification of PONV Risk to create a Perioperative Pain and PONV Risk Assessment Tools document.
IMPLEMENTATION

- Final review and acceptance of tool design with Acute Pain Service, Nursing, and Anesthesia resources
- Hospital Forms Committee for approval of new form
- Education
  - Nursing staff
  - Anesthesia staff
  - Surgeons
  - Pain Service
EDUCATION IS KEY

Training the bedside nurse how to use the new tool required multiple education techniques…
Pitfalls!!!!
PITFALLS

- **Nurses**
  - Pre-Op nurses
  - Post-Op nurses

- **Anesthesia Care Providers**
  - Letters via anesthesia department administration
  - Direct conversations

- **Surgeons**
  - Letters through surgical chief residents
  - Communicating with attending physicians

- **Pain Service**
  - Meetings and one to one interactions
TOOL EVOLUTION FOLLOWING IMPLEMENTATION

- Initial design printed and piloted by nursing staff
- Feedback suggested design changes
- Consensus on design changes was elicited
- Implemented changes after staff re-educated
SUCCESS OF THE TOOL

- Staff Response

- Acute Pain Service Feedback
  - Introduce to other facilities within our hospital system
  - Interest in collaboration and data collection

- Tool Validation
VALIDATION OF A NURSING ASSESSMENT TOOL

- Process of validation for a new nursing assessment tool
- Content Validity Item (CVI) Rating
- Feedback and suggestions included in form re-design
- Outcome of validation
Feedback useful for tool development

- Feedback from users gave ideas for revisions of initial design
- Input from anesthesia care providers and surgical staff provided additional ideas
- Feedback from validation process generated solutions for revisions of the initial design
- Audit process provided data for analysis of tool use and design
AUDIT PROCESS – DEDICATED TIME FOR CHART REVIEW AND DATA COLLECTION
AUDIT PROCESS

- Performance Improvement data collection based on chart audits
- Chart audits completed over 4 months
- Current and retrospective data collection allowed for auditor flexibility
- Nearly 800 chart audits were done to identify if the tool was utilized correctly with appropriate referrals
- Outcome: Evaluation of Tool implementation and effectiveness
The potential exists for:

- Improved communication between care providers
- Improved patient post-operative pain management
- Improved patient surgical experience
  - Increased patient satisfaction with pain management in the perianesthesia setting
- Performance improvement project…can transition into nursing research
CURRENT PERIOPERATIVE PAIN MANAGEMENT RISK TOOL

1. PERIOPERATIVE PAIN MANAGEMENT RISK TOOL
To be completed in Pre-Surgical Testing, if posslbe, or on the day of surgery.
Check the appropriate box in the chart below and notify the appropriate practitioner(s) as indicated.

<table>
<thead>
<tr>
<th>Patient Description</th>
<th>Current Therapy</th>
<th>Pain Management Risk</th>
<th>Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opioid Naive</td>
<td>LOW</td>
<td></td>
<td>Communicate Patient Risk with Anesthesia Care Team during pre-op handoff of care by means of boarding pass</td>
</tr>
<tr>
<td>History of Acute Pain with Low Dose and/or Short Term Opioid Use (less than 3 months)</td>
<td>MEDIUM</td>
<td></td>
<td>Communicate Patient Risk with Anesthesia Care Team during pre-op handoff of care by means of boarding pass</td>
</tr>
<tr>
<td>History of Chronic Pain and/or Prolonged Opioid Use (greater than 3 months)</td>
<td>HIGH</td>
<td></td>
<td>Consider Acute Pain Service (APS) Notification</td>
</tr>
<tr>
<td>History of Substance Abuse (recent or distant)</td>
<td></td>
<td></td>
<td>Notify Acute Pain Service (APS) Team</td>
</tr>
<tr>
<td>Patient currently under the care of a Pain Services Physician (e.g., Acute Pain Service [APS], Palliative Care, or other provider)</td>
<td></td>
<td></td>
<td>Notify Surgical Team preoperatively on day of surgery</td>
</tr>
</tbody>
</table>

Screening RN: __________ Date / Time: __________
APS Notification: NA Voice mail to 4-025
OK Reported to: __________ Date / Time: __________
Surgical Team Notification: NA Reported to: __________ Date / Time: __________

2. KOIVURANTA ET AL TOOL FOR IDENTIFICATION OF PONV RISK
To be completed on day of surgery. Notify the appropriate practitioner.

<table>
<thead>
<tr>
<th>Koivuranta et al Tool for Identification of PONV Risk</th>
<th>Points</th>
<th>Patient Score</th>
<th># of Risk Factors</th>
<th>Level of Risk</th>
<th>% Risk of PONV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female Gender</td>
<td>1</td>
<td>0 - 1</td>
<td>Low</td>
<td>10 - 30</td>
<td></td>
</tr>
<tr>
<td>Non-smoker</td>
<td>1</td>
<td>2</td>
<td>Moderate</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>History of PONV</td>
<td>1</td>
<td>3</td>
<td>Severe*</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>History of Motion Sickness</td>
<td>1</td>
<td>4</td>
<td>Very Severe*</td>
<td>80 +</td>
<td></td>
</tr>
<tr>
<td>Duration of Surgery greater than 60 minutes</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sum = 0...5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Screening RN: __________ Date / Time: __________
Surgical Team Notification: NA Reported to: __________ Date / Time: __________
Pain can be like the Washington Monument – some days it is cloudy and dark…

…but with improved pain control, the sun comes out!
Lincoln Memorial
REFERENCES


REFERENCES


TEAM MEMBERS

- Linda Bowles RN, CPAN
- Laurie Cushman RN, BSN, CPAN
- Charlotte Kreger RN, BSN, MHSA-Candidate
- Christopher Spevak, MD

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QUESTIONS?

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