INCORPORATING PERFORMANCE IMPROVEMENT WITH A LIVE CME ACTIVITY – A PILOT PROJECT

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Starting Point

• Identified long-standing review course

• Developed clinical recommendations for participant implementation

• Created template for data collection, follow up and evaluation

• Modified the full PI CME process
Planners

- Course director (Heitz)
  - Course faculty
- Senior Dean for CME (Seltzer)
- OCME Staff (Cole/Sylvester)
CME Conference

• 16th Annual Gulf Shorts: Topics in Clinical Anesthesiology

• April 7-11, 2008

• #145 Participants
Purpose of PI Project

• Improve anesthesiology practice

• Help participants translate new knowledge into practice

• Measure impact on physician performance

• Address the updated accreditation criteria

• Gain experience with PILOT PROJECT
Develop PI Project

- Course Director & faculty provided evidence-based clinical recommendations (N = 29) based on lecture content.

- “Clinical Recommendations Packet” was distributed at registration with instructions.

- Course director repeatedly encouraged participation from podium.
Part 1 - Enrollment Onsite

Complete a short form:

- Identify 3 recommendations to examine in their own practice

- Complete a commitment to change (CTC) statement
Part 1: Onsite Enrollment Form

Jefferson 16th Annual Gulf Shorts: Topics in Clinical Anesthesia

PART 1 CHECKLIST
Identify Clinical Recommendations You Will Implement

Part 1: COMPLETE this part of the process before you leave the conference

Last Name, First Name (Please Print): ____________________________  DEGREE: ________
LAST 4 DIGITS of SSN: __________ PHONE: ____________________________  Work [ ]  Home [ ]  Cell [ ]
EMAIL ADDRESS: ________________________________________________

I plan to adopt the following into my practice:

<table>
<thead>
<tr>
<th>A. Clinical Recommendation (enter the Recommendation number from p.13-14 from the packet)</th>
<th>B. I believe my current practice relating to this clinical recommendation is</th>
<th>C. My level of commitment to implementing this clinical recommendation is</th>
</tr>
</thead>
<tbody>
<tr>
<td>Must select 3 to qualify for any credits</td>
<td>Very High</td>
<td>High</td>
</tr>
<tr>
<td></td>
<td>o</td>
<td>o</td>
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<td>o</td>
</tr>
</tbody>
</table>

Instructions for:
- Column A: Select 3 recommendations from the list in the Information Packet (pp 13-14). Enter the NUMBER of the Clinical Recommendation in the space provided (ex: #1, #28, ...).
- Column B: Predict how well you are already performing by filling in the appropriate circle
- Column C: Indicate how committed you are to implementing the identified recommendation in your practice by filling in the appropriate circle

When Completed:
Return the top copy to the Registration Desk
Keep the bottom copy for your records
Send a copy to:
Part 2 - Pre-conference Performance

For each recommendation selected:

- Reviewed 5 *pre-conference* charts
- Assessed performance against clinical recommendation
- Submitted results of chart review online*
- Completed online survey*

* using SurveyMonkey®
Part 2: Online Survey

Part 2: Gulf Shorts 2008 Retrospective Mini-Audit for Practice

1. FIRST Clinical Recommendation Report

This activity is open to all individuals who attended the Jefferson Gulf Shorts Conference in April 2008.

Thank you for participating in this CME Performance Improvement Project. Please enter the chart review information for each of the three clinical recommendations that you selected to implement in practice.

For the FIRST Clinical Recommendation you are reviewing, please provide the following information.

1. Enter the number of the Clinical Recommendation you are reporting on.

   * 2. Chart code:
     1.1:
     1.2:
     1.3:
     1.4:
     1.5:

   * 3. For each chart reviewed, indicate how well you had complied with the clinical recommendation you have identified.

     | Chart 1.1 | Very High | High | Moderate | Low | Very Low |
     |-----------|-----------|------|----------|-----|----------|
     |           |           |      |          |     |          |
     | Chart 1.2 |           |      |          |     |          |
     | Chart 1.3 |           |      |          |     |          |
     | Chart 1.4 |           |      |          |     |          |
     | Chart 1.5 |           |      |          |     |          |

Comment:

Click on the arrow below to continue.
Part 3 – Post-conference Performance

• Follow up email notification to complete Part 3

• Completed additional chart reviews of 5 post-conference cases online*

• Assessed changes in compliance with selected clinical recommendations*

* using SurveyMonkey®
Part 3: Online Survey

11. Years in Practice
   - 1-7
   - 8-15
   - 15-22
   - >22

Please give us your feedback about your experience with the Jefferson Gulf Shorts 2009 Clinical Recommendations process thus far.

12. How long did it take you to complete the Post-Conference Mini-Audit?
   - < 1 hr
   - 1-2 hrs
   - > 2 hrs

Comment on time:

13. Were you surprised by the results of your mini-audit for any of the three clinical recommendations you selected? If yes, please indicate you surprised you.
   - No
   - Yes

Recommendation # and explanation

14. Rate the usefulness of this process in helping you implement the clinical recommendations you selected.
   - Very High
   - High
   - Moderate
   - Low

Comment?

15. Rate the clarity of the instructions for completing Part 3 of this process.
   - Very High
   - High
   - Moderate
   - Low
   - Very Low

Any suggestions to improve this process?

16. This Performance Improvement CME activity, incorporated into a Conference, is a new design for CME. We would appreciate your comments and feedback.

Are you willing to talk to a Jefferson representative about your experience with this project?
   - Yes
   - No

If yes, please indicate your preference for us to contact you:

Thank you for completing Part 3 of the Jefferson Gulf Shorts 2009 Clinical Recommendations Performance Improvement process. You will receive an email with a summary of the information you submitted, and a notice on how to retrieve your CME credits. In the meantime, please don’t hesitate to contact us at 888 JIFF CME (or jeffersoncme@jefferson.edu) if you have any questions.
Timeline

Jan 2008
Concept

Jan 08 Mar 08 Apr 08 May - Jul 08 Sept 08 – Apr 09

April 2008
Activity Occurred

STEP 1
Develop clinical recommendations packet
- Distribute packet
- enroll onsite
- Select 3 to examine

STEP 2
Review of 5 pre-conference cases
for compliance w/selected recommendations

STEP 3
Review of 5 post-conference cases

April 2009
Data collection closed
Instructions Packet

Jefferson 16th Annual Gulf Shorts: Topics in Clinical Anesthesia

EVIDENCE-BASED RECOMMENDATIONS

These recommendations can be implemented for additional AMA Category 1 Continuing Medical Education Credit as part of the Jefferson Anesthesia Gulf Shorts 2008 Performance Improvement Project as outlined in the accompanying information. Please note, evidence-based recommendations appear for many, but not all, of the topics offered during the symposium. The appropriateness of an individual recommendation for a particular clinical situation remains the judgment of the anesthesia provider. The symposium does not advocate or endorse the use of specific medications or techniques.

Professionalism dictates the honest completion of your practice review. Physicians are reminded that the American Medical Association’s Code of Ethics states in part “Physicians should claim credit commensurate with only the actual time spent attending a CME activity or in studying a CME enduring material.” (8.11)

EMERGING TECHNIQUES FOR ACUTE PAIN MANAGEMENT

Recommendation #1: Postoperative epidural analgesia with EREM should be administered to appropriately selected patients who may benefit from epidural analgesia without the need for an indwelling epidural catheter.

Extended-release epidural morphine (EREM) can provide up to 48 hours of analgesia without the need for an indwelling epidural catheter. EREM is not currently recommended for individuals with opioid-tolerance or obstructive sleep apnea. EREM should be considered for patients who may benefit from postoperative epidural analgesia without the need for an indwelling epidural catheter. This would include patients for whom postoperative epidural analgesia would be beneficial, but an indwelling epidural catheter is either contraindicated or presents an increased risk because of the concurrent need for anticoagulation.


Recommendation #2: Intrathecal fentanyl should be administered to appropriately selected patients for postoperative analgesia.

Reportedly, 2% of all medication errors result in patient harm, but the likelihood of patient harm increases 3.5 fold if the error involves a PCA pump. Intrathecal fentanyl allows for demand dosing of postoperative fentanyl from a preprogrammed device, eliminating some of the more common sources of medication error and the need for a PCA pump. The possibility of intentional tampering of the programming of the PCA pump, by patient or the patient’s family, is also eliminated. Intrathecal fentanyl may offer advantages over IV PCA opioid for some patients.


PRETERM LABOR AND DELIVERY

Recommendation #3: When administering succinylcholine to patients receiving intravenous magnesium, use a standard infusing dose (1mg/kg) without prior administration of a defasciculating dose of a nondepolarizing neuromuscular blocker.

Intravenous magnesium is a tocolytic commonly administered in treatment of preterm labor. Since magnesium potentiates the action of neuromuscular blockers, a defasciculating dose of a nondepolarizer should not be administered prior to administration of succinylcholine. A standard infusing dose of succinylcholine (1 mg/kg) is recommended with the understanding that its duration of action may be potentiated as well.


Results – Part 1

• Initial enrollment = 46/145 (32%) - 30 physicians

• Final enrollment = 40 (28%) - 1 withdrawn ; 5 bad emails

• Assessed current practices at a moderate level of compliance: range: 3.20 – 3.33

• Assessed their commitment to implementing the recommendation at a high level: range 4.42-4.51
Participants

Participants by Degree (N=46)

- CRNA/MSN/MS: 35%
- MD/DO: 65%
Top 3 Recommendations Selected

Top 3 recommendations selected:

<table>
<thead>
<tr>
<th>#</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>#5</td>
<td>NSAIDs should be administered to appropriately selected patients as part of a multimodal analgesia regimen in an effort to minimize side effect profiles including postoperative ileus.</td>
</tr>
<tr>
<td>#8</td>
<td>US-guidance for should be used for femoral-fascia iliaca blocks to lower local anesthetic requirements.</td>
</tr>
<tr>
<td>#9</td>
<td>Multimodal analgesia should be used for patients at risk for moderate or severe pain postoperatively and for patients who have difficulties tolerating opioids due to side effects.</td>
</tr>
</tbody>
</table>
Results – Part 2

- 9 physicians (30%) completed Part 2 (audit of preconference charts)

- 23% identified a gap between their clinical practice and the evidenced-based recommendation
Results - Part 2
Usefulness Ratings

14. Rate the usefulness of this process in helping you improve your practice relating to the clinical recommendations selected.

<table>
<thead>
<tr>
<th>Usefulness</th>
<th>Response Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very High</td>
<td>27.3%</td>
</tr>
<tr>
<td>High</td>
<td>45.5%</td>
</tr>
<tr>
<td>Moderate</td>
<td>27.3%</td>
</tr>
<tr>
<td>Low</td>
<td>0.0%</td>
</tr>
<tr>
<td>Very Low</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

70% of respondents rated usefulness of exercise as “very high/high”
Results - Part 2
Completion Time

12. How long did it take you to complete the Retrospective Mini-Audit?

<table>
<thead>
<tr>
<th>Response</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 1 hr</td>
<td>27.3%</td>
</tr>
<tr>
<td>1-2 hrs</td>
<td>72.7%</td>
</tr>
<tr>
<td>&gt; 2 hrs</td>
<td>0.0%</td>
</tr>
</tbody>
</table>
Results – Part 3

Compliance Ratings

• 5 (13%) completed Parts 2 & 3

• Differences between Part 2 & 3 compliance ratings -.06 to +1.6

• Average change +.51
Results – Part 3

Usefulness

57% deemed activity highly or very highly useful, decreased from 70% in Part 2
Results – Part 3
Completion Time

Completion time is shorter in Part 3 than Part 2
Results – Part 3
Years in Practice

70% enrollees practicing for ≤15 years
Conclusions – Study

*Pilot project too small to make definitive conclusions*

- While initial enrollees indicated a high degree of commitment to implement
  - We had declining participation at each subsequent step (40/9/5)
- PI component added to CME lecture format may help participants recognize their practice deficiencies
- Participants who completed all 3 parts averaged change of +.5 in compliance ratings
What We Learned - Program Director

• Development of clinical recommendations impact faculty presentations
  – 2010 Anesthesiology Update Conference
    clinical recommendations will drive presentations
• Process highlighted learner needs, which became clearly
  – Articulated
  – Rationalized
  – Referenced
What We Learned - OCME

We found we need to:

• Modify collection method of recommendations from faculty (for ease of organizing)*
• Revise instruction packet
  – Move clinical recommendations summary page in front*
• Revise survey tool for Part 3
  – Display Part 2 selections in Part 3 survey
• Develop a report to go back to participants

*Improvements made and used in a 2008 FCM Update Course
What We Learned - OCME

• Need to collaborate, CME office can’t do alone
• Too many choices?
  – Balance of individualized practice vs ability to quantitatively analyze results
  – Data analysis labor intensive
  – Comparisons between Part 2 & 3 responses difficult
• Participation *may* increase if more credit hours awarded or modulating PI project for credit hours
Since We Started This....

• Clinical recommendations format adopted into our CME activities documentation (actions/evidence table)

• Planning a June 2009 FCM Update Course PI Project with modifications

• Model will be used for other review-type CME activities
Thank You!

Questions?