**Value from Anesthesia Care: Where do we influence the cost/outcome equation**

Lee A. Fleisher, M.D.

---

**Premise**

- There is no incentive for better outcomes in the old system since increased utilization = increased payment
- Requiring providers to take ownership of their outcomes through financial means, will lead to greater value to society
  - Better health itself has intrinsic value and is worth spending money to achieve

**Value**

- The core issue in health care is the value of health care delivered

*Value = Patient health outcomes per dollar spent*

- Value is the only goal that can unite the interests of all system participants

Michael Porter NEJM 2010

---

**CMS**

**Triple Aim**

- better care for individuals
- better health for populations
- lower costs
Payment reform

- Traditional fee-for-service
  - Reduced reimbursement
- Bundled payments
- Capitation

Bundling

Issues

- What can anesthesiologists influence?
- Can you actually measure our impact?
  - Process
  - Outcome
- How will healthcare reform influence our position?
Impact of the Affordable Care Act

Value-based Purchasing
Process of care & Patient experience
Begins FY2013, full 2% annual payment update at risk by FY2017

30-Day Readmissions
Up to 8 conditions targeted including AMI, HF, PNA
1% DRG payment penalty beginning FY2013, rising to 3% by FY2015

Hospital-Acquired Conditions
Up to 8 conditions targeted
1% DRG payment penalty for hospitals in worst quartile beginning FY2015

What can we influence

PREOPERATIVE INTRAOPERATIVE ICU WARD POST-D/C

CHRONIC PAIN END-OF-LIFE

HCAHPS Patient Experience Domains

• Summary Measures
  – Communication with nurses (3 items)
  – Communication with doctors (3 items)
  – Responsiveness of hospital staff (2 items)
  – Pain management (2 items)
  – Communication about medicines (2 items)
  – Discharge information (2 items)
• Individual Measures
  – Cleanliness of hospital environment
  – Quietness of hospital environment
• Global Measures
  – Overall rating of hospital

PREOPERATIVE INTRAOPERATIVE ICU WARD POST-D/C

• Diagnostic testing
  – Identify those at risk and intervene
  – Reduce unnecessary testing– SURGICAL HOME
• Ensure proper medication
  – Continuation of beta-blockers
  – Continuation of aspirin
PREOPERATIVE  INTRAOPERATIVE  ICU  WARD  POST-D/C

- Is it just about mortality/morbidity directly related to anesthesia?
  - What can we take ownership of?
  - What can we influence?

Quality Defects Occur at Alarming Rates

Components of Perioperative Risk

Implications of Complications on Mortality
Failure to rescue

- % of anesthesiologists who are board certified
  - Death 0.76 (0.6, 0.98)
  - Adverse outcome 0.9 (1.1)
  - FTR 0.63 (0.5, 0.9)

Do we make a difference: Anesthesiologist #7

Mortality and Hospital Volume

Birkmeyer et al. Surgery 1999

Guidelines for patients undergoing surgery as part of an Enhanced Recovery Programme (ERP)

- Future challenges
  - Is better outcome achievable for patients undergoing surgery as part of ERP?
  - Is there a realisation in healthcare system?
  - Is it spread?

The engagement of virtual decision makers in the provision of these guidelines is key.
Evidence for Measure Focus

- Hierarchical preference for
  - Outcomes linked to evidence-based processes/structures
  - Outcomes of substantial importance with plausible process/structure relationships
  - Intermediate outcomes
    - Processes/structures

SCIP-1 and Outcome
1,638,756 cases from > 3,500 hospitals analyzed.

<table>
<thead>
<tr>
<th></th>
<th>Odds Ratio</th>
<th>C.I.</th>
</tr>
</thead>
<tbody>
<tr>
<td>30-d mortality</td>
<td>0.56</td>
<td>0.61-0.67</td>
</tr>
<tr>
<td>30-d readmission</td>
<td>0.88</td>
<td>0.93-0.98</td>
</tr>
<tr>
<td>30-d SSI</td>
<td>0.83</td>
<td>0.89-0.95</td>
</tr>
</tbody>
</table>

Adjusted OR for passing measure in eligible patients

Reduction in surgical complications

- Improve outcome
  - Continuity in morbidity mortality
- Reduce costs
  - Decreased healthcare utilization
  - Costs of complications

Why should we care?
Premier Dataset (45,969 patients)
**Patient Group**: All | No complications | Major complications
---|---|---
**Total Costs**
Mean | $18,392 | $17,178 | $37,285
Median | $17,002 | $16,910 | $37,285

**Contribution Margin**
Mean | $(2,182) | $(1,476) | $(1,434)
Median | $(1,592) | $(1,360) | $(1,434)

**Patient Group**: All | No complications | Major complications
---|---|---
**Total Costs**
Mean | $38,005 | $20,070 | $43,983
Median | $31,270 | $20,419 | $36,751

**Contribution Margin**
Mean | $5,945 | $21,478 | $678
Median | $14,028 | $21,590 | $8467

---

**DRG 331: Major small & large bowel procedures w/o CC/MCC**

**DRG 329: Major small & large bowel procedures w/ MCC**

---

**Endoscopy Anesthesia**

- **Value**
  - Patients with significant comorbidities = patient safety
  - Healthy patients = ?

- **So, what could be the value?**
  - If screening colonoscopy is cost-effective for cancer detection and treatment = increased compliance with screening with anesthesia will be cost-effective

---

**What if anesthesia services for endoscopy does not add value for society?**

- **Endoscopy increases efficiency to endoscopists**
  - Endoscopists make more money from more procedures

- **Endoscopy adds value for individual patient to avoid discomfort?**
  - Eg. anesthesia for dental procedures

---

**PREOPERATIVE INTRAOPERATIVE ICU WARD POST-D/C**

- Pain management
- Intensivists
- Code/rapid response teams
Bundling

- Cardiac surgery is among the most advanced in this area, but others coming
  - Preoperative care
  - Intraoperative care
  - Postoperative care

Why do we need to define value?

- Bundled care-
  - How do we divvy up the pie?
    - Traditional FFS
    - Fixed payment
    - Lower fixed payment and share in any profit margin
      - Should the anesthesiologist be allowed to share in potential reward?
      - Does the anesthesiologist want to assume any risk?

We are in this together!

"You cannot solve a problem from the same consciousness that created it. You must learn to see the world anew."
Summary

- Patients and payers are willing to pay for better health but want to see value for their money
- Anesthesiologists need to rethink how they demonstrate value
  - Directly impact
  - Influence as part of the team
  - Influence of our research
- We need to continuously assess our actions
- We should be the innovators!