Impact of Regional Anesthesia on Quality, Cost and Patient Satisfaction: *Minor Changes, Immediate Impact*

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With the advent of the new healthcare reform initiatives, what sort of impact is anesthesia likely to have in the areas of quality, cost and satisfaction?
Anesthesia Compliance Timeline

Pay For Performance (P4P)

Anesthesia Performance

2003: CMS RHQDAPU (MMA Act)

Sept. ‘04: JC & CMS Clinical Reporting Measures Unite (NHQM)

2007: CMS Physician Quality Reporting Initiative (PQRI) introduced; 2 Anesthesia measures

2010: CMS Conditions of Participation; Anesthesia I.G. (January and May) has numerous new requirements

Pay For Outcomes

Anesthesia Outcomes tied to Hospital $$$

2010: CMS IPPS (formerly RHQDAPU) includes new Anesthesia measures tied to hospital $$$

2011: CMS Value-Based Purchasing Program (PACA)

July ‘11: CMS ACO Proposal Released (PACA)

July ‘04: Joint Commission “SIP” Core Measure Program

July ‘06: JC “SCIP” core measures introduced

Mar. ‘11: CMS ACO Proposal Released (PACA)
## Anesthesia Compliance: What We Know

- CMS CoP (Anesthesia I.G.) enforced through Joint Commission and State DoH surveys
- CMS Goal: Prevent preventable complications (infections, etc.) resulting in increasing costs
- CMS 5 year (2010-2015) projected H.A.C. savings = $100 million

<table>
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<tr>
<th>Measure</th>
<th>Joint Commission</th>
<th>CMS PQR(I)S</th>
<th>CMS AHRQ (IPPS Hosp. Update)</th>
<th>* CMS FY13 VBP</th>
<th>CMS FY14 VBP</th>
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<td>SCIP Inf-4</td>
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<td>2008</td>
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<td>Prevent Central Line BSI</td>
<td>NPSG 07.04.01</td>
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<td>2010 (PSI # 7)</td>
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<td>HCAHPS (Patient Satisfaction)</td>
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<td>x</td>
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**Source:** 2010 Patient Affordable Care Act

Publicly Reported on HospitalCompare
Anesthesia Compliance: What We Do Not Know

Anesthesia Impact on ACOs

- Staffing
- Services
- Supplies

- PQRI/VBP
- “Quantified” quality
- Additional measures

Anesthesia Keys to Success:

- Accountability
- Solution partners
- Transparency
- More than quality basics
- Market sensitive costs
How can a medical device supplier help support healthcare quality, cost containment, and satisfaction?
Safe, Effective, Better Use of Resources

- Clinical Value
- Business Value

- Value and Partnership
- Skills Training Workshops
- Products and Supply Chain Services
Is Regional Anesthesia (RA) Safer Than What I am Doing Today?

Hospital Acquired Conditions (HAC):

- Deep Vein Thrombosis
  - R.A.
  - Opioid

- Surgical Site Infection
  - R.A.
  - Opioid

- Catheter-Related UTI
  - R.A.
  - Opioid
Is Regional Anesthesia (RA) More Effective Than What I am Doing Today?

**Preventable Side Effects**
- Pain
- PONV
- Sleepiness
- Itching
- Sore Throat

**Labor & Supplies**
- Less Forced OT
- Nurse Interventions
- Over-utilized Time
- Medications / Rescue Drugs

**Length of Stay (LoS)**
- Increased Throughput
- PACU Bypass
- Time to Discharge
Safe, Effective, Better Use of Resources
Process Efficiency = Lower Costs

- 52% said Regional Anesthesia lowered per-case medication cost
- 74% reported lower PONV
- 82% experienced reduced PACU stays
- 39 minute mean time reduction in PACU
- 58% of respondents experienced shorter total LOS

“Nerve blocks reduce the cost of each case”

In a time of unprecedented quality and cost scrutiny, why is it so critically important for anesthesia providers to search for supplier partners that offer the highest value?
Anesthesia Operational Costs of Care

Anesthesia Cost Drivers:

1) **Anesthetic Gases** (Volatile Agents):
   - Cost Variation: Isoflurane @ $10/bottle v. Sevoflurane @ $180/bottle
   - Impacted by 1) Contract, 2) Types/Duration of Cases, 3) Provider Use
   - Typically represents >30% of total Anesthesia operational costs

2) **Anesthetic Drugs**:
   - Impacted by 1) Formulary, 2) Provider Preference, 3) Case Type/Duration
   - Typically represents 20% of total Anesthesia operational costs

3) **Anesthesia Supplies**:
   - Cost Variations: Disposable v. Reusable, ie: Laryngoscope Blades, Pulse-Ox Probes, BP cuffs; Breathing Circuits; Spinal/Epidural Trays
   - Impacted by 1) Contract, 2) Effectiveness, 3) Provider Preference
   - Typically represents 20% of Anesthesia operational costs
Anesthesia Provider’s Impact on Costs

• **Supply Knowledge, Availability and Preference**
  – Product options, effectiveness and costs to achieve best outcomes
  – Anesthesia participation in supply analysis committee
  – Data and feedback: can only improve what you can measure

• **Provider Competency Training**
  – Airway management and regional anesthesia
  – Supplier partnerships: education, training and support

• **Provider Competency Assessment**
  – Clinician evaluations (FPPE/OPPE)
    • Minimum bi-annual evaluation to assess skills and competencies
    • Used for re-credentialing/privileging
  – Joint Commission requirement
Anesthesia Competency Evaluation Compliance
Joint Commission Focused/Ongoing Professional Practice Evaluations (FPPE/OPPE)

Caveat: Even this rate an aggressive estimate; well over half of hospitals probably still working on OPPE response.

Source: Advisory Board Company; The Accountability Moment, 2010
Anesthesia Costs Tied to Quality

“CMS Guiding Principle of Reform” applies to anesthesia

Substandard Care + Poor Outcomes = Increased Costs

Examples:
- Infected Labor Epidural leads to unnecessary increased LoS and increased costs
- Poor Intra-Op fluid management leads to hypovolemia and unnecessary ICU stay
- Over-sedated patient requires additional services and time to reverse effects

Anesthesia choices, performance, and outcomes will directly impact operational costs

Quantified Quality ÷ Costs = Value
Anesthesia Quality Tied to Costs

Anesthesia Occurrence Tool

- Occurrence tools monitor daily outcomes
- Aligned with ASA Quality Institute measures
- Beyond compliance (SCIP)
- “Quantified” quality = quantified costs
- Profile group and clinician outcomes
- No existing published clinical benchmarks
Can you give examples of how medical device suppliers can help customers implement an RA Program and train clinicians?
Safe, Effective, Better Use of Your Resources

- Customized skill workshops
- Clinical/Didactic education
- Surgical assistance
- Logistics and flow consultation
What is So Important About Pain or PONV?

#1 cause of extended PACU stays?

Pain, 45%

#2 cause of extended PACU stays?

PONV, 35%
Are Hidden Costs Hurting You?

ACL Reconstruction: CPT29888.TC
Operating Margin: 4%

Cases/Year: 800
PACU RN $/hr: $35.00
The Results

**Case Cost**

**Cost of PONV:**
- 89% profit erosion
- $229 / case

**Annual Cost**
- $57,708 per year

**Cost of Pain:**
- 54% profit erosion
- $140/ case

**Annual Cost**
- $45,360 per year
In this era of health reform, why now has anesthesia been more closely tied to the reportable measures for hospitals and ASCs, and tied to the bottom line?
Anesthesia’s Impact and Value

- Does any other medical specialty touch/affect more care areas in the hospital or ASC?

- CMS realization: Anesthesia can and does impact care in all of those clinical areas (OR, ICU, etc.) often associated with preventable complications, H.A.C’s, infections, etc.-contributing to increased services, LoS and costs

- Anesthesia supplier partnerships are critical in providing high quality, effective supplies at the lowest possible costs that impact anesthesia, surgeon and patient satisfaction.
Anesthesia Patient Satisfaction Impact

- October 2006: CMS implements Hospital Consumer Assessment of HealthCare Providers and Systems (HCAHPS); a nationwide standard inpatient satisfaction reporting tool and system.

- July 2007: Hospitals participating in the IPPS required to submit HCAHPS results as part of annual update requirements.

- March 2008: HCAHPS results are publicly reported on the Department of Health and Human Services HospitalCompare.

- 2010: HCAHPS results will be used to calculate CMS Value Based Performance payments beginning in 2013.

- 2011 HCAHPS survey contains 21 questions; 1 related to Anesthesia (Pain Control).

- 2011/12: HCAHPS piloting a new surgical-focused survey containing over 40 surgery-related questions with 8 (20%) anesthesia-related questions.
Surgeon Satisfaction Impact

• Surgical Case Throughput: Blocks before OR; Pre-Op Block Area
  • Most effective using MD/CRNA care team mode
  • Patient ready for procedure at surgical start time

• Post-Op Pain control can expedite discharge and recovery; reduce LoS

• Obstetrical Pain Management (Labor Epidurals)
  • Availability/Access to pain control services
  • Does not hinder/affect labor process
  • Improved Patient and Staff Satisfaction
  • Anesthesia Responsiveness; dedicated coverage?
  • Augment with Patient Controlled Epidural Anesthesia (PCEA)
How do regional anesthesia services specifically target both clinical outcomes and patient satisfaction to result in growing a stronger reputation within the community?
Turn Fear into Loyalty

• How much will it hurt?
• Will Anesthesia make me sick?
• How long will I have to stay?
• Who will take care of my kids?
• When can I go back to work?
Factors that Lead to Patient Referrals

- Felt ready for discharge
- Physician concern for questions
- Nurses courteous/respectful
- Skill of physicians
- How well pain was controlled
- Staff worked together for care

Patient Likelihood to Repeat/Refer

- 64%
- 67%
- 69%
- 70%
- 79%
Optimal Patient Outcomes

- Low risk with high rewards
- Safe, effective, and better use of resources
- Shorter length of stay (LoS)
- Increase patient census
- Safe therapy delivery at home
Improved Outcomes

Community

Patient

Facility

Physician
How does an “accountable anesthesia organization” develop a robust quality assurance program that focuses on clinical performance, outcomes and satisfaction that are all clearly tied to the hospital and ASC’s bottom line?
Accountable Anesthesia Organization (AAO)™

- A transparent, collaborative, partner in the delivery of high-quality, cost-effective anesthesia care.
- Focused on the two quantifiable ACO pillars: quality and cost.

Old “Silo” Model
- Episodic
- Anecdotal
- Independent

New “Connected” Model
- Integrated
- Quantifiable
- Interdependent
Accountable Anesthesia Organization (AAO)™

**ACO**
- LEADERSHIP-MANAGEMENT STRUCTURE
- CLINICAL-ADMINISTRATIVE MANAGEMENT SYSTEMS
- EVIDENCE-BASED MEDICINE PROCESS
- QUALITY AND COST REPORTING
- COORDINATION OF CARE
- PATIENT-CENTRIC

**Non-AAO**
- Lack of participation in leadership roles
- Separate goals
- IT infrastructure challenges
- Compliance issues
- Lack of benchmarked results
- Recording and tracking deficiencies
- Lack of transparency
- Perform services and leave
- Scheduling conflicts
- Lack of documentation or outcome tracking
- Few patient surveys

**AAO™**
- On-site clinical and non-clinical leadership
- Align goals to facility’s
- Existing IT infrastructure
- Documented policies and procedures
- Set benchmarks
- Set protocols and procedures
- Data capturing process
- Centralized scheduling
- Accountability roles
- Patient surveys
- Outcome tracking
- Audit procedures

*Source: “The Role of Accountable Care Organizations”, Somnia Anesthesia Resources, 2011*
Thank You

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