Anesthesia Technology in the Age of Healthcare Reform

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Three Numbers – 30% 18% 25

- **30%**
  - Average tax burden per person in the US
  - Expected to grow to 60% in 10-15 years given current rate of growth of healthcare costs

- **18%**
  - Percent of GNP spent on healthcare
  - 50% more than similar developed countries

- **25**
  - Typical healthcare ranking on quality indices

Shea GP. Wharton School – University of Pennsylvania.
Its about the Money

- Fee for service model
  - Capacity drives utilization
  - Volume drives income
  - No incentive to limit utilization

- Payment Models
  - Value Based Payments
  - Risk Sharing Payments
ACA & Medicare Payment Models

- Medicare Hospital Value Based Purchasing
  - Withhold percentage of payment (1% in 2012) (increases each year)
  - Return for documentation of best practices
- Bundled Payments Initiative
  - Episode based payment
- Home Based Primary Care for High Risk Patients
  - Savings shared for reducing hosp/readmissions
- No payment for preventable complications
  - eg. Wound infections, hospital acquired infections

Ref: Kaiser Foundation. Pub #8061. www.kff.org
VALUE = OUTCOME ÷ COST

- Managing costs is not enough
  - Reduce cost without knowing impact on outcome will not improve value
  - Total cost of care is typically not known

- Outcomes must be measured
  - Condition specific
  - Multi-dimensional
  - Longitudinal outcomes not measured

- Comparative Effectiveness Research (PCORI)

Porter ME. NEJM 2010;363:2477.
Implications for Anesthesia Practice

- Change from Fee for Service Model
  - Hospital & surgeon partnership - payment and outcome
  - Negotiation for resources

- Consolidation of practices
  - Large public companies – NAPA, Sheridan, Somnia
  - Improved negotiating skills and position
  - Ability to measure performance

- Expansion of services – Periop Medicine
  - No longer paid just for OR activities
  - Opportunity to bring value but payment ? & need to demonstrate improved outcome
Implications for Device Companies

- IT is an enabling/critical technology for meaningful healthcare reform
  - Significant resources devoted to IT by institutions
  - Must collaborate with IT vendors
  - Anesthesia groups do not have IT infrastructure
    » IT management
    » Reporting and data analysis
Opportunities & Challenges

- **Durable products**
  - Control costs to maintain margins
  - Document “Added Value” to justify cost

- **Value oriented product lines**
  - Postoperative Monitoring
  - IT Reporting
    - Individual Productivity
    - OR Utilization and Efficiency
Opportunities

- Infection control
  - Hospital acquired infection
  - Cross contamination between patients

- Safe drug administration
  - Drug errors still a large percentage of preventable errors

- PATIENT FLOW MANAGEMENT

- Information technology
  - Interfaces
  - Reporting

- Workspace improvements
  - OR table design
  - Device integration
Examples

- Anesthesia Delivery Systems
  - Vapor delivery & conservation
  - IT communication
    » Large HIS eg. EPIC

- Anesthesia carts:
  - Access control/security
  - Inventory and drug control
  - Infection control
Examples

- Monitoring Technology
  - IT integration – large HIS
  - “Cableless” monitoring in the OR
  - Postoperative monitoring

- Workspace integration
  - Video access: airway management, ultrasound
  - Support airway devices
  - Infusion technology
  - OR Table Design

- Value Oriented
  - Infection control
  - Safe Drug Administration

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References

- Porter, ME. What is Value in Healthcare? NEJM 2010:363(26);2477.
- Kaiser Family Foundation, Summary of New Health Reform Law in Focus on Health Reform, 2011. (Pub #8061 www.kff.org)