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

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

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)

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

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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

References

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