Driving Reporting and Quality Improvement

Session Takeaways
Dashboards for your providers across multiple quality domains
Review an early warning system for key medical conditions
Learn about iCare, an emergency decision support system
Integrate your EMR with hospital and national QI systems

Dashboards: The Case for Data
Physicians want to do the right thing
But don’t know where they are relative to others
Need data – usually work alone in a vacuum
Can’t see how others are succeeding or where we are
Peer Pressure - highly motivational
May be the most effective change factor, no one wants to be at the bottom of the scale
Learn from those doing it better
Still have a lot to learn – this is real time improvement
Identify those who need more help
Those at the lower end can be identified and coached

Dashboards: Requirements for Success
Accurate
Physicians will search for inaccuracy and perceived excuses
Real Time
Need to be able to see the effect of interventions
Reliable
Metric cannot change over time, upgrades cannot reset system
Available
Must be easy to find and use – self serve analytics

Dashboards: What to consider tracking
ASA Score Summaries
Anesthesia Start to Ready Times (by Service)
Airway placement, Line placement, Block placement
PACU recovery times, pain scores, opioid administration
OPPE Metrics
Emergence Agitation
Nausea / Vomiting
Efficiency Metrics
Block Utilization
Room Utilization
Case Volume
Cancellations
Room Turnover
Percent of First Case Late Starts
**Dashboards: ASA Status**
ASA score summaries
Distribution of medical complexity
Start to Ready Times by Service Efficiency

**Dashboards: Airway and Line Placement**
Allows tracking of procedures and competency
Shows distribution of techniques
Focus on areas with lower numbers

**Dashboards: Airway and Line Placement**
Airways

**Dashboards: OPPE Metrics**
May be influenced by anesthetic plan

**Dashboards: PACU**

**Dashboards: Nausea and Vomiting**
Results in severe patient dissatisfaction
May be influenced by anesthetic plan
Dashboards: *Emergence Delirium*

Child wakes inconsolable and disassociated from the environment

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Dashboards: *OR Metrics*

- Scorecard
  - Every 6 months
  - Self-serve analytics available anytime
- Two standard deviations below mean
- Outlier management
- Cases reviewed with clinical management team
- Suggestions offered for improvement

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Dashboards: *Considerations*

Data integrity
  - Where do the metrics come from?
  - Who is entering the data
- Inter-rater reliability
- Case distribution
  - Specialty teams
- Variability
  - Appropriate timeframes for analysis

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Dashboards: *Change Management*

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Early Warning System

Identify conditions in which we can intervene
Display a warning
Advise the clinician how to prevent it

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Early Warning System: *STBUR*

Case study: Predicting perioperative respiratory adverse events
STBUR (Snoring, Trouble Breathing, Un-Refreshed Sleep)
Anesthesiologist charted pre-op section
Early Warning System: *Braden Q*

Case study: Braden Q – Risk of pressure ulcer

Nurse entered assessment in the admission encounter

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Early Warning System: *Display*

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Early Warning System: *Reports*

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iCare

Emergency Decision Support in AIMS system

Common anesthesia emergencies
 Calculates drug doses automatically
 Real time guidance
 Same report format can be used for protocols

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iCare: *Integration with intraop*

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iCare: *Example Report*
Event Reporting

Event and Outcome capture
Review cases in M&M process
Drive system based improvement

Two ways to integrate
Hospital Systems
Anesthesia Quality Institute

Can’t fix what we don’t know about

Event Reporting: AQI

Anesthesia Incident Reporting System (AIRS)

AQI - Anesthesia Incident Reporting System (AIRS)

Preventing Harm: Anesthesia Sign-In

Anesthesia Protocols

• Use your AIMS system to standardize provider performance
  • Pre-op: Review and acknowledge protocol
  • Intra-op: Use scripting (Macros, Reminders) as cognitive aids
  • Post-op: Make the performance data available
    • Self Serve Analytics

• Change Management
  • Opt-In model vs Department / Service line requirement
  • Assigned person accountable for cases
  • Review data with providers