New Directions In OR Nursing

Stephanie A. Randa, RN, BSN, MHA
Objectives

• Examine Various Directions the Operating Room is Heading
• Examine Technology Advances that May Have Benefits to Safe Patient Care
• Provide a Roadmap to Advances In the Operating Room Setting
Minimally Invasive Surgery (MIS)

• HD Video + Fixed Imagining = Integration

• Routing Videos, audio, or data (fluoroscopy)
Current Robotics Technology

• Da Vinci Robotic Assisted Surgery
  • 500,000 robot-assisted procedures
  • Trans-oral Robotic

• Single site instrumentation
Robotics Technology On The Horizon

• Titan Medical’s Amadeus Composer

• Instrumentation Improvements
Hybrid Operating Rooms

• What is it?
  • OR with ceiling mounted C-arm
  • Angiography and Cauterization
• Price: $2 Million Dollars
• What Problem Does It Solve?
  • Easy transition between surgical and catheter based procedure
Hybrid Operating Room Plus

• Adding an MRI system to an OR
  • Neurosurgery
  • Trauma
• Pitfalls
  • Weight-bearing capacity
  • Shielding in the floor, ceiling, and walls
Hybrid Operating Rooms

• Reimbursement:
  • No incremental reimbursement
• Not a Solution to Capacity Constraints
  • Medium and Long Term Opportunity to Grow Volumes
• Attract Innovative Physicians
• Promotion of Cutting Edge Care
• Preparing for Future from Surgical to Endovascular Treatments
Operating Rooms of the Future

• Combining advanced imaging systems in one suite
  • MRI Capability
  • PET/CT Machine
  • X-ray Fluoroscopy
  • Ultrasound system
Operating Rooms of the Future

• OR’s on Steroids
  • Craniotomy for Brain Tumors
  • Prostatic surgery
  • Soft Tissue Biopsies
  • Cervical Cancer Therapies
• Suite Size: 5,700 square feet
• Cost: $15 million dollars
Please select your role to navigate through the room from different perspectives.
Mobile and Wireless Technology

• Pre-operative assessments at bedside or remotely
• Accessing the OR schedule via your phone’s calendar
• Confirming the surgeon’s presence at the hospital by electronic texting or confirmation
Barcoding In The Perioperative Setting

- Inventory Management
- Patient Registration and Discharge
- Medication Management
- Radiology Tracking
- Laboratory Samples & Results Tracking
Advantages of Bar Coding

• Accuracy
• Ease of Use
• Timely Feedback
• Improved Productivity
ECRI’s Top 10 Health Technology Hazards

1. Alarm Hazards
2. Infusion Pump Medication Errors
3. Exposures & Radiation Burns
4. Patient/Data Mismatches in EHR’s
5. Interoperability failures with medical devices and health IT Systems
ECRI’s Top 10 Health Technology Hazards

6. Air embolism hazards
7. Use of Adult Technology With Pediatric Patients
8. Inadequate reprocessing of endoscopic devices and surgical instruments
9. Caregiver distractions from smartphones and other mobile devices
10. Surgical fires
Road Map for Hospitals

1. Alignment Between Hospitals, Doctors and other stakeholders
2. Use of Evidence Based Practices to Improve Quality and Safety
3. Improve Efficiency Using Productivity and Financial Management
4. Develop Integrated Information Systems
Out of the Box Thinking
• Destination Surgery
  • Employers are looking for value
  • Quality rating for hospitals
  • CareChex is a quality rating system
Examples of Destination Hospitals

• Your hospital does not need national reputation to shine.
• Cardiac surgery: TriStar Centennial Hospital in Nashville, TN
• Joint Replacement: Special Surgery in NY City
• Spine Hospital in Baltimore Maryland
Advice for OR Directors

• Understand how your surgery department is being assessed
• See how your hospital ranks in CareChex & The Leapfrog Group
  • [www.thedeltagroup.com](http://www.thedeltagroup.com)
  • [www.leapfroghospitalsurvey.org](http://www.leapfroghospitalsurvey.org)
• Take advantage of these data bases and work to improve your performance
Conclusions

• Operating Rooms “Ever Changing, Never Stagnant”