



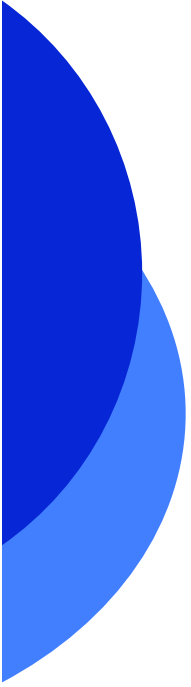
OR Safety: Impact of the LiveData OR-Dashboard

**Managing Today's OR Suite
October 2008**

**Bethany Daily
Massachusetts General Hospital**



What makes us vulnerable?

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- A decorative graphic on the left side of the slide, consisting of two overlapping curved shapes in shades of blue.
- **Constant shifts in case schedule**
 - **Growing numbers of staff**
 - **Frequent influx of new faces**
 - **Competing priorities for the surgeons**
 - **Sedated/sleeping patient**
 - **More, more, more**

Lesson Borrowed

○ Crew Resource Management (CRM)

- CRM originated in 1979 to address the impact of human errors on the safety of commercial aviation flights. The National Transportation Safety Board defines CRM as

“using all available sources – information, equipment, and people – to achieve safe and efficient flight operations.”

○ CRM involves team training, safety tools, measurement systems, and simulation to:

- Manage fatigue
- Improve teamwork
- Proactively address potential problems
- Use cross-checking tools to catch mistakes before they become serious and avoid mishaps
- Utilize effective communication skills to ensure better decisions and provide feedback for continuous quality improvement



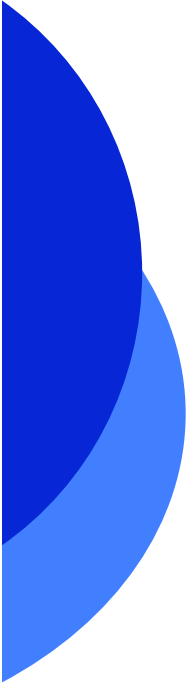
Using All Available Sources

- **Fundamental principle of LiveData OR-Dashboard**

CONSOLIDATE DATA

- **Data is helpful to most/all role groups**
- **Visible**
- **Visually appealing**
- **Timely**

Surgical Site Time-Out

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- A decorative graphic on the left side of the slide, consisting of two overlapping curved shapes in shades of blue.
- **Last step in our Universal Protocol is the Surgical Site Time-Out**
 - Pre-procedure verification
 - Site marking
 - Pre-incision surgical site time-out
 - **Our Time-Out has become a “rolling stop”**
 - Near-misses can turn into real-misses
 - Role groups still doing other tasks
 - Surgeons haven't been the ones to initiate

How can an OR-Dashboard help?



Patient ■ Smith, Jane **F 62Y** **MRN: 0000000** **Gen Anesthesia** **OR 3** **Temp 75 F / 24 C**

Workflow – Time Out: Getting Ready for the Case

Gluten Nafcillin
Mayavel Penicillins

Staff	Case Setup	Time Out	Intraop
Nursing Scrub: Pat Boone St Circ: Ana Fe Guinanao Anesthesia Ortiz, Vilma Enid Crimi, Ettore Surgery Prim: Demoya, Marc A. Prim: Fagan, Shawn Patrick Surg: Nehra, Deepika Visitors None	300 HR 0 100 SpO2 75 200 BP 0	64 65 100 116 69	Time Out Checklist <ol style="list-style-type: none"> Re-verified correct info with 2 or more relevant records: <ul style="list-style-type: none"> Procedural / surgical consent History and physical / progress notes Procedural / operative site schedule Images available, if needed for procedure Correct patient identified using two patient identifiers Agreement of Correct Procedure Correct Site Side <ul style="list-style-type: none"> Left Right Bilateral Procedure / Operative site marked and visible after draping Correct patient position Availability of correct implants and any special equipment or special requirements

0000000 0000000 ...en, Do... 0000000 ...ke, Ju... 0000000 ...th, Ja...

0000000 ...oy, Ka... 0000000 ...en, Do... Right Breast Lumpecto... 0000000 ...ke, Ju... Left Mastectomy, Modified Radical 0000000 ...th, Ja... Left Breast Lumpecto...

07:00 09:00 11:00 13:00 15:32 ▲ 17:00 19:00

How can an OR-Dashboard help?

- **Visibility – nursing documentation becomes room documentation**
- **Very apparent when Time-Out not performed**
- **Time-Out required to proceed**



How can an OR-Dashboard help?



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Alternate view of a Time-Out Screen



LiveData Jan. 11, 2006 OR #22 68.7 F / 20.4 C

Patient: **Claus , Santa V.** M 78y 84 kg / 185lbs MRN: 21356754

Isolation Status: **Strict**
 Isotope: **PD-103**
 IRB Protocol: **97-134 >>>**

Case Description: **Radical resection**

Staff

Nursing Information
 Circ: Almira Warner #5679
 Scrub: Magnus Kline
 Circ: Lance Gadow

Anesthesia Information
 Atten: Nelson Goldvogel #2279
 CRNA: Kelvin Friedline #8335

Surgeon Information
Orthopedics
 Surg: Norman Aggery #4567
 Fellow: Joey Keppinger #5864
 Assist: Mayra Elless #8651

Support Staff
 Sophie Fair #9872
 Anthony Light #5497

Critical Information

Special Needs: ICU, bari-bed

Allergy: Latex
 Ampicillin Neomycin
 Aspirin Lorazepam
 Cortisone >>>

Nursing Notes: Positioned in Lateral by ortho team as per standard

Case Setup Briefing Intraoperative Closing Debriefing Pathology

Timeout

- First name
- Last name
- MRN
- Procedure performed
- Position
- Correct side/site
- Availability of correct implant/equipment

Surgeon verification

- Diagnosis
- Brief history
- Complexity (EBL)
- Time estimate
- Position
- Special equip./needs
- Pathology / Research
- Radiology requested

Anesthesia verification

- Anesthesia type
- Blood bank req.
- Antibiotic schedule
- Pain management

Procedure

- Radical Resection - - - - - Right
- Neuroplasty - - - - - Right
- Brachytherapy - - - - - N/A
- Ureteroneocyst. - - - - - Right
- Replace. of ureter - - - - - Right
- Cysto w insertion - - - - - Bilateral

Circulating Nurse

- Allergies
- Medication for field
- Implant verified

Scrub Person

- Instruments available
- Instruments working
- Suture requirements

Introduce new team members

Progress Log

Further questions/ideas



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