Bridging the Gap: Establishing a Working Relationship with Anesthesiology

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No financial disclosures
Objectives

- At the completion of this presentation, participants should be able to utilize some of the following ideas to develop and strengthen a partnership with anesthesiology:
  - Standardized observation tool with real time feedback
  - Novel techniques for education programs
  - Methods to clearly communicate best practices
Items for Discussion

- Best practices for devices used in the OR
- OR Observations
- Education methods
- Pictorials
- Contact Isolation – in OR and during transport
Background

• Barnes Jewish Hospital
  – 1250 bed tertiary care hospital associated with Washington University School of Medicine
  – St. Louis, Missouri

• Peri-operative services
  – 5 suites of operating rooms, 1 ambulatory surgery center (66 total operating rooms)
  – 40,000 inpatient and outpatient procedures in 2013
Background

• Clinical Anesthesiology Services
  – 90 Faculty, 10 Fellows, 70 1st-3rd year Residents
  – 60 CRNAs
  – 50 Anesthesiology Technicians

• Hospital Epidemiology and Infection Prevention
  – 9 Infection Preventionists (6 cover most of the OR)
  – Surgical site infection (SSI) surveillance for 11 operative procedures
This is the story of a journey...

• CLABSI prevention:
  – Work to standardize best practices for central line insertion in patient care areas (ICUs, ED, floors)
  – Partners in these areas encouraged similar work with the OR

• SSI prevention:
  – OR observations included nursing staff, surgeons, anesthesiology and environmental services
First Meetings: Building Relationships

• General tips for building relationships
  – Be prepared
  – Allow them to make decisions
  – Act as a consultant, not the police
  – Pay attention to the details!
  – It takes time
Best Practices for Insertion of Central Lines

• Standard practices for patient care areas
  – Plain packaged central lines
  – Custom insertion kit, including checklist
  – CL insertion or procedure cart

• Training
  – Online electronic modules
  – Hands-on course for new MDs
Alterations for Anesthesiology

• Kits
  – Removed duplicative supplies
  – Provided basis for supplies that were questioned

• Carts
  – Not needed, handled with existing supply carts
Inclusion in Standard Training

• Around 15 new anesthesiology house staff per year
  – Hands on demonstrations
  – On-line modules
Operating Room Observations

• Includes 2 main sections
  – Surgical attire – based solely on perioperative services’ surgical attire policy (AORN guidance)
  – IP Technique
    • General IP Principles
    • Site Prep
    • Anesthesiology
    • Environment
Operating Room Observations

• Full observations
  – All questions answered
  – Takes around 1-2 hours to complete
  – Done twice a month for each OR suite

• Partial observations
  – Surgical attire and environment only
  – Takes about 10 minutes to complete
  – Done 4 times a month per suite
Still Building the Relationship

• Allow them to make decisions
• Act as a consultant, not the police
• Deliver on your promises in a timely fashion
Anesthesiology Components of OR Observations

- Central lines placed with sterile technique, sterile dressing applied after
- Needleless connectors prepped with alcohol prior to injecting
- Stopcocks capped between use
- Alcohol hand sanitizer available for use in their area
- Gloves worn to start IV, intubate and measure urine; hand hygiene performed after these tasks
Components with Caveats or that were Removed

• Caveats:
  – Needleless connectors: only need to be prepped with alcohol if a syringe or cap was not in place prior to the injection

• Removed:
  – Drape between anesthesia and patient above level of anesthesiologist’s nose and mouth
  – Do the anesthesia personnel lean over drape during a procedure
Methods of Observing

• IP wants to build a collegial relationship with the OR staff and not be viewed as “police"
• Deficiencies found during the observations should be used to educate all members of the suite and not result in any punitive action
• In response to management feedback, OR observations include a room number and time of observation
Methods of Observing

• Observation tool shared with staff so they are aware of what is being observed; feedback they offer is appreciated

• IP introduces themselves as they enter the OR
  – Remind staff that these are routine observations
  – Ask staff if they have any additional concerns to share

• Ensure you remember to follow-up on those concerns!
Feedback of Observations

• Individual observation feedback (sent within 2 days of the observation)
• Monthly roll-up summary of all observations is sent to peri-operative administration
  – All anesthesia questions are a roll-up number in this report
• Monthly anesthesia specific roll-up
  – Shared with all staff in a monthly anesthesiology e-newsletter
**OR Observation Report**

### Surgical Attire

<table>
<thead>
<tr>
<th></th>
<th>#</th>
<th>%</th>
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<th>%</th>
<th>#</th>
<th>%</th>
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<th>%</th>
<th>#</th>
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</tr>
</thead>
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<td><strong>Nursing</strong></td>
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<td>4</td>
<td>100%</td>
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<td>100%</td>
<td>4</td>
<td>100%</td>
<td>4</td>
<td>100%</td>
</tr>
<tr>
<td><strong>Surgeon</strong></td>
<td>2</td>
<td>100%</td>
<td>2</td>
<td>100%</td>
<td>2</td>
<td>100%</td>
<td>2</td>
<td>100%</td>
<td>2</td>
<td>100%</td>
</tr>
<tr>
<td><strong>Anesthesiology</strong></td>
<td>2</td>
<td>100%</td>
<td>2</td>
<td>100%</td>
<td>1</td>
<td>100%</td>
<td>2</td>
<td>100%</td>
<td>2</td>
<td>100%</td>
</tr>
<tr>
<td><strong>Anes. Tech</strong></td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Vendor</strong></td>
<td>1</td>
<td>100%</td>
<td>1</td>
<td>100%</td>
<td>1</td>
<td>100%</td>
<td>1</td>
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</table>

**Surgical Attire Comments:**

**General Infection Prevention Principles**

<table>
<thead>
<tr>
<th>Step</th>
<th>Yes/No</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1)</td>
<td>Yes</td>
<td>Did the OR door remain closed except when used for entry or exit?</td>
</tr>
<tr>
<td>2)</td>
<td>Yes</td>
<td>Were gloves changed between dirty and clean procedures?</td>
</tr>
<tr>
<td>3)</td>
<td>Yes</td>
<td>Was hand hygiene performed when gloves were removed or changed?</td>
</tr>
<tr>
<td>4)</td>
<td>Yes</td>
<td>Are non-scrubbed individuals always attentive to the sterile field?</td>
</tr>
<tr>
<td>5)</td>
<td>Yes</td>
<td>Were all items sterilized by traditional methods in CSPD?</td>
</tr>
<tr>
<td>6)</td>
<td>N/A</td>
<td>Are off staff members attentive to the sterile field while waiting for X-ray?</td>
</tr>
<tr>
<td>7)</td>
<td>Yes</td>
<td>Did members of surgical team appear to be healthy?</td>
</tr>
<tr>
<td>8)</td>
<td>Yes</td>
<td>Were instrument trays filtered checked prior to placing instruments?</td>
</tr>
<tr>
<td>9)</td>
<td>Yes</td>
<td>Were all solutions supplied in single use containers?</td>
</tr>
<tr>
<td>10)</td>
<td>Yes</td>
<td>Were all solutions used liquid or solid?</td>
</tr>
<tr>
<td>11)</td>
<td>No</td>
<td>Did the vendor use a pointer to indicate instruments on scrub table?</td>
</tr>
</tbody>
</table>

**Site Prep**

<table>
<thead>
<tr>
<th>Step</th>
<th>Yes/No</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1)</td>
<td>Yes</td>
<td>Was the operative site cleansed prior to scrub?</td>
</tr>
<tr>
<td>2)</td>
<td>N/A</td>
<td>If hair removal was performed, were clippers used?</td>
</tr>
<tr>
<td>3)</td>
<td>Yes</td>
<td>Was contamination spread minimized?</td>
</tr>
<tr>
<td>4a)</td>
<td>Yes</td>
<td>Perineal area prepped and/or covered with impermeable drapes?</td>
</tr>
<tr>
<td>4b)</td>
<td>No</td>
<td>Chloraprep used?</td>
</tr>
<tr>
<td>4c)</td>
<td>No</td>
<td>Betadine used?</td>
</tr>
<tr>
<td>4d)</td>
<td>No</td>
<td>Was prep single-use?</td>
</tr>
<tr>
<td>5)</td>
<td>Yes</td>
<td>Was site prepped according to recommendations?</td>
</tr>
<tr>
<td>6)</td>
<td>Yes</td>
<td>Was operative site allowed to air dry prior to incision?</td>
</tr>
</tbody>
</table>

**Anesthesiology**

<table>
<thead>
<tr>
<th>Step</th>
<th>Yes/No</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1)</td>
<td>Yes</td>
<td>Were hand antisepsis products available for anesthesia personnel?</td>
</tr>
<tr>
<td>2)</td>
<td>N/A</td>
<td>Were central lines placed with sterile procedures?</td>
</tr>
<tr>
<td>3)</td>
<td>N/A</td>
<td>Was a sterile dressing placed on central line after insertion?</td>
</tr>
<tr>
<td>4)</td>
<td>No</td>
<td>Were stopsocks on lines sapped between uses?</td>
</tr>
<tr>
<td>5)</td>
<td>Yes</td>
<td>Were IV lines prepped prior to injecting medications?</td>
</tr>
<tr>
<td>6)</td>
<td>Yes</td>
<td>Did personnel wear gloves to start IV, intubate &amp; measure urine?</td>
</tr>
<tr>
<td>7)</td>
<td>Yes</td>
<td>Were gloves removed and hand hygiene performed after these procedures?</td>
</tr>
</tbody>
</table>

**Environment**

<table>
<thead>
<tr>
<th>Step</th>
<th>Yes/No</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1)</td>
<td>Yes</td>
<td>Was room free of visible dust?</td>
</tr>
<tr>
<td>2)</td>
<td>No</td>
<td>Were surfaces wiped correctly with disinfectant between cases?</td>
</tr>
<tr>
<td>3)</td>
<td>No</td>
<td>Was floor mopped completely in between cases?</td>
</tr>
<tr>
<td>4)</td>
<td>No</td>
<td>Were nonessential items stored in OR rooms covered?</td>
</tr>
</tbody>
</table>

**Other**

<table>
<thead>
<tr>
<th>Step</th>
<th>2</th>
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</thead>
<tbody>
<tr>
<td>Personnel/job titles of personnel not involved in case:</td>
<td>graduate RN, vendor</td>
</tr>
<tr>
<td>No. of times any door opened in 10 minute period while sterile pack open:</td>
<td>12</td>
</tr>
<tr>
<td>Reasons for door openings: pl in, bed out, MD out, MD in/out, Anes in, RN in, Anes out, MD in, RN out, RN in</td>
<td></td>
</tr>
<tr>
<td>No. of times any door opened in 10 minute period while incision open:</td>
<td>2</td>
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<tr>
<td>Reasons for door openings: RN out, RN in</td>
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**Compliance**

<table>
<thead>
<tr>
<th></th>
<th>Compliant</th>
<th>Total</th>
<th>%</th>
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<tbody>
<tr>
<td>Gen/Infection Prevention Principles</td>
<td>9</td>
<td>10</td>
<td>90%</td>
</tr>
<tr>
<td>Site Prep</td>
<td>4</td>
<td>4</td>
<td>100%</td>
</tr>
<tr>
<td>Anes</td>
<td>5</td>
<td>5</td>
<td>100%</td>
</tr>
<tr>
<td>Env</td>
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</tr>
<tr>
<td>Total</td>
<td>19</td>
<td>20</td>
<td>95%</td>
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## OR Observations
### February 2014

#### Surgical Attire Trend

<table>
<thead>
<tr>
<th></th>
<th>OR Suite 1</th>
<th>OR Suite 2</th>
<th>OR Suite 3</th>
<th>OR Suite 4</th>
<th>OR Suite 5</th>
<th>OR Suite 6</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scrubs</td>
<td>20</td>
<td>51</td>
<td>43</td>
<td>100</td>
<td>21</td>
<td>100</td>
<td>15</td>
</tr>
<tr>
<td>Mask</td>
<td>20</td>
<td>44</td>
<td>45</td>
<td>100</td>
<td>21</td>
<td>100</td>
<td>15</td>
</tr>
<tr>
<td>Hat</td>
<td>20</td>
<td>51</td>
<td>43</td>
<td>100</td>
<td>21</td>
<td>100</td>
<td>15</td>
</tr>
<tr>
<td>Eyewear</td>
<td>20</td>
<td>51</td>
<td>43</td>
<td>100</td>
<td>21</td>
<td>100</td>
<td>15</td>
</tr>
<tr>
<td>Jewelry</td>
<td>20</td>
<td>51</td>
<td>43</td>
<td>100</td>
<td>21</td>
<td>100</td>
<td>15</td>
</tr>
<tr>
<td>Hand/Nails</td>
<td>20</td>
<td>51</td>
<td>43</td>
<td>100</td>
<td>21</td>
<td>100</td>
<td>15</td>
</tr>
<tr>
<td>Surgical Scrub</td>
<td>8</td>
<td>100</td>
<td>22</td>
<td>100</td>
<td>8</td>
<td>100</td>
<td>15</td>
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</tbody>
</table>

#### Compliance Trend

<table>
<thead>
<tr>
<th></th>
<th>OR Suite 1</th>
<th>OR Suite 2</th>
<th>OR Suite 3</th>
<th>OR Suite 4</th>
<th>OR Suite 5</th>
<th>OR Suite 6</th>
<th>Total</th>
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<td>100</td>
<td>21</td>
<td>100</td>
<td>21</td>
<td>100</td>
<td>15</td>
</tr>
<tr>
<td>Site Prep</td>
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<td>100</td>
<td>10</td>
<td>100</td>
<td>8</td>
<td>100</td>
<td>15</td>
</tr>
<tr>
<td>Anesthesiology</td>
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<td>92</td>
<td>6</td>
<td>100</td>
<td>8</td>
<td>100</td>
<td>15</td>
</tr>
<tr>
<td>Environment</td>
<td>0</td>
<td>80</td>
<td>3</td>
<td>67</td>
<td>7</td>
<td>71</td>
<td>15</td>
</tr>
</tbody>
</table>

#### Personnel Not Involved in Case/Door Openings Trend

<table>
<thead>
<tr>
<th></th>
<th>OR Suite 1</th>
<th>OR Suite 2</th>
<th>OR Suite 3</th>
<th>OR Suite 4</th>
<th>OR Suite 5</th>
<th>OR Suite 6</th>
<th>Month Avg.</th>
<th>Year Avg.</th>
</tr>
</thead>
<tbody>
<tr>
<td># personnel not involved in case</td>
<td>0.0</td>
<td>1.5</td>
<td>2.5</td>
<td>2.0</td>
<td>0.5</td>
<td>0.0</td>
<td>1.0</td>
<td>0.8</td>
</tr>
<tr>
<td># times/10 mins door opened (sterile packs)</td>
<td>3.0</td>
<td>11.6</td>
<td>7.0</td>
<td>6.0</td>
<td>6.6</td>
<td>0.7</td>
<td>4.8</td>
<td>5.5</td>
</tr>
<tr>
<td># times/10 mins door opened (invasion open)</td>
<td>0.0</td>
<td>6.0</td>
<td>1.5</td>
<td>4.0</td>
<td>7.0</td>
<td>0.0</td>
<td>2.8</td>
<td>2.8</td>
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## Surgical Attire

<table>
<thead>
<tr>
<th></th>
<th>Jan</th>
<th>Feb</th>
<th>YTD</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td># Compl</td>
<td>Total Obs</td>
<td>%</td>
</tr>
<tr>
<td>Scrubs</td>
<td>36</td>
<td>37</td>
<td>97</td>
</tr>
<tr>
<td>Mask</td>
<td>20</td>
<td>20</td>
<td>100</td>
</tr>
<tr>
<td>Hat</td>
<td>30</td>
<td>37</td>
<td>97</td>
</tr>
<tr>
<td>Eyewear</td>
<td>26</td>
<td>35</td>
<td>74</td>
</tr>
<tr>
<td>Jewelry</td>
<td>26</td>
<td>28</td>
<td>90</td>
</tr>
<tr>
<td>Hands/Nails</td>
<td>26</td>
<td>27</td>
<td>100</td>
</tr>
<tr>
<td>Overall</td>
<td>150</td>
<td>181</td>
<td>94</td>
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### Question Results

<table>
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<tr>
<th>Question</th>
<th>Jan</th>
<th>Feb</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Were hand antiseptic products available for anesthesia personnel?</td>
<td>23</td>
<td>20</td>
<td>43</td>
</tr>
<tr>
<td>2) Were central lines placed with sterile procedure?</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3) Was sterile dressing placed on central line after insertion?</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>4) Were stopcocks on lines capped between uses?</td>
<td>9</td>
<td>8</td>
<td>15</td>
</tr>
<tr>
<td>5) Were hubs of IV lines prepped prior to injecting medications?</td>
<td>8</td>
<td>5</td>
<td>13</td>
</tr>
<tr>
<td>6) Did anesthesia personnel wear gloves to start IV, intubate and measure urine?</td>
<td>18</td>
<td>12</td>
<td>30</td>
</tr>
<tr>
<td>7) Were gloves removed and hand hygiene performed after these procedures?</td>
<td>8</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>Total</td>
<td>68</td>
<td>47</td>
<td>115</td>
</tr>
</tbody>
</table>
Feedback of Observations

• At the time of observation (anesthesiology only)
  – Verbal can be problematic:
    • Patients may be awake
    • Providers may not take criticism well
  – Slips of paper with results seem to work better
Anesthesiology Surgical Attire Compliance

![Graph showing compliance rates over time for Anes and AnesTech.]
Maintaining the Relationship

• Stay in touch by celebrating achievements
• The more conversations, the closer the connection
  – Priorities and areas of interest ebb and flow
  – Make it a standing meeting
• Continue to stress that you are here to consult, help
• Deliver on your promises in a timely fashion
Educational Efforts

• Annual clinical skills days
  – Completed several times a year to catch all staff
  – In person, hands on, small class size to facilitate discussions

• Newsletter articles
  – More frequent quick blurbs with scientific or regulatory reasons for IP requirements
Skills Days

• Anesthesia Academy
• 3 sessions per year
• Attendees split in to small groups to rotate to stations around the room
• IP is one station
IP Anesthesia Academy Stations

• Year 1: Focus on line insertion
• Year 2: HELP
• Year 3: Find the IP error
Central vs. Peripheral Lines

**Central Line**
- Prep with Chloroprep
- Sterile field set up
  - full body drape
- PPE
  - Sterile gloves
  - Mask and hat
- Assistant in the room
- Place transparent dressing over new line
  - Date and time dressing

**Peripheral Line**
- Prep with Chloroprep
- Aseptic technique
- PPE
  - Clean gloves
- No assistant needed
- Place transparent dressing over new line
  - Date and time dressing
New Dressing Placement Procedure

Meticulous hand hygiene with the use of an alcohol-based hand rub or soap and water (when hands are visibly soiled) is essential

Open dressing kit and set up sterile field
HELP KEEP OUR PATIENTS SAFE

• **H** – Hand Hygiene
  – Perform hand hygiene after glove removal
  – Perform hand hygiene when moving from a dirty to a clean site

• **E** – Eyewear
  – Should always be worn to protect you from splashes and sprays; this includes prior to the procedure, during skin prep, and the entirety of the procedure

• **L** – Line Care
  – Protect the hub and stopcock at all times by keeping a cap on it or leaving a syringe in place; alternately, the hub must be scrubbed with an alcohol pad for 15 seconds prior to use

• **P** – Prepping
  – When prepping skin for insertion of any type of IV, vigorously scrub the skin for 30 seconds, then allow to air dry for 30 seconds
SURGICAL MASKS

CORRECT

• Masks should be worn whenever sterile supplies and equipment are open
• Mask securement straps should be tied around the top of the head and at the neck

INCORRECT

• Masks should fully cover the nose and mouth and be secured in a manner that prevents venting
SURGICAL EYEWEAR

CORRECT

• Eyewear should be donned before an incision is made, and worn throughout the entirety of the operative procedure

• Acceptable eyewear includes reusable or disposable goggles, and masks with eye shields

INCORRECT

• Eyewear protects healthcare workers from splashes and sprays of infectious or harmful material to the eyes

• Personal glasses alone (without side pieces) are NOT acceptable eyewear
SURGICAL HEAD COVERING

CORRECT

• Disposable bouffant and hood style covers are preferred
• Disposable hats should be worn over reusable cloth headgear when entering restricted and semi-restricted areas

INCORRECT

• Personnel should cover head and facial hair, including sideburns and necklines
• Single use headgear should be removed and discarded in a designated receptacle as soon as possible after daily use
HAND HYGIENE

CORRECT

• Perform hand hygiene after glove removal
• Gloves should always be worn when: Emptying urine containers, intubating, starting IVs, drawing blood from any line, and suctioning

INCORRECT

• Glove change and hand hygiene should be performed between dirty and clean tasks
• Hand hygiene should be performed before donning sterile gloves and after any glove removal
CATHETER MAINTENANCE

CORRECT

• Keep the bag below the level of the bladder at all times to prevent the backflow of urine and reduce risk for infection.

INCORRECT

• Never leave a bag lying on the floor to prevent bag contamination and reduce risk for infection.

www.apic.org
IV LINES

CORRECT

• An uncapped hub is considered contaminated, and should be scrubbed for 15 seconds prior to use
• Lines should never rest on the floor

BEST PRACTICE

• It is preferred that lines be capped when not in use (e.g., blue cap or syringe attached to the line)
Newsletter Articles

• Common errors
• CAUTI and CLABSI best practices
• Nail hygiene
• Process changes with OR observations and feedback
• New cleaner used in ORs
How to deal with setbacks

• Leadership change (sometimes you have to start all over!)
• Bad data
• Communication breakdowns
And the journey continues...

• Addressing the environment of the anesthesiology working area
• Specific best practice examples for hand hygiene and glove use in the OR
• Building the business case for eyewear
• Addressing the need for contact isolation in the OR
The Environment, Hand Hygiene and Glove Use in the OR

• Perception that all parts of the anesthesiology working area are clean
  – Overestimation of need for hand hygiene

• Hospital hand hygiene policy – generalization based on CDC guidelines

• Best practices examples needed specific to anesthesiology*
  – Help to clarify and reduce perceived need for hand hygiene in the OR
The Anesthesiology Working Area

Dirty: Anesthesia Machine

Clean: Supply Cart
The Anesthesiology Working Area

- Clean supply cart
- Supplies used over multiple patients
- Hand hygiene is required before reaching for supplies/equipment in the supply cart
The Anesthesiology Working Area

• Dirty anesthesia machinery
• Pieces are either single patient use or cleaned between patients
• No hand hygiene required when going between this area and the patient

APIC Online Learning

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# Hand Hygiene with Invasive Devices

<table>
<thead>
<tr>
<th>Process</th>
<th>Hand Hygiene Before</th>
<th>Gloves</th>
<th>Process</th>
<th>Hand Hygiene After</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before First Contact with Patient or Anesthesia Environment</td>
<td>Yes</td>
<td>No</td>
<td>Examples: Pulling meds or supplies, moving patient from stretcher to table</td>
<td>No</td>
</tr>
<tr>
<td>Peripheral Venous access</td>
<td>No</td>
<td>If desired</td>
<td>Assessing the arm, tourniquet, skin disinfection</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td></td>
<td>Opening the sterile-packed catheter and venous puncture</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>No</td>
<td>Fixation of the access and flushing, cleaning and waste disposal</td>
<td>Yes</td>
</tr>
<tr>
<td>Intubation and Ventilation</td>
<td>No</td>
<td>Yes</td>
<td>Mask ventilation and intubation (tube / larynx mask)</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>No</td>
<td>Fixation of the tube, programming the anesthesia machine</td>
<td>Yes</td>
</tr>
<tr>
<td>Urine Measurement</td>
<td>No</td>
<td>Yes</td>
<td>Measure Urine</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*Scheithauer S, Rosarius A, Rex S, et al. Improving hand hygiene compliance with the anesthesia working room work area: More than just more hand rubs. AJIC 2013: 1001-6.*
Eyewear

- Compliance continues to be a problem
- Need to sell the need for eyewear as protection for the wearer
- Developing education with real-life examples of close-call splashes and bloodborne pathogen exposure data
Contact Isolation in the OR

• All non-scrubbed personnel should wear gowns and gloves for contact with the patient or the patient’s stretcher
  – IV pumps, stethoscopes and anesthesia machines should be considered potentially contaminated and gloves should be worn when in contact with them

• At the end of the case or when the equipment is no longer needed, it should be cleaned and disinfected
Contact Isolation and Transport

• Gloves and gowns do not need to be worn during transport unless activities are in progress that result in contact with the patient or bed
  – If so, a “clean” healthcare worker who is not having contact with the patient (no gown/gloves), should be designated to touch surfaces
  – After delivery to the patient room or the PACU, gloves and gowns removed, hand hygiene performed
Conclusion

• The credibility our department has built with anesthesiology has allowed us to tackle some more challenging topics.

• Overall, our continued efforts have resulted in a better relationship, which leads to better care for our patients.
Acknowledgements

• Infection Prevention, Anesthesiology and Infectious Diseases groups at Barnes Jewish Hospital and Washington University School of Medicine