### Supplemental Information

**Appendix A: Nursing Self-Practice Audit Form**

**JHOC 6CVAD Maintenance Bundle**

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

**Central Venous Access Device (CVAD) & Insertion Site**

- ☐ Do you have concerns about CVAD site/function/security (e.g. redness, won’t draw)?
- ☐ If so, was it discussed with medical team? (Mark NA if no CVL concerns/problems)
- ☐ Reduction of CVL entries (draws, meds) completed/documented with medical team (e.g. PV, IV to PO, reduced freq. of medfills, bathing entries into one, etc)
- ☐ All CVL insertion/dressing site(s) clean, dry, and intact?
- ☐ All dressing site(s) clearly delineated? (NA = no dressing)

**Catheter Access**

- ☐ Central venous access (CV) entry (may mark NA if no entry)
- ☐ Claes® Scrub with EVERY CVAD entry (may mark NA if no entry)
- ☐ at proximal access point in circuit (e.g. CVAD, stopcock)
- ☐ ☐ ☐ at distal access points in circuit (e.g. tubing, syringe pump)
- ☐ ☐ 15 Second Scrub Prep: each entry at any access point in CVAD circuit
- ☐ ☐ Hand Hygiene: each CVAD access/care procedure by hand washing
- ☐ ☐ ☐ ☐ Clean Gloves (non-sterile): used for each CVAD entry
- ☐ ☐ ☐ ☐ ☐ Personalized minimized entering CVL circuit: as infrequently as possible

For any of above “best practices” where answer was <100%, please indicate any reason(s)

- ☐ Pt safety /urgency
- ☐ Too busy
- ☐ Forgot
- ☐ Don’t believe it matters
- ☐ Didn’t know
- ☐ Too impractical
- ☐ Other (please explain):

### JHOC CVAD Maintenance Bundle - Page 2

**ONLY ANSWER SECTIONS FOR EQUIPMENT CHANGED**

#### A

**Clave® (those directly attached to CVL hub) changed because:**
- ☐ N/A
- ☐ Blood / blood product
- ☐ Uncertain when changed

**YES NO PROCEDURE**

- ☐ Sterile gloves and mask worn by care provider / assistant
- ☐ Clave® connection site scrubbed with alcohol for 15s before removal of old one
- ☐ New Clave® dated/timed documented in chart

#### B

**CARRIER TUBING changed because:**
- ☐ N/A
- ☐ Acuteness change
- ☐ Fluid incompatibility

**YES NO PROCEDURE**

- ☐ Tubing/Claes® connection site scrubbed with alcohol for 15s before disconnection
- ☐ Changed all Clave® connectors, stopcocks, manifolds, extensions down to CVAD hub
- ☐ Sterile/Claes® gloves worn for connection of new tubing to CVAD hub
- ☐ Mask worn by care provider / assistant for connection of new tubing to CVAD hub

#### C

**CVAD DRESSING changed because:**
- ☐ 7 days since last transparent dressing
- ☐ Dressing soiled / loose / damp

**YES NO PROCEDURE**

- ☐ Site shielded from sources of patient contamination (e.g. mask, face, respiration)
- ☐ Security method (e.g. suture), verified and satisfactory (if problem, notify MD to secure)
- ☐ Hand hygiene performed immediately before dressing change
- ☐ Sterile gloves worn for dressing change
- ☐ Masks worn by care provider / assistant for dressing change
- ☐ Site cleansed with CHG/GH friction rub for 30s plus 60s air-dry if CHG not used, why?
- ☐ New dressing dated/timed prior to this prompt (if not, please mark “No” then date/time)

#### D

**NEEDLE changed because:**
- ☐ Same day use only
- ☐ 7 days since last changed
- ☐ Dressing loosened/untied
- ☐ Needle dislodged / infiltrated

**YES NO PROCEDURE**

- ☐ Data/time of new needle noted in some manner prior to this prompt (if not, please do)

...AND...

- ☐ Pt safety /urgency
- ☐ Too busy
- ☐ Forgot
- ☐ Don’t believe it matters
- ☐ Didn’t know
- ☐ Too impractical
- ☐ Other (please explain):

For any of above “best practices” where answer is NO, please indicate any reason(s)

All comments/insights welcomed! Completed forms Cindy Behr 1/14/11
## Appendix B: Mini-Root Cause Analysis Form

<table>
<thead>
<tr>
<th>Patient</th>
<th>MR No.</th>
<th>Admit Date</th>
<th>Infection Date</th>
<th>Organism:</th>
<th>Criteria:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### CVC Insertion (date, type, where inserted) - Date CVC Insertion Site - Maximum sterile barriers, large drape, 2-minute skin prep followed by air drying

<table>
<thead>
<tr>
<th>CVC Insertion (date, type, where inserted)</th>
<th>Date CVC Removed</th>
<th>Insertion Site</th>
<th>Maximum sterile barriers, large drape, 2-minute skin prep followed by air drying</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Patient Information and CVC Care Practices

1. Patient’s location/room number(s):  
2. Date of last CVC dressing change and skin condition at insertion site at that timeport access
3. Estimated number of CVC system entries for each 24-hour period for 72 hours prior to infection date

4. A 30-second scrub followed by 30-second air dry with 2% CHG/70% alcohol was used to access the CVC hubports located below the level of the IV pump:  
   Yes: [ ]  
   No: [ ]  
   If no, please explain why:  

5. A 70% alcohol scrub was used to access IV port/ports located above the IV pump:  
   Yes: [ ]  
   No: [ ]  
   If no, please explain why:  

6A. 48-72 hours before infection date, who accessed the CVC system (check all that apply):  
- [ ] I.V. Nurse  
- [ ] Nurse from Other Unit  
- [ ] Local MD  
- [ ] Radiation  
- [ ] Anesthesia  
- [ ] ED  
- [ ] Radiology Personnel  
- [X] Family  
- [ ] Home care RN  
- [ ] Other  
- [ ] Recent Procedures:  
  Specify:  

6B. Date of last access:  

7. Describe any mechanical problems with CVC prior to the infection date:

8. Have there been any problems with the CVC or IV equipment or supplies:

9. Is there any additional hardware present:

10. Are there any significant patient factors that may have contributed to this infection:

   - [ ] PO  
   - [ ] IV  
   - [ ] ONC surveillance col/colonization with above organisms  
   - [ ] Mucositis  
   - [ ] DVT  
   - [ ] Diarrhea  
   - [ ] Skin Lesions  
   - [ ] GVHD: acute chronic; organ involvement:  
   - [ ] Active/controlled/resolved  
   - Immune suppressive agents close  

11. What recent therapy has the patient had:

   - [ ] BMT  
   - [ ] Auto: day of regimen  
   - [ ] Chemotherapy protocol:  
   - [ ] Most recent agents:  
   - XRT within the past 2 months:  
   - Surgery in the past month (explain):  
   - Use of Hospo tubing:  
   - Yes  
   - No  

12. Laboratory Findings on date of infection:

   - [ ] Hgb  
   - [ ] ANC  
   - [ ] ALC  
   - [ ] rising/falling  

13. Could this infection have been prevented:

   Yes: [ ]  
   No: [ ]  
   Please explain why:  

---

Completed by: Judith Asencio, RN, MSN, Clinical Nurse Specialist, PICU, revised by Kim Druce, RN for CMSC8, revised by Cindy Herpel for JHCOC epidural ciprate