SAHS Critical Care Residency Program

Sherry Parks BSN, MS, NEA-BC VP & CNO
Teri Woychick BSN, RN Director of Critical Care
Cindy Malinowski RN, MN, CCRN, Nurse Educator
SAHS Critical Care Residency Program

• Perfect Storm
  – High CC turnover
  – Lack of experienced nurses
  – Competitive market place
  – Higher census and acuity
SAHS Senior Leadership supports a multifaceted approach to address recruitment and retention which include:

- Partners in Practice
- Competitive Comp Program
- Graduate Nurse Residency
- Clinical Ladder expansion to Nampa
- Critical Care Residency
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CNO Philosophy of Critical Care Residency

- The recruitment of internal acute care nurses allows nurses, who are interested and qualified, to receive focused critical care education in a 6 month residency program.
- Experienced acute care nurse have acquired strong clinical skills and knowledge which serve as the foundation for an enhanced critical care education and training.
- The critical care residency program is an opportunity for the system to "grow our own" critical care nursing workforce.
Important program components

- Plan as early as possible.
- Develop your Program team
- What should the program include:
  - Vision
  - Qualifications
  - Program Content and Calendar
  - Who will oversee the educational curriculum?
  - Determine the number of candidates to accept.
  - Application, job posting, interview process, and dates that allow for candidate selection, offer, acceptance, and notification of the current manager.
  - Evaluated the current Preceptor program. How do we align the current preceptor performance with the new residency?
  - Metric-How do we measure success beyond retention?
  - Basic Knowledge Assessment Test (BKAT) measures a body of knowledge beyond the required licensure for safe care of the critical care patient.
    - BKAT to be used as the baseline metric to evaluate the program competency at the beginning and end of residency.
Candidates selected came from a variety of acute care units.

- Orthopedics
- Telemetry
- General Surgery
- Medical/Oncology
- NICU
- Neurosurgery
1st Program

• Program began 1/18/2016
• 24 week residency that includes:
  – Clinical Education team, Didactic education, simulation, integrated orientation plan to follow the Essentials of Critical Care Orientation (ECCO), & clinical orientation with designated preceptors.
• Critical Care Preceptors received updated training to align their mentoring with the 24 week program.
• Boise candidates will rotate through 3 critical care units during the 5th month.
• BKAT administered the first day of program
What’s unique about an ICU

• The ICU provides a location for the continuous monitoring of unstable patients and the use of invasive technology to support basic life processes
  - Learning about that technology is often the focus of orientation
  - Mastering the safe use of that technology is important and still needed to be a part of the curriculum.

• The real value of an ICU environment is the level of clinical judgment that occurs amongst the Interdisciplinary Team!
  - Basic question asked when planning: How would the Critical Care Residency foster the development of clinical judgement amongst our newest RN’s?
What does clinical judgement look like

- Clinical judgment requires the ability to process information...
  - Experienced critical care nurses recognize patterns & trends!
    - With experience the patterns become more evident and recognizable.
    - Eventually they “see a pattern or feel a gut response to a clinical situation that allows them to know the situation”
  - Accurate, thorough & organized Assessment was identified as the Foundation for developing clinical judgement!
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Role of the Preceptors

• **Preceptors ALL signed a letter of commitment**
• **To ensure consistency, Preceptors were taught the same “head to toe” assessment that we expected of our Residents**
  – We expected them to reinforce an accurate, thorough, and organized assessment with documentation that met our minimum charting standards
• **We gave them a variety of tools to use…**
## WEEK ONE

### I. ECCO 3.0 Completion
- Global Perspectives in the Care of the Critically Ill Patients: Part 1  
  - 2.5 hours
- Global Perspectives in the Care of the Critically Ill Patients: Part 2  
  - 3.5 hours

### II. Classroom/Simulation
- Organizing care of the critically ill, assessment, charting standard  
  - 4 hours
- Cardiac Rhythms Part A  
  - 4 hours
- Central Monitors measuring/charting strips; S & Q Audits  
  - 2 hours

### III. Priority Policies Week One
- Charting Guidelines
- Clinical Pathways
- Review Policies, Procedures, Forms relevant to patient assignment (see Policy and Procedures listed in the Appendix that all critical care Residents are required to read/review)

### IV. Clinical/Documentation
- Complete and Chart Initial and Focused Reassessment (Assisted/Independent)  
  - Circle One Day 1
- Complete and Chart Initial and Focused Reassessment (Assisted/Independent)  
  - Circle One Day 2
- Complete and Chart Chlorhexidine Bath

### V. Orientation Check Lists Completed (List Below)
- Scavenger Hunt
- Central Line & VAP Competency
- Complete Safety and Quality and Skin Audit on One Patient (#1)
# SAHS Critical Care Residency Program

## Charting Grid

<table>
<thead>
<tr>
<th>MEW Physical Assess:</th>
<th>MEW Frequent Assessment Band:</th>
<th>IJEWV Lines</th>
<th>IJEWV Interventions q shift/when done</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete on Admit &amp; qShift</td>
<td>q2HLP Cpr/qrn</td>
<td>T hooks, Drains &amp; Urinary Cath.</td>
<td>Pre-op Prep/PACU Recovery, Pre-procedure V lot</td>
</tr>
</tbody>
</table>

### Pre-op Prep/PACU Recovery

<table>
<thead>
<tr>
<th>PACU Assessment</th>
<th>PACU Discharge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adreline 1</td>
<td>Pre-operative V lot</td>
</tr>
</tbody>
</table>

### Neurological Body System Assessment

<table>
<thead>
<tr>
<th>LOC/GCS/Pupils</th>
<th>Neuro Checks-Strobe</th>
</tr>
</thead>
<tbody>
<tr>
<td>NH Stroke Scale</td>
<td>RASS (Cont. Sed.) q4t</td>
</tr>
<tr>
<td>Facial Symmetry</td>
<td>Ramsey (Proc. Sed.)</td>
</tr>
<tr>
<td>Motor Strength of Extremities</td>
<td>Train of Four</td>
</tr>
<tr>
<td>Seizure Activity</td>
<td>ICU CPR</td>
</tr>
<tr>
<td>Dysphagia, Cough/Gag Reflex</td>
<td>Bispectral Index (BIS)</td>
</tr>
<tr>
<td>Corneal &amp; Blink Reflex</td>
<td>Brain Tissue 02</td>
</tr>
<tr>
<td>Dolor Eyes/Bulbar Instincts</td>
<td></td>
</tr>
<tr>
<td>Syncope/Episodes</td>
<td></td>
</tr>
</tbody>
</table>

### Cardiovascular (CVS) Body System Assessment

<table>
<thead>
<tr>
<th>Rhythm</th>
<th>HR &amp; Rhythm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orthostatic Changes</td>
<td>RPRP/RAR/P/CVP</td>
</tr>
<tr>
<td>Chest Pain</td>
<td>CO/DiSC/CV q1h</td>
</tr>
<tr>
<td>Heart Sounds, JVD</td>
<td>Hemo Calcs q4h</td>
</tr>
<tr>
<td>Color, Capillary refill</td>
<td>IABP Data q1h</td>
</tr>
<tr>
<td>Peripheral Pulses</td>
<td>Vasoscoptic q1/h</td>
</tr>
<tr>
<td>Edema</td>
<td>Neurovascular V</td>
</tr>
<tr>
<td>Homans</td>
<td>Shoshan Removel</td>
</tr>
<tr>
<td>Neurovascular</td>
<td>Post-Procedure V</td>
</tr>
<tr>
<td>Pacemaker Data</td>
<td></td>
</tr>
</tbody>
</table>

### Respiratory Body System Assessment

<table>
<thead>
<tr>
<th>Pt Reported Symptoms</th>
<th>RR/Sp02</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respiratory Rhythm</td>
<td>q2HLP Cpr/qrn</td>
</tr>
<tr>
<td>Accessory Muscle Use</td>
<td>SpO2 with Vitalts</td>
</tr>
<tr>
<td>Breath Sounds</td>
<td>Nasal Secretions</td>
</tr>
<tr>
<td>Color &amp; Amount of Secretions</td>
<td>Oral Secretions</td>
</tr>
<tr>
<td>Respiratory Treatments</td>
<td>Artificial Airways Secretions</td>
</tr>
<tr>
<td>Respiratory Band in MEW</td>
<td>Airway Support</td>
</tr>
<tr>
<td>Vent Settings/ Vent Weaning</td>
<td>Exclusion Criteria</td>
</tr>
<tr>
<td>Non invasive Vent</td>
<td></td>
</tr>
</tbody>
</table>

### Endocrine Body System

<table>
<thead>
<tr>
<th>Endocrine</th>
<th>HbA1C (Depar EHR)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>IV insulin Protocol</td>
</tr>
</tbody>
</table>

### Neuro Interventions

- Aspon Collar
- Soft Collar
- Leg roll
- Back Board
- Hap
- Reorient
- Communication Board
- Seizure Mt

### CVS Interventions

- Tele monitoring
- Trendelenburg
- Activity Prog
- Sedoform
- Bowel/Gas
- Heart Hugger
- Epidural Wire Remove
- Anti-Emetic Precautions
- Intermittent Pneumatic Compression
- ACE Wrap

### Respiratory Interventions

- Incentive Spr.
- BB & C
- Suctioning
- Trach Care
- Mouth Care
- CRG Mouth Care charted in NAR
  (RRT function)
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SBAR Tools

SBAR: Physician Notification Tool Cardiac Medicine

**Situation:**
1. I am calling about: _______________________ Are you familiar with this patient? _______________________ (if physician is familiar move to problem)
2. ICU Date of Admission: ______________ Procedure Done: ______________
3. The problem: (Additional background info may be needed when unknown to on-call LIP)
   - **Neuro Changes:**
     - Change in Resp
     - Pupils
     - Grasps
     - Seizure
   - **Arrhythmia:**
     - X
     - Antianthrombic Meds
     - Mg
     - Beta Blocker
   - **Hypotension:**
     - S&S Hypotension (yes/no)
     - Vasopressor Meds
     - Vasodilator Meds
   - **Hypertension:**
     - S&S Hypertension (yes/no)
     - Vasodilator Meds
   - **Low CI:**
     - SvO2
     - BP
     - Filling Pressures
     - Dry Weight
     - T & O
   - **Lab Abnormalities:**
     - Na
     - Urine Specific Gravity
     - K
     - Hg
     - Mg
     - B12
     - B12

**Background:**
1. Goals/Issues currently being addressed relevant to the problem

**Assessment:** Additional focused assessment findings related to the primary problem

**CNS:**
- Temperature trends
- Change in mental status
- Restlessness
- Fatigue

**CVS:**
- HR trends
- BP trends
- Orthostatic hypotension
- Oxygen requirement trends

**Pulmonary:**
- Respiratory Rate trends
- Dyspnea/orthopnea
- Accessory muscle use

**GU:**
- u/o
- BUN/Creat

**Plan:**
1. Anticipated orders may include:
   - Fluids
   - Inotropes
   - Antiarrhythmics
   - Other
   - Blood Products
   - Vasodilators
   - Electrolyte Replacement
   - Diuretics
   - Vasopressors
   - Anticoagulants
# SAHS Critical Care Residency Program

## Addendum to the Core Competency

### Resources Key
- **P**: Policy
- **J**: Job Aide
- **G**: Guiding behavior
- **S**: Standard of Care

<table>
<thead>
<tr>
<th>Validation Key:</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-Teach Back</td>
</tr>
<tr>
<td>D-Demonstrate</td>
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</table>

## Competencies

<table>
<thead>
<tr>
<th>Competencies</th>
<th>Resource</th>
<th>Validation</th>
<th>Initial Orientee/Preceptor</th>
<th>Date</th>
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<tbody>
<tr>
<td><strong>Unit Specific Skills: Basic Critical Care</strong></td>
<td></td>
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</tr>
<tr>
<td>• CAM-ICU</td>
<td>S</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• RASS</td>
<td>S</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• NIHSS</td>
<td>S</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• ECG Monitoring</td>
<td>P</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• <strong>Arterial Line Monitoring</strong></td>
<td>P</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Aspen Collar</td>
<td>P,S</td>
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</tbody>
</table>

### Arterial Line Monitoring
- Set up arterial line
- Assist with insertion of arterial line
- Draw blood from arterial line
- Apply dressing to arterial line per policy
- Change tubing according to policy
- Assess circulation, motion, and sensation of site
- Set alarm limits appropriately
- Discontinue arterial line per policy
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Role of the Preceptors

• We asked the preceptors to emphasize the importance of:
  – Early detection
  – Early intervention to prevent deterioration

• Frequency of assessment is often a nursing judgment…
  – Preceptors needed to guide the “Residents” to think critically and recognize the need for more frequent monitoring when the patient’s condition was changing!

• **Unit routines, standards of care, and protocols are Evidence-based....**
  – Preceptors were expected to use prompts to get their “Resident” thinking about what they are doing and why.
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Tips/Prompts for the Preceptor

• **We gave them a standard set of questions that they could use as prompts to foster clinical judgement**

<table>
<thead>
<tr>
<th>Foster clinical reasoning along with technical skill development</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Explore the patient’s history, findings on physical examination, current physician orders, and progress.</td>
</tr>
<tr>
<td>2. Review/discuss possible complications that could occur.</td>
</tr>
<tr>
<td>3. Review/discuss each potential complication in terms of how it would be manifested clinically.</td>
</tr>
<tr>
<td>4. Review/discuss/consider anticipated interventions for each potential complication.</td>
</tr>
<tr>
<td>5. When faced with multiple tasks at hand, ask your orientee to discuss and prioritize their options;</td>
</tr>
<tr>
<td>6. Review/discuss relevant quality measures</td>
</tr>
</tbody>
</table>

• **We also gave them suggestions for disease specific questions organized around common critical illnesses (i.e., AMI, Heart Failure, Stroke, etc.)**
  – **We actually had our preceptors “develop the answers” to the questions as an exercise to assist them in fostering their own clinical judgment!**
  – **This was identified by the Preceptors as one of the most valuable reference tools!**
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Final thoughts for the Preceptor

- Take time to discuss the *trends*
- Discuss *common trajectories*: How is the patient progressing down a predictable path of recovery
- *Surveillance is important*: Scan for signs that a “a problem is developing” or “for evidence of stability”
- *Investigate problems*: You should not “rest” until the picture becomes clear
- Be *goal oriented*
- Utilize the tools to assist in *Communicating findings*: The more practice with SBAR the more effective the “Residents” became.
  - Charge nurses, preceptors, mentors play a role in helping the new nurse make the decision on “when to call”!
- Involve the “Residents” in *Team decision making*: Help them become an active members of the team:
  - Rounds, Daily Goal Sheets, SBAR’s, hand-off, etc.
Primary Focus in the first 6 weeks:
- **Assessment**
- **Basic critical care monitoring** (i.e., ECG interpretation, arterial lines, etc.)

**Didactic** information laid the foundation
- Assessment
- ECG interpretation

**Simulation** provided the Residents with the opportunity to apply what they were learning and prepare them for ACLS
- They were able to practice new ECG recognition skills
- They were able to initiate treatment protocols for urgent and emergent situations

*This coordinated and multi-faceted approach better prepared them to get the most out of the first few weeks of their preceptored clinical...*

*Preceptors told us that “they’d never had new hires so prepared on their first day!”*
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First Six Weeks

• **ECCO in the first 6 weeks focused on:**
  – *Prioritizing and organizing care of the critically ill*
  – *Preventing complications of critical illness*
  – *Special situations such as procedural sedation and PACU*
  – *Assessment*

• **Quality & Safety Audits** introduced our Residents to priorities at Saint Alphonsus and reinforced content in ECCO:
  – Preventing CAUTI
  – Preventing CLABSI
  – Preventing VAP
  – Preventing Skin Breakdown
  – Alarm Management

*The Residents completed weekly audits to reinforce the importance of basic nursing care and the role nurses play in preventing HAI...*
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More advanced concepts & skills (week 7-24)

• **Assessment was still important!**
  – Reinforce the importance of a routine!
  – Reinforce the importance of a comprehensive initial assessment.
  – Ensure that an appropriate focused reassessment was being completed.

• **Basic Monitoring Systems may still need to be mastered!**
  – ECG, Arterial lines, Chest tubes

• **Start challenging them with more advanced skills!**
  – Pacemakers, NICOM, Swan, Ventilator, ICP, Hypothermia, etc.
  – Look at their weekly goal sheets and try to coordinate the patient assignment with what they were studying
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Typical schedule

- Preceptored clinical
  - Minimum: 2 shifts per week
  - Majority: 3 shifts per week

- AACN: Essentials of Critical Care Orientation (ECCO)
  - Flex-up to a 40-hour work week!
  - Specific content was assigned some weeks to meet pre-requisite requirements for classes
  - Resident had some flexibility to align choice of content with patient assignment

- Mandatory Case-based Classes (4 hours)
  - After the first few weeks, 1 Case-based class every 2 weeks
  - Often in place of ECCO so we weren’t taking time from the bedside
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Role of the Educator

- Curriculum development
  - Classroom & simulation content supplemented Essentials of Critical Care Orientation (ECCO)

- Daily rounding
  - Roughly 3-4 hours/week were spent by each critical care educator 1:1 at the bedside
    - Answering questions
    - Guiding critical thinking
    - Coordinating special experiences

- Program Evaluation
  - BKAT
  - Survey Monkey
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Measures of Success

• Metrics
  • BKAT score
  • Retention of candidates
  • Employee Engagement/Burnout
  • Quality and Safety Outcomes
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Update

Challenges for success
• Lack of applicants due to night shift scheduling post program.
• Retention is challenged as CRNA/NP programs have reduced experience to 1000 hrs.
• Critical Care serves as springboard to advanced degree programs.
• Size, practice and acuity variations between Boise and Nampa
Our 2nd Cohort began August 22, 2016

- Application process open through 4/15/16.
- Panel interview by critical care management and education team.
- 8 candidates in 2nd Cohort.
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Next Steps

- Continue with 2 Cohorts annually
- Possible expansion to other service lines
- Monitor metrics for success
Questions?