White Memorial Medical Center

Engaging Physicians as Champions

January 19 2016
As a Seventh-day Adventist medical center, we are a family of caring professionals serving our community with a passion for excellence, a spirit of Christian service, and a commitment to medical education.
About the Medical Staff at White Memorial

Teaching Hospital
Foundation Model
Independent Practices
GOAL
Improve care delivery across all care settings: Clinical Quality, Patient Safety and Clinical Value

Quality Improvement Committee:
- ICU Mortality
- Sepsis Mortality
- PCI Mortality
- Immunizations
- VTE

Patient Safety Committee:
- Reducing Hospital Acquired Infections:
  - Handwashing
  - CLABSI
  - CAUTI
  - cDiff

  - Post-Op Complications
  - Falls

Utilization Management Committee:
- Level of Care
- Length of Stay
- Throughput
- Readmissions
- Blood Utilization
- Pharmacy Utilization

KEY RESOURCES
- Premier Quest
- IHI
- Duke University

KEY RESOURCES
- Premier Quest
- Premier
Handwashing

Weekly recognitions on units achieving above target scores.

Teams continue to meet to drive success.

Champions: Elizabeth Camargo-Garcia / Azmy Ghaly, MD / Linette Martin

Target = National Better Performing
Key Utilization Initiatives

Blood Utilization
Urinary Catheterization
Antibiotic Stewardship
Diagnostic Imaging
Daily/Serial Labs
End of Life / Palliative Care
Utilization Management

The medical staff’s forum for optimizing use of health care services
Organizational Performance

The medical center’s quality improvement hub
## Organizational Performance

**Clinical Performance Improvement Facilitators**

<table>
<thead>
<tr>
<th>Clinical PI Facilitator</th>
<th>Clinical PI Facilitator</th>
<th>Clinical PI Facilitator</th>
<th>Safety Coordinator</th>
<th>Engineer Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Women’s &amp; Children’s</strong></td>
<td><strong>Adult Surgical</strong></td>
<td><strong>Adult Medical</strong></td>
<td>Patient Safety</td>
<td>Performance</td>
</tr>
<tr>
<td>Departments</td>
<td>Departments</td>
<td>Departments</td>
<td>CAUTI/CLABSI</td>
<td>Process Management</td>
</tr>
<tr>
<td>OB/GYN</td>
<td>All Surgical</td>
<td>Emergency</td>
<td>C-Diff</td>
<td>Lean / Six Sigma</td>
</tr>
<tr>
<td>Pediatric</td>
<td>Cardiology</td>
<td>Internal Medicine</td>
<td>AMS</td>
<td>High Reliability</td>
</tr>
<tr>
<td>Neonatal / Perinatal</td>
<td></td>
<td>Family Medicine</td>
<td>Handwashing</td>
<td>Value: Cost of Care</td>
</tr>
<tr>
<td>Anesthesia</td>
<td></td>
<td></td>
<td>Hygiene</td>
<td>Innovation</td>
</tr>
<tr>
<td>Radiology</td>
<td></td>
<td></td>
<td>Falls Rate</td>
<td>Throughput</td>
</tr>
<tr>
<td><strong>Committees</strong></td>
<td></td>
<td></td>
<td>Committees</td>
<td>Utilization</td>
</tr>
<tr>
<td>Vascular Interventional,</td>
<td></td>
<td></td>
<td>Code Blue / RRT,</td>
<td>Management</td>
</tr>
<tr>
<td>Limb Preservation,</td>
<td></td>
<td></td>
<td>Sepsis, PT&amp;T/MERP,</td>
<td></td>
</tr>
<tr>
<td>SCIP Committee Chair,</td>
<td></td>
<td></td>
<td>Stroke, Adult</td>
<td></td>
</tr>
<tr>
<td>STEMI Receiving,</td>
<td></td>
<td></td>
<td>Special Care,</td>
<td></td>
</tr>
<tr>
<td>Operative Invasive,</td>
<td></td>
<td></td>
<td>Skin Care Restraints</td>
<td></td>
</tr>
<tr>
<td>Cardiac Conference</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>CPQCC/VON</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perinatal Core Measures</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>State Required Monitors</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CMS Immunization</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>CMS SCIP, AICD</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACC/PCI, STS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Apache ICU, Stroke/GWTG Data, CMS Heart Failure, CMS AMI, CMS Pneumonia, ACC Diagnostic Cath</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Matrix Responsibility to **Data Coordinator** for Abstraction Responsibilities
Fostering Dialogue

Align with a committee
Open door practice
Meet them at the bedside
An internal customer
Use data appropriately
Choosing Wisely & Utilization Management

Critical Care Page
Focus on Sepsis
7 Recommendations Issued
**Choosing Wisely**

As an initiative of the ABIM Foundation

Critical Care Societies Collaborative - Critical Care

**Five Things Physicians and Patients Should Question**

1. **Don’t order diagnostic tests at regular intervals (such as every day), but rather in response to specific clinical questions.**
   
   Many diagnostic studies (including chest radiographs, arterial blood gases, blood chemistries and counts and electrocardiograms) are ordered at regular intervals (e.g., daily). Compared with a practice of ordering tests only to help answer clinical questions, or when doing so will affect management, the routine ordering of tests increases health care costs, does not benefit patients and may in fact harm them. Potential harms include anxiety due to unnecessary phosphorus, which may necessitate risky and costly transfusion, and the aggressive work-up of incidental and non-pathological results found on routine studies.

2. **Don’t transfuse red blood cells in hemodynamically stable, non-bleeding ICU patients with a hemoglobin concentration greater than 7 g/dL.**
   
   Most red blood cell transfusions in the ICU are for benign anemia rather than acute bleeding that causes hemodynamic compromise. For all patient populations in which it has been studied, transfusing red blood cells at a threshold of 7 g/dL is associated with similar or improved survival, fewer complications and reduced costs compared to higher transfusion triggers. More aggressive transfusion may also limit the availability of a scarce resource. It is possible that different thresholds may be appropriate in patients with acute coronary syndromes, although most observational studies suggest harms of aggressive transfusion even among such patients.

3. **Don’t use parenteral nutrition in adequately nourished critically ill patients within the first seven days of an ICU stay.**
   
   For patients who are adequately nourished prior to ICU admission, parenteral nutrition initiated within the first seven days of an ICU stay has been associated with harm, or at best no benefit, in terms of survival and length of stay in the ICU. Early parenteral nutrition is also associated with unnecessary costs. These findings are true even among patients who cannot tolerate enteral nutrition. Evidence is mixed regarding the effects of early parenteral nutrition on nosocomial infections. For patients who are severely malnourished directly prior to their ICU admission, there may be benefits to earlier parenteral nutrition.

4. **Don’t deeply sedate mechanically ventilated patients without a specific indication and without daily attempts to lighten sedation.**
   
   Many mechanically ventilated ICU patients are deeply sedated as a routine practice despite evidence that using less sedation reduces the duration of mechanical ventilation and ICU and hospital length of stay. Several protocol-based approaches can safely limit deep sedation, including the explicit titration of sedation to the lightest effective level, the preferential administration of analgesic medications prior to initiating analgesics and the performance of daily interruptions of sedation in appropriately selected patients receiving continuous sedative infusions. Although combining these approaches may not improve outcomes compared to one approach alone, each has been shown to improve patient outcomes compared with approaches that provide deeper sedation for ventilated patients.

5. **Don’t continue life support for patients at high risk for death or severely impaired functional recovery without offering patients and their families the alternative of care focused entirely on comfort.**
   
   Patients and their families often value the avoidance of prolonged dependence on life support. However, many of these patients receive aggressive life-sustaining therapies, in part due to clinicians’ failures to elicit patients’ values and goals, and to provide patient-centered recommendations. Routinely engaging high-risk patients and their surrogate decision makers in discussions about the option of foregoing life-sustaining therapies may promote patients’ and families’ values, improve the quality of dying and reduce family distress and bereavement. Even among patients pursuing life-sustaining therapy, initiating palliative care simultaneously with ongoing disease-focused therapy may be beneficial.
Discussing the Opportunity

Interdisciplinary Care Team
Physician Champions
Clinical Information Systems
Financial Stakeholders
Tools for Understanding the Opportunity

Case Review Template
Interdisciplinary Team Forum
Facilitation
<table>
<thead>
<tr>
<th>Vitals</th>
<th>ED 5/17 @1730</th>
<th>ICU 5/18 @ 0626</th>
</tr>
</thead>
<tbody>
<tr>
<td>T=101.4-98.4, P=152-70, RR=32-17, SBP=152-99, DBP=131-48, O2 Sats=100-92 on non-rebreather mask and ventiator</td>
<td>T=100.8-98.4, P=80-71, RR=25-14, SBP=126-91, DBP=99-37, O2 Sats=100-97 on vent with 80-40% fio2</td>
<td></td>
</tr>
</tbody>
</table>

| Labs | BS = 28-132; WBC=21.8, H/H=8.7/28.5, Plt=239, Na=136, K=4.4, Cl=101, Co2=17, BS=58, BUN/Cr=30/1.4, Ca=8.5, Tropl=<0.04, C-Peptide=<0.1, PT/Inr=11.1/1.08, PTT=27.8; Ammonia=27 @1930; Lactic 2.3 @1900, 1.2 @0201; Tropl =0.30 @2036, 1.82 @0201; BloodCx1=corynebacterium striatum, BloodCx2=coagulase negative, staphylococcus corynebacterium jeikeium; UrineCx=E.Coli,; MRSA Scree= negative; Insulin Level=891.75; Repeat labs @ 2036: WBC=10.7, H/H=7.5/23.6, plt=143 | ABG=pH=7.37, pCO2=41, pO2=211, HCO3=23.7, BE=-1.6, Sats=99.4, TropI @0723=1.53, A1C6.01, BS=250-258, Tchol=51, Trigly=47, HDL=26, Ferr=39.5, Iron=26 |

| Diagnostic Tests | CXR @ 2205 = Recommend withdrawal of ETT 2cm, cardiomegaly with pulmonary vascular congestion, calcified aorta, spondylosis thoracic spine; EKG @ 1933= Sinus tachycardia; @0050=SR; @0350=SR | EKG @ 0805= SR, normal EKG; CT Abd/pelvis=Right base effusion/infiltrate, Left lower lobe consolidation/atelectesis, NG tube in place, surgery changes consistent with cholycestectomy, incomplete closure of inferior incision, rectal sigmoid anastomosis.CT Brain= No lesions, sinus disease |

Vitals, Labs, Diagnostic Tests, Procedures, Consults, MD Daily Impression

Meds: IV, Meds: PO/SQ/IM, Dietary, Nursing/Ancillary treatments
Process for Understanding the Opportunity

Global trends
Financial implications
Daily care synopsis
Cost of care
## Top 7 Opportunities in Sepsis

### Length of Stay
- Discharge planning for Placement, HH, & DME, SNF, early identification of discharging barriers
- Underutilization of LTAC
- Social worker engagement regarding home safety, patient needs, POLST update to avoid futile care, coordinate along with the PCP family meeting to discuss the plan of care (especially for end stage patients)
- Delayed discharge opportunity (stable windows)

### Level of Care
- ICU vs. DOU/Tele & Tele/DOU vs Med/Surg
- ICU patients downgrades always to DOU? Then DOU to TELE then finally to MS
- Level of Care: Vent but stable

### Lab Diagnostics
- Daily Arterial Blood Gas Post Intubation w/o Vent Setting Change
- Frequent unnecessary sputum induction and culture
- Unnecessary daily labs

### Radiology Diagnostics
- Daily Chest X rays Post Intubation w/o Vent Setting Change
- Repeated CT & MRI w/o change of condition

### Antibiotic Choice
- Over utilization of initial empirical IV abx
- Abx selection (double coverage)
- Absence of abx stop date
- Not using our antibiogram
- Duration of abx use
- Guidelines for very expensive abx usage
- IV antibiotic standard
- Streamline antibiotic selection

### Referral Practices
- GI consult for chronic anemia
- Indications for endoscopy, endoscopy in stages
- ICU podiatry consult, debridement
- Consultant overutilization overall

### Pharmacy & Blood Products
- Albumin overuse
- Avoidable blood transfusion
- Epoetin Alfas unnecessary (it takes weeks to work)
- Excessively dialyzed
- Overuse IV Fluids (avoidable complications)

### Findings

<table>
<thead>
<tr>
<th>Findings</th>
<th>Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Length of Stay</td>
<td>Early identification of Sepsis. Optimize LTAC utilization, educating COC on LTAC admission criteria. Case Manager and Social Worker assessment on Day 1 to identify patient needs and address discharge barriers.</td>
</tr>
<tr>
<td>2. Level of Care</td>
<td>Follow admission criteria for level of care.</td>
</tr>
<tr>
<td>3. Lab Diagnostics</td>
<td>Avoid ordering unnecessary labs, x-rays, cultures (for example, routine orders when there are no indications).</td>
</tr>
<tr>
<td>4. Radiology Diagnostics</td>
<td>Avoid ordering unnecessary radiology/diagnostic tests.</td>
</tr>
<tr>
<td>6. Referral practices</td>
<td>Avoid use of routine consults when no acute indications are present.</td>
</tr>
<tr>
<td>7. Pharmacy &amp; Blood Products</td>
<td>Optimize use of pharmacy and blood products if no indications are present. Ensure stop date of drug and blood products.</td>
</tr>
</tbody>
</table>
Next Steps

Spread & educate
Measure & monitor
Encourage ownership
Engage residents