St. Joseph Mercy Health System
Keystone ICU Collaborative: 
Making your ICUs safer

The secret ingredients are culture and team

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KEYSTONE PROJECT

- Statewide initiative-75 Hospitals, 127 ICUs
- In Collaboration with Johns Hopkins’ Quality and Research Institute
- Reduce errors and improve patient outcomes in ICUs
- Combination of evidence based medicine and quality improvement
- 5 interventions implemented over a 2 year Grant funded period
- Still going strong after 7 years!!!
Keystone: ICU

- Science of Safety (CUSP)
- BSI
- VAP
- Daily Goals
- Sepsis
- Oral Care
- Delirium and Progressive mobility

Partnership between Johns Hopkins University and MHA
Initiated with AHRQ Matching Grant Sustained with participant fees in 2005 and 2006
St. Joseph Mercy Story

- CUSP in the ICU and beyond
- Building on CUSP and CLABSI/CAUTI for other work

<table>
<thead>
<tr>
<th>Technical (evidence based practices)</th>
<th>Adaptive (communication and teamwork)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HAI infection prevention</td>
<td>MDR with daily goals</td>
</tr>
<tr>
<td>Sepsis identification and management</td>
<td>Morning briefings/pre-procedure briefings</td>
</tr>
<tr>
<td>Intra-abdominal HTN</td>
<td>Learn from defects</td>
</tr>
<tr>
<td>Delirium</td>
<td>Huddles</td>
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<tr>
<td>Progressive mobility</td>
<td>Crucial Conversations training</td>
</tr>
</tbody>
</table>
The “Secret Ingredient” Comprehensive Unit-Based Patient Safety Program

PRE-CUSP work

1. Form a unit CUSP team
2. Measure unit culture

1. Educate staff on Science of Safety
2. Identify defects using the Staff Safety Assessment; prioritize
3. Executive adopt a unit
4. Learn from one defect per quarter
5. Implement team/communication tools

*Keep focus on this throughout the journey!!!*
Start with:

Keystone ICU Team

- Denise Harrison RN, MSN, Director of Critical Care
- Christine Curran, MD, physician project leader
- Mary-Anne Purtill MD, medical director SICU
- Pat Posa RN, MSA, system performance improvement leader
- Marco Hoesel MD, surgical resident
- Amy Heeg RN, BSN CCU-Livingston
- Brian Kurylo RN, CCU
- Cathy Stewart RN, BSN, CCRN Resourse Pool
- Diane Jones PA, cardiac surgery
- David Holmes, cardiac surgery
- Sondra RN CCU-Livingston
- Andreea Sandu RN, MICU
- Angie Malcolm RN, MICU
- Michael Maher, RN, SICU
- Emily McGee, RN, Case Nurse, SICU
- Shikha Kapila, Pharm. D
- Cheryl Morrin MPH, infection control
- Chris Kiser, Pharmacy, Livingston
- Beverly Bay-Jones, RRT, Resp Therapy
- Tahnee Thibodeau., RD, MICU dietitician
- Wendy Nieman RN, Project Impact
What is a Culture?

That’s not the way we do it here!!!

Measure culture at the unit level

Represents a set of shared attitudes, values, goals, practice & behaviors that makes one unit distinct from the next.
The Science of Safety

- Understand system determines performance
- Use strategies to improve system performance
  - Standardize
  - Create Independent checks for key process
  - Learn from Mistakes
- Apply strategies to both technical work and team work.
- Recognize that teams make wise decisions with diverse and independent input

How we do this:
- Educate all personnel in all the ICU—RN, RT, residents, PA/NP
- Educate the attending---difficult but important
- Part of orientation
Medical errors most often result from a complex interplay of multiple factors. Only rarely
Are they due to the carelessness or misconduct of single individuals

Lucien L. Leape, MD
Harvard School of Public Health
Why do mistakes happen

“The Every system is perfectly designed to achieve the results it gets”
Why Mistakes Happen?

Process Factors
- Variable input (diff pts)
- Inconsistency/variation
- Complexity
- Too many/complicated steps
- Human intervention
- Tight time constraints
- Hierarchical culture

People Factors
- Fatigue
- Inattention/distraction
- Unfamiliar situations/new problem
- Using past solutions
- Equipment design flaws
- Communications errors
- Mislabeling/inadequate instructions
Effective communication amongst caregivers is essential for a functioning team.

The Joint Commission reports that ineffective communication is the most commonly cited cause for a sentinel event.

Observations of ICU teams have shown errors in the ICU to be concentrated after communication events (shift change, handoffs, etc).

30% of errors are associated with communication between nurses and physicians.

Reader, CCM 2009 Vol 37 No 5; Donchin, CCM 1995 Vol 23
Effective Teamwork and Communication Requires:

- Structured Communication
- Assertion/Critical Language
- Psychological Safety
- Effective Leadership

- SBAR, structured handoffs
- Key words, the ability to speak up and stop the show
- An environment of respect
- Flat hierarchy, sharing the plan, continuously inviting other team members into the conversation, explicitly asking people to share questions or concerns, using people’s names
Safety Issues Survey

1. Tell us about the last patient who would have been harmed without your intervention.
2. How will the next patient be harmed?
3. What steps can you do to prevent this harm?
   - by either preventing the mistake, making the mistake visible or mitigating the harm should it occur

This is a very important tool. Use this to identify some of the ‘whys’ mistakes are happening and what is impacting culture

Taking an identified patient safety issue from the frontline staff and create an action plan to resolve this is an early win for this program and staff buy-in
Objective
Remove barriers, enhance trust so their issues are surfaced and addressed, allow learning and improvement with a local ownership of this process (i.e., “not here to blame or audit”).

Strategies (to surface barriers)
Review recent incident reports, infections, complications, safety culture results; were Culture Checkup Tool actions taken? Learning from Defects tool issues: (What happened, Why did it happen, what have you done to reduce the likelihood of it recurring with different caregivers, how will you know risk was reduced, and with whom did you share the lessons learned?), Follow up on actions to address issues from previous visits

Sample questions
“How will the next pt in this clinical area be harmed?”
“Was a pt recently harmed because of less-than-safe care?”
“What can this unit do on a regular basis to improve safety?”

Evidence shows that the % of caregivers exposed to rounds over time should be maximized (via # rounds & connecting with different caregivers each visit).

www.dukepatientsafetycenter.com

What do I need to know?
Monthly executive partnerships whereby the same executive visits the same unit (1 hr), serve to build local ownership, trust and capacity for ongoing quality improvement. Encourage and reward staff for innovation and questioning the status quo. When combined with monthly use of the Learning from Defects tool by staff, these partnerships are most productive. Over time, the need for the executive decreases as staff comfort with defect tool increases.

What do I need to do?
Executive (e.g., VP or higher) works with unit-based safety officer to schedule predictable monthly meetings. Over 12 month period, at least 50% of staff should have opportunity to participate at least once. Identify up to 7 issues, but no more than 2 action plans per month (only one can be adaptive, as they take longer).

What should I be worried about?
Pace — don’t tackle too many complicated issues too quickly, and don’t solve all the simple issues in the first 2 months either, balance approximately one technical and one adaptive issue per month with specific tasks and timelines. Help with their Learning from Defects tool.

Adapted from:
Thomas E, et al. BMC Health Serv Res. 2005; Jun 8;5(1).

FAST FACTS
Executive Safety Partnerships
Best Practices: Humble Curiosity

• Help your staff to feel heard – unheard staff find an ear elsewhere, at your expense

• Remember your role as a leader isn’t always to solve problems, it is, at times to listen to staff and learn from them while you empathize

• Show curiosity in staff feedback –
  – Don’t be defensive: defensive leaders have defensive followers

  if you are defensive: “Why was that so low…,” they will be defensive and not engage

  instead engage “Teach me, what can be done to remove barriers so that your concerns are addressed?”
Learn from a Defect Tool

- Designed to rigorously analyze the various components and conditions that contributed to an adverse event and is likely to be successful in the elimination of future occurrences.
- Tool can serve to organize factors that may have contributed to the defect and provides a logical approach to breaking down faulty system issues.
Learning from Defects Tool

What happened?
(brief defect description)

Why did it happen?
(what factors contributed + and -)
System factors (e.g., historical precedent, staffing, workload, equipment, production pressure, other departments, caregiver factors [training/fatigue/attitude], management support, physical environment [space/noise], failure of policy/procedure, patient condition [complexity/language])

What can we do to reduce the risk of it recurring with different caregivers?

How will we know the risk was reduced?

With whom should we share our learning?

What do I need to know?
Purpose of learning from defects in a structured way is to help this clinical area “learn how” to operationalize best practices so that they solve problems while building capacity to improve quality in the future.

What do I need to do?
Use brief (30–60 min) defect learning discussions to explore & resolve system factors involved in the defect. Focus discussion on specific actions to reduce the likelihood of defect recurrence.

What should I be worried about?
Protected time to discuss monthly or in response to an event in the unit, meet in a safe place for open discussion, try to keep group size to 5 or fewer if possible.

Adapted from:

FAST FACTS
Mindfully Learning from Defects

www.dukepatientsafetycenter.com
Finding Defects to Learn From

- Staff feedback/issues identified on unit
- Event reporting
- Quality and safety measures
- Gaps in application of the evidence
- Have staff complete short 3 question survey
Mistakes and near misses are defects

- Have each ICU present learning from a defect each quarter----now doing monthly
  - NG placed in the lungs
  - Missed respiratory treatments
  - Delay in radiology tests for ICU pts
  - Non-compliance with contact precautions

*This is very hard to continue to do, we did it first for the first year. We didn’t keep it up----but are now doing this almost daily through our huddles, The biggest challenge is following up on each action plan giving the feedback to the staff.*
Tools and strategies to improve safety, communication and teamwork

- Daily rounds/goals
- Pre-procedure briefing
- Morning briefing
- Huddles
  - Learn from a defect
  - Executive Safety Rounds
  - Standardize handoffs
- Simulation
- Crucial Conversations
CUSP Communication & Teamwork

Tools Interventions

- Multidisciplinary Rounds with Daily Goals
- Structured Huddles
Multidisciplinary Rounds with Daily Goals – What is it?

- A strategy to assemble the patient care team members to review important patient care and safety issues and improve collaboration on the overall plan of care for the patient
- Improve communication among care team and family members regarding the patient’s plan of care
- Goals should be specific and measurable
- Documented where all care team members have access
- Checklist used during rounds prompts caregivers to focus on what needs to be accomplished that day to safely move the patient closer to transfer out of the ICU or discharge home
- Measure effectiveness of rounds—team dynamics, communication, quality measure compliance, LOS
Evidence For Impact Of MDR

- Research studies on the effect of structured interdisciplinary rounds show:
  - Earlier identification of clinical issues
  - More timely referrals
  - Improved ratings by nurses and physicians on teamwork, communication and collaboration.

- Research also indicates variable effects on LOS and cost, with some studies showing improvement and others having no impact.

**Improving teamwork: impact of structured interdisciplinary rounds on a medical teaching unit.**

The Effect of Multidisciplinary Care Teams on Intensive Care Unit Mortality
Arch Intern Med Feb 22, 2010

• Retrospective cohort study (using state discharge data from Pennsylvania Health Care Cost Containment Council)
• 112 hospitals
• Non-cardiac, non-surgical ICUs
• 30 day mortality
• Looked at 3 types of multidisciplinary care models
  • multidisciplinary care staffing alone
  • intensivist physician staffing alone
  • interaction between intensivist physician staffing and multidisciplinary care teams
# The Effect of Multidisciplinary Care Teams on Intensive Care Unit Mortality

*Arch Intern Med*  Feb 22, 2010

## Association Between Intensivist Physician Staffing and 30-Day Mortality for All Patients

<table>
<thead>
<tr>
<th>Variable</th>
<th>Value</th>
<th>OR (95% CI)</th>
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<tbody>
<tr>
<td><strong>Model 1: multidisciplinary care staffing alone</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>- No multidisciplinary care</td>
<td>1 [Reference]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Multidisciplinary care</td>
<td>0.84 (0.76-0.93)</td>
<td>.001</td>
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<tr>
<td><strong>Model 2: intensivist physician staffing alone</strong></td>
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</tr>
<tr>
<td>- Low intensity</td>
<td>1 [Reference]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- High intensity</td>
<td>0.84 (0.75-0.94)</td>
<td>.002</td>
<td></td>
</tr>
<tr>
<td><strong>Model 3: interaction between intensivist physician staffing and multidisciplinary care teams</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Low intensity + no multidisciplinary team</td>
<td>1 [Reference]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Low intensity + multidisciplinary team</td>
<td>0.88 (0.79-0.97)</td>
<td>.01</td>
<td></td>
</tr>
<tr>
<td>- High intensity + multidisciplinary care</td>
<td>0.78 (0.68-0.89)</td>
<td>.001</td>
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</tbody>
</table>
Multidisciplinary Rounds with Daily Goals

Challenges and Opportunities

- Should be done in ICUs and all units in hospital
- Hard initiative to implement, especially if you have an open unit and/or no intensivists or in non-ICU area
  - Standardize the structure and process for all units
  - Benefits seen even if physician can not attend consistently or at all
  - Second rounds should be done in afternoon—include at least physician and bedside nurse
    - Evaluate if goals for day have been met; readjust if necessary
    - Identify if patient can be discharged (or transferred) the next day and if so, what needs to be accomplished
Multidisciplinary Rounds with Daily Goals

- Focused first on defining daily goals and recording those either on the white board in the room or on a sheet of paper
- Then standardize rounds—who should attend and what is discussed
- Implemented checklist or nursing objective card
Spectrum of MDR

- Community hospital with all private practice physicians or hospitalists
  - ICU
  - Non-ICU
- University affiliated teaching hospital—ICUs with dedicated intensivists

Remember purpose of MDR:
- A strategy to assemble the patient care team members to review important patient care and safety issues and improve collaboration on the overall plan of care for the patient
- Improve communication among care team and family members regarding the patient’s plan of care
Multidisciplinary Rounds with Daily Goals

Steps to Implementation

1. Commitment by all that MDR with daily goals is a strategy that will be implemented to improve communication and patient outcomes
2. CUSP team takes on initiative—identify if there are any additional team members needed
3. Evaluate current rounding process
4. Identify gaps between current process and what you want it to look like
5. Define the standard work of rounds, roles and responsibilities of each member and develop checklist and goal process
6. Define metrics to evaluate MDR
Current State Assessment

What is the state of rounds on your unit?

- Describe unit structure (i.e. ICU, non-ICU, open unit, closed unit, intensivist, hospitalist)
- How often are rounds held?
- Who usually attends rounds?
- What are the roles of each member?
- Where do rounds usually take place?
- Is there a defined structure/process for rounds? If so what is it? Or does it depend on who is running them?
- How have rounds made a difference during the past year in improving the performance on your unit?
- What is the major barrier for multidisciplinary round implementation on your unit?
Multidisciplinary Rounds with Daily Goals

Steps to Implementation

4. Identify gaps between current process and what you want it to look like

5. Define the standard work of rounds, roles and responsibilities of each member and develop checklist and goal process

6. Define metrics to evaluate MDR
Future State
What Multidisciplinary Rounds should look like?

- Video samples
- Defined and agreed upon purpose and goals for MDR with DG
- Consistent time, members, member roles and structure to rounds
- Defined checklist and daily goal documentation
Standardized Work Paradigm

Old Paradigm - I know you’ll be able to figure it out. Just get it done the best way you can.

New Paradigm - In order to have consistent results we must do things the same way every time.
Standard Work System

- Standardized Work is a system for achieving a stable baseline for a process in order to systematically improve it.
- Standardized Work Systems are the basis for Continuous Improvement.

“*What you permit, you promote*”

“*We deserve what we tolerate*”
<table>
<thead>
<tr>
<th>Task</th>
<th>Responsibility</th>
<th>Due Date</th>
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<tbody>
<tr>
<td>Obtain executive buy-in</td>
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<tr>
<td>Define members of rounds and their roles</td>
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<td></td>
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<tr>
<td>Define time of day and frequency</td>
<td></td>
<td></td>
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<tr>
<td>Structure of rounds:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Review of systems (or major issues)</td>
<td></td>
<td></td>
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<tr>
<td>• Define components of checklist</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Time for each patient</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Documentation:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• What is documented in medical record</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• daily goal—where is it documented?</td>
<td></td>
<td></td>
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<tr>
<td>Define metrics and evaluation process</td>
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</tbody>
</table>
Who?

- **Physician**
  - Team leader: guide rounds, ensure follow defined process, elicit input from all members, summarizes define daily goal

- **Resident:**
  - Present patient in system format
  - Place orders in computer during rounds
  - Document note in chart

- **Bedside nurse**
  - Provide clinical information, current patient status, changes over previous 24hrs, patient or family concerns/issues (if not present on rounds)
Who?

- Case manager/social work
  - Could function as leader if physician not present
  - Oversee discussion of discharge planning
  - Define patient/family concerns/issues

- Charge nurse/CNS/CNL
  - Function in leader role if designated and physician not present

- Others
  - Pharmacist, respiratory therapy, PT/OT, pastoral care, palliative care
Structure of MDR

- Time of day
- Frequency
- Process for each patient
  - Checklist
- Documenting
  - Which pieces of rounds?
  - Daily goal
- Define daily goal follow up process
**Patient Daily Goals Form**

**Lakeland Hospital CCU Patient Daily Goals**

- **Date:** [ ] / [ ] / [ ]
- **Room Number:** [ ]

- **Patient mechanically ventilated:** ☐ Yes ☐ No
- **HOB @ 30 degrees:** ☐ Yes ☐ No
- **Weaning trial today:** ☐ Yes ☐ No
- **Patient on sedation:** ☐ Yes ☐ No
- **Daily sedation interruption ordered:** ☐ Yes ☐ No
- **Able to follow commands:** ☐ Yes ☐ No
- **Ramsey Scale:** [ ]

- **Central lines in place and reviewed for removal:**
  - **Type and location placed:**
  - **Date Placed:** [ ] / [ ] / [ ]
  - **Date D/C’d:** [ ] / [ ] / [ ]

- **Central lines discontinued due to ?? infection:** ☐ Yes ☐ No
- **Lab work reviewed including culture results:** ☐ Yes ☐ No
- **Foley catheter in place:** ☐ Yes ☐ No
- **Medication list reviewed for changes needed:** ☐ Yes ☐ No

- **Mobility:** ☐ Bedrest ☐ Up in chair ☐ PT/OT Consult ☐ nn

- **Restrains order signed (if applicable):** ☐ Yes ☐ No

- **Skin Issues:**
  - If yes, was there an ET nurse consult completed: ☐ Yes ☐ No

- **Code Status determined:** ☐ Yes ☐ No ☐ NA

- **Emotional/Psychosocial/Spiritual Needs Addressed:** ☐ Yes ☐ No

- **Family Issues Addressed:** ☐ Yes ☐ No

**Patient Daily Goals: Steps we need to take to ready patient for transfer out of CCU:**

- [ ] [ ] [ ] [ ] [ ]

**Test/Procedures scheduled for today:**

- [ ] [ ] [ ] [ ] [ ]

**What is the patient’s greatest risk today and how can we decrease that risk?**

**Comments:**

**Goals reviewed by Intensivists and Nursing (Please initial):**

- [ ] [ ] [ ] [ ] [ ]
  - **7a-7p RN:** ☐ Yes ☐ No ☐ RN initials
  - **Intensivist:** ☐ Allen
  - **7p-7a RN:** ☐ Yes ☐ No ☐ RN initials
  - **Intensivist:** ☐ Hempel
  - ☐ Nwakamma

**Place patient sticker here**

**Return to Rita’s mailbox after 48 hours in nursing chart!**

---

**Patient Daily Goals Form**

**NOT A PART OF THE PERMANENT MEDICAL RECORD-DO NOT SCAN**

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**Place patient sticker here**

**Return to Rita’s mailbox after 48 hours in nursing chart!**
# Daily Goal Sheet

## Interdisciplinary Critical Care Plan and Daily Goals – CCU

<table>
<thead>
<tr>
<th>Relevant System / Discipline</th>
<th>Key: “Yes” = issues identified needing to be addressed (list issues) “No” = no issues identified</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Date:</strong> Time: Initials:</td>
<td>Date: Time: Initials: Date: Time: Initials: Date: Time: Initials:</td>
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</table>

### Goal(s)

<table>
<thead>
<tr>
<th>Patient greatest safety issue</th>
</tr>
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</table>

### Lab work / tests

<table>
<thead>
<tr>
<th>Tests / Procedures for today</th>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Neurologic (alert / oriented w/o deficit)</th>
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<table>
<thead>
<tr>
<th>Cardiovascular</th>
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<table>
<thead>
<tr>
<th>Respiratory / vent management</th>
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<table>
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<tr>
<th>Renal / Fluid Status</th>
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</table>

<table>
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<tr>
<th>GI / Nutrition</th>
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<table>
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<tr>
<th>Endocrine</th>
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</table>

<table>
<thead>
<tr>
<th>Pain / Sedation medications</th>
</tr>
</thead>
</table>

### Relevant System / Discipline

- **Admit**
- **Culture**
- **HgA1C**
- **Culture**
- **Hgb**
- **Hct**
- **K+**
- **Cr+**
- **CPK**
- **Hgb**
- **Hct**
- **K+**
- **Cr+**
- **CPK**
- **Troponin**
- **Hgb**
- **Hct**
- **K+**
- **Cr+**
- **CPK**
- **Troponin**
- **Lab work / tests**
- **Tests / Procedures for today**

### Key

- **Yes**
- **No**
- **LOC**
- **Seizure Precautions**

### Relevant System / Discipline

- **Date: Intubated**
- **Date Exhusted**
- **Reintubation required**
- **Combivent / Nebs**
- **ARDS: Low TV management**

### Relevant System / Discipline

- **Baseline Cr**
- **Output goals**
- **Recognize Daily weight gain / loss**

### Relevant System / Discipline

- **Baseline Prealbumin**
- **Enteral tube feeding protocol**
- **Supplements/speech evaluation**
- **Document malnutrition**
- **Bowel management**

### Relevant System / Discipline

- **Glucose control: Goal 80 – 120, if intubated, blood sugar every 6 hours. If blood sugar 121 – 149, initiate diabetic management orders. Hypoglycemia protocol utilized**

### Relevant System / Discipline

- **Glucose 80 – 110 mg/dL**
- **Steroids**

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### Relevant System / Discipline

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- **Steroids**
<table>
<thead>
<tr>
<th>Activity – Skin – Mobility</th>
<th>Long term discharge goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Adequate activity progression, no skin breakdown)</td>
<td>“If Braden ≤ 18 at risk for skin breakdown”</td>
</tr>
<tr>
<td>VAD</td>
<td><strong>DVT prophylaxis</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Consult ET RN</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Dressing, wound, incision</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Pressure ulcer prevention standard</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Impaired skin management standard</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Safety / Restraints</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>No</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Family – Psychosocial – Spiritual</th>
</tr>
</thead>
<tbody>
<tr>
<td>No ethical concerns, e.g., end of life issues, financial issues</td>
</tr>
<tr>
<td>Spokesperson</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Discharge / Transfer Plans</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long term discharge goal</td>
</tr>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>No</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Medication Review</th>
</tr>
</thead>
<tbody>
<tr>
<td>(no concerns re: IV to PO, home med, renal adjustments, sedation requirements, new allergies, adverse reaction, unnecessary medications)</td>
</tr>
<tr>
<td>Yes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other patient specific issues / Other needed consults</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMI / ACS Indicators</td>
</tr>
<tr>
<td>Cardiac Cath</td>
</tr>
<tr>
<td>ACE for EF &lt; 40%</td>
</tr>
<tr>
<td>CHF Indicators</td>
</tr>
<tr>
<td>ACE for EF &lt; 40%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RN Signature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date:</td>
</tr>
<tr>
<td>Time:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Intensivist Signature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date:</td>
</tr>
<tr>
<td>Time:</td>
</tr>
</tbody>
</table>
Nursing Card
(SJMHS Interdisciplinary Rounds Checklist)

VAP
Delirium
Sepsis
<table>
<thead>
<tr>
<th>Task</th>
<th>Responsibility</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obtain executive buy-in</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Define members of rounds and their roles</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Define time of day and frequency</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Structure of rounds:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Review of systems (or major issues)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Define components of checklist</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Time for each patient</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Documentation:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• What is documented in medical record</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• daily goal—where is it documented?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educating staff</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Define metrics and evaluation process</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
MDR with DG Evaluation: Outcome Metrics

- Length of Stay
- AHRQ HSOPS results
  - “In this unit, people treat each other with respect”
  - “Staff feel free to question the decision or actions of those with more authority”
  - “Staff are afraid to ask questions when something does not seem right”
## MDR with DG Evaluation: Survey the Process

<table>
<thead>
<tr>
<th>Attending:</th>
<th>Resident:</th>
</tr>
</thead>
<tbody>
<tr>
<td>RN:</td>
<td>Intern:</td>
</tr>
</tbody>
</table>

Circle others in attendance: Pharmacy Nutrition Respiratory Therapy CNL

Room #: __________________

Rounding outside patient room: yes no

Nursing notified: yes no n/a

Nursing present during rounds: yes no

RT present during rounds: yes no

Checklist followed as outlined: yes no

(If no, what objectives were omitted) __________________________________________

Sepsis screen, sepsis bundles reviewed/signed by team: yes no

Daily goals in room board updated by intern: yes no

Plan of care/daily goals clarified with team: yes no

Nursing questions/concerns addressed: yes no n/a

Physician questions/concerns addressed: yes no

Patient/family questions/concerns addressed: n/a

Were team members listening to each other: yes no

Did leaders ask others for input: yes no

Feedback to team members (professionalism, team interaction, timeliness, efficiency, thoroughness, organization and clarity):

_____________________________________________________________________________________________

Was criticism positively presented: yes no
MDR with DG Evaluation
Survey the Participants

5 point scale

- Was your voice/opinions heard and valued?
- Did you have a understanding of what the goals and plan for the patient was for the day?
- Did the leader facilitate the rounds to ensure efficiency and open communication?
- What was the goal for day for each patient?
- Did MDR with DG improve how you cared for your patient?
- What worked?
- What could be improved?
Enable teams to have frequent but short briefings so that they can stay informed, review work, make plans, and move ahead rapidly.

Allow fuller participation of front-line staff and bedside caregivers, who often find it impossible to get away for the conventional hour-long improvement team meetings.

They keep momentum going, as teams are able to meet more frequently.

*Beginning to use this strategy to begin to recovery immediately from defects---IE: falls, sepsis*
**Components**

Metric 1: Quality/Safety  
Metric 2: Patient Satisfaction  
Metric 3: Operations

**Daily Critical Communications**

**Information**

**Ideas in Motion**

**How to do it?**

- Beginning or mid shift  
- 5-10 minutes  
- Lead by member of unit leadership team
## Structured Huddles Action Plan

<table>
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<tr>
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<td></td>
</tr>
<tr>
<td>Order Huddle board</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Select Huddle metrics for first board: operational, quality/safety and patient satisfaction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Define huddle process:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Define time of day and frequency</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Who will lead huddle</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Expectations of staff—who will attend</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Create agenda (in first huddles include overview of purpose of huddles and huddle process)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hang huddle board and fill in metrics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Identify when huddles will begin</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Define process for changing huddle metrics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Create evaluation process: how will I know if huddles are successful?</td>
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</table>
SICU Huddle Board

**SEPSIS**
- Resuscitation goals met ≤ 4 hours
- # of pts resus ≤ 4°
- Goal 80%
- # of septic pts.
- 2/3 = 66%

**Quality/Safety**
- **Improve Pain Reassessment**
  - Reassessment after pain meds
  - # of episodes reassessed after med (PRN)
  - 11
  - # of episodes auditioned
  - 24
  - 78% Goal 100%

**Operations**
- **Decrease Length of Stay in SICU**
  - Early recognition of delirium using CAM-ICU
  - # of pts 2 completed CAM-ICU for last 24h
  - 20/38 = 52%

**Daily Critical Communications**
- *Please complete Safety attitude Questionnaire* See Nurse Coordinators
- *Please document CAM-ICU & RASS as a comment for all patients*

**Skin**
- # of days since last pressure ulcer developed in SICU
- Unit Incidence Rates
  - Jan: 13.3%
  - Dec: 0.7
  - Nov: 0.1

**Ideas in Motion**
1. Re-education for staff → Presep cath
2. Education for families about delirium
3. Use RN objective Cards during RN RN visits
Surgical Unit Huddle Board

Hand Hygiene
- 93% S/H Audit
- 90% No Hand Wash

Goal: 100%

Entrance & Exit

Pain Goal
- 33% NPO
- 25.2% NG/PR
- 72.2% NPO

Goal 20%

Kudos to:
- Tanja
- Ann
- N. Ana

Discharge by 11 AM
- Goal: 2-3 pm/day (25%)

Last Week
Average
33%

Critical Communications
Bed Alarms: 831, 820

Restraints: 832

Days Fall-Free: 10
Medical Unit Huddle Board

- **Caution**:
  - # that meet criteria
  - # patients w/ Foleys
  - Pneumovax: 652, 1653 - need

- **Mobility**:
  - #1 chair or beyond
  - # eligible

- **Admit Med History**:
  - 2 complete in 8 hours
  - 2 new admits
  - Good job Hadley...

- **Daily Critical Communications**:
  - (PNA screening): Do NOT choose "unable to determine" (this should never be used)

- **Ideas in Motion**:
  1. Move monitor to side in alcoves so we can see the monitor when our C.O.W. is plugged in
  2. Get only the PCU call lights to keep so we do not have call light fatigue & MICU light
Selecting Metrics

- Should reflect improvement opportunities that have been identified by unit, aligned with unit and hospital goals and objectives
- Must be specific and measurable – and feasible to monitor frequently
- Identify who will be collecting data and updating board
- Define goal for metric---this will help you decide how long to keep metric going

Quality: IE: core measures, handwashing, falls, delirium, skin etc

Patient Satisfaction: IE: use results from hospital’s patient satisfaction survey----- pain is controlled, noise at night etc

Operations: IE: unit functioning, efficiencies---% of patients discharged by 11am, time from transfer or discharge order till patient moved
Selecting Metrics

**Quality:** (IE: core measures, handwashing, falls ect)

Med-surg: pneumonia core measure—your unit is falling short in one area—vaccination.

Metric:  
- # of patients who received the vaccine (PNE)
- # of patients who qualified for it

ICU: ventilator associated pneumonia prevention—your unit is not consistently performing the spontaneous awakening trial (SAT)

Metric:  
- # of patients who received a SAT
- # of patients who qualified for SAT

LAB: turnaround time for stat lab—CBC

Metric:  
- # of CBC resulted within 30 minutes
- # of CBC in previous 24 hrs
Selecting Metrics

Patient Satisfaction:

IE: use results from hospital’s patient satisfaction survey-

Med-surg: call lights being answered within 5 minutes
  Metric: # of call lights answered within 5 minutes
  # of call lights in 24 hrs

ICU: pain reassessment in 1 hour
  Metric: # of patient who’s pain was reassessed in 1 hour
  # of patient episodes audited

Radiology: patient waiting
  Metric: # of in-patients that waiting in the hallway 5min
  # of inpatients brought to department for testing in 24 hrs
Selecting Metrics

Operations: IE: unit functioning, efficiencies-
- Med-surg: percent of patients discharged by 11am
  Metric: \# patients discharged by 11am
  \# of patients with discharge orders in place before 11am
- ICU: delirium assessment
  Metric: \# of patient with 2 documented CAM-ICU in last 24 hours
  \# of patient in ICU
- Radiology: no show rate
  Metric: \# of out patients that miss schedule appointment
  \# of outpatients scheduled for testing in 24 hrs
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<td></td>
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</table>
Huddle Evaluation: Outcome/Process Metrics

- Improvement in metrics on huddle board

AHRQ results:

- “Our procedures and systems are good at preventing errors from happening”
- “We are actively doing things to improve patient safety”
- “After we make changes to improve patient safety, we evaluate their effectiveness”
- “In this unit, we discuss ways to prevent errors from happening again”
Structured Huddles Evaluation: Survey the Staff

1. Select which department you work for:
2. I have attended a daily huddle
   - Once
   - 2-5 times
   - 5-10 times
   - 10-20 times
   - 20 or more times
   - I have not attended a huddle
3. I understand the purpose of the daily huddles
   - Strongly agree
   - Agree
   - N/A
   - Disagree
   - Strongly Disagree
4. I feel comfortable asking questions and expressing ideas during the huddles
   - Strongly Agree
   - Agree
   - N/A
   - Disagree
   - Strongly Disagree
Structured Huddles Evaluation: Survey the Staff

5. I feel that the daily huddle provides me with information to be able to provide safe, effective and efficient care to my patients
   - Strongly Agree
   - Agree
   - N/A
   - Disagree
   - Strongly Disagree

6. The huddle board has provided me the opportunity to see how my practice impacts patient outcomes
   - Strongly Agree
   - Agree
   - Disagree
   - Strongly Disagree

7. The huddle board and daily huddles empowers me to improve my own practice
   - Strongly Agree
   - Agree
   - Disagree
   - Strongly Disagree

8. Please provide any suggestions to improve both the huddle board and the huddle process
## CUSP-Challenges and Strategies

<table>
<thead>
<tr>
<th>Issues</th>
<th>Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engaging frontline staff (including off-shifts) owning this work</td>
<td>Part of team (especially night shift staff), bulletin boards, newsletters,</td>
</tr>
<tr>
<td>Timely follow through with identified defects or safety issues and</td>
<td>Manager shares updates/status at staff meetings, communication at huddles,</td>
</tr>
<tr>
<td>strategies to resolve</td>
<td>created huddle book</td>
</tr>
<tr>
<td>Continued engagement of the executive</td>
<td>MHA Keystone letters to executive, locally at each hospital—through one on</td>
</tr>
<tr>
<td></td>
<td>one on one conversations</td>
</tr>
<tr>
<td>Implementing strategies and tools to help improve culture and</td>
<td>Learn from a defect, MDR with focus on communication, survey team members</td>
</tr>
<tr>
<td>teamwork</td>
<td>on perception of communication, morning briefings, debriefings, huddles,</td>
</tr>
<tr>
<td></td>
<td>crucial conversations</td>
</tr>
<tr>
<td>Continual learning from defects</td>
<td>Have each unit learn from a defect monthly and share at meetings</td>
</tr>
</tbody>
</table>
Lessons Learned

- Spend sufficient time on CUSP before moving on to implementing practice changes.
- CUSP is the foundation and needs to be a continued focus-----forever!!!!
- Must work on culture and team improvement strategies throughout the journey.
- **CUSP must be unit based.** Culture is different on each unit, therefore opportunities for improvement and strategies might be different.
- Define at beginning a communication plan that includes all levels of the organization.
- *This work must be the responsibility of everyone, but important to have someone who’s job is to focus and drive this daily.*
Can we change practice through process improvement alone?

or

Will successful change require an altering of the value structure within the unit?
“In medicine, as in any profession, we must grapple with systems, resources, circumstances, people--and our own shortcomings, as well. We face obstacles of seemingly endless variety. Yet somehow we must advance, we must refine, we must improve.”

Atul Gawande, *Better: A Surgeon’s Notes on Performance*
QUESTIONS