DOM M & M Task Force Report

Heidi Wald, MD, MSPH
Jonathan Pell, MD
It depends on whom you ask
Why look at M & M?
Mission

- Inventory, examine and standardize and disseminate approach to M & M conferences.
Vision

- All clinically active providers (faculty, trainees, mid-level providers) have access to and participate in high quality M & M on a regular basis.

- High quality M & M = incorporates best practices from the literature
Participants

- Heidi Wald, VC Quality
- Chip Ridgway, VC Clinical Affairs
- Suzanne Brandenberg, VC Education
- Kevin Hartman/Noelle Northcutt, Chief Residents
- Darlene Tad-y, GIM/Hospitalist
- Wag Schorr-Ratzlaff, GIM/Outpatient
- Christie Heller, GI
- David Katz/Ashley Fitzgerald, Chief Cards Fellows
- Paul Varosy, Cards
- Ivor Douglass, Pulm/CC
- Jonathan Pell, GIM/Hospitalist
- Ellen Burnham, Pulm/CC
- James Cooper, Renal
- Alkesh Jain, Renal
- Sterling West, Rheum
- Jeff Wallace, Geri
- Chris Lieu, Onc
- Steve Dreskin, A & I
- Aran Nichol, ID
- Kathy Hassell, Heme/BMT
- Celia Wang, Endo
- Lindsie Klingman, RN, MBA, CEPS
- Laura Kozarek, RN Risk Management
- Gerry Barber, Pharm D
Task Force Activities

- Phase 1

- Phase 2

- Phase 3

DOM M and M Steering Committee. Revised on 7-1-2013
Best Practices

- Capture of cases
- Standardized analysis
- Interprofessional participation
- Reporting to risk management and graduate medical education
- Development of PI projects
Standard fishbone diagram

Figure 2 - Fishbone Diagram Illustrating Categories of Latent Failures

- **Environment**
  - Economic pressures
  - Care delivered along specialized service lines
  - Physician coverage system

- **Information Technology**
  - Patient scheduling system
  - Protocol for sending patients for procedures

- **People**
  - Patient Provider Communication
  - Design of cardiac EP suite

- **Processes**
  - Protocol for sending patients for procedures

- **Organization**

- **Problem**
Cognitive-systems fishbone diagram

Clinical Assessment  Communication  Medical Decision Making  Professionalism  Medical Knowledge

People  Environment  Organization  Processes  Information Technology  Equipment

Problem
# Vanderbilt Matrix

## Healthcare Matrix: Care of Patient(s) with....

<table>
<thead>
<tr>
<th>ACGME Competencies</th>
<th>SAFE¹</th>
<th>TIMELY²</th>
<th>EFFECTIVE³</th>
<th>EFFICIENT⁴</th>
<th>EQUITABLE⁵</th>
<th>PATIENT-CENTERED⁶</th>
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<td><strong>IOM Aims</strong></td>
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<td><strong>Patient Care</strong></td>
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<td>(Overall Assessment)</td>
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<td><strong>Medical Knowledge &amp; Skills</strong></td>
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<td>(What must we know?)</td>
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<td><strong>Interpersonal &amp; Communication Skills</strong></td>
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<td><strong>Professionalism</strong></td>
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<td>(How must we behave?)</td>
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<td><strong>System-Based Practice</strong></td>
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<td>(What is the process? On whom do we depend? Who depends on us?)</td>
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<td><strong>Practice-Based Learning &amp; Improvement</strong></td>
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<td>(What have we learned? What will we improve?)</td>
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**Assessment of Care**

**Improvement**

**Information Technology**

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DOM Inventory (n=14)

<table>
<thead>
<tr>
<th>Component</th>
<th>Yes N (%)</th>
<th>Comments</th>
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<tbody>
<tr>
<td>Interdisciplinary</td>
<td>6 (42%) always, 2 (14%) sporadically</td>
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<tr>
<td>Standardized case finding</td>
<td>4 (28%)</td>
<td>10 (71%) gathered/chosen by CMR or faculty</td>
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<tr>
<td>Standardized analysis</td>
<td>4 (28%)</td>
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<tr>
<td>Leads to PI Projects</td>
<td>5 (42%) routinely, 3 (21%) ad hoc</td>
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<tr>
<td>Risk/GME reporting</td>
<td>2 (14%)</td>
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Opportunities and Challenges
The Peer Review Process

STEP 1
Identification of Cases

- Mortalities
- Morbidity (e.g. IHI global trigger tool, other events)
- Metric Variance (specialty specific metrics)
- Other care concerns (Provider referral, Self report, Incident Reports)

STEP 2
Peer Review Process

- Systems Concern
- Provider Concern
- No Concern

STEP 3
Disposition

- Performance Improvement (Division, Department, SOM, UCH)
- Individual remediation
- Closed Case

STEP 4
Reporting

- Department
- Risk
- GME

Conference (M and M)
Proposed Quality/Peer Review Committee Hospitalist Medical Group

- **Committee:**
  - Physician lead
  - Staff MD (rotating)
  - IM Resident (rotating)
  - QI RN
  - Medical Nursing
  - Pharmacy
  - others
Recommendations

- ACCESS
- STANDARDS
- RESOURCES
Recommendation 1: ACCESS

- DOM divisions and/or clinical units must provide opportunities for M & M participation for all clinical faculty and trainees.
  - Incorporate into ongoing conference series; combine with another division or unit.
  - Align current series with best practices
  - Identify a faculty coordinator
- Affiliate faculty participation/uptake encouraged
Recommendation 2: STANDARDS

- Commitment to best practice standards
- Implementation of best practices may be phased, particularly inputs (case identification) and outputs (PI projects)
Recommendation 3: RESOURCES

- **Short term needs**
  - Identify division coordinators
  - Provide toolkit
  - Provide consultation
  - Form DOM steering committee
    - Monitor and develop metrics
    - Form project team
  - Improve case report form and process
Recommendation 3 (con’t)

- Intermediate to long term needs:
  - Develop central database of cases
  - Pilot new case identification processes and peer review committees
  - Staffing to address DOM action items
Pilot Testing

- DOM Residency Program M & M
- Subcommittee
  - Noelle Northcutt, Kevin Hartman, Darlene Tad-y, Suzanne Brandenburg, Jonathan Pell, and Heidi Wald
Turnout was high
Preparation is significant
Tools and Balance
A Toolkit for M&M Redesign

Darlene Tad-y, Jonathan Pell, and Heidi Wald
Toolkit Snapshot

- Preparing for the conference
  - Timeline for preparation
  - Tips for choosing a case
  - Facilitator notes

- At the conference
  - Agenda + Glossary of terms
  - Learner reflection sheet

- Post-Conference
  - Maintaining momentum
Timeline for Preparation

6 wks prior - People and Case

2wks prior -
- Confirm Discussants
- Know Questions
- Slides Complete
- Create Handouts

4 wks prior -
- Investigate and Teaching Points

3 wks prior -
- Interviews and Invites

M & M
Choosing a Case

- Recent event
- Need an Identifiable adverse event
- Learner involvement
- Systems and cognitive errors present
Facilitator’s Notes

- Feels comfortable discussing and dissecting systems issues
- Creating a safe environment
  - Begin by describing mission of conference
  - Reiterate confidential nature of conference
- Engage learners to reflect on event
  - Acknowledge emotions, discomfort, fears
  - Direct to identify systems and cognitive errors
Agenda

- Given time constraints, allocate time wisely
  - 20% - case presentation
  - 60% - discussion of errors and teaching points
  - 10% - focus on ways to improve
  - 10% - “wiggle room”

- Facilitator Direct discussion at times
  - Pointed questions towards audience and faculty
MISSION

M & M conference provides a safe venue in which to identify areas of improvement, and promote professionalism, ethical integrity and transparency in assessing and improving patient care. The purpose is to foster a climate of openness and discussion about medical errors amongst staff, students, residents, and faculty. Presenting cases in this fashion also provides an opportunity and atmosphere meant to promote leadership and inspire scholarly activity while delivering a learning opportunity and addressing the six core ACGME competencies.

Reminder:
All participants are reminded this is a privileged and confidential meeting – subject to peer review and medical review protections at University of Colorado Hospital and in the state of Colorado.

DOM M and M Steering Committee. Revised on 7-1-2013
M & M FOLLOW UPS

- August: Troponin Critical Calls - 3rd follow up
- September: CICU Nursing - METS
- October: Complicated Interventions - ECMO
- November: TBD
- December: TBD
FISH-BONE ANALYSIS

- Medical Knowledge
- Diagnostic Reasoning
- Therapeutic Choices
- Clinical Assessment

Sub-Cause

- Materials/Machines
- Personnel/People
- Communication Processes
- Environment

Cognitive Errors

ADVERSE EVENT

Systems Errors

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COURSE OF EVENTS

Case 1

38 yo F: T2N2a Stage III ER/PR/HER2+ BRCA
10/3/2012: FV to 39.4, presents to OSH, BCx: 1/2 GPC
10/5/2012: Fever, Rigors at home --> calls Onc
Direct Admission to UCH Onc Floor
Transfer to MICU 8 hours p/ admit
Admission Exam, Response to Tx
ICU Peri-Txfr Dx To Floor D19

67 yo M: Renal Cell CA w/ metastatic nodules s/p nephrectomy
IP out of state, Wound Vac for non-healing LE rads wounds
10/15/2012: FV x days, presents to clinic w/ FV, leg pain, mental status
Direct Admission to UCH Onc Floor
Admission Exam, Response to Tx
ICU Peri-Txfr Dx To Floor D13
Transfer to MICU 6 hours p/ admit

Case 2

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Guided Reflection

- Identify the Adverse Event
- Identify Errors
- Provision of “glossary of terms”
  - Presents systems-based concepts
  - Allows introduction of new vocabulary
- Serves as another vehicle to cement teaching points
threshold for transferring
Blood Gx + lopp
is reported to admitting doctor
triage potential to ICU, see through ED
follow up + admit advice
time to transfer + timing of intervention
comfort level + sick patients
levels of care depending on time of day
workload
available resources

- EMR translation b/w LOC
- patient preferences
- provider preferences
Post-Conference

- Debrief of presenter, facilitator, M&M committee
- Prioritize “actionable” suggestions made during the conference
- Engage clinical institution in addressing changes related to “actionable” items
- Provide update at subsequent conferences
Outcomes of Pilot August-Dec 2012

- August 2012 – implementation of new format
  - GIM, cardiology, pulmonology, oncology have since presented
  - Guest attendees: Family medicine, CT surgery
- Well-received by residents, students, and faculty
- Systemic changes incorporated in 3 months
  - Positive troponins to be called consistently
  - MET alert policy on CICU and Cards step down units clarified
  - CT surgery developing ECMO protocol
  - Review/revision of direct admission policy
  - Decision Making Capacity tool into EPIC
Challenges

- Case finding and preparation
  - Clinically interesting with significant systemic factors
- New format involves teaching QI/PS content
- 1 hour is not enough time for deep discussion
Thank you!