Practice and Academics Partnering to Improve Patient and Student Outcomes

Sigma Theta Tau Symposium
November 2015
Symposium Overview

• Presentation 1: Clinical Exemplar Overview
  – Dana Tschannen & Leah Shever

• Presentation 2: Exemplar #1
  – Mary Lynn Parker & Jole’ Mowry

• Presentation 3: Exemplar #2
  – Kate Gosselin & Inga Vitins
Exemplar Unit Initiative Framework: Engaging Faculty & Staff to Improve Patient & Student Outcomes

Dana Tschannen, PhD, RN & Leah Shever, PhD, RN
Clinical Excellence Initiative (CEI) Purpose

• Co-create a bold vision and design a partnership model between the School of Nursing and the Health System to advance scholarship, practice, and education
CEI Model

- Joint partnership with the Health System & University School of Nursing
- Faculty embedded on units in contrast to traditional teaching approaches
- Students are a part of the practice team (rather than guests) and work with a staff nurse mentor
Timeline of the CEI

- Pilot (2008-2009): piloted in two units/junior level
- Phase I (2009-2010): Roll out to all units/student levels
- Phase II (2011-2012): Clinical faculty hired and embedded
- Phase III (2013-2014): Exemplar Unit Initiative
Current State of the CEI

• Integrated across the UMHS
• Inpatient units have a dedicated faculty member (as applicable)
• All undergraduates receive the bulk of their clinical education at the UMHS
• Clinical leaders are adjunct faculty (as applicable)
• Faculty are integrated into the nursing governance structure
• Unit partnerships beginning work in quality improvement and evidence-based practice
Purpose of the Exemplar Units

• To fully actualize the Clinical Excellence Initiative on three exemplar units through a microsystem (i.e. unit) level approach.
  – Deeply embedding clinical faculty on their respective unit
  – Creating partnerships with unit leadership through the implementation of specific structure and process components.
  – ‘Model case’ for future deployment
Parties Involved

Exemplar Team

Directors, Nurse Managers
CNS, Supervisor, Unit-Based Committee Chair
Embedded Faculty & Cluster Lead
Associate Dean for Clinical Practice

Units

Adult Surgery
Adult Ortho Trauma
Adult General Medicine
Central Structures & Processes

• Exemplar teams will meet monthly
• An action plan will be developed
• The Cluster Lead, Associate Dean, and Nursing Director lead will make rounds
Monthly Meetings

- Participants: Cluster Lead, Associate Dean, Nursing Director lead, nurse managers, and faculty
  - Expanded based on feedback to include: Nursing Directors, CNSs, one supervisor, and one unit based committee chair
  - High level of engagement & participation
- Meeting topics: Identification of model of care component and quality area of focus, action plans, metrics for evaluation, process check, dissemination, IRB, etc.
<table>
<thead>
<tr>
<th>Section</th>
<th>Model of Care Focus</th>
<th>Patient Outcome Focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surgical</td>
<td>Self-Care Efficacy</td>
<td>Patient satisfaction with instructions for home</td>
</tr>
<tr>
<td>Ortho/Trauma</td>
<td>Patient Story</td>
<td>Patient satisfaction with pain</td>
</tr>
<tr>
<td>General Medicine</td>
<td>Patient Story</td>
<td>Falls</td>
</tr>
</tbody>
</table>
Action Plans

- Done by each unit team
- Included contribution of each member

<table>
<thead>
<tr>
<th>OBJECTIVES</th>
<th>ACTION STEPS</th>
<th>ACCOUNTABLE PERSON(S)</th>
<th>COMPLETION DATES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Produce monthly updates on falls with injury to staff and students.</td>
<td>Monthly unit meetings will contain a brief informational touch base on monthly fall rates (in addition to displayed number).</td>
<td>Julie, Sandra, Winnie, Kate</td>
<td>1/31/14</td>
</tr>
<tr>
<td>Educate students at the beginning of each semester regarding SAFE TEAM processes, and give them the SAFE TEAM TOOL</td>
<td>Two sophomore students will round every Thursday and Friday on 6B with SAFE TOOL, and record findings each semester</td>
<td>Kate</td>
<td>11/15/13 Pilot started</td>
</tr>
<tr>
<td>Increase staff awareness of student implementation of SAFE TEAM and current fall risk data</td>
<td>Use monthly unit meetings to give staff data from the SAFE TOOL regarding patients seen as fall risk, # of falls with injury, and EOC issues.</td>
<td>Kate supply information, Julie provides to staff</td>
<td>1/31/14</td>
</tr>
<tr>
<td>Increase collaboration between everyone</td>
<td>Collect literature from various resources using literature search with key words</td>
<td>Kate &amp; Inga</td>
<td>11/1/13</td>
</tr>
</tbody>
</table>
Rounding

- In the February team meeting this was identified as a gap
- Unit teams stated that rounding by leadership would be helpful
  - Important for staff to see involvement of SON & UMHS leaders
  - Started in March and was helpful
Rounding Observations

• Engagement of students, staff mentors, and unit leadership
  – Staff mentors change schedules to accommodate students
  – Team members can articulate unit focus area
• Mentors noted ‘change’ in student behavior
  – More prepared
  – Clarity in student ability and weekly focus
  – Students were seen as helpful and not a burden
• Staff RN Mentors spoke of unique partnership and ‘relationship’ with faculty member
• Students articulated their learnings from participation in the exemplar unit focus area projects
Additional Process Components

- Identified based on unit team needs/focus
- Meeting with Central Leads and individual unit teams to gain clarity around metrics
Unit Based Structures & Processes

• A patient quality outcome area of focus and one Patient Care Model component was identified
• CEI Central Leaders and unit level leaders meet to determine unit priorities
• The embedded faculty is a member of the unit based committees (UBC) providing leadership in a pre-identified area
• Embedded faculty communicates the learning expectations to the nurse mentors
Students review their learning goals with their mentor and embedded faculty

The nurse manager seeks opportunities to more fully embed the clinical faculty on the unit

The nurse manager communicates to faculty all major initiatives, priorities, that are impacting the unit

Problem-solve together

Quality improvement data is shared with clinical faculty
• Leads met prior to start of the semester to determine focus area
• Nurse manager is communicating to the clinical faculty all major initiatives, priorities, processes, and changes.
• Nurse manager shares quality improvement data with the clinical faculty as appropriate.

* All units teams did this PLUS more, resulting in a rich partnership *
Embedded Faculty

The embedded faculty is an actively engaged member of one of the unit based committees (UBC) providing leadership in a pre-identified area, (e.g., falls, collaboration, medication safety, standards of care related to a procedure, etc.)
Embedded Faculty

The embedded faculty communicates with the nurse mentors the general learning expectations for each level of learner on the unit.

Students review their learning goals for each day with their mentor and the embedded faculty.
Clinical Mentor Forums

Problem-solve with the clinical educator (and others) as issues arise related to students, nurse mentors, action plan items, etc.
Improving Orthopedic Patient Satisfaction With Pain Management Through Nursing Staff, Student and Faculty Collaboration

Mary Lynn Parker, MS, RN
Clinical Nurse Specialist, Orthopedic/Trauma Unit

Jole’ Mowry, MS, RN
Clinical Instructor, School of Nursing

SAFE (Student Assessment and Fall Evaluation) Team for Fall Prevention and Education

Kate Gosselin, DNP, RN, CEN
Clinical Assistant Professor, School of Nursing

Inga Vitins, BS RN
Staff Nurse, General Medicine Unit
Improving Orthopedic Patient Satisfaction With Pain Management Through Nursing Staff, Student and Faculty Collaboration

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Clinical Instructor, School of Nursing
Why Did We Choose Pain?

- Undermanaged orthopedic pain is challenging for patients and their families
  - Pain management is essential to nursing practice
  - Nurses often have little formal education in therapies
- Press Ganey scores for orthopedic patient satisfaction with pain management were declining
- Undergraduate students need strong foundational skills in patient communication and pain management
Overall Goals of the Project

- Implement project in Fall 2013 and Winter 2014 terms
- Improve patient satisfaction with pain management
- Increase Sophomore nursing students’ knowledge regarding pain assessment and management
- Demonstrate improved staff nurse mentor engagement in pain management
Nursing Mentor Role

- Learned about expanded role of embedded faculty
- Partnered with students to provide pain management
- Reviewed data gathered by the student
- Discussed pain plan with patient and student
- Participated in forums to obtain feedback regarding the student participation/intervention and the mentor role
Student Interventions

Students completed pre pain surveys to assess pain knowledge

Received education in pain management and assessment

Conducted patient pain management interviews

End of term!

Students completed post pain surveys to assess pain knowledge

Wrote patient’s current pain score and daily pain goal on the patient’s whiteboard

Performed pain assessments

Faculty evaluated if pain goals were met
Beginning of the term
• Students completed a pre-clinical survey to assess individual pain knowledge
  – Questions covered basic pain assessment, interventions and pain re-assessment
• Students received an evidence-based pain management lecture from the unit Clinical Nurse Specialist
  – Content was reinforced throughout term by embedded faculty
End of the term
• The same survey was repeated after the clinical experience
• Survey answers were scored and compared to evaluate if pain knowledge increased over the term
## Student Pain Knowledge Survey Results

<table>
<thead>
<tr>
<th>PROCESS METRICS</th>
<th>2013-2014</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FALL ‘13</td>
</tr>
<tr>
<td>“Pain Management and Communication Survey” knowledge (pre-clinical score)</td>
<td>79.2% (n=16)</td>
</tr>
<tr>
<td>“Pain Management and Communication Survey” knowledge (post-clinical score)</td>
<td>90.4% (n=16)</td>
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</table>
Patient Interview Survey

- Students interviewed patients experiencing moderate to severe pain (N=176)
  - Pain score(s) >5 in previous 24 hours
- Patients able to share their story
- Provided structure for ↑ communication
- Students increased their skills and confidence
  - Improved active listening skills
  - Developed relationships with patients and families
    - Created mutual pain goals for the day
  - Felt sense of partnership with staff nurse mentors
Setting Mutual Goals

- **Know** the patient’s story – needs, perspectives, fears, challenges, strengths, goals, etc.

- **Use** the patient’s story to establish shared goals, plan care, and evaluate outcomes

- **Share** the patient’s story for continuity of care (between shifts, units, home, disciplines, etc.)
Patient Whiteboards

- Facilitate timely and relevant communication between the patient and family, nurses, and the health care team.
- Engage in setting mutual pain goals specific to the patient
- Mutual daily pain score goal visible to patient, family and health care team
- Update plan of care to reflect changes and progress achieved
# Patient Whiteboard Documentation

<table>
<thead>
<tr>
<th>PROCESS METRICS</th>
<th>2013-2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acceptable pain goal documented on white board</td>
<td>55% (96/173)</td>
</tr>
<tr>
<td># times white board documentation complete/ # patient interviews completed</td>
<td>54.5% (96/173)</td>
</tr>
<tr>
<td>Acceptable pain goal met</td>
<td>55.3%</td>
</tr>
</tbody>
</table>
Patient Satisfaction Scores (Press Ganey)
June 2013-2014

- How well was your pain controlled: ↑3.8
- Response to concerns or complaints: ↑4.0
- Staff worked together to care for you: ↑2.5
- Attention to special or personal needs: ↑1.2
- Nurses' attitude toward requests: ↑1.3
Since implementing this project, we have seen the following:

- Improved student knowledge in patient pain management
- ↑ student nurse confidence in performing pain assessments
- ↑ student engagement in improving patient outcomes
- ↑ attentiveness perceived by patients to their individual story and pain care needs
- ↑ staff nurse mentors’ engagement in student learning experiences
Ongoing Work

- Continue collaborative project between UMHS and University of Michigan School of Nursing
- Expand the project to additional units and student groups
- Increase staff nurse communication with patient/family regarding daily pain goal and interventions
- Improve transition of project from students to staff nurses when school is not in session
SAFE (Student Assessment and Fall Evaluation) 
Team for Fall Prevention and Education

Kate Gosselin, DNP, RN, CEN
Clinical Assistant Professor, School of Nursing

Inga Vitins, BS RN
Staff Nurse, General Medicine Unit
Why Falls on 6B?

• The current unit fall rate was above the overall organizational goal

• The unit staff voiced concern over a lack of reliable and standardized process to communicate a patient’s fall risk factors and individualized interventions on a daily basis

• Current fall safety measures and processes in place needed reinforcement

• The patient population had multiple variables that made it difficult to isolate any one particular fall precaution to institute for all

• Falls impact not only patient safety but also patient outcome
Goals of the Intervention

- Identify a common quality measure to work on
- Form a collaborative workgroup on our general medicine unit consisting of embedded faculty, nursing leadership, and clinical staff to address the quality measure and impact it positively
- Use the patients story to facilitate the fall intervention
- Align the fall intervention with measures already in place and consistent with the UMHHC Fall reduction program: logic model/action plan
- Create a standardized tool at the bedside that will assist all members of the health care team to identify patients at risk to fall by their individualized risk factors
- Reduce the fall rate on 6B: falls with injury
Logic Model for the Intervention

Program: S.A.F.E. (Student Assessment and Fall Evaluation) Team Implementation Logic Model
Situation: CEI embedded unit project (UMHS/Faculty collaboration)

**Inputs**
- UMHC Fall Reduction policy
- Nurse Rounding tool
- Fall Data from Risk Pro (Year 2013 & Monthly Reports)
- Fall Prevention Implementation Programs
- Literature search
- EMR, NOC, NIC Documentation
- Fall Signage Examples
- Elements of the Model of care: Patient Story
- Patient Huddle Tool

**Outputs**
- Monthly meetings to design intervention and discuss results of implementation
- Receive and review monthly reports: Risk Pro, falls with injury on 6B
- Create SAFE tool for use during clinical: Patient interview, EMR information, EOC evaluation, sign presence
- Complete literature review and table creation for BP regarding fall prevention implementation/In service for staff and students
- Student rounding: Every Thurs/Fri on SAFE team and data record SAFE VEST

**Participation**
- Kate Gosselin
- Julie Grunewalt
- Sandra Kendziora
- Winnie Wood
- 6B clinical mentor (Inga Vilina)
- UM sophomore students

**Activities**
- # Up to date patient falls with injury per month
- Increase communication and interactions embedded faculty and 6B Admin
- Increase use and compliance of standardized tool at the bedside by all staff
- Increase Knowledge: staff, students, faculty EDP fall interventions for 6B patients
- Increase student confidence levels for communication and fall risk assessment
- Increased/improved student/patient communication
- External Factors: Patient acuity, student ability, Michart adaptation

**Short Outcomes**
- Observe a decline in fall rate with injury per month/quarterly Organizational Goal: .03/month

**Long Outcomes**
- Increased/improved collaboration for strategies to avoid falls for patients on 6B
- Improved more effective communication and collaboration between faculty/students/mentors/patients on fall education and reduction strategies

**Impact**
- 10% Reduction in fall rate with injury on 6B

Assumptions:
- 6B population
- UMSON Students present on unit TH/Fri
- 6B admin/faculty/student/mentor collaboration

AKO 12/2013
Collaborative Activities

• Interviewed staff
• Conducted a literature review
• Reviewed policies in place
• Designed sign for patient rooms
• Reviewed fall data for common themes
• Created student activity for unit
• Provide ongoing education
# What Should We Measure?

## Outcomes and Measurement

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>Measurement</th>
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<tbody>
<tr>
<td>Patient outcomes</td>
<td>Fall rate (Falls with harm per 1,000 Patient Days)</td>
</tr>
<tr>
<td>Process Outcomes</td>
<td>Chart audits, timeline deadlines, patient room audits</td>
</tr>
<tr>
<td>Student Outcomes</td>
<td>Confidence levels pre and post</td>
</tr>
</tbody>
</table>
Two elements added to our efforts to reduce falls on our unit:

1. Fall sign in the room
2. Student activities each semester (including patient interviews, environmental sweeps, sign audits, patient re-education) all reinforce the use of the sign and UMHS fall reduction program
Fall Sign

Please call me:__________________

<table>
<thead>
<tr>
<th>Patient Specific Risk Factors:</th>
<th>Hx of Falls</th>
<th>Sensory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobility</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elimination</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cognition</td>
<td></td>
<td></td>
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</tbody>
</table>

| Mobility/Transfers:           | CIRCLE THE ICON |

<table>
<thead>
<tr>
<th>Staff and Visitor Reminders:</th>
<th>I ALWAYS NEED HELP TO THE BATHROOM:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>I NEED MY: GLASSES</td>
</tr>
<tr>
<td></td>
<td>HEARING AIDE</td>
</tr>
<tr>
<td></td>
<td>DENTURES</td>
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<table>
<thead>
<tr>
<th>HOURLY Rounding</th>
<th>Pro Active Tolieting</th>
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<tbody>
<tr>
<td></td>
<td>Call light</td>
</tr>
<tr>
<td></td>
<td>Comfort Needs</td>
</tr>
<tr>
<td></td>
<td>Environment Care</td>
</tr>
</tbody>
</table>

STAFF ASSIST 1 2 BELT ASSIST

TRANSFER

PARTIAL ASSIST

TOTAL DEPENDENCE

AMBULATION

CANE WALKER WHEELCHAIR
Student Assessment & Fall Evaluation Team
S.A.F.E. Team

- Starts each semester since 2014 (fall/winter)
- Sophomore level students in 4 year program
- Developmentally appropriate activity for the student working on interviewing skills and assessment skills
- Patient rounds conducted every Thursday & Friday
- Signs reviewed and filled out by students
- Charge Nurse provided immediate and end of the day feedback on student findings
- Pre and Post assessment of student confidence levels
S.A.F.E. Team Day

Student Assessment & Fall Evaluation (S.A.F.E.) Team 6B Pilot Project

Goals for the S.A.F.E. Team
1. Collaborate with 6B leadership and staff to reduce the fall rate.
2. Design an interactive scholarly exercise for the students to improve their interviewing skills, confidence levels, and ability to assess individualized patient fall risk factors
3. Provide a safe environment for the patients on 6B
4. Reinforce educational efforts, pro-totiling and fall prevention strategies already in place on 6B
5. Partnership building between 6B and SON students

Process
- Undergraduate Sophomore Students assigned to 6B
- Groups of 8
- Thursday & Friday
- Fall & Winter

6 Students
- Care for patients

2 Students designated to the S.A.F.E. Team

Part I
- 7:30 AM – 11:00 AM
- Student Interviews
  1. with individual patients
  a. Interview patients
  b. Identify individual risk factors
  c. Fill out signs in room
  d. Attend to environmental concerns
  e. Educate all patients/visitors on risk factors in general and individualized
  f. Offer pro-totiling
- Lunch

Part II
- 11:30 AM – 2:00 PM
- 1. Student Independent Work for submission
  a. Identify top five possible patient fallers
  b. Review medications for those patients
  c. Rank patients according to perceived risk
  d. Provide a focused care plan for the highest risk
  e. Fill out charge nurse form for submission

Part III
- 2:00 PM - 3:00 PM
- 1. Student Debriefing
  a. Submit form to 6B charge nurse, review
  b. Review 2014 fall data and identify outliers, trends, demographics
  c. Discuss in post conference (students)
  d. Identify top concerns for patients falling on 6B (Cognition Impairment, mobility)
  e. Post Survey online
2014 Patient Outcomes

- Patient Outcomes:
- Fall Rate with Injury:
  - January 2014 to June 2014: 1.63/1000 pt days
  - June 2014 to December 2014: 1.14/1000 pt days
- Overall Fall Rate:
  - January 2014 to June 2014: 3.67/1000 pt days
  - June 2014 to December 2014: 3.46/1000 pt days
• Patient Safety Reports At A Glance:
  – Elimination, cognition, and mobility were the most identified risk factors for our general medicine population
  – Population dynamics reviewed: age, sex, diagnosis
    - **Age:** 30% ages 65 and up
    - 50% ages 40 to 65
    - 20% ages 40 and under
    - **Sex:** Male to Female ratio about even
    - **Diagnoses:** Variable
2014 Process Outcomes

- Process Outcomes
- Room/Sign and Chart Audits
  - September 2014 to May 2015

<table>
<thead>
<tr>
<th>Measurement</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the patient a fall risk (assessment)</td>
<td>81.83%</td>
</tr>
<tr>
<td>Are the fall risk factors completed (sign)</td>
<td>92.8%</td>
</tr>
<tr>
<td>Are the non-skid socks and gait belt at bedside</td>
<td>95%</td>
</tr>
<tr>
<td>Assistive device(s) near patient</td>
<td>93.7%</td>
</tr>
<tr>
<td>Are the fall interventions selected (sign)</td>
<td>88.6%</td>
</tr>
<tr>
<td>Are the patients toileting needs addressed (chart/bedside)</td>
<td>92.6%</td>
</tr>
</tbody>
</table>
2014 Student Outcomes

Pre S.A.F.E. Team Day
Q: I feel comfortable assessing a patient for their fall risk

Post S.A.F.E. Team Day
• Q: I feel comfortable assessing a patient for their fall risk
2014 Student Outcomes

Pre S.A.F.E. Team Day

Q: I have a clear understanding of how to identify individual fall risk factors

Post S.A.F.E. Team Day

Q: I have a clear understanding of how to identify individual fall risk factors
Lessons Learned

• Consistency with organizational policies and procedures is essential
• Education needs to be ongoing for staff and patients
• Changes and challenges should be expected in the partnership
• Separating the outcomes/goals into buckets helps with clarity in the process
Moving Forward

- Continue measuring outcomes
- Implement S.A.F.E. team on more units (easily adapted to individual unit needs) and compare student outcomes
- Continue to examine fall data quarterly with staff to identify common themes, risk factors, population dynamics, staffing ratios
- Add multi-level student intervention (senior, junior, graduate level) to enhance approach
- Revisit the AHRQ toolkit for fall prevention for more ideas
Patient outcomes are being positively impacted

Students, nurse mentors and faculty are clearly identifying the positive impact of this model on education, and practice readiness and expertise

Embedded faculty has completely integrated into the team and are seen “as one of us” by staff, which leads to trust, collaboration, ability to problem-solve, ability to provide constructive feedback, etc.

Commitment by the team is required
Moving Forward

• Build on other work related to increase faculty and unit leadership knowledge around EBP and quality improvement.
  – Workshops
  – UBC Quality Prioritization & Forum
• Stabilize people/staff to build relationships.
• Continued evolution of the exemplar units’ foci
• Dissemination to other units

*References available upon request.*