Practice and Academics Partnering to Improve Patient and Student Outcomes

Sigma Theta Tau Symposium

November 2015

SCHOOL OF NURSING
UNIVERSITY OF MICHIGAN

HEALTH SYSTEM
UNIVERSITY OF MICHIGAN

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.

Quality & Patient Care Model of Focus Mutually Identified

	Model of Care Focus	Patient Outcome Focus
Surgical	Self-Care Efficacy	Patient satisfaction with instructions for home
Ortho/Trauma	Patient Story	Patient satisfaction with pain
General Medicine	Patient Story	Falls

Action Plans

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

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

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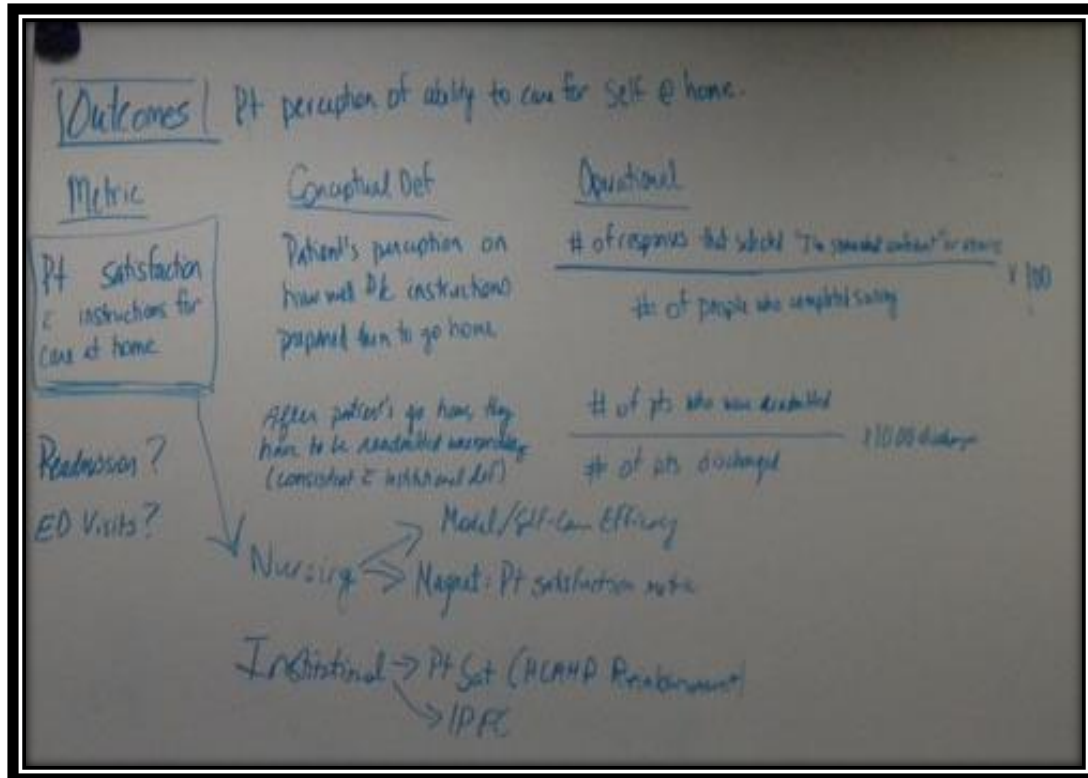
- Identified based on unit team needs/focus
- Meeting with Central Leads and individual unit teams to gain clarity around metrics

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

Unit Based Structures & Processes
(Cont.)

- 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

Communication & Partnership

- 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 *
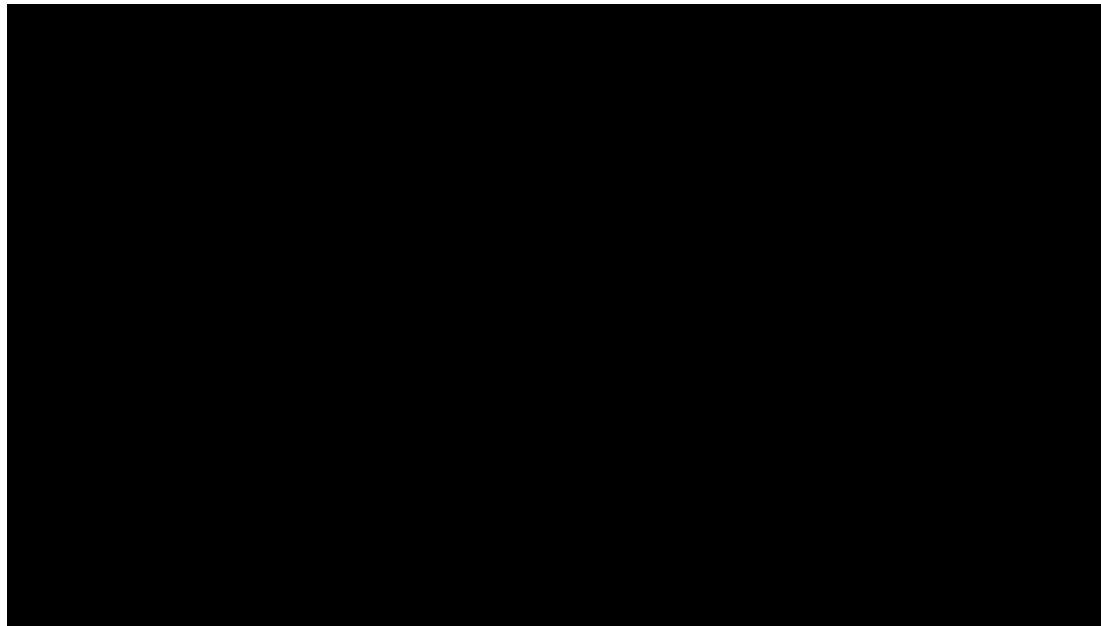
Embedded Faculty

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.

Exemplar Projects

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

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Improving Orthopedic Patient Satisfaction With Pain Management Through Nursing Staff, Student and Faculty Collaboration

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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

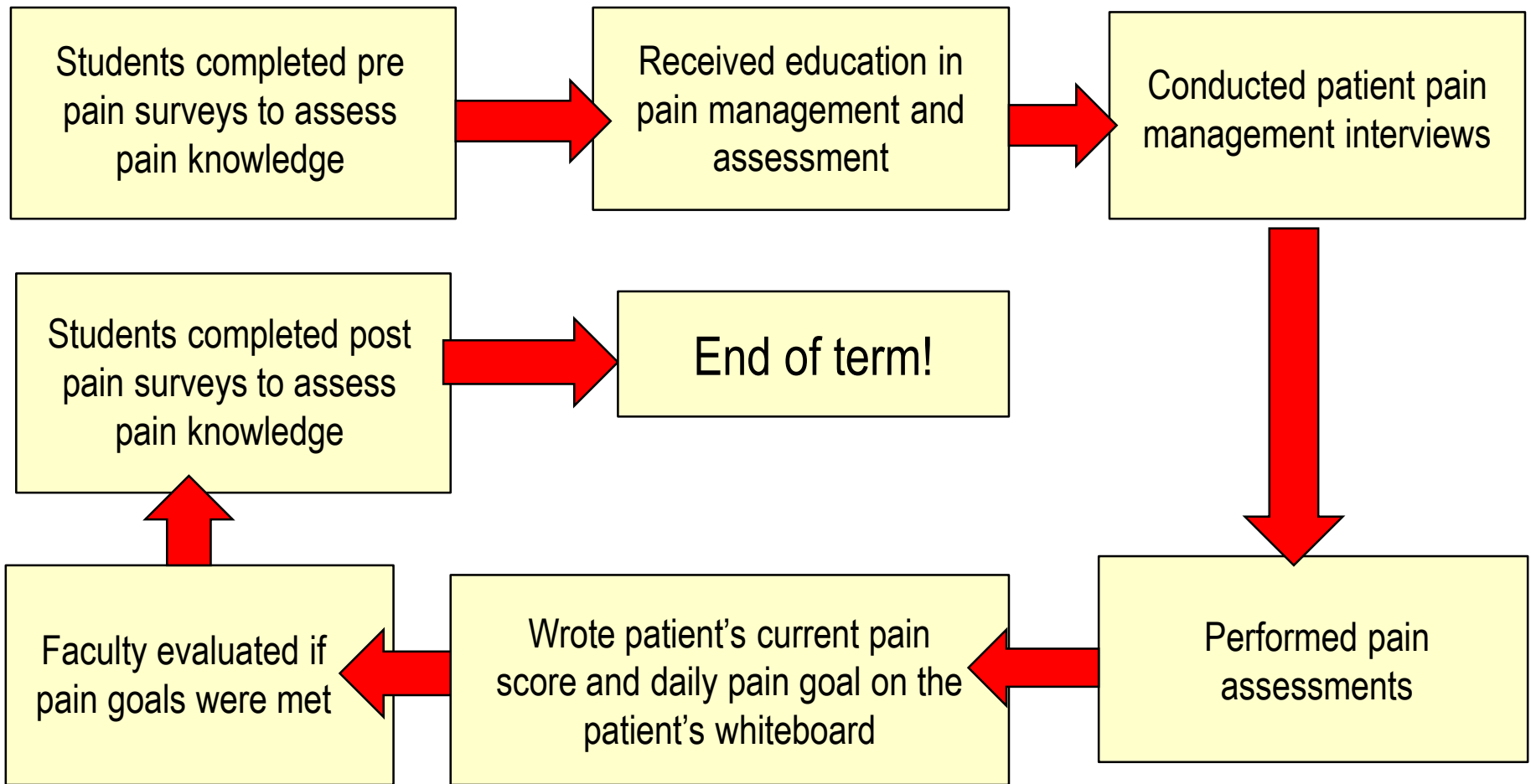- Demonstrate improved staff nurse mentor engagement in pain management

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

↓

Performed pain assessments ← Wrote patient's current pain score and daily pain goal on the patient's whiteboard → Faculty evaluated if pain goals were met

↑

Students completed post pain surveys to assess pain knowledge → End of term!

Student Pain Knowledge Survey

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

PROCESS METRICS	2013-2014	
	FALL '13	WINTER '14
"Pain Management and Communication Survey" knowledge (pre-clinical score)	79.2% (n=16)	87.7% (n=15)
"Pain Management and Communication Survey" knowledge (post-clinical score)	90.4% (n=16)	90.2% (n=15)

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

- <u>**Know**</u> the patient's story – needs, perspectives, fears, challenges, strengths, goals, etc.

- <u>**Use**</u> the patient's story to establish shared goals, plan care, and evaluate outcomes

- <u>**Share**</u> 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

PROCESS METRICS	2013-2014
Acceptable pain goal documented on white board	55% (96/173)
# times white board documentation complete/ # patient interviews completed	54.5% (96/173)
Acceptable pain goal met	55.3%

Patient Satisfaction Scores (Press Ganey)
June 2013-2014
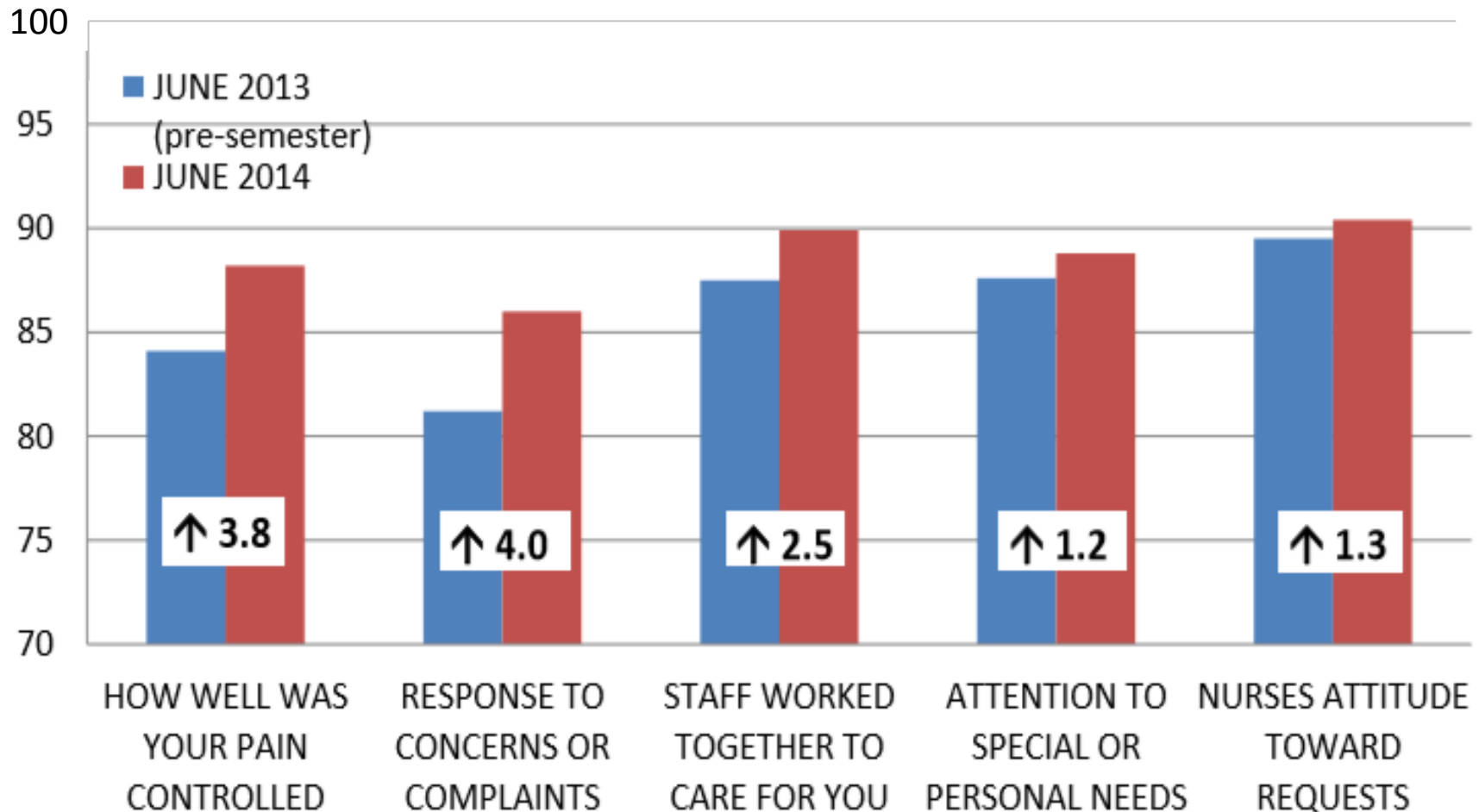
Discussion

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

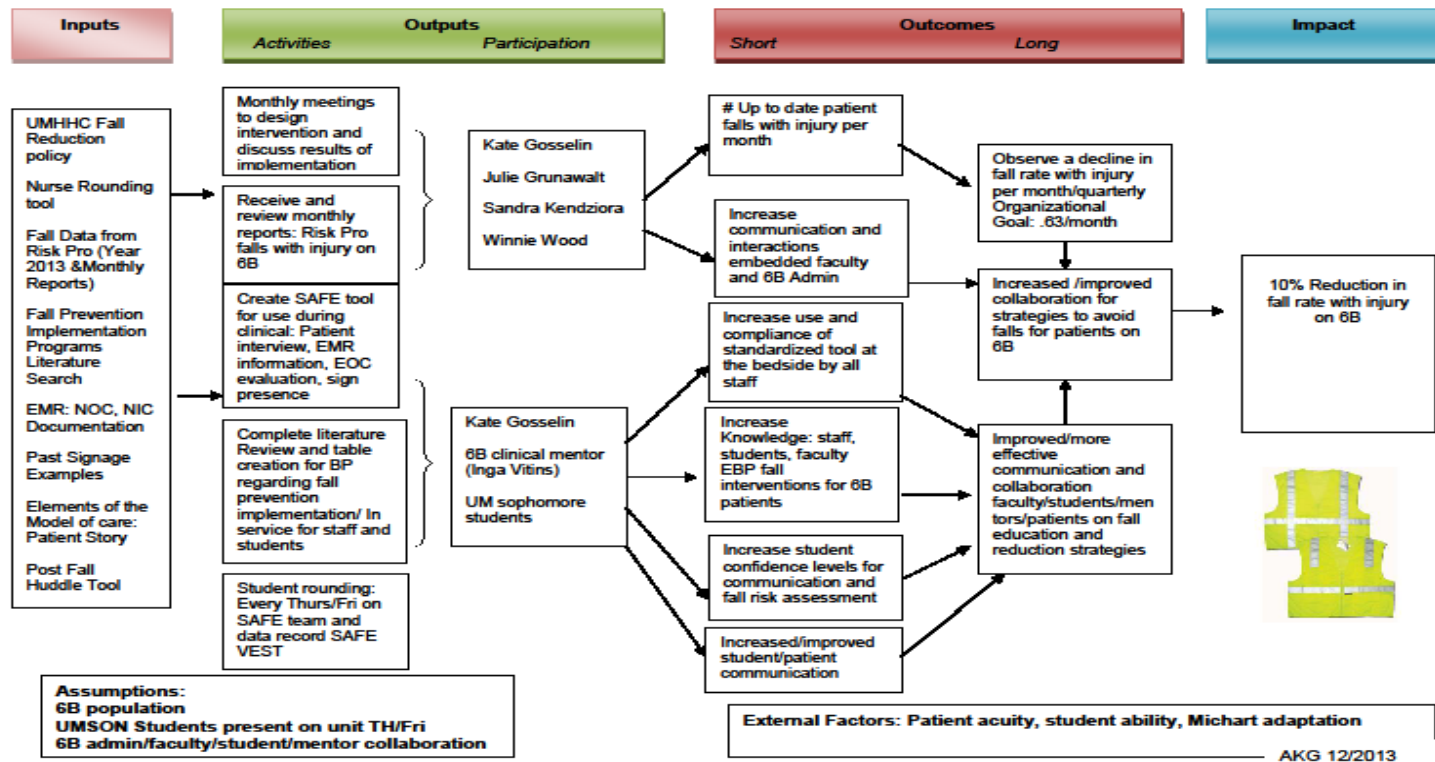- Falls impact not only patient safety but also patient outcome

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	Outputs — Activities / Participation	Outcomes — Short / Long	Impact
UMHHC 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

Past Signage Examples

Elements of the Model of care: Patient Story

Post Fall Huddle Tool | 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

Kate Gosselin
Julie Grunawalt
Sandra Kendziora
Winnie Wood

Kate Gosselin
6B clinical mentor (Inga Vitins)
UM sophomore students | # 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 EBP fall interventions for 6B patients

Increase student confidence levels for communication and fall risk assessment

Increased/improved student/patient communication

Observe a decline in fall rate with injury per month/quarterly Organizational Goal: .63/month

Increased /improved collaboration for strategies to avoid falls for patients on 6B

Improved/more effective communication and collaboration faculty/students/mentors/patients on fall education and reduction strategies | 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

External Factors: Patient acuity, student ability, Michart adaptation

AKG 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

Outcomes	Measurement
Patient outcomes	Fall rate (Falls with harm per 1,000 Patient Days)
Process Outcomes	Chart audits, timeline deadlines, patient room audits
Student Outcomes	Confidence levels pre and post

Design & Implementation

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

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-tolieting and fall prevention strategies already in place on 6B
5. Partnership building between 6B and SON students

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**

Process

S.A.F.E. Team Start

1. Put on yellow vests
2. Print out charge nurse census
3. Copy unit report sheet
4. Take Pre Survey online (Qualtrics)
5. Organize Day for patient interviews

Part I

7:30 AM – 11:00 AM

1. Student Interviews 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-tolieting

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

2014 Patient Outcomes

- 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

Measurement	Outcome
Is the patient a fall risk (assessment)	81.83%
Are the fall risk factors completed (sign)	92.8%
Are the non-skid socks and gait belt at bedside	95%
Assistive device(s) near patient	93.7%
Are the fall interventions selected (sign)	88.6%
Are the patients toileting needs addressed (chart/bedside)	92.6%

2014 Student Outcomes

Pre S.A.F.E. Team Day

Q: I feel comfortable assessing a patient for their fall risk
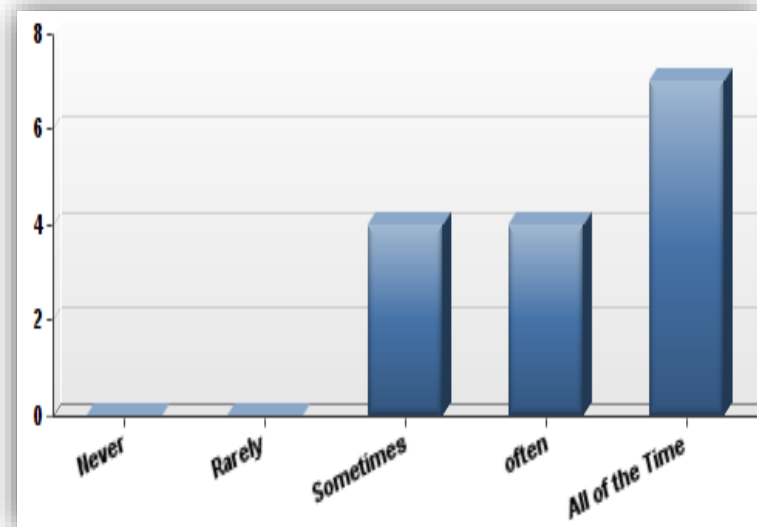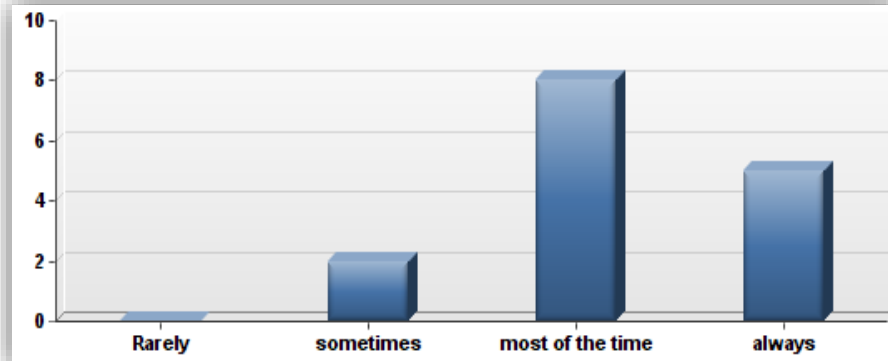

Post S.A.F.E. Team Day

- Q: I feel comfortable assessing a patient for their fall risk
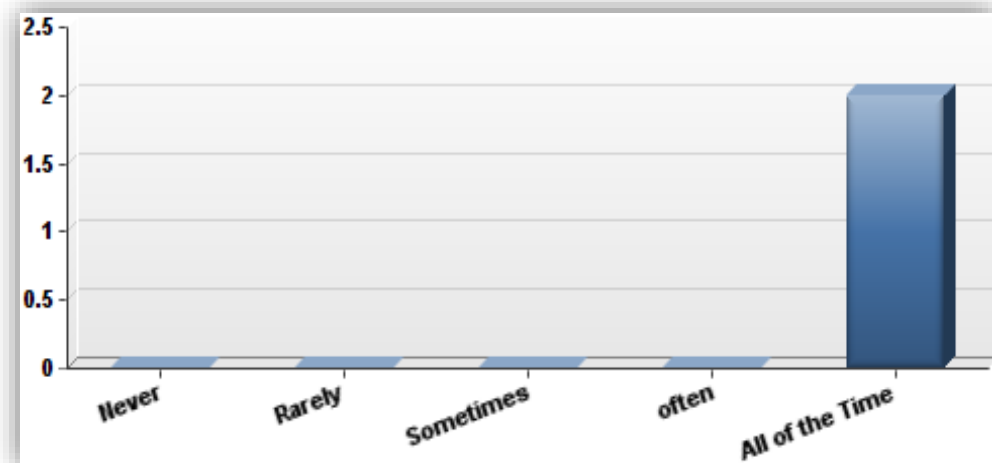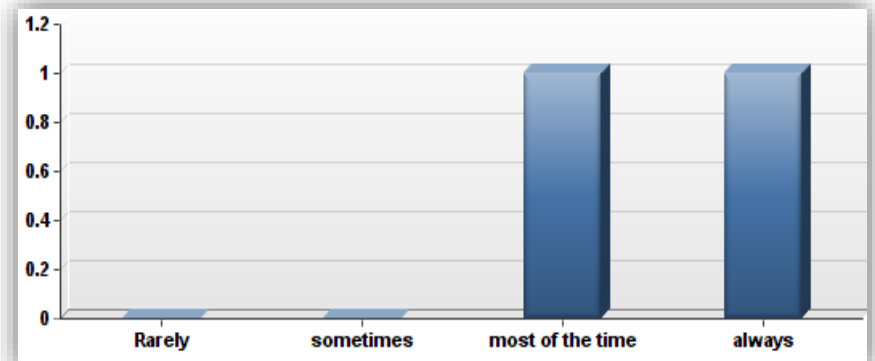
2014 Student Outcomes

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
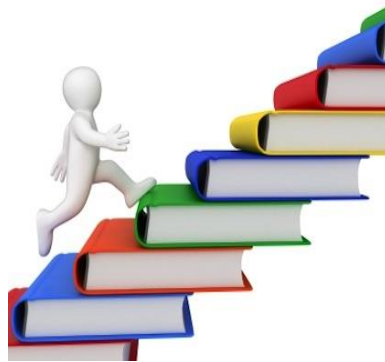
Moving Forward

- 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

CEI Summary

- 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.