Keeping Patients Safe: The Role of Interprofessional Education and Practice

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Objectives

1. Explore the relationship between interprofessional education and patient safety
2. Discuss two examples of patient safety initiatives
3. Identify elements of successful interprofessional patient safety programs
Interprofessional Education

Two or more professionals *learn with, from and about* each other to improve collaboration and the quality of care.

Center for the Advancement of Interprofessional Education
Interprofessional Education (IPE) Intervention

“An IPE intervention occurs when members of more than one health and/or social care profession learns interactively together, for the explicit purpose of improving interprofessional collaboration and/or the health/well-being of patients/clients. Interactive learning requires active learner participation and active exchange between learners from different professions.”

Zwarerstein et al. Cochrane Database of Systematic Reviews, (3), 2000
How Much of a Problem is Patient Safety in the United States?

- Medical errors cause 44,000-98,000 of preventable deaths annually*
- Estimates of the annual number of preventable adverse events suffered by hospitalized patients varies from 1.3 million** to 15 million***
- On average a hospital patient is subject to at least one medication error per day+
- Cost: $30 billion annually in lost income and excess health care expenditures++

*Institute of Medicine, To Err is Human. 1999
**Leape LL et al., QRB Qual Rev Bull 1993;19;144-9
***http://ihi.org/IHI/programs/campaign/2005
+Institute of Medicine, Preventing Medication Errors. 2007
++Thompson DA et al. Amer J Med Qual 23(4); 2008
Loved...

...blueberries, teasing his little sister & soccer.

Adam Miller
1997 - 2005

Jefferson School of Nursing
Loved...

...British mysteries,
Thai cooking classes
& gardening.

Adelaide Madsen
1951 - 2006

Jefferson School of Nursing
Loved...

...barbecues, hugging his wife & fly fishing.

Teddy Shultz
1940 - 2003

Jefferson School of Nursing
Health Care is Extremely Complex

1. Highly complicated technologies
2. An arsenal of powerful drugs
3. Unclear lines of authority
4. Highly variable physical settings
5. Unique combinations of diverse patients
6. A time-pressured environment
7. Care processes that widely vary
8. Fragmented communication
9. Entrenched organizational culture/s
10. Widely differing professional education of providers
“Colleges of medicine, nursing, pharmacy, health care administration, and their related associations should build more instruction into their curriculum on patient safety and its relationship to quality improvement.”

“Most care delivered today is done in teams of people, yet training often remains focused on the individual responsibilities leaving practitioners inadequately prepared to enter complex settings. More opportunities for interdisciplinary training is needed.” (p 146)
“To achieve the six aims (safe, effective, patient-centered, timely, efficient, equitable) additional skills will be required of all health professionals.”

(p.208)
Core Competencies

All health professionals should demonstrate the ability to deliver *patient-centered care* as members of an *interdisciplinary team*, emphasizing *evidence-based practice*, *quality improvement approaches*, and *informatics*.
How have healthcare and academic institutions responded to the IOM reports as related to interprofessional and patient safety education?
Diffusion of Innovation (Rogers, 2003)
Improving Communication in the ICU Using Daily Goals

*Background:* <10% of ICU team (physicians, nurses, nurse practitioners, anesthesia and surgery residents, pharmacist) understood the goals of care for the day

*Purpose:* evaluate and improve the effectiveness of communication during patient rounds using a daily goals form (July 2001-June 2002).

Pronovost et al., J Crit Care, 2003, 18(2), 71-76
Improving Communication in the ICU Using Daily Goals

*Methods:* goal form created by the care team members. Completed during daily rounds on each patient.

*Results:* >95% of ICU team understood the goals of care for the day. ICU length of stay decreased from a mean of 2.2 days to 1.1 days

Pronovost et al., J Crit Care, 2003, 18(2), 71-76
An Intervention to Decrease Catheter-Related Bloodstream Infections in the ICU

- Annually, central venous catheters cause an estimated 80,000 catheter-related bloodstream infections and result in up to 28,000 deaths among ICU patients.
- Median rate of catheter-related bloodstream infections in ICUs of all types range from 1.8 to 5.2 per 1000 catheter days.
- Collaborative cohort study of 103 adult ICUs in Michigan.
- Methods: evidenced based intervention to reduce rate of catheter-related bloodstream infections, daily patient goals sheets, comprehensive unit-based safety program to improve safety culture.

Pronovost, P et al NEJM, 2006 355(26) 2725-2732
An Intervention to Decrease Catheter-Related Bloodstream Infections in the ICU (continue)

• **Methods**: Designated physician/nurse team leaders and interdisciplinary colleagues and partners. Education and training together.

• **Results**: median rate of infection decreased from 2.7 per 1000 catheter days at baseline to 0 within the first 3 months after implementation of the intervention. Sustained reduction (up to 66%) in catheter-related bloodstream infections was maintained throughout the 18 month study period.

Pronovost, P et al NEJM, 2006 355(26) 2725-2732
Development of an Interprofessional Patient Safety Course

• *Purpose*: in response to IOM reports Creighton University develop an interprofessional patient safety course

• *Methods*: 17 faculty from 7 colleges and schools and medical center participated (nursing, medicine, law, dentistry, pharmacy, occupational therapy, physical therapy, social work, health care administration and others)

Development of an Interprofessional Patient Safety Course

- **Methods**: describes developing an interprofessional course, course materials including interprofessional case studies, scheduling logistics, student and program level considerations, grading across academic programs, and faculty development and engagement.

- **Results**: Students found the course “eye opening” and “extremely enlightening”. Absence of medical and dental students held a negative meaning.

Creating Success

• Solving complex health system problems requires that all health professionals and all health profession students have knowledge and understanding of the science of safety and its translation into practice.

• This requires interprofessional education and practice to turn knowledge into action.
Creating Success

• Never lose sight of the patient
• Health care professionals work in a highly complex error-prone industry
• Errors happen in the best places, with the best people
• Utilize error events as opportunities for organizational learning and improvement
• All teach, all learn
Creating an interprofessional approach to patient safety isn’t a switch to be thrown…it is a journey to be taken
Patient Safety is an Interprofessional Team Sport
One Word of Caution

In our zeal to educate students in interprofessional care, patient safety, quality improvement, and systems knowledge, we must not lose sight that our patients are at the core of these efforts.

As systems change, patients can feel left behind.
Always Remember….

Love Goes On