Clinical Safety & Effectiveness
Cohort # 7

Utilization of Evidence-Based Practice Resources by Junior Nursing Students

Educating for Quality Improvement & Patient Safety
DISCLOSURE

Danet Lapiz-Bluhm, BSN, PhD has no relevant financial relationships with commercial interests to disclose.

Christine Gaspard, MLS has no relevant financial relationships with commercial interests to disclose.

Katherine Prentice, MSIS, AHIP has no relevant financial relationships with commercial interests to disclose.
The Team

• Christine Gaspard, MLS*S
• Danet Lapiz-Bluhm, BSN, PhD†
• Angela Myatt, M.Sc.*
• Katherine Prentice, MSIS, AHIP*

Other key players:
• Nursing Research and Evidence-Based Practice (NURS 3402) Students
• Information Desk Library staff and Mobile Library staff volunteers
• Jonquil Feldman, MALS, AHIP*
• Dr. Rosemary Walulu† – NURS 3402 Faculty
• Dr. Peter Guarnero† – NURS 3402 Faculty
• School of Nursing, Office of Admissions and Student Services
• Center for Patient Safety & Health Policy Team: Jan Patterson, MD, Amruta Parekh, MBBS, Leticia Bresnahan, MBA

* UT HSC Briscoe Library
† UT HSC School of Nursing
What We Are Trying to Accomplish?

OUR AIM STATEMENT

Our aim is to increase utilization of evidence-based practice (EBP) resources by 25% among junior level (semester 2) students at the UT Health Science Center School of Nursing in 3 months.
Why Focus on Evidence-Based Practice?

Integrates the best research evidence with clinical expertise and the patient’s unique characteristics (Sackett)
<table>
<thead>
<tr>
<th>Milestone</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Team created</td>
<td>October 2010</td>
</tr>
<tr>
<td>AIM Statement created</td>
<td>January 31, 2011</td>
</tr>
<tr>
<td>Weekly Team Meetings</td>
<td>January – May 2011</td>
</tr>
<tr>
<td>Background Data, Brainstorm Sessions, Workflow &amp; Fishbone Analyses</td>
<td>January 2011</td>
</tr>
<tr>
<td>Interventions Implemented</td>
<td>January 13, 2011 – April 15, 2011</td>
</tr>
<tr>
<td>Data Analysis</td>
<td>March – April 2011</td>
</tr>
<tr>
<td>CS&amp;E Presentations: SON Faculty Librarians’ Meeting</td>
<td>May 20, 2011 \nMay 23, 2011</td>
</tr>
<tr>
<td>CS&amp;E Graduation Presentation</td>
<td>June 24, 2011</td>
</tr>
</tbody>
</table>
Background

- From bench science to clinical use, the translation to use takes on average 17 years (IOM).
- EBP is designed to ensure quality and safe patient centered care.
- EBP tools have been used to achieve the National Patient Safety Goals.
- Training and ongoing education on EBP must be integrated within the curriculum.
Background

• The American Association of Colleges of Nursing (AACN) has mandated scholarship on EBP where nursing students should receive training on accessing evidence based literature and appropriate practice utilization. (AACN, 2008)

• Existing nursing curriculum includes the tenets of research but little data is available on actual student awareness and utilization of EBP.

• We aim to measure student knowledge, utilization and satisfaction with EBP.
Background

• Since lack of knowledge, access to and utilization of EBP literature are barriers to effective clinical decision making, our project goal is to address these issues.

• Patient safety and quality of care will be improved.

• Nursing students will become champions of EBP in future clinical care.
How Will We Know That a Change is an Improvement?

Always a challenge for education projects

• Types of measures
  ✓ Surveys

• How you will measure
  ✓ Frequency of self-reported utilization
  ✓ Self-reported satisfaction

• Specific targets for change
  ✓ Satisfaction
  ✓ Utilization
What Changes Can We Make That Will Result in an Improvement?

• Library orientation class
  ➢ Library services
  ➢ Getting Help
  ➢ Evidence-Based Practice resources
  ➢ Hands-on practice

• Library access and help
  ➢ Mobile Library and Information Desk

• Blackboard Course Resources
Selected Process Analysis Tools

- Brainstorming
- Fishbone
- Flowchart
Fishbone Diagram

Challenges to the Utilization of Evidence Based Practice Resources by Junior Nursing Students

Policies
- Internet access barriers
- Curriculum limitations
- Lack of emphasis on EBP
- Lack of policies to promote EBP
- Budget cuts
- Issues with library educational mission compliance
- Computer literacy requirement background

People
- Computer literacy
- Perceived difficulty
- Instructors not promoting EBP
- Student preparation
- Student perception of EBP
- Inconsistent integration of EBP in library instruction

Procedures
- Each database requires new skills "keyword vs. subject"
- Learning to use new databases is
- Time pressures on students, faculty, librarians
- Timeliness of existing

Plant/Technology
- Internet access barriers
- Accessibility of resources
- Visibility of resources
- Availability of Databases (cost)
- Specialized expert training costs money
- Applicability of resources

Decreased Utilization of EBP Resources
Utilization of Evidence Based Practice Resources by Junior Nursing Students

Faculty/Students - Process Flow Before Interventions

Students Enroll in NURS 3402

Previous Experience with EBP searching?
- Yes, experienced
- No prior experience

Relevancy of EBP is unclear to students

Use EBP databases

Yes, experienced

Potentially inadequate answers to questions

Answers not found successfully

Dissatisfaction with results

Limited Utilization of EBP Resources

Stress and frustration are evident

Difficulty finding and using search engines and databases

Stress and frustration are evident
Utilization of Evidence Based Practice Resources by Junior Nursing Students

Faculty/Librarians/Students - Process Flow with Interventions

Library Presentation

Student Research

Poster Class

Research Presentation

Students Enroll in NURS 3402

Student Pre test

Librarian Database and EBP Research Instruction

Instruction requested by faculty for NURS 3402

Students begin research projects

Students seek help

Students do not seek

Relevancy of EBP is unclear to students

Visit library, mobile library, Ask a Librarian email, etc

BB Content Intervention

Student Post test

Independent student research

Instruction on Posters and Presentation Skills

Student research poster presentations with written research paper

Demonstrated increase of Utilization of EBP resources

Midpoint survey evaluation

Projects/presentations are judged and ranked competitively. Relevant references are required.
Selected Decision Making Tools

Pareto Diagram - to better identify barriers to utilization

Pareto Principle

20% of the input (time, resources, effort) accounts for 80% of the output (results, rewards)