Mentoring the Staff Nurse on Evidence Based Practice and the Conduct of Research

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Research

- “I could never do that”
- “I don’t know how I would ever get started”
- “Boring”
- “The process seems so frightening & overwhelming”
- “I really don’t understand it or know enough about it to be able to do research”
University Outcome:

Limited knowledge in evaluation of research, how to utilize it or conduct research
"Because we always do it that way"
Research Utilization Activities

*Provides the reasoning by which:*

- Assessment parameters are established.
- Preventative actions are identified.
- Interventions are evaluated in the clinical setting to determine the effect on patient care and outcome.
NURSING RESEARCH

CLINICAL PRACTICE
Problems with Some Hospital Based Clinical Research Programs

- A traditional academic model of research is used
- Full and active administrative commitment is not achieved
- Research is not integrated into the organizational infrastructure and is not aligned with goals
- Often focus on the needs of the researcher versus the needs of the patient

Campbell GM, 2007
Evidenced-Based Practice

The conscientious, explicit, and judicious integration of

- the best available evidence from systematic research,
- with individual clinical expertise and
- patient preference

at the bedside in making decisions about clinical practice.
What is Evidence?

• That which tends to prove or disprove something
• Ground for belief
• Something that furnishes proof

(Dictionary.com, 2010)

• Types:
  • External generated from rigorous research
  • Internal generated from outcomes management; practice based evidence
Evidence Based Nursing

• Asking a clinical question
• Searching the literature for relevant research
• Critically appraising what has been found
• If change is warranted by the research evidence and if it fits with clinician skills, resource availability, and patient preferences, then the following stages also take place:
  • Implementing the change in practice
  • Evaluating the change in practice
Research-Evidence

- To Describe
- To Explain
- To Predict
- To Explore
- To Discover

What if we did it this way?

That is not the way we do it here?

Why that way…why not this way?
WHAT’S THE DIFFERENCE: QI, EBP, & RESEARCH?

- **Quality**
  - The degree of excellence
- **Evidence-Based Practice**
  - Integration of best practice research with clinical expertise & patient’s unique preferences and values
- **Research**
  - Systematic inquiry using disciplined methods
Nurses Self Perceived Deficits to EBP

- 2,344 nurses
- 19 Hospitals
- Younger nurses & nurses with higher education reported ↑ EBP competency
- + correlation between EBP competency & EBP mentors

Melynk BM, et al. World Evidence-Based Nursing, 2017;0:1-10
RN: Application of the Evidence

- Cross-sectional design
- Six item survey self reported EBP
- 987 RNs two years postgraduate (76% return rate)
- Results:
  - 19% formed questions and perform searches
  - 56% used information from other information sources
  - 31% appraise the literature
  - 30% participated in practice development
  - 34% participated in evaluating clinical practice
  - RNs working in eldercare apply evidence-based practice more than those in acute care
  - Contextual factors in the role of the R.N. in the organization impacted utilization of EBP

WHY EVIDENCE-BASED PRACTICE?

Everyone Must Bring Data! & a Story

Examples of Dated Practices

• Recording vital signs every four hours at night unstable patients, despite their need for on disrupted sleep for recovery

• Removing urinary catheters only upon a physician’s order to do so although the removal of catheters according to a nurse driven protocol is more efficient may prevent CAUTI’s

• Not performing delirium screening on patients in the ICU. This failure cost 4 to 6 18 billion annually because delirium affects up to 80% of ICU patients.

• Continuing the practice of 12 hour nursing shifts, when findings from research indicate adverse outcomes for nurses and patients

Magers TL, Evidence Based Practice in Nursing and Healthcare: A guide to Best Practice. 2014;70-73
Stimphel AW, etal. Health Affairs, 2012;31:2501-2509
WHY EVIDENCE-BASED PRACTICE?

Heater, Becker, & Olson, 1988

Outcome Based on Practice

Traditional Practice

Evidence-Based Practice

28% Improvement
WHY EVIDENCE-BASED PRACTICE?

- *Crossing the Quality Chasm*
  - Committee on Quality Health Care in America, Institute of Medicine, 2001
  - Rule # 5: Evidence-Based decision-making
- 90% Healthcare decisions will be evidenced based by 2020 (IOM Roundtable on EBP)
WHY EVIDENCE-BASED PRACTICE?

• 21% of 1200 practicing nurses implemented evidence from research into their practice (Bostrom & Suter, 1993)
• Healthcare providers not following evidence based guidelines 1/3 of the time (Cretin, Farley, Dolter & Nicholas, 2001)
• 10-15% consistently implementing EBP (Melnyk, 2010)
• Takes 17 years to translate findings into practice (Balas & Boren, 2000)
WHY EVIDENCE-BASED PRACTICE?

• Healthcare providers have higher levels of satisfaction using EBP (Dawes, 1996)
• Quality safe care delivery while reducing cost and turnover rates (Titler, Cullen & Ardery, 2002)
• Without evidence, practice is rapidly outdated:
  • 30-40% receive outdated practice
  • Infant prone positioning (AAP, 2000)
  • Beta blockers in acute myocardial infarction (Slutsky, 2003)
WHY EVIDENCE-BASED PRACTICE?

- Best service possible
- Up to date knowledge
- Supplements clinical judgment
- Saves time
- Improves care
- Saves lives
EBP Leads to:

- Improved patient outcomes
- Avoidance of unnecessary procedures
- Reduction of complications

Nurses should feel empowered to change practice using proven methods
Evidence Based Interventions

• Skin risk assessment in predicting patients likely to breakdown
  • Braden Skin Risk Assessment
• Oral care antisepsis & brushing the teeth for reducing the incidence of healthcare acquired pneumonia
• Best time of day to weigh a patient?
• Mobilization of patients reduces the risk of de-conditioning and long term complications of functional limitations

www.ihi.org; Macklebust, JA (2009) The Braden Scale reliable assessment to effective interventions
BARRIERS TO EBP

- Hospital systems and organizations/Inadequate resources and investment in EBP
- Lack of leadership support
- Individual health care providers not embracing EBP interventions
  - Inadequate knowledge and skills
  - Misperceptions that EBP takes too much time
  - Low comfort level with search techniques
  - Educational programs that continue to teach research the “traditional way” with a focus on producing instead of using evidence

Melnyk, B.M. Et al. J Nursing Adm, 2012;42(9): 410-417
### Table 1. Facilitators and Hindrances of Nursing Research and Research Productivity in Hospitals by Rank

<table>
<thead>
<tr>
<th>Facilitator Code Name and Rank Order</th>
<th>Magnet</th>
<th>Non Magnet</th>
<th>Hindrance Code Name and Rank Order</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nursing research mentor</td>
<td>1</td>
<td>1</td>
<td>Lack of time</td>
</tr>
<tr>
<td>Institutional research infrastructure</td>
<td>2</td>
<td>8</td>
<td>Lack of research knowledge or research training opportunities</td>
</tr>
<tr>
<td>Leadership support</td>
<td>3</td>
<td>2</td>
<td>Lack of financial resources for nursing research</td>
</tr>
<tr>
<td>Making research relevant</td>
<td>4</td>
<td>3</td>
<td>Lack of experienced nursing research mentors' academic affiliation</td>
</tr>
<tr>
<td>Research training</td>
<td>5</td>
<td>4</td>
<td>Lack of institutional research infrastructure</td>
</tr>
<tr>
<td>NRC</td>
<td>6</td>
<td>5</td>
<td>Intimidated by research</td>
</tr>
<tr>
<td>Nursing culture that supports research</td>
<td>7</td>
<td>7</td>
<td>Lack of leadership support</td>
</tr>
<tr>
<td>Research is part of the job</td>
<td>8</td>
<td>8</td>
<td>Nursing culture does not support nursing research</td>
</tr>
<tr>
<td>Financial and other tangible resources</td>
<td>8</td>
<td>6</td>
<td>Nurse educational level</td>
</tr>
<tr>
<td>Magnet</td>
<td>9</td>
<td>9</td>
<td>Nursing research is not a priority</td>
</tr>
<tr>
<td>Dedicated time for research</td>
<td>9</td>
<td>5</td>
<td>Lack of relevance to nursing practice, lack of interest</td>
</tr>
<tr>
<td>Impact of higher education</td>
<td>10</td>
<td>8</td>
<td>Lack of NRC</td>
</tr>
</tbody>
</table>

The Basis for Nursing Care

- U. S. Nurses Working in Clinical Practice:
  - 54% were not familiar with term EBP
  - 82% never used a hospital library
  - 67% get information for practice from other nurses

We Will Make a Significant Difference in Every Life with Touch
How Do We Get Information to Leap From the Pages of Magazines and Into Our Heads and Become Part of Our New Daily Routine?
Starting the Journey
Organizational Assessment: 50,000 Feet

- What does the organization have in place to promote nursing research and evidence-based practice
  - Has a model been adopted?
  - Are there APRN’s or others to facilitate the process?
  - Is there access to statistical software, publishing software and editorial assistance?
  - Is there a nursing council structure to help guide and educate through the IRB process?
  - Is their a nursing research department & director
Iowa Model: a Process Model

• Successfully implemented since 1994
• internationally
• Infuses research into practice to improve quality of care
• Planned change principles integrate research and practice
• Utilizes a multidisciplinary team approach
• Utilizes feed-back loops
The Advancing Research and Clinical Practice Through Close Collaboration (ARCC) Model

ARCC

- System wide model-organizational framework
- Guide system wide implementation and sustainability of EBP
- Assessing strengths and barriers in advancing EBP
- Launching critical mass of EBP mentors
- EBP mentors work with individual clinicians changing behavior & creating sustainable organizational change

Evidence Based Practice

Shared Governance
Nursing Department Benefits from a Clinical Research & EBP Program

- Significant number of completed and ongoing projects
- Multiple opportunities for staff to give presentations, posters etc.
- Increased shared decision making
- Magnet
- Visibility and Image

Campbell G, 2007

“The difference between what we know and what we do is lethal.”

Dr. David Satcher
16th United States Surgeon General
Key Component For a Successful Journey

Create a Research Friendly Climate
Components of Creating a Research Friendly Climate

- Mentoring
- Increase comfort level in reading research
- Always question practices and actions within your environment
- Integration into the infrastructure
Cultivate a Spirit of Inquiry & EBP Culture

• Set EBP as an institutional expectation and build it into the vision, mission and strategic plan of the organization
  • Organizations strategic plan
  • Staff evaluations
  • Competencies
  • Clinical ladder

• Incorporate EBP guidelines and practice changes into policies and procedures

Melnyk, BM., Fineout-Overholt E. EBP in Nursing & Healthcare, Lippincott. 2011
Melnyk BM. Worldviews on Evidence Based Nursing, 2016;13(2):99-101
Cultivate a Spirit of Inquiry & EBP Culture

- Include EBP as part of every new clinician’s orientation
- Provide ongoing continuing education on EBP
- Disseminate results of EBP implementation
- Provide library and internet resources
- Clinicians encouraged and supported to consistently ask questions about the care they are delivering
- Develop EBP mentors to work regularly with clinicians at point of care

Melnyk, BM., Fineout-Overholt E. EBP in Nursing & Healthcare, Lippincott. 2011
Melnyk BM. Worldviews on Evidence Based Nursing, 2016;13(2):99-101
National Survey of Hospital Nursing Research

- 160 hospitals participated-66% Magnet, 33.75% non-magnet
- > # magnet hospitals reported RN lead research
- 87% of hospital had no barriers for RN’s to be PI’s
- Research mentors were present to guide at most hospitals (82%)
- 20% provided nurse research internship
- 65% had nursing research councils
- Hospitals reported (5 year period)
  - 4 studies initiated, 4 disseminated (podium or poster), 1 publish & 2 funded

Mentoring

- Serves as a knowledge resource of the research & change process
- Cheerleader/Motivator
- Fosters personal & professional growth
- Role models research utilization behaviors
- Consider increasing numbers through a fellowship program
Research Mentor Qualifications

• Clinical currency
• Mentorship skills
• Research/EBP experience
• Positive attitude
• Strong interpersonal skills
• Familiar with the system
Links to Knowledgeable Resources

- Medical colleagues
- Graduate students
- Ph.D. faculty
- Onsite nurse researchers
Example of a Unit Based Model

Research Mentor

Unit

Unit

Unit

Unit
Increased Comfort Level with Reading Research

• Journal Club
American Journal of Critical Care
Nursing Research
JBI COnNECT
Worldviews of Evidence Based Nursing
Journal Club

- Structured format
- Informal
- Unit-based
Purposes of a Journal Club

• Every level of practitioner can participate
• Promote critical thinking and clinical questioning
• Assess the validity and applicability of the literature
• Improve competence in critical appraisal
• Increase use of literature in clinical practice & influence change in practice
• Ideas can stimulate research studies or PI projects

Levin R & Fledman HR. Teaching Evidence-Based Practice in Nursing, 2006. Springer, NY.
Lachance C. Journal of Continued Education in Nursing, 2014;45:559-565.
Tools to Evaluate the Literature

- Research evaluation tool (CURN Project)
  - evaluates each phase of the research process
  - academic, detailed and instructional
  - lengthy

- Evidence-based evaluation (Canadian Critical Care Evidence-based group)
  - evaluates key components of the research process
  - realistic, user friendly, consumer ready
Clinical Practice Questions:
Topics for Journal Club

- What is the frontline strategy for hand washing? Is it soap & water or alcohol based hand washing?
- Does the trendelenburg position create any real improvement in perfusion/flow?
- Does the use of an oral antiseptic rinse reduce the incidence of ventilator associated pneumonia?
- Which antiseptic is best for preparation of a central line insertion site?
Journal Club Outcomes

- Increased familiarity of the research terminology and process
- Revisions in policies and procedures
- Stimulated additional clinical questions
Questioning the Practice and Actions within your Environment
Personal Ownership in the Process

- Begin reading research articles
- Link with research knowledgeable individuals to help answer your questions
- Individual application of research findings if appropriate
Ways Nurses Gain Information

- 61% of nurses reported needing information at least once a week
- Nurses seldom use journal articles, research reports and hospital libraries
- Nurses usually sought out their colleagues to answer information questions
- Libraries perceived as remote from the workplace even if close by.

Librarian’s Role

- Master’s degree in accessing information
- Frequently nurses unaware of what the librarian can do for them
- Training offered in multiple aspects of searching
  - Database searches
  - Best sources to answer nurses questions
  - How to formulate questions
- Partner in the process

PICO Technique for Developing Questions

- P: Population
- I: Intervention
- C: Comparison Intervention
- O: Outcome
  - Intervention, Secondary Prevention, Prognosis and Harm Questions
- T: Time
**PICOT**

<table>
<thead>
<tr>
<th>P</th>
<th>I</th>
<th>C</th>
<th>O</th>
<th>T</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population/disease (i.e. age, gender, ethnicity, with a certain disorder)</td>
<td>Intervention or Variable of Interest (exposure to a disease, risk behavior, prognostic factor)</td>
<td>Comparison: (could be a placebo or &quot;business as usual&quot; as in no disease, absence of risk factor, Prognostic factor B )</td>
<td>Outcome: (risk of disease, accuracy of a diagnosis, harm questions)</td>
<td>Time: (time frame the question will be measured within)</td>
</tr>
</tbody>
</table>

In a population of adult medical ICU patients undergoing neuromuscular blockade, does sedation amount and types affect the recall perceptions of the patients during their hospital stay?
Animal Research: Lateral Positioning

- Immobile 6-10 hrs
  - significantly lower PaO$_2$ ‘s & higher shunts

- Alternate lateral positioning every hour
  - moderate elevations in PaO$_2$ & lower shunts

- Alternate lateral positioning every 30 minutes
  - highest PaO$_2$ & lowest shunts

Recall Perceptions of Patients Receiving Neuromuscular Blockade Therapy
I can’t make a difference

Look at the difference I can make
Quality Improvement Projects

Evidence-based Guideline Utilization & Product Evaluation

Clinical Research
Strategies for Incorporating Research into Practice

- Quality Improvement Processes
- Clinical Questions
- Bedside Consultations
Tools & Techniques

Bowel Habits Task Force
Driving Clinical Questions

- What process did we have to assess bowel habits on admission and during the ICU stay?
- Was there a connection between constipation and inability to tolerate tube feeding or reach nutritional goal?
- Did problems with constipation delay weaning?
The Quality Improvement Process

- Data collection tool designed
- Data collected on 25 consecutive patients on mechanical ventilation
- QI statistics performed

- Results shared with multidisciplinary team
- Protocol for assessment and management of bowels developed and implemented
- Currently monitoring results
Quality Improvement Projects

Evidence-based Guideline Utilization & Product Evaluation

Clinical Research
When the Evidence Comes Pre-Packaged

Guidelines for the Prevention of Intravascular Catheter-Related Infections

CDC. Prevention of Catheter Infection: MMWR 2002;51 (No. RR-10):[1-29]
Health Care Acquired Infections: Central Lines

- Pre-central line infection rate:
  - 6.38 per 1000 catheter days
- Pre-implementation practice
  - Gown, glove, mask and drape
  - Routine change of central lines every 4 days
  - Dressing change every 4 days/prn when soiled with gauze dressing

- No routine changes of central lines
- If infection suspected, perform guidewire exchange and culture the tip
- If tip positive, remove line and perform a new stick
- No routine dressing changes/use of transparent dressing to view the site
### Health Care Acquired Infections: Central Lines

<table>
<thead>
<tr>
<th></th>
<th>Device Utilization</th>
<th>Bloodstream Infection</th>
<th>Rank Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Benchmark</strong></td>
<td>&gt; 50</td>
<td>6.1</td>
<td>50-75%</td>
</tr>
<tr>
<td>MICU Central Line data</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>(Pre change)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HFH MCC Central Line data</td>
<td>&gt; 90</td>
<td>6.38</td>
<td>50-75%</td>
</tr>
<tr>
<td><strong>(Post change 2000)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HFH MCC Central Line data</td>
<td>&gt; 90</td>
<td>2.90</td>
<td>10-25%</td>
</tr>
<tr>
<td><strong>(Post change 2002)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HFH MCC Central Line data</td>
<td>&gt; 90</td>
<td>1.33</td>
<td>10-25%</td>
</tr>
</tbody>
</table>

Cost avoidance associated with low Central Line rate: $1,240,000.

* Significant at p < 0.0001

- If infection of the line is strongly suspected, pull & insert at a new site
- If mechanical or other issues arise, use guide wire technique
- Gauze dressings changed q 2 days, transparent changed q 7 days &/or no longer occlusive
- CHG prep for insertion & care
New Guidelines...New Practice

- **Lessons Learned**
  - Standardization across all ICU’s in both practice & equipment is necessary to reduce process variation
  - Line cart is not enough to ensure the correct procedure is done
  - Old habits are hard to break so remove the opportunity

- **New Practices**
  - Guidelines reviewed and adopted at institutional critical care
  - Insertion equipment available in one kit
  - Remove products to prevent use
Quality Improvement Projects

Evidence-based Guideline Utilization & Product Evaluation

Clinical Research
Product Evaluation

- Cooling blanket product evaluation
- Randomization
- Inclusion/exclusion criteria
- Lacked sample size
- Low level statistics
- Not reviewed by Ethics
Setting the Stage: Product Evaluation

- Stepping stone for designing a research study to follow
- Helps to identify methodological problems
- Captures the interest of the staff to become involved in the research study
Clinical Research Study:
Cooling by Convection versus Cooling by Conduction

- 840 bed urban tertiary medical center
- 41 consecutive adults patients receiving mechanical ventilation
- Fever related to a suspected or documented infection
- Medical critical care area
- No difference in age, weight, sex, baseline fever
Methodology

- Alternating assignment of subjects to air or water flow groups.
- Machines set at 10° C.
- Cooling therapy used until a temperature of 38.0° C or a maximum of 8 hours of cooling reached.
- Data collection for 32 hours to examine fever recurrence and complications.
- Esophageal temperature probe used.
- Peripheral extremities were wrapped to reduce shivering.
## Results

<table>
<thead>
<tr>
<th>COMPARISON VARIABLE</th>
<th>AIRFLOW N  MEAN  SD</th>
<th>WATER FLOW N  MEAN  SD</th>
<th>P-VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rate of Reduction</td>
<td>21 -0.34 0.36</td>
<td>20 -0.10 0.15</td>
<td>0.006 (Wilcoxon Rank Sum)*</td>
</tr>
<tr>
<td>Hours to Recurrence</td>
<td>21 21.1 20.6</td>
<td>20 5.6 12.0</td>
<td>0.004 (Wilcoxon Rank Sum)*</td>
</tr>
<tr>
<td>Temperature Reached goal</td>
<td>15/21 (n) 71.4%</td>
<td>8/20 (n) 40.0%</td>
<td>0.043 * (chi-square)</td>
</tr>
<tr>
<td>Complications</td>
<td>2/21 (n) 9.5%</td>
<td>2/20 (n) 10.0%</td>
<td>1.00 (Fischer-Exact)</td>
</tr>
</tbody>
</table>
Study Follow Up

- Oral presentation at the Society of Critical Care Annual Scientific Symposium in 2000
- Publication in the American Journal of Critical Care in the Jan of 2001
Different methods for securing NGT’s to prevent dislodgment & breakdown

Examining the impact of various environmental and physiological variables on sleep in the critically ill patient

Examined impact of different positions on spontaneous tidal volumes during weaning in patients with large abdomens
It can be done!!!!
Role of Nursing Leadership

- Local & Upper Level Leadership
  - facilitating staff to use of guidelines, accessible, visible & communicating adequately (Cheerleader-Role Model)
  - Support & feedback & commitment to EBP
- Organizational characteristics
  - Administrative support, policy revisions
  - Allocation of resources and encouragement to attend
  - Access to CNS or in-house nurse researcher

Sandstrom B, et. al. Worldviews on Evidence Based Nursing, 2011;
Role of Nursing Leadership

- Culture characteristics
  - Culture where research is valued by managers and incorporated into performance appraisals
  - Environments where research is encouraged, used, and recognized
  - Positive environment to support best practice
  - Established practice norms and values systems

Sandstrom B, et al. Worldviews on Evidence Based Nursing, 2011;
Formal Program for Education on EBP

**Phase 1:**
- Introduce EBP and review selected model
- Library resources introduced, Nurse lead/librarian formulate questions and introduce search processes
- Pre-defined clinical scenarios introduced and create PICO & used databases to search
  - P = Patient/population
  - I = Intervention or exposure
  - C = Clinical question
  - O = Comparative intervention or outcome
- Homework: article with a critique model for phase 2

Formal Program for Education on EBP

**Phase 2:**

- Staff nurses skills are developed for critiquing research articles
- Determining if sufficient evidence is available to make a practice change
- Review organizations model for making the practice change
- How to evaluate change and disseminate is discussed

Part of Formal Education Program

- EBP workshops held on a monthly basis
  - Iowa model
  - Research versus performance improvement
  - Statistics
  - Creating the clinical question
  - Qualitative, quantitative research
  - Writing a proposal
  - Searching for evidence
  - Critiquing evidence
  - Presenting evidence
- Creation of EBP Champions

Process Support

- Easy access to information
- Website with links to EBP/research tools
- Library sites/search capacity
- Institutional review Board training
- Staff time for training and work
- Ongoing staff & leadership interest
- Performance appraisal
Reinforce, Reward, Acknowledge

- Certificates of attendance
  - Binders with educational materials and references
- Abstracts and national conferences
  - Financial support of presenting
  - Create a template for posters
- Monthly nursing grand rounds
<table>
<thead>
<tr>
<th>Bedside RNs</th>
<th>Advanced Practice Nurse</th>
<th>Nurse Manager</th>
</tr>
</thead>
<tbody>
<tr>
<td>Questions current practice</td>
<td>Serves as coach and mentor EBP</td>
<td>Creates a microsystem that fosters critical thinking</td>
</tr>
<tr>
<td>Participates in implementing changes in practice</td>
<td>Challenges staff to seek out evidence &amp; facilitates locating evidence</td>
<td>Role models EBP</td>
</tr>
<tr>
<td>Participates as a member of the EBP project team</td>
<td>Synthesizes evidence for practice</td>
<td>Create a culture that fosters interdisciplinary quality improvement based on evidence</td>
</tr>
<tr>
<td>Read evidence related to one’s practice</td>
<td>Uses evidence to write/modify practice standards</td>
<td>Uses evidence to guide operation and management decisions</td>
</tr>
<tr>
<td>Participates in PI projects</td>
<td>Role models use of evidence</td>
<td>Uses performance criteria about EBP in evaluation of staff</td>
</tr>
<tr>
<td>Suggest resolutions clinical issues based on evidence</td>
<td>Facilitates system changed to support EBP</td>
<td></td>
</tr>
<tr>
<td><strong>Associate Director for Clinical Services</strong></td>
<td><strong>Chief Nurse Executive</strong></td>
<td></td>
</tr>
<tr>
<td>--------------------------------------------</td>
<td>--------------------------</td>
<td></td>
</tr>
<tr>
<td>Higher than retains nurse managers and APN with knowledge and skill in EBP</td>
<td>Ensures that governance reflects EBP if initiated in the councils and committees</td>
<td></td>
</tr>
<tr>
<td>Provides learning environment for EBP</td>
<td>Assigns accountability for EBP</td>
<td></td>
</tr>
<tr>
<td>Uses evidence in leadership decisions</td>
<td>Ensures explicit articulation of organizational and department commitment to EBP</td>
<td></td>
</tr>
<tr>
<td>Sets strategic direction for EBP</td>
<td>Modifies mission and vision to include EBP language</td>
<td></td>
</tr>
<tr>
<td>Provides resources for EBP</td>
<td>Provides resources to support EBP by direct care providers</td>
<td></td>
</tr>
<tr>
<td>Integrates EBP processes into division/service line governance</td>
<td>Articulate value of EBP to CEO in governing boards</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Role models EBP in administrative decision-making</td>
<td></td>
</tr>
</tbody>
</table>

Additional Role of Leadership

- Additional structural changes to enhance research utilization and conduct
  - professional career ladder
  - nursing research day
  - bedside nurse researcher of the year award
  - development of models to link with resources
The Seven Steps of Evidence-based Practice

• Step 0: Cultivate a spirit of inquiry
• Step 1: Ask clinical questions in PICOT format
• Step 2: Search for the best evidence
• Step 3: Critically appraise the evidence
• Step 4: Integrate the evidence with clinical expertise and patient preference and values
• Step 5: Evaluate the outcomes of practice decisions or changes based on evidence
• Step 6: Disseminate EBP results

Melnyk BM. AJN, 2010;110(1):51-53
Take Home Points

• Learn to read research & use it in your daily practice
• Draw your research questions from daily practice
• Increase comfort with the inquiry process
Take Home Points con’t

• Find a question you are passionate about answering
• Link with a mentor to write the proposal, submit to ethics, obtain biostatistical support and submit for publication
• You become the Mentor for your peers
It Takes a Village
WHEN WOULD NOW BE A GOOD TIME TO DO THIS?
What *routines* or *traditions* need to be changed in *your* work environment?
Risk Taker
Learn to enjoy the hunt. For it is here, in the moment of transition, in rushing to a goal, that the power resides.
Enjoy the Journey of Discovery

It will forever change the way you view your practice