Achieving the Quadruple Aim in Healthcare with Empowered, Healthy and Evidence-based Nurse Practitioners

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The Quadruple Aim in Healthcare
- Enhance the patient experience (includes quality)
- Improve population health
- Decrease costs
- Improve the work life of healthcare providers

In God We Trust, Everyone Else Must Bring Data!

The State of Healthcare and Health
- Preventable medical errors are a major cause of morbidity and mortality throughout the world (3rd cause of death in U.S.)
- The delivery of evidence-based care is highly variable with estimates of it occurring only 50 to 55% of the time
- Poor quality healthcare costs billions of dollars every year
- Healthcare spending could be reduced by 30% if patients receive evidence-based healthcare
- 80% of chronic disease can be prevented with healthy lifestyle behaviors
- Depression will be the 2nd most impairing disease worldwide by 2020

Current State of Health in Nurses

U.S. Physicians Set Good Health Example
Physicians in better health than nurses and employed adult population

by Katie Bass and Kyley McGeeney
October 3, 2012 see:

Data based on 1,984 physicians and 7,166 nurses, conducted Jan. 2, 2011 to Aug. 31, 2012.

State of Health in Nurses in 2012

Chronic Health Problems Among Physicians, Nurses, and Other Workers

<table>
<thead>
<tr>
<th>Problem</th>
<th>Physicians</th>
<th>Nurses</th>
<th>Other workers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obese</td>
<td>13</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>High Blood Pressure</td>
<td>16</td>
<td>22</td>
<td>22</td>
</tr>
<tr>
<td>High Cholesterol</td>
<td>21</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>Diabetes</td>
<td>4</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Depression</td>
<td>7</td>
<td>14</td>
<td>15</td>
</tr>
<tr>
<td>Heart Attack</td>
<td>2</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>Asthma</td>
<td>9</td>
<td>12</td>
<td>10</td>
</tr>
<tr>
<td>Cancer</td>
<td>6</td>
<td>5</td>
<td>4</td>
</tr>
</tbody>
</table>

Gallup/Healthways Well-Being Index
GALLUP
A National Study Links Nurses’ Physical and Mental Health to Medical Errors and Perceived Worksite Wellness (N=1790)

Melnyk et al., 2018, Journal of Occupational and Environmental Medicine

Health Status by Perceived Wellness Support & Stress at Workplace

From Melnyk et al., 2018, Journal of Occupational and Environmental Medicine

Percent of Nurses with Poor and Good Health with Medical Errors

Errors and Shift Work

How can we protect the health of the people who protect our own?

National Academy of Medicine
Action Collaborative on Clinician Well-Being and Resilience
Learn more at nam.edu/ClinicianWellBeing
Considering All Causes of Morbidity and Mortality, Behaviors are the #1 Killer of Americans

From a Small Coal Mining Town to Buckeye Nation: My Story

Contributors to Premature Death

What Will the Last 10 Years of YOUR Life Look Like?

Every day, we make behavioral choices that influence our health and wellness outcomes

Based on Evidence, What Do We Know?

People who have the following behaviors have 66% less diabetes, 45% less heart disease; 45% less back pain, 93% less depression, and 74% less stress

- Physical activity - 30 minutes 5 days per week
- Healthy eating - 5 fruits and vegetables per day
- No smoking
- Alcohol in moderation - 1 drink per day for women, 2 drinks per day for men

Add at least 7 hours per night of sleep and daily stress reduction for even better outcomes!
Kaylin’s Story: Australian Dream Trip Turned Nightmare


The Merging of Science and Art: EBP within a Context of Caring & EBP Culture and Environment Results in the Highest Quality of Patient Care

Clinical Decision-making Quality Patient Outcomes

Research Evidence & Evidence-based Theories

Clinical Expertise and Evidence from assessment of the patient’s history and condition as well as healthcare resources

Patient Preferences and Values

Acting on the Evidence

• Strength of the Evidence + Quality of the Evidence = Confidence to Act!

Patient Outcomes With and Without Evidence-Based Practice

Despite an aggressive research movement, the majority of findings from research often are not integrated into practice to improve outcomes

The gap between the translation of research into practice and policy is huge; it often takes decades to translate research findings into practice and policy

Why Must We Accelerate EBP?

The So What Outcomes Factor in an Era of Healthcare Reform

• Conducting research and EBP projects with high impact potential to positively change healthcare systems, reduce costs and improve outcomes for patients and their families

• Key questions when embarking on a research study or an EBP project:

So what will be the end outcome of the study or EBP project once it is completed?

So what difference will the study or EBP project make in improving healthcare quality, costs or patient outcomes? Measuring ROI is important!

So what will I measure as outcomes that will help scale the findings when the project is complete?

© Melnyk & Fineout-Overholt, 2003
COPE (Creating Opportunities for Parent Empowerment): An Evidence-Based Program to Improve Outcomes in Critically Ill/Hospitalized Young Children, LBW Premature Infants & Parents

FUNDING FOR THIS WORK BY THE NATIONAL INSTITUTE OF NURSING RESEARCH R01#05077 NR05077-04S1

A 4 Day Shorter Length of Stay (LOS) for COPE Preterms Resulted in Cost Savings of $5000 per infant; 8 Day Shorter LOS for Preterms < 32 Weeks

Why Must We Accelerate EBP?

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The Steps of EBP

Step 0:  • Cultivate a Spirit of Inquiry & EBP Culture
Step 1:  • Ask the PICO(T) Question
Step 2:  • Search for the Best Evidence
Step 3:  • Critically Appraise the Evidence
Step 4:  • Integrate the Evidence with Your Clinical Expertise and Patient Preferences to Make the Best Clinical Decision
Step 5:  • Evaluate the Outcome(s) of the EBP Practice Change
Step 6:  • Disseminate the Outcome(s)

Findings from our EBP Survey with U.S. Nurses

Melnyk et al., 2012, JONA

• Over 1000 randomly sampled nurses from the American Nurses Association
• The more years in practice, the less nurses were interested in and felt it was important to gain more knowledge and skills in EBP
The One Thing That Prevents You From Implementing EBP

<table>
<thead>
<tr>
<th>Total Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Time 151</td>
</tr>
<tr>
<td>2. Organizational culture, including policies and procedures, politics, and a philosophy of &quot;that is the way we have always done it here.&quot; 123</td>
</tr>
<tr>
<td>3. Lack of EBP knowledge/education 61</td>
</tr>
<tr>
<td>4. Lack of access to evidence/information 55</td>
</tr>
<tr>
<td>5. Manager/leader resistance 51</td>
</tr>
<tr>
<td>6. Workload/staffing, including patient ratios 48</td>
</tr>
<tr>
<td>7. Nursing (staff) resistance 46</td>
</tr>
<tr>
<td>8. Physician resistance 34</td>
</tr>
<tr>
<td>9. Budget/payors 24</td>
</tr>
<tr>
<td>10. Lack of resources 20</td>
</tr>
</tbody>
</table>

The National Chief Nurse Survey
Melnyk et al., 2016, Worldviews on Evidence-based Nursing

- 93% currently in the CNO role
- Ages ranged from 32-68 (M= 55 years)
- Years in practice ranged from 8-47 (M=31 years)
- Years as a CNO ranged from <1- 32 (M= 9 years)
- 92% female; 94% White
- 6% bachelor’s degree; 69% master’s degree;
- 8% PhD prepared; 10% DNP prepared
- 45 States and DC represented
- 18% work in Magnet facilities
- 55% reported having clinical ladder systems
- 47% had no ongoing nursing research projects

EBP Priorities

CNOs EBP Beliefs
I am sure about how to measure the outcomes of services provided to patients

Organizational Readiness
In your organization, to what extent is there a critical mass of nurses who have strong EBP knowledge & skills?

Top Priorities
As a CNO/CNE, what are the top priorities that you are currently focused on in your role?
**The First U.S. Study on Nurses’ EBP Competencies Indicates Major Deficits that Threaten Healthcare Quality, Safety and Patient Outcomes**

**Aims:**
- describe the state of EBP competency in nurses across the U.S.
- determine important factors associated with EBP competency

**Methods:**
- Cross sectional anonymous descriptive survey with nurses across the U.S.

**Sample:**
- 2,344 nurses from 19 hospitals/healthcare systems
- Mean age = 44.5 years
- 92% female
- 85% non-Hispanic White
- 58% had a bachelor’s degree
- 69.2% worked in a Magnet organization

**Correlations among EBP Competency and EBP Culture, Knowledge, Beliefs and EBP Mentoring**

<table>
<thead>
<tr>
<th></th>
<th>Mean (SD)</th>
<th>Competency</th>
<th>Culture</th>
<th>Knowledge</th>
<th>Beliefs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Culture</td>
<td>80.2 (21.9)</td>
<td>0.29</td>
<td>–</td>
<td>–</td>
<td>–</td>
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<tr>
<td>Knowledge</td>
<td>19.5 (7.0)</td>
<td>0.43</td>
<td>0.28</td>
<td>–</td>
<td>–</td>
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<tr>
<td>Beliefs</td>
<td>56.7 (8.5)</td>
<td>0.66</td>
<td>0.47</td>
<td>0.42</td>
<td>–</td>
</tr>
<tr>
<td>Mentoring</td>
<td>21.4 (10.9)</td>
<td>0.69</td>
<td>0.69</td>
<td>0.24</td>
<td>0.47</td>
</tr>
</tbody>
</table>

P < 0.001 for all the Pearson correlation coefficients

**State of Self-reported EBP Competencies by Nurses Across the United States (N = 2075)**

**Making Use of the Competencies**

The new EBP competencies should be integrated into healthcare system orientation programs, clinical ladders, and performance appraisals.

Incorporating the competencies into real world practice and academic settings will assist healthcare systems in improving quality, safety, and patient outcomes as well as reducing costs!
Creating a Culture and Environment to Sustain EBP and Healthy Work Environments

What Works
Remember, Culture Eats Strategy!

The only person that likes a change is a baby with a wet diaper!

Critical Components of an EBP Culture

A Philosophy, Mission and Commitment to EBP:
- There must be commitment to advance EBP across the organization as evidenced in orientation, clinical ladders, evaluations

A Spirit of Inquiry:
- Health professionals are encouraged to continuously ask questions, review and analyze practices to improve patient outcomes

EBP Mentors:
- Individuals who have in-depth knowledge and skills in EBP, mentoring others, and overcoming barriers to individual and organizational change

Critical Components of an EBP Culture

Administrative Role Modeling and Support:
- Leaders who value and model EBP as well as provide the needed resources to sustain it

Infrastructure:
- Tools and resources that enhance EBP across the organization, computers for searching up-to-date databases, library resources

Recognition:
- Individuals and units are rewarded regularly for EBP

Outcomes of Implementing the ARCC Model at Washington Hospital Healthcare System

- Early ambulation in the ICU resulted in a reduction in ventilator days from 11.6 to 8.9 days and no VAP
- Pressure ulcer rates were reduced from 6.07% to .62% on a medical-surgical unit
- Education of CHF patients led to a 14.7% reduction in hospital readmissions
- 75% of parents perceived the overall quality of care as excellent after implementation of family-centered care compared to 22.2% pre-implementation

Melnik et al., 2017, Worldviews on Evidence-based Nursing
The simple provision of resources and dissemination of information alone will not lead to uptake of EBP. A multi-component active strategy is necessary, including behavior and organizational culture change strategies.

A key ingredient for success is persistence as there will be many “character-building” experiences along the way!!

“At least I have found 9000 ways that it won’t work.”

Thomas Edison

Worldviews on Evidence-Based Nursing™

Linking Evidence to Action

Editor
Bernadette Melnyk, PhD, CNPN/PMHNP, FAANP, FAAN

- Gives readers methods to apply best evidence to practice
- Global coverage of practice, policy, education and management
- From a source you can trust, the Honor Society of Nursing, Sigma Theta Tau International

www.blackwellpublishing.com/wn

Ask yourself:
- What will you do if you know you can not fail in the next 2 to 5 years?
- What is the smallest EBP change that you can make tomorrow that would have the largest positive impact for your patients’ outcomes?

“...because we’ve always done it that way.”

Nothing Happens Unless First a Dream!

Carl Sandburg
The Helene Fuld Health Trust National Institute for EBP in Nursing & Healthcare took 10+ years for the dream to become reality. Inaugural Fuld National Summit held October 19-20, 2017. See https://fuld.nursing.osu.edu/

The Next 2-5 Years

What will you do in the next 2 to 5 years if you know that you cannot fail?

Shoot for the moon, even if you miss, you will land amongst the stars

There Is A Magic In Thinking Big!

Les Brown

Dream, Discover and Deliver
Just “Do It!”

Final Motivational Words

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