Igniting and Sustaining EBP to Meet the Quadruple Aim in Healthcare

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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: http://www.gallup.com/poll/157859/physicians-set-good-health-example.aspx
Data based on 1,984 physicians and 7,166 nurses, conducted Jan. 2, 2011 to Aug. 31, 2012.

Current State of Health in Nurses

<table>
<thead>
<tr>
<th>Chronic Health Problems Among Physicians, Nurses, and Other Workers</th>
<th>Physicians</th>
<th>Nurses</th>
<th>Other Workers</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Obesity</td>
<td>13</td>
<td>23</td>
<td>25</td>
</tr>
<tr>
<td>% High Blood Pressure</td>
<td>18</td>
<td>22</td>
<td>22</td>
</tr>
<tr>
<td>% High Cholesterol</td>
<td>21</td>
<td>20</td>
<td>20</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>13</td>
</tr>
<tr>
<td>% Sleep Distress</td>
<td>8</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>% Asthma</td>
<td>9</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>% Cancer</td>
<td>6</td>
<td>5</td>
<td>4</td>
</tr>
</tbody>
</table>

Gallup Healthways Well-Being Index
GALLUP
Data from the AAN National Million Hearts Committee Nurses’ Study Currently Underway (N=3640)

Health Status by Perceived Wellness Support & Stress at Workplace

Percent of Nurses with Poor and Good Health with Medical Errors

Important to Embed Wellness in Nursing Curricula

Self-Care is Key for Great Care of Others
Contributors to Premature Death

- Genetic Predisposition: 30%
- Behavioral Patterns: 40%
- Social Circumstances: 15%
- Health Care: 10%
- Environmental Exposure: 5%

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

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
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
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

EBP Culture & Environment
Context of Caring
Quality Patient Outcomes

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

Patient Outcomes With and Without Evidence-Based Practice

Why Must We Accelerate EBP?
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

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

NICU LOS NICU + Transfer Hospital LOS

*p < .05

Why Must We Accelerate EBP?
Practices routed in tradition are often outdated and do not lead to the best patient outcomes

- Daily changing of IV dressings
- Mayonnaise for head lice
- Sugar paste for pressure ulcers
- Albuterol delivery with nebulizers
- Checking placement of NG tubes with air
- Vital signs every 2 or 4 hours
- 12 Hour Shifts for Nurses

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)

The EBP Process

Clinical Inquiry
Formulate a Searchable, Answerable Question (PICOT)
Search for the Best Evidence
Rapid Critical Appraisal, Evaluation, and Synthesis of Evidence
Integrate the Evidence with Clinical Expertise and Patient Preference(s)
Generate Evidence Internal: QI External: Research
Evaluate Outcomes based on Evidence
Disseminate the Outcome(s)
A Critical Step in EBP: The PICO(T) Question

Ask the burning clinical question in PICO(T) format

Patient population
Intervention or Interest area
Comparison intervention or group
Outcome
Time

In adults with depression (P), how does CBT (I) versus interpersonal therapy (C) affect depressive symptoms (O) 3 months after treatment (T)?

Levels of Evidence

- Systematic review or meta-analysis of all relevant randomized controlled trials (RCTs)
- Evidence-based clinical practice guidelines based on systematic reviews of RCTs
- Evidence obtained from at least one well-designed RCT
- Evidence obtained from well-designed controlled trials without randomization and from well-designed case-control and cohort studies
- Evidence from systematic reviews of descriptive and qualitative studies
- Evidence from a single descriptive or qualitative study
- Evidence from the opinion of authorities and/or reports of expert committees

Why Measure the Outcomes of EBP?

Outcomes reflect IMPACT!

- EBP’s effect on patients
  - Physiologic (complication reduction; health improvement)
  - Psychosocial (quality of life; depressive and anxiety symptoms; patient satisfaction with care)
  - Functional improvement

- EBP’s effect on the health system
  - Decreased cost, length of stay, rehospitalizations
  - Nursing retention / job satisfaction
  - Interdisciplinary collaboration

Findings from our EBP Survey with U.S. Nurses

- 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

Percent of Respondents from the ANA Survey Who Agreed or Strongly Agreed with the Following Statements

<table>
<thead>
<tr>
<th>Statement</th>
<th>%</th>
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<tbody>
<tr>
<td>EBP is consistently implemented in my healthcare system</td>
<td>53.6</td>
</tr>
<tr>
<td>My colleagues consistently implement EBP with their patients</td>
<td>34.5</td>
</tr>
<tr>
<td>Findings from research studies are consistently implemented in my institution to improve patient outcomes</td>
<td>46.4</td>
</tr>
<tr>
<td>EBP mentors are available in my healthcare system to help me with EBP</td>
<td>32.5</td>
</tr>
<tr>
<td>It is important for me to receive more education and skills building in EBP</td>
<td>76.2</td>
</tr>
</tbody>
</table>
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/payers 24</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
- 46 States and DC represented
- 18% work in Magnet facilities
- 55% reported having clinical ladder systems
- 47% had no ongoing nursing research projects

EBP Priorities

How important is it for you to build & sustain a culture of EBP?

How much do you believe implementation of EBP improves quality & patient outcomes?

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

Organizational Readiness for EBP
To what extent is EBP clearly described as central to the mission & philosophy of your institution?
Organizational Readiness for EBP
To what extent do you believe that EBP is practiced in your organization?

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?

Performance Metrics
NDNQI Metrics

Performance Metrics
Core Measures

Creating a Culture and Environment to Sustain EBP
What Works

Remember, Culture Eats Strategy!
The only person that likes a change is a baby with a wet diaper!

We must begin with the end in mind

SHOCK!
“You are asking me to implement EBP on top of everything else that I do?”

Stressed!

Change Fatigue

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: 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 data bases, library resources.

Recognition:
• Individuals and units are rewarded regularly for EBP.

EBP Competencies for Practicing Nurses and Advanced Practice Nurses

The Establishment of Evidence-based Practice Competencies for Practicing Registered Nurses and Advanced Practice Nurses in Real-World Clinical Settings: Proficiencies to Improve Healthcare Quality, Reliability, Patient Outcomes, and Costs 2014

Bernadette Mazurek Melnyk, RN, PhD, CNPN/PMHNP, FAANP, FNAP
Lynn Gallagher-Ford, RN, PhD, DFNAP, NE-BC
Lisa English Lang, RN, MSN, CNS
Ellen Fineout-Overholt, RN, PhD, FAAN

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

Return on Investment with EBP
• It is critical to establish ROI with EBP
• ROI helps with sustainability of EBP
• We must measure quality indicators

Melnyk & Fineout-Overholt’s ARCC (Advancing Research and Clinical practice through close Collaboration) Model

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 settings will assist healthcare systems in improving quality, safety, and patient outcomes as well as reducing costs!
Evidence to Support ARCC

- **Study #1**: Descriptive correlational study with 160 nurses
- **Study #2**: A psychometric study of the EBP beliefs and EBP implementation scales with 360 nurses
- **Study #3**: A randomized controlled pilot study with 47 nurses in the VNS
- **Study #4**: A quasi-experimental study with 159 nurses in a clinical research medical center environment
- **Study #5**: A pre-experimental study with 52 clinicians at WHHS

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 6.2% 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

Melnyk 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

The Future of EBP: What It Will Look Like in 2030

- EBP is in the DNA of every practicing clinician and educator
- 100% of healthcare decisions are evidence-based
- Reimbursement is only provided for EBP
- There is no time lag between the generation of research findings and their implementation in practice to improve care and outcomes

What Will It Take to Achieve the Vision?

- Slaying of many sacred cows!
- An interprofessional team dream, belief, risk-taking and persistence through the “character-builders!”
- A sense of urgency; the time is NOW!
- Professors and clinical educators who have the knowledge and skills to teach EBP as people cannot teach what they themselves do not know
- Investment in building cultures and environments of EBP, including critical masses of EBP mentors
- Integration of the new EBP competencies as standard of care

Diffusion of Innovation
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

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.”

Carl Sandburg

Nothing Happens Unless First a Dream!

The Helene Fuld Health Trust National Institute for EBP in Nursing & Healthcare took 10+ years for the dream to become reality

Fuld National Summit – October 18-20, 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

-Les Brown

There Is A Magic In Thinking Big!

Contact Information

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