Reaching the Quadruple Aim in Healthcare with Evidence-based Practice: Key Strategies for Success

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The Quadruple Aim in Healthcare

- Enhance the patient experience (includes quality)
- Improve population health
- Decrease costs
- Improve the work life and well-being of healthcare providers

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.

Percent of Nurses with Poor and Good Health with Medical Errors

Errors and Shift Work


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

The Ohio State University
Considering All Causes of Morbidity and Mortality, Behaviors are the #1 Killer of Americans

What will the last 10 years of YOUR life look like?

We Make Behavioral Choices Every Day

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

Getting 7 hours of sleep and regularly engaging in stress reduction will result in even greater reductions in chronic disease.
Percent of adults who engage in the 5 leading health behaviors that can reduce the risk of chronic disease. Nearly 83% of healthcare spending could be cut if more people employed:

- Not Smoking
- Exercising regularly
- Avoiding alcohol or drink in moderation
- Maintaining a healthy body weight
- Getting sufficient sleep

CDC, 2016

Contributors to Premature Death

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

contributors to premature death

Kaylin’s Story: Australian Dream Trip Turned Nightmare


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?

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?

- Tongue Patch for Weight Loss
The Steps of EBP

- Cultivate a Spirit of Inquiry & EBP Culture
- Ask the PICO(T) Question
- Search for the Best Evidence
- Critically Appraise the Evidence
- Integrate the Evidence with Your Clinical Expertise and Patient Preferences to Make the Best Clinical Decision
- Evaluate the Outcome(s) of the EBP Practice Change
- Disseminate the Outcome(s)

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

The National Chief Nurse Survey

- 83% currently in the CNO role (N=273)
- 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;
- 6% 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 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

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 hospital/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

The First U.S. Study on Nurses’ EBP Competencies Indicates Major Deficits that Threaten Healthcare Quality, Safety and Patient Outcomes
State of Self-reported EBP Competencies by Nurses Across the United States (N = 2075)

Impact of Magnet designation on EBP Competency

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

Structural Equation Model

Making Use of the Competencies

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:
- 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

Infrastructures:
- Tools and resources that facilitate EBP across the organization, computer searching, updated 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

Melnyk et al., 2017, Worldviews on Evidence-based Nursing

EBP RN Competencies after ARCC Implementation: Memorial Sloan Kettering vs. the National Study Data

1. Questions practice for the purpose of improving the quality of care
2. Describes clinical problems using internal evidence
3. Participates in the formulation of clinical questions using PICO-T format
4. Searches for external evidence
5. Participates in a critical appraisal of pre-assessed evidence
6. Participates in a critical appraisal of published research studies
7. Participates in the evaluation and synthesis of a body of evidence
8. Integrates evidence from internal and external sources to plan EBP practices
9. Implements practice changes based on evidence, expertise and patient preferences
10. Evaluates outcomes of EB practice changes
11. Disseminates best practices supported by evidence
12. Participates in activities to sustain an EBP culture

Melnyk et al., 2017, Worldviews on Evidence-based Nursing

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ARCC© = Advancing Research & Clinical practice through close Collaboration

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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, APRN-CNP, FAANP, FNAP, 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

https://onlinelibrary.wiley.com/journal/17416787

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?

Nothing Happens Unless First a Dream!
Carl Sandburg

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

Because we’ve always done it that way!
The Helene Fuld Health Trust National Institute for EBP in Nursing & Healthcare took 10+ years for the dream to become reality

- Inaugural Fuld National Expert Forum and Summit October 18-20, 2017
- Recommendations published in Worldviews on Evidence-based Nursing
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

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