

**Improving Healthcare Quality and Patient Outcomes with Evidence-based Practice**

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**In God We Trust,  
Everyone Else Must  
Bring Data!**



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**The State of Healthcare**

- There are up to 200,000 unintended patient deaths per year (more than auto accidents & breast cancer)
- Patients only receive about 55% of the care that they should when entering the healthcare system
- Poor quality healthcare cost the United States about 720 billion dollars in 2008
- Wasteful healthcare spending costs the healthcare system 1.2 trillion dollars annually
- The U.S. healthcare system could reduce its healthcare spending by 30% if patients receive evidence-based healthcare



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**The Cost of Poor Quality Healthcare**

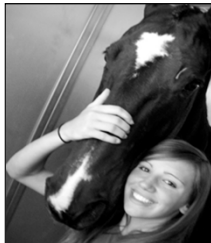
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-RAND



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**Kaylin's Story:  
Australian Dream Trip Turned Nightmare**



From Melnyk, B.M., & Fineout-Overholt, E. (2011). *Implementing EBP: Real World Success Stories*



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**A High Reliability  
Healthcare Organization**

- A high reliability healthcare organization provides care that is safe and one that minimizes errors while achieving exceptional performance in quality and safety
- A healthcare organization that has measurable near perfect performance on quality of care, patient safety and efficiency
- It is recognized that EBP is a key strategy in creating a high reliability organization



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 A Key Strategy for Enhancing Engagement,  
 Reducing Stress, Fatigue and Burnout



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**What is Evidence?**

- A collection of facts that grounds one's belief that something is true (Dictionary.com 2007)
- External versus internal evidence
  - **External evidence:** generated from rigorous research
  - **Internal evidence:** generated from outcomes management; practice based evidence
- Does the evidence that is generated through rigorous research still hold when translated to the real world?

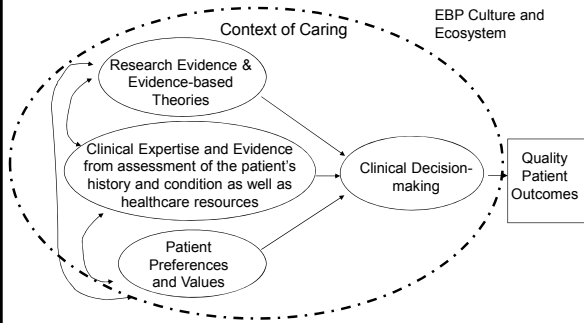
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**The So What Factor  
 in an Era of Healthcare Reform**

- 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?

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



EBP Culture and Ecosystem

Context of Caring

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


Clinical Decision-making

Quality Patient Outcomes

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 © Melnyk & Fineout-Overholt, 2003

**Acting on the Evidence**

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



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**The IOM Roundtable on EBM**

- Formed in response to the 2003 IOM's Committee on the Health Professions Education Summit recommendation that
  - All healthcare professionals will be educated to deliver patient-centric care as members of an inter-disciplinary team, **emphasizing EBP**, quality improvement approaches and informatics
- **Ninety percent of healthcare decisions will be evidence-based by 2020**



- The IOM Roundtable on EBP


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### Annual Guide to Clinical Preventive Services

- Evidence-based gold standard recommendations adapted for a pocket-sized book
- Formatted for clinicians to consult for clinical guidance in their daily practice
- Recommendations are presented in an indexed, easy-to-use format with at-a-glance charts

The Guide to Clinical Preventive Services  
2010 - 2011  
Recommendations of the U.S. Preventive Services Task Force



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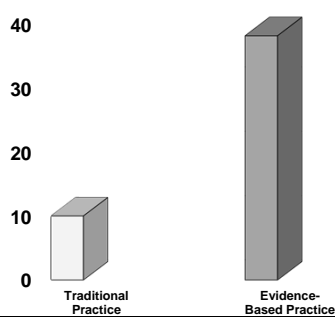
## Why Must We Accelerate Evidence-Based Practice in Healthcare Providers and Systems Across the U.S?




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### Patient Outcomes With and Without Evidence-Based Practice



Practice Type	Approximate Outcome Score
Traditional Practice	10
Evidence-Based Practice	38




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### Why Must We Accelerate EBP?

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


- It takes approximately 17 years to translate research findings into practice if we are fortunate!




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







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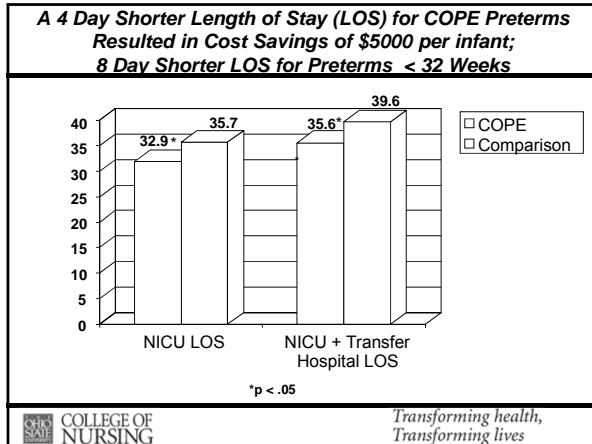
### The COPE NICU Program





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### Why Must We Accelerate EBP?

- A high JASPA score (Journal of Associated Score of Personal Angst)
  - J: Are you ambivalent about renewing your Journal subscriptions?
  - A: Do you feel Anger toward prolific authors?
  - S: Do you ever use journals to help you Sleep?
  - P: Are you surrounded by piles of Periodicals?
  - A: Do you feel Anxious when your journals arrive?

Modified from BMJ (1995), 311, 166-1668

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### Why Must We Accelerate EBP?

- Practices routinized in tradition are often outdated and do not lead to the best patient outcomes.
  - ❖ Daily changing of IV dressings
  - ❖ Perineal shaves before child birth
  - ❖ Mayonnaise for head lice
  - ❖ Sugar paste for pressure ulcers
  - ❖ Albuterol delivery with nebulizers

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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)

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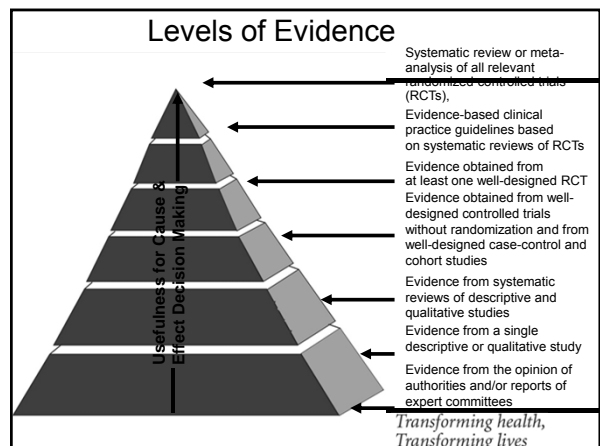
### A Critical Step in EBP: The PICO(T) Question

Ask the burning clinical question in PICO(T) format

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

In premature infants (P), how does music (I) versus massage (C) affect oxygen saturation (O) while in the NICU (T)?

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## Levels of... Chocolate

*"Inspirational quotes are fine, but you'll motivate more people with chocolate."*

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 Modified from Julia Sollenberger, University of Rochester  
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## 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
  - ❖ Nursing retention / job satisfaction
  - ❖ Interdisciplinary collaboration

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## Major Barriers to the Advancement of EBP

- Lack of knowledge and skills
- Low comfort level with search techniques
- Perceived lack of time
- Challenges with critically appraising research
- Lack of organizational/administrative support
- Educational programs that continue to teach research the "traditional way" with a focus on producing instead of using evidence
- Negative attitudes toward research

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Colleagues who are skeptical of or who do not believe in EBP

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## Findings from our Recent EBP Survey with U.S. Nurses

### Other Findings (Mehy et al., JONA, 2012)

- More highly educated nurses reported being more clear about the steps in EBP and having more confidence implementing evidence-based care
- The more years in practice, the less nurses were interested in and felt it was important to gain more knowledge and skills in EBP

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

	%
EBP is consistently implemented in my healthcare system	53.6
My colleagues consistently implement EBP with their patients	34.5
Findings from research studies are consistently implemented in my institution to improve patient outcomes	46.4
EBP mentors are available in my healthcare system to help me with EBP	32.5
It is important for me to receive more education and skills building in EBP	76.2

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The One Thing That Prevents You From Implementing EBP	
	Total Responses
1. Time	151
2. Organizational culture, including policies and procedures, politics, and a philosophy of "that is the way we have always done it here."	123
3. Lack of EBP knowledge/education	61
4. Lack of access to evidence/information	55
5. Manager/leader resistance	51
6. Workload/staffing, including patient ratios	48
7. Nursing (staff) resistance	46
8. Physician resistance	34
9. Budget/payers	24
10. Lack of resources	20



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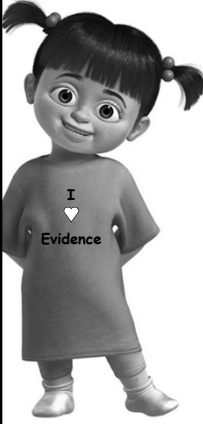
### Evidence-Based Facilitators of EBP

- Individual knowledge and skills of EBP
- Beliefs that EBP improves care and outcomes
- Beliefs in the ability to implement EBP
- Mentors who are skilled in EBP
- Administrative/organizational support, including executives/managers that model and encourage EBP



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### Facilitators




Champions, mentors and nurse executives/managers who are passionate about EBP

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### An Essential Element Required for a Successful Change to System-wide EBP

A Vision with Specific Written Goals  
*We must begin with the end in mind*




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### Ask yourself:


- *What would you do if you knew you could not fail in the next 2 to 3 years?*
- *What is the smallest EBP change that you can make tomorrow that would have the largest positive impact for your patients' outcomes?*




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### SHOCK!

"You are asking me to implement EBP on top of everything else that I do?"




## Stressed!



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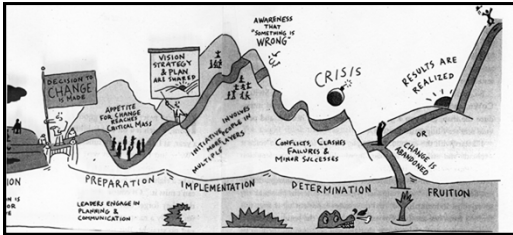
## Change Fatigue



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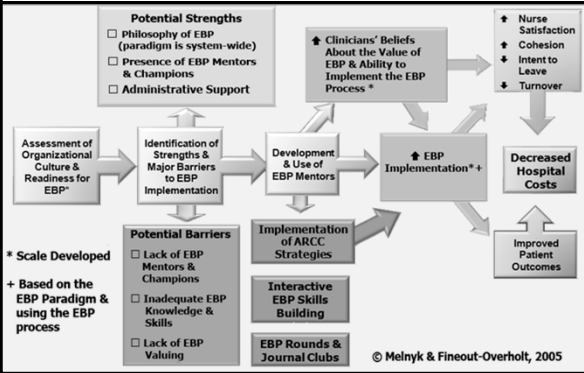
### The Change Curve Model by Jeanie D. Duck

Knowing what to expect as part of the change process will enhance success!!!



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### Melnik & Fineout-Overholt's ARCC Model



© Melnik & Fineout-Overholt, 2005

### Outcomes of Implementing the ARCC Model at Washington Hospital Healthcare System

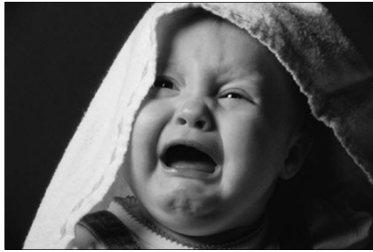
- Early ambulation in the ICU resulted in a reduction in ventilator days from 11.6 to 8.9 days and no VAP
- Pressure ulcer rates were reduced from 6.07% to .62% on a medical-surgical unit
- Education of CHF patients led to a 14.7% reduction in hospital readmissions
- 75% of parents perceived the overall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

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## Creating a Culture to Implement and Sustain EBP: What Works

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



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### Critical Components of an EBP Culture

- **A philosophy, mission and commitment to EBP:** there must be organizational commitment to advance EBP
- **A Spirit of Inquiry:** all health professionals are encouraged to question their current practices
- **A Cadre of EBP Mentors:** who have in depth knowledge and skills in EBP, mentoring others, and overcoming barriers to individual and organizational change



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### Critical Components of an EBP Culture

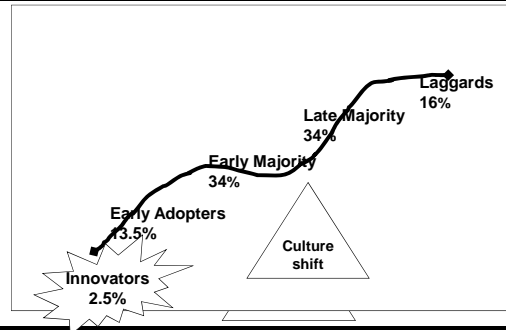
- **Administrative Role Modeling and Support:** leaders who value and model EBP as well as provide the needed resources to sustain it
- **Infrastructure:** tools and resources that enhance EBP across the organization, such as computers for searching and up to date data bases
- **Recognition:** individuals and units are rewarded regularly for EBP



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### Diffusion of Innovation



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**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



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### Persistence is a Key to Success

Theodor S. Geisel wrote a children's book that was rejected by 23 publishers. The 24<sup>th</sup> publisher sold 6 million copies of the first "Dr. Seuss Book."



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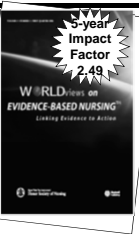
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### Worldviews on Evidence-Based Nursing™


*Linking Evidence to Action*

Editor: Jo Rycroft-Malone, RN, PhD  
 Associate Editors: Tracey Bucknall, RN, PhD  
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### American Journal of Nursing



- Evidence-Based Practice, Step by Step: 10-part series
- Articles appeared every other month
- Periodic "Ask the Authors" call-ins
  - See [www.ajnonline.com](http://www.ajnonline.com)

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? ? ? ?

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

? ? ? ?

Anonymous

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### Nothing Happens Unless First a Dream!

*Carl Sandburg*



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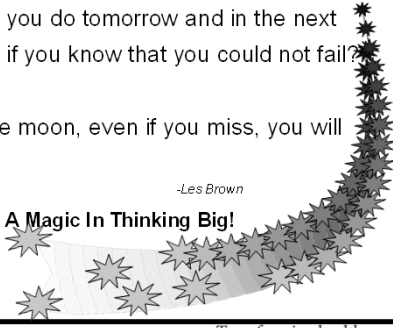
### The Next 2-3 Years

What would you do tomorrow and in the next 2 to 3 years if you know that you could not fail?

Shoot for the moon, even if you miss, you will hit the stars

-Les Brown

**There Is A Magic In Thinking Big!**



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