

# **Implementing Evidence-based Practice in Real World Practice Settings: Key Strategies for Conducting and Disseminating EBP Implementation Projects**

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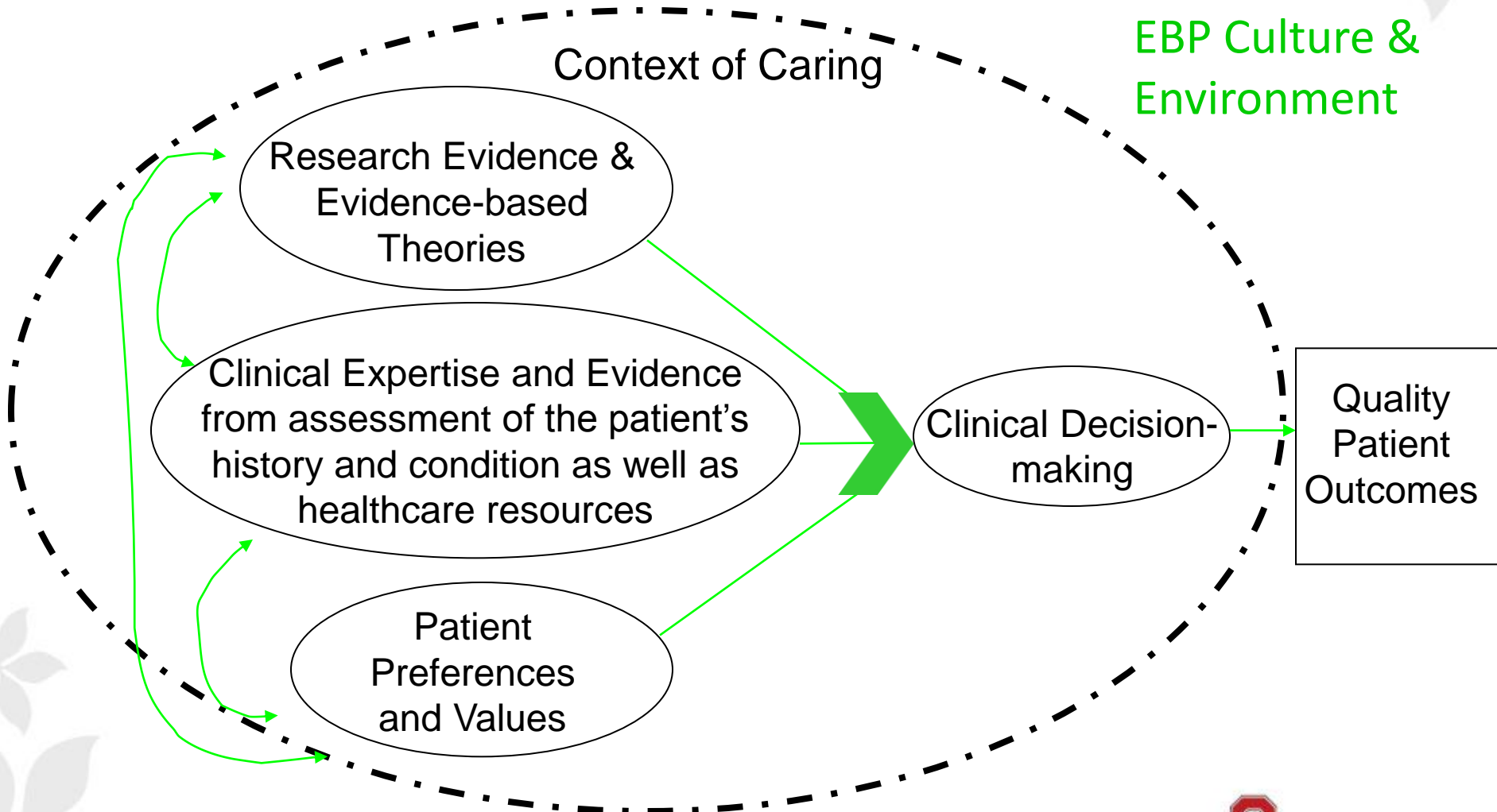
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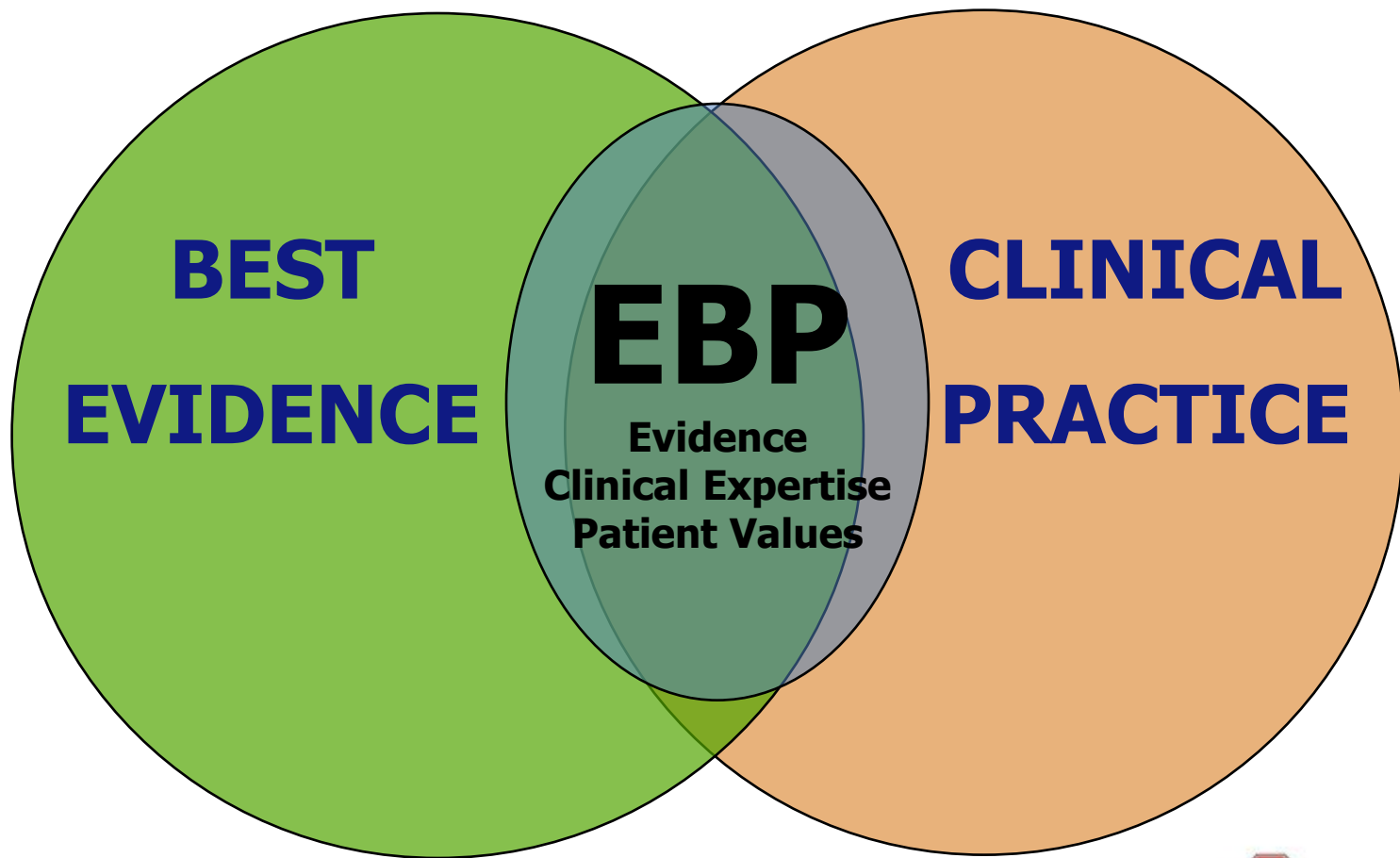
*Editor, Worldviews on Evidence-based Nursing*



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



# Evidence-Based Practice is the integration of Best Evidence with Clinical Practice



# The Difference between Research and an EBP Implementation Project

- **Research:** a rigorous systematic inquiry designed to generate new knowledge and external evidence
- **EBP Implementation Project:** Implementation of a practice change based upon external evidence generated from research for the ultimate purpose of improving patient outcomes (may also integrate internal evidence)



# 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:

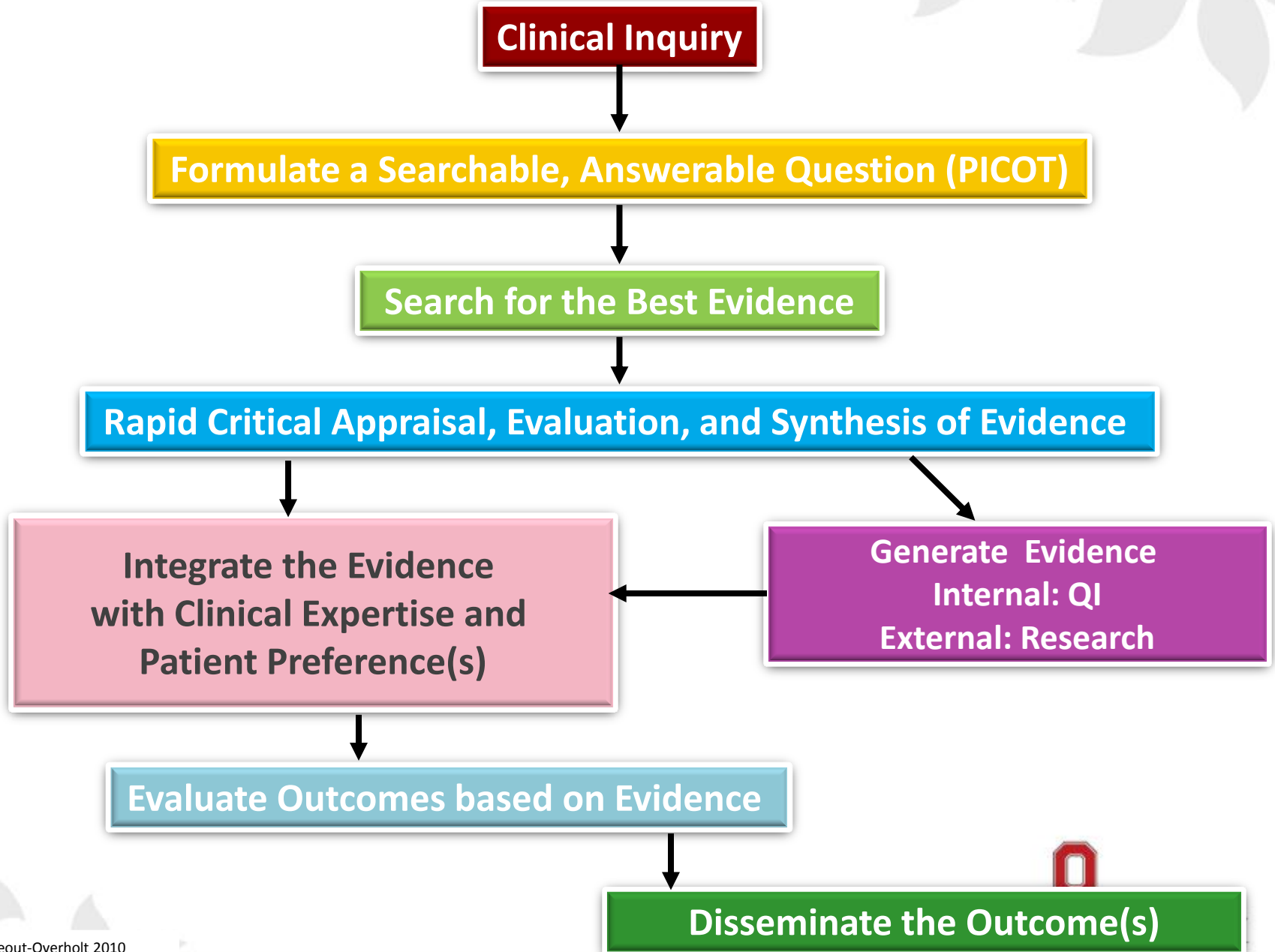
- Evaluate the Outcome(s) of the EBP Practice Change

Step 6:

- Disseminate the Outcome(s)



# The EBP Process



# 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

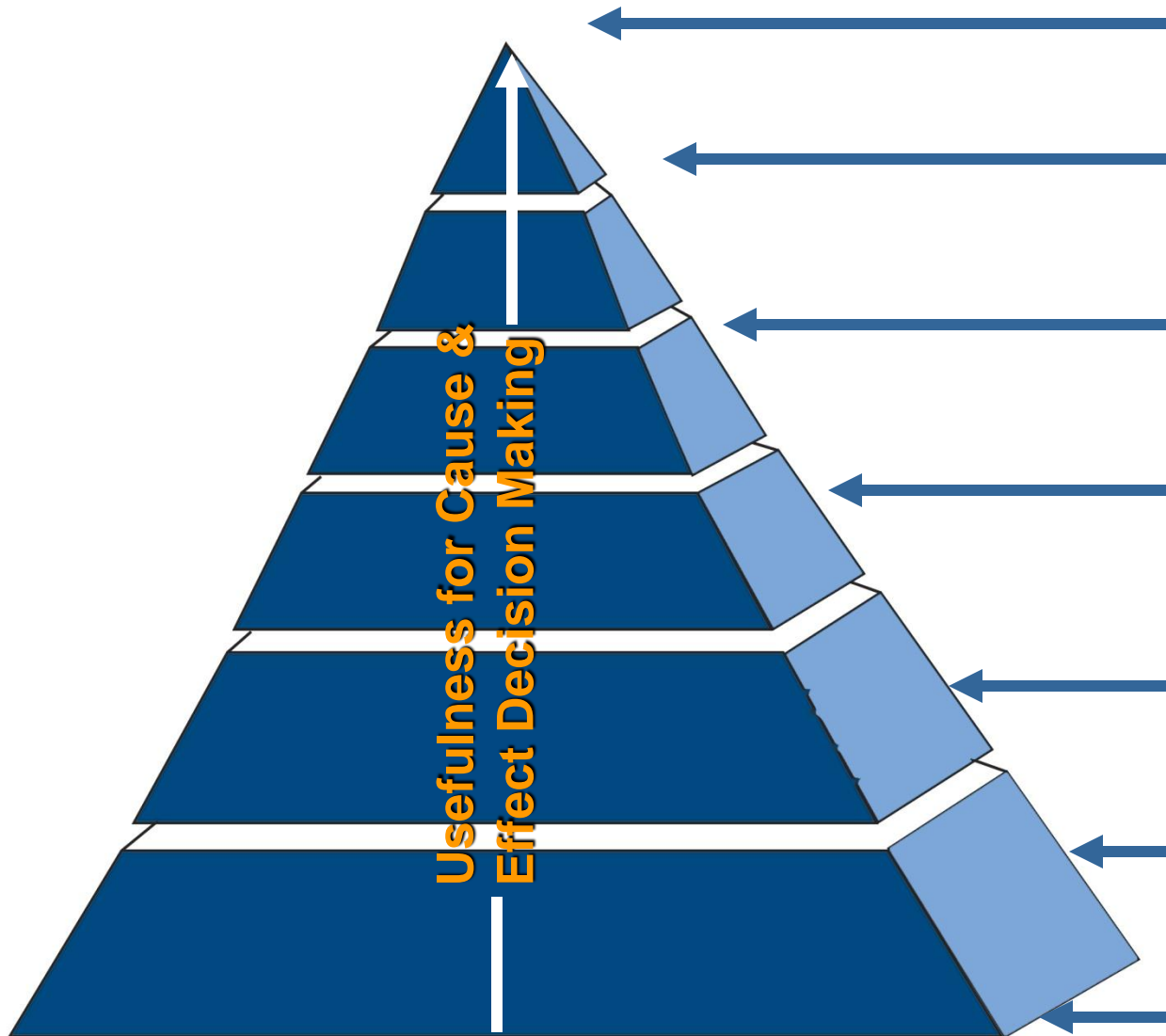
Outcome

Time

In *adolescents 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 Outcomes?

- Evaluating outcomes of an EBP change is important to determine whether the findings from research are similar when translated into the real world clinical practice setting
- When an effective intervention from research is translated into clinical practice where confounding variables are not controlled and the patients are not the same as those used in research, the outcomes in the real world may be different



# 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

**OUTCOMES**

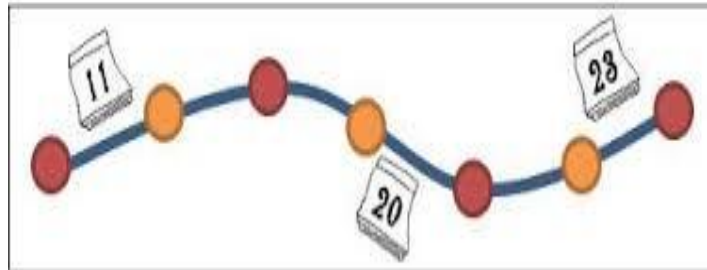
# Important Questions to Ask When Selecting Outcomes to Measure of the EBP Project

- Are the outcomes of interest sensitive to change?
- How will the outcome of interest be measured (subjectively through self-report, objectively by observation, or through EHR data)?
- Are there valid and reliable instruments to measure the outcomes of interest?
- Who will measure the outcomes and will training be necessary?
- What is the cost of measuring the outcomes?



# When to Measure Outcomes

- Before the practice change (at baseline)
- Shortly after the practice change (short-term follow-up)
- More long-term after the practice change, which provides data on the sustainable impact of the EBP change



# Remember to Also Include Process Measures That Lead to the Outcomes

- Process measures are how the EBP change is being implemented (e.g., Are the staff implementing the practice change as designed; Is it being *consistently* implemented; What are the barriers or facilitators of the EBP change?)



# Steps of an EBP Implementation Project

- Identify the problem; include data on the prevalence of the problem in your setting
- Ask the PICO question
- Search for and critically appraise the evidence
- Evaluate and synthesize the evidence
- Decide upon the best evidence-based practice change



# Steps of an EBP Implementation Project

- Identify goals for implementation of the EBP change, methods to be undertaken (e.g., education of staff, use of protocol sheets), potential barriers with strategies, outcomes to be measured, time-line and persons responsible for each goal
- Obtain IRB approval if needed
- Collect baseline data



Colleagues who are skeptical of or who do not believe in EBP may be a huge barrier to the success of an EBP implementation project





# Steps of an EBP Implementation Project

- Implement the evidence-based practice change
- Measure the process and outcomes of the evidence-based practice change
- Disseminate the outcomes and celebrate the success!



# Reducing Falls in a Definitive Observation Unit: An Evidence-Based Practice Institute Consortium Project

*Gutierrez, F. & Smith, K; Published in CCQ*

- ***The Problem Identified by a Spirit of Inquiry  
(Step 0)***

- Falls in a high-acuity cardiac and medical surgical telemetry unit were exceeding the California Nursing Outcomes Coalition benchmark for hospitals similar in size
- Each fall costs a hospital an average of \$11,402 depending on injury and length of stay



# Reducing Falls in a Definitive Observation Unit: An Evidence-Based Practice Institute Consortium Project

- ***The PICO Question (Step 1)***

In a convenience sample of inpatients determined to be at high risk for falling (P), how does identifying and modifying practices determined to be obstructive to implementation of an evidence-based fall prevention practice (I) compared with current practice (C) reduce the occurrence of falls (O)?



# Reducing Falls in a Definitive Observation Unit: An Evidence-Based Practice Institute Consortium Project

- ***The Search for Evidence (Step 2)***

- A literature review of published fall-related research was conducted

- 100 publications underwent initial review, and then narrowed to 22 for thorough review; 18 were finally selected to be used to guide this EBP implementation project (most of the studies were conducted without random assignment)



# Reducing Falls in a Definitive Observation Unit: An Evidence-Based Practice Institute Consortium Project

- ***Critical Appraisal of the Studies from the Search Led to the Following Conclusions (Step 3)***
  - The etiology of falls is multifactorial
  - The following interventions reduce falls
    - \**Regular hourly rounding*
    - \**Educational oversight of an active prevention protocol*
    - \**An assessment tool*
    - \**Ensuring appropriate lighting, clearing clutter, and removing trip hazards*



# Reducing Falls in a Definitive Observation Unit: An Evidence-Based Practice Institute Consortium Project

- ***Integration of the Evidence with Clinical Expertise and Patient Preferences to Determine the Practice Change (Step 4: Action)***

A team, consisting of a bedside nurse (a fellow), an APN (the mentor), and a CNS (the project mentor) was formed to work on creating and implementing the EBP change to reduce falls; They attended an EBP institute, which was a consortium of local hospitals for nursing excellence in San Diego

Paid time was given to work on the project (6 to 8 hour paid monthly sessions over 5 months and 48-hours paid non-clinical time)

The fellow recruited the education training team that consisted of 2 day-shift and 2 night-shift RNs who ended up being champions for the project



# Reducing Falls in a Definitive Observation Unit: An Evidence-Based Practice Institute Consortium Project

- ***Integration of the Evidence to Determine the Practice Change (Step 4: Action)***

Baseline data was collected regarding current practices to prevent falls, including surveys with nurses and physicians regarding what interventions they were using that helped to prevent falls

Based on external and internal evidence, a SAFE (Specialty Adult Focused Environment) area and evidence-based fall prevention protocol was embedded into a new standard of evidence-based care for fall prevention



# Reducing Falls in a Definitive Observation Unit: An Evidence-Based Practice Institute Consortium Project

- ***Evaluate the outcomes of the EBP change***

- (Step 5)***

- In the previous three quarters before the EBP protocol was implemented, fall rates rose from 3.0/1000 patient days to 4.87/1000 patient days

- In the first phase of the EBP change, fall rates dropped to 3.59/1000 patient days and staff knowledge increased regarding use of the fall prevention protocol





# Facilitators

The RN Champions were determined to be a key ingredient to the success of this project

I



Evidence



# Impact of Oral Hygiene on Prevention of Ventilator-associated Pneumonia in Neuroscience Patients

*Powers, J., Brower, A. & Tolliver, S. ;*

*Published in Journal of Nursing Care Quality*

- ***The Problem Identified by a Spirit of Inquiry (Step 0)***

- Ventilator-associated pneumonia (VAP) is one of the most frequent complications among critically ill patients
- The incidence of VAP is 10 to 65 percent
- Patients with VAP have a mortality rate of 12 to 71%
- Patients with VAP have increased ICU LOS from 4.3 to 19 days, costing \$57,000 per occurrence



# Impact of Oral Hygiene on Prevention of Ventilator-associated Pneumonia in Neuroscience Patients

- ***The PICO Question (Step 1)***
  - In adult neuroscience patients (P), how does implementation of an evidence-based oral hygiene protocol (I) versus the current protocol being used (C) result in fewer episodes of VAP?



# Impact of Oral Hygiene on Prevention of Ventilator-associated Pneumonia in Neuroscience Patients

- ***The Search for Evidence (Step 2)***
  - Etiology of VAP
  - A positive association exists between dental plaque and VAP
  - Several studies have linked the method of oral hygiene (e.g., antiseptic rinses to the prevention of VAP)



# Impact of Oral Hygiene on Prevention of Ventilator-associated Pneumonia in Neuroscience Patients

- ***Critical Appraisal of the Evidence (Step 3)***
  - Little evidence supports current oral care practices by nurses
  - Little evidence exists to inform oral care with neuroscience patients



# Impact of Oral Hygiene on Prevention of Ventilator-associated Pneumonia in Neuroscience Patients

- ***Integration of the Evidence to Inform Best Practice (Step 4: Action)***

- A multidisciplinary ventilator management program team was developed, with a goal to decrease VAP
- An evidence-based protocol for oral care was developed, including use of an antiseptic rinse with brushing the teeth every 12 hours, use of oral swabs every 4 hours, and deep oral-pharyngeal suctioning every 12 hours



# Impact of Oral Hygiene on Prevention of Ventilator-associated Pneumonia in Neuroscience Patients

- ***Evaluation of Outcomes (Step 5)***

- In the first phase of implementation, the neuroscience unit went 13 weeks without any cases of VAP and 20 weeks with only one case
- 5 months into the evaluation period, several cases of VAP were identified: the cause was investigated and learned that the unit was out of deep oral suctioning catheters, which went undetected
- The oral care kits had been introduced as a trial and the staff thought the trial was over
- The catheters are now packaged routinely as an oral care kit



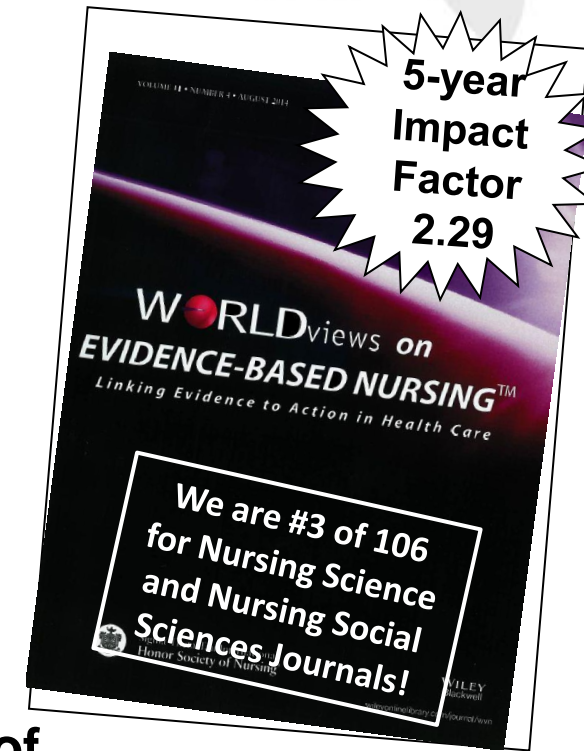
# ***Worldviews on Evidence-Based Nursing™***

***Linking Evidence to Action (Current Impact Factor = 2.38)***

## **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**



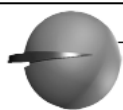
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**THE OHIO STATE UNIVERSITY**



# Implementing and Sustaining EBP in Real World Healthcare Settings Column in Worldviews: Ideal for Publishing EBP Implementation Projects



## Implementing EBP Column

### Implementing and Sustaining EBP in Real World Healthcare Settings: A Leader's Role in Creating a Strong Context for EBP

Lynn Gallagher-Ford, RN, PhD, DPFNAP, NE-BC

Column Editor for "Implementing and Sustaining EBP in Real World Healthcare Settings"

This column shares the best evidence-based strategies and innovative ideas on how to promote and sustain evidence-based practices and cultures in clinical organizations. Guidelines for submission are available at <http://onlinelibrary.wiley.com/journal/10.1111/JSSN>1741-6787

#### INTRODUCTION

A growing body of research has emerged related to moving beyond the barriers to evidence-based practice (EBP) toward implementing strategies to successfully implement and sustain EBP in organizations (Melnyk, 2007). Through this work, the concept of organizational context has emerged as critical to success. Evidence-based practice context has been defined as "the specific environment in which implementation, utilization, and creation of evidence may take place" (McCormack et al., 2002, p. 101) and has been described as including three characteristics: organizational culture, leadership, and measurement or evaluation. More recently, Dugherly et al. (2013) found that contextual factors exist at four levels: individual, environmental, organizational, and cultural and "influence facilitation of evidence-based practice in real situations at the point-of-care" (p. 129).

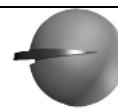
Researchers have identified aspects of context supportive to implementation of EBP, including creation of a culture where EBP is valued and expected, where dialogue between administration and staff is prevalent and opportunities for collaboration are encouraged (Cummings et al., 2008). Additionally, development of practitioners' EBP knowledge and skills, availability of resources, including access to EBP mentors (Melnyk 2007), and adequate staffing and time; to review and implement evidence are critical (Melnyk, 2004; Rycroft-Malone, 2005). Finally, developing nurses' skills to negotiate organizational complexities is important to successful integration of evidence into nursing practice (French, 2005).

The American Nurses Association Scope and Standards for Nurse Administrators states that nurse administrators are responsible to "integrate research findings into practice" and "create a supportive environment with sufficient resources for nursing research, scholarly inquiry, and the generation of knowledge" (American Nurses Association, 2008, p. 41). Newhouse (2007) states that nursing leaders are a "significant force in the success of EBP because they allocate the human and material resources that provide the context for nurses' work environment and shape the culture for resource use" (p. 21).

The role of the nursing leader in creating the context for implementing and sustaining EBP has been clearly articulated in the literature, yet challenges in the "real world" often seem daunting and beg the following questions: "What can one leader do to make EBP the foundation of practice in a real world setting?"; and "Can one leader positively affect change in a setting that has a long history of paternalistic decision making and power, which is deeply steeped in traditional nursing hierarchies and roles?" The answer is yes, one nurse leader can influence the context and the culture of an organization to support a transformation to an EBP friendly facility.

#### DESCRIPTION OF THE STRATEGIES AND OUTCOMES

This journey began with one nursing leader believing that an EBP transformation was possible and taking action to make it a reality. First steps included acquisition of EBP knowledge and skills, which were empowering and built confidence to



## Implementing EBP Column

### Leveraging Shared Governance Councils to Advance Evidence-Based Practice: The EBP Council Journey

Lynn Gallagher-Ford, RN, PhD, DPFNAP, NE-BC

This column shares the best evidence-based strategies and innovative ideas on how to facilitate the implementing of EBP principles and processes by clinicians as well as nursing and interprofessional students. Guidelines for submission are available at <http://onlinelibrary.wiley.com/journal/10.1111/JSSN>1741-6787.

#### BACKGROUND

A community hospital with progressive nursing leadership set out to redefine and reinvent professional nursing practice. One of the key strategies in this reformation was the replacement of traditional nursing committees with shared governance councils. Porter-O'Grady (2004) has defined shared governance as a professional practice model, founded on the cornerstone principles of partnership, equity, accountability, and ownership that form a culturally sensitive and empowering framework, enabling sustainable and accountability-based decisions to support an interdisciplinary design for excellent patient care. Many organizations have operationalized shared governance through definitions such as "a dynamic staff-leader partnership that promotes collaboration, shared decision-making and accountability for improving quality of care, safety, and enhancing work life" (Vanderbilt University Medical Center, 2004). The implementation of shared governance was undertaken as an underpinning of moving away from traditional "top-down," hierarchical nursing governance to a model that would promote staff participation, ownership, and autonomy.

#### The Process of Council Formation

The conversion of committees to councils began with thoughtful determination of what the work of each council needed to be and then naming councils to capture the individual council activities. In this process, the following changes were made: the Quality Assurance Committee became the Quality Council; the Nursing Policy and Procedure Committee became the Clinical Practice Council; the Recruitment and Retention Committee became the Professional Development Council; and two new councils were added, the Research Council

and the Coordinating Council. The transition to shared governance councils included drafting council charters that described the work of each group; recruitment of members for the councils; transitioning traditional committee "chairs" (who were all in administrative roles within the organization) to council facilitators; and the appointment of staff nurses as council chairpersons. An overwhelming majority of staff committee members chose to remain involved and participate in this new council approach. All of the individuals moving into these new roles were provided education and support during the transition. The two new councils, Coordinating Council and Research Council, followed very different development trajectories. The Coordinating Council launched smoothly as it was merely a meeting of all of the council chairpersons and administrative directors and the chief nursing officer. Its intent was to provide opportunities for the staff chairpersons to meet with nursing administration, provide council updates, and discuss barriers and needed assistance. Once the other council chairpersons were selected, the Coordinating Council was established and functioned well from the very beginning.

The Research Council, on the other hand, was the most difficult to establish even with the advantage of a very energetic, knowledgeable administrator who was extremely committed to the establishment of this council. She eagerly stepped into the facilitator role and began to forge ahead; however, several barriers were encountered. The most daunting of the barriers were: recruitment of council members; recruitment of a staff council chairperson; convincing potential council members that they were not going to be conducting research in the only context they had been exposed (i.e., clinical drug trials); and addressing research and evidence-based practice (EBP) knowledge deficits of the council members.

# REMEMBER.....

## Author Guidelines

### *Length*

**Up to 1200 words**

### *References*

**5-10 references**

**You never get a 2<sup>nd</sup> chance to make a great first impression**

*THIS IS A GREAT PLACE TO START  
YOUR WRITING CAREER!*





Improving Patient Care through XXXXXXXX

Journal:	Worldviews on Evidence-Based Nursing
Manuscript ID:	WVN-15-065
Manuscript Type:	Implementing EBP Column
Keywords:	Education/Curriculum/learning, Evidence-based practice, Mentorship, Nursing Practice, Professional issues/Professional ethics/Professional standards, Quality improvement/Quality of care/Quality of services

SCHOLARONE™  
Manuscripts

Review

**Manuscript is  
submitted;  
The journey  
begins!**



# Three Scenarios with Submitted Manuscripts

- Accept
- Revise and resubmit
- Reject - Typical reasons include:
  - A similar paper was recently published
  - Writing style not clear- a fatal flaw!
  - Poor writing
  - Poor logic and flow
  - Inadequate description of the steps of EBP



# Shocked

*I can't believe they didn't like my work!*



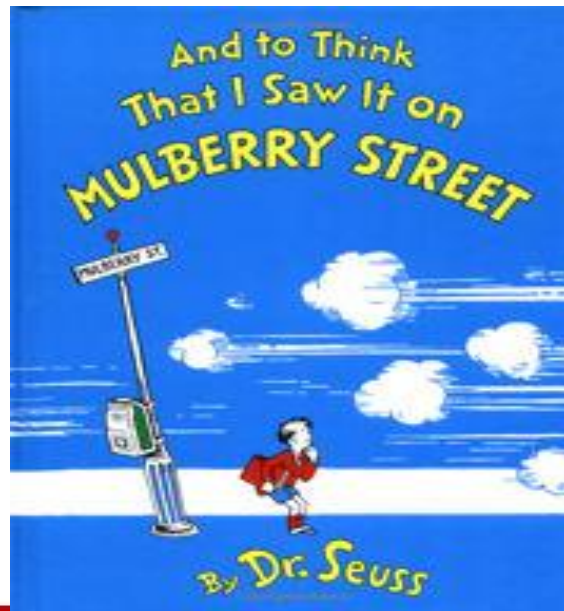
# Revise and Persist through the Character-Builders!

- Important Facts to Remember
  - Very few papers are accepted without revisions
  - Many well written papers are rejected because the content and focus would be better suited to another journal
  - The paper is NOT you!



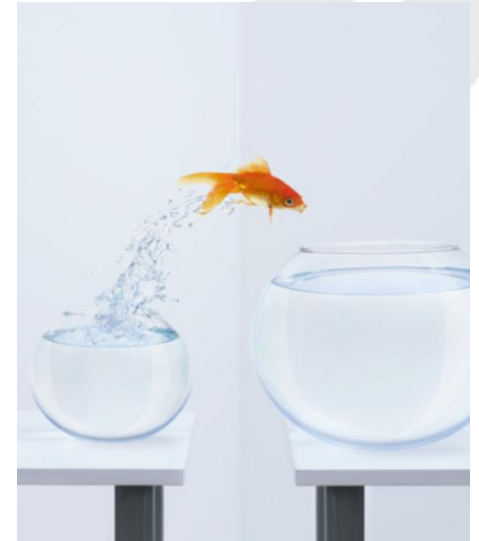
# Persistence is a Key to Success

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."



# “I’ve looked at life from both sides now....”

- It is intimidating.
- It takes courage.
- You need to be confident in your content.
- You *may* have to face rejection(at first).
- Believing it’s possible and perseverance are keys to success.
- You can do this!





## *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 you can make that would have the greatest positive impact on your patients' outcomes?*





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



# The Next 30 to 90 Days are Critical for Action

- Formulate your plan according to the 7 steps of EBP
- Collect baseline data
- Begin Implementation



# You Must Dream It Before You Can Do it!

What will 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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