

Implementing Evidence-Based Practice Models

ONRQC Conference
April 14, 2025

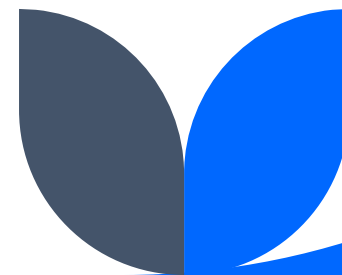


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Objectives

- Describe the significance of utilizing evidence-based practice models in advancing nursing practice and quality patient care
- Identify and describe key evidence-based practice models
- Analyze the distinct phases or steps within evidence-based practice models
- Discuss strategies for choosing how to implement an evidence-based practice model within your organization





Audience participation – scan the QR code to answer!



When it comes to evidence-based practice models or frameworks...

1. I have used one before
2. I have heard of them but never used one
3. I am not sure what you are talking about



Evidence-based practice (EBP) is not new...



Comparison of EBP Steps to FN's Actions of 1850's

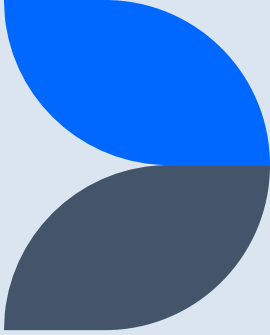
Steps of EBP (Mazurek Melnyk & Fineout-Overholt, 2015)	Step Met	FN's Actions (Supporting that she used EBP)
1. Cultivate a Spirit of Inquiry	√	Went to Crimea and many European hospitals to tour and evaluate.
2. Formulate the PICOT Question	√	Had population, issue of interest, outcome, and time frame in mind. Her comparison was pre-intervention.
3. Search for Best Evidence	~	No other studies to review. Completed systematic review of all actual hospitals available.
4. Critical Appraisal of Evidence	~	Best validity and reliability are questionable, but certainly applicable, statistics were used.
5. Integrate the Evidence	n/a	There was no literature available, no pt involvement.
6. Evaluate the Outcomes	√	Outcomes in the Crimean War improved from a death rate of 10% to less than 1%.
7. Disseminate the Outcomes	√	Wrote 2 books to disseminate the design & outcomes throughout UK and the U.S.

Care to Improve Patient Outcomes

FN's "Canons" or Best Practices from <i>Notes on Nursing</i> by Chapter (* Incorporated into the pavilion-style hospital)	
1. *Ventilation and Warming (windows, stoves, heat, air flow)	8. *Bed and Bedding (fever, cleanliness, tidiness, comfort, turning/positioning)
2. *Health of Houses (air control, water purity, drainage, sewers)	9. *Light (brightness, view)
3. *Petty Management (staffing, organization, critical thinking, service)	10. *Cleanliness of room and walls (dust control, cleaning, washing, floor & wall structure/finishes)
4. Noise (control)	11. *Personal Cleanliness (bathing, hand washing)
5. *Variety (design, flowers, mind-spirit, psycho-social)	12. Chattering Hopes and Advices (false assurances, incorrect facts)
6 & 7. Food (diet, nutrition, feeding)	13. *Observation (assessment)

Campbell, W. (2017). Early Evidence Based Practice. In Proceedings EBP Florence Nightingale and the Pavilion Style Hospital.
url={<https://api.semanticscholar.org/CorpusID:80140354>}

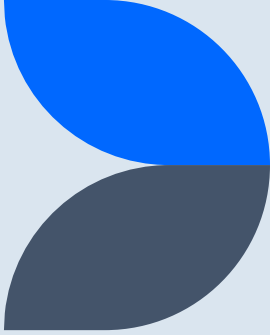
David Sackett published five steps of evidence-based medicine in 1997 – but its older than that!



The practice of evidence-based medicine is a process **of life-long, self-directed learning in which caring for one's own patients creates the need for clinically important information** about diagnosis, prognosis, therapy, and other clinical and health care issues, and in which its practitioners:

1. Convert these information needs into **answerable questions**
2. **Track down**, with maximum efficiency, **the best evidence** with which to answer them (and making increasing use of secondary sources of the best evidence)
3. **Critically appraise** that evidence for its validity (closeness to the truth) and usefulness (clinical applicability)
4. Integrate the appraisal with **clinical expertise** and apply the results in clinical practice
5. **Evaluate** one's own performance

Current day: The seven steps of EBP as published by Melnyk et al in 2010



0. Cultivate a spirit of inquiry within an EBP culture and environment
1. Ask the burning clinical question in a PICOT format
2. Search for a collect most relevant and best evidence
3. Critically appraise the evidence
4. Integrate best evidence with clinical expertise and patient preferences to make a practice decision or change
5. Evaluate the practice decision or change
6. Disseminate the outcomes of the EBP decision or change



ONLY 7 steps...
Easy enough, right?!?!?

**You may need some help staying
organized along the way 😊**

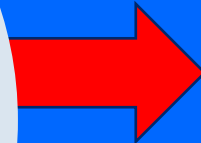
So, why use an evidence-based practice (EBP) model?





EBP models and frameworks that establish strategies to determine resource needs, identify barriers and facilitators, and guide processes to manage the 7 steps of EBP



Research shows that EBP models are an important determinant of an EBP environment

Introducing an EBP model is an essential early step that can improve evidence-based practice



Determinants of an Evidence-Based Practice Environment			
			
Process	Support	Facilitation	Context
<ul style="list-style-type: none">• Shared EBP model• Nurse led yet interdisciplinary• Focus on frontline practice• Aligned to organisational priorities• Implementation guidance	<ul style="list-style-type: none">• EBP as core business• Scaffolded EBP education• Experiential EBP training• Academic partnerships• Knowledge infrastructure	<ul style="list-style-type: none">• Direct care nurse leadership• Actively engaged nurse management• Facilitation by nurse specialist• Expert support from nurse scientist	<ul style="list-style-type: none">• Collaborative yet competitive• Continuous improvement• Shared governance• External recognition• Leadership support

A recent scoping review identified 19 EBP models and frameworks in the literature

Evidence based practice
Original research

Evidence-based practice models and frameworks in the healthcare setting: a scoping review

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Abstract

Objectives The aim of this scoping review was to identify and review current evidence-based practice (EBP) models and frameworks. Specifically, how EBP models and frameworks used in healthcare settings align with the original model of (1) asking the question, (2) acquiring the best evidence, (3) appraising the evidence, (4) applying the findings to clinical practice and (5) evaluating the outcomes of change, along with patient values and preferences and clinical skills.

Design Scoping review.

Included sources and articles Published articles were identified through searches within electronic databases (MEDLINE, EMBASE, Scopus) from January 1990 to April 2022. The English language EBP models and frameworks included in the review all included the five main steps of EBP. Excluded were models and frameworks focused on one domain or strategy (eg, frameworks focused on applying findings).

Results Of the 20 097 articles found by our search, 19 models and frameworks met our inclusion criteria. The results showed a diverse collection of models and frameworks. Many models and frameworks were well developed and widely used, with supporting validation and updates. Some models and frameworks provided many tools and contextual instruction, while others provided only general process instruction. The models and frameworks reviewed demonstrated that the user must possess EBP expertise and knowledge for the step of assessing evidence. The models and frameworks varied greatly in the level of instruction to assess the evidence. Only seven models and frameworks integrated patient values and preferences into their processes.

Conclusion Many EBP models and frameworks currently exist that provide diverse instructions on the best way to use EBP.



PDF +
Supplementary
Material

Which models are people using?

Use of Evidence-based Practice Models and Research Findings in Magnet-Designated Hospitals Across the United States: National Survey Results

Karen Gabel Speroni PhD, RN, BSN, MHSA✉ Maureen Kirkpatrick McLaughlin PhD, RN-BC, NEA-BC,
Mary Ann Friesen PhD, RN, CPHQ

First published: 04 April 2020 | <https://doi.org/10.1111/wvn.12428> | Citations: 46

In a 2020 survey of 181 nurse leaders in Magnet-designated hospitals, use of the following EBP models were reported in order (most used to least used):

- Iowa Model of Evidence-based Practice to Promote Quality Care
- Johns Hopkins Nursing Evidence-based Practice Model
- Advancing Research and Clinical Practice Through Close Collaboration
- Site-developed models
- Model for Change to Evidence-based Practice
- Other*: ACE Star Model of Knowledge Transformation; McMaster Model of EBP; Transdisciplinary Model of EBP



How are they using them?

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Karen Gabel Speroni PhD, RN, BSN, MHSA✉ Maureen Kirkpatrick McLaughlin PhD, RN-BC, NEA-BC, Mary Ann Friesen PhD, RN, CPHQ

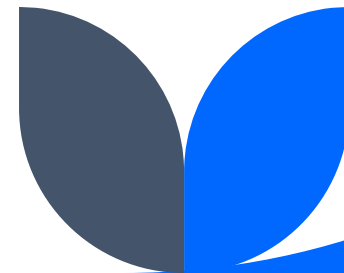
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- Education and training
- Nurse residency programs
- EBP or research fellowships
- Orientation
- EBP and quality improvement projects
- As templates and documents that support EBP processes

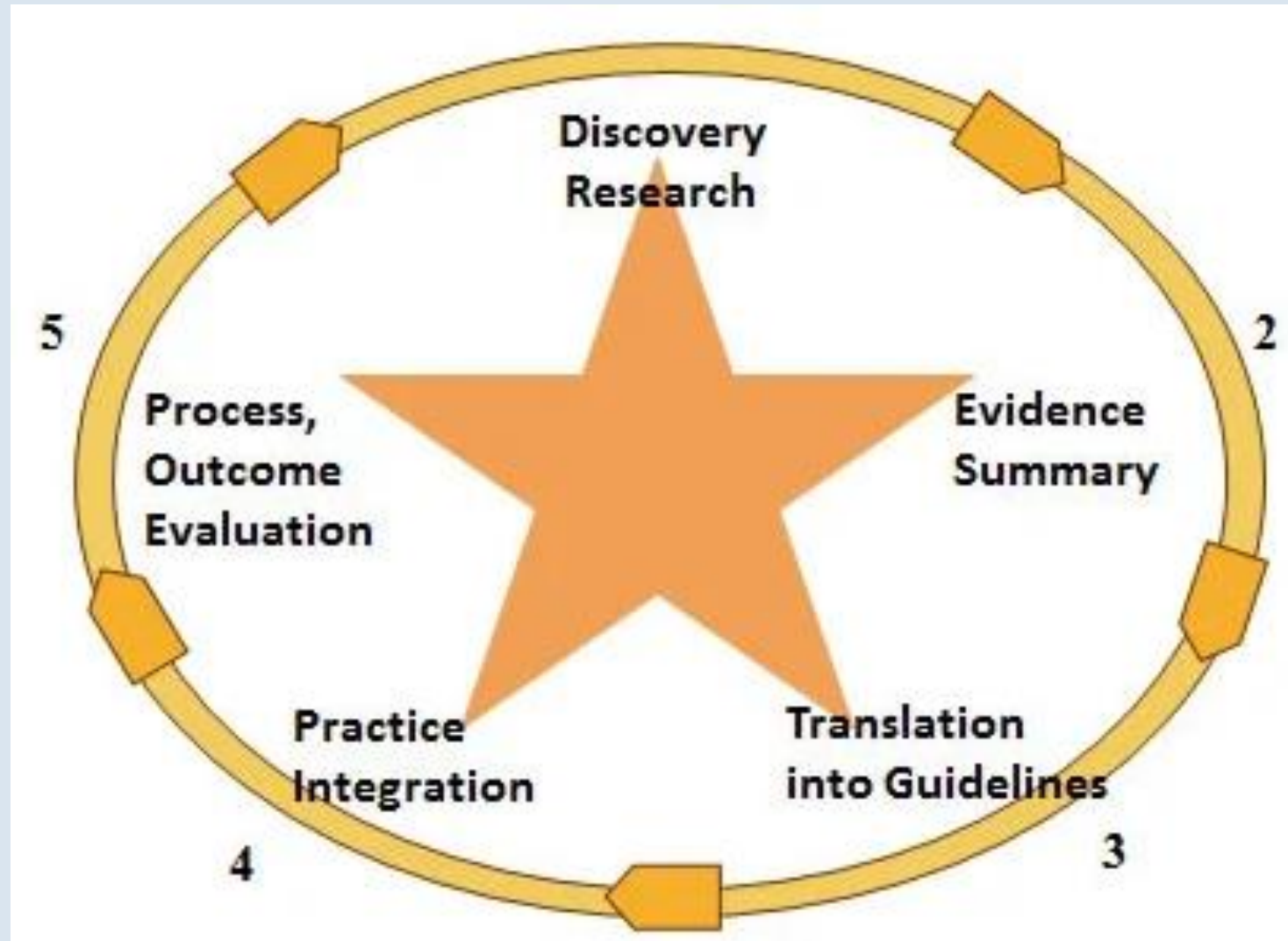


Let's take a closer look at the steps and themes of a few of the models...

- Academic Center for Evidence-Based Practice STAR model
- Advancing Research and Clinical Practice through Close Collaboration (ARCC)
- Iowa Model
- Stetler Model of Evidence-Based Practice
- Johns Hopkins Evidence-Based Practice for Nurses and Other Healthcare Professionals



ACE Star Model of Knowledge Transformation



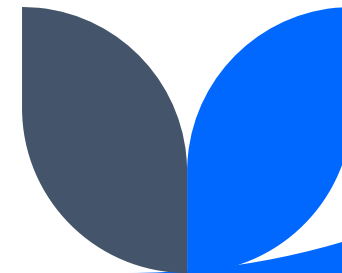
ACE Star

Main steps

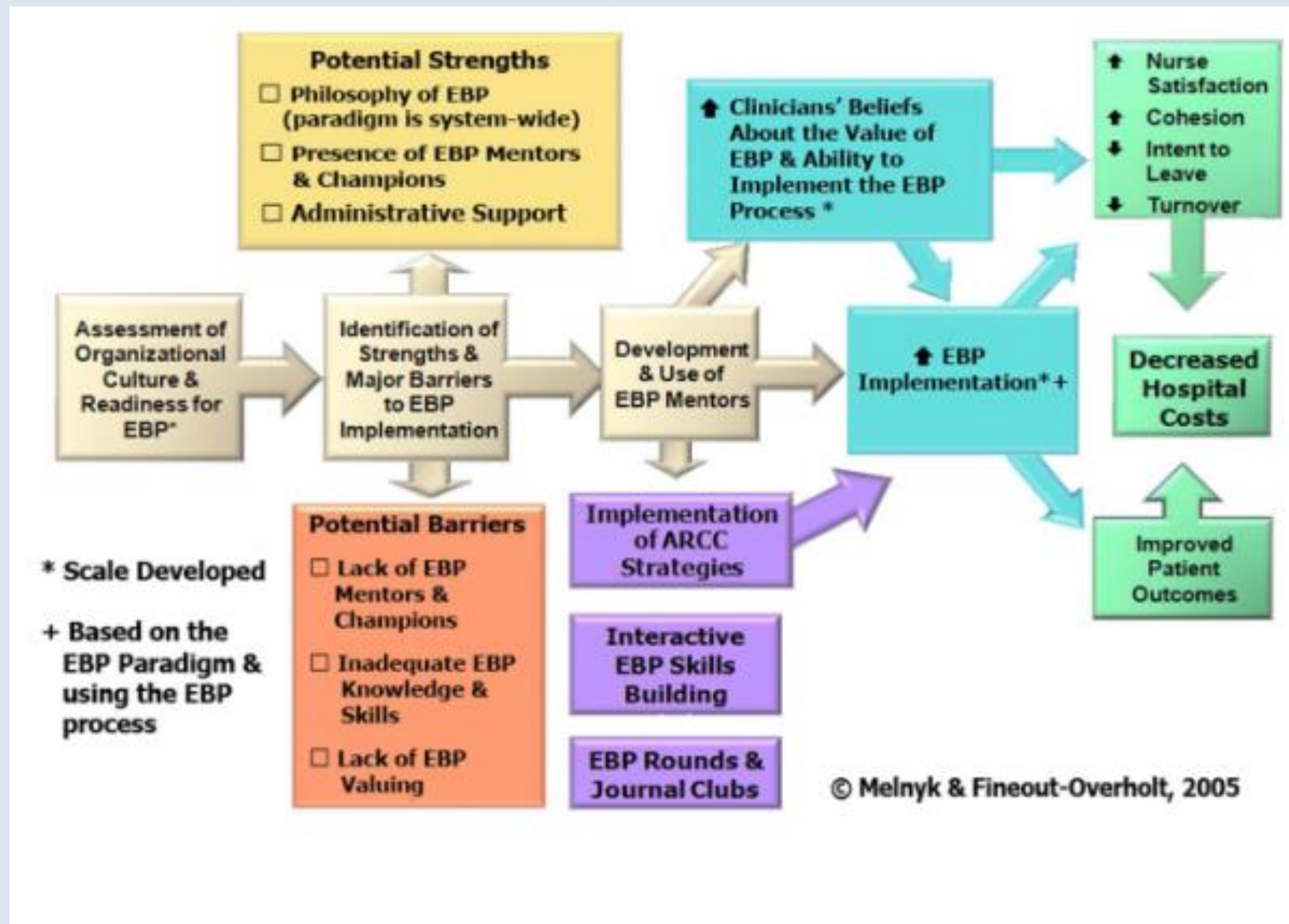
- 1. Discovery:** Searching for new knowledge
- 2. Evidence Summary:** Synthesize the body of research knowledge
- 3. Translation:** Provide clinicians with a practice document
- 4. Integration:** Changed through formal and informal channels
- 5. Evaluation:** EBP outcomes are evaluated

Themes

- ▶ Promotes discovery of evidence through systematic reviews
- ▶ Promotes transition of evidence through guideline creation
- ▶ Includes use of qualitative evidence
- ▶ Expertise and patient preference are considered another form of evidence



Advancing Research and Clinical practice through close Collaboration (ARCC) Model



ARCC Model

Main steps

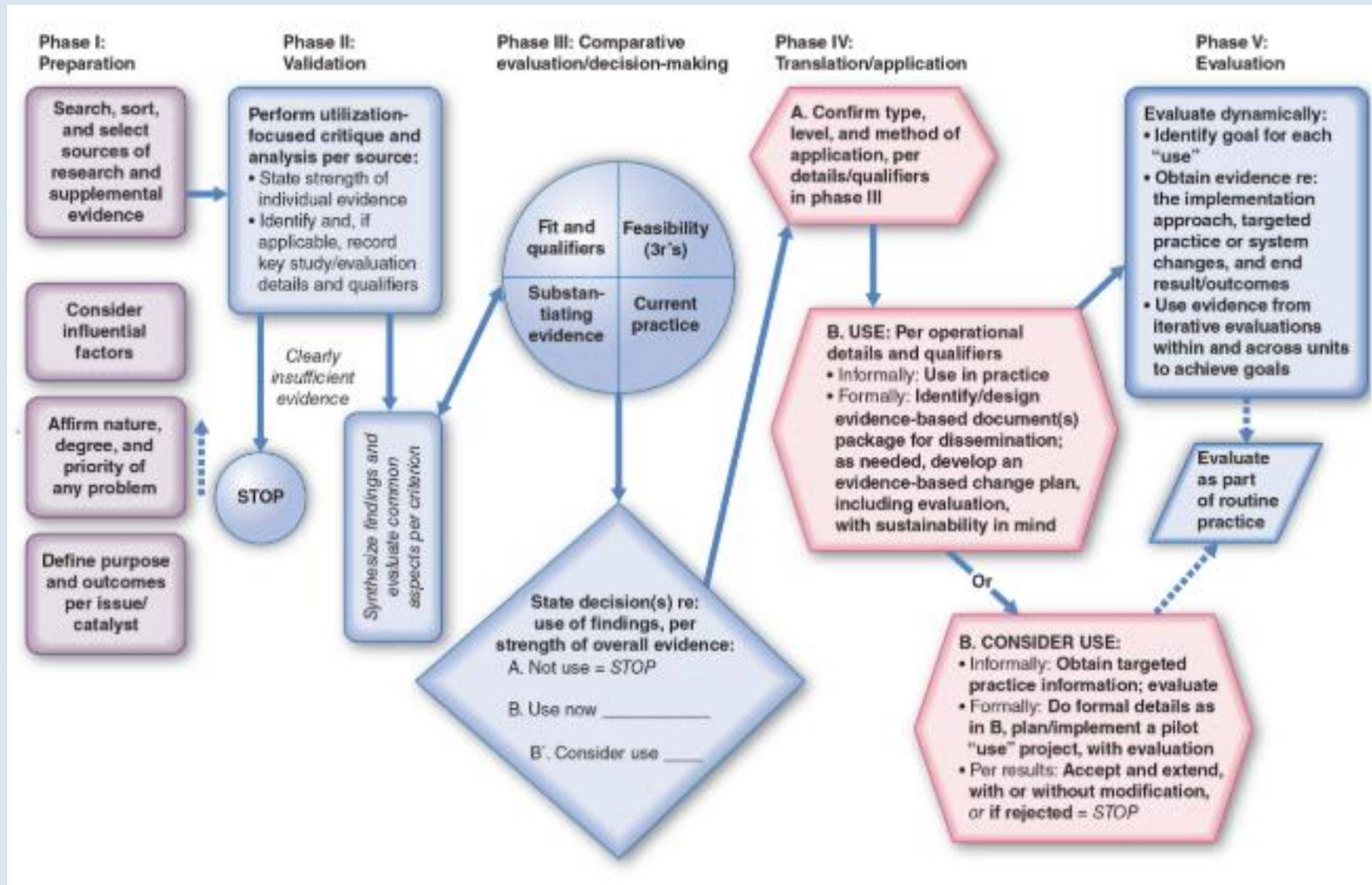
- 1. Assess readiness:** Evaluate the organization's culture and readiness for EBP
- 2. Identify barriers and facilitators:** Identify what's helping and hindering EBP
- 3. Develop EBP mentors:** Create a group of mentors to work with clinicians to implement EBP
- 4. Disseminate best practices:** Share the best evidence from studies to improve clinical care
- 5. Evaluate effectiveness:** Study the impact of the ARCC model on clinical care and EBP implementation

Themes

- ▶ Training program with tools to assess literature and implement
- ▶ Focuses on mentors undergo training
- ▶ Identifies a network of supportive stakeholders
- ▶ Emphasis on organization readiness
- ▶ Encompasses patient values, and clinical skill as evidence
- ▶ Control theory and cognitive behavior theory guide mode



Stetler Model of EBP



Stetler Model of EBP

Main steps

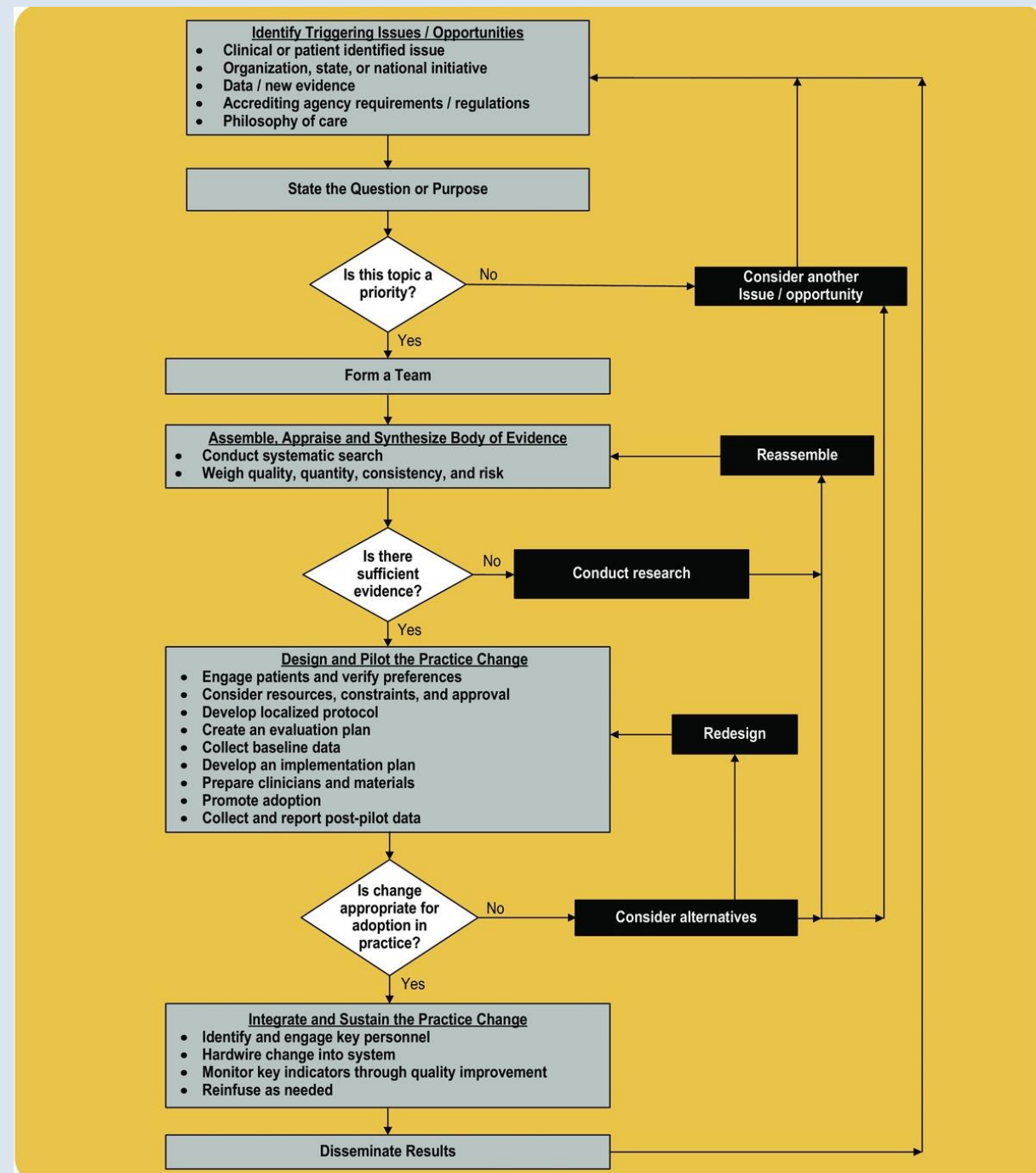
1. Question development includes project context
2. Identify the relevance of evidence sources and quality
3. Summarize evidence
4. Develop a plan
5. Identify/collect data outcomes to evaluate effectiveness of plan

Themes

- ▶ Designed to encourage critical thinking
- ▶ Allows for categorization of evidence as external (e.g., research) or internal (e.g., organization outcome data)
- ▶ Emphasizes use by single practitioner but may include groups



The Iowa Model Revised



Iowa Model

Main steps

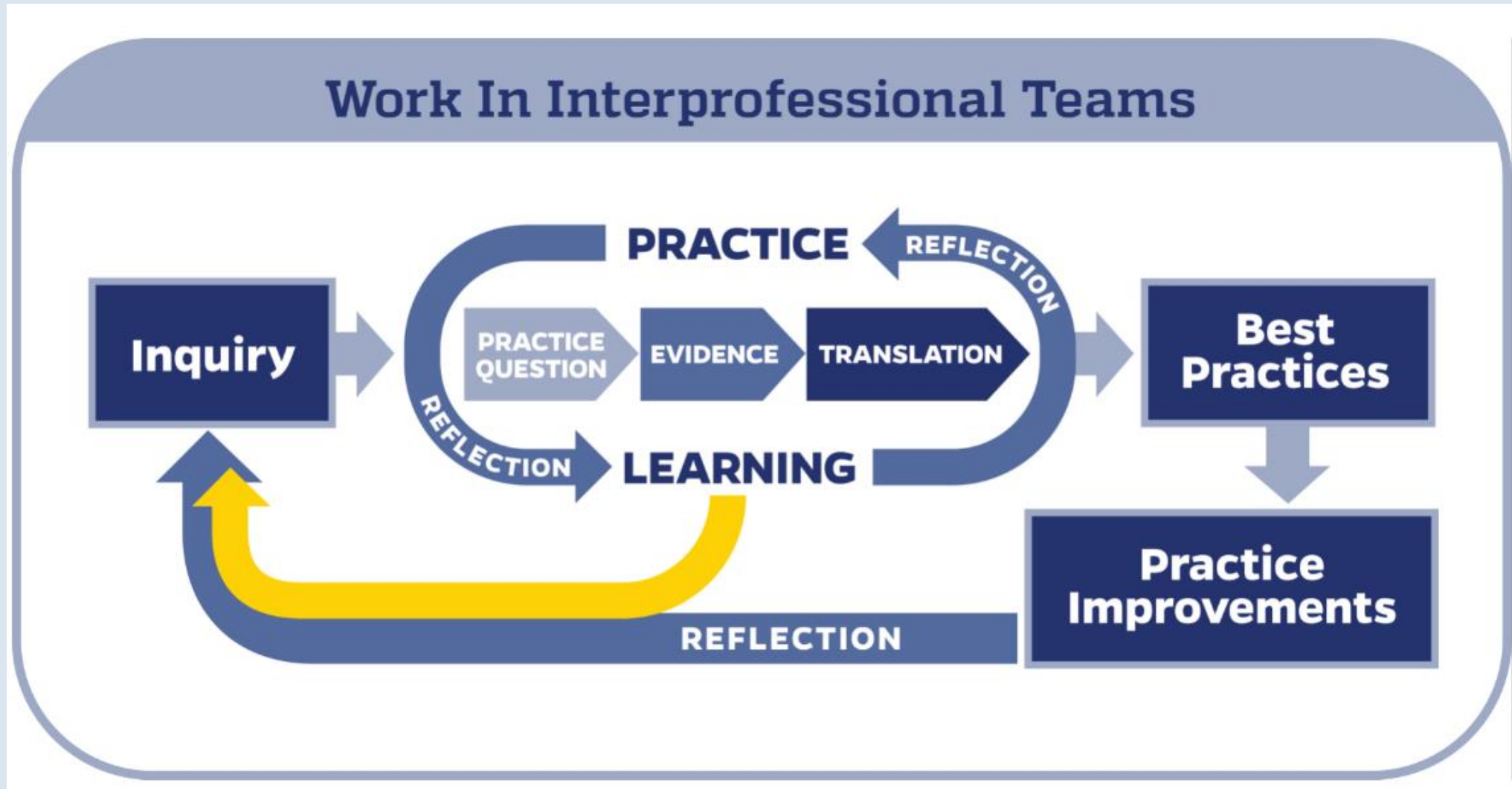
1. Question development
2. Searches, appraises and synthesizes the literature
3. If literature is lacking, conduct research
4. Develop, enact and appraise a pilot solution
5. If successful, implement across organization
6. If unsuccessful, restart process

Themes

- ▶ Recommended for use at an organizational level
- ▶ Detailed flowchart guides decision-making process
- ▶ Identified decision points and feedback loops throughout the model
- ▶ Emphasized pilot project before initiating system-wide project
- ▶ Designed for interprofessional collaboration



Johns Hopkins Evidence-Based Practice for Nurses and Healthcare Professionals Model



Johns Hopkins EBP Model

Main steps

1. **Practice question:** EBP question is identified
2. **Evidence:** the team searches, appraises, rates the strength of evidence
3. **Translation:** feasibility, action plan and change implemented and evaluated

Themes

- Well-developed tool kit that provides guide for question development, evidence-rating scale and appraisal guide for various forms of evidence



How to we choose?



Considerations when selecting a model

1. Does your organization have a **preferred model**?
2. What do you want the model **to do for you**?
3. **How** are you going to **use** the model?

4. What is your **professional governance** structure?
5. What are some **examples** of the models in use?
6. Other considerations?



Potential challenges when using these models



1. Many require **baseline knowledge of how to find and assess evidence** – so may need to develop those skills first.
2. Some do not have a clear methods for **including patient values and preferences** – however, this piece is important!
3. **Not all models have tools** that can used to guide the work – which may lead to confusion about the EBP process.

Published in 2008, this tool remains a great way to compare and contrast different EBP models

Selecting a Model for Evidence-Based Practice Changes

A Practical Approach

Anna Gawlinski, DNSc, RN, FAAN
Dana Rutledge, PhD, RN

Evaluation Criteria for EBP Model

Purpose of Project: Evaluation and selection of an EBP model for the Nursing Department of Ronald Reagan University of California, Los Angeles Medical Center.

1. Search, retrieve, and synthesize the current literature describing EBP models to help staff nurses use EBP concepts and apply them in clinical practice.
2. Recommend the adoption of a specific EBP model for use by UCLA nurses.

Scoring system: 0 = not present; +1 = present/yes; +2 = highly present/yes

Criteria	Models							
1. Concepts and organization of model are clear and concise								
2. Diagrammatic representation of the model allows quick assimilation of concepts and organizes the steps in the process of EBP changes								
3. The model is comprehensive from beginning stages through implementation and evaluation of outcomes								
4. The model is easy to use when concepts are applied to direct EBP changes and practice issues in clinical settings								
5. The model is general and can be applied to various populations of patients, EBP projects, and department initiatives and programs								
6. The model can be easily applied to typical practice issues as evidenced with practice scenario or in published literature								
Total								

Comments	
EBP Model:	Strengths: Weaknesses:
EBP Model:	Strengths: Weaknesses:
EBP Model:	Strengths: Weaknesses:
EBP Model:	Strengths: Weaknesses:
EBP Model:	Strengths: Weaknesses:



Audience participation – scan the QR code to answer!



**I think an evidence-based
practice model or
framework would help me...**

1. Ensure I am considering all important stakeholders
2. Assist with organizing evidence
3. Help encourage critical thinking
4. Guide the decision-making process
5. All of the above



**So, you've picked a
model, now what?**

Tips for implementing an EBP model

- **Be sure you have the latest version of the model**
 - These models are sometimes updated, and you want to be using the most current form
- **Know how to access the model**
 - Often a request is made to the owner of the model
- **Find a mentor to assist with implementing the model**
 - A person with experience using any model is helpful
- **Get to know the model's tools**
 - Tools will help you get the work done so read through them in advance so that you know all the model has to offer and/or what it may lack



Audience participation – scan the QR code to answer!



What is your biggest
takeaway from this
presentation?





Questions?