

Evidence-Based Practice



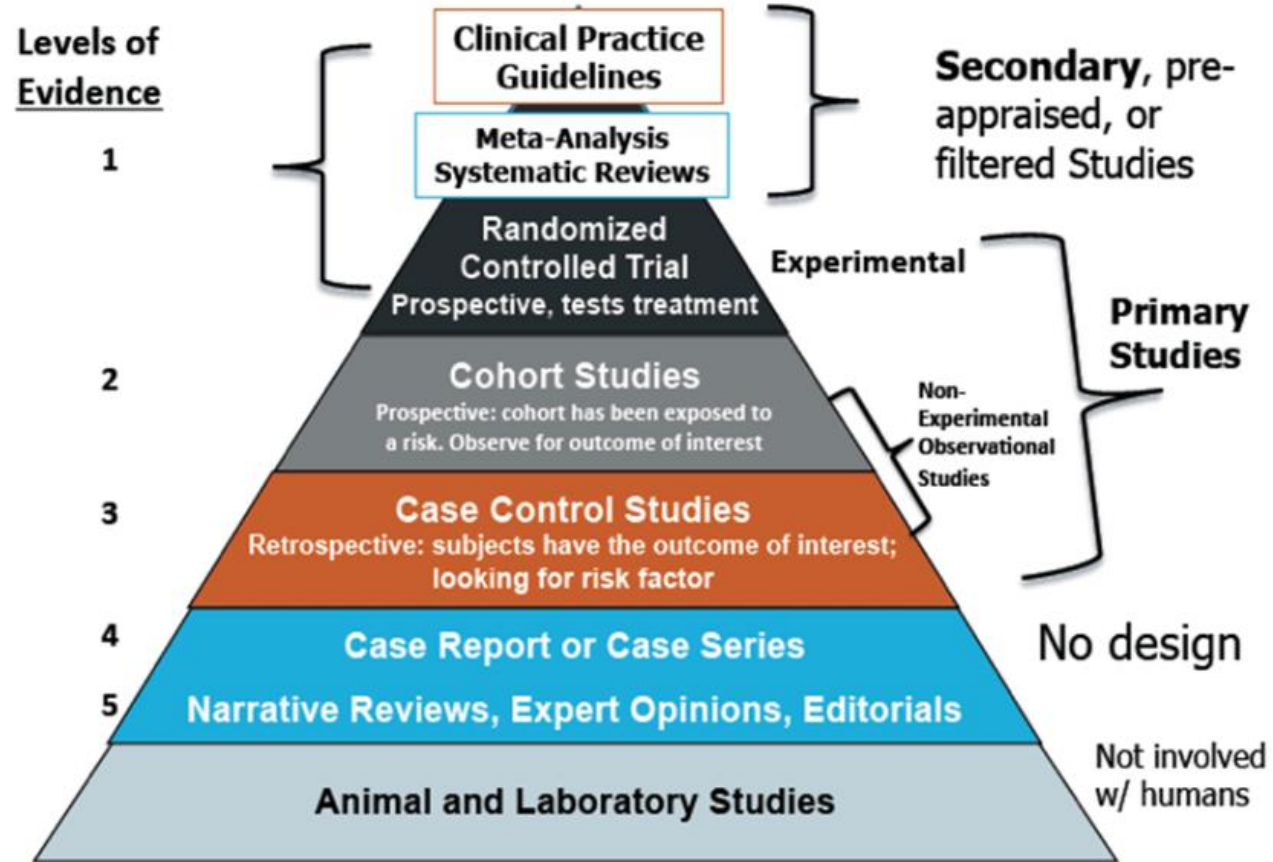
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What is EBP?

Evidence-Based Practice (EBP) is when the nurse makes clinical decisions based on the best available current research evidence, their clinical expertise, and the needs and preferences of the patient



EBP Pyramid



Levels of Evidence

- **Meta Analysis** – systematic review that uses quantitative methods to synthesize and summarize the results
- **Systematic Review** – attempts to collect and analyze all the evidence that answers a specific question
- **Random Controlled Trial** – participants are randomly allocated into an experimental group or a control group and followed over time
- **Cohort Study** - involves identification of two groups: one receiving the exposure and one which did not
- **Case Control Study** - a study involving identifying patients who have the outcome of interest (cases) and patients without the same outcome (controls)
- **Case Series** – report on a series of patients with an outcome of interest. No control group is involved.

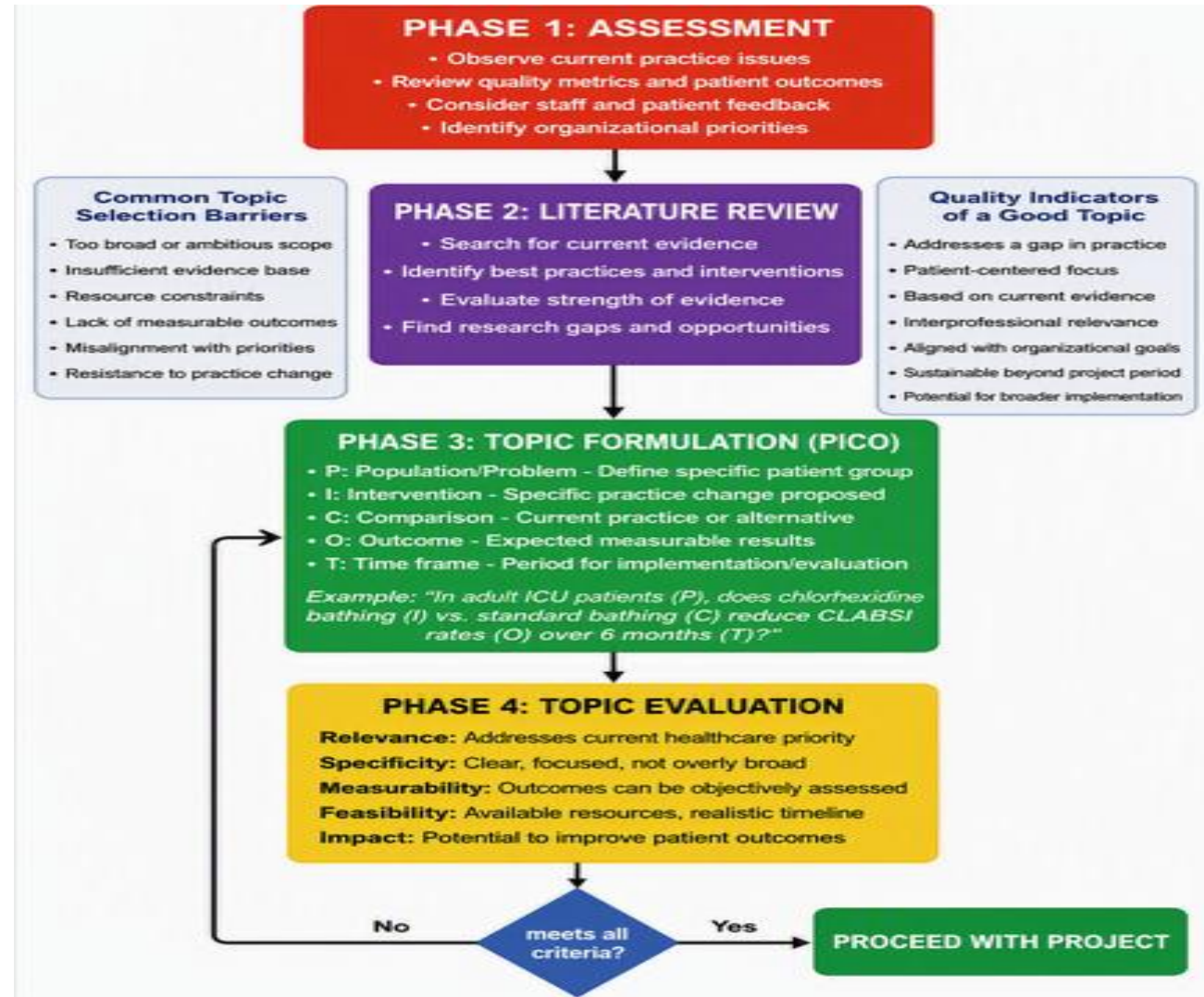
EBP Steps



5 As of EBP



EBP Phases



Common Clinical Question Types

Type or Domain	Explanation	Types of evidence to answer the question
Therapy (Treatment)	Questions about the effectiveness of interventions in improving outcomes in sick patients / patients suffering from some condition. These are the most frequently asked. Among the many treatments offered by clinicians are medications, surgical procedures, exercise, and counseling about lifestyles changes.	Randomised Controlled Trial (RCT)
Prevention	Questions about the effectiveness of an intervention or exposure in preventing morbidity and mortality. Similar to treatment questions. When assessing preventive measures, it is particularly important to evaluate potential harms as well as benefits.	RCT or Prospective Study
Diagnosis	Questions about the ability of a test or procedure to differentiate between those with and without a condition or disease.	RCT or Cohort Study
Prognosis (Forecast)	Questions about the probable cause of a patient's disease or the likelihood that he or she will develop an illness.	Cohort Study and/or Case-Control Series
Etiology (Causation)	Questions about the harmful effect of an intervention or exposure on a patient.	Cohort Study
Meaning	Questions about patients' experiences and concerns.	Qualitative Study

Clinical Questions

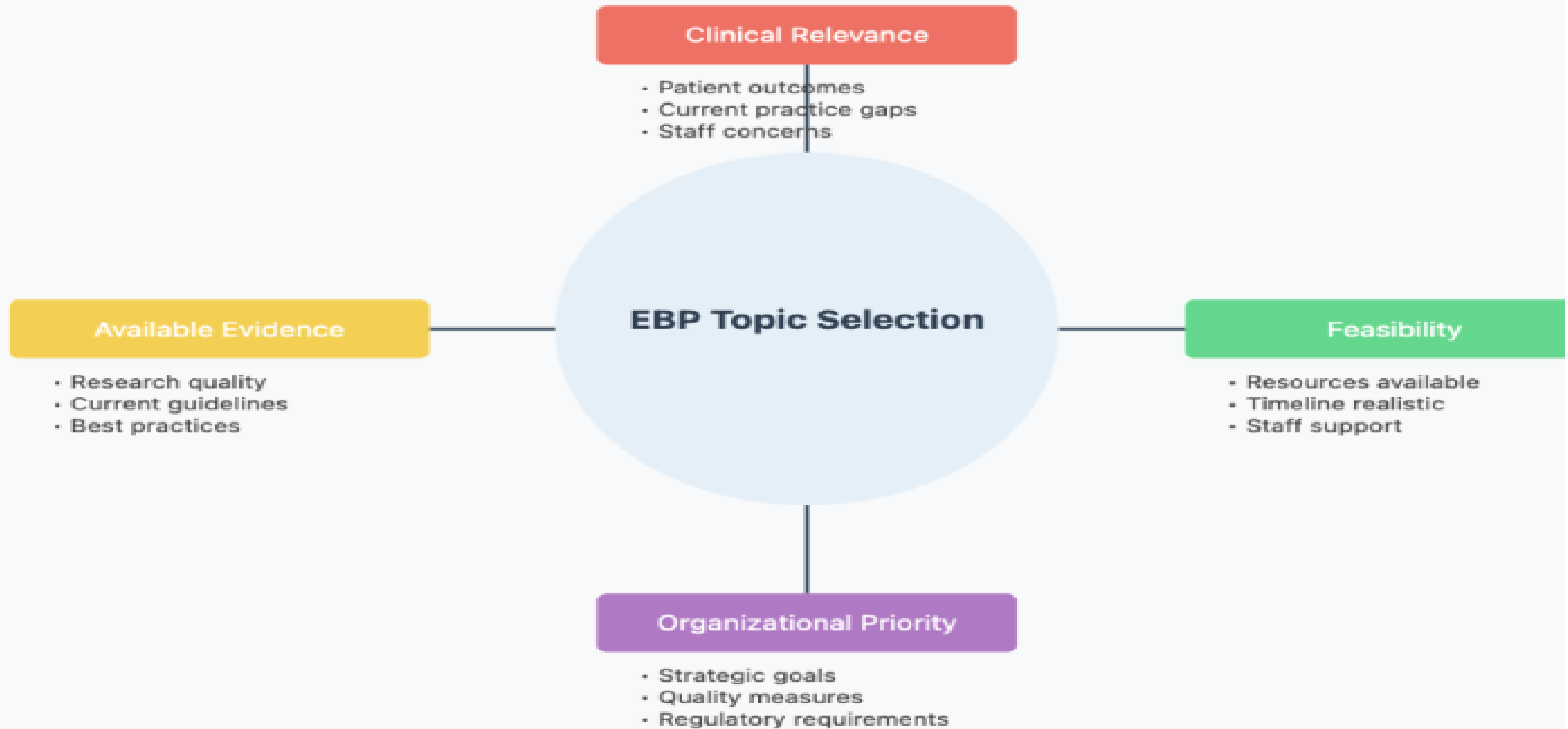
Background Questions

- **Purpose:** Provide broad, foundational knowledge about a disease, condition, or concept.
- **Structure:** Contain a question root (who, what, when, where, why, how) plus a verb and a specific condition or topic.
- **Example:** "What causes type 2 diabetes?" or "What are the signs of a heart attack?"

Foreground Questions

- **Purpose:** Provide specific, complex evidence to guide direct actions or patient care.
- **Structure:** Often use the **PICO** format (Population, Intervention, Comparison, Outcome).
- **Example:** "In adults with type 2 diabetes, how does a low-carbohydrate diet compare to a low-fat diet affect blood sugar control?"

EBP Nursing Project Topic Selection Guide



EBP Project Examples & Keywords

1. **Hand Hygiene Protocols** (keywords): infection prevention, compliance monitoring, alcohol-based handrub, hand hygiene
2. **Fall Prevention Protocols** (keywords): Morse Fall Scale, risk assessment, hourly rounding, injury prevention
3. **Pressure Injury Prevention** (keywords): pressure ulcer, Braden Scale interventions, repositioning schedules
4. **Pain Management** (keywords): pain scale, multimodal analgesia, non-pharmacological interventions, patient-controlled
5. **Catheter-Associated UTI Prevention** (keywords): CAUTI prevention, nurse-driven removal, bladder scanning, catheter necessity criteria
6. **Ventilator-Associated Pneumonia Prevention** (keywords): VAP bundles, oral care protocol, head-to-bed elevation, sedation vacation
7. **Delirium Assessment** (keywords): CAM-ICU, cognitive assessment, non-pharmacological management, re-orientation
8. **Early Mobility Protocols** (keywords): progressive utility, ICU rehabilitation, early ambulation, deconditioning prevention
9. **Kangaroo Care for Premature Infants** (keywords): skin-to-skin contact, thermoregulation, neonatal care, maternal-infant bonding
10. **Standardized Handoff Communication** (keywords): SBAR, I-PASS, communication framework care transitions, patient safety
11. **Medication Reconciliation** (keywords): adverse drug events, medication safety, transitions of care, medication discrepancies
12. **Central Line-Associated Bloodstream Infections** (keywords): CLABSI bundle, insertion protocol, maintenance bundle, catheter-related infection
13. **Nurse-Led Smoking Cessation** (keywords): tobacco cessation, nicotine replacement, motivational interviewing, 5 As framework
14. **Diabetes Self-Management Education** (keywords): DSME, self-care behaviors, glycemic control, patient empowerment, diabetes educator
15. **Heart Failure Self-Care Management** (keywords): heart failure readmissions, fluid restriction, self-monitoring, symptom recognition
16. **Sepsis Early Recognition and Treatment Protocols** (keywords): sepsis bundle, qSOFA, blood lactate monitoring, fluid resuscitation, antibiotic stewardship
17. **Early Warning Scoring Systems** (keywords): NEWS score, MEWS, deterioration recognition, rapid response activation, vital sign trends
18. **Music Therapy for Symptom Management** (keywords): anxiety reduction, pain distraction, patient-selected music, headphone delivery

Tips for Writing an Effective EBP Nursing Paper

1

Choose a relevant clinical topic and state the evidence gap clearly.

Conduct a thorough literature review search.

2

3

Critically appraise the evidence. Using appraisal tool e.g. Johns Hopkins

Include the implications and how to improve nursing practice.

4

5

Use EBP specific keywords e.g. evidence based practice.