

SESSION 1:

INTRODUCTION TO EBP
RELATIONSHIP BTWN EBP, QI, AND RESEARCH
OVERVIEW OF THE JHN-EBP MODEL

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Overall Workshop Goals

Cultivate a **spirit of inquiry**. Ask: **WHY** are we doing what we are doing?

Prepare clinicians to be **critical consumers** of research to inform and engage in evidence-based practice.

Understand and use the formal **language** associated with research, EBP, and QI

Objectives: Session 1

- Provide a brief overview of Evidence-Based Practice (EBP), and the momentum driving this approach
- Discuss the relationship between EBP, Quality Improvement (QI), and Research
- Review the Johns Hopkins Nursing- Evidence-Based Practice Model

Icebreaker Questions

- What thoughts and feelings come to mind when you hear the terms: Evidence-Based Practice?
- How much evidence do you think is used to guide practice?

Discussion question

- % of responses from an 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 |

What is giving Research, EBP, QI momentum?

- IOM report – *To Err is Human*
 - ▣ Deaths - ~ 98,000/year
 - ▣ As DEVESTATING AS A JUMBO JET CRASHING EVERY DAY.....
 - ▣ Morbidity - complications, serious injuries, long-term disability
 - ▣ Patients only receive about 55% of the care they should when entering the healthcare system
 - ▣ Economic costs – ~ \$17B - \$29B/year
 - ▣ Loss of patient/public trust
 - ▣ Negative effect on morale of health professionals

Crossing the Quality Chasm: How to Improve Safety and Reduce Medical Errors

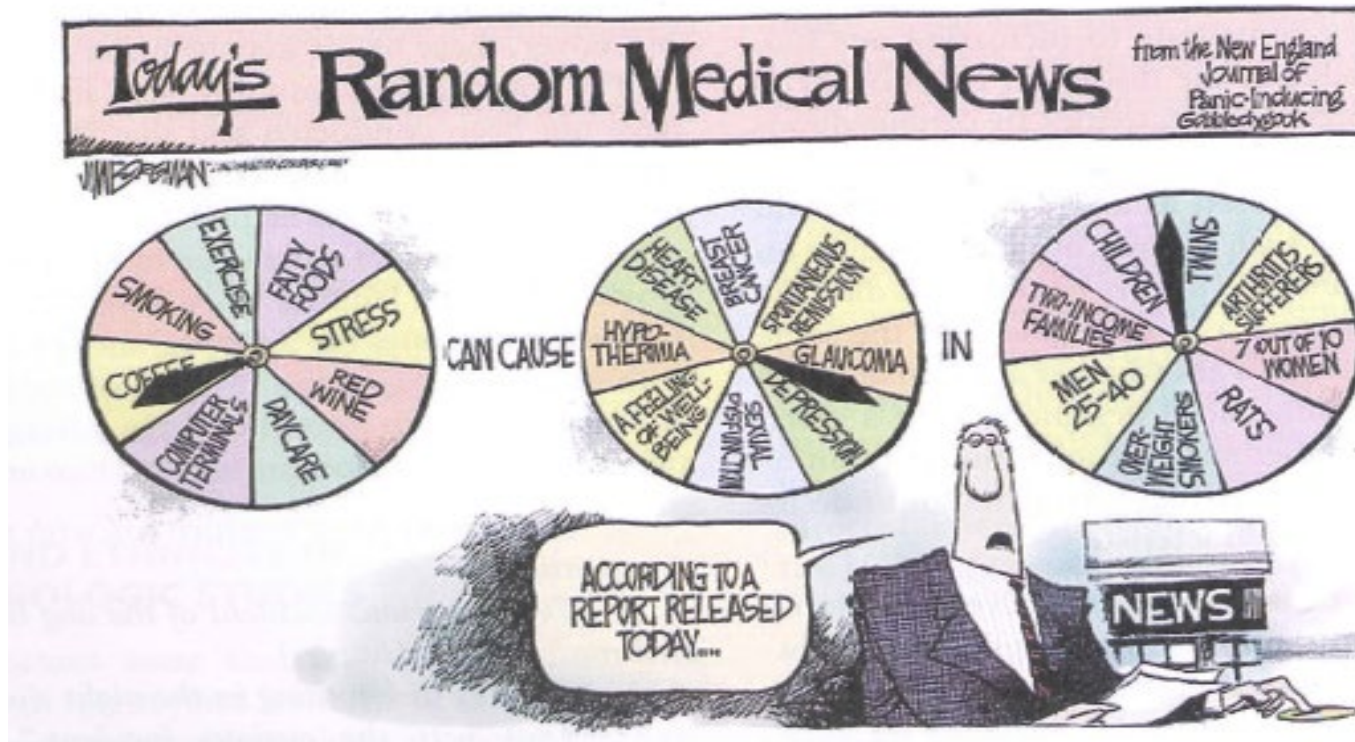
- ⊙ Build the science
- ⊙ Use the science in practice **day-in-and-day-out**
- ⊙ Improve systems (QI)
- ⊙ Educate all health care workers
- ⊙ Empower patients (i.e. patient-centered care)

What is giving EBP it's momentum?

- Health care consumer quality and safety movement
 - ▣ Changes in reimbursements based on ACA
 - ▣ Consumers have access to online health care information
 - ▣ Patients with chronic health problems often have considerable expertise in the management of their condition

What is giving EBP it's momentum?

- Tremendous growth of new knowledge



What is giving EBP it's momentum?

- There is considerable delay in incorporating new evidence into clinical practice
 - ▣ It takes on average 17 years to get knowledge translated into practice
 - ▣ Knowledge of best care is negatively correlated with time since graduation
 - Reliance on basic nursing education – averaging 18 years prior.

What Guides Your Practice ?



So what exactly is RESEARCH, EBP, and QI, and how are they related?

Research, EBP, and QI

- Research:
 - **Systematic investigation** that is designed to generate **new knowledge** that can be **generalized** to broader applications

- Evidence-Based Practice (EBP):
 - A method of decision making (**practice recommendations**) that are based on
 - (1) A rigorous/systematic appraisal of current research,
 - (2) patient preferences, and
 - (3) provider expertise/environmental situations

- Quality Improvement (QI):
 - **Process** by which individuals work to **improve systems** at the **local level**.
 - Intent is to **monitor performance & improve outcomes** in an on-going process.
 - QI may uncover a practice problem that initiates an EBP project

Research: 2 Main Paradigms

□ Positivist/ Post-positivist (Quantitative)

- Purposes: describe, explain, predict, and control
- Quantify (put numbers to) a phenomenon
- Understand the causal relationship between phenomena or characteristics of a phenomenon
- Hypothesis testing

□ Constructivist/ Naturalist (Qualitative)

- Purposes: identify and describe
- Gain understanding of a phenomenon that is little understood
- Begin to build theory
- Hypothesis building

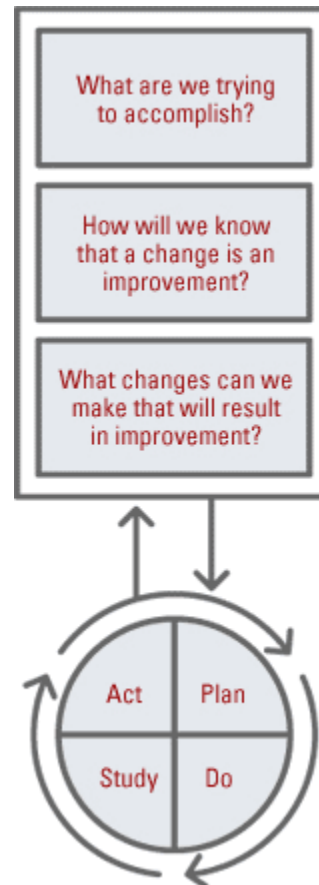
Evidence Based Practice



“Healthcare is both art & science”

Quality Improvement

Model To change P-D-S-A



Self-Reflective Practice



What do I do and why do I do it?

What do I know and how do I know it?/ **Why** do we do this this way?

Is what we are doing helpful?

Is there room for improvement?

Welcome to the journey

□ “Evidence is Stronger
than Argument”

-Winston Churchill, 1897



Move towards EBP... It's a journey & the right tools can help

Soccer, Science, and Practice



Overview of the JHN-EBP Model

PET Process

PICO Worksheet

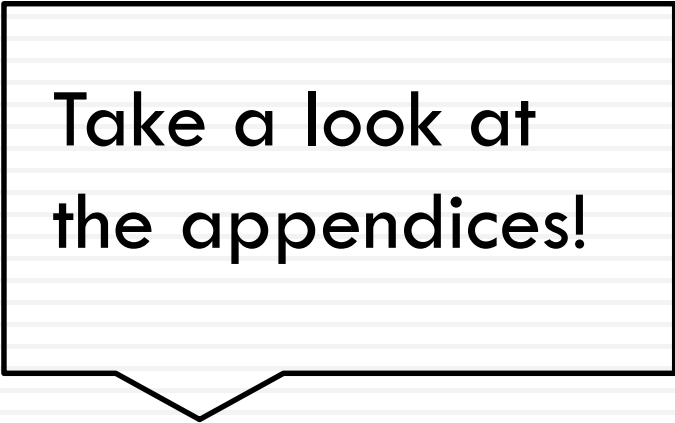
Evidence Hierarchy

Appraisal Tools

- Research
- Non-research

Summary Tools

- Individual Research Summary Tool
- Synthesis and Recommendations Tool
- Synthesis of Evidence Guide



Take a look at
the appendices!

Appendix A: Project Management Guide

| Initial EBP Question: | | | | | | |
|---|------------|---------------|----------|-----------------|-----------|------------------------------|
| EBP Team Leader(s): | | | | | | |
| EBP Team Members: | | | | | | |
| Activities | Start Date | Days Required | End Date | Person Assigned | Milestone | Comment / Resources Required |
| PRACTICE QUESTION: | | | | | | |
| Step 1: Recruit interprofessional team | | | | | | |
| Step 2: Develop and refine the EBP question | | | | | | |
| Step 3: Define the scope of the EBP question and identify stakeholders | | | | | | |

Appendix D: Practice Questions, Evidence, and Translation (PET)

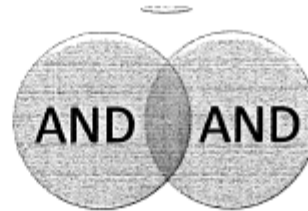


Appendix B: Question Development Tool

| |
|--|
| 1. What is the problem and why is it important? |
| |
| 2. What is the current practice? |
| |
| 3. What is the focus of the problem? |
| <input type="checkbox"/> Clinical <input type="checkbox"/> Educational <input type="checkbox"/> Administrative |
| 4. How was the problem identified? (Check all that apply) |
| <input type="checkbox"/> Safety/risk management concerns <input type="checkbox"/> Quality concerns (efficiency, effectiveness, timeliness, equity, patient-centeredness) <input type="checkbox"/> Unsatisfactory patient, staff, or organizational outcomes <input type="checkbox"/> Variations in practice within the setting <input type="checkbox"/> Variations in practice compared with external organizations <input type="checkbox"/> Evidence validation for current practice <input type="checkbox"/> Financial concerns |
| 5. What is the scope of the problem? |
| <input type="checkbox"/> Individual <input type="checkbox"/> Population <input type="checkbox"/> Institution/system |
| 6. What are the PICO components? |
| P – (Patient, population, problem): I – (Intervention): C – (Comparison with other interventions, if applicable): O – (Outcomes that include metrics for evaluating results): |
| 7. Initial EBP question: |
| |
| 8. List possible search terms, databases to search, and search strategies: |
| |
| 9. What evidence must be gathered? (Check all that apply) |
| <input type="checkbox"/> Literature search <input type="checkbox"/> Patient/family preferences <input type="checkbox"/> Standards (regulatory, professional, community) <input type="checkbox"/> Clinical expertise <input type="checkbox"/> Guidelines <input type="checkbox"/> Organizational data <input type="checkbox"/> Expert opinion |

...Another Helpful Form (Wanda Anderson)

| POPULATION/PROBLEM | | INTERVENTION | | COMPARISON | | OUTCOME |
|--------------------|-----|--------------|-----|------------|-----|---------|
| _____ | AND | _____ | AND | _____ | AND | _____ |
| (or) | | (or) | | (or) | | (or) |
| _____ | | _____ | | _____ | | _____ |
| _____ | | _____ | | _____ | | _____ |
| _____ | | _____ | | _____ | | _____ |
| _____ | | _____ | | _____ | | _____ |
| _____ | | _____ | | _____ | | _____ |



Appendix C: Evidence Level & Quality Guide

| Evidence Levels | Quality Guides |
|---|---|
| Level I Experimental study, randomized controlled trial (RCT) Systematic review of RCTs, with or without meta-analysis | A High quality: Consistent, generalizable results; sufficient sample size for the study design; adequate control; definitive conclusions; consistent recommendations based on comprehensive literature review that includes thorough reference to scientific evidence |
| Level II Quasi-experimental study Systematic review of a combination of RCTs and quasi-experimental, or quasi-experimental studies only, with or without meta-analysis | B Good quality: Reasonably consistent results; sufficient sample size for the study design; some control, fairly definitive conclusions; reasonably consistent recommendations based on fairly comprehensive literature review that includes some reference to scientific evidence |
| Level III Non-experimental study Systematic review of a combination of RCTs, quasi-experimental and non-experimental studies, or non-experimental studies only, with or without meta-analysis Qualitative study or systematic review with or without a meta-synthesis | C Low quality or major flaws: Little evidence with inconsistent results; insufficient sample size for the study design; conclusions cannot be drawn |

Appendix E: Research Appraisal Tool

Evidence Level and Quality: _____

| | | | |
|--|------------------------------|---|-----------------------------|
| Article Title: | | Number: | |
| Author(s): | | Publication Date: | |
| Journal: | | | |
| Setting: | | Sample (Composition & size): | |
| Does this evidence address my EBP question? | <input type="checkbox"/> Yes | <input type="checkbox"/> No Do not proceed with appraisal of this evidence | |
| Level of Evidence (Study Design) | | | |
| A. Is this a report of a single research study? <i>If No, go to B.</i> | | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 1. Was there manipulation of an independent variable? | | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 2. Was there a control group? | | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| 3. Were study participants randomly assigned to the intervention and control groups? | | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| If Yes to all three, this is a Randomized Controlled Trial (RCT) or Experimental Study → | | <input type="checkbox"/> LEVEL I | |

Appendix F: Non- Research Appraisal Tool

Evidence Level & Quality: _____

| | | | |
|---|------------------------------|-----------------------------|--|
| Article Title: | | Number: | |
| Author(s): | | Publication Date: | |
| Journal: | | | |
| Does this evidence address the EBP question? | <input type="checkbox"/> Yes | <input type="checkbox"/> No | Do not proceed with appraisal of this evidence |
| <input type="checkbox"/> Clinical Practice Guidelines: Systematically developed recommendations from nationally recognized experts based on research evidence or expert consensus panel. LEVEL IV | | | |
| <input type="checkbox"/> Consensus or Position Statement: Systematically developed recommendations based on research and nationally recognized expert opinion that guides members of a professional organization in decision-making for an issue of concern. LEVEL IV | | | |
| • Are the types of evidence included identified? | <input type="checkbox"/> Yes | <input type="checkbox"/> No | |
| • Were appropriate stakeholders involved in the development of recommendations? | <input type="checkbox"/> Yes | <input type="checkbox"/> No | |
| • Are reasons for which recommendations apply and do not apply clearly stated? | <input type="checkbox"/> Yes | <input type="checkbox"/> No | |

Appendix H: Synthesis & Recommendation Tool

| Category (Level Type) | Total Number of Sources/Level | Overall Quality Rating | Synthesis of Findings Evidence That Answers the EBP Question |
|---|-------------------------------|------------------------|--|
| Level I · Experimental study · Randomized Controlled Trial (RCT) · Systematic review of RCTs with or without meta-analysis | | | |
| Level II · Quasi-experimental studies · Systematic review of a combination of RCTs and quasi-experimental studies, or quasi-experimental studies only, with or without meta-analysis | | | |
| Level III · Non-experimental study · Systematic review of a combination of RCTs, quasi-experimental, and non-experimental studies, or non-experimental studies only, with or without meta-analysis · Qualitative study or systematic review of qualitative studies with or without meta-synthesis | | | |
| Level IV · Opinion of respected authorities and/or reports of nationally recognized expert committees/consensus panels based on scientific evidence | | | |
| Level V · Evidence obtained from literature reviews, quality improvement, program evaluation, financial evaluation, or case reports · Opinion of nationally recognized expert(s) based on experiential evidence | | | |

Appendix I: Synthesis of Evidence Guide

