

# Integrating Evidence Into Teaching

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# Key Challenge in Education

## Integrating Evidence-Based Practice (EBP) Throughout the Curriculum





# EBP Competencies By Educational Level

★ Undergraduate

★ Masters

★ Doctoral



# EBP Resource

**Stevens, KR. (2009). Essential Competencies for Evidence-Based Practice in Nursing. 2<sup>nd</sup> Edition. San Antonio, TX: Academic Center for Evidence-Based Practice, UTHSCSA.**

**<http://www.acestar.uthscsa.edu>**



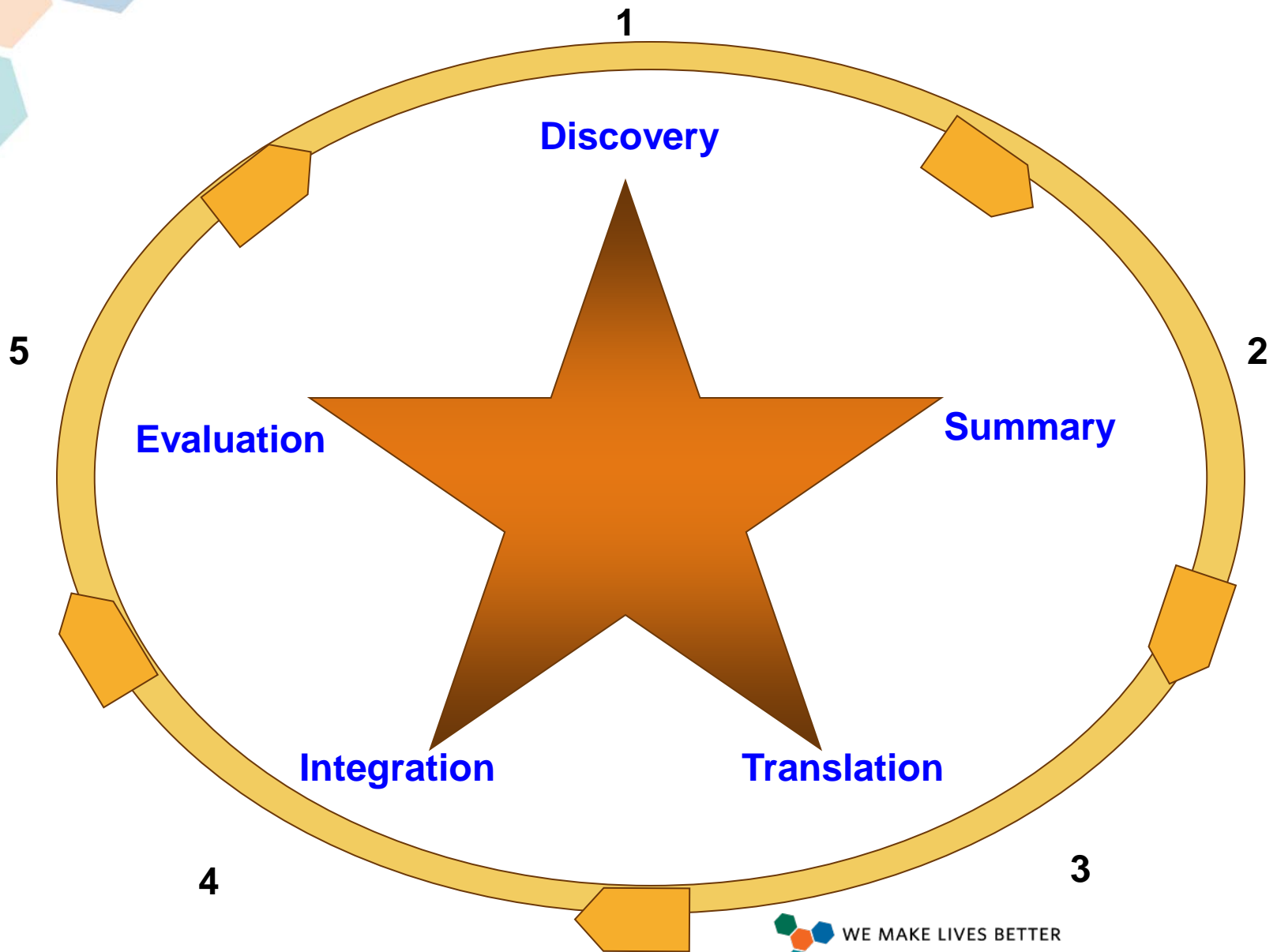
# Essential Competencies for EBP in Nursing Project

**Purpose:** To establish national consensus on essential competencies for EBP that would guide inclusion of EBP skills and content in nursing education programs and provide a basis for professional competencies in clinical practice

# EBP Competencies Project

- ★ Consensus forming expert panel, minimum of 90% agreement
- ★ Four levels of nursing preparation
- ★ Organized using the *ACE Star Model of Knowledge Transformation*
- ★ 10 ADN statements
- 20 Baccalaureate statements
- 32 Masters statements
- 31 Doctoral statements

# The ACE Star Model of Knowledge Transformation



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# EBP Baccalaureate Level Competencies Example

STAR POINT	EBP COMPETENCY
<b>1 Discovery</b>	<b>“Define EBP in terms of evidence, expertise, and patient values”</b>
<b>2 Summary</b>	<b>“List advantages of systematic reviews as strong evidential foundation for clinical decision making”</b>
<b>3 Translation</b>	<b>“Using specified databases, access clinical practice guidelines on various clinical topics”</b>
<b>4 Integration</b>	<b>“Deliver care using evidence-based clinical practice guidelines”</b>
<b>5 Evaluation</b>	<b>“Participate in evidence-based quality improvement processes to evaluate outcomes of practice changes”</b>

**Source: Stevens, K. (2009). *Essential Competencies for EBP in Nursing*. 2<sup>nd</sup> edition.**

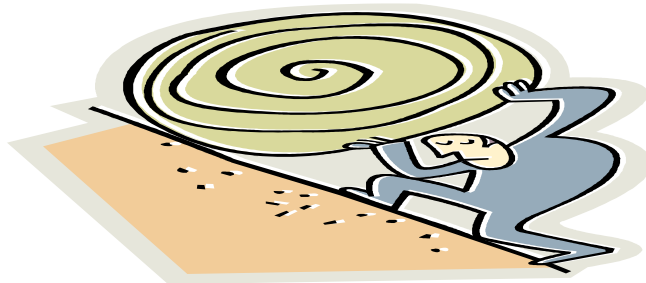


# Faculty & Student EBP Competencies

- ★ **Define evidence-based practice**
- ★ **Understand the importance of Evidence-Based Practice (EBP) – Institute of Medicine quality reports**
- ★ **Describe the hierarchy of evidence and recognize ratings of strength of evidence**

# Faculty & Student EBP Competencies

- ★ **Identify & discuss EBP resources**
- ★ **Use evidence in clinical decision making**
- ★ **Identify strategies for implementing evidence-based research into clinical practice**





# EBP Defined

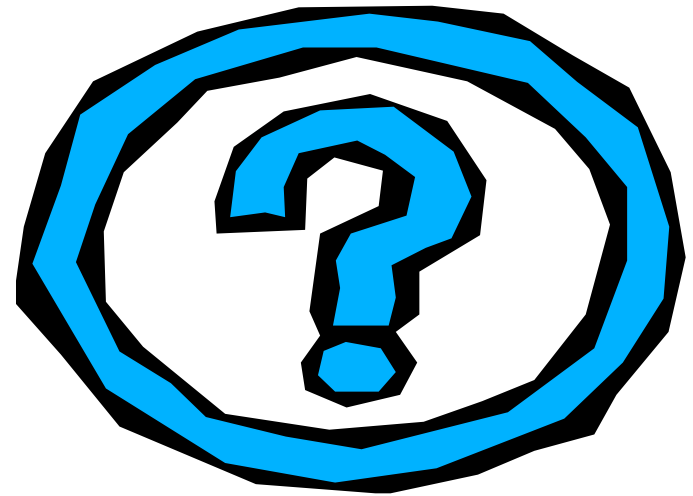
**“Conscientious, explicit and judicious use of current best evidence in making decisions about the care of individual patients” Sackett, et al, 1996**

**“Integration of best research evidence with clinical expertise and patient values”**

**Sackett, et al, 2000**



# What are the 3 components of the definition of Evidence- Based Practice





# Evidence-Based Practice

**“Integration of best research  
evidence with clinical  
expertise and patient values”**

**Sackett, et al. 2000**



# Institute of Medicine (IOM) Reports on Quality

**In 1996, the IOM began a concentrated, continuing effort focused on assessing and improving the United States' quality of care**

**<http://www.iom.edu>**

# Institute of Medicine (IOM) Reports on Quality

**Reports acknowledge the serious  
problem of the nation's overall  
quality of healthcare**





# Institute of Medicine (IOM) Reports on Quality

- ★ **To Err is Human: Building A Safer Health System (2000)**
- ★ **Crossing the Quality Chasm: A New Health Care System for the 21<sup>st</sup> Century (2001)**



# IOM Reports

**Identified that fundamental change is needed in the health care delivery system in the United States**



# Institute of Medicine (IOM) Reports on Quality

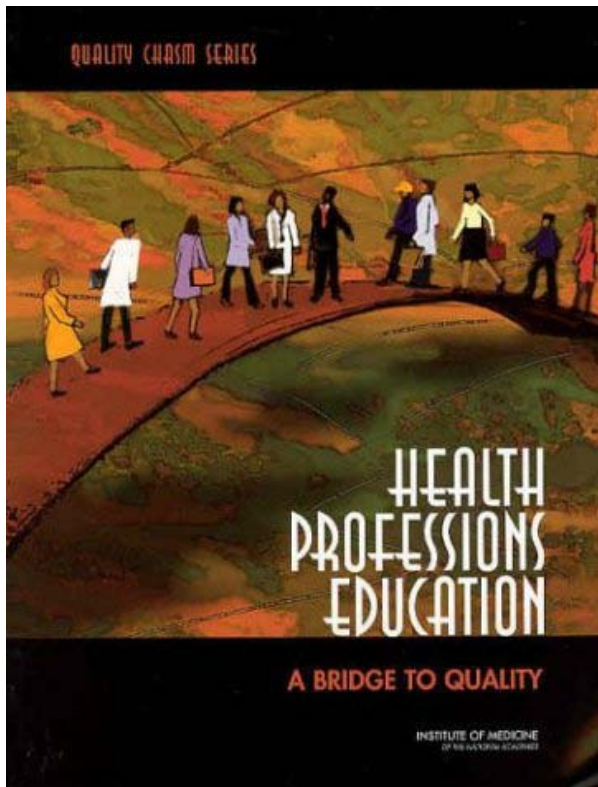
**IOM reports set a vision for transforming the healthcare system to “close the chasm between what we know to be good quality care and what actually exists in practice”**



# Health Professions Education: A Bridge to Quality (IOM, 2003)

## Essential Competencies:

1. Provide patient-centered care
2. Work in interdisciplinary teams
3. Employ evidence-based practice
4. Apply quality improvement
5. Utilize informatics



# Institute of Medicine Quality Aims For Improvement

## “STEEEP” Healthcare Challenge

1. **S**afe
2. **T**imely
3. **E**ffective
4. **E**fficient
5. **E**quitable
6. **P**atient Centered



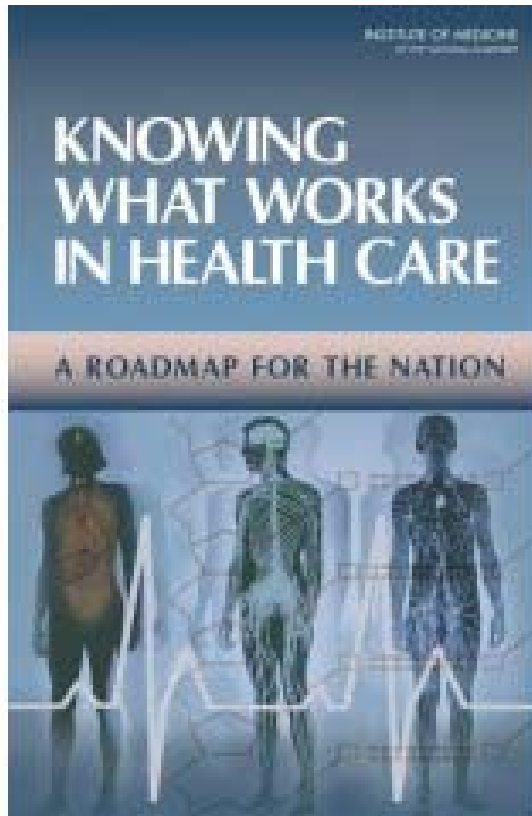


# Institute of Medicine (IOM) Reports on Quality

## ★ Priority Areas for National Action: Transforming Health Care Quality (2003)

Provides a set of 20 priority areas  
for improvement in health care  
quality

# Knowing What Works in Health Care: A Roadmap for the Nation (IOM, 2008)



★ **Systematic  
Reviews**

★ **Clinical Practice  
Guidelines**

# Systematic Reviews

**Concise summaries of the best evidence, uses a rigorous scientific approach to combine results from a body of original research studies**



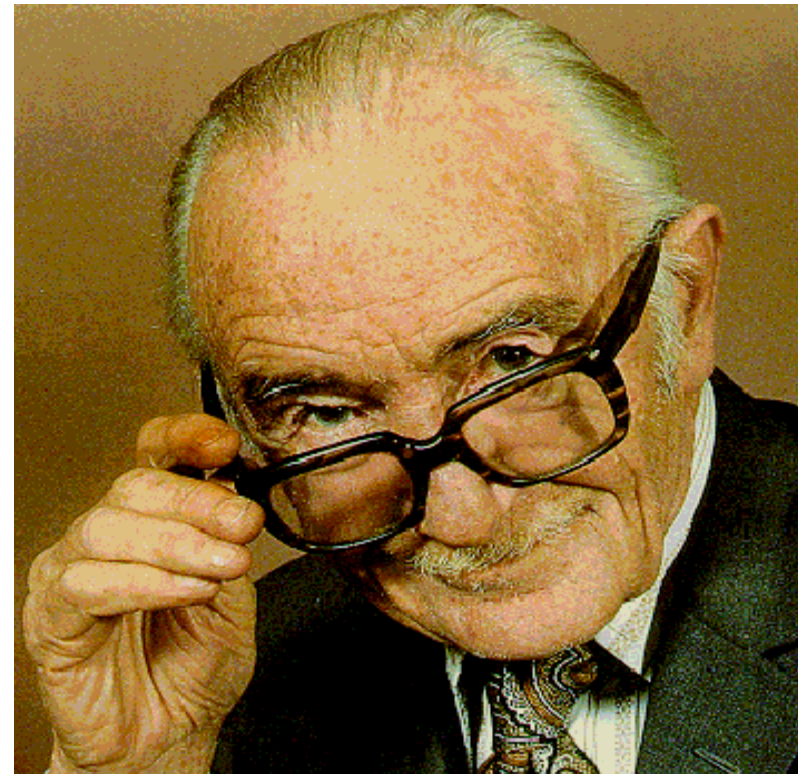
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# Systematic Reviews: Cochrane Library

★ **Founded in 1993 and named after Archie Cochrane, a British epidemiologist**

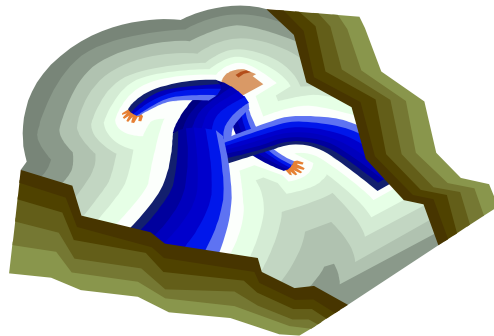
**Considered the founder of the EBP movement**





# Systematic Reviews & Clinical Practice Guidelines

**Offer strong levels of evidence  
to assist with translating  
research evidence into clinical  
practice and assist in clinical  
decision making**





# Clinical Practice Guidelines

**CPGs are systematically developed statements to assist clinicians and patients in making decisions about appropriate health care for specific clinical circumstances**

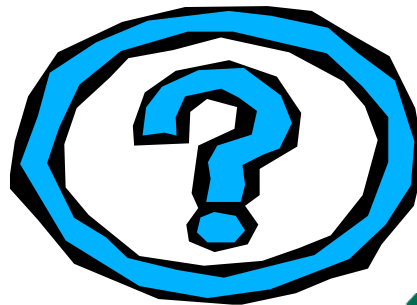
**IOM, 1992**



# Key Challenge in Healthcare

★ Translating research into practice

How long does it take to translate  
research findings into practice



# Clinical Practice Guidelines

**Clinical practice guidelines (CPGs) are key tools that can assist in moving evidence-based research into practice**





# Levels of Evidence

- ★ **Hierarchy of evidence**
- ★ **Strongest clinical recommendations come from systematic reviews**
- ★ **Grades of recommendations based on level of evidence**

# Levels of Evidence

**A systematic review of RCTs represents the highest level of evidence and expert opinions and/or reports of expert committees are the lowest**



# One Example of a Method to Assess the Quality & Strength of the Evidence

<b>I</b>	<b>Evidence is obtained from at least one properly randomized controlled trial (RCT).</b>
<b>II-1</b>	<b>Evidence is obtained from well-designed controlled trials without randomization.</b>
<b>II-2</b>	<b>Evidence is obtained from well-designed cohort or case-control analytical studies, preferably from more than one center or research group.</b>
<b>II-3</b>	<b>Evidence is obtained from multiple time series with or without the intervention. Dramatic results in uncontrolled experiments (such as the results of the introduction of penicillin treatment in the 1940s) could also be regarded as this type of evidence.</b>
<b>III</b>	<b>Opinions of respected authorities, based on clinical experience; descriptive studies and case reports; or reports of expert committees.</b>

**Quality of Evidence Rating Scheme  
(USPSTF, 1996)**



# Rating Strength of Evidence

**AHRQ publication: Systems to Rate the Strength of Scientific Evidence**

**<http://www.ahrq.gov/clinic/epcsu ms/strengthsum.htm>**

# Key EBP Resources



**United State's lead Federal agency for health care quality, costs, outcomes & patient safety research**



# Key EBP Resources - AHRQ

- ★ **Stopped producing clinical practice guidelines in 1996**
- ★ **Supports the development of evidence syntheses through 14 evidence-based practice centers (EPCs)**



# Key EBP Resources - AHRQ

- ★ **Translating Research Into Practice Initiatives (TRIP I & II)**
- ★ **AHRQ provides funding for TRIP studies to promote translational research**

**The AHRQ Health Care Innovations Exchange** is a Web-based information and social learning hub for sharing health care service innovations. **Goal:** Improve health care quality and reduce disparities by promoting adoption and implementation of service innovations



# Key EBP Resources

★ **National Guideline Clearinghouse**

<http://www.guideline.gov>

★ **The Cochrane Library**

[www.cochrane.org](http://www.cochrane.org)

# Cochrane Library

- ★ **International organization**
- ★ **Committed to creating current, accurate information about the effects of healthcare easily available worldwide**



**Quest For Quality**



# EBP Resources

- ★ **U.S. Preventive Services Task Force**

<http://www.ahrq.gov/clinic/uspstfix.htm>

- ★ **Produce the Guide to Preventive Services, *Put Prevention Into Practice* initiatives**



# EBP Resources

★ **CDC** [www.cdc.gov](http://www.cdc.gov)

★ **Joanna Briggs Institute**  
[www.joannabriggs.edu.au](http://www.joannabriggs.edu.au)

★ **RNAO** [www.rnao.org](http://www.rnao.org)



# EBP Resources

**Veteran Administration &  
Department of Defense (VA/  
DoD) Clinical Practice Guidelines**

**[https://www.qmo.amedd.army.mil/  
pguide.htm](https://www.qmo.amedd.army.mil/pguide.htm)**

**U.S. Army MEDCOM Quality  
Management Office Website**



# EBP Resources

**Clinical Specialty Organizations**  
**For example: The Association of Women's Health, Obstetric and Neonatal Nurses (AWHONN)**  
**advocates the use of evidence to guide practice**



# **AWHONN**

**Developed evidence-based clinical practice guidelines on the following topics:**

- ★ Neonatal skin care**
- ★ Breast-feeding support**
- ★ Nursing management of the 2<sup>nd</sup> stage of labor**



# AWHONN

★ [www.awhonn.org](http://www.awhonn.org)

★ **AWHONN guidelines include the strength of evidence on each recommendation**



# Magnet Hospitals & EBP

- ★ **Voluntary credentialing process**
- ★ **Represents the highest level of recognition by the American Nurses Credentialing Center (ANCC) granted to health care organizations that provide RN services**



# EBP and Quality & Safety Connection

IHI.org

A resource from the  
Institute for Healthcare Improvement

**100k** *lives* Campaign

SOME IS NOT A NUMBER. SOON IS NOT A TIME.



# EBP and Quality & Safety Connection

IHI.org

A resource from the  
Institute for Healthcare Improvement

PROTECTING

**5 Million** *lives*

FROM HARM

SOME IS NOT A NUMBER. SOON IS NOT A TIME.



WE MAKE LIVES BETTER

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# EBP Barriers



★ Lack of time

★ Lack of awareness

★ Lack of knowledge

# EBP Barriers



★ **Negative attitudes**

★ **Lack of belief that EBP will result in positive outcomes**

# EBP Barriers



- ★ **Huge amount of information in the literature**
- ★ **Lack of resources to seek and critically appraise evidence (i.e. financial, staff, library access)**

# EBP Barriers



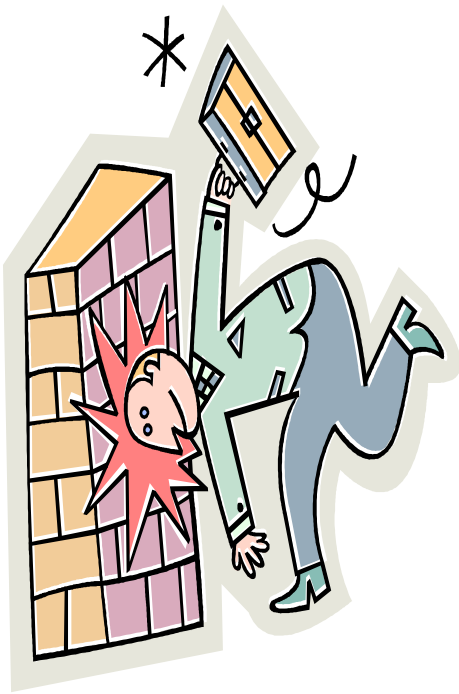
★ **Lack of skills/competencies to seek and critically appraise evidence and implement change**

# EBP Barriers



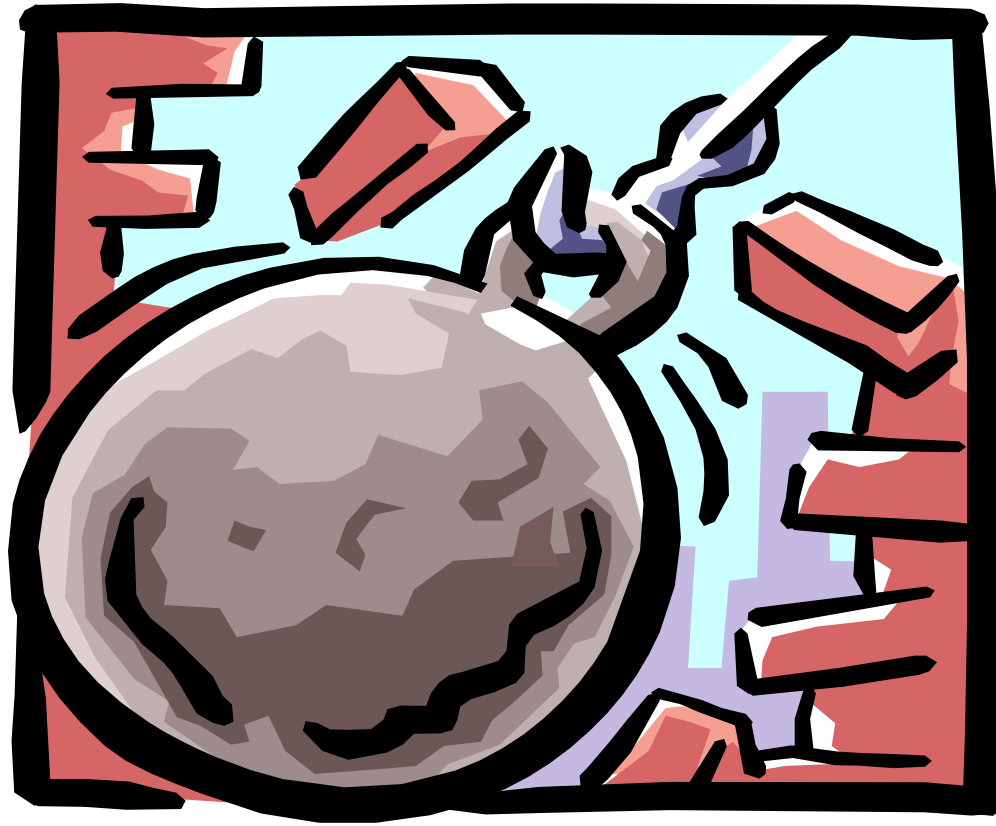
- ★ **Organizational barriers**  
(Lack of administrative support or incentives, implementation infrastructure – adequate time and resources)

# EBP Barrier



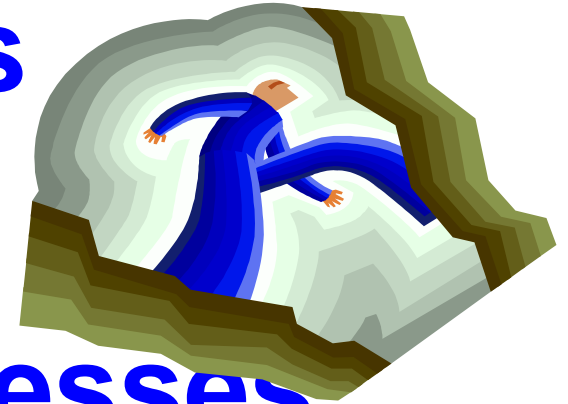
**No shared vision or mission promoting an EBP culture**

# How Do You Break Down The Barriers?



# A Simple Task?

**Start with small steps**



**Celebrate small successes**



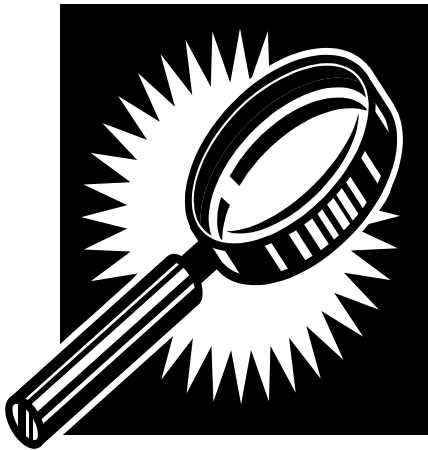


# Overcoming EBP Barriers

A vital **INITIAL** step to overcoming barriers is to conduct a **DIAGNOSTIC ANALYSIS** to assess baseline attitudes, knowledge, and behavior of health care professionals regarding **EBP**

# Assessing CPG Barriers

## ★ Formal & Informal Methods



Questionnaires/surveys,  
focus groups, staff  
members input, practice  
gaps, etc.)

# Changing Clinical Practice



**“Dissemination only” strategies show little or no change in provider behavior or health outcome when used alone**



# Implementation Strategies

★ Educational materials

★ Conferences

✓ Passive dissemination not effective when used alone



# Implementation Strategies

- ★ **Local consensus process**
- ★ **Education outreach visit**
- ★ **Local opinion leaders**
- ★ **Audit & feedback**
- ★ **Multifaceted interventions**



# Integrating Evidence Into Teaching

★ **Envisions EBP & Quality Care**



★ **Awareness of EBP Paradigm,  
Concepts, Definitions, and  
Resources**

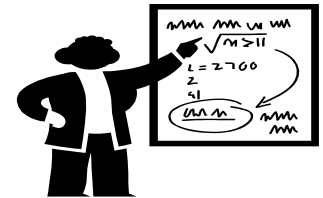
# Integrating Evidence Into Teaching

- ★ **Establish an EBP Culture**  
(Role Model/Mentor, Help Create  
An EBP culture)
- ★ **Act as a change agent**



# Integrating Evidence Into Teaching

**Administrative support of EBP  
development by providing time,  
expertise, and funds to learn and  
enhance EBP skills**





# Integrating Evidence Into Teaching

- ★ **Provide faculty development to enhance EBP knowledge and competencies**
- ★ **Develop a plan on how EBP will be incorporated in didactic and clinical courses**



# Resource

**Levin, R.F., & Feldman, H.R. (2006).  
Teaching evidence-based practice  
in nursing. Springer Publishing  
Company, Inc.: New York.**



# July 2010 9<sup>th</sup> Annual EBP Summer Institute

## Achieving Excellence With Evidence July 8-10, 2010



San Antonio, Texas

The University of Texas Health Science  
Center at San Antonio Academic Center for  
Evidence-Based Practice