EVIDENCE-BASED PRACTICE: IMPROVING CARE ONE STEP AT A TIME

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OBJECTIVES:

- Discuss the evolution of EBP
- Describe the EBP process
- Describe how implementing best practice is essential in sustaining EBP

WHAT DRIVES DECISION-MAKING IN HEALTHCARE

MONEY, MONEY, MONEY

- Access
- Quality
- Ethics
- Values
- Standards
- Evidence

KNOWING WHAT WORKS IN HEALTH CARE?

A ROAD MAP FOR THE NATION (IOM, 2008)

- Examine how the nation uses scientific evidence to identify highly effective clinical services
- Nation must significantly expand its capacity to use scientific evidence to assess what works in health care

IOM DEFINITION OF Quality:
The degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge (IOM, 1990, http://www.iom.edu/CMS/8089.aspx)

THE INSTITUTE OF MEDICINE: “CROSSING THE QUALITY CHASM”

- Report outlined six “Aims for Improvement”, or characteristics of care that all stakeholders should strive for in the provision of care.

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PATIENT-CENTERED CARE
- Focus of quality and safety
- Create a culture of improvement
- Buy-in by all
- Collaborative relationships
- Outside experts

EVIDENCE-BASED PRACTICE (EBP):
is a problem solving approach to clinical practice that integrates the conscientious use of best evidence with a clinician’s expertise and patient preferences and values to make decisions about the type of care that is provided.

Why Must We Accelerate EBP?
Despite an aggressive research movement, the majority of findings from research often are not integrated into practice
- It takes approximately 17 years to translate research findings into practice
- It is estimated that only approximately 10-15% of clinicians in the U.S. are consistently implementing EBP

http://www.cms.gov
- Infections
- Falls in the hospital
- Post-surgical blood clots
- Catheter-associated urinary tract infections and vascular infections
- Foreign objects left in the body after surgery, like sponges
- Post-surgical pneumonia
- Wrong-site operations (i.e. operating on the wrong body part)
- Wrong type blood transfusions
- Bed sores – Pressure ulcers

STEP 1: CLINICAL ISSUE OF INTEREST
- What is the clinical issue?
- Is it meaningful to your practice?
- Are you an evidence-based practitioner?
- If so what does that mean?

STEP 2: FORMULATE A SEARCHABLE, ANSWERABLE QUESTION
- Ask the burning clinical question in PICO format:
  - P: Patient population
  - I: Intervention or interest
  - C: Comparison intervention group or comparison group
  - O: Outcome(S)
  - T: Time
STEP 3: STREAMLINE, FOCUSED SEARCH
- Collect the Best Evidence
- Search first for evidence

TIPS ON DIGESTING RESEARCH REPORTS
- Read regularly, get used to style
- Read copied articles: underline, highlight, write notes
- Read slowly & actively
- Look up technical terms in glossary
- Don’t be intimidated by statistics—grasp gist of story
- “Translate” articles or abstracts

STEP 4: CRITICALLY APPRAISE THE EVIDENCE
- Rapid Critical Appraisal (RCA)
- Evaluate the evidence
- Synthesize the evidence

STEP 5: APPLY VALID RELEVANT EVIDENCE
- Apply the evidence: Implement EBP project, collect baseline data, measure outcomes

STEP 6: GENERATE EVIDENCE
- If the available evidence is insufficient to act (not enough confidence)
  - Generate evidence through outcomes management,
  - Quality Improvement

STEP 7: EVALUATE OUTCOMES
- Evaluate Outcomes based on Evidence
EBP One Step at a Time

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**Structure influences Process & Process influences Outcomes**

**STRUCTURE: CONDITIONS UNDER WHICH CARE IS PROVIDED**
- Focus is on the characteristics of the individuals who provide care and of the settings where the care is delivered
- Example: Material resources: facilities and equipment. Human resources. Education, training, certification, of professionals, facility staffing, equipment, and overall organization

**PROCESS: ACTIVITIES THAT CONSTITUTE HEALTHCARE**
- Focus: Takes place in the delivery of care and evaluating quality of care
- Example: Appropriateness (refers to whether the right actions were taken), skill (refers to how well the actions were carried out and how timely they were). Including: Diagnosis, treatment, rehab, prevention, and patient education – usually carried out by professional personnel and others who may contribute.

**OUTCOMES: CHANGES (DESIRABLE OR UNDESIRABLE) IN INDIVIDUALS AND POPULATIONS THAT CAN BE ATTRIBUTED TO HEALTH CARE.**
- Focus: Whether healthcare goals were achieved
- Example: Cost of care, patient satisfaction with care, patient related outcomes (pain level, condition improved, patient gained full function)

**DEFINITION OUTCOMES:**

"Measuring outcomes and linking them to nursing actions is critical in developing an evidence-based practice and in launching high-quality improvement efforts."

(Polit & Beck, 2008, p.323)

**OUTCOMES RELEVANT TO NURSING**
- Physical or Physiological function
  - (heart rate, blood pressure)
- Psychological function
  - (comfort, quality of life, satisfaction)
- Social function
  - (relations, family members)
- Outcomes effect on Healthcare System
  - Nurse retention rate
  - Length of stay (LOS)
  - Cost factors

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DATA, DATA EVERYWHERE

Data are generated:
- by many individuals during the course of providing care
- by billing systems, budgeting/financial systems

Data are collected in response to accreditation or regulatory requirements

GETTING THE DATA

- Understand the structure in your organization
- Do not assume you have to do chart audit or data entry

ASKING THE RIGHT QUESTION

- We often speak in different languages
- IT and Finance staff speak one language and clinical staff speak another
- Be clear about your question

EVALUATE THE OUTCOMES = IMPACT

- Ways to collect data:
  - Comparing outcomes from hospital records before and after the innovation (Pre/Post design)
  - Gathering Patient and/or Staff satisfaction (retrospective, prospective)
  - Survey or interviews

KEY CONCEPTS:

- Health care decision making must be data-driven
- Data must be accessible and user friendly to point of care providers
- Outcomes evaluation must be interdisciplinary

- Outcome evaluation must be part of each health care providers’ daily activities
- Health care organizations must integrate EBP
Major Barriers to the Advancement of EBP

- Low comfort level with search techniques
- Perceived lack of time
- Challenges with critically appraising research
- Lack of organizational/administrative support
- Educational programs that continue to teach research the “traditional way” with a focus on producing instead of using the evidence
- Negative attitudes toward research

REALITY SHOCK!!

- You want me to do what? On top of everything else I have to do!

MAKING A GOOD INVESTMENT

- Make cost effective care decisions
- Document cost savings over time
- Justify processes and interventions

MAKING THE FINANCIAL CASE FOR EBP

- Infrastructure Costs
- Staff Education Costs
- Implementation Costs
- Economic Analysis: support and sustain long term financial benefits.

Making the Case

- Business case
- Economic case
- Social case

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Making the Business Case

“A business case for a health care improvement intervention exists if the entity that invests in the intervention realizes a financial return on its investment in a reasonable time frame” (Kilpatrick et al., 2005, p. 348)

What Can you do to Improve Care?

- Get started
- Foster “BEST PRACTICE”
- Be committed
- Have a vision and share it
- Write down goals
- Work together
- Learn, learn & learn
- Evaluate outcomes
- Be a CHAMPION
- Know where the resources are
- Share your knowledge and work
- Get started
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STEP 8: DISSEMINATION OF WORK

- Get to word out!
- Share successes and lessons learned
- Expands the knowledge of impact of health outcomes

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