

Nursing Research Series

Essentials of Science: Methods, Appraisal and Utilization

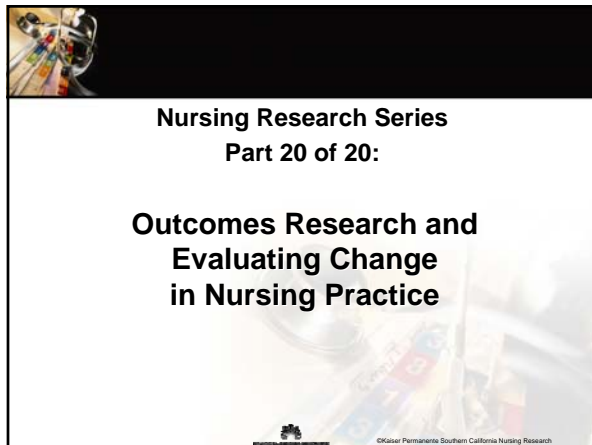


Nursing Research Series

*Essentials of Science:
Methods, Appraisal and Utilization*




©Kaiser Permanente Southern California Nursing Research

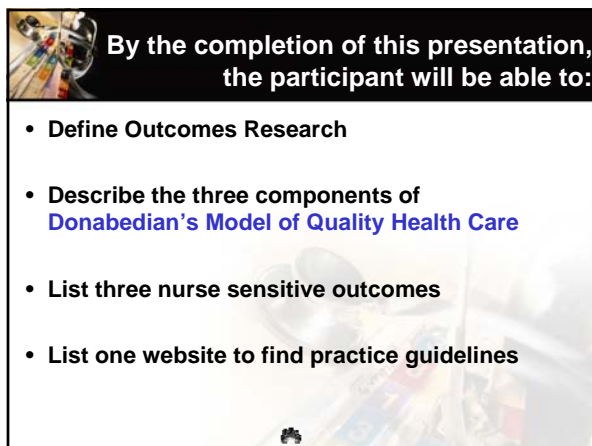


Nursing Research Series
Part 20 of 20:

**Outcomes Research and
Evaluating Change
in Nursing Practice**




©Kaiser Permanente Southern California Nursing Research



**By the completion of this presentation,
the participant will be able to:**

- Define Outcomes Research
- Describe the three components of **Donabedian's Model of Quality Health Care**
- List three nurse sensitive outcomes
- List one website to find practice guidelines



©Kaiser Permanente Southern California Nursing Research

Nursing Research Series

Essentials of Science: Methods, Appraisal and Utilization

What is Outcomes Research?

- Developed to examine the *end point* of patient care. Evaluates the status of people after receiving care and the processes to obtain desired results
- Use of evaluation methods, along with epidemiology and economic theory
- Impacts formation of policies and procedures, guidelines, and even public health policies

Donabedian Model

- A conceptual framework for outcomes research is **Donabedian's Model** of Quality Health Care
 - 3 major connected concepts
 - Structure
 - Process
 - Outcome

Donabedian Model

Structure + Process = Outcomes
(Donabedian, 1972)

- Healthcare providers and researchers assess each part of the equation along with the links between them to assess the quality of outcomes

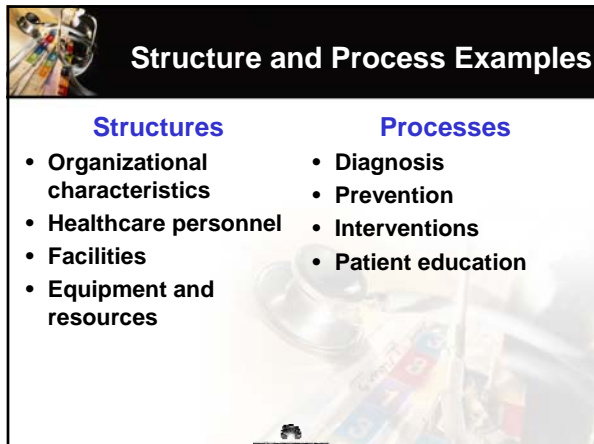
```
graph LR; S[STRUCTURE] --- P[PROCESS]; P --> O[OUTCOMES]
```

Nursing Research Series

Essentials of Science: Methods, Appraisal and Utilization

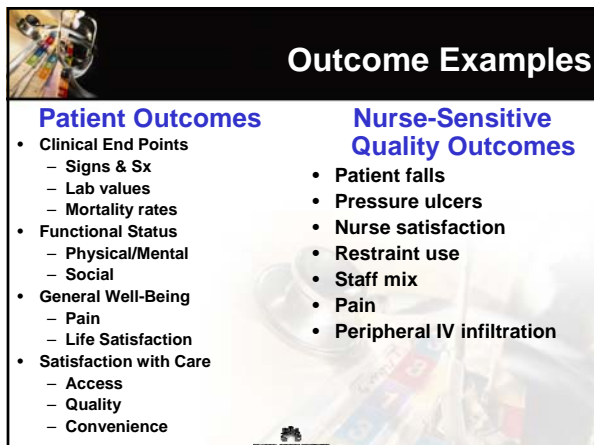
Structure and Process Examples

Structures	Processes
<ul style="list-style-type: none">• Organizational characteristics• Healthcare personnel• Facilities• Equipment and resources	<ul style="list-style-type: none">• Diagnosis• Prevention• Interventions• Patient education



Outcome Examples

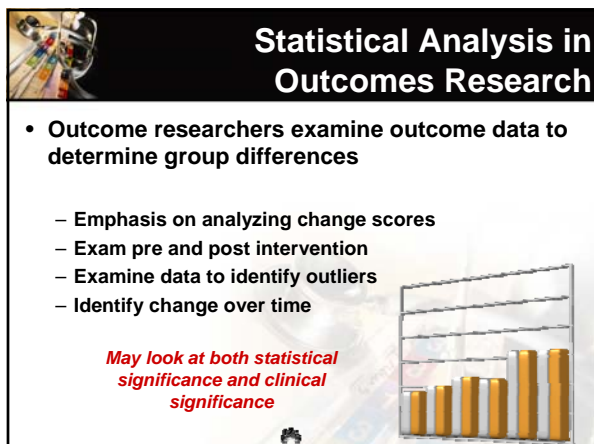

Patient Outcomes	Nurse-Sensitive Quality Outcomes
<ul style="list-style-type: none">• Clinical End Points<ul style="list-style-type: none">– Signs & Sx– Lab values– Mortality rates• Functional Status<ul style="list-style-type: none">– Physical/Mental– Social• General Well-Being<ul style="list-style-type: none">– Pain– Life Satisfaction• Satisfaction with Care<ul style="list-style-type: none">– Access– Quality– Convenience	<ul style="list-style-type: none">• Patient falls• Pressure ulcers• Nurse satisfaction• Restraint use• Staff mix• Pain• Peripheral IV infiltration



Statistical Analysis in Outcomes Research


- Outcome researchers examine outcome data to determine group differences
 - Emphasis on analyzing change scores
 - Exam pre and post intervention
 - Examine data to identify outliers
 - Identify change over time

May look at both statistical significance and clinical significance




Nursing Research Series

Essentials of Science: Methods, Appraisal and Utilization




Evidence-Based Practice

- A way to implement processes and evaluate outcomes is through use of an Evidence-Based Practice (EBP) Model
- **Common steps include:**
 - Perform a critical review of the literature
 - Obtain baseline information
 - Implement the intervention
 - Evaluate the results
 - Incorporate findings into the clinical setting



Evidence-Based Practice Models


- **The Iowa Model of EBP to Promote Quality Care**
<http://www.uihealthcare.com/depts/nursing/rqom/evidencebasedpractice/iowamodel.html>
- **ACE Star Model**
http://www.acestar.uthscsa.edu/Learn_model.htm
- **Stetler Model**
<http://jan.ucc.nau.edu/~nur390c/hsueh/syllabus.htm#stetler>



Finding Evidence to Improve Outcomes

- Electronic databases of systematic reviews, individual research, and expert opinion articles
- Guidelines and practice statements from professional organizations
- Clinical information areas
 - Patient preferences
 - Population statistics
 - Logistic information
 - Social and cultural influences


(Melnyk & Fineout-Overholt, 2005)



Nursing Research Series

Essentials of Science: Methods, Appraisal and Utilization

MINING THE EVIDENCE TO IMPROVE NURSING PRACTICE
Techniques to Find the Gold



AN INTERACTIVE ONLINE EVIDENCE BASED PRACTICE MODULE
<http://nursingpathways.kp.org/scal/research/innovation/ebp1/index.html>

Guidelines

- Successful, tested processes that achieve quality outcomes can be incorporated into practice guidelines
- Practice Guidelines are:
 - Systematically developed statements about a plan of care for a specific set of clinical circumstances involving a particular population”

(Melnyk & Fineout-Overholt, 2005, p. 43)

Guidelines

- Center for Disease Control (CDC)
 - <http://www.cdc.gov/>
- National Guidelines Clearinghouse
 - <http://www.guidelines.gov>
- Professional Organizations
 - American Heart Association
 - American Diabetes Association
- Specialty Professional Organizations

Nursing Research Series


Essentials of Science: Methods, Appraisal and Utilization



Motivating and Sustaining Change in Nursing Practice


- Strategies are developed to disseminate the findings from outcome studies to various entities and people to implement into practice
- Strategies for process implementation to achieve and maintain outcomes:
 - Addressing feasibility issues
 - Effective communication
 - Involving opinion leaders and stakeholders
 - Selecting team members who are change agents
 - Strategic planning
 - Overcoming barriers


(Melnyk & Fineout-Overholt, 2005)



Reach for the Stars


Be part of the discovery of new knowledge through research!





References to Consider

- Burns, N. & Grove, S.K (2007). *Understanding Nursing Research, building an Evidence-Based Practice 4th Edition*. St. Louis, Missouri: Saunders.
- Donabedian, A. (1972). Models for organizing the delivery of health services and criteria for evaluating them. *Milbank Quarterly*, 50,103-154.
- Harris, M. & Taylor, G. (2008). *Medical Statistics Made Easy, 2nd Edition*. Oxfordshire: Scion Publishing
- Melnyk, B. & Fineout-Overholt, E. (2005). *Evidence-Based Practice in Nursing & Healthcare: A Guide to Best Practice*. Philadelphia, PA: Lippincott Williams & Wilkins



For more information please contact:
Nursing.Research@kp.org
<http://nursingpathways.kp.org/scal/research/index.html>

©Kaiser Permanente Southern California Nursing Research
