Comparison of Quality Improvement Evidence-based Practice and Nursing Research

April, 2014

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<th>Definition</th>
<th>Quality Improvement</th>
<th>Evidence-Based Practice</th>
<th>Nursing Research</th>
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<td>-Evaluate effectiveness of nursing interventions and to provide direction for further improvement in the achievement of quality clinical outcomes and cost effectiveness. -Not designed to develop nursing practice standards or nursing science (UAB Center for Nursing Excellence, 2010).</td>
<td>-Integration of best clinical research evidence, clinical expertise and patient values. -Is the conscious and judicious use of current best evidence in conjunction with clinical expertise and patient values to guide health care decisions (LoBiondo-Wood &amp; Haber, 2010) -A scholarly and systematic problem-solving paradigm that results in the delivery of high-quality health care. (ANA, 2010).</td>
<td>-Formal, systematic and rigorous process of inquiry used to generate and test theories about the health-related experiences of human beings within their environments and about the actions and processes that nurses use in practice. (Fawcett &amp; Garity, 2009) -Systematic investigation designed to generate or contribute to new knowledge that can be generalized for broader application (DHS, 2002).</td>
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<th>Purposes (Dimitroff, 2011)</th>
<th>Quality Improvement</th>
<th>Evidence-Based Practice</th>
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<td>-Brings about immediate improvement of care in a specific setting -To compare organization to standards or benchmarks. -Increase cost effectiveness -Make processes more efficient/better</td>
<td>-Translate research into practice -Increase the effectiveness of treatment -Encourage some consistency in practice -Utilize interdisciplinary approach in practice -Encourage practice not based on tradition (because that is how we have always done it)</td>
<td>-Answer the research question -Test the hypothesis -Describe -Explain -Predict -Explore -Discover</td>
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<th>Impact on Practice</th>
<th>Quality Improvement</th>
<th>Evidence-Based Practice</th>
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<td>-To improve patient care processes -Seeks to improve processes in unit and organization -Incorporates the knowledge.</td>
<td>-To improve practice. -Seeks to positively impact practice. -Translates the knowledge.</td>
<td>-To generate new knowledge for practice. -Seeks to add to professional literature.</td>
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<tr>
<td>History</td>
<td>Business/auto industry</td>
<td>Medicine</td>
<td>Florence Nightingale</td>
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<td>Nursing Standards of Practice (ANA, 2010)</td>
<td>The registered nurse participates in quality improvement. Activities may include (p. 52): -Identifying aspects of practice important for quality monitoring. -Using indicators to monitor quality, safety and effectiveness of nursing practice. -Collecting data to monitor quality and effectiveness of nursing practice. -Analyzing quality data to identify opportunities for improving nursing practice. -Formulating recommendations to improve nursing practice or outcomes. -Implementing activities to enhance the quality of nursing practice. -Participating on and/or leading interprofessional teams to evaluate clinical care or health services. -Participating in and/or leading efforts to minimize costs and unnecessary duplication. -Identifying problems that occur in day-to-day work routines in order to correct process inefficiencies. -Analyzing factors related to quality, safety and effectiveness. -Analyzing organizational systems for barriers to quality healthcare consumer outcomes. -Implementing processes to remove or weaken barriers within organizational systems.</td>
<td>The registered nurse integrates evidence and research findings into practice (p. 51): -Utilizes current evidence-based nursing knowledge, including research findings to guide practice. -Incorporates evidence when initiating changes in nursing practice. -Participates, as appropriate to education level and position, in the formulation of evidence-based practice through research. -Shares personal or third-party research findings with colleagues and peers.</td>
<td>The registered nurse integrates evidence and research findings into practice (p. 51): -Participates, as appropriate to education level and position, in the formulation of evidence-based practice through research. -Shares personal or third-party research findings with colleagues and peers. The graduate-level prepared specialty nurse or the advanced practice registered nurse: -Contributed to nursing knowledge by conducting or synthesizing research and other evidence that discovers, examines, and evaluates current practice, knowledge, theories, criteria and creative approaches to improve healthcare outcomes. -Promotes a climate of research and clinical inquiry. -Disseminates research findings through activities such as presentations, publications, consultation and journal clubs.</td>
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The graduate-level prepared specialty nurse or the advanced practice registered nurse:
- Provide leadership in the design and implementation of quality improvements.
- Designs innovations to effect change in practice and improve health.
- Evaluates the practice environment and quality of nursing care rendered in relation to existing evidence.
- Identifies opportunities for the generation and use of research and evidence.
- Obtains and maintains professional certification, if it is available in the area of expertise.
- Uses the results of quality improvement to initiate changes in nursing practice and the healthcare delivery system.

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<th>Nursing’s Role (Sackett et al., 2000)</th>
<th>AD Graduate</th>
<th>BS Graduate</th>
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| Identify practice that requires improvement | - Understand and have an awareness of the value and relevance of research in nursing  
- Help identify problems in nursing practice  
- Use research findings in practice  
- Develop and revise or implement clinical standards, protocols and critical paths | - Be intelligent consumers of research  
- Understand every step in research process  
- Understand how each step relates to the others  
- Critically read and understand research reports, studies  
- Determine strength of evidence of studies  
- Generate clinical questions to identify nursing research projects |
| Collect data | - Search for the best evidence  
- Critically appraise the evidence  
- Synthesize the evidence  
- Apply the evidence  
- Evaluate outcomes | |
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<tr>
<th>Institutional Review Board</th>
<th>No IRB</th>
<th>Assess IRB process related to intended project and the level of risk, benefits, confidentiality, generalizability, and publishing plans.</th>
<th>IRB required.</th>
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| Methods                   | -Plan-Do-Check-Act (PDCA)  
-Plan-Do-Study-Act (PDSA)  
-Six Sigma, Lean Six Sigma | -PICO or PICOT  
-Iowa Model of Evidence-based Practice  
-Ask a focused clinical question  
Find the best clinical evidence  
Critically appraise the evidence  
Apply evidence to practice  
Evaluate outcomes | -Scientific Method  
Research Question/Hypothesis Methods  
Interpretation of Data  
Implications for practice  
Dissemination of findings  
-Qualitative Research  
-Quantitative Research |
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<th>Examples of Projects</th>
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<td>-Reduce wait time for OR patients</td>
<td>-Best practices for tracheotomy dressing</td>
<td>-3 year study examining symptoms clusters of patients with congestive heart failure</td>
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<td>-Decrease boarding time for PACU patients</td>
<td>-For adult acute care medical surgical patients receiving blood transfusions, what are the best monitoring practice to assess for the incidence of adverse transfusion reactions?</td>
<td>-Does a review of the literature indicate a need for new knowledge regarding blood pressure management?</td>
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<td>-Evaluate how nursing measures blood pressure and the accuracy of data entry</td>
<td>-Does the evidence say that manual vs. automatic blood pressures as most accurate?</td>
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<td>-Improving documentation of critical lab values.</td>
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**Resources**


Department of Health and Human Services, 2002.


McLaughlin, M. (2012). Show me the difference! Articulating the differences between QI, EBP and Research. MedStar Health


Sanford Health 2012: Evidence Based Practice, Research, Quality Improvement, Performance Improvement: Articulating Differences and Similarities


University of Alabama at Birmingham Center for Nursing Excellence (2010). Evidence based Practice, Quality Improvement and Nursing Research Fact Sheet.