

# Differentiating Between EBP, QI, and Research

Harris Health System Nursing Services

harrishealth.org

### EBP, QI, & Research Comparison: Intent

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SYSTEM

EBP	QI	Research
<ul><li>Patients/families</li><li>Staff</li><li>Organization</li></ul>	<ul><li>Current benefits expected:</li><li>Patients/families</li><li>Staff</li><li>Organization</li></ul>	<ul><li>Benefits for:</li><li>Clinicians</li><li>Scientific Community</li><li>Subjects (on occasion)</li></ul>
<ul> <li>Improve quality and safety within the local clinical setting by applying evidence in healthcare decisions.</li> </ul>	<ul> <li>Improve quality or safety of processes or patient experience within the local clinical setting OR Evaluate changes in efficiency or flow.</li> </ul>	<ul> <li>To contribute to and/or generate new knowledge that can be generalized.</li> </ul>
<ul> <li>Scope of Interest:</li> <li>Specific unit or patient population within an organization.</li> </ul>	<ul> <li>Scope of Interest:</li> <li>Specific unit or patient population within an organization.</li> </ul>	<ul> <li>Scope of Interest:</li> <li>Generalize to populations beyond organization.</li> </ul>

## EBP, QI, & Research Comparison: Methodology HARRISHEALTH

EBP	QI	Research
<ul> <li>Processes or Outcomes Measurement:</li> <li>Measure of key indicators using tools with face validity and may be without established validity or reliability.</li> <li>Measures include knowledge, attitude, behavior/practices, and outcomes (Bick &amp; Graham, 2010).</li> </ul>	Processes or Outcomes Measurement:  • Measures are simple, easy to use and administer.  • Measures for key indicators only.	<ul> <li>Processes or Outcomes Measurement:</li> <li>Measures are complex.</li> <li>Increased time is required to fill out the measure.</li> <li>Measures require a detailed administration plan.</li> <li>Estimates of reliability, validity, specificity, and/or sensitivity are required.</li> </ul>



#### EBP, QI, & Research Comparison: Design

EBP	QI	Research
Examples:	Examples:	Examples: • Quantitative
<ul> <li>Iowa Model</li> <li>Johns Hopkins Nursing         EBP Model</li> <li>ACE Star Model</li> <li>Rosswurm &amp; Larrabee Model</li> <li>Stetler's Model</li> <li>[Note: A modified Iowa Model is used for evidence based practice at HCHD.]</li> </ul>	<ul> <li>Plan Do Check Act         (PDCA)</li> <li>Plan Do Study Act         (PDSA)</li> <li>LEAN</li> <li>Six Sigma</li> <li>Focus Analyze Develop         Execute (FADE)</li> <li>Continuous Quality         Improvement (CQI)</li> <li>Total Quality         Management (TQM)</li> <li>Other terms: PI Performance Improvement Process Improvement</li> </ul>	<ul> <li>✓ Randomized Control Trials (RCTs)</li> <li>✓ Quazi-experimental</li> <li>✓ Non-experimental Longitudinal Retrospective Prospective Correlational Surveys</li> <li>• Qualitative</li> <li>✓ Ethnography</li> <li>✓ Grounded Theory</li> <li>✓ Phenomenological</li> </ul>



#### EBP, QI, & Research Comparison: Design

EBP	QI	Research
Timing:	Timing:	Timing:
<ul> <li>Timeline varies as GATHER &amp; APPRAISE evidence</li> <li>Based on availability of clinical practice guidelines or other synthesis reports</li> </ul>	<ul> <li>Rapid Cycle [Test an intervention with a small population. If the desired improvement results, apply the intervention in a larger population to test for continued improvement.]</li> </ul>	Planned and longer
<ul><li>Sample:</li><li>Small convenience sample</li></ul>	<ul><li>Sample:</li><li>Small convenience sample</li></ul>	<ul><li>Sample:</li><li>Sample varies based on study question</li></ul>
<ul><li>Sample size:</li><li>Small but large enough to observe changes</li><li>Feasible for data collection</li></ul>	<ul><li>Sample size:</li><li>Small but large enough to observe changes</li><li>Feasible for data collection</li></ul>	<ul> <li>Based on estimates of adequate power (power analysis) or saturation</li> </ul>



#### EBP, QI, & Research Comparison: Design

EBP	QI	Research
Data Collection:	Data Collection:	Data Collection:
<ul> <li>Minimal time, resources, costs</li> </ul>	<ul> <li>Minimal time, resources, costs</li> </ul>	<ul> <li>Complex, tightly controlled plan constructed for resources to maintain consistency</li> </ul>
<ul><li>Extraneous variables:</li><li>Acknowledged, but not measured</li></ul>	<ul><li>Extraneous variables:</li><li>Acknowledged, but not measured</li></ul>	<ul><li>Extraneous variables:</li><li>Controlled and/or measured</li></ul>
<ul> <li>Data Analysis:</li> <li>Descriptive statistics or statistical process control charts for trended data</li> </ul>	Data Analysis:  • Descriptive statistics or statistical process control charts for trended data	<ul> <li>Data Analysis:</li> <li>Complex with inferential statistics to promote generalizability of results</li> </ul>





#### **Regulating Bodies**

EBP	QI	Research
Regulating bodies:  • Organization	<ul> <li>Regulating bodies:</li> <li>Organization</li> <li>Influenced by:</li> <li>✓ The Joint Commission</li> <li>✓ Centers for Medicare &amp; Medicaid Services</li> </ul>	<ul> <li>Regulating bodies:</li> <li>Organization</li> <li>✓ Institutional Review Board (IRB)</li> <li>Office for Human Research Protection (OHRP)</li> <li>✓ Code of Federal Regulations (45 CFR part 46)</li> <li>Food Drug Administration (FDA)</li> <li>State and local laws</li> </ul>



#### EBP, QI, & Research Comparison:

#### **Additional Burden or Risks**

EBP	QI	Research
<ul> <li>Patient and/or population expected to benefit directly from improved flow or process</li> </ul>	<ul> <li>Patient and/or population expected to benefit directly from improved flow or process</li> </ul>	<ul> <li>Subject may or may not benefit from participation in study</li> </ul>
<ul> <li>Risk of participation is same as receiving usual care</li> </ul>	<ul> <li>Risk of participation is same as receiving usual care</li> </ul>	<ul><li>Participant is aware of risks</li><li>Informed Consent</li></ul>
<ul> <li>If risk or burden is higher than with usual care, consider research &amp; IRB</li> </ul>	<ul> <li>If risk or burden is higher than with usual care, consider research &amp; IRB</li> </ul>	required





#### **IRB Approval**

EBP	QI	Research
<ul> <li>IRB approval not required (unless required by organizational policy)</li> </ul>	<ul> <li>IRB approval not required (unless required by organizational policy)</li> </ul>	• IRB approval required

## EBP, QI, & Research Comparison: Dissemination HARRISHEALTH

EBP	QI	Research
<ul> <li>Expected to disseminate within the organization</li> <li>Presentations as EBP         Once locally         Once nationally</li> <li>Publication as EBP</li> <li>Does not indicate generalizability of findings or research</li> </ul>	<ul> <li>Expected to disseminate within the organization</li> <li>May be expected for public accountability and transparency based on CMS regulations</li> <li>Presentations as QI</li> <li>Once locally Once nationally</li> <li>Publication as QI</li> <li>Does not indicate generalizability of findings or research</li> </ul>	<ul> <li>Expected to disseminate findings</li> <li>✓ To study participants</li> <li>✓ Within the organization</li> <li>✓ Presentations of findings</li> <li>Once locally Once nationally</li> <li>✓ Publication as research</li> </ul>