

Quality Improvement versus Research for UCSF Health Nurses

	Quality Improvement	Research
<i>What is your goal?</i>	To conduct a rapid cycle, small test of change (evidence-based intervention) on my unit to improve our outcomes.	To generate new knowledge and disseminate my findings (publication or presentation) with this project internally and externally.
Definition	Process of systematic, data-guided activities designed to bring about immediate, positive changes in the delivery of healthcare in particular setting. ¹	A systematic, intensive study intended to increase knowledge or understanding of the subject studied, a systematic study specifically directed toward applying new knowledge to meet a recognized need, or a systematic application of knowledge to the production of useful materials, devices, and systems or methods, including design, development, and improvement of prototypes and new processes to meet specific requirements. ²
Methods <i>Ways to do it</i>	<ul style="list-style-type: none"> • Lean Principles <ul style="list-style-type: none"> ○ A3 EBP Focus ○ PDSA • Five (Seven) Steps of EBP 	<ul style="list-style-type: none"> • Scientific Method • Quantitative, Qualitative • Includes clinical trials, observational studies, qualitative studies
Data collection <i>Ways to collect data</i>	Simple measurement tools developed for the project or adapt tools from the literature	Reliable and valid data collection tools
Theoretical Framework <i>How to view the problem</i>	<ul style="list-style-type: none"> • PARIHS model • UCSF Synergy model • Johns Hopkins Nursing Evidence-Based Practice model 	<ul style="list-style-type: none"> • Physiological frameworks • Sociological frameworks • Biomedical model
Institutional Review Board (IRB)/ Committee on Human Research (CHR) (Ethics board)	Not required unless involving collection and records of Personal Health Information (PHI)/ Personally Identifiable Information (PII)	Required for all projects

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Clinical Nurse Responsibilities <i>What is my role?</i>	<ul style="list-style-type: none"> • Serve as a Clinical Expert • Identify the problem • Access the literature (evidence) • Critically appraise the literature (evidence) • Create/Implement an intervention based on the best available evidence • Evaluate the practice change • Disseminate the findings (internal and external) 	<ul style="list-style-type: none"> • Serve as a Clinical Expert and/or Co-Principal Investigator • Identify an area that needs new information • Collaborate with INEx to develop a research question and plan (data collection and analyses) • Implement the research study • Analyze the findings • Disseminate the findings (internal and external)
INEx/ SON Support	Provide education, mentorship, and support to ensure success of the project	<ul style="list-style-type: none"> • Provides resources and support • INEx Clinical Nurse Researcher or SON faculty serve as a Principal Investigator (PI)
Population	Focused on unit	Uses specific sampling methods to answer the research question
Intervention	The intervention is supported by published evidence	The intervention or phenomenon may not have data to support it
Comparison	Another unit or current practice	<ul style="list-style-type: none"> • A comparison group is dependent on the type of research questions asked • Not all research requires a comparison group
Outcome <i>What impact will I have?</i>	Change practice on your unit or organization	Create knowledge and change practice on your unit, organization, and scientific community
Time <i>How long does it take?</i>	<ul style="list-style-type: none"> • 3-9 months on average • Planned (rarely unplanned) • Varies based on type of question and operational needs 	<ul style="list-style-type: none"> • 3 months- many years • Planned • Varies based on type of question, best available evidence and operational needs
Examples	What is the effectiveness and feasibility of the CDC STEADI Algorithm in an inpatient hospital setting to reduce falls in the elderly population?	What is the effect of an implementation of a multifaceted training program would affect competency of clinicians utilizing High Frequency Percussive Ventilation during transport?

References

1. Baily MA, Bottrell M, Lynn J, Jennings B, Hastings C. The ethics of using QI methods to improve health care quality and safety. Hastings Cent Rep. 2006;36(4):S1-S40.
2. National Institutes of Health. Glossary & acronym list. <http://grants.nih.gov/grants/glossary.htm>. Published 2015. Accessed February 20, 2015.