	Research	Quality Improvement
Purpose	Designed to develop or contribute to generalizable knowledge: consists of facts, theories, principles or relationships, or the accumulation of information on which they are based, that can be corroborated by accepted scientific methods of observation and inference	Designed to implement knowledge, assess a process or program as judged by established/accepted standards. To improve internal processes, practices, costs or productivity for a specific intervention [i.e. determine how this intervention affected this participant group in this setting].
Goals	Knowledge-seeking is independent of routine care and intended to answer a question or test a hypothesis, innovative practice or understand a phenomena. [e.g. pilot testing, new therapeutic interventions, behavioural research]	Knowledge-seeking is integral to ongoing management system for delivering health care To assess an existing practice that is an approved procedure or that has been shown effective in the literature.
External funding required?	Usually research requires a separate source of funding, although some research is unfunded. Funding may be from an external granting agency or an internal grant competition for research only.	No, funding for QI initiatives typically is budgeted for within an institution's operating budget.
Benefits	• Might or might not benefit current subjects; intended to benefit people or patients in the future patients • Results can be generalized to future individuals with the same characteristics as the study sample/population.	• Directly benefits a process, system, program, decision-makers, program management; might or might not benefit patients. • Results cannot usually be generalized outside of the existing practice.
Risks	may put subjects at risk There may be some risk incurred by participants, e.g. physical, emotional, privacy risks of harm, as a result of change in the usual standard of care/intervention or from being exposed to questions regarding sensitive issues.	does not increase risk to patients, with exception of possible patients' privacy or confidentially of data There will be no risks beyond the usual intervention [i.e. improve usual care and not place participants at risk; n.b. privacy may be a concern].
Participants	Typically, the research subjects must, reflect the characteristics of the total population that is being studied. Quantitative design: use a formal power analysis [n.b. pilot testing does not require power analysis]. Controls may also be required. Qualitative design: use knowledge of the sample to determine #'s of participants to include in focus groups/interviews. Controls may also be required. Participants are usually randomized into groups	Will use a convenience sample of participants exposed to the practice [i.e. small sample size, but large enough to observe change; depends somewhat on size of practice]. No randomization required
Design	Design is tightly controlled in order to limit the effect of confounding variables on the variables of interest – essential to determine causality.	Design is flexible and may vary during course of project as feedback is provided throughout the Plan Do Study Act cycle. Changes in design are encouraged for quick identification of the best process to achieve a desired goal. Confounding variables are acknowledged but not controlled.
Endpoint	answer a research question	improve a program, process or system
Analysis	statistically prove or disprove hypothesis With inferential statistics to test for significant differences, descriptive statistics or a qualitative methodology that can compare and contrast qualitative data.	compare program, process or system to established standards With descriptive statistics that demonstrate change/trends.
Adoption of Results	little urgency to disseminate results quickly Findings will contribute to scientific body of knowledge which collectively adds to evidence that will inform practice/policy. Will change practice slowly as often multiple studies are needed to validate the results.	results rapidly adopted into local care delivery Will change practice in my setting immediately.
Publication/Presentation	investigator obliged to share results	QI practitioners encouraged to share systematic reporting of insights
REB review required?	Yes	No