DEPARTMENT OF EVALUATION AND RESEARCH SERVICES

2011 09 12; Updated 2014 03 04

Differentiation of Research, Quality Improvement and Program Evaluation[1,2,3,4]

	RESEARCH	QUALITY IMPROVEMENT	PROGRAM EVALUATION
What is the purpose of your project?	To generate new knowledge, that is generalizable to the wider population. 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.	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].	To inform decisions, identify improvements [i.e. formative evaluation], and provide information about the success of programs [i.e. summative evaluation] according to predefined goals and objectives. Planning the evaluation may run concurrently with program planning.
What are you trying to accomplish with this project?	To test a new, innovative practice or understand phenomena. [e.g. pilot testing, new therapeutic interventions, behavioural research]	To assess an existing practice that is an approved procedure or that has been shown effective in the literature.	To make judgments about the program, improve or further develop program effectiveness, inform decisions about future programming, and/or increase understanding.
Is 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.	No, funding for Program Evaluation typically is budgeted for within an institution's operating budget.
Who will most likely benefit from your project? How generalizable will your results be?	There may not be any benefits to the actual research participants from the research. The knowledge is intended to have future benefits for the research population as well as benefits for others who may wish to apply the research findings. *Results can be generalized* to future individuals with the same characteristics as the study sample/population.	Decision-makers; program management who use the findings to make improvements to the 'practice' being reviewed to benefit current and future program participants *Results cannot usually be generalized outside of the existing practice.*	Decision-makers; program management who use the findings to make improvements to the 'practice' being reviewed to benefit current and future program participants *Results cannot usually be generalized outside of the existing practice.*
Will participants be placed at risk during the project?	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.	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].	There will be no risks beyond the usual intervention; n.b. privacy may be a concern.
Will the data from participants be kept confidential?	Yes, deidentified, anonymized or anonymous (n.b. there may be exceptions)	Yes, deidentified, anonymized or anonymous	Yes, deidentified, anonymized or anonymous
How will you	Typically, the research subjects must	Will use a convenience sample of	Sample size will depend on the # of program

determine how many participants to include?	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 exposed to the practice [i.e. small sample size, but large enough to observe change; depends somewhat on size of practice].	participants and to what degree it is necessary to determine if the success of the program can be attributed to the program itself versus confounding factors.
Will you try to randomize participants into different groups?	Yes for randomized trials OR will design sampling strategies to match the targeted population	No	Only if an experimental or quasi-experimental design can be used.
Could your project be done with participants outside your setting?	Yes, having participants outside the setting would add strength to its external validity, e.g. multi-site trials.	No, having participants outside the setting would not make sense because another setting would not deliver the practice in the same way.	Quantitative design: Yes, if a matched comparison control group can be used that does not receive the program. Qualitative: Stakeholders and experts external to the program are typically an important line of evidence.
What kind of tool/instrument will you use to collect data?	Valid & reliable instruments that measure concepts of interest.	Data collection tools that allow simple & easy recording of information	May use a combination of valid & reliable instruments as well as program specific data collection tools.
Will you be able to vary your protocol during the study?	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.	Design is tightly controlled to the degree that statistical analysis may be able to control confounding variables or a quasi-experimental design is used. The existence of confounding variables may emerge which may cause a change in design – i.e. may choose to conduct a qualitative analysis to understand program outputs & outcomes.
Will you be using an experimental OR quasi-experimental design OR generating theory from qualitative analysis?	Yes, each of these may be used or mixed methods may be used.	No	Quasi-experimental ; non-experimental design; qualitative, quantitative and mixed-methods analysis
How will you handle extraneous variables [factors that might interfere with/confound your results]?	Try to control or measure them.	Acknowledge them, but do not try to interfere with them. They are part of any real life experience.	Use multiple lines of evidence to answer evaluation questions (related to program implementation and/or success) and to minimize the factors that confound results.

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How will you analyze the data?	With inferential statistics to test for significant differences, descriptive statistics or a qualitative methodology that can compare and contrast qualitative data.	With descriptive statistics that demonstrate change/trends.	Quantitative (inferential and descriptive analysis) and qualitative may be used.
How long do you anticipate your project will take?	It will take considerable time.	It will be done quickly through rapid cycles.	It depends on the size and scope of the program. The complexity of the evaluation design, which depends on the type of information necessary to make decisions, influences the length of the evaluation process. The resources available to conduct evaluation may limit the evaluation design.
What do you plan to do with your findings? How will they be applied?	Findings will be applied as widely as possible to increase the body of scientific knowledge by publishing or presenting for others within the discipline. *This process has a longer time frame & is dependent on the research meeting scholarly criteria for publication.*	Communicate findings within the organization primarily by providing specific feedback to decision makers responsible for managing the practice. Findings may be published with organizational approval [i.e. QI is carried out for purposes of meeting organizational goals]. *This process has a short, more immediate time frame.*	Communicate findings within the program and organization primarily by providing specific feedback to those who commissioned the evaluation. Findings may be published with organizational approval [i.e. Program Evaluation is carried out for purposes of meeting organizational goals. FH also does accountability focused evaluation to answer questions from funders, not necessarily exclusively organizational goals]. - The length of this process may be dependent on whether the evaluation includes recommendations or whether evaluation results are used by the evaluation commissioner's to make recommendations.
Is Research Ethics Board approval required?	Yes - *REB approval is usually also required for publication in a research journal.*	No	No
How will your findings change practice/policy?	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.	Will change practice in my setting immediately.	Improve program design and implementation (i.e. redefine target population), and identify efficient practice, unintended benefits and risks.

[1] Kring, DL. Research and Quality Improvement: Different Processes, Different Evidence. MEDSURG Nursing. June 2008. Vol. 17, No. 3, p. 162-169.
[2] Rozalis, ML. Evaluation and Research: Differences and Similarities. The Canadian Journal of Program Evaluation. 2003. Vol. 18, No. 2, p. 1-31.
[3] Alberta Heritage Foundation for Medical Research: Alberta Research Ethics Community Consensus Initiative (ARECCI). ARECCI Ethics Decision-Support Tools for Projects
[4] Vancouver Coastal Health. Draft Project Screening Tool. October 2008