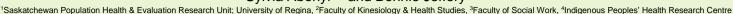


Evaluation Methods in Population Health Research: Measuring and Building Capacity

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ABSTRACT

Recognition of the importance of collaborative and intersectoral partnerships has been woven into the fabric of evaluation methods and approaches developed in the health promotion arena. These methods and approaches also fit well with community based and participatory approaches in the area of population health research. This poster reports on the use of evaluation methodology in a participatory research project in northern Saskatchewan Aboriginal communities. The goal of the project is to develop a framework and indicators of community wellness and capacity for use by health managers in ongoing program planning and evaluation. The current research incorporates an effective strategy. we used in a previous evaluation project which successfully combined evaluation. methodology (logic modelling) with research methodology (qualitative methods and a participatory approach). We report here on the process and results of the first phase of the project, focusing our observations on the capacity building process and outcomes.

INTRODUCTION

It is well documented that Aboriginal Canadians do not enjoy the same level of health compared to non-Aboriginal Canadians (Bird, 2002; Jackson & Ward. 1999; Morgan. Slade. & Morgan, 1997: O'Donoghue, 1999: Van Uchelen et al., 1997). As communities and as nations. Aboriginal Canadians are moving beyond these disparities to focus on healing and re-building their communities. The literature suggests that Canadian Aboriginal people are experiencing gradual improvements in health status; however, indices used to determine these improvements are often based on standards and values established by the general (non-Aboriginal) population (RCAP, 1996). Few studies have attempted to measure Aboriginal health based on Aboriginal values and Aboriginal standard measures (Burhansstipanov, Bemis, Dignan, & Dukepoo, 2001; Morgan et al., 1997). Health in westernized models is often measured on the basis of illness (morbidity) and death (mortality); however, this approach does not take into account the positive and constructive components of an Aboriginal community (Morgan et al., 1997; Van Uchelen et al., 1997). New ways of measuring the health status of Aboriginal populations is long overdue not only to assess alternate ways of addressing known disparities but also to encourage community development and community empowerment in the process (Bauert, Brown, Collins, & Martin, 2001: Morgan et al., 1997: O'Donoghue, 1999)

PURPOSE OF THE PROJECT

The primary purposes of this research are 1) to develop culturally sensitive and relevant indicators to assess changes in community health and community capacity, and 2) to develop an evaluation framework that can be used to assess the community health impacts of health and other community-based human services. To achieve these objectives, the following questions will be answered:

a) What are the elements of community health and community capacity that are important to community members, and how do these members understand the relationships between

b) How do community members understand the contribution of health and human services to community health and community capacity?

These questions, aligned with existing theories and models of community health (determinants) and community capacity, will lead to development of an evaluative framework of how health and human services contribute to community health and community capacity. This leads to the final two research questions:

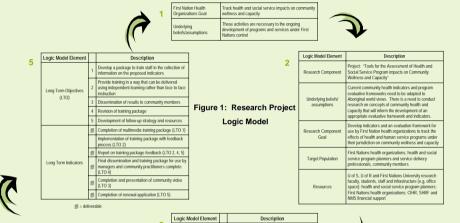
c) What are the indicators that would allow health and human services in communities to monitor changes in community health and community capacity?

d) What are the logic models that would allow health and human services in communities to evaluate their contribution to changes in community health and capacity?

This poster focuses on the research process, specifically, our use of a combination of evaluation methodology (logic modelling), with research methodology (qualitative methods and participatory approach). This combination of approaches facilitates a capacity building orientation both in our process and outcomes.

Brief Summary of Findings from Phase 1... Development of an Initial Evaluative Framework

- Directors and managers of community-based health services all identified specific health issues and concerns of importance to their communities as a whole, as a starting point for a broader discussion of community health, wellness and capacity. Health issues related to addictions, for example, were a common entry point into the discussion. These managers also provide a clear distinction between their understandings of community 'health' and community 'wellness'. Furthermore, they all distinguish guite specific and separate domains for community health and community capacity.
- The domains of community health and wellness, and their associated issues, that were identified by health directors include; economic viability, services and infrastructure, food security, healthy lifestyles, and identity and culture.
- Community capacity domains include understanding community history, community values, sense of community, education and training, honouring youth, leadership, needs assessment, holistic organization, and resource mobilization.



(STO) Development of an evaluative framework that explains the theoretical basis for the selection of Final report on evaluative frameworks and Short Term Indicators indicators (STO 1, 2) fff = deliverable

capacity

Description

velopment of culturally appropriate and levant indicators of community health and

Logic Model Element

Short Torm Objective



Process Activities (PA)	1	Conduct secondary analysis of research literature and program documentation for existing community health and capacity indicators and frameworks, including those specific to a First Nation context and perspectives
	2	Conduct key informant interviews with health and human service program directors
	3	Complete logic models that identify program components contributing to community health and capacity-building, highlighting indicators
	4	Develop an initial evaluative framework based on First Nations perspectives of how and why programs and services are expected to realize community health and capacity
	5	Conduct interviews with health and human service program personnel and focus groups with health committee members and community members using the initial framework and logic models as tools
	6	Data analysis
Process Indicators	ß	Synthesis report of the literature review (PA1)
		Completion of initial evaluative framework and logic models (PA 2, 3, 4)
		Completion of primary data collection and analysis (PA 5,6)

METHODS

- Research Strategy: The four-stage project involves primary data collection in stages one and two via interviews with community-based health directors, and focus groups with managers of community-based human services. Our objective in these first two stages is to determine their understandings of the meanings of community health and community capacity and the ways in which progress in these two areas can be tracked or monitored in their communities. The outcomes of these stages include the development of an evaluative framework that identifies core domains of both community health and capacity, and suggestions for specific indicators that are believed to be appropriate and relevant for tracking change in these areas. In stage three we will be implementing the framework in two communities over a six-month period, and in stage four will be following up with a process evaluation of the experiences of health staff and managers in using the framework.
- Research Challenge: Effective communication that bridges disciplinary, institutional, organizational, and community level stakeholders: One of the challenges in this type of research is explicitly outlining the process in such a way that all stakeholders can link proposed research activities with the rationale for undertaking them and the expected outcomes. Clarifying the research process facilitates an inclusive critical appraisal of the course of action and the theories underlying it -right from the planning stages. We have found logic models to be an effective tool in this process, essentially providing a common structure and language for conversations on collaboration to take place.
- What Are Logic Models?: A logic model is a description, often in the form of a diagram, of the relationship between goals, objectives and activities, as well as indicators of progress and resources available to complete the work. The presence of particular elements in a logic model and the connections between elements are hinged on underlying theories and assumptions -the empirical, philosophical and theoretical beliefs upon which a project is based (Tabori and Hermann 2001; Weiss 1997).
- How have logic models been used in evaluation methodology? Logic models have primarily been used in the area of program planning and evaluation (Dwyer and Makin 1997: Judge and Bauld 2001) Program planners or deliverers can use them to show/evaluate how their services will result in favourable outcomes for program participants. The model articulates program goals (long term and short term) and then identifies specific actions that the program will be responsible for (process objectives). It also sets specific targets for participant involvement with the program activities and services, and it identifies the measurable outcomes (indicators) that are intended as a result of program. activities. Program evaluation is the context in which we first began to use logic models, and they proved to be an effective means of launching discussion and providing rationale for the types of interview questions we were asking. The communication challenges in some research environments are similar to the program evaluation context. The success of the logic model as a communication tool in evaluation work lead us to consider its application in the diversely peopled research settings we work in -particularly in the area of community-university research partnerships. We have since found that others are also using logic models in this way (Betts and Stuart 2002).
- How can logic models be used in research?:
 - ✓ To reveal/test/ critique the assumptions/ theories on which a project is based.
 - √ Allows for a variety of theories to be linked as components of a central theme each linked to a specific set of activities and resources.
 - ✓ To outline and describe a program of research with stakeholders
 - ✓ To clarify the linkage between objectives, activities, and resources.
 - ✓ To ensure the appropriateness and timing of proposed activities
- ✓ To reveal where expertise lies and how various stakeholders will work together.
- ✓ To clearly describe a project to potential funders
- ✓ To create a blueprint for administration and planning.
- How are we using logic modelling in this research project? (Figure 1): Logic modelling was used in workshop style discussions with the multidisciplinary team and First Nation collaborators to develop the research strategy (Figure 1). We drew on the numerous resources available on structuring logic model workshops (University of Toronto 2001, Tabori and Hermann 2001). This approach facilitated our development of a research strategy that is both academically rigorous and contextually appropriate. The logic model was subsequently used to describe the project in a successful funding application, and continues to guide the progress of the work as well as anchor discussions with team members and collaborators

Reflections on the use of evaluation methodology in population health research...

We identified a number of challenges with using a logic model approach to developing the research process. We found logic modelling to be a time intensive process that works best when all stakeholders can be present. However, given scheduling difficulties in our large team, we implemented an iterative feedback type process - an approach that we continue to use effectively with the interpretation of project data and results.

We found, however, that the strengths of this blended approach outweighed the challenges. Logic modelling in research offers opportunity for multi-stakeholder participatory engagement from planning through decision-making and action, offering opportunities for capacity building among all team members. The logic model diagram of the research process facilitates collective understanding of complex phenomena, and provides a clearly articulated process that allows the consideration of what worked and what did not work as the project unfolds. Finally, as with any long-term research endeavour, representatives of various stakeholder groups change with position turnover. The logic model is a useful tool to rapidly communicate complex project objectives, methods, and logistics to new team members.

Next Steps...

This initial evaluative framework will now be presented to focus groups in each community to seek their feedback on the domains and issues identified by health directors. The focus groups will be comprised of managers of community-based human services in each location and other community leaders identified by health directors. The initial framework will be revised and expanded to include specific indicators that address each domain and related issues that were identified. This revised framework will be presented back to the health directors for their final validation to prepare for the next step of implementing the framework on a pilot basis in some of the communities. The initial project logic model continues to guide our research activities. The project logic model illustrated here facilitates revisiting timelines and activities, adjusting as necessary in response to changing dynamics and direction.

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