The Imperative of Strategic Alignment Across Organizations: The Experience of the Canadian Cancer Society’s Centre for Behavioural Research and Program Evaluation

Roy Cameron, PhD, Barbara L. Riley, PhD, H. Sharon Campbell, PhD, Stephen Manske, EdD, Kim Lamers-Bellio, PhD

ABSTRACT

The Canadian Cancer Society’s Centre for Behavioural Research and Program Evaluation (CBRPE) is a national asset for building pan-Canadian capacity to support intervention studies that guide population-level policies and programs. This paper briefly describes CBRPE’s experience in advancing this work in the field of prevention. The aim is to illuminate issues of central importance for advancing the goals of the Population Health Intervention Research Initiative for Canada. According to our experience, success in building the population intervention field will depend heavily on purposeful alignment across organizations to enable integration of research, evaluation, surveillance, policy and practice. CBRPE’s capacity development roles include a) a catalytic role in shaping this aligned inter-organizational milieu and b) investing our resources in building tangible assets (teams, indicators, data systems) that contribute relevant capacities within this emerging milieu. Challenges in building capacity in this field are described.

Key words: Population health; intervention studies; capacity building; organizational alignment

C hronic diseases are a major concern worldwide.¹ There is an urgent need for population-level interventions to reduce rates of these diseases,² with emphasis on environmental and policy interventions.³ There is a large gap between the research being done (mostly descriptive) and the research needed (intervention studies) to inform this prevention agenda: one review suggested that “not more than 0.4% of academic and research output is relevant to public health intervention research”⁴.

Infrastructure is needed to enable relevant intervention studies to be conducted and used.⁵ This has been recognized for years. It was identified, for instance, in developing prevention intervention research centres in the US decades ago.⁶ At that time, Donald Campbell called for “wise investment in social structure over and above the funding of the specific research” (p. 398). Subsequent reviews of the US Prevention Research Centers reinforce the need for such investment,⁷ as do lessons from the Canadian Heart Health Initiative (see the article by Riley and colleagues in this issue). Capacity must be built at individual, organizational and system levels⁸⁻⁹ if research and evaluation are to contribute to effective policies and programs.

The Centre for Behavioural Research and Program Evaluation (CBRPE), funded by the Canadian Cancer Society (CCS) through the National Cancer Institute of Canada (NCIC), has been building pertinent population intervention infrastructure. This paper describes CBRPE’s experience, with the hope of providing insights relevant to the Population Health Intervention Research Initiative for Canada (PHIRIC).

Our experience suggests that PHIRIC’s success will depend fundamentally on deliberate alignment of plans and investments across organizations, each working within its own mission and mandate. The goal is to enable integration of research, evaluation, policy and practice across organizations involved in these various domains of activity. Alignment is challenging: autonomous organizations must cooperate to align plans and investments, but alignment is imperative for organizations to amplify their (individual and collective) impact on the health of Canadians. This overarching insight derived from our experience is evident in the presentation that follows. Other insights, reflected below, are encapsulated in Table 1.

How CBRPE operates: two core premises

Premise 1: Our goal is impact. Commitment to impact flows from the missions of our funders. Both CCS and NCIC missions focus on impact by (in paraphrase) reducing the number of people who get cancer, the number of deaths from cancer, and the burden on people affected by cancer.

CCS supports CBRPE’s commitment to impact. For instance, during a CBRPE mandate review, CCS indicated that CBRPE should advance CCS’s mission (not just its own programs) and work with other organizations (including fundraising competitors) to optimize impact. Such institutional integrity facilitates creation of the inter-organizational alignment required for PHIRIC (and CBRPE) to flourish.

NCIC also influenced our approach to achieving impact. NCIC developed a cancer control model that envisions integrating all

Author Affiliations

Centre for Behavioural Research and Program Evaluation, University of Waterloo

Correspondence and reprint requests: Roy Cameron, Centre for Behavioural Research and Program Evaluation, University of Waterloo, Lyle S. Hallman Institute North, Waterloo, ON N2L 3G1, Tel: 519-888-4567, ext. 84503, Fax: 519-886-6424, Email: cameron@healthy.uwaterloo.ca

Acknowledgements: Sincere thanks to the National Cancer Institute of Canada and the Canadian Cancer Society for their leadership in cancer prevention and control, including forming and supporting CBRPE. Thanks also to Christine Herrera for technical support in preparing the paper.

Preparation of this paper was supported by a personnel award to Dr. Riley from the Heart and Stroke Foundation of Canada and the Canadian Institutes of Health Research.
Table 1. Summary of Some Lessons for the Population Health Intervention Research Initiative for Canada

- Organizations have different functions and cultures even though they share common commitments to population health. A culture of cooperation that honours organizational needs will facilitate alignment of effort.
- Concepts and models to guide capacity building for population health intervention research and its use are not well developed. These need to be co-created by and for PHIRIC.
- The public health environment is increasingly complex. Working within this environment requires a blend of strategic and organic approaches to change.
- Tangible assets to advance population health intervention research (e.g., indicators, data collection tools) will only be useful in an environment that supports their use. Complementary investments are needed to create a supportive environment and tangible assets.
- New metrics are needed that define successful integration of research, evaluation, surveillance, programs and policies.

Cancer control functions (including research, evaluation, surveillance, policy and practice) to achieve impact (Advisory Committee on Cancer Control, 1994). This model inspired CBRPE's work: we seek to help move the model from words to reality.

Premise 2: CBRPE will accomplish most by building a collaborative enterprise in which leaders (in research, evaluation, policy and practice) join forces to enhance their collective impact. To encourage alignment and synergy, we seek to cooperate, not compete with other organizations.

To promote collaboration, we seek to provide facilitative leadership and to give credit to others. This approach is reflected in the words of one of our key stakeholders: "your approach to leadership in the area of population intervention research has been very much appreciated... Your focus on moving the agenda forward... and... your ability to lead without needing to be seen to be the leader has helped many of our organizations move a coherent agenda forward together".

Brief organizational and historical overview of CBRPE

The Centre was created in 1993 to address three objectives: to stimulate behavioural cancer research in Canada; to build a pan-Canadian behavioural cancer research network; and to build capacity to evaluate CCS programs.

CBRPE is located at the University of Waterloo. The core budget is now $2.5 million per year. The unit at the University of Waterloo has 17 full-time equivalents, including scientists (five), evaluation, administrative and communication staff. CBRPE has supported a national research network, comprising five Research Teams led by colleagues across Canada. The Centre is reviewed periodically by international peers.

CBRPE's focus may be seen as evolving through phases. Phase 1 (1993-1998) focused on developing behavioural cancer research capacity through a network, with a presence in most provinces. Productivity was modest, given a small, emerging community of scientists. Phase 2 (1998-2007) centered on demonstrating productivity (grants and publications were key indicators). The original network was disbanded, and a competitive review was used to create the five current Teams. Since 2001, CBRPE and the Teams have received more than $200 million in external funding and have produced more than 800 publications. As this capacity grew, CBRPE and our colleagues across Canada steered the work to a focus on population (versus clinical) intervention and impact. Given progress in this reorientation, especially in tobacco control, in 2005 NCIC encouraged CBRPE to build the population intervention field, and this is now emerging as our major focus as we enter Phase 3 (see pg. I-30, CBRPE's future: A postscript).

CBRPE's capacity development approach

As suggested, CBRPE's focus evolved as the environment evolved (e.g., as research capacity was established the focus shifted to advancing impact). The missions of CCS and NCIC are a guiding compass, but the specific work we have done evolved organically and opportunistically as we worked with key stakeholders (especially CCS and NCIC but also the Canadian Institutes of Health Research [CIHR], Health Canada, the Public Health Agency of Canada, provincial governments, and the Heart and Stroke Foundation). Service in advisory roles has been invaluable for facilitating alignment through mutual influence (i.e., through such roles we could influence other organizations but also anticipate their directions, and hence steer our work to complementary niches).

It was invaluable to have the freedom to take this “organic” approach to defining our new Phase 3 niche (even as we continued to build traditional research capacity, i.e., Phase 2 overlapped with Phase 3). The support from CCS and NCIC was vital. They positioned us as an ongoing national asset (key to planning with others), afforded freedom (with accountability through review) to operate as an “entrepreneurial start up”, plugged us into important developments (e.g., arranging for CBRPE leaders to serve on relevant advisory bodies) and granted latitude as we defined our niche within the scope of their missions and goals. CCS has also been CBRPE’s key partner in linking evidence to action (through their programs and advocacy) to achieve impact (e.g., by influencing judicial decisions and regulations, and by shaping provincial and national programs).

CBRPE has played two roles: a) a catalytic role in influencing the inter-organizational milieu required to advance CBRPE’s (and PHIRIC’s) mission and b) an investment role, using our resources to fill a value-added niche within this emerging milieu. We are a small but nimble player that tries to both catalyze development of a system to enable impact-oriented population intervention studies and to embed our Centre within the system as an organization that contributes relevant capacities. The following section illustrates these roles.

What CBRPE does: 1. Catalytic role in shaping the environment

If research and evaluation are to accelerate generation and use of evidence in development, implementation and continual improvement of population-level interventions, appropriate funding programs must be in place. They are not. Organizations that fund research and evaluation must use new funding vehicles to move this field forward. If funding programs are not hospitable to impact-oriented population intervention studies, this impedes the ability of scientists to generate relevant evidence.

Given that creation of suitable funding programs is critical for the success of CBRPE and scientists who share our mission, we seized an opportunity to propose, then initiate, creation of the Canadian Tobacco Control Research Initiative (CTCRI) though NCIC and CCS. Current CTCRI partners include CIHR and Health Canada, along with CCS. CTCRI offers unique features, such as...
quick turnaround funding to enable researchers to seize fleeting opportunities to study natural experiments as innovative policies are implemented.

Beyond the need for appropriate funding for research and evaluation, as noted, accelerating generation and use of evidence requires alignment of effort across organizations involved in research, evaluation, policy and practice. To promote such alignment, CBRPE helped initiate a call for an integrated primary prevention system (during planning of the Canadian Strategy for Cancer Control) and for creation of the Chronic Disease Prevention Alliance of Canada (CDPAC) to drive prevention system development. Then CBRPE initiated and co-sponsored a workshop, led by CDPAC and funded by CIHR (Institute of Population and Public Health and Institute of Nutrition, Metabolism, and Diabetes), to create a shared vision for integrating research and evaluation capacity within this prevention system.12

This shared (across organizations and sectors) vision provides a stimulus to develop inter-organizational arrangements for creating the integration envisioned. As a next step, CBRPE played an initiating role in creating PHIRIC as a means for this integration of research, evaluation, policy and practice.

**What CBRPE does: 2. Investment in assets to enable pertinent studies**

CBRPE identified niche roles within which it has invested resources to create tangible assets that enable population intervention studies. The aim is to build systemic capacity. Two types of assets are described: a) teams and b) related data systems that support system level evaluation.

a) **Teams**

Research teams are typically investigator led and not necessarily impact oriented. CBRPE is giving priority to teams that address the evidence needs of decision-makers, not just the interests of scientists.

As noted, CBRPE initiated and provides support (<$100,000 per year) to multi-site teams. This investment has led to some innovative work. A striking example is the International Tobacco Control Policy Evaluation Study.13,14 This ground-breaking study examines the impact of national-level policies on smokers in a growing number of countries, to generate evidence that will inform over 150 countries as they implement national policies to reduce tobacco use under the World Health Organization Framework Convention on Tobacco Control. This “spinoff” study was led from the beginning by our colleague Dr. Geoffrey Fong at the University of Waterloo.

b) **Development of Indicators and Data Systems for System-Level Evaluations**

Standardized indicators and data systems facilitate study of natural experiments as innovative policies and programs are implemented (as in the Fong study,13,14 just described) and also enable evaluation of services across jurisdictions (or organizations) to generate powerful “practice-based evidence.”15 Three examples from CBRPE's experience illustrate the development of indicators, data systems and system-level evaluation. This work is highly relevant to PHIRIC and its goals.

First, CBRPE led development of a Minimal Data Set of standard indicators for evaluating state and provincial smoking cessation telephone services (on behalf of the North American Consortium of Quitlines).16 All states/provinces in North America support quit lines that now can use the Minimal Data Set. This allows cross-jurisdictional study of key issues (e.g., the relative impact and costs of various service models) and joint learning that will lead to continuous improvement in the services based on practice-based evidence. In addition to creating indicators, CBRPE for a time conducted pan-Canadian evaluation of cessation lines, reporting results to the operators and funders of these lines to inform ongoing program and policy decisions.

Second, CBRPE instigated and helped lead an initiative (funded mainly by the CTCLI) that allowed Canadian provinces to work together to develop standard indicators for evaluating provincial tobacco strategies. This creates potential for inter-provincial comparisons to identify optimal mixes of policies and programs by using evaluations based on common indicators.17

Third, CBRPE has provided leadership in developing the School Health Action Planning and Evaluation System (SHAPES). SHAPES is used for data collection from all students in a school (using machine-readable questionnaires and local community data collectors) and provides a computer-generated school profile feedback report to the school or community, usually within two to six weeks. SHAPES has a Tobacco Module and Physical Activity Module with a Nutrition Module under development. Communities (public health departments, regional health authorities) are using SHAPES for planning and evaluation of programs and policies; provincial and federal governments are using it for surveillance and related macrolevel planning; and scientists are using it for field research.18 SHAPES, provided at cost, is thus attracting pooled investment to create a data system with potential to integrate research, evaluation, surveillance, policy and practice across local, provincial and national levels. SHAPES is building capacity to examine the impact of national, provincial, community and school-level interventions (and their interactions) on youth. See Cameron et al.19 and www.shapes.uwaterloo.ca for more information.

In all its work (team studies, indicator and data system development, system level evaluations), CBRPE seeks to bring together leaders in research, evaluation, policy and practice to integrate activities across these domains. For instance, indicators developed must serve the needs of policy and program leaders as a top priority and be as reliable and valid as possible to provide sound evidence for surveillance, evaluation and research. Input from those who use evidence promotes development of useful measures; input from researchers promotes development of sound measures. Creating teams that include leaders from policy, program and research domains to develop and then do studies with standard measures appears essential to progress in the population intervention field, but there is little systemic support for such work. By taking this on, CBRPE has sought to add value to the collective effort to accelerate generation and use of findings that have impact.

**Illustrating the Value of Alignment**

Here is a concrete illustration of the power of alignment. There is concern that flavoured cigarettes entice youth to smoke. CBRPE’s Youth Studies team, which includes colleagues across Canada, used SHAPES to collect data for Health Canada’s Youth Smoking Survey (YSS). To inform advocacy, information was collected about use of flavoured tobacco. Results were released through the University of Waterloo in June. The Canadian Cancer Society prepared an advo-
cacy strategy to coincide with the release. By September, the Prime Minister had promised to crack down on flavoured tobacco products. This conveys a sense of how government, university, and NGO sectors can align efforts to have impact, with an organization like CBRPE playing a “behind the scenes” role in enabling alignment.

Challenges
CBRPE’s non-traditional roles and approach present challenges, including the following. There are no definitive models for building capacity to support population intervention studies and their use. We must learn as we go. This uncertainty, combined with the inter-dependence with other organizations required to achieve health impacts, creates challenges in defining measurable objectives and in developing formal strategies and tactics with metrics to track and attribute progress.

Attribution of credit is an example of a specific challenge in this realm. CBRPE’s experience affirms the validity of the notion that “you can accomplish anything in life, provided that you do not mind who gets the credit.”20 But it is challenging to reconcile this way of working with the need to get credit to secure public profile and meet accountability expectations, both of which are important to organizational success in the current environment. Our approach to accountability has been to solicit letters (emphasizing nouns and verbs) from stakeholders that document CBRPE’s contribution in joint ventures. However, it is challenging to balance a) working in the background and giving credit to others in order to encourage collaboration, with b) the need for CBRPE to get credit in its own right.

Promotion of inter-organizational collaboration may require new thinking about accountability and metrics. Traditional organizational performance metrics may impede progress if they fail to reward investment in a common inter-organizational enterprise. For instance, people who invest in building bridges to other organizations may not be fully appreciated within their organizations: they may be seen as unfocused and distracted from the core business of their employer. Organizations must be predisposed, enabled and rewarded for working together in a productive, focused, efficient way to achieve impact. This is a major systemic challenge.

CBRPE’s future: A postscript
Since this paper was written, CBRPE has developed a new strategic plan with extensive input from leaders in public health policy, program, evaluation and research domains. CBRPE is now positioned to “accelerate the generation and use of evidence that enables leaders in policy, program, and advocacy to develop and implement effective population health interventions”. Our focus will be tobacco control, youth health (tobacco, physical activity, nutrition) and the quality of life of people affected by cancer. Organizational structures will change. CCS is integrating with NCIC. Hence, the CCS-CBPE relationship will be more direct. This provides opportunity for tighter alignment with CCS program and advocacy agendas.

REFERENCES
10. Advisory Committee on Cancer Control, National Cancer Institute of Canada. CMAJ 1994;151:1141-46.

RéSUMÉ
Le Centre de recherche sur le comportement et d’évaluation des programmes (CRCEP) de la Société canadienne du cancer est un atout national pour le développement des capacités pancanadiennes à l’appui d’études interventionnelles qui orienteront les politiques et les programmes axés sur les populations. Dans cet article, nous décrivons brièvement l’expérience du CRCEP à cet égard dans le domaine de la prévention. Notre objectif est d’éclairer les enjeux déterminants pour faire progresser l’Initiative de recherche interventionnelle en santé des populations du Canada (IIRICP). D’après notre expérience, le renforcement des interventions axées sur la population dépendra beaucoup d’une concordance délibérée entre les organismes en cause pour permettre l’intégration de la recherche, de l’évaluation, de la surveillance, des politiques et des pratiques. En matière de renforcement des capacités, le CRCEP joue un double rôle : a) il est un catalyseur qui favorise la concordance entre les organismes du milieu et b) il investit ses ressources dans la création d’actifs tangibles (équipes, indicateurs, systèmes de données) qui élargissent les capacités dans le milieu émergent. Nous décrivons les difficultés associées au renforcement des capacités dans ce domaine.

Mots clés : santé des populations; études interventionnelles; renforcement des capacités; concordance organisationnelle.