
Advancing community-based research in Canada

S. Martin Taylor*

Canadian Research Data Centre Network,
McMaster University,
Hamilton, Ontario, L8S 4L8, Canada
Email: smt@uvic.ca
*Corresponding author

Joanna Ochocka

Centre for Community Based Research,
190 Westmount Road North,
Waterloo, Ontario, N2L 3G5, Canada
Email: joanna@communitybasedresearch.ca

Abstract: Canada has a strong track record of community-based research. The Social Sciences and Humanities Council of Canada (SSHRC) has made partnership research one of the three main components of its funding architecture. Community Based Research Canada (CBRC) supports a national network of university and community researchers working on a broad range of projects addressing issues of high priority on the research and societal agendas. In November 2014, CBRC partnered with the Centre for Community Based Research in Waterloo, Ontario to host a national summit focused on developing standards of excellence for community-based research based on previous work and exemplified by seminal regional case studies. The follow-up is to establish a network of regional hubs of excellence to advance research and its applications to public policy at regional and national levels with standards of excellence derived from the summit serving as guiding principles for best practice.

Keywords: community-based research; Canada; standards of excellence; national networks.

Reference to this paper should be made as follows: Taylor, S.M. and Ochocka, J. (2017) 'Advancing community-based research in Canada', *Int. J. Knowledge-Based Development*, Vol. 8, No. 2, pp.183–200.

Biographical notes: S. Martin Taylor is the Executive Director of the Canadian Research Data Centre Network based at McMaster University. He is a Professor Emeritus of Geography at the University of Victoria, and a member of the board of Community Based Research Canada.

Joanna Ochocka is the co-Director of the Centre for Community Based Research in Waterloo, Ontario. She is an Adjunct Associate Professor at the University of Waterloo and Wilfrid Laurier University, and a member of the board of Community Based Research Canada.

This paper is a revised and expanded version of a paper entitled 'Advancing community engaged research in Canada' presented at the 12th PASCAL International Conference, Catania, Italy, 7–9 October 2015.

1 Introduction

In recent years, there has been a significant shift in the universities and colleges both in Canada and internationally towards increased community engagement. Community-university engagement is seen as beneficial in addressing complex issues affecting communities and as an important outreach commitment of universities. The drivers have been internal to the universities themselves, related to a heightened sense of social imperative and responsibility, and external, as funding agencies, especially governments, have sought tangible measures of returns on investment of public monies, and as communities have sought to partner with universities to address priority societal issues. Developments in Canada parallel those in several other countries – Britain, the USA, France and many other western nations – whereby significant government research funding is targeted to programs that focus on greater public participation in the defining and executing of social science and humanities research (Hart and Church, 2011). In Canada this trend is driven by an emerging consensus among philanthropic foundations, government agencies and other major sources of research funding (Lévesque, 2008). This new focus encourages relevance, transparency, collaboration, multi-disciplinarity, practicality and accountability both within academia and externally with community partners as conditions for funding.

In this context, community-based research (CBR), within the broader domain of community-university engagement initiatives, has gained wider currency and adoption (Hall et al., 2015). Several terms are used to describe research approaches that stress community-engagement, including participatory action research (Kemmis and McTaggart, 2005), community-based participatory research (Israel et al., 1998; Minkler and Wallerstein, 2008), action research (Stringer, 2007) and community-engaged scholarship (Fitzgerald et al., 2010). However it is ‘CBR’ that has been globally used, as demonstrated by the establishment of the UNESCO chairs of CBR and social responsibility in higher education (GUNi, 2014).

CBR is seen as a strong facilitator in addressing complex social, economic, health and environmental challenges that require the active involvement of diverse organisations and individuals (Spilker et al., 2016). It provides practical advantage in recognising community members as knowledge-rich partners where community wisdom and experiential knowledge are equally valued with the scientific or technical expertise of universities (Hart et al., 2013; Ochocka and Janzen, 2014). The goals and products of CBR are aimed toward immediate application focused on solutions and changes (Small and Uttal, 2005; Wiebe and Taylor, 2014). From a theoretical perspective, the community plays a major role in shaping research questions and in refining theory (Fitzgerald et al., 2010). In fact, the potential of synergistic co-learning between community and university partners brings to a deeper and fuller understanding of inquiry (Frabutt and Graves, 2016). In this context, several articles previously published in this journal have identified the critical connection between CBR, and community-university engagement more broadly, on the one hand, and, on the other, effective knowledge transfer and the advance of community development, whether more formally through public policy processes or more informally through initiatives such as the learning city movement (Badenhorst and Scarf, 2011; Shrestha and Mahjabeen, 2011; Garcia and Martinez, 2015; Laitinen et al., 2016; Kim et al., 2016).

In short, CBR is an approach that engages diverse partners in the co-creation and co-mobilisation of knowledge. It strives to be community-situated, collaborative, and

action-oriented such that the research process and results are relevant and useful to community members in making positive societal changes (Ochocka and Janzen, 2014). CBR can be defined as “a research approach that involves active participation of stakeholders, those whose lives are affected by the issue being studied, in all phases of research for the purpose of producing useful results to make positive changes” [Nelson et al., (1998), p.12]. This research approach advances the philosophy of ‘knowledge democracy’ in which community members are full partners in research that impacts their lives (de Sousa Santos, 2006; Hall, 2011).

Regardless of terminology, and after decades of practice, a community-based approach to research is becoming mainstream in many institutions of higher education around the world (Hall et al., 2015). In Canada, the history of CBR can be divided into three periods: the foundational years (to 1998, largely centred outside academia); the institutionalisation period (e.g., the creation of targeted SSHRC funding programs – community university research alliance and partnership grants); and the national engagement period that started after May of 2012 when the Honourable David Johnson, Governor General of Canada, delivered the opening keynote address to the Congress of Humanities and Social Sciences on democratisation of knowledge (Brown et al., 2015). In 2016, most Canadian universities have CBR or its equivalent written into their strategic plans and have some kind of community-university research support structure.

A healthy development as the CBR field matures is a growing focus on the need for excellence, standardisation and quality assessment of the CBR projects, programs and networks that the field has spawned. This leads to the question of what criteria should be used to assess quality in terms of the rigour of the research conducted as well as the outcomes and impacts resulting from the work. The purpose of this paper is to address this question and to describe recent initiatives in Canada, specifically the role of Community Based Research Canada (CBRC), the outcomes of a national summit on CBR held in late 2014, and the development of a national network of regional hubs of excellence in CBR.

2 Community Based Research Canada

In advancing CBR and its application to addressing priority societal issues, Canada’s geography is a strength and a weakness. As the world’s second largest country in land area, yet with a relatively small population and research community, there is an inevitable diversity and fragmentation in CBR related initiatives and activities led by universities and communities in different regions of the country. This reality is a strength in so far as it promotes a breadth and depth of CBR expertise and experience, a reservoir of capacity that can be drawn upon to address local and regional problems. At the same time, it is a weakness when there is a failure to maximise the benefits and impacts of CBR capacity from across the country to address issues of national consequence.

In this context, CBRC is a network of universities and community partners supporting good practice in CBR in Canada. CBRC was founded in 2008. Its original intent was to serve as a network of post-secondary institutions, CBR organisations and individuals who are committed to CBR. CBRC’s mission has evolved to become a national champion and facilitator for CBR in the broader context of community-campus engagement through its network of post-secondary institutions and community partners.

CBRC's *raison d'être* and mandate are nested within a national research ecosystem whereby post-secondary institutions and allied research organisations engage on an equal footing with community partners to address societal challenges and achieve positive impacts for the benefit of Canada and Canadians. CBRC plays a coordinating, convening and enabling role to harness research resources and assets and to facilitate and build collaborative relationships, especially between our community partners and our universities, colleges and hospitals, in ways that might not otherwise occur or be sustained. An important role of CBRC has been to convene bi-annual CUExpos as national for a for the sharing and advancement of best practices in CBR and community-university partnerships (Ochocka, 2014).

CBRC's goals and activities are guided by a five year strategic plan approved in 2014 and the organisation has recently incorporated as a federal not-for-profit corporation, signalling its evolution from an informal network, commensurate with the need for a more formal governance and management structure as its national mandate grows, its activities expand, and its fiscal and other operational responsibilities increase.

Within the broader context of community-campus engagement, nationally and internationally, CBRC is part of a movement to change the research culture, especially to promote the importance of community and post-secondary sector collaboration to co-create knowledge, advance social innovation, and generate evidence that is timely, robust and appropriate for informing policy and practice. In so doing, CBRC values multiple forms of knowledge, including indigenous knowledge and knowledge gained through lived experience.

CBRC's strategic plan coincides with a time of significant developments in Canada and internationally in CBR in the broader context of community-campus engagement activities, including the role of networks as coordinating, convening and enabling organisations. Nationally, the community-campus collaboration initiative (CCCI) was launched in 2011 with the support of the Governor General, David Johnston. With the vision of Canada becoming a *smarter and more caring* nation, the CCCI aims to promote a culture of collaboration to harness the resources of communities and post-secondary institutions to address *big and complex societal issues* in the social, environmental and cultural domains that require multi-sector approaches and solutions. CBRC is a participating organisation given that CBR has been identified as a key mechanism for collaborative initiatives and for building an evidence-base for understanding and addressing Canada's societal challenges.

Still within Canada, CBRC is part of and conduit for both national and international networks in the broad public engagement domain. These include the Canadian Alliance for Community Service Learning (CASL), research impact, and the community engaged scholarship partnership. Internationally, CBRC is linked with the Campus Partnerships for Health (CCPH), the UK National Coordinating Centre for Public Engagement (NCCPE), the Community University Partnership Program (CUPP) at Brighton University, the Living Knowledge Network in Europe, the Global Alliance for Community Engaged Research (GACER) and the PASCAL International Observatory. CBRC shares with these allied organisations a guiding philosophy and principles that draw from an understanding of knowledge democracy, focus on network capacity building for CBR, and support a national movement for knowledge creation and application for societal benefit and impact.

Innovation in theory, method and practice is central to the mission and goals of CBRC. Building on the strengths of its national network of universities and allied

partners, CBRC is planning to create hubs of excellence in CBR with the goal of promoting and enabling best practice in CBR. The outcome in view is co-created knowledge as the evidence-base to inform policies, programs and practices that address major societal challenges for Canada and Canadians. As such, CBRC seeks to support social innovation in ways identified at the national and provincial levels as priorities for the prosperity and well-being of Canadians. This commitment aligns with federal leadership under the CCCI and emergent plans of several Canadian provinces.

To go beyond rhetoric, however, and to eventuate in tangible positive societal impacts, these well intended initiatives have to be grounded in strong evidence that draws on research where excellence criteria have primacy. In this regard, the strength of CBR is also its weakness; the breadth of the research agenda, covering a wide range of cultural, economic, environmental, health and social issues, mitigates against coordination of effort and coherence around agreed upon standards of research practice. This is where CBRC seeks to provide leadership, capitalising on its established network of university and community partners to share and learn lessons from the multiplicity of CBR projects already completed or in progress to identify and advance best practice.

Ultimately, the sought after impact of promoting and enabling CBR best practice for effective knowledge translation is the prosperity of Canadians as societal challenges are conceived and addressed as CBR opportunities that motivate and engage the best faculty and students from our universities with their colleagues from our partner organisations. CBRC was uniquely placed to convene this impressive capacity from across the country at the national summit – *Promoting Excellence in Collaborative Campus Community Research* – held at the University of Waterloo in November 2014.

Before turning to the summit and its outcomes, it is important to note key guiding principles drawn from the literature that served to frame and focus the summit agenda and the deliberations of the delegates. A more detailed review of these principles is provided in Wiebe and Taylor (2014).

2.1 Guiding principles for CBR

There is growing literature on collaborative research between communities and post-secondary institutions intended to bridge the gap between diverse stakeholders for the common goal of addressing and resolving complex societal issues (GUNi, 2014; Stoecker, 2005). These challenges range from growing poverty and homelessness in urban centres (Brown et al., 2008; Walsh et al., 2008), to agriculture and rural decline (Rosegrant and Cline, 2003), and from climate change impacts on northern communities to declining health in first nations communities (Cairo, 2008). The need to explore and develop alternative methods of relevant knowledge creation is an increasingly urgent task in a rapidly changing and uncertain world (Hoyt and Hollister, 2014). Conceptualisations of higher education's hegemony in the process of knowledge production are insufficient at best. CBR partnerships are a powerful and effective approach providing real and innovative solutions to community needs (Hall et al., 2013).

Four guiding principles emerge from this literature and provide the theoretical underpinnings for determining indicators of excellence for community engaged research: *community relevance; research design; equitable participation; and action and change* (Wiebe and Taylor, 2014). While each of the four principles is distinct, they inevitably overlap and their interconnections have implications for developing indicators of

excellence to identify what are core defining criteria for each such that the indicator set is not compromised in its application and utility by overlap and redundancy.

2.1.1 Community relevance

This refers to the practical significance of the research to communities. Research is relevant when community members, especially those most affected by the issue under study, gain voice and choice through the research process (Ochocka and Janzen, 2014; Wilson et al., 2010) and when researchers draw on the ways of knowing that people agree are valuable to them (Jewkes and Murcott, 1998). As such, community relevance honours the Indigenous research tradition that stresses self-determination (Kovach, 2009). It involves creating and sustaining meaningful, flexible research partnerships.

2.1.2 Research design

Design refers to the practical scaffolding needed to conduct research of quality. This domain concerns itself with issues of methodological rigour, including the appropriateness of methods in achieving the stated research purpose. It also emphasises the appropriateness of research procedures that reinforce the other three domains (Wiebe and Taylor, 2014). Meaningful research design to community may include collaboratively defining the problem, varying levels of engagement, a culturally appropriate and adaptive research approach, open communication about the roles and responsibilities of research team members, inclusion of community members on the research team and a mix of interdisciplinary methodologies.

2.1.3 Equitable participation

Equitable participation emphasises that community members and researchers share control of the research agenda through active and reciprocal involvement in the research design, implementation and dissemination (Nelson et al., 1998; Ochocka, 2007). Drawing on the 'southern' participatory research tradition, this domain acknowledges that when people are conscious of their situation and the power that oppresses them, they can collectively work towards a better future (Freire, 1970). An equitable and participatory process entails respect for local knowledge and contextual understanding, recognition of community expertise and knowledge, collaborative decision making throughout the process and opportunities for shared learning through evaluation.

2.1.4 Action and change

Action and change honours the 'northern' utilisation-focused action research tradition that is frequently associated with Kurt Lewin. This domain has an emphasis on social change through successive reflective action cycles (Lewin, 1948; Cartwright, 1951). It stresses that the process and results of research should be useful to community members in making positive social change and to promote social equity (Nelson et al., 1998; Ochocka and Janzen, 2008). An outcomes-focused approach oriented to social change supports community capacity-building and skills transfer. It enables opportunities for shared knowledge mobilisation as well as policy development internal and external to the community. Measure of success in final stages of the research process may include

attracting new or additional resources to the community as well as supporting leadership within the community.

2.2 The national summit: pursuing excellence in collaborative campus community research

Much of the community engaged research literature is pitched at a fairly high level of abstraction. It speaks in compelling and convincing terms of the importance of respecting and meeting foundational principles of good practice in each of the four areas identified, but it leaves largely undetermined the translation of those more abstract constructs to indicators that can be evaluated based on specific measures of practice and performance. Arguably, more attention has been paid to this more detailed level of resolution in the health arena, specifically in the field of community-based participatory health research (CBPHR), but even here the methodology is still not fully developed.

Implicit in this regard are the reasons why quality assessment in CBR matters. They include:

- enhancing rigour and promoting standards of best practice in CBR
- meeting peer review requirements for publications and grants
- encouraging faculty and student engagement
- enhancing funding success
- advancing institutional commitments to CBR
- strengthening the evidence-base for informing policy and programs
- supporting system/network resource capacity
- building the capacity of community partners
- countering criticisms of ‘soft’ research and its implications for career advancement.

In November 2014, CBRC partnered with the Centre for Community Based Research, a non-for-profit research institute now based at the University of Waterloo, to convene a national summit – *Pursuing Excellence in Collaborative Community Campus Research*. Funded by the Social Sciences and Humanities Research Council, the summit was a unique opportunity to convene a focused discussion on indicators of excellence in CBR, and thereby lay the foundation for developing a national network of hubs of CBR excellence, harnessing and building on the major strengths of the Canadian university and allied partner community that CBRC has been instrumental in supporting and enhancing.

As Canadian funding agencies – especially, the Social Sciences and Humanities Research Council and the Canadian Institutes of Health Research – institute programs to support community engaged research so the importance of defining indicators for the purposes of peer review of grant applications as well as the evaluation of research outcomes increases. The focus of the summit was therefore both challenging and timely as the field as a whole – the agencies that support it, the researchers who practice it, and those who apply the findings – strives to advance in its rigour, best practice, and hence in its value and impact.

This national summit brought together 60 leading practitioners of CBR from universities, government bodies, and community organisations across Canada to advance the growing movement of CBR. The summit used facilitated discussions to create a working environment where consensus could be built about preliminary indicators of excellence in CBR. It was not only a learning event, but also a starting point for an ongoing collaborative process to advance CBR across Canada.

The summit built on the collective strengths of the CBRC network which cover a broad range of societal issues of high priority on the research and policy agendas in Canada, including: aboriginal issues; poverty reduction; economic development; environmental sustainability; and Canada's North. The summit provided a forum within which this collective capacity could be shared and advanced in building a national network of regional hubs of excellence in CBR. The breadth and depth of CBR across Canada was exemplified by the range of case studies submitted by research centres from across the country (Figure 1) in advance of the summit (Table 1). The case studies and questions related to each of the four main constructs described in the previous section (Table 2) served to guide the discussions about the development of indicators of best practice.

Figure 1 Leading centres of CBR in Canada (see online version for colours)

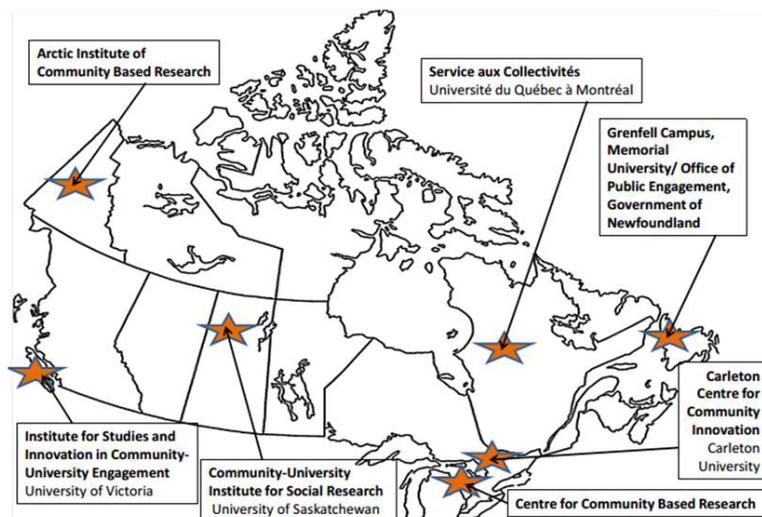


Table 1 Canadian case studies of community engaged research

Nourishing our future: an adaptive food security strategy to ensure the cultural and physical well-being of the Kluane First Nation against the impacts of climate change in the Yukon <i>Arctic Institute of Community Based Research</i>
Siem Smun`eem: indigenous child well-being research and training network <i>Institute for Studies and Innovation in Community Based Research, University of Victoria</i>
Participatory sustainable waste management <i>Institute for Studies and Innovation in Community Based Research, University of Victoria</i>

Table 1 Canadian case studies of community engaged research (continued)

Ocean Networks Canada's smart oceans initiative <i>Institute for Studies and Innovation in Community Based Research, University of Victoria</i>
Quality of life in Saskatoon <i>Community-University Institute of Social Research, University of Saskatchewan</i>
Self-directed funding for people with intellectual disabilities <i>Community-University Institute of Social Research, University of Saskatchewan</i>
Taking culture seriously in community mental health: a community-university research initiative that moves research into action <i>Centre for Community Based Research, Kitchener, Ontario</i>
Living wage from the employee's view: implementation guidelines for small-medium size businesses <i>Carleton University</i>
Étude sur les besoins et les aspirations des résidents de l'îlot de l'ancienne biscuiterie Viau. Synthèse des recherches effectuées: présentation des résultats et des pistes d'actions <i>Incubateur Universitaire Parole d'excluEs (IUPE), Université du Québec à Montréal (UQAM)</i>
Research program: issues related to cyanobacteria in Bromont Lake <i>Incubateur Universitaire Parole d'excluEs (IUPE), Université du Québec à Montréal (UQAM)</i>
An analysis of municipal readiness for socio-economic development opportunities in the isthmus of Avalon Region <i>Memorial University and Office of Public Engagement, Government of Newfoundland and Labrador</i>
Newfoundland and Labrador drinking water studies <i>Memorial University</i>

Table 2 Guiding questions for developing indicators of excellence

1 Community relevance
a Defining community
• Has the community of relevance been clearly and appropriately defined?
• Who was involved in the definition?
b Approaching community
• When and how was the community engaged?
• How was the research framed and focused to be meaningful to communities?
c Partnership principles
• Were community-university partnership principles defined and respected?
• How were partnerships evaluated as they evolved?
d Co-creating knowledge
• Was there a shared understanding of the co-creation of knowledge by communities and university partners?
• Were tools for effective communication employed?

Table 2 Guiding questions for developing indicators of excellence (continued)

2	Research design
a	Building the research team, clarifying responsibilities <ul style="list-style-type: none"> • Did researchers work with communities to develop a collaborative research governance structure? • Was a forum created for ongoing dialogue about roles and responsibilities?
b	Collaborative problem definition <ul style="list-style-type: none"> • Were critical research questions developed collaboratively to address community issues? • Were processes established to promote and sustain collaboration?
c	A dignified, culturally-relevant method of engagement <ul style="list-style-type: none"> • How were cultural appropriateness and respect incorporated into the research design? • How was the engagement process and experience evaluated and how did it evolve in the course of the research?
d	Mixed methodologies and interdisciplinary innovation <ul style="list-style-type: none"> • What research methodologies cultivate quality, rigour, innovation and interdisciplinarity? • Did the research generate new alliances within the university and with community partners?
3	Equitable partnerships
a	Situated knowledge <ul style="list-style-type: none"> • How was community knowledge valued and incorporated in the research design? • How was the research process adjusted in the course of the research to better integrate community knowledge?
b	Recognising community expertise <ul style="list-style-type: none"> • How was community expertise acknowledged and incorporated into the management and conduct of the research? • How did community expertise impact the design of research processes?
c	Revisiting roles and responsibilities <ul style="list-style-type: none"> • Were roles and responsibilities monitored, evaluated and adjusted in the course of the research? • How were conflicts addressed and resolved?
d	Participatory evaluation <ul style="list-style-type: none"> • How was participatory evaluation incorporated into the research process? • How was participatory evaluation combined with other forms of evaluation?

Table 2 Guiding questions for developing indicators of excellence (continued)

4	Action and change
a	Skills development and resource transfer
	<ul style="list-style-type: none"> • Did skills development and resource transfer occur through the research? • What actions were taken to sustain the research and its applications beyond the project end date?
b	Integrated knowledge mobilisation
	<ul style="list-style-type: none"> • How were roles and responsibilities for collaborative knowledge mobilisation determined? • How was knowledge mobilisation for policy development understood and advanced?
c	Policy development
	<ul style="list-style-type: none"> • Were policy impacts an explicit objective of the research? • What were the means of monitoring impacts on policy?
d	Longer-term planning
	<ul style="list-style-type: none"> • How did researchers promote sustainable relationships with community leaders for ongoing collaboration? • What means were used to share lessons learned from the research process and outcomes to advance best practice in CCCR?

A significant outcome of the summit was the emergence of a CBR ‘theory of change’ built around three main elements: research process, research rigour and research impact. Research process refers to both the practical significance and relevance of the research to communities and to the meaningful participation of stakeholders. Research is relevant when community needs are central to the research, when research is aligned with community norms and ways of knowing (Jewkes and Murcott, 1998), and when reciprocal relationship between researchers and other community members occur (Nelson et al., 1998). Research rigour refers to the practical procedures needed to implement research with quality, including the appropriateness of methods to the stated research purpose, as well as the appropriateness of research procedures in data gathering and data analysis (Wiebe and Taylor, 2014). Research impact refers to creative and effective strategies for both mobilising knowledge (Phipps, 2011) and mobilising people (Kemmis and McTaggart, 2005) to increase positive individual, community, and societal impacts.

The summit discussion advanced these three elements by identifying for each one a set of preliminary indicators of excellence (Figure 2). Indicators addressed the question: how do we know if we are successful when pursuing each of these CBR desired outcomes? The emergent theory of change and the sets of related indicators provide a common framework to assess the quality of CBR projects applicable to CBR researchers, research funders, and end-users of CBR.

Overall, the summit outcomes were substantial, including: pan-Canadian engagement of community and academic partners; an ongoing process to refine a CBR theory of change and indicators of excellence for CBR projects; continuing efforts to establish a national network of regional hubs of excellence; and the development of post-summit knowledge mobilisation products, including the proceedings, toolkits and presentations.

Figure 2 Intended outcomes and preliminary indicators of CBR excellence (see online version for colours)

	GREATER RELEVANCE TO COMMUNITIES			MORE MEANINGFUL PARTICIPATION			
	COMMUNITY NEEDS AS CENTRAL	RESEARCH ALIGNED WITH COMMUNITY	STRATEGIC RELATIONSHIPS	OF RESEARCH PARTNERS	OF COMMUNITY MEMBERS	OF NEW RESEARCHERS	
RESEARCH PROCESS	<ul style="list-style-type: none"> presence of a research agreement or a memorandum of understanding presence of a community advisory committee reports that the vision for research is in line with community values 	<ul style="list-style-type: none"> number and reported quality of community-defined gatekeepers involvement reports of appropriate and relevant language being used reports of honouring community traditions and ways of knowing 	<ul style="list-style-type: none"> reports of transformational relationships reports of researchers' commitment beyond funding timeframe reports of ongoing, transparent, and bidirectional communication 	<ul style="list-style-type: none"> reports that partners feel benefited by their involvement reports that resources are equitably shared between partners reports that partners are strategically chosen in light of the research purpose 	<ul style="list-style-type: none"> number of community members as co-applicants on research proposals reports of community expertise being valued amount of grant money allocated to community partners 	<ul style="list-style-type: none"> number and reported quality of new researchers mentored number of new researchers and students hired reports of new researchers shaping the research agenda in all stages of research 	
RESEARCH RIGOUR	MORE MEANINGFUL AND USEFUL DATA AND INTERPRETATIONS						
	RIGOROUS METHODOLOGY			RIGOROUS ANALYSIS			
	<ul style="list-style-type: none"> reports that methods align with research purpose in sequential design reports of research tool quality presence of a community-based research aligned ethics review 			<ul style="list-style-type: none"> number of stakeholder perspectives involved in analysis evidence of following quantitative and qualitative standards of quality (reliability/validity, trustworthiness) in data analysis reported quality of stakeholder perspectives in verifying research findings 			
RESEARCH IMPACT	GREATER KNOWLEDGE MOBILIZATION			GREATER COMMUNITY MOBILIZATION			
	PRODUCER PUSH	USER PULL	KNOWLEDGE EXCHANGE	SHORT-TERM MOBILIZATION	LONG-TERM MOBILIZATION		
	<ul style="list-style-type: none"> reported quality of knowledge mobilization products disseminated number of community members contributing to knowledge mobilization products number and reported quality of visual and aural dissemination strategies 	<ul style="list-style-type: none"> number of requests for knowledge mobilization products number of new connections brokered reports of research being useful for multiple stakeholder groups number of new stakeholders showing interest in the research 	<ul style="list-style-type: none"> number and reported quality of community forums or other knowledge exchange events held reports of research products informing policy development, on local and national levels reports of research products supporting new funding applications 	<ul style="list-style-type: none"> reports of stakeholders implementing recommended action reports of stakeholders wanting to learn more about CBR number and reported quality of allies engaged (e.g., within government) to implement recommended change(s) reports of stakeholders owning the knowledge coming out of the project 	<ul style="list-style-type: none"> reports of community members reaching out to researchers with research ideas and needs number of community members acknowledging CBR as an important tool for change reports of increased community capacity to enact change(s) reports of decreased time-lag between research dissemination and policy changes 		
	MORE MEANINGFUL AND USEFUL DATA AND INTERPRETATIONS						

Note: For full chart and more complete preliminary indicators see <http://bit.ly/1BhWkMz>.

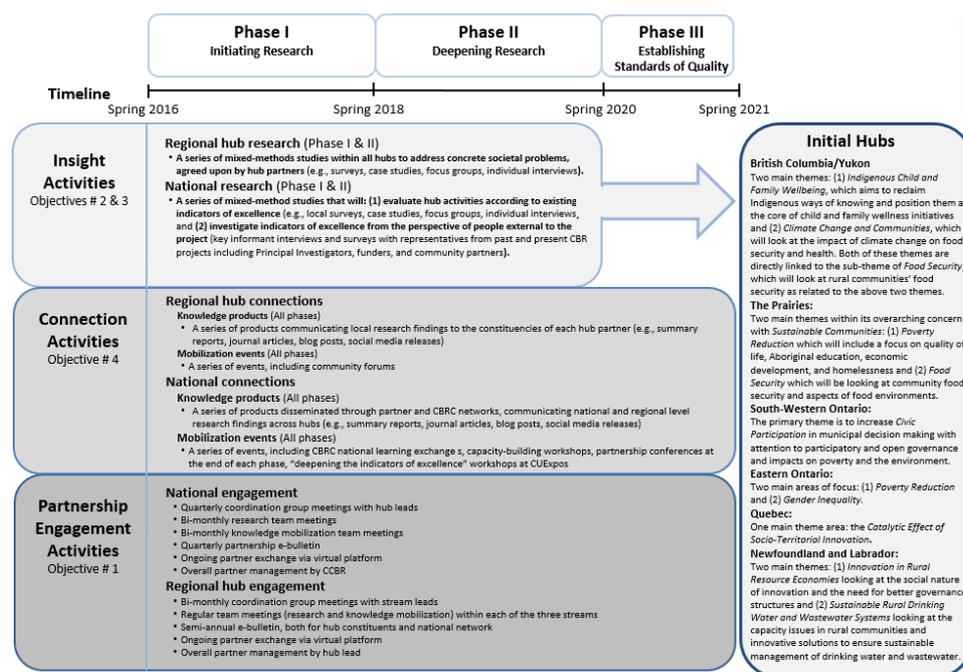
3 From the summit to a national network of regional hubs of CBR excellence

The CBRC national summit was a staging point, a forum for sharing best practice in CBR building upon regional strengths and diversity, while recognising the need for establishing standards for evaluating and advancing research that value the results, especially in their application to informing public policy and practice. Going forward, the strategic objective is therefore to progress from the summit to establishing a national network to advance high quality CBR in addressing concrete societal problems in Canada.

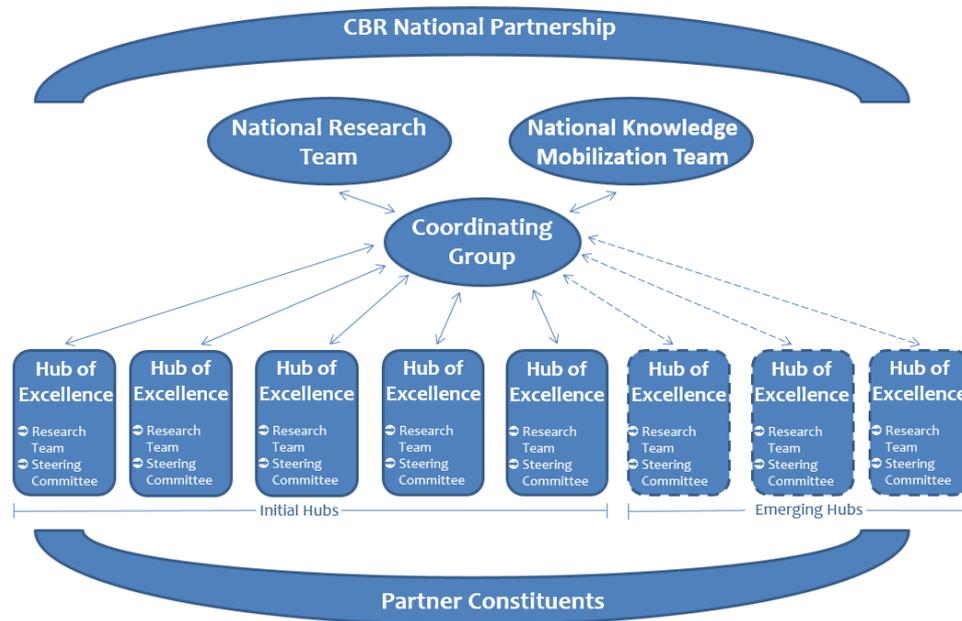
Central to the strategy is the creation of a network of regional hubs of excellence across Canada, each implementing CBR projects guided by the preliminary indicators developed at the summit and each project designed to achieve positive change on pressing societal issues (e.g., aboriginal justice, poverty reduction, economic development, environmental sustainability). The summit served to identify initial CBR hubs and discussed the vision, guiding principles, and potential research topics for each. It also helped in identifying the concrete objectives of this national partnership serve to advance the pursuit of excellence within Canada's growing CBR movement. The objectives of this national partnership are therefore:

- 1 to establish five to eight regional hubs of excellence across Canada each pursuing cross-sectoral CBR projects on concrete societal problems that they identify, and that are guided by the preliminary indicators of excellence developed previously by grant partners
- 2 to evaluate nationally the CBR projects conducted by the hubs in order to expand and refine CBR indicators of excellence related to research process, research rigour, and research impact
- 3 to pursue national knowledge mobilisation activities that engage people in utilising their collective knowledge to address complex societal concerns, and that inform and inspire others to conduct CBR with excellence
- 4 to expand the network of community-based researchers (including interdisciplinary established and new scholars, students and community partners) across Canada.

Figure 3 Planned network activities and timelines (see online version for colours)



The plan for the national network of regional hubs of excellence is to implement research and connection activities carried out in three phases over five years (see Figure 3). They include two phases of regional and national research activities (two years each) and three phases of knowledge mobilisation activities. The two phases of research will allow for a longer timeline in involving community partners and in experiencing research impact on specific societal topics, as well as for critical reflections and learning when advancing national indicators of CBR excellence. A five-year timeframe should provide sufficient time to implement a robust research and knowledge mobilisation agenda while laying the groundwork for a broad-based and functional partnership, including additional funds and development of new hubs.

Figure 4 Network partnership structure (see online version for colours)

Ongoing partnership communication and effective coordination will ensure synergy among partners combining academic excellence with community relevance (Figure 4). Mechanisms of communication include regular team meetings with Hub leads and national research and knowledge mobilisation teams, quarterly/bi-monthly partnership e-bulletin on both the regional and national levels, ongoing partner exchange via a virtual platform, and participation in connection activities. The network of regional hubs will provide rich opportunities for interdisciplinary training and mentoring for graduate students, new scholars, and for other highly qualified personnel. Given the applied focus of much of the research conducted through the network of regional hubs, knowledge mobilisation will be a central activity. *Nationally*, both the CBRC network and CUExpo conferences will be instrumental in knowledge mobilisation using dissemination channels across Canada and internationally. At the *regional* level, each hub will ensure that knowledge products are accessible in multiple formats tailored to the stakeholders' contexts.

4 Conclusions

This paper began by observing the growth and widespread adoption of CBR within the larger frame of community-university engagement initiatives. Various drivers of this development – some internal to the universities and some external in the wider research and societal context – were noted. Canadian researchers are internationally recognised as innovative leaders in CBR. Hallmarks of their work are collaborative approaches that integrate interdisciplinary perspectives and engage community partners in the co-creation

of knowledge that both advances understanding of complex social issues and contributes to the development of evidence-based public policies. Regional strengths of expertise have emerged that reflect the particular societal issues of Canada's diverse geographies and political economies. The diversity reflects the disparity of social, economic, and environmental issues most current and relevant in different places, as well as the diverse proclivities of researchers.

The breadth and diversity of CBR research is striking in Canada and paralleled in many other western countries. But arguably this speaks more to the quantity of the studies undertaken and leaves open the question of their quality and the impacts of the findings both in advancing understanding of society and informing our approaches to addressing societal issues – economic, social, cultural, environmental and health. CBR has been dominated by qualitative research and for good reasons given its focus on understanding complex processes and issues in their spatial and temporal context; moreover, the qualitative emphasis fits with a commitment to community partnered research and an underlying philosophy of knowledge democracy.

In this context, the main contribution of the paper has been to address ways in which the quality of CBR work can be assessed and advanced, recognising that a rules of evidence approach well-established and practiced in quantitative research does not have a clearly defined or accepted counterpart in the largely qualitative CBR domain, while neither disregarding nor diminishing the large body of work on qualitative methodology for which Miles and Huberman (1994) among others were pioneers. Particular focus has been on the Canadian experience and the role of CBRC to convene the CBR research community in Canada, to draw on the rich and diverse research activities conducted across the country, to identify criteria to assess the quality and impact of the research, and going forward to promote the development of communities of practice through a national network of regional hubs of excellence.

A pivotal event was the national summit in 2014 for which preparatory work had identified from the literature four guiding principles as theoretical underpinnings for determining indicators of excellence for community engaged research: *community relevance; research design; equitable participation; and action and change*, supported by case examples of best CBR practice in Canada. The success of the summit was substantial in terms of the pan-Canadian engagement of community and academic partners, the development of indicators of excellence for CBR projects grounded in a theory of change, and the momentum to establish a national network of regional hubs of excellence. While these outcomes are rooted in the Canadian experience, they are sufficiently generalisable to have much wider application and thereby inform an international movement to advance CBR by strengthening the quality, relevance and impact of the research conducted, and thereby to achieve the societal betterment that motivates much of the work. This aspiration is well captured in the words of Canada's governor general [cited in Hall et al., (2015), p.123].

“When it comes to bringing about a societal change, this is where universities and communities can work together to great effect. Communities know what the needs are, and post-secondary institutions know the methods and possess the experience and the expertise to help determine how to go about meeting those needs – a wonderful combination of the what and the why.” (Hon David Johnson, Governor-General of Canada, 14 June 2013)

References

- Badenhorst, A. and Scarf, C. (2011) 'Local action to support knowledge-based development', *International Journal of Knowledge-Based Development*, Vol. 2, No. 3, pp.316–333.
- Brown, J., Knol, D., Fraehlich, C. and Rodger, R. (2008) 'Providing opportunities for adult learning and employment in Aboriginal inner-city organizations', *Proceedings of the Third International Community University Exposition (CUExpo08)*, University of Victoria, Victoria, Canada, pp.31–35.
- Brown, L., Ochocka, J., de Grosbois, S. and Hall, B. L. (2015) 'Kamucwkalha: Canadian approaches to community-university research partnerships', in Hall, B. et al. (Eds.): *Strengthening Community University Partnerships: Global Perspectives*, pp.95–112, PRIA and University of Victoria Press, Victoria.
- Cairo, A. (2008) 'Opo Yeye: raise your spirit: community-based participatory mental well-being from a non-western cultural perspective', *Proceedings of the Third International Community University Exposition (CUExpo08)*, University of Victoria, Victoria, Canada, pp.41–44.
- Cartwright, D. (Ed.), (1951) *Field Theory in Social Science: Selected Theoretical Papers*, Harper and Row, New York.
- de Sousa Santos, B. (2006) *The Rise of the Global Left: The World Social Forum and Beyond*, Zed Books, London.
- Fitzgerald, H., Burack, C. and Seifer, S. (2010) *The Handbook of Engaged Scholarship*, Michigan State University Press, East Lansing, Michigan.
- Frabutt, J. and Graves, K. (2016) 'The language and methods of community research', in Beckman, M. and Long, J. (Eds.): *Community-Based Research: Teaching for Community Impact*, Stylus Publishing, LLC, Sterling, Virginia, pp.15–32.
- Freire, P. (1970) *Pedagogy of the Oppressed*, Continuum, New York.
- Garcia, B.C. and Martinez, A. (2015) 'Knowledge-based citizenship: a capital systems perspective', *International Journal of Knowledge-Based Development*, Vol. 6, No. 2, pp.152–173.
- GUNi (2014) *Higher Education in the World 5: Knowledge Engagement and Higher Education, Contributing to Social Change*, Palgrave Macmillan, Hampshire, UK.
- Hall, B., Jackson, T., Tandon, R., Fontan, J.M. and Lall, N. (2013) *Knowledge, Democracy and Action*, University of Manchester Press, Manchester.
- Hall, B., Tandon, R. and Tremblay, C. (2015) *Strengthening Community University Partnerships: Global Perspectives*, PRIA and University of Victoria Press, Victoria, Canada.
- Hall, B.L. (2011) 'Towards a knowledge democracy movement: contemporary trends in community-university research partnerships', *Rhizome Frierean*, Vol. 9, No. 9, pp.1–18.
- Hart, A. and Church, A. (2011) 'Research leadership for the community-engaged university: key challenges', *Metropolitan Universities: An International Forum*, Vol. 22, No. 2, pp.45–64 [online] https://about.brighton.ac.uk/cupp/images/stories/MUJ_22_2_Research_Leadership.pdf (accessed 30 September 2016).
- Hart, A., Davis, C., Aumann, K., Wenger-Trayner, E., Heaver, B., Aranda, K. and Wolff, D. (2013) 'Mobilizing knowledge in community-university partnerships: what does a community of practice approach contribute?', *Journal of the Academy of Social Sciences*, Vol. 8, No. 3, pp.1–14.
- Hoyt, L. and Hollister, R. (2014) 'Strategies for advancing global trends in university civic engagement', *Journal of Teaching and Learning in Higher Education*, Vol. 6, No. 1, pp.1691–1710.
- Israel, B., Schulz, A., Parker, E. and Becker, A. (1998) 'Review of community-based research: assessing partnership approaches to improve public health', *Annual Review of Public Health*, Vol. 19, pp.173–202.
- Jewkes, R. and Murcott, A. (1998) 'Community representatives: representing the 'community'?', *Social Science and Medicine*, Vol. 46, No. 7, pp.843–858.

- Kemmis, S. and McTaggart, R. (2005) 'Participatory action research', in Denzin, N.K. and Lincoln, Y.S. (Eds.): *Handbook of Qualitative Research*, 3rd ed., Sage Publications, Inc., Thousand Oaks, California, pp.559–603.
- Kim, H., You, T., Ahn, S.-J. and Jung, W.-S. (2016) 'Embracing networks of national policy research in future foresight', *International Journal of Knowledge-Based Development*, Vol. 7, No. 2, pp.107–124.
- Kovach, M. (2009) 'Being indigenous in the academy – creating space for Indigenous scholarship in the academy', in Timpson, A. (Ed.): *First Nations, First Thoughts: The Impact of Indigenous Thought in Canada*, pp.51–76, UBC Press, Vancouver, BC.
- Laitinen, I., Osborne, M. and Stenvall, J. (2016) 'Complex regional innovation networks and HEI engagement', *International Journal of Knowledge-Based Development*, Vol. 7, No. 2, pp.184–201.
- Lévesque, P. (2008) 'Government support and infrastructure: realizing the value of collaborative work', *Gateways: International Journal of Community Research and Engagement*, Vol. 1, pp.150–164.
- Lewin, G.W. (Ed.) (1948) *Resolving Social Conflicts; Selected Papers on Group Dynamics*, Harper and Row, New York.
- Miles, M.B. and Huberman, A.M. (1994) *Qualitative Data Analysis*, Sage Publications, Thousand Oaks.
- Minkler, M. and Wallerstein, N. (Eds.) (2008) *Community-Based Participatory Research for Health: From Process to Outcomes*, Jossey-Bass, San Francisco.
- Nelson, G., Ochocka, J., Griffin, K. and Lord, J. (1998) 'Nothing about me, without me: participatory action research with self-help/mutual aid organizations for psychiatric consumer/survivor', *American Journal of Community Psychology*, Vol. 26, No. 6, pp.881–912.
- Ochocka, J. (2007) 'Working with diverse communities towards social change: a community university partnership in Canada using a participatory action research approach', in Bokszczyński, A. (Ed.): *Social Change in Solidarity: Community Psychology Perspectives and Approaches*, pp.76–83, Wydawnictwo Uniwersytetu Opolskiego, Opole.
- Ochocka, J. (2014) 'Bringing community and university scholars together on a national stage: the Canadian community university exposition (CUEXpo) experience', in Global University Network for Innovation (Ed.): *Higher Education in the World 5: Knowledge, Engagement & Higher Education: Contributing to Social Change*, pp.262–263, Palgrave Macmillan, New York.
- Ochocka, J. and Janzen, R. (2008) 'Blending commitment, passion and structure: engaging cultural linguistic communities in collaborative research', in Williamson, A. and DeSouza, R. (Eds.): *Researching with Communities*, pp.323–338, Wairua Press, Waitakere City.
- Ochocka, J. and Janzen, R. (2014) 'Breathing life into theory: illustrations of community-based research hallmarks, functions, and phases', *Gateways: International Journal of Community Research and Engagement*, Vol. 7, pp.18–33.
- Phipps, D. (2011) 'A report detailing the development of a university-based knowledge mobilization unit that enhances research outreach and engagement', *Scholarly and Research Communication*, Vol. 2, No. 2, pp.1–13.
- Rosegrant, M.W. and Cline, S.A. (2003) 'Global food security: challenges and policies', *Science*, Vol. 302, No. 5652, pp.1917–1919.
- Shrestha, K.K. and Mahjabeen, Z. (2011) 'Civic science, community participation and planning for knowledge-based development: analysis of Sydney metropolitan strategy', *International Journal of Knowledge-Based Development*, Vol. 2, No. 4, pp.412–432.
- Small, S.A. and Uttal, L. (2005) 'Action-oriented research: strategies for engaged scholarship', *Journal of Marriage and Family*, Vol. 67, No. 4, pp.936–948.

- Spilker, R., Nagel, R., Robinson, J., Brown, L. and Tremblay, C. (2016) *Creating Citizen Communities? Innovation and Impacts in Community University Engagement Networks*, University of Victoria, British Columbia.
- Stoecker, R. (2005) *Research Methods for Community Change: A Project Based Approach*, Sage Publications, Thousand Oaks.
- Stringer, E.T. (2007) *Action Research*, 3rd ed., Sage Publications, London.
- Walsh, C. (2008) 'Housing and home: making the connections for women who are homeless', *Proceedings of the Third International Community university Exposition (CUExpo08)*, pp.315–318, University of Victoria, Victoria, Canada.
- Wiebe, S.M. and Taylor, S.M. (2014) *Pursuing Excellence in Collaborative Community Campus Research*, Centre for Community Based Research, Kitchener, Ontario, Canada.
- Wilson, M.G., Lavis, J.N., Travers, R. and Rourke, S.B. (2010) 'Community-based knowledge transfer and exchange: helping community-based organizations link research to action', *Implementation Science*, Vol. 5, No. 33, pp.1–14.