Scalability assessment of evidence-based innovations in community-based primary health care: a cross-sectional study

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Word Count: 2,390

Abstract

Background: Over the past five years, the Canadian Institutes of Health Research have funded 12 community-based primary healthcare teams ("12-Teams") to develop evidence-based innovations (EBIs). We took an in-depth look at the scalability of these EBIs.

Methods: In this cross-sectional study, we invited the 12-Teams to rate their EBIs for scalability potential. Based on a systematic review, we developed a self-administered questionnaire with 16 scalability assessment criteria grouped into five dimensions (theory, impact, coverage, setting, and cost). The teams completed distinct questionnaires for each of their EBIs. We analyzed data using simple frequency counts and a hierarchical cluster analysis. We calculated mean number and standard deviation (SD) of EBIs that met criteria within each dimension including more than one criterion. The analysis unit was the EBI.

Results: Eleven responding teams evaluated 33 EBIs ($median$=3, $range$=1-8 per team). Most EBIs were health interventions (n=21), followed by analytical methods (n=4), conceptual frameworks (n=4), measures (n=3), and research capacity building strategies (n=1). Most EBIs met criteria in the theory dimension (n=29), followed by impact ($mean$=22, SD=6), setting ($mean$=22, SD=9), cost ($mean$=18, SD=2), and coverage ($mean$=14, SD=4). On average, EBIs met 10 of the 16 scalability assessment criteria. Adoption was the least assessed criterion (n=9). Most EBIs were highly ranked for scalability potential (n=20).

Interpretation: Scalability potential varied among EBIs, suggesting the readiness for scale up was suboptimal for some EBIs. Coverage is a dimension that remains largely unaddressed; consequently future evaluations of the teams' activities should investigate criteria relating to this critical dimension.

Keywords: Community-based primary health care, evidence-based innovations, scalability assessment, scale up, spread, knowledge translation, Canadian Institutes of Health Research

Introduction

Primary care is the first point of access to the health system and is at the heart of major reforms in many countries, including Canada (1–5). Primary care has evolved beyond its origins in family medicine to encompass a broad range of healthcare services (including primary prevention), and the term community-based primary health care (CBPHC) reflects this evolution (6–8). Development and implementation of evidence-based innovations (EBIs) such as care models and performance measurement tools have been strongly incentivized as part of primary care reform in Canada. However, there is a significant gap between their development as research projects and their implementation as standard care (9–11).

Bringing evidence into practice to improve population health is at the core of knowledge translation (KT) (12). Most KT literature focuses on methods to implement EBIs but neglects their scale-up to potentially benefit whole populations (13,14). “Spread” and “scale up” refer to increasing coverage (adoption and reach) of EBIs (15–18). “Spread” captures organic, passive and horizontal diffusion, whereas “scale up” implies systematic, deliberate and vertical diffusion (16–20). While scale up has been widely used to address infectious diseases in low- and middle-income countries (21–23), there is now increasing interest in high-income countries including Canada to scale up EBIs to address chronic diseases in CBPHC (24–27). However, there are few systematic efforts to facilitate or support scale up in Canada.

In 2013, 12 CBPHC research teams (“12-Teams”) were funded by the Canadian Institutes of Health Research (CIHR) to conduct innovative cross-jurisdictional research in

improving access to CBPHC for vulnerable populations and in chronic disease prevention and management (28). As a funding condition, teams were required to collaborate in sharing their findings and lessons learned, build capacity and plan for scale up (29).

To plan for such scale up, an EBI needs information or measures for assessing scalability (we call the availability of such information its "scalability potential"), but there are few theoretical, conceptual and practical frameworks to guide scalability assessments (20,30). Some of the scalability assessment criteria in these frameworks include, for example, having data on adaptability, cost-effectiveness and potential adoption (31–33).There is a need for further exploration and adaptation of these criteria to specific contexts such as CBPHC in Canada.

In this paper, we took an in-depth look at the scalability potential of the EBIs developed by the 12-Teams as a result of their programmatic CBPHC research.

Methods

Study design

In this cross-sectional study, we invited the 12-Teams to rate their EBIs for scalability potential. An evidence-based innovation (EBI) was defined as a program, model, approach, tool, instrument, indicator, algorithm, service, idea, policy, or practice whose evidence base has been established (31,32).

Setting and participants

We conducted this study between August and December, 2017 together with the project participants, i.e. the 12-Teams. These teams covered all of Canada except for one province (Saskatchewan) and one territory (Yukon) (29,34). Their locations, profiles and projects are detailed elsewhere (29,35). An ethics review was not needed because data was not collected on human subjects (36).

Data collection

We created a one page self-administered questionnaire containing the key elements for assessing the scalability potential of EBIs according to the results of a systematic review of scaling-up and spread strategies in primary care (21), and the recommendations of two scaling-up guides (20,30) (**Additional file 1**). The 12-Teams were invited to fill in a form to rate the scalability potential of their EBIs. They were asked for details about their team, and the name, type and aim of the EBI. The form included 16 criteria for rating scalability potential. The criteria were grouped into five dimensions: (i) theory used for the development of the EBI; (ii) impact (e.g., has efficacy been assessed); (iii) likely coverage of the EBI (e.g., has adoption been assessed); (iv) alignment of the EBI with the setting (e.g., is it compatible with similar innovations in the same setting); and (v) cost (e.g., is scaling up affordable). For each criterion, there were five response options: (i) "Yes", criterion was assessed; (ii) "No", criterion was not assessed; (iii) "UE", criterion was under evaluation; (iv) "NP", criterion assessment was not planned; and (v) "NA", not applicable. Space was provided for additional comments on each criterion.

The questionnaire was piloted by one of the teams (SW) and revised to improve understanding of the instructions and examples of EBIs. All teams were then asked to

complete and return their responses by email. A maximum of three reminder messages were sent no later than three weeks after the first message. A team could rate more than one of their EBIs and submit more than one completed questionnaire (i.e., one completed questionnaire per EBI).

Data analysis

We analyzed data using simple frequency counts and hierarchical cluster analysis. The unit of analysis was the EBI. As we had very little missing data, no specific missing case analyses were conducted. Data were analyzed using SAS version 9.4.

Two authors (ABC, HTVZ) independently classified the EBIs into one of mutually exclusive five types according to themes pre-defined. Any discrepancies were resolved through consensus with FL. The themes correspond to the following types of EBIs:

- *Health intervention*: an act performed for, with or on behalf of a person or a population, whose purpose is to improve, maintain, promote or modify health functioning or health conditions (e.g., preventive strategy, screening program, training program, care approach, care model, decision aid) (37);
- *Analytical method:* a generic or systematic process combining the scientific method with the use of a formal process to solve any type of research problem (38,39);
- *Conceptual framework*: a set of concepts or abstractions linked and arranged rationally according to their relevance to a common theme (40);
- *Measure*: any instrument, measure or indicator (41);

- *Research capacity building:* a process of individual or institutional development which leads to higher skill level and greater ability to perform useful research (42,43).

Team respondents were involved in all steps of this study. Together, we grouped the response options for the 16 scalability assessment criteria into three categories: (i) criterion met (i.e., responses corresponding to "criterion was assessed" and "criterion was under evaluation"); (ii) criterion not met (i.e., responses corresponding to "criterion was not assessed" and "criterion assessment was not planned"); and (iii) not applicable. Thus, each EBI was scored on the number of scalability assessment criteria met. Then we ranked the 16 scalability assessment criteria according to the number of EBIs that met each of these criteria. For the impact, coverage, setting and cost dimensions (i.e., all dimensions which include more than one criterion), we calculated the mean number and standard deviation (SD) of EBIs per dimension for which criteria were met. We used analysis of variance to compare the number of criteria met per EBI.

We conducted a hierarchical cluster analysis among the EBIs using the SAS CLUSTER procedure (44). This allowed us to group EBIs into the most homogenous clusters possible, based on the number of scalability assessment criteria met. The objective was to rank EBIs in order of their scalability potential. We used the average linkage method, under which the distance between two clusters is the average of the distances of all pairs of EBIs, one in each cluster (44,45). We estimated the optimal number of clusters using the $pseudo\ F$ and t^2 statistics (44).

Results

Participants

Eleven of the 12-Teams reported at least one EBI (**Figure 1**). We received information for 33 EBIs ($median$=3, range 1 to 8 per team).

Types of evidence-based innovations

As shown in **Table 1,** the majority of EBIs were health interventions (n=21; e.g., a community partnership program aiming to reduce the impact of vascular disease on the health of Canadians (46)), followed by analytical methods (n=4; e.g., piloting an automated practice-based patient survey system by phone or email), conceptual frameworks (n=4; e.g., a guide to implement integrated care), measures (n=3; e.g., a 21-item measure for identifying persons with multimorbidity in primary care), and research capacity building (n=1).

Scalability assessment dimensions

As shown in **Table 2**, theory was the dimension in which scalability assessment criteria were most often met (n=29; e.g., the Consolidated Framework for Implementation Research), followed by impact ($mean$=22; SD=6), setting ($mean$=22; SD=9), cost ($mean$=18; SD=2), and coverage ($mean$=14; SD=4). Within the coverage dimension, the criteria of reach, adoption, and maintenance were frequently reported as not applicable (n=12, n=12, and n=14 respectively) (**Additional file 2**), with the most commonly reported reason being that the EBI was "not an intervention". Description of scalability assessment criteria are detailed in appendix (**Additional file 2**).

On average, 10 of the 16 scalability assessment criteria (SD=4) were met by the 33 EBIs. Adoption was the least assessed criterion (n=9). The number of criteria that were met in the coverage dimension varied with the type of EBI ($p = 0.005$), with health interventions likely to meet the most criteria.

Rankings for scalability potential

Using hierarchical cluster analysis, we classified the 33 EBIs into three groups ($pseudo\ F = 73.5$ and $pseudo\ t^2 = 8.0$): those whose scalability potential was ranked as high (n=20), medium (n=11) or low (n=2) (**Table 1**). The mean number of scalability assessment criteria met for the three groups respectively was 12 (SD=2), 7 (SD=2), and 1 (SD=1).

A high ranking indicated that the team had collected diverse significant information relevant to make a decision about the scale-up or spread of its EBI. Nine of the 11 responding teams ranked at least one of their EBIs as having high potential for scalability ($median$=1, range 0 to 5 per team). The majority of the 20 highly ranked EBIs were health interventions (n=16).

Interpretation

To the best of our knowledge, this study is the first to examine scalability assessment criteria in a large sample of EBIs in a Canadian health care setting. Majority of EBIs were health interventions and most them ranked high for scalability potential. However, few of the EBIs met the scalability assessment criteria relating to coverage, a dimension essential for scalability. These findings lead us to make the following observations.

First, the EBIs that the teams rated as having high scalability potential were most likely to be health interventions. Primary care communities are complex and non-uniform health organizations, and system-focused health interventions need to be robust and address a variety of contexts (47). Therefore, it is more likely for the teams to have collected a variety of data on the health interventions, including information relevant to future scale up. Future investigation is needed to learn from the EBIs with the highest scalability potential among health interventions. For example, the Pop-up Health and Community Service Event met all of the scalability assessment criteria, and consequently a case study on this health intervention could inform us further about scalability. This heath intervention has already been implemented and assessed in several different settings (e.g., a seniors' centre, the Indigenous Early Intervention Organization, an elementary school) (48), demonstrating such an important scalability potential.

Second, we found that coverage was the dimension in which scalability assessment criteria were least likely to be met and adoption was the least assessed criterion. This may be in part because some EBIs were not yet fully implemented, or were designed to be locally tailored rather than scalable. Lack of scalability frameworks to support research design and lack of sufficient time and resources could be other reasons. While EBIs based on theory and aligned with local and regional settings are more likely to become part of regular care (49,50), for EBIs to have a substantial impact, they need to be adopted by a large enough population over a sustained period (30). Thus, coverage of targeted users or settings is a critical indicator for measuring the success of large-scale implementation and is at the heart of scalability (21,30,51). Developers of EBIs can evaluate their programs using the "Reach, Effectiveness, Adoption, Implementation, and

Maintenance" Qualitative Evaluation for Systematic Translation (RE-AIM QuEST) framework to specifically explore the coverage potential of their EBIs (52,53).

Finally, certain scalability assessment criteria were more pertinent for some EBIs than for others. Teams whose EBIs consisted of a conceptual framework or an analytical method, for example, were less concerned about widespread implementation of their EBIs as they were not necessarily designed to directly improve health functioning or conditions (54). Yet, without any doubt, there is value in adapting and scaling up methodological approaches and tools (such as theories and frameworks) for wider use by implementation science researchers (50,55–57). Furthermore, different experimental conditions may also play a role: for example, it may not be applicable to rate efficacy in a program conducted in a real-world environment. As a first exercise to rank EBIs in CBPHC in Canada for their scalability potential, these findings will enable us to adapt the scalability assessment criteria and improve our scalability assessment form.

Limitations

First, in balancing tensions between brevity and science, the short questionnaire may not have covered every dimension of assessing scalability. Second, all questions may not been understood by teams. This highlights the need to standardize terminology relating measures of scale up. Third, our questionnaire collected data on assessment of criteria (i.e., the presence of information necessary for assessing scalability), but not on the results of those assessments. Thus, based on our data, we cannot confidently label the EBIs as scalable or not. However, our data clearly shows that some teams collected significant information to consider a future scale-up plan of their EBIs. Moreover,

feedback from the team members indicated they found the experience constructive and informative for the purposes of future scale-up planning.

Conclusion

We examined scalability assessment criteria among a large sample of EBIs in a Canadian health care setting. Our findings contribute important new understandings of scalability assessment in CBPHC that has relevance for a broad group of stakeholders, including policy makers, patients, health care providers and researchers. A major contribution of this work is that it prompted dialogue on scalability within and between the 12-Teams. The structure of the questionnaire served, in itself, as a KT tool as it motivated many teams to talk with their research communities and decision makers about scalability. Overall, teams had significant information about their EBIs, which could be used to help them plan for scale up and/or spread. However, coverage is a critical dimension that remains largely unaddressed. Future evaluations of the activities of the CBPHC research teams should investigate data and measures relating to coverage.

List of abbreviations

CBPHC, community-based primary health care; **CIHR**, Canadian Institutes of Health Research; **EBI**, evidence-based innovation; **KT**, knowledge translation; **RE-AIM,** Reach, Effectiveness, Adoption, Implementation and Maintenance; **SD**, standard deviation.

Declarations

Ethics approval

Our study assessed research innovations and did not collect data on human participants; thus, an ethics review was not needed.

Competing interests

The authors have none to declare.

Funding

This study was funded by the 12-Teams. ABC and HTVZ were funded by the Quebec Strategy for Patient-Oriented Research (SPOR) Support for People and Patient-Oriented Research and Trials (SUPPORT) unit. FL holds a Tier 1 Canada Research Chair in Shared Decision Making and Knowledge Translation, and AF was funded by this Chair. Only the authors have responsibility for the information provided or views expressed in this article.

Authors' contributions

ABC, KH, SW, HTVZ, MF, AF, KN, JP and FL participated in the design of the study. KH and SW coordinated data collection. The 12-Teams contributed the data collection. ABC conducted the statistical analyses and wrote the initial draft of the manuscript, and FL oversaw the work as supervisor of his postdoctoral position. All authors contributed to the interpretation of data, revised the manuscript critically for important intellectual content, gave final approval of the version to be published and agreed to be accountable for all aspects of the study.

Acknowledgements

We thank the 12-Teams nominated principal investigators, Marshall Godwin, Eva Grunfeld, Janusz Kaczorowski, Kue Young, Stewart Harris, Walter Wodchis, Jeannie Haggerty, and Moira Stewart. We also thank the members of the 12-Teams for their for their contribution: **ACCESS-MH** (Atlantic Canada Children's Effective Service & Strategies in Mental Health), **ACHRU** (Aging, Community and Health Research Unit), **CanIMPACT** (Canadian Team to Improve Community-Based Cancer Care along the Continuum), **C-ChAMP** (Canadian Chronic Disease Awareness and Management Program), **CircHSIT** (Circumpolar Health System Innovation Team), **FORGE AHEAD** (Transformation of Indigenous Primary Healthcare Delivery), **iCOACH** (Implementing Integrated Care for Older Adults with Complex Health), **IMPACT** (Innovative Models Promoting Access-to-Care Transformation), **iPHIT** (Innovation in Community Based Primary Healthcare Supporting Transformation in the Health of First Nations and Rural/Remote Manitoba Communities), **LHIV** (Living with HIV), **PACE in MM** (Patient-Centred Innovations for Persons with Multimorbidity), and **TRANSFORMATION** (Improving the Science and Reporting of Performance in Primary Care). Finally, we thank Tarek Bouhali for his help as an Advisory Panel member; and Louisa Blair, English-language editor, for her kind help with the manuscript.

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Figures

Figure 1: Flow chart for identification of evidence-based innovations

Tables

Table 1: Characteristics of evidence-based innovations (n=33)

Table 2: Description of criteria for scalability potential among 33 evidence-based innovations

Additional files

Additional file 1: The one page self-administered questionnaire

Additional file 2: Description of criteria for scalability potential among 33 evidence-based innovations

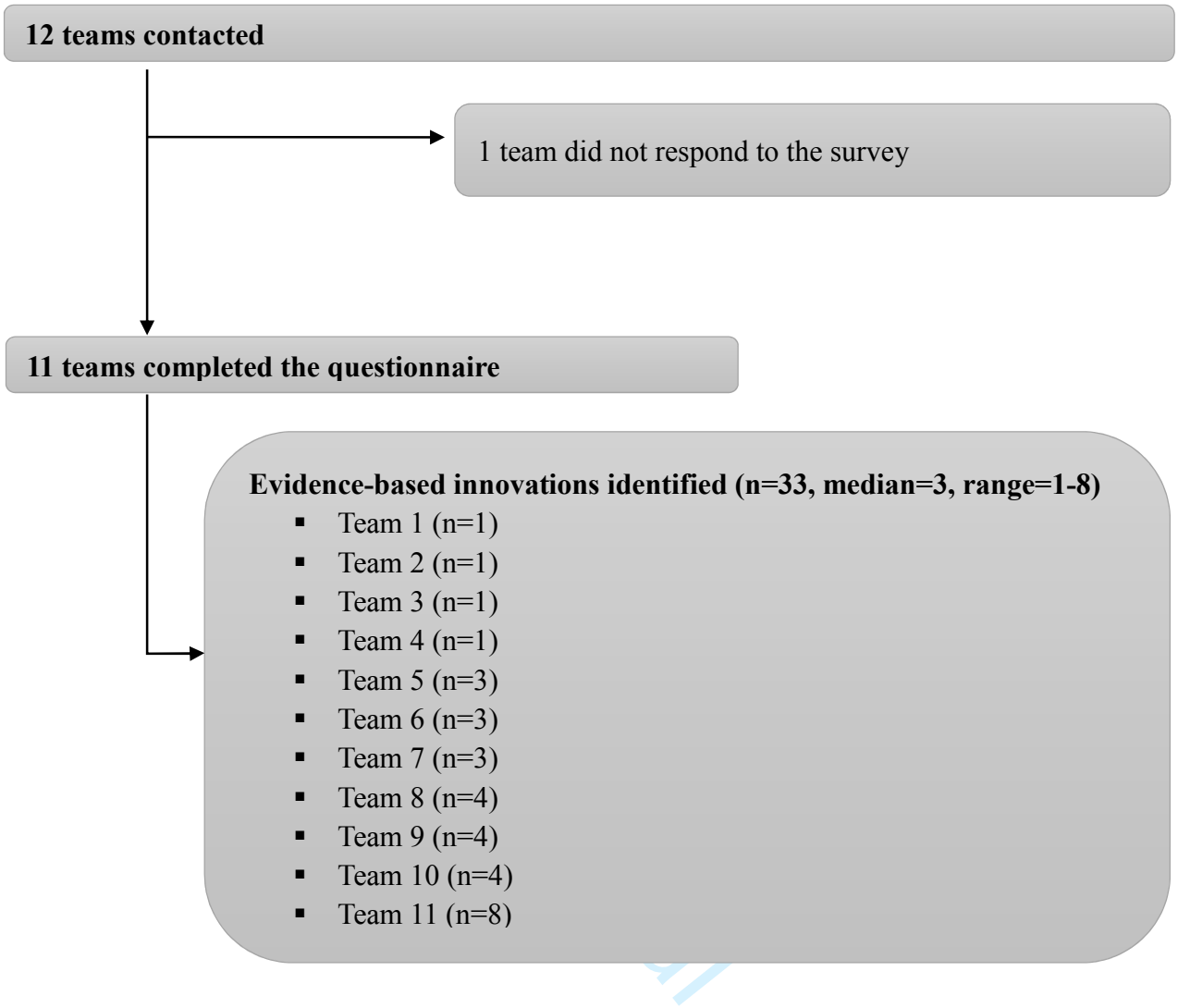

Figure 1: Flow chart for identification of evidence-based innovations

Table 1: Characteristics of evidence-based innovations (n=33)

Scalability potential ranking	Number of scalability assessment criteria met (range 0 to 16)[1]	Type of evidence-based innovation	Aim of evidence-based innovation as reported
High	16	Health intervention	Increase access to primary healthcare (PHC) for individuals/populations that are underserved by, and struggle to connect with, traditional PHC services. Further, improve coordination and collaboration of PHC service providers when providing care.
High	14	Health intervention	To enhance the new patient's capacity to access the clinic and understand how it functions
High	14	Health intervention	Multi-faceted, inter-professional, self-management, community-based program for older adults with diabetes and multiple chronic conditions
High	14	Health intervention	Introducing innovative team work for the management of patient with multimorbidity
High	13	Health intervention	To improve diabetes prevention and management by leveraging existing resources
High	13	Conceptual framework	To enable health providers to implement integrated care for people with complex health needs.
High	13	Health intervention	An inter-professional, self-management, community-based program for older adults with vascular conditions and multiple chronic conditions
High	13	Health intervention	To reduce the impact of vascular disease on the health of Canadians
High	13	Health intervention	Actionable information on primary care for key stakeholders; sustainable performance portrait (through ongoing funding); innovation through information to stakeholders.
High	12	Analytical method	Piloted a practice-based automated patient survey system by phone or email to consenting patients.
High	12	Health intervention	Integrating chronic disease prevention and management by a team in primary care practices

High	12	Health intervention	To develop navigators' knowledge, skills and abilities to work with primary care practices to support individuals experiencing social barriers reach community health and social resources
High	11	Health intervention	To identify patients at increased risk of breast and colorectal cancer and personalize screening and management; to help patients with breast cancer make treatment decisions
High	11	Health intervention	Integrated Approach For Chronic Diseases
High	11	Health intervention	To improve communication between primary care providers and cancer specialists; to improve continuity of care among patients with cancer
High	11	Health intervention	Type of patient referrals, navigation services provided, community health and social resource needs
High	11	Health intervention	To provide rural remote primary care
High	10	Research capacity	Building research capacity
High	10	Conceptual framework	Inform implementation of patient-centered interventions to improve care of patients with multimorbidity
High	10	Health intervention	A toolkit to support caregivers of older adults with dementia and multiple chronic conditions with changes they are experiencing
Medium	9	Measure	Identifying persons with multimorbidity in primary care
Medium	9	Analytical method	Comparability of Health Administrative Data (HAD) indicator definitions across provinces
Medium	8	Conceptual framework	Supporting Innovation and Transformation in First Nations Health
Medium	8	Measure	Assessing the integration, coordination and transitions of care
Medium	8	Health intervention	Ensure meaningful engagement and participation of people with lived experience in the research process, and ensure that people with lived experience are adequately

			compensated for their time and energy devoted to the research.
Medium	6	Conceptual framework	Understanding Mental health form a First Nations Perspective
Medium	6	Analytical method	To gather narratives/stories of youth mental health journeys from multi-vocal perspectives
Medium	6	Measure	Assessing the correlations of sex and gender with patient outcomes
Medium	5	Health intervention	To explore how people might use publicly reported primary care information through a series of citizen-patient deliberations in three Canadian provinces
Medium	5	Analytical method	Using Analytical Modeling to support children and youth with mental health conditions
Medium	4	Health intervention	To lead to awareness among allied health professionals and policy shifts in health care systems regarding mental health care for youth and support for caregivers
Low	1	Health intervention	To present the clinical cancer system and experiences of breast and colorectal cancer patients in Canada through synthesis maps to be used as knowledge translation tools
Low	0	Health intervention	To profile Canadian initiatives aimed at improving continuity of care between primary care providers and cancer specialists

[1] A higher number indicates more scalability assessment criteria met

Table 2: Description of criteria for scalability potential among 33 evidence-based innovations

Assessment dimension	Criterion	EBIs met criterion: n (%)	Number of EBIs met criteria per dimension: mean[1] (SD)
Use of theory (1 criterion)	EBIs developed with theory	29 (87.9)	
Impact assessments (6 criteria)	Acceptability	22 (66.7)	22.3 (5.6)
	Feasibility	26 (78.8)	
	Adaptability	19 (57.6)	
	Efficacy	13 (39.4)	
	Effectiveness	27 (81.8)	
	Results documented	27 (81.8)	
Setting assessments (4 criteria)	Implemented in setting comparable to target setting	28 (84.8)	21.7 (8.5)
	Compatibility with similar EBIs in target settings	12 (36.4)	
	Consistency with policy directives	25 (75.8)	
Cost assessments (2 criteria)	Cost-effectiveness	16 (48.5)	17.5 (2.1)
	Resources needed for the scale-up (affordability)	19 (57.6)	
Coverage assessments (4 criteria)	Reach (numerator & denominator)	14 (42.4)	14.0 (4.1)
	Adoption (numerator & denominator)	9 (27.3)	
	Fidelity	19 (57.6)	
	Maintenance	14 (42.4)	

Abbreviations: EBI, evidence-based innovation; **SD**, standard deviation

[1] Mean = sum of the number of EBIs (n) that met criteria in each dimension divided by the total number of criteria in that dimension.

Additional file 1: The one page self-administered questionnaire

Name of the team and nominated principal investigator	
Name and abbreviation of the evidence-based Innovation (EBI*)	
Type of the evidence-based Innovation (EBI*)	
Aim of the evidence-based Innovation (EBI*)	

**We define EBI as a program, model, approach, tool, instrument, indicator, algorithm, service, idea, policy, practice whose evidence base has been established.*

Dimensions	Items	Yes	No	UE	NP	NA+	Comment
Theory	Did a theory or conceptual model(s) inform the development of the EBI?	☐	☐	☐	☐	☐	
Impact	Do you have data on the acceptability of the EBI?	☐	☐	☐	☐	☐	
	Do you have data on the feasibility of the EBI?	☐	☐	☐	☐	☐	
	Do you have data on the adaptability of the EBI?	☐	☐	☐	☐	☐	
	Do you have data on the efficacy of the EBI (i.e., testing under optimal conditions)?	☐	☐	☐	☐	☐	
	Do you have data on the effectiveness of the EBI (i.e., testing in real-world conditions)?	☐	☐	☐	☐	☐	
	Have the results of the testing of the EBI been documented?	☐	☐	☐	☐	☐	
		Yes	**No**	**UE**	**NP**	**NA+**	**Comment**
Coverage	Do you have a measure of the reach of the EBI (numerator & denominator)?	☐	☐	☐	☐	☐	
	Do you have a measure of the adoption of the EBI (numerator & denominator)?	☐	☐	☐	☐	☐	
	Do you have data on the fidelity of the implementation/use of the EBI?	☐	☐	☐	☐	☐	
	Do you have data on the maintenance of the EBI? If yes for how long (please specify)?	☐	☐	☐	☐	☐	
		Yes	**No**	**UE**	**NP**	**NA+**	**Comment**
Setting	Did you implement the EBI in a setting (e.g., at individual, community, cultural, political, workforce or organizational levels) comparable to that of the new setting to which it will be scaled up and/or spread?	☐	☐	☐	☐	☐	
	Did you assess if the EBI is compatible with similar interventions in the same setting?	☐	☐	☐	☐	☐	
	Did you determine if the EBI is consistent with policy directives?	☐	☐	☐	☐	☐	
		Yes	**No**	**UE**	**NP**	**NA+**	**Comment**
Cost	Do you have data on the cost-effectiveness of the EBI (compared to existing equivalent EBIs or alternatives)?	☐	☐	☐	☐	☐	
	Do you have data on potential financial and staff resources needed to scale up and/or spread the EBI?	☐	☐	☐	☐	☐	

Abbreviations: ***EBI***, Evidence-Based Innovation; ***UE***, Under Evaluation; ***NP***, Not Planned (or not evaluated); **NA**, Not Applicable (+ please specify why NA).
Definitions: ***Reach***: proportion (numerator and denominator) of target population experiencing the EBI; ***Adoption***: proportion (numerator and denominator) of settings that will adopt the EBI; ***Fidelity***: extent to which the EBI is implemented/used as intended; ***Maintenance***: extent to which the EBI is sustained over time.

Please send this completed form to kasra.hassani@ubc.ca by September 29th 2017. For questions, please contact Ali Ben Charif (ali.ben-charif.1@ulaval.ca).

Additional file 2: Description of criteria for scalability potential among 33 evidence-based innovations

Assessment dimension	Criterion	n of EBIs (% row)			Number of EBIs met criteria per dimension: mean[3] (SD)
		Criterion met	Criterion not met	Criterion not applicable	
Use of theory (1 criterion)	EBIs developed with theory[1]	29 (87.9)	2 (6.1)	2 (6.1)	
Impact assessments (6 criteria)	Acceptability	22 (66.7)	4 (12.1)	7 (21.2)	22.3 (5.6)
	Feasibility	26 (78.8)	3 (9.1)	4 (12.1)	
	Adaptability	19 (57.6)	8 (24.2)	6 (18.2)	
	Efficacy[2]	13 (39.4)	10 (30.3)	9 (27.3)	
	Effectiveness	27 (81.8)	2 (6.1)	4 (12.1)	
	Results documented	27 (81.8)	4 (12.1)	2 (6.1)	
Setting assessments (4 criteria)	Implemented in setting comparable to target setting[1]	28 (84.8)	1 (3.0)	4 (12.1)	21.7 (8.5)
	Compatibility with similar EBIs in target settings[2]	12 (36.4)	13 (39.4)	7 (21.2)	
	Consistency with policy directives	25 (75.8)	0	8 (24.2)	
Cost assessments (2 criteria)	Cost-effectiveness	16 (48.5)	10 (30.3)	7 (21.2)	17.5 (2.1)
	Resources needed for the scale-up (affordability)	19 (57.6)	10 (30.3)	4 (12.1)	
Coverage assessments (4 criteria)	Reach (numerator & denominator)	14 (42.4)	7 (21.2)	12 (36.4)	14.0 (4.1)
	Adoption (numerator & denominator) [1]	9 (27.3)	12 (36.4)	12 (36.4)	
	Fidelity	19 (57.6)	4 (12.1)	10 (30.3)	
	Maintenance[1,2]	14 (42.4)	4 (12.1)	14 (42.4)	

Abbreviations: EBI, evidence-based innovation; **SD**, standard deviation

[1] Due to rounding error, percentages may not add up to 100%

[2] Information about the assessment criteria was not provided for one EBI (i.e., missing value: n=1, 3.0%)

[3] Mean = sum of the number of EBIs (n) that met criteria in each dimension divided by the total number of criteria in that dimension.