

Assessment of scalability of evidence-based innovations in community-based primary health care: a cross-sectional study

Ben Charif A^{1*}, Hassani K², Wong ST², Zomahoun HTV¹, Fortin M³, Freitas A¹, Katz A⁴, Kendall CE⁵, Liddy C⁵, Nicholson K⁶, Petrovic B⁷, Ploeg J⁸, Légaré F¹

¹Université Laval, QC, Canada; ²University of British Columbia, BC, Canada; ³Université de Sherbrooke, QC, Canada; ⁴University of Manitoba, MB, Canada; ⁵University of Ottawa, ON, Canada; ⁶Western University, ON, Canada; ⁷University of Toronto, ON, Canada; ⁸McMaster University, ON, Canada. *Contact: ali.bencharif@gmail.com

Background

- Implementation of evidence-based innovations (EBIs) has been strongly incentivized as part of primary care reform in Canada
- But there is a growing gap between development of EBIs as research projects and their implementation as standard care
- In 2013, the Canadian Institutes of Health Research (CIHR) funded 12 research teams to conduct programmatic research and develop EBIs in community-based primary health care (CBPHC)

Aim: To explore scalability (i.e., potential for scale up) of the teams' EBIs

Methods

Study design

- Cross-sectional study

Setting

- Survey conducted in Canada between August & December, 2017

Participants

- The 12 CIHR-funded research teams

Data collection

- Creating a 1-page self-administrated questionnaire based on a systematic review and scale-up guides
- Data collected by email about:
 - EBI characteristics (e.g., type and aim of the EBI)
 - 16 criteria assessing scalability, grouped into 5 dimensions: theory, impact, coverage, setting and cost
 - Scalability assessment criteria met or not

Data analysis

- The analysis unit was the EBI
- Descriptive analysis using simple frequency counts (n, %)
- Hierarchical cluster analysis to rank EBIs by their scalability

Results

Participants

- The **11 responding teams** evaluated 33 EBIs (median=3, range=1-8 per team)
 - ✓ Health interventions (e.g., preventive and screening programs) (**n=21**)
 - ✓ Methodological innovations (e.g., conceptual frameworks, measures) (**n=12**)
 - ✓ Most of them focused on access to care and chronic disease prevention and management

EBIs meeting scalability assessment dimensions (n=33)

Use of theory:

1 criterion (88%)

1st

- EBIs developed with theory (88%)

Impact:

6 criteria (68%)

2nd

- Acceptability (67%)
- Feasibility (79%)
- Adaptability (58%)
- Efficacy (39%)
- Effectiveness (82%)
- Results documented (82%)

Setting:

3 criteria (66%)

3rd

- Implemented in target setting (85%)
- Compatibility with similar EBIs (36%)
- Consistency with policy directives (76%)

Cost:

2 criteria (53%)

4th

- Cost-effectiveness (48%)
- Affordability (58%)

Coverage:

4 criteria (42%)

5th

- Reach (42%)
- Adoption (27%)**
- Fidelity (58%)
- Maintenance (42%)

Ranking for scalability using hierarchical cluster analysis

- High** (n=20) | **Medium** (n=11) | **Low** (n=2)
- Most (16) of the 20 high-ranking EBIs were health interventions
- A high ranking indicated team had enough significant information about its EBI to plan for scale-up

Conclusions

- Scalability varied among EBIs, suggesting that readiness for scale-up was suboptimal for some EBIs
- Coverage remained largely unaddressed; further investigation of this critical dimension is necessary
- Scalability assessment should be part of project design and funding requirements