

Evaluating the use of maps as tools for knowledge transfer and exchange in public health: The Ontario Early Years plan

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Goals

1. To examine KT & E at public health level
2. To study effect KT & E have on facilitating evidence-based d-m
3. To evaluate use and effectiveness of maps/mapping tools on KT & E

Objectives

1. To document use of maps in EYC
2. To evaluate perceived impact of maps on decision-making processes
3. To identify barriers and facilitators to the use of maps in programs, planning and policies at local level
4. To modify/create (new) mapping tools in collaboration with study participants that best suits their needs

Rationale

- CIHR argues that 'ultimate research users' – policymakers and practitioners – need to be engaged in KT activities.
- Need to move from one-way transfers to two-way dialogues (information exchange)

Study Population

- Early Years Coordinators and Administrators in 19 sites
- These 19 sites formed part of an earlier project

Research Phases

1. Short Survey – mainly assessing computing/hardware needs/barriers
2. Key informant interviews
3. Participatory Design and User Testing

Survey phase – 3 sections

1. Current computing hardware and software used in Centre
2. Measure perceptions of current mapping tools within Centres (e.g. commenting on design, layout, ease of use, etc).
3. Background information on Coordinators and Centres

Qualitative Phase: n=40 – 50 respondents

- Factors that facilitate/impede adoption/use of new tools
- Contextual factors
- Who uses the maps; who is intended audience
- Perceived effectiveness of maps and/or new tools

Participatory Design & User Testing

- Iterative process
 - Phase 1 → workflow and dataflow diagrams; user profiles; task scenarios
 - Phase 2 → will update these diagrams and scenarios
- Prototyping

Prototyping

- With moderators, groups of 5-6 participants create paper mock-ups of the tool
- Results gathered & evaluated as a group
- Groups return to paper mock-ups & evaluation a second time building on results
→ final outcome is used to develop computer tool

Testing Phase

- Once developed, tool is shared with participants for a testing period of 6 months
- Developers provide training for tool and troubleshooting for 6 months

Evaluation

- Focus group session with participants after testing period to evaluate perceived effectiveness of tool
- Make improvements as necessary & retest if time

Outcomes

- Add to understanding of KT & E at an often overlooked level: public health
- Use of OMRU throughout project
- Will be able to assess if spatial & visual presentation of data more effective for d-m
- Develop a tool that builds capacity in the creation, use and interpretation of maps
- Tool could then be tested for other sites, and possibly generalized to other areas

Reviewers Comments

- “Enthusiastic support expressed for the useful developments proposed in these methods to enhance knowledge translation, and further development of this proposal encouraged ”
- “The significance of the project lies primarily in its applied, policy-relevant nature rather than in its academic contribution...[is original] in the application of ideas from non-medical disciplines in the sphere of health research ”

Reviewers Comments

“Is the Ontario Early Years Plan being used as a case study, with the assumption that the findings will be directly transferable to other sectors of the health care system? And likewise, is the mapping component simply a case study of one type of data representation, with the findings transferable to other data analysis and communication methods?”

Reviewers Comments

- “Some questions as to the extent of the innovation and how this might be enhanced - innovation recognised in developing the increased use of such methodologies.”

Reviewers Comments

- Concerns about time management
- Need for preliminary data
- “The third project is the most interesting, however confidence in being able to achieve it is less certain. Furthermore, evaluation of the new tools would be important .”

Pilot Phase

- Designed to collect survey information and being interviews
- Permit us to answer:
 - if maps are perceived as useful for decision-making;
 - if a new tool is needed and how can it be provided given already identified constraints

Submit new grant to CHRP

- CHRP – jointly funded by NSERC and CIHR
→ competition may be less?
- Mandate: "to encourage collaboration between researchers in the natural sciences and health researchers to develop knowledge and technologies that may be useful to improve the health of Canadians".

Questions?

- Thoughts for improvement?