National Collaborating Centre
for Determinants of Health

Centre de collaboration nationale
des déterminants de la santé

BRIDGING THE GAP BETWEEN RESEARCH AND PRACTICE:

METHODOLOGY FOR CASE STUDY DEVELOPMENT

ACKNOWLEDGEMENTS

ABOUT THE NATIONAL COLLABORATING CENTRE FOR DETERMINANTS OF HEALTH

The National Collaborating Centre for Determinants of Health is one of six National
Collaborating Centres (NCCs) for Public Health in Canada. Established in 2005 and
funded by the Public Health Agency of Canada, the NCCs produce information to
help public health professionals improve their response to public health threats,
chronic disease and injury, infectious diseases, and health inequities.

The National Collaborating Centre for Determinants of Health focuses on the
social and economic factors that influence the health of Canadians. The Centre
translates and shares information and evidence with public health organizations and
practitioners to influence interrelated determinants and advance health equity.

Background

This document describes the method used to develop four case studies that illustrate the application of social determinants of health (SDH) in public health. Each of the case studies reflect a different a geographical region of Canada. The case studies were developed as a knowledge exchange tool to support a workshop hosted by the National Collaborating Centre for Determinants of Health (NCCDH) and the Canadian Institutes of Health Research Institute of Population and Public Health (CIHR-IPPH)[1] in Toronto, Ontario on February 14-15, 2012. The workshop was designed to:

1. Examine approaches to recognize health inequities and increase practitioners' ability to use tools to address health equity during research, program planning, implementation, and/or evaluation, building on the environmental scan *Integrating Social Determinants of Health Equity into Canadian Public Health Practice conducted by the NCCDH*[2].
2. Strengthen practitioners' ability to integrate research and practice-based evidence into planning, implementing and evaluating public health interventions, as well as to monitor action and create opportunities to adjust based on the evidence.
3. Identify opportunities for sustained knowledge translation and create stronger links between researchers and public health practitioners who are addressing health equity.

To enable learning and possible implementation of the processes discussed at the workshop, the four case studies were developed. Each case study includes a description of the context, issues addressed, activities undertaken and the possible application of the approach to public health work.

This paper reviews relevant literature on using the case study approach as an adult learning tool. It also outlines the process used in the development of the case studies. At all steps in the process, input was sought from an external advisory group or external reviewers. All case studies were approved by the organizations involved. The case studies and outlined approach can be used by public health practitioners and decision-makers to learn from experiences which may be relevant to their own practice.

The Case Study Method as a Learning Tool

Case studies are a form of problem-based learning particularly well-suited to the learning styles of adults. According to the adult learning theory of andragogy[3], adults typically learn best through experience, especially when armed with a clear understanding of why they are learning something. Adults generally see learning as an opportunity to solve problems and tend to absorb information most readily when the topic is relevant to them and immediately applicable. Put succinctly, adults learn best when they are fully engaged in the learning experience.[4,5] Problem-based learning using case studies involves all participants in actively defining the problem and developing a range of solutions. Effective case studies promote active learning, by making the reader think critically about the information presented. They encourage analysis and synthesis, and lead to well-considered solutions.[6] By putting learners into the situation, they are better prepared to deal with similar challenges in their own work contexts. Case

studies can also be used to evaluate past problem-solving, by asking participants to apply the lessons learned through a problem-based learning exercise to issues they have addressed in the past.[2]

Case studies are designed to help learners develop critical thinking skills, and to identify false assumptions or flaws in the logic presented. The goal is to develop the learner's ability to analyze and assess situations, not necessarily to make the same decision as the people in the actual case. Additional benefits of the case study approach are that participants may learn discipline-specific terminology, and develop improved communication and collaboration skills.[4]

Case studies are a particularly effective form of problem-based learning when they give learners the opportunity to interact with individuals involved in the scenario and can request clarification to better understand the problem. According to Cognitive Flexibility Theory, learning complex concepts is enhanced by an iterative approach to receiving and processing information from varying perspectives.[7] While problem-based learning has been used primarily in clinical settings, it has been argued that the approach is effectively applied to population health issues, particularly when a 'progressive disclosure' process is used and when the situations reflect 'real-life situations'.[3]

Challenges to applying problem-based learning include time management, as learners lead the discussion. This creates an atmosphere that encourages active listening skills, as learners must be very attentive to teaching leaders as well as each other throughout the process. A skilled facilitator is required, who guides the discussion through[8]:

- effective questioning to start the discussion and keep it moving along;
- active listening – for content; how things are said (including emotional undercurrents that can support or undermine the discussion); what is not said (for example, ethical issues that people may be reluctant to raise); and disconnects between participants (making sure learners understand and respond to each other's statements); and
- helpful responding, to provide feedback to learners and guide the discussion along, including using techniques such as echoing learners statements, perhaps to emphasize or clarify them.

Effective Case Studies

A good case study provides enough of the right kind of information to allow people to reach appropriate conclusions. To do this it requires the following elements:[2]

- Presented as a structured story that draws the reader in, capturing an interesting challenge;
- A clear focus on one main question or issue - What is the key challenge to be resolved?
- Information presented in way so that a "right" answer is not obvious;
- Background research included that presents what happened and why, from various perspectives;
- Enough detail that learners can understand the context, including significant events leading up to the situation, and organizational and cultural factors that may impact the solution; and
- Descriptions of the key decision makers and stakeholders, including their roles and perspectives, motivations and interests.

Methodology to Develop Case Studies

The following steps were followed to develop the four case studies showing the application of the Social Determinants of Health in public health across Canada.

Determine the locations

Cases were identified based on alignment with the workshop theme and objectives. Locations were chosen by staff at the NCCDH, based on recommendations of the 2010 NCCDH environmental scan, in collaboration with colleagues at the CIHR-IPPH and the writer, a public health specialist. To ensure that a broad cross-section of practitioners could see themselves in the process, case studies were chosen to reflect organizations at various stages in the application of Social Determinants of Health principles, and from different regions of Canada. Public health organizations were prioritized in the selection; however, recognizing the importance of actions outside of the health sector to improve health equity, one non-public health case was identified.

The case studies selected reflect one or more of the promising practices identified by the Sudbury and District Health Unit[9]. These promising practices include:

- Targeting with universalism
- Purposeful reporting
- Social marketing
- Health equity target setting
- Equity-focused health impact assessment
- Competencies/organizational standards
- Contribution to evidence base
- Early childhood development
- Community engagement
- Intersectoral action

Developing the case studies

The case studies were developed using multiple steps. The first step was conducted prior to the workshop and was based on the experiences of the various organizations and their partners. During the workshop, participants took part in sessions which used the "progressive disclosure" approach and actively contributed to the various challenges posed by the case study presenters. Following the workshop, the case studies were updated to reflect participants' suggestions.

Pre-workshop

Key decision makers and stakeholders from each of the four case studies were identified to participate in semi structured interviews. Interview guides were developed and interviews were conducted with key informants noting their roles in the process. Case studies were then developed for use at the workshop. An outline for presenters' versions of the case studies was designed specifically to guide progressive disclosure and promote active learning. Workshop presentations were designed using the case study approach described above.

Workshop

During the workshop, participants actively engaged with the case study presenters. Using progressive disclosure, presenters shared their experiences and interacted with participants. Input was gathered from participants at the workshop through worksheets, reporters at each discussion table and reports to plenary.

Post-workshop

After the workshop the Case Studies were adapted to integrate the input from the Workshop discussion. The input gathered from participants at the workshop through worksheets completed

by participants, reporters at each discussion table and reports to plenary was collated and added to the case studies. Particular attention was paid to participants' proposed solutions to each scenario (including similarities and differences to the actual solution), ways of overcoming barriers identified, opportunities that would facilitate a solution, application of a health equity lens to the issues, and use of research to inform the solutions. The redrafted case studies were circulated to internal and external reviewers, and to the case presenters for feedback, validation, and editing suggestions.

Conclusion

The method described above resulted in the development of four final case studies that illustrate the application of social determinants of health (SDH) in public health. The method used to develop the cases studies was modified from the literature reviewed to suite to needs of the workshop participants and the presenters. Each of the case studies provides a rich description of their unique situation, stage of application and geographical region of Canada. The case studies produced are titled as follows and are available at www.nccdh.ca:

- Building Leadership Competency in Public Health: Taking advantage of changes in health delivery in Québec
- Empower the Community: New Brunswick's Approach to Overcoming Poverty
- Improving Health Equity in Saskatoon: From Data to Action
- Making the Case for Health Equity Internally: Winnipeg's Experience

The case studies were effectively used as a knowledge exchange tool to support a workshop hosted by the National Collaborating Centre for Determinants of Health (NCCDH) and the Canadian Institutes of Health Research Institute of Population and Public Health (CIHR-IPPH). The knowledge exchange strategy was favourably evaluated by the workshop participants and presenters. Subsequent webinars and web based materials have been developed from the content.

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