INTERVENTION PROJECT PROGRESS REPORT 2
Research-Oriented Decision-Making to Guide Local Public Health Practice to Reduce Social Inequities in Health

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Sudbury & District Health Unit Vision:
Healthier communities in which the Sudbury & District Health Unit plays a key role.

Sudbury & District Health Unit Mission:
Working with our communities to promote and protect health and to prevent disease.

Note: The authors used the Second Progress Report framework described in appendices A, B and C of the Intervention Project and Mentoring Guide (revision April 21, 2009) as the main organizing tool for the development of this document.
What is the evidence base for local public health practices to reduce social inequities in health and how can this evidence optimally inform SDHU management decision-making about programs and services?
**Anecdote: An experience that galvanized our resolve…**

The three authors have had a longstanding interest in reducing social inequities in health. One real life local issue that galvanized and further grew our resolve involved the late Kimberly Rogers. Ms. Rogers was a 40-year-old Sudbury student who was eight months pregnant when she died in August of 2001 while on house arrest for welfare fraud. Her crime was to receive $13,500 of annual social assistance while also in receipt of student loans.

The Sudbury & District Health Unit (SDHU) was called upon to testify at the subsequent coroner’s inquest, during which the Medical Officer of Health contributed local data about the cost of nutritious eating. The coroner’s verdict included a recommendation that such local data should be used to routinely assess the adequacy of social assistance rates and thus ensure that recipients’ basic needs are met.

The SDHU’s contribution demonstrated the upstream public health role in both reducing poverty rates and mitigating the health repercussions of poverty and social inequities. Our intervention project was inspired by this example of healthy public policy development through the provision of local evidence.

**I Problem Statement**

What is the evidence base for local public health practices to reduce social inequities in health and how can this evidence optimally inform SDHU management decision-making about programs and services?

**II Context—Your Place and the Big Picture**

The Sudbury & District Health Unit (SDHU) is a progressive, accredited public health agency and part of the Ontario public health system of 36 such agencies. Through its main office in Sudbury and four branch offices in the districts of Sudbury and Manitoulin, the SDHU delivers...
provincially legislated public health programs and services to its geographic catchment area covering approximately 46,121 square kilometres, 200,000 people and 19 municipalities. The organization is governed by an autonomous sole purpose board of health and is lead by the Medical Officer of Health/Chief Executive Officer. The 2008 staffing complement was 250 full-time equivalents with a total budget of $23.6 million.

The SDHU has a longstanding history of interest in and action on the social determinants of health and health inequalities. (See Appendix A—Social inequities in health: Highlights from the last decade) More recently, the health unit adopted language that more explicitly recognizes the underlying values-base for this work and now consciously uses the term inequities in health. (See Appendix B—Glossary of terms) It is this underlying values-base—that systematic differences in health judged to be avoidable by reasonable action are unfair—that underpins the support of the Sudbury & District Board of Health and the work of the organization. (See Appendix C—Board of Health Position Statement) Also driving the SDHU work is the recognition that while population-based public health interventions may successfully improve overall health status or related health behaviours, they may actually increase health inequities (e.g. increased rates of smoke-free homes overall but increased gradient in smoke-free homes between high and low income earners). (See Appendix D—SDHU Smoke-free homes example)

Our interest in addressing local health inequities is also congruent with emerging global-to-local policy direction—from, for example, the World Health Organization Commission on Social Determinants of Health (WHO CSDH) to the new Ontario Public Health Standards (OPHS) to local community poverty prevention and reduction plans. Recent seminal international, national, provincial and local reports are listed in Appendix E and were summarized in our Intervention
Project Progress Report (IPPR) 1. Evident from our review of these reports is that the levers for action by local public health professionals are poorly understood\(^2,^3\). The evidence base supporting effective methods of reducing health inequities is limited\(^4\) and the lack of certainty about precise causal pathways means that there is limited guidance, tools, or techniques for integrating equity considerations into policy and programs\(^5\).

We also appreciate that the scope of the “problem” beyond the reach of local public health may be a potential concern for a focused intervention project based in a public health unit. However, the SDHU EXTRA project must, of necessity, be situated in a broader context. Many of the strategies required to effectively reduce social inequities in health lie outside of the local public health sphere of influence and practice. Although we know that more macro-level initiatives are underway or under investigation, our questions exploring the complementary contribution of local public health actions to this issue are useful and timely. Effective local public health actions may be seen as a legitimate component of a comprehensive and coherent multi-level strategy to ultimately reduce social inequities in health.

Additionally, with recent public health renewal initiatives in Ontario, boards of health under the new OPHS are responsible for public health programs and services that incorporate equity-based expectations. As evidenced in our review of international, national, provincial and local policy contexts (Appendix E), many questions remain concerning the evidence base for such effective local public health practice to reduce social inequities in health. It is anticipated that the SDHU EXTRA project will contribute to the knowledge base for local action and be relevant for public health practice settings across Ontario.

What is the evidence base for local public health practices to reduce social inequities in health and how can this evidence optimally inform SDHU management decision-making about programs and services?
III The Evidence—A Critical Review

1. Methods:
An extensive literature search was undertaken, using multiple search terms related to public health practice, inequities in health, and evidence. Approximately 20 databases were searched. (Further details on the search terms are documented in our IPPR1). The initial database search was limited to articles published in the last ten years and limited to either reviews (systematic or otherwise) or meta-analyses. Once the information was obtained from systematic reviews, a more refined search for individual articles was conducted. Additionally, the websites of approximately 35 public health, government, non-government and other local/provincial/national/international organizations were searched for relevant grey literature presented as web content, conference proceedings, documents, reports, and associated web-links or databases. We also identified grey literature through the EXTRA desktop grey literature search function, through references and advice from our EXTRA mentors and other experts, and by a “snowball” approach in which we gathered salient documents listed as references in other literature. Several key reports on social inequities in health have been released since the time of the literature search, and new reports were also considered as “snowball” items. Significant grey literature included the reviews conducted as part of the international, national and regional reports listed in Appendix E. Of note is the major contribution to our project of the work of the Measurement and Evidence Knowledge Network (MEKN) which was established as part of the WHO CSDH to “collect, assess and synthesize global knowledge on existing methodologies to evaluate the effectiveness of policies, interventions and actions on social determinants of health which are aimed at improving health outcomes and health equity.”(p.8)5

A summary of the yield of the search is presented in Figure 1. Titles and abstracts (if provided) from approximately 1600 database and grey literature search results were scanned initially for...
relevance. Of these, 238 documents were determined to warrant further in-depth appraisal.

Articles were then more thoroughly reviewed and categorized into three levels:

- **Level 1**—A “must-have” article—either a systematic review (SR) or best practice (BP)/promising practice-focused article or grey literature, and helped answer the project question very specifically (related to public health). Within this level, approximately one-third were selected as the core set of “required readings” on the topic.

- **Level 2**—A “nice-to-have” article—may be a SR or BP or single-study article/grey literature, deal with one lifestyle-focused action, describe public health actions or other sectors’ actions that have the potential to address social inequities in health.

- **Level 3**—May be of some specific use—articles/grey literature that mention (but do not describe/discuss in depth) possible public health actions that can affect social inequities in health.

The “required reading” Level 1 documents and the “snowball” items were reviewed in full by the EXTRA fellows for the purposes of this project.

**Figure 1:** Number of Documents at Each Stage of Literature Search

![Diagram showing the flow of documents from initial search to final triage]

What is the evidence base for local public health practices to reduce social inequities in health and how can this evidence optimally inform SDHU management decision-making about programs and services?
Assessing and Adapting the Evidence: The complexity of the “problem” under study results in significant limitations to the evidence base in terms of traditional hierarchies of evidence\textsuperscript{6-8}. Evidence needs, therefore, to be judged on a fit-for-purpose basis, assessing whether it convincingly answers the question asked\textsuperscript{9}. Our critical appraisal approach thus focused on assessing relevance and applicability, rather than on a strict appraisal of evidence quality. We based our appraisal on the key questions identified by the National Collaborating Centre for Methods and Tools (NCC-MT)\textsuperscript{10}. The three questions they suggest, drawn from Rychetnik et al\textsuperscript{11}, are listed below, with some modifications for the purposes of our investigation:

1. Is the research (or review) of good quality?
2. What outcomes can I expect if I implement this research? (Is it applicable to my situation?)
3. Will my target population (SDHU staff) be able to use this research?

Our approach to critical appraisal was also informed by the work of Pawson et al on realist reviews\textsuperscript{12}. Realist reviews seek to understand how complex programs work in particular contexts and settings. Realist reviews learn from, rather than control for, real world phenomena. Although there were no published realist reviews on health inequity-reducing interventions in local public health upon which to draw, our appraisal was influenced by the idea that relevance of evidence can be judged by contextual factors as well as research “quality” factors. NCC-MT\textsuperscript{10} and the WHO CSDH\textsuperscript{1} acknowledge that research evidence is one component of evidence-informed public health decision making. This evidence is to be balanced along with expertise, public health resources, community/political preferences and actions, and local context. In keeping with these models, the realist review concept assisted us to incorporate expert views (as presented in grey literature and elsewhere) and contextual factors into our critical appraisal and our selection of the “required readings”.

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2. **Causal Pathways:**
Although our knowledge of the causal pathways explaining the systematic patterns of health and wealth, or social gradient in health, remains incomplete, it has been noted that “researchers have focused much more on causes of health inequalities than on effects of interventions to reduce inequalities” (p. 348)\(^{13}\). Even with this focus, there remains much uncertainty about the precise causal mechanisms and there are significant differences in theoretical explanations to understand the interactions between the social world and human biological outcomes\(^{14}\). As our paper moves to a discussion of potential local public health interventions, we move from the description of a relationship to implicit theories about why this relationship exists and therefore what we should do about it\(^5\). In other words, we move from a somewhat uncertain area to an even less established knowledge base. Public health research has focused more on the impact of social inequalities than on their causes or realistic strategies to address underlying causes (p. 62)\(^{15}\). However, the WHO CSDH notes that while more research is needed, given the importance of the issue, this lack cannot be a barrier to making judgements with the current evidence (p. 42)\(^1\).

From our review and critical appraisal of the literature, we identified evidence-based or promising practices for public health practices to address social inequities in health. These practices are described in varying detail in the next section of the paper, according to the findings of our literature review. The subsequent section describes how we decided on our specific intervention project and provides a preliminary description of the interventions and their implementation.

3. **Public Health Practices:**
Our review and analysis of the literature yielded ten public health practices, relevant at a local public health level, that are at least “promising” in their potential to contribute to reductions in

3.1 Targeting with universalism:
Debates about the relative effectiveness of targeted versus universal approaches to address poverty and social inequity are usually held in the context of government social and fiscal policy discussions. Under universalism, the entire population is the beneficiary, while under targeting, some form of means-testing is used to determine eligibility for the benefit (p. 63)\textsuperscript{15}. Decisions about which approach to take reflect underlying assumptions about values and responsibilities to citizens. Skocpol (quoted in Solar & Irwin p. 64)\textsuperscript{15} notes that in more successful [sic] countries, social policy is more universalistic, with targeting used as an instrument to make universalism more effective. This “targeting within universalism” ensures that extra benefits are directed to poorer groups and acts to “fine-tune” essentially universal policies.

As applied to local public health practices, decisions about universal versus targeted approaches reflect basic underlying goals. If the goal is to “level up”, then some targeting must occur. In their \textit{Levelling-up Report, Parts 1 and 2}, Dahlgren and Whitehead\textsuperscript{16,17} describe the need to improve disproportionately the health of more disadvantaged groups while at the same time improving the health of the entire population. To make strides in reducing health inequities, public health practice must strive to balance selective or targeted approaches with universal strategies.
The WHO CSDH\(^1\) recommended that within a framework of universal access, special attention be provided to the socially disadvantaged and, especially, children who are lagging behind in their development. Targeting, also, may be effective during times of life transition. Blackman\(^{18}\) has suggested, for instance, the integration of smoking cessation programs during times of transitioning to employment.

It is noted that targeting must entail careful identification of disadvantaged populations\(^4\). This requires the availability of equity-based epidemiological information. The careful analysis of such data can then be used to inform, monitor and evaluate programs and policies that target disadvantaged populations\(^{19}\).

### 3.2 Purposeful reporting:

The WHO, among others, identifies the importance of reporting purposefully on the relationship between health and social inequities in all health status reporting. The WHO document: *The Social Determinants of Health: Developing an evidence base for political action*, highlights the link between reporting on health inequities and political action\(^{14}\). Similarly, *Closing the Gap in a Generation*\(^1\), notes that “ensuring that health inequity is measured…is a vital platform for action.” (p. 2). Thus, evidence about health inequities presented publicly and intentionally may be considered part of a strategy for change.

In *Health for All*\(^{13}\), the authors describe the importance of stratifying data by socioeconomic status (SES) as one example, rather than controlling for the effect of SES as many analyses do. By stratifying, the differential effect of income on health status becomes apparent. Similar analyses could be undertaken for links between health and unemployment, social exclusion, education, deprivation, and other variables.
An additional benefit to reporting in a way that presents, rather than masks, the effect of social inequities in health, is that evidence of progress, or lack thereof, can also be brought to the fore and can guide future interventions.

3.3 Social marketing:
Social marketing is “the systematic application of marketing alongside other concepts and techniques, to achieve specific behavioural goals, for a social good” (National Social Marketing Centre 2007 as quoted in Farr p. 451). Target audience segmentation and tailored interventions, including health communications, are key steps within the social marketing process. This approach is considered a promising practice for creating positive social change and improving the health of vulnerable populations. With the objective of reducing health inequalities, social marketing interventions for local public health practice can be thought of in two ways. One is the more conventional tailoring of behaviour change interventions to more disadvantaged populations (with the goal of leveling up). The second, less conventional approach, is to use social marketing to change the understanding and ultimate behaviour of decision makers and the public to take or support action to improve the social determinants of health inequities.

Regarding the more conventional approach, the literature identifies the importance of tailored messages within a multilevel approach (a socioecological framework) for changing voluntary health practices, especially among minority populations. There is also evidence to suggest that integrating culture into tailored prevention and control interventions may enhance their effectiveness in diverse populations.

A criticism of social marketing is the predominant use of the methods to promote individual behaviour change and the relative infrequency of targeting of policy makers (and the public) to
take action to support health equity. This less conventional approach to social marketing is potentially very powerful, especially if combined with individual behaviour change approaches.

3.4 Health equity target setting:
The WHO CSDH recognizes that “good evidence on levels of health and its distribution, and on the social determinants of health, is essential for understanding the scale of the problem, assessing the effects of actions, and monitoring progress” (p. 20). The value of evidence to track change is emphasized; they stop short, however, of recommending target setting as a strategy.

The World Health Organization, although recognizing that many countries have incorporated target setting into their intersectoral work on social inequities in health, questions whether there is a demonstrated benefit to target setting for intersectoral work (p. 22). In this commentary, they distinguish between the valuable practice of setting clear and measurable objectives and the setting of time-based outcome objectives. Thus, the exact nature of the targets appears to be important, since some targets may be more enabling of progress than others.

Gardner, in a discussion paper for the Toronto Central Local Health Integration Network (LHIN), frames a health equity strategy around “concrete targets to drive action” (p. 8). The strategy suggests developing and monitoring health equity targets in broad health indicators, specific targets for certain conditions, and targets for health service provision. The context of this target setting within the accountability structure of LHINs is distinct from public health, but may still be informative about public health approaches at the local level.

Lemstra and Neudorf, in *Health Disparity in Saskatoon*, suggest targets as an option for addressing social determinants of health. The National Health Service in the UK has used health
inequity targets as part of their overall strategy for reducing health inequities: “targets are a way of ensuring that resources and effort are directed at tackling health inequalities in an explicit and measurable way” (p. 9). However, they also recognize several challenges to setting inequity reduction targets.

Overall, target setting, although not wholeheartedly supported in the literature, appears to hold some promise as part of a strategy for reducing health inequities, and may have a role at the local public health level. It seems important to focus those targets on areas shown to be remediable, as opposed to setting lofty but perhaps unattainable targets. Target setting as part of a community engagement process, as used by the NHS, connects target setting to other identified aspects of health inequity practice.

3.5 Equity-focused health impact assessment†:
Health Impact Assessment (HIA) is a structured method to assess the potential health impacts of proposed policies and practices. When applied correctly, HIA enables decision-makers to highlight and enhance the positive elements of a proposal, and minimize the aspects that may result in negative health outcomes. By evaluating a broad range of evidence, HIAs are a useful way to assess the impact of proposals (either policy or specific practice) at the general population level. However, they are also recognized as a promising method to address the underlying social and economic determinants of health and resulting health inequities.

As distinct from HIA, an Equity-focused Health Impact Assessment (EfHIA) includes questions such as: Is this proposal likely to affect those who are already disadvantaged? Is it likely to impose new health burdens on specific groups? Is it likely to change exposure to, and/or

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† This section draws extensively on Stephanie Lefebvre’s (Sudbury & District Health Unit, 2009) unpublished summary of the literature on equity-focused health impact assessment.

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distribution of risk factors or specific determinants of health (e.g. living conditions, access to services)? By applying an equity lens to HIAs, it becomes clear that virtually every policy has winners and losers, some groups who will benefit more than others. With the goal of reducing social inequities in health, this knowledge can assist decision-makers to minimize negative health outcomes, compensate those affected with other benefits, and/or ensure that those affected are not already disadvantaged. Furthermore, increasing awareness of the determinants of social inequities in health among decision-makers and other stakeholders has the potential of influencing both immediate and long-term policy decisions. Finally, a truly participatory approach to conducting EfHIAs can build the capacity of individuals and communities and foster social networks among diverse community members.

Health Impact Assessments are a promising tool for public health practitioners and for a variety of diverse sectors and stakeholders. They can be applied to specific projects as well as broad-reaching policies and in a variety of contexts. Although HIAs could be led by many groups, the public health sector with its knowledge of health determinants is well-poised to promote the use of HIAs (and specifically EfHIAs) and to assist with their application.

Challenges for the public health sector in effectively undertaking EfHIAs include resources, professional competencies and the institutional nature of public health agencies. A comprehensive and participatory EfHIA requires intensive investment of resources for evidence collection and assessment, stakeholder consultations, and the development of community profiles. EfHIAs require very specific skill sets, especially related to engaging communities and involving diverse stakeholders in a participatory HIA process. Although the potential of a participatory approach is significant in terms of community capacity-building, it can pose
challenges for established institutions with little experience with the power issues involved in such community development-type work.

It is important to acknowledge the limitations of HIAs when considering the objectivity of the HIA process. The function of HIAs is to assess a broad range of evidence related to a proposal’s impact on health (both positive and negative). However, the HIA itself is merely a tool to inform the decision-making process. The interpretation of the evidence lies with decision-makers, especially in the case of EbHIAs which require value-judgments as to the fairness or avoidability of health outcomes.

3.6 Competencies/organizational standards:
Acting in accordance with the approaches identified in our literature review will require new or enhanced skill sets and capacity building among the public health workforce. The skills base required to work effectively on social inequities in health includes community planning and partnership and coalition building, among other skills — not a common knowledge or experience base for most public health staff. This shift will mean changes in public health recruitment, training, professional development, job orientation and job descriptions. Given that assessing inequities implicitly requires a value judgement, the willingness of public health practitioners to act in accordance with social justice values and beliefs is also important in creating a work force that can respond to the demands of social inequities work.

The Public Health Agency of Canada identified 36 core competencies for public health encompassing essential knowledge, attitudes and skills. Most importantly, these competencies were developed for practice within the context of the values of public health and include, for example, equity, social justice, community participation, and determinants of health. As such, the

What is the evidence base for local public health practices to reduce social inequities in health and how can this evidence optimally inform SDHU management decision-making about programs and services?
core competencies for public health offer a solid foundation for local public health staff recruitment and skill development.

Potvin et al\textsuperscript{36} note that public health programs for social change will require an enabling change to the “bureaucratic/structural model upon which public health practice has been traditionally based” (p. 592). Public health organizations will have to make social inequities work a priority, and commit to working intersectorally and with community engagement as a foundation, something that may amount to a paradigm shift for public health.

3.7 Contribution to evidence base:
Petticrew and Roberts\textsuperscript{37} describe the:

under-populated, dispersed, and different [from the medical literature] nature of the public health evidence base…. It is under-populated because there are few outcome evaluations of public health interventions and fewer still that examine the distributive effects of interventions across different social groups—and can that shed light on the effective means of reducing health inequalities. (p. 199)

We can certainly attest to the gaps in the evidence base with respect to effective local public health practices to reduce social inequities in health. Much of this knowledge is produced by practitioners working in a service delivery context in which publishing is not a priority. Furthermore, any evidence produced is often preliminary, small in scale and specific to a particular context and setting, and might not be accepted for publication in the traditional academic outlets. Grey literature (reports and evaluations) form part of the knowledge base for local public health interventions, but even these do not represent a complete picture of the practice knowledge that exists, and such literature is often difficult to access.

Raphael\textsuperscript{38} identifies a series of actions that should be taken to address determinants of health, and includes in this list the need to “contribute papers to academic and professional journals on developments in Canada and their potential for affecting the health of Canadians” (p. vi). It is
important that the burgeoning knowledge base on addressing social inequities through local public health action be strengthened by intentional dissemination of knowledge, whether through traditional mechanisms such as journal publications, through reports, or through other knowledge exchange mechanisms such as communities of practice.

3.8 Early childhood development:
That early child experiences establish the foundational building blocks for development across the life stages is widely recognized\(^1,39\). Furthermore, with the greatest gains experienced by the most deprived children, investments in early child development have been referred to as powerful equalizers\(^1\).

Simply living under unfavourable socioeconomic conditions during childhood and adolescence increased the risk of health problems later in life…living conditions during childhood are among the greatest determinants of health…their effects are cumulative and have very long term ramifications. (p.39)\(^{30}\)

Early child experiences influence language, physical, social, emotional and cognitive development, which in turn, and throughout the lifecourse, affect learning, educational, economic and social success and health \(^1,41-44\). The literature is consistent on the importance of early childhood development, nurturing environments and quality childhood experiences for positive human development \(^43,45\) and health. Early child experiences are understood to contribute to the positive developmental outcomes and subsequently health through a number of pathways, including psychological, behavioural and physical\(^{43,46,47}\). Multiple reports have noted that a comprehensive continuum of approaches to ECD is required in order to reduce health inequities \(^1,48\). This includes policies, programs and services that are designed through intersectoral collaboration, that are based on “targeted universalism” and that involve communities, especially the most vulnerable communities, in their development, implementation...
and monitoring. Some of the specific interventions noted in the literature include: prevention of Fetal Alcohol Spectrum Disorder, promotion and support of breastfeeding, home visiting, positive parenting practices, school-based interventions for low-income youth, detection of depression, including in pregnant and postpartum women, and detection of family violence. Policy options frequently cited in the literature as effective practice include: a system of high quality childcare and learning, housing quality, integrated child development services, National Child Benefit, food security, Mother Baby Nutrition Supplement, smoking cessation and prevention, youth sexual education and consultation, promotion of equity between rural and urban areas, elimination of child poverty, and reducing exposure to inappropriate models in the media including violence.

3.9 Community engagement:
As noted in other subsections of this report, community engagement is a key cross-cutting strategy in reducing social inequities in health. Public health professionals should involve communities in the development and implementation of policies, programs and services. Frohlich and Potvin emphasize in particular the participation of members of vulnerable populations in problem identification, intervention development and evaluation. The MEKN Final Report notes the dearth of rigorous evaluations of social interventions aimed at reducing health inequalities. However, the authors list the key characteristics identified from others’ reviews of successful programs—each of these eight characteristics includes community consultation, involvement, support and/or engagement as essential (p. 63).

As noted in the equity-focused health impact assessment subsection of this report, significant community engagement can pose challenges for established public health institutions.
Community engagement may require levels of shared power and control that are not necessarily comfortable for public health practitioners. Implementation of an inclusive practice at all levels of the planning cycle will require evidence to further inform decisions regarding the optimal intensity of this practice (p. 63–64)\textsuperscript{14}. A careful assessment of required public health workforce skills-based competencies and values\textsuperscript{35} will also be necessary.

3.10 Intersectoral action:
Intersectoral action is critical, as many of the solutions to addressing social inequities in health lie outside of the health sector. Building strong and durable relationships between public health and other sectors (e.g. education, municipal, transportation, environment, finance, etc.) will be necessary for effective action (p. 62)\textsuperscript{14}. Public health champions have a key role in assisting other sectors to understand how their decisions impact on health equity. The prevailing view is that complex problems require complex solutions that can only be generated through governments and sectors working together to identify problems, share resources and evaluate outcomes\textsuperscript{7}. Intersectoral action requires synergy, coordination, sharing, participatory approaches, time and long term commitment to a common vision\textsuperscript{51}.

Public health has a longstanding history of providing leadership on health issues and working through coalition structures. The opportunity to provide leadership for intersectoral action on the reduction of health inequities may not be within the scope of practice, authority or competency for all public health practitioners and would require reflection to ensure the enablers are in place to maximize the opportunity for success.

IV The Intervention and Implementation (Early Comments)
Of the ten promising public health practices described above, three will be formally adopted as our EXTRA intervention project. We state this as such because it is fully expected that, given our
organizational readiness and supportive contextual factors as described here and in our first IPPR, the SDHU will adopt to varying degrees all of the practices identified. Targeting with universalism (TU), social marketing (SM) and equity-focused health impact assessment (EfHIA) are the practices that will form the EXTRA intervention. (See Appendix F for project program logic models) In selecting these three practices, we used the guiding questions listed in Table 2 (informed by the principles of need, impact, capacity and partnership/collaboration of the Ontario Public Health Standards, 2008).

<table>
<thead>
<tr>
<th>Question</th>
<th>Details</th>
<th>Applicability</th>
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<tbody>
<tr>
<td>Is this a new area of practice? (need)</td>
<td>Represents a new area of practice such that unless it was adopted, there would be no activity in this area</td>
<td>• Yes for SM and EfHIA \n• Partial for TU</td>
</tr>
<tr>
<td>Does the practice leverage existing knowledge and practice? (capacity)</td>
<td>The practice builds on staff competencies and practices, making adoption more feasible</td>
<td>• Yes for SM and TU \n• Partial for EfHIA</td>
</tr>
<tr>
<td>Is there organizational capacity for the practice? (capacity)</td>
<td>Includes aspects of financial resources, leadership support, internal staff champions, workload assessment</td>
<td>• Yes for SM, EfHIA and TU \n• Workload will need to be reviewed regarding competing priorities</td>
</tr>
<tr>
<td>Is the practice within the scope of programming expected of boards of health? (impact)</td>
<td>Falls within the legislated mandate of boards of health, community expectations and organizational direction</td>
<td>• Yes for TU and SM \n• Yes for EfHIA with a progressive interpretation of scope</td>
</tr>
<tr>
<td>Together, do the practices incorporate lifestyle- and policy-focused public health practices? (need)</td>
<td>Having prioritized these two areas in our overall program logic model, we should ensure that the intervention project includes both categories of practice</td>
<td>• Yes (SM=both; TU=lifestyle; EfHIA=policy)</td>
</tr>
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<td>Is there potential for significant impact? (impact)</td>
<td>Practice will either be relevant to the work of many staff and program areas and/or will have significant community impact</td>
<td>• Yes for TU regarding relevance to many staff and program areas \n• Yes for SM and EfHIA regarding potential for significant community impact</td>
</tr>
<tr>
<td>Is there potential for building or enriching community partnerships? (partnership and collaboration)</td>
<td>The practice will involve other non-health partners and involve community engagement (a cross-cutting strategy as per results of our literature review)</td>
<td>• Yes for SM and EfHIA \n• Potential for TU</td>
</tr>
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Further, a strong theme from our literature review was the imperative for policy-based approaches in reducing health inequities\(^{14}\). For a local public health agency, and in the context of the literature review of promising practices, this translates into support for two distinct strategies: 1) increase public and local decision-maker awareness and support for, and ultimate action on, health inequities (e.g. through social marketing); and 2) increase the ability to “equity-proof” (i.e. a policy or programme needs to identify, assess and address its potential health equity impacts so as to maximize the potential health equity outcomes and minimize any potential harm)\(^{14}\) decisions made at the local level by other agencies and sectors (e.g. through equity-focused health impact assessment).

From an organizational perspective, the bulk of public health staff and operational resources are spent on programs and services that in some way focus on individual or lifestyle issues. Given our organization’s priority regarding health equity, we need to ensure that these many activities contribute to this priority. Targeting with universalism is understood to be a promising practice that can help transform our many lifestyle-focused interventions into tools to level up population health\(^{16, 17}\). This work will require accurate descriptions of local social structures to inform targeting and establish evaluation and monitoring plans.

In conceptualizing the introduction of the three public health practices into the organization, we were assisted by the model from Greenhalgh et al (p. 593)\(^{53}\). This model describes different conceptual and theoretical bases for the spread of innovation in service organizations, along a continuum of: “let it happen”; “help it happen”; and “make it happen”. Although at later stages we believe our approach will be more to the left side of the continuum, letting it happen, our initial intervention approach will be more technical/managerial in nature as we help it and make
it happen. We have a high level of governance support and a steering committee in place to oversee this work. Specific work groups with identified internal champions will be established to lead the development of the three practices. Work groups will be tasked with developing concrete action plans, identifying resource needs and specifying timelines, deliverables and evaluation strategies. It is expected that with the further articulation of these practices, cross-organizational uptake will be informed by diffusion of innovations principles and the development of relevant communities of practice.

We are at the early stages of implementation of our intervention. While organizing work is underway, it is not yet systematically informed by our review of the knowledge translation/exchange and organizational change literature. We have, however, assessed our organizational readiness for change. (Both aspects are included as short-term outcome objectives in our project’s overall program logic model, Appendix F). We believe that our organization has many attributes of receptive context for change as identified in the literature: strong leadership, clear strategic vision, good management relations, visionary staff in pivotal positions, a climate conducive to experimentation and risk taking, and effective data capture systems (p. 607). Further, in assessing system readiness for innovation, we note in Table 3 key points regarding our readiness but also regarding areas for further or ongoing attention (adapted from Greenhalgh et al, p. 607–608).
What is the evidence base for local public health practices to reduce social inequities in health and how can this evidence optimally inform SDHU management decision-making about programs and services?

Table 3: System Readiness for Innovation

<table>
<thead>
<tr>
<th>Element of system readiness</th>
<th>SDHU assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tension for change</td>
<td>Staff perceive that the current situation must change, i.e. that there are expectations that we engage in more explicit programming to reduce health inequities(^{55,56})</td>
</tr>
<tr>
<td>Innovation-system fit</td>
<td>The proposed innovations (practices) fit with the organization’s values, norms, strategies, and goals(^{57})</td>
</tr>
<tr>
<td>Assessment of implications</td>
<td>The implications of the practices are anticipated, however, further work must be undertaken to ensure a more detailed review</td>
</tr>
<tr>
<td>Support and advocacy</td>
<td>The supporters of these practices are numerous and strategically placed in the organization</td>
</tr>
<tr>
<td>Dedicated time and resources</td>
<td>This is an area in which further attention will be required (EXTRA survey of SDHU management on evidence use identified needs in this area)</td>
</tr>
<tr>
<td>Capacity to evaluate innovation</td>
<td>The organization has the appropriate skills and capacity to undertake monitoring and evaluation of the practices</td>
</tr>
</tbody>
</table>

In summary, our assessment is that the SDHU is well positioned for implementation of the practices that constitute our EXTRA intervention project. We look forward to the next stage of implementation and to reporting on the specific details of the practices and the realities of implementation in our future report.
What is the evidence base for local public health practices to reduce social inequities in health and how can this evidence optimally inform SDHU management decision-making about programs and services?

References


42. Pascal CE. With our future in mind: Implementing early learning in Ontario; 2009.


What is the evidence base for local public health practices to reduce social inequities in health and how can this evidence optimally inform SDHU management decision-making about programs and services?
What is the evidence base for local public health practices to reduce social inequities in health and how can this evidence optimally inform SDHU management decision-making about programs and services?


52. Pong, R. Rural poverty and health: What do we know? Presentation to the standing Senate committee on agriculture and forestry; May 29, 2007.


55. Sudbury & District Health Unit. The health equity mapping project: A report on process, results, and recommendations for practice. Sudbury, ON: Author; 2008.

56. Sudbury & District Health Unit. OPHS planning path. Sudbury, ON: Author; 2009.

Appendices
# Appendix A

## Social Inequities in Health

### Sudbury & District Health Unit Highlights from the Last Decade

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000-04</td>
<td>Multiple community and staff presentations on social determinants of health (e.g., Social Planning Council, Rotary Club, Registered Nurses Association of Ontario, workplaces, Romanow Commission, etc.)&lt;br&gt;Testimony at the Inquest into the death of Kimberly Rogers (house arrest for welfare fraud)</td>
</tr>
<tr>
<td>2005</td>
<td>Board of Health Determinants of Health Position Statement&lt;br&gt;SDHU OPHA/alPHA conference stream, November 2005: <em>Determinants of Health: Developing an Action Plan for Public Health</em>&lt;br&gt;Resulting alPHA AGM resolution A05-4, November 2005: <em>Determinants of Health as a Mandatory Public Health Program</em>&lt;br&gt;Resulting OPHA AGM resolution, November 2005: <em>Determinants of Health</em>&lt;br&gt;SDHU Working Poor Needs Assessment and Conference&lt;br&gt;Board of Health motion 73-05: <em>Equity Based Planning</em></td>
</tr>
<tr>
<td>2006</td>
<td>SDHU discussion paper: <em>A Framework to Integrate Social and Economic Determinants of Health into the Ontario Public Health Mandate</em>&lt;br&gt;Board of Health motion 63-06: <em>Cost shared operation budget with a focus on health equity</em></td>
</tr>
<tr>
<td>2008</td>
<td>Internal scan: <em>Health Equity Mapping Project</em>&lt;br&gt;CHSRF EXTRA Program Fellowship: intervention project on social inequities and public health practice (2008-2010)&lt;br&gt;Board of Health endorsement of the Greater Sudbury Community Strategy for Poverty Reduction (Social Planning Council of Sudbury)&lt;br&gt;SDHU coordination: <em>Social Inequities in Health Steering Committee</em>&lt;br&gt;Mayor’s Expert Panel on Health Cluster Development: formal liaison with health sector leaders on opportunities for action on poverty</td>
</tr>
<tr>
<td>2009</td>
<td>Board of Health motion 15-09: <em>Put food in the budget campaign</em>&lt;br&gt;Board of Health motion 25-09: <em>WHO Commission on Social Determinants of Health: Call to Action for Ontario Public Health</em></td>
</tr>
</tbody>
</table>

Current to May 25, 2009
**Appendix B**

**Glossary**

| Health inequality | Health inequalities are differences in health status experienced by various individuals or groups in society. These can be the result of genetic and biological factors, choices made or by chance, but often they are because of unequal access to key factors that influence health like income, education, employment and social supports. [Source: Health Disparities Task Group. (December, 2004). Reducing Health Disparities - Roles of the Health Sector: Discussion Paper.] |
| Health inequity (a.k.a. Social inequities in health) | Health inequities refers to those health inequalities that are systematic, socially produced (and therefore modifiable by society’s actions), and are judged to be unfair and unjust [PHAC (2007). Canada’s Response to the WHO Commission on Social Determinants of Health.] *Thus, not all health inequalities are health inequities. |
| Health equity (Levelling Up) | Health equity is the condition where everyone could attain their full health potential and are not disadvantaged due to their social position or other socially determined circumstances. [Brennan, R, Baker EA, Metzler M. (2008) Promoting Health Equity: A Resource to Help Communities Address Social Determinants of Health. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention; 2008.] The Rainbow Model (above) is used at the SDHU to guide program efforts to work as far “upstream” as possible. Levelling up means bringing “up the health status of less privileged socioeconomic groups to the level already reached by their more privileged counterparts” (Levelling Up (part 2), 2006, p. 2). This implies that the overall goal is improving health, not reducing the health of any group for the sake of achieving equal (but lower) health status across the population. |
| Equity oriented health policies | These are policies that aim to reduce or eliminate social inequities in health. Whitehead, M. & Dahlgren, G., 2006 |

Appendix C

Sudbury & District Board of Health
Determinants of Health Position Statement 2005

Position

The Sudbury & District Board of Health uses a population health approach to improve the health of the entire population in its catchment area and to reduce health inequities among population groups. Health improvements are achieved through effective action on the broad range of factors and conditions that determine health. Health inequities are reduced by focusing on vulnerable populations. The broad determinants of health are addressed in each life stage: childhood and youth, mid-life and later life. The Sudbury & District Board of Health recognizes that efforts to improve population health require evidence-based strategies, strong partnerships within and outside of the traditional health sector, and flexibility in the face of complex challenges.

Background

Why are some Canadians healthy and others not? There is a growing body of evidence about what makes and keeps people healthy. In 1974 the landmark Health and Welfare Canada, Lalonde Report, described a framework of key factors that determine health status: lifestyle, environment, human biology and health services. Since that time, this simple framework has been refined and expanded. The population health approach builds on the Lalonde framework and recognizes that health depends on more than access to a good health care system. Excellent scientific research has established that factors such as living and working conditions and how we share wealth in our societies are crucially important for a healthy population.

Commonly referred to as the determinants of health, these broad factors impact on individual and population health. The determinants of health are each important in their own right, however, they interact to forcefully influence health and well being across the lifespan.

Although the determinants of health can be described in many ways, the Sudbury & District Board of Health uses the Public Health Agency of Canada categorization of the twelve major determinants.

The 12 Determinants of Health

1. Income and social status: There is strong and growing evidence that higher social and economic status is associated with better health. In fact, these two factors seem to be the most important determinants of health.

2. Social support networks: The health effects of social relationships may be as important as established risk factors such as smoking, physical activity, obesity, and high blood pressure.
3. Education and literacy: People with higher levels of education have better access to healthy physical environments for their families. Canadians with low literacy skills are more likely to be unemployed and poor, to suffer poorer health and to die earlier than Canadians with high levels of literacy.

4. Employment/Working conditions: Employment provides not only money but also a sense of identity and purpose, social contacts and opportunities for personal growth. Unemployed people have a reduced life expectancy and suffer significantly more health problems.

Conditions at work, both physical and psychosocial, can have a profound effect on people’s health and emotional wellbeing.

5. Social environments: Effective social and community responses can add resources to an individual’s choices of strategies to cope with changes and foster health.

6. Physical environments: At certain levels of exposure, contaminants in our air, water, food and soil can cause a variety of adverse health effects. In the built environment, factors related to housing, indoor air quality, and the design of communities and transportation systems can significantly influence our physical and psychological well-being.

7. Personal health practices and coping skills: There is growing recognition that personal health choices are greatly influenced by the socioeconomic environments in which people live, learn, work and play.


9. Biology and genetic endowment: The basic biology and organic makeup of the human body are a fundamental determinant of health. Genetic endowment provides an inherited predisposition to a wide range of responses that affect health status and appears to predispose certain individuals to particular diseases or health problems.

10. Health services: Health services designed to maintain and promote health, to prevent disease, and to restore health and function contribute to population health.

11. Gender: Gender refers to the array of society-determined roles, personality traits, attitudes, behaviours, values, relative power and influence that society ascribes to the two sexes on a differential basis. “Gendered” norms influence the health system’s practices and priorities.

12. Culture: Some persons or groups may face additional health risks largely due to a socio-economic environment which is determined by dominant cultural values that may perpetuate conditions such as marginalization, stigmatization, loss or devaluation of language and culture and lack of access to culturally sensitive appropriate health care and services.

Reference

Public Health Agency of Canada  http://www.phac-aspc.gc.ca/ph-sp/phdd/
Appendix D
Sudbury & District Health Unit Experience with Smoke-free Homes: Increasing Inequities

Smoke-free Homes

Figure 5.2: Smoke-free Homes (%), SDHU vs. Ontario, 2003 and 2005

<table>
<thead>
<tr>
<th>Year</th>
<th>SDHU</th>
<th>Ontario</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>57.4</td>
<td>62.9</td>
</tr>
<tr>
<td>2005</td>
<td>72.1</td>
<td>70.7</td>
</tr>
</tbody>
</table>

Source: Canadian Community Health Survey, 2003 and 2005

Smoke-free Homes

Figure 5.3: Smoke-free Homes (%), by Household Income, SDHU, 2001-2006

Appendix E
Social Inequities in Health in the International, National, Provincial, Local and Organizational Policy Context

The following are key reports and sources related to social inequities in health, which were described in our IPPR1.

International Policy Contexts:

http://whqlibdoc.who.int/publications/2008/9789241563703_eng.pdf


The European Union’s related work as described in the *Determine project, an EU consortium for action on the socio-economic determinants of health*. http://www.health-inequalities.eu/

National Policy Contexts:

Sweden:


United Kingdom:


The UK has also developed valuable web-based tools:

Norway:

Canada:


Provincial Policy Contexts:


Local Policy Contexts:


The City of Greater Sudbury has adopted a healthy community model and has been designated by the United Nations University as a Regional Centre of Expertise in Education for Sustainable Development:


Appendix F
Program Logic Models
Sudbury & District Health Unit EXTRA Project
Research-Oriented Decision-Making to Guide Local Public Health Practice to Reduce Social Inequities in Health
Overall Program Logic Model

Project Goal

To reduce social inequities in health through public health practice

Long-term Outcome Objective

To implement evidence-informed local public health practice to reduce social inequities in health

Short-term Outcome Objectives

To identify evidence-informed local public health practice to reduce social inequities in health

To identify evidence-informed strategies to effectively change local public health practice

Process Objectives

To determine how individual, lifestyle-focused public health practice can reduce social inequities in health

To determine how policy-focused public health practice can reduce social inequities in health

To determine how to implement and manage organizational change including KTE components

To understand the organizational context for change

Components

Contingent on literature review findings (SOCIAL MARKETING)

Contingent on literature review findings (HEALTH IMPACT ASSESSMENT)

Contingent on literature review findings

Contingent on assessment findings

Contingent on assessment findings

Inputs

*Note: The review of the literature is intended to entail a comprehensive and inclusive strategy, including grey literature and a range of levels of evidence (including expert opinion). It is anticipated that it will be necessary to examine research evidence from other fields to deduce or infer components of effective strategies for public health. It is an a priori hypothesis that social marketing and health impact assessment will emerge as two fields of promising practice for public health, but this hypothesis has yet to be tested by our literature review. In addition to a desire to examine the potential for these two strategies (social marketing and health impact assessment), we are also interested in identifying cross-cutting public health strategies that affect the determinants of social inequities in health (for individual-focused and policy-focused actions) such that social inequities in health are reduced or at least not increased.
Sudbury & District Health Unit EXTRA Project
Research-Oriented Decision-Making to Guide Local Public Health Practice to Reduce Social Inequities in Health
Results from Literature Review of Interventions
O: 09/07/99

Project Goal

To reduce social inequities in health through public health practice

Long-term Outcome Objective

To implement evidence-informed local public health practice to reduce social inequities in health

Short-term Outcome Objectives

To identify evidence-informed local public health practice to reduce social inequities in health

Specific Strategies

- To determine how individual, lifestyle-focused public health practice can reduce social inequities in health
- To review the literature on lifestyle-focused public health actions that can affect SIH
- SOCIAL MARKETING
- EARLY CHILD DEVELOPMENT
- PURPOSEFUL REPORTING
- TARGETING with UNIVERSALISM

Cross-cutting Enabling Strategies

- COMPETENCIES ORGANIZATIONAL STANDARDS
- CONTRIBUTION to EVIDENCE BASE
- COMMUNITY ENGAGEMENT
- HEALTH EQUITY TARGET SETTING

- INTERSECTORAL ACTION
- EQUITY FOCUSED HEALTH IMPACT ASSESSMENT
Sudbury & District Health Unit EXTRA Project
Research-Oriented Decision-Making to Guide Local Public Health Practice to Reduce Social Inequities in Health
Targeting with Universalism Preliminary Program Logic Model
0:1/07/09

Project Goal

Long-term Outcome Objective

To reduce social inequities in health through public health practice

To reduce social inequities in health through individual, lifestyle-focused public health practice

To accelerate the health improvements of more disadvantaged groups through targeted lifestyle-focused public health practice

To improve the health of the entire population through universal lifestyle-focused public health practice

Short-term Outcome Objectives

To identify key developmental or transition-related periods of vulnerability during the lifecourse

To identify vulnerable groups based on socioeconomic or other disadvantage

To adapt programs, messages, and resources to target identified vulnerable populations

To ensure universal access to lifestyle-focused public health practice

Process Objectives

Review the literature on vulnerability periods

Analyze local epidemiology and community social service agency data

Review the literature on specific effective practices

Consider primary data collection with specific communities
Sudbury & District Health Unit EXTRA Project
Research-Oriented Decision-Making to Guide Local Public Health Practice to Reduce Social Inequities in Health
Equity-focused Health Impact Assessment Preliminary Program Logic Model

O: 11/07/09

Project Goal

To reduce social inequities in health through public health practice

To reduce social inequities in health through equity-focused health impact assessment

Long-term Outcome Objective

Short-term Outcome Objectives

To develop organizational competencies in EHIA

To develop other agencies' and sectors' understanding and receptivity to EHIA

To lead EHIA projects in local area

Process Objectives

To develop and appropriately resource supportive organizational structures (e.g., task group, leadership, resources)

To engage in related professional development

To develop educational and sensitization activities (possibly related to social marketing initiative)

To pilot an EHIA project, ensuring robust evaluation and promotion of same