Develop and Test Indicators of Ontario Local Public Health Agency Work to Address the Social Determinants of Health to Reduce Health Inequities

Phase 2 Report:
A Case Study Approach to Pilot Test Indicators

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Disclaimer

The views expressed in this report are those of the research team and do not necessarily reflect those of Public Health Ontario.

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Executive Summary

The Ontario Public Health Standards (OPHS) and Ontario Public Health Organizational Standards (OPHOS) increased the emphasis on addressing the determinants of health and reducing health inequities (OPHS, 2008, p. 2) for local boards of health. A key component of the OPHS requirements is to identify and work with priority populations (OPHS, 2008, p. 2). Boards of health are required to have a strategic plan and ensure that, within it, they describe how equity issues will be addressed in the delivery and outcomes of program and services (OPHS, 2008, p. 14).

Although "*addressing social determinants of health to reduce health inequities*" is fundamental to the work of public health in Ontario, there are no program standards that clearly define the health equity mandate and requirements for local boards of health and their public health agencies. While the literature provides consistent definitions of public health roles for addressing social determinants of health to reduce health inequities, recent research is finding a lack of consensus in practice on how local public health agencies (LPHAs) could and should address the social determinants and tackle health inequities at the local level (Tran et al., 2013, Manson et al., 2012).

More specifically, this project focused on identifying and testing indicators of public health equity activity (which is one part of the process of planning and delivering public health services) in a way that supports the public health roles identified by the National Collaborating Centre on the Determinants of Health (NCCDH) report (2011) including
1) assess and report,
2) modify/orient,
3) engage and
4) lead/participate and support.

These roles are seen as fundamental in reducing health inequities across population groups. For the purposes of evaluating public health work in addressing inequity, process measures tend to be more sensitive than outcome measures to differences in quality of care (Mant, 2001).

Phase 1 involved a three part process of reviewing the literature, obtaining initial feedback on a potential suite of indicators from key informants, and then integrating the results of the key informant interviews to derive a final set of indicators for field testing. Both the literature review and key informant steps confirmed that the use of indicators to assess, measure and report health equity work in public health is still in an early developmental stage. The project team used a group consensus method to identify an initial set of indicators in each of the four NCCDH roles. In accomplishing this, a fifth role pertaining to internal organizational systems emerged. A workbook containing indicators representing five roles was prepared for the next phase.

To test the indicators that emerged from phase 1 for feasibility, understandability, relevance, validity, reliability and comparability, an exploratory, multiple case study design as advanced by Yin (2003) was adopted as a framework for Phase 2. For the purpose of the project, the case was defined as the local public health agency (or LPHA test site). Multiple sites were used to support the reliability of findings and to facilitate exploration of variation in capacity to implement assessment. Two rounds of data were collected.

Analysis of three focus group and workbook responses from all test sites revealed that respondents considered the indicators to be relevant. Refinements have been made to the indicators and the supporting documentation, based on test site feedback, to improve clarity.

Participants from all sites agreed that involvement in assessment was a valuable process. Participants stressed that the information collected should not be used to compare health units, but would be better used to help agencies focus their attention to issues of health equity as part of a shared learning journey.

Introduction

The release of the Ontario Public Health Standards (OPHS) in 2008 signaled changes in how local public health agencies (LPHAs) should assess, plan, implement and evaluate public health programs and services (Ontario Ministry of Health and Long-Term Care, 2008). Changes included an increased emphasis on addressing the determinants of health and reducing health inequities (OPHS, 2008, p. 2). A key component of the OPHS requirements is to identify and work with priority populations (OPHS, 2008, p. 2).

Complimentary to the OPHS, the Ontario Public Health Organizational Standards (OPHOS) released in 2011 established the management and governance requirements for LPHAs (Ontario Ministry of Health and Long-Term Care, 2011). Boards of health are required to have a strategic plan and ensure that, within it, they describe how equity issues will be addressed in the delivery and outcomes of program and services (OPHS, 2008, p. 14).

Although "*addressing social determinants of health to reduce health inequities*" is fundamental to the work of public health in Ontario, there are no program standards that clearly define the health equity mandate and requirements for local boards of health and their public health agencies. While the literature provides consistent definitions of public health roles for addressing social determinants

of health to reduce health inequities, recent research is finding a lack of consensus in practice on how LPHAs could and should address the social determinants and tackle health inequities at the local level (Tran et al., 2013, Manson et al., 2012).

Our scope of interest focused on identifying indicators that would assist in developing and assessing the public health roles specific to addressing the social determinants of health to reduce health inequities, identified by the National Collaborating Centre on the Determinants of Health (NCCDH) report (2011) including
1) assess and report,
2) modify/orient,
3) engage and
4) lead/participate and support.

These roles are seen as fundamental in reducing health inequities across population groups. For the purposes of evaluating work in addressing inequity, process measures tend to be more sensitive than outcome measures to differences in quality of care (Mant, 2001).

Building on the work by the alPHa-OPHA Health Equity Workgroup (alPHA/OPHA, 2013), this report focuses on the findings of the second phase of a larger study conducted to develop and test indicators to address the work of LPHAs in addressing the social determinants of health to reduce health inequities.

Overall Purpose

To provide local boards of health with a rigorously tested and comprehensive set of indicators that is relevant to their work to address health inequity as required by OPHS and OPHOS. The indicators will be feasible for application at the local level where boards are active and accountable.

Phase 1 Study Results

Phase 1a of the research consisted of a systematic literature review and synthesis process to identify a core set of indicators to inform the remainder of the project. The methodology and results of this phase of the project has been fully described in the Phase 1 Report: Review of the Literature.

Phase 1b Methods

In Phase 1b, potential 'health equity content experts' were identified as possible participants in one-hour long individual, semi-structured interviews to examine the indicators extracted from the literature for issues of face validity within each of the public health roles as well as to gather opinions with regard to relative importance, and possible retention or deletion from the list of indicators. In addition, expert informants were asked to identify possible assessment gaps within each role and comment on important areas for further development.

Sample and Data Collection

Potential 'health equity content experts' were identified, using the knowledge and contacts within the LDCP project team. In addition, online searches of affiliated organizations and of authors listed on reports identified during the literature review process were used to supplement the initial list. These additions were vetted through the partnership group and possible key content experts added as appropriate. Provincial, national and international experts were all considered and a total of 18 potential interviewees were identified by the group. Invitations were extended by email and 13 telephone interviews were conducted by the Research Assistant. Prior to the scheduled interview, an information package was forwarded containing the indicators identified in Phase 1 a, classified by Role (See Appendix A). Participants were asked to review the information prior to the interview, and complete the questions as a means to facilitate the discussion. Interview materials are provided in Appendix B.

Analysis

Key informants (n=13) provided valuable written and verbal feedback on the importance, relevance and categorization of each of the Phase 1a indicators and their alignment with the NCCDH's roles. All interviews were recorded and transcripts were produced verbatim. Analysis of all transcript data was performed using NVivo software (version 10) by the Research Assistant and an academic member of the project team. A summary document detailing results of this analysis for each indicator and role, noting general role comments, specific indicator concerns and potential gaps in assessment, was created and discussed by the whole team at a face-to-face meeting of the project team in January 2015.

At the meeting in January, summary analyses were reviewed in-depth. Indicators were designated for inclusion, or exclusion. Included items were further considered for retention within a role or moved to another role, as appropriate. Gaps pertaining to the four roles, identified by the experts were discussed. This process led to the creation of a revised list of potential indicators, suggestions for development and revision, a list of gaps to be addressed and additional potential resources provided by the key informants, according to role. In addition, the analysis indicated that a fifth role to address broad, organizational activities related to health equity was required. An additional domain, entitled 'Organizational and System Development' was added.

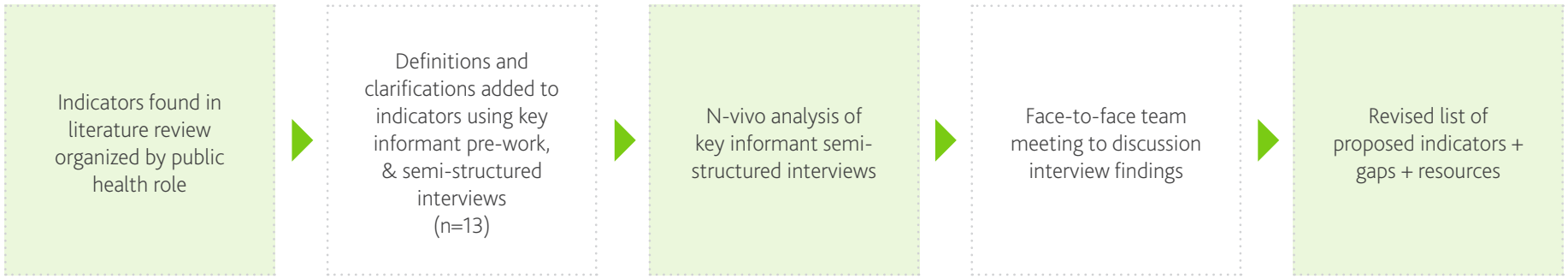
Subsequent Synthesis

Following the meeting in January, it was apparent that based on the input gathered from the key expert informants and the subsequent analysis and discussion process that a development phase was needed to create a list of indicators for testing in Phase 2. In order to maintain progress within the timeframe proposed for the project, an online collaborative working environment (GroupMap) was identified, so that members could work and communicate in a shared space in real time. Working groups were established for each of the public health roles and a Group Map or online workspace established for each indicator. Within this space, working group members could brainstorm ideas and provide feedback, as well as post and access additional resources relevant to the development of each indicator. A series of teleconferences were also scheduled over a 3-month period to supplement the ongoing and emergent development process. Once preliminary lists of indicators were developed using this process, they were reviewed with the team who was also invited to review and comment on them within a GroupMap environment created to facilitate feedback by all LDCP team members.

Phase 2 Research Objective

1) To test the indicators that emerged from phase 1 for feasibility, understandability, relevance, validity, reliability and comparability.

Phase 1b: Consultation



Development Phase

Methods

For Phase 2, an exploratory, multiple case study design as advanced by Yin (2003) was adopted as a framework within which to test the health equity indicators as identified and refined in Phase 1 of the project. For the purpose of the project, the case is defined as the local public health agency (or LPHA test site). Multiple sites were used to support the reliability of findings and to facilitate exploration of variation in capacity to implement assessment. In addition, participant sites engaged with the research team via focus groups to examine the availability of data sources, test the capacity for rigorous data collection, review possible barriers and facilitators to indicator completion and explore anticipated uses for the data collected. This data were used to facilitate analysis of indicator feasibility, understandability, and relevance.

Sample and Data Collection

Indicators emerging from Phase 1 of the study were tested in four local public health agencies. Local Public Health Agencies (LPHAs) were recruited at the time of study initiation, through team members' professional networks, to participate as pilot sites. Preference was given to sites that were representative of a variety of Statistics Canada peer groupings (Statistics Canada, 2013) and of different public health governance structures. All LPHA test sites participated in Phase 2 concurrently, over a period of approximately 16 weeks.

At each of the four (4) participating test sites, individuals were recruited from within the health equity/social determinants team or related working group. Site team leaders were identified at each LPHA test site and took responsibility for the distribution of letters of information and consent. Individuals were eligible to participate if they had been employed by the LPHA for at least two (2) months, and were a member of a health equity/ social determinants of health team or related working group in the LPHA. Interested individuals contacted the project research assistant directly to be added to the project. Consent to participate was obtained from all individuals from all test sites (n=14) prior to the commencement of data collection.

All individuals were invited to participate in an orientation webinar provided by the research project team prior to commencing the first round of data collection. In advance of the webinar, all test sites received a workbook containing a draft of 1) the proposed indicators, 2) background information and definitions and 3) data collection worksheets. This allowed participants to ask questions about the process as well as the materials provided and establish a common understanding of project goals. The presentation was recorded for access by any participant unable to attend the orientation meeting as scheduled.

The case study process was conducted in a series of 5 steps. A broad timeline was established in order to accommodate site orientation, data collection activities, feedback, and scheduling of 3 focus groups Although the process of data collection occurred in sequence, it should be noted that analysis, synthesis and indicator development processes were ongoing, emergent and iterative (See Figure 2).

1 *Step 1 (Weeks 1 - 4)*

Test sites were tasked with collecting indicator data using a standard workbook containing specific data collection worksheets. Worksheets included a series of questions to address indicator relevance, understandability, ease of data collection and feasibility. Participating sites were asked to devote not more than four (4) hours to complete the workbook. In addition, sites were asked to nominate one individual who would assume primary responsibility for data collection in Round 1. On the second round of data collection, they were asked to nominate a different individual to oversee this task.

2 *Step 2 (Week 5 - 7)*

The participant who was most involved with the data collection process, in this first round of data collection, was asked to participate in a telephone focus group. This discussion included the individuals nominated as 'most responsible' from all test sites (n=4). All focus groups were semi-structured. Questions prompted participants to discuss issues of understandability, feasibility and relevance for each indicator item. The format for the focus group(s) is provided in Appendix D.

Focus group discussions were recorded and transcribed verbatim. All worksheets completed by each test site were returned to the research office by email.

Data collected to complete indicator items was entered into Microsoft Excel spreadsheets. All focus group transcripts, and open-ended responses to worksheet questions were entered into NVivo for preliminary coding and analysis (see Analysis, below).

In addition, information from the test sites pertaining to ongoing refinement of the indicators or the information to be contained in a possible user guide to accompany the indicators was uploaded to the group's collaborative site for ongoing refinement (see Analysis, below).

3 *Step 3 (Week 8 - 11)*

Test sites were asked to complete a second round of data collection, using the worksheets as before. However, it was asked that the task be completed by different people at each study site. Data collectors in Round 2 were supplied with a guidance document (described below) based on the results of the first focus group discussions.

4 *Step 4 (Weeks 12 - 14)*

A second telephone focus group was conducted with the participants most involved in data collection at each test site (n=4). As before, the discussion was recorded and transcribed verbatim. Worksheets were returned to the research office via email.

The focus group used the same questions as prompts, but was informed by the previous discussion group, the analysis and the production of the guidance document. The second focus group also required approximately 2 hours and, as before, the discussion was recorded and transcribed verbatim. Worksheets were returned to the research office via email.

Indicator data was recorded in the Microsoft Excel database for further review and analysis. The focus group transcript and all open-ended data from test site worksheets were transferred to the NVivo software program for analysis. Information from the focus group continued to inform collaborative development processes (see Analysis, below).

5 *Step 5 (Weeks 15 - 16)*

A final telephone focus group was held to discuss relevance and anticipated use of the information collected from the indicators. As for all focus groups, the discussion was recorded and transcribed, verbatim.

The set of indicator items as provided to the test sites is provided in Appendix C. Interview guides for Steps 2,4 and 5 can be found in Appendix D. The Standard Indicator Worksheet can be found in Appendix E. A complete set of revised indicators can be found in Appendix F.

Analysis

Analysis within this phase was conducted in several steps. Following the first focus group, all data collected by the test sites in response to the indicator items were entered into spreadsheets (using Microsoft Excel software), where results by site could be viewed easily. Open-ended responses from test site workbooks were compiled and imported for analysis into NVivo software (version 10). Transcripts from the first focus group were likewise imported into NVivo for analysis.

Within the NVivo environment, preliminary coding was conducted to identify common concepts associated with understandability, feasibility (barriers and facilitators, ease of data collection) and relevance associated with each indicator. The results of this analysis (of both the workbook and focus group data) were reviewed by several other team members who provided refining comments. Based on these initial procedures, a guidance document was created to provide feedback to the individuals at each test site who would be responsible for conducting round 2 data collection activities. In addition, concepts identified within the initial analysis that could be used to refine a) the indicator items, and b) the background and definitions that accompanied each item in the indicator workbook were summarized and posted to our collaborative site online.

Within the online working space used by the research team, these comments were used to assist with the refinement of the indicators and associated testing materials. The process for refinement began prior to the second focus group and continued until all concepts and comments identified during the analysis of round 2 data could be addressed.

Following the second focus group, transcripts were imported into NVivo for analysis as were the same

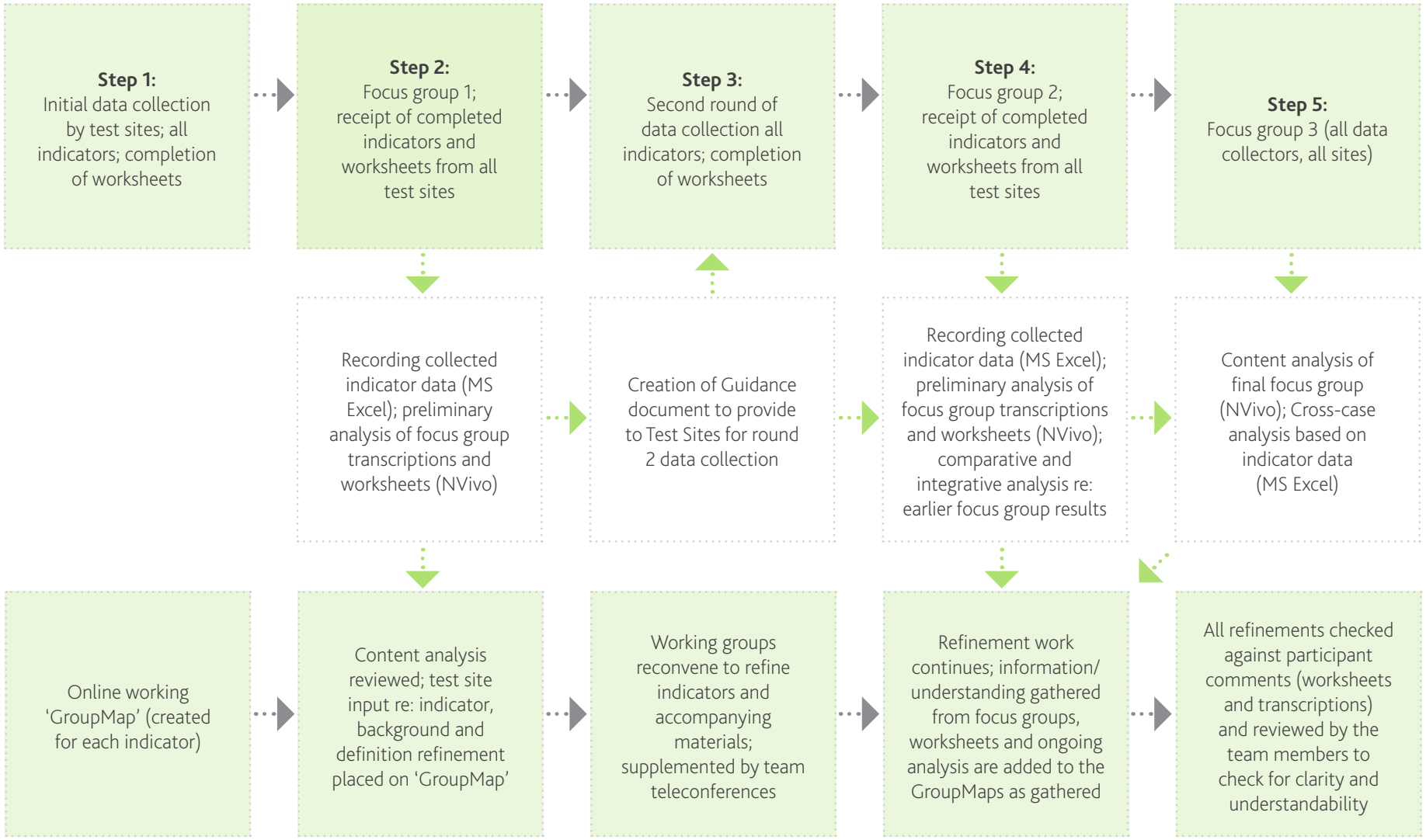
feasibility responses from the round 2 test site worksheets as above. Worksheets from the second round of data collection were used to enrich cross case comparisons. Content analysis was carried out as described above. Concepts and comments for indicator refinement following round 2 were compared with round 1, summarized and added to the online working space where they were used to inform the ongoing refinement process being conducted by the research team. As before, data collected in response to the indicators were entered into the Excel spreadsheets.

The third and final focus group was recorded and transcribed as for all other interviews and focus groups. Content analysis proceeded as described previously. A summary analysis was undertaken that included data from all focus groups.

Ethics Review

Ethics approval was received as required from all participating research team members, partners and test sites.

Phase 2: Test Sites



Ongoing analysis and refinement

Results

The four LPHA sites (described in Table 1) completed all steps of the data collection activities as outlined above.

Table 1. Description of test sites

Pilot Test Site	Governance	Peer Group
Site 1	Regional council acts as the board	A (urbal/rural mix)
Site 2	Autonomous board	C (sparsely populated urban/rural mix)
Site 3	Autonomous board	E (mainly rural)
Site 4	Semi-autonomous board	G (metro centre)

Relevance

Analysis of all focus group and workbook responses from all test sites revealed that respondents considered the indicators to be relevant; however, on occasion, the relevance of the indicator item could be improved by refinements in: 1) increased clarity of the indicator item and 2) the background/definition information that was supplied along with the item.

In the final focus group discussion, participants from all sites agreed that the indicators were important and involvement in this kind of assessment process was valuable. Participants stressed that the information collected should not be used to compare health units, but would be better used to help agencies focus their attention to issues of health equity and learn from each other. For example, participants noted:

"…this is about raising the bar up for everyone, not pointing fingers…everyone is at a different place along the path"

"good to have as a guideline or primer to encourage health units to look at and use and include in our own performance measurements and data collection and look at the indicators of what we should look at and focus on"

Understandability (clarity)

While many of the indicators were considered to be understandable, particularly in the role of organizational and system development, participant feedback called for improvements to indicator clarity as well as additions and revisions to the background and definition information that was provided to the sites as part of the testing materials.

Following the first focus group, and subsequent to the preliminary analysis of the focus group and written workbook responses, it became apparent that several issues related to indicator understandability needed to be addressed in the feedback provided to test sites prior to the second round of data collection.

1) There was confusion over the use of "Board of Health" in the indicator language. In response, sites were instructed to interpret "Board of Health" as "local public health agency" for round 2. In the final version, the indicators have been revised accordingly.

2) Sites requested clarity over the purpose of the exercise and wished to know against what standard their responses would be judged. All materials accompanying the indicators now strongly emphasize that the information gathered is for the LPHA to reflect on their own practices and areas for improvement.

3) Respondents provided comments and suggestions for improving the clarity and understandability of indicators and background definitions. In some cases, respondents noted that lack of clarity hindered their ability to complete (or evaluate the relevance of) the indicator. We have used this feedback to improve the workbook and indicators.

Feasibility

Barriers to completion of the indicators:

Based on the feasibility responses from all completed workbooks as well as the focus group data, a summary of feasibility 'themes' or common 'concepts' across both data collection rounds was created.

For completion of indicators in Role 1, those typically related to the reporting of epidemiological or population data, reported barriers in both rounds were mostly related to the availability and quality of sources. "*Being able to access the right data at the right time*" and having "*sources of data that focus specifically on priority and vulnerable populations*" were specific barriers noted as was the "*cancellation of the long-form census*". At the local level, there were limitations noted around potential data quality. Particularly when the data were collected from "*public health data sources*" and for smaller agencies, there were concerns expressed regarding sample size (i.e. "*sample size for us is going to be a constraint because it will be very difficult for our populations to be stratified*").

For completion of other indicators that did not use traditional epidemiological or population data, it was reported by the test sites that there was often no single, centralized place in which information was stored or a strategy in place for capturing it at the organizational level. In those cases, it was challenging to know where the data was located and/or who to approach to find the information needed.

Other barriers to the completion of the indicators included time and resource capacity. The process of completing this data collection activity required more time than was originally estimated – partly because of the type of information participants needed to access, and the lack of coordinated data collection, storage and mechanisms for communicating the information within the agency (see above). Smaller units noted "*we don't have the people or the time to put toward this the way we'd like to*".

In all focus groups, participants noted that data collection was more difficult if the indicator idea/issue had not been made a priority for the agency (i.e. "*a barrier is that it is not a priority for our health unit*", "*when it is not visible and it's not a priority, it doesn't get done*", "*without a sort of mechanism there, whether it's a mandate, a framework, I think something like that would really help us*").

Facilitators to completion of the indicators:

It was noted by all of the test sites that commitment was essential to a successful data collection process – particularly given that, for some indicators, there was no clear mechanism for data storage or communication. Respondents noted that indicator completion was much easier in areas for which there was a strategic plan within the organization (i.e. "*facilitating our ability would be that we have a strategic plan, it's well disseminated throughout the organization*") and where there was strong leadership supporting the commitment to equity work (e.g. "*we have leadership, strong leadership support for this work and prioritizing this work and I think that's a real strength*").

Indicator areas that had been included as a strategic, organizational priority were more likely to be associated with established and accessible mechanisms for data storage or dissemination, such as website pages, or balanced score cards, to which respondents could turn in their data collection process.

Relationships were also noted as an important facilitator to data collection – particularly with regard to those indicator items that called for engagement with or dissemination to the community. Respondents noted that "*there is a lot of collaboration, interprofessional connections and a lot of community members involved*", and "*we see our strengths in participation…as part of a collaborative partnership*".

Reliability

After the first focus group the team chose, based on the feedback, to provide the sites with some clarification to assist them in their data collection before the second focus group. The team felt strongly about supporting the pragmatic application of the workbook. The consequence of this decision, however, is that a comment cannot be made about the reliability of the indicators.

Applicability

In the final focus group, participants discussed what they had learned and how they might apply information gained from completion of the indicators.

1) All participants noted that the process had highlighted the **need for a strong, organizational approach to health equity activities**. Individuals noted a lack of a "comprehensive approach" across the organization despite doing well in "*some areas, in some programs and in some divisions, but not across the whole health unit.*" One individual suggested that "*having a strategy…would really increase our capacity to be engaged.*"

2) Completion of the indicator items served as a **prompt for future planning**. Participants noted that by completing indicators, we realized that "*this is what we should be doing*" and "*this indicator is giving examples of good practice, better practice.*" The process "*really raised awareness*" and "*raised the awareness of the importance of the work and, I think, really put some wheels in motion*."

3) Collecting this data, **helped the participants to think about doing things differently**. For example, participants noted that they should plan to be more inclusive in their methods of information dissemination (e.g. "*more in plain language*", "*use more accessible formats*"). They talked about mandating activities related to health equity (e.g. Health Equity Impact Assessments) and improving mechanisms for internal communication around health equity activity within their own organizations.

4) For some participants, data collection had provided an opportunity to discover activities within their own agency. These participants noted the need to improve internal communication (e.g. "*might be a pocket of good work happening somewhere that's just a best kept secret*"; "*we learn something is happening in a program area or division area that we weren't aware of, it might create better internal partnership opportunities*").

Cross-case analysis

The responses to the indicators were examined across all sites to explore the influence of context (geography, governance structure), and to identify findings about health equity work in the study sample. The sample was selected purposefully to try to capture differences in population demographics and governance models. A comparison of indicator completion across all four test sites revealed that Sites 2 and 4 seemed to find completion of the indicators easier than the other 2 sites overall. These two sites (one sparsely populated, urban/rural mix and the other a large metro site) reported very different methods of data collection. The sparsely populated site relied on engagement of key individuals from within the organization through a meeting at which the indicators were addressed collectively. The large metro site had a larger number of data collecting participants who engaged members of various teams who could best address the indicator items and assist in data collection.

When comparing completeness of data collection, there was no evidence that LPHAs with autonomous board structures had any relative advantage in terms of their ability to collect data. The LPHA with the semi-autonomous Board appeared to have the fewest gaps in indicator data, while the site where the regional council acts as the Board had the most information gaps. The sites with autonomous board structures fell between the two in terms of data completeness.

There was consensus in responses provided across all 4 sites for the following indicators:

1) **Role 1, Indicator 2** – all agencies identify and plan for priority populations (although there was a standard and explicit process reported in only 2/4 sites)

2) **Role 1, Indicator 3** – all sites involved community members from priority populations in data collection activities other than surveys

3) **Role 3, Indicator 2** – all sites reported forming active partnerships with most of the non-health partners listed

4) **Role 5, Indicator 1** – all sites reported having 4-year strategic plans (though they vary in focus regarding health equity)

5) **Role 5, Indicator 4** – no sites reported having performance appraisals for health unit staff or management that require health equity goals

Limitations

This was a limited pilot test of health equity indicators at only 4 of 36 LPHAs in Ontario; therefore, it is possible

that we did not capture all of the potential experiences regarding indicator application—especially related to feasibility of data collection. Our ability to draw meaningful inferences from the cross-case comparison was also limited. For example, if more northern/isolated health units had participated in the study, perhaps we would have learned more about feasibility of data collection in those contexts, as compared to southern contexts. In addition; the reporting requirements attached to the project, involving deliverables due by certain dates, meant that limitations had to be imposed on the time available for participants to collect data for each indicator. It is possible that, with more time, feasibility of indicator use may have been different.

Recommendations

There was general feedback from all the test sites that the indicators were relevant and important. However, participants also noted that the kind of information that this process yields could not reasonably be used to compare LPHAs. We recommend that the following message(s) accompany the presentation/distribution of the indicators:

1) The purpose of the health equity indicators and workbook is to support local public health agencies to improve their individual efforts with respect to health equity—i.e., to 'move the needle forward' in terms of integration of health equity in their work. For some agencies, the indicators may function almost like a primer or reminder of what they could be doing, while for others the indicators may be a way to determine which things they are doing well and which things they could be thinking about doing in a different way (i.e., they would serve as a self-assessment tool). While it would not be appropriate to use the indicators to

compare the progress of different local public health agencies because of very different contextual factors, they might serve as a useful tool for different local public health agencies to document and share their experiences of integrating health equity into their work in a way that they can learn from each other.

2) Although these indicators would not be used as a basis for inter-agency comparison, it would still be helpful if there could be a centralized repository where LPHAs could access the materials. For example, the recommended health equity indicators, along with the User Guide, could be made available to all public health agencies in Ontario via a website that would also function as a repository for information about health equity action.

3) Given the limited scope of indicator pilot testing, and the emergent nature of the development process, further evaluation of the indicators reliability and validity is warranted. Given this recommendation, the findings emerging from the cross-case analysis serve as preliminary signposts for future work rather than definitive conclusions about the pilot sites.

Conclusion

The review conducted in the first phase of our study revealed few evidence-based indicators that could be used by LPHAs to monitor and guide health equity and SDOH-related activity within each of the defined public health roles. The phases of the study described within this report reflect our immediate response to this challenge. Through a deliberate, systematic and iterative process that was informed by individuals who are acknowledged experts in the areas of health equity, social determinants of health and indicator development as well as the practical experience of individuals working within LPHA contexts, we compiled a set of indicator items that might be used to reflect health equity activity at the level of the public health unit organization. These indicator items will be accompanied by background information and definitions that were also developed by a process of review, testing and consultation with our collaborative partnership as well as the individuals engaged in data collection practices at LPHAs.

However, we do not see this process as complete and, indeed, the process of evaluating health equity-related activity within organizations is in the early stages. As we learned from all of the test sites engaged in the study, there are internal mechanisms of data collection, storage and communication pertaining to many of these types of activities that may require attention. In addition, further evaluation of the reliability and validity of the indicator items would be ideal, particularly given that we were unable to test the reliability of indicators either between assessors or over time.

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Appendix A: Phase 1a Indicators

Role 1 - Assessing and reporting on health status and what could be done to improve it

Recommended Item
Measurement of the percentage of families with English as a second language
Comparison of your organization's workforce diversity with the population diversity
Measurement of the percentage of elders who are offered fall prevention awareness initiatives
Measurement of the percentage of children who have completed recommended vaccination programs
Measurement of diabetes rates
Measurement of the number of clients who are registered in methadone maintenance programs
Implementation of a needle exchange program that is located in the higher need areas
Use of health impact assessment tools
Monitoring {*the percentage of*} Board of Health reports on health statuses that include disaggregation of data by social determinants of health where possible?*

Role 2 - Modify/re-orient public health programs

Recommended Item
The number of current culturally sensitive policies, programs, or strategies employed
The type of culturally sensitive policies, programs, or strategies
The perceived effectiveness of culturally sensitive policies, programs, or strategies
Assessment of whether the organization is conducting equity-focused performance assessments
Use of pre-existing Health Equity Assessment tools
Use of indicators that are specific to issues of importance to Aboriginal communities
Assessment of whether the organization is conducting gender and equity analysis for the purpose of program planning
Assessment of strategies used to support opportunities to increase the capacity of underserved populations
Assessment of plans for capacity building with relevant staff in population health thinking (*e.g. through education and training*)
Employment of a mechanism to ensure that operational planning includes a health equity assessment of programs and services?
Evaluation of how programs and services have changed or been developed based on the health equity assessment?
Following a strategic plan that describes how equity will be addressed.
Following a current operational plan that incorporates the identification and planning for priority populations? If yes, what is the process?

Role 3 - Engage in community and multi-sectoral collaboration in addressing the health needs of these populations through services and programs

Recommended Item
Work/efforts/strategies to reduce language barriers to equitable access
Strategies for the development of community capacity
Involvement of vulnerable youth populations in community decision-making
Involvement of vulnerable elder populations in community decision-making
Participation (*by the organization*) in local poverty reduction efforts.

Role 4 - Lead/support/participate with others to address policies:

Recommended Item
The number of new diversity and anti-racist policies?
The types of new diversity and anti-racist policies?
The perceived effectiveness of the new diversity and anti-racist policies?
The number and type of diversity among the organization workforce, especially managers in proportion to the diversity in the general population
The number of community needs assessments that have been conducted? (within an assigned period of time)

*Indicators in bold were developed by the alPHa-OPHA Working Group

Appendix B: Key Informant Interview Materials (Phase 1b)

Key Informant Interview Pre-work ***(Completed for each role and distributed to each informant prior to the interview)***

Role:

Role Description:

Recommended Item/ Indicator for Development	Please rate the importance of the proposed item as an indicator (1= greatest importance, 4 = least importance) and indicate whether or not you feel this item should be retained.						Has this item been assigned to the right role? (check one)		Additional Comments pertaining to this specific item/indicator
	1	2	3	4	Retain	Omit	Yes	No	

Additional comments regarding indicators/assessment within this role. Please include any items/indicators you feel might have been missed.

External Key Informant Interview Guide (Phase 1b)

Interviewer's script:

"The purpose of this study is to identify a comprehensive set of evidence-based indicators for health equity action that boards of health or public health units in Ontario could use to monitor and guide progress toward fulfillment of public health roles to address the social determinants of health and reduce health inequities. Prior to this interview we distributed a list of items, identified during a review of the peer-reviewed and grey literature, that represent recommended indicators or areas for indicator development. We have asked that you review this list so that you might provide some feedback regarding the importance of these indicators within each of the public health roles, prior to prior to developing and testing the usefulness of a set of these indicators within selected public health agencies."

1. Before we look at the proposed items within each role, tell us about yourself and your own experience(s), and how it is related to health equity.

2. Within Role #1 –

    a) Which of the items proposed as potential indicators did you feel were most important to include?
        i. How did you rate each of these items?
        ii. Why did you consider these to be important?
        iii. Does this item require further development as an indicator? If so, what changes would you suggest?

    b) Were there any proposed items/indicators that you felt could be eliminated?
        i. If so, why?
        ii. would any of the proposed items/indicators be better classified under one of the other roles?

    c) Within this role, are there any other items or indicators that you feel have been missed and should have been included?

    d) [We did not talk about items x,y,z… just briefly, I would like to review your ratings and comments for each of those items]

[Repeat questions for each public health role]

3. Overall, are there any indicators that you feel are missing and that should be added to this list? If so, please describe.

    a) Has each role been captured adequately?

    b) Do the items and areas addressed reflect the need to support engagement in community and multi-sectoral collaboration and/or in policy analysis, development and advocacy for improvements in health inequities?

4. Are you aware of any data in the municipality or elsewhere that may be useful to a local board of health in measuring and assessing its work on the social determinants of health or health inequities?

5. Is there anything else that you would like to add before we end this interview?

Appendix C: Indicators After Phase 1b

Role 1 - Assess and Report

Role 1 - Indicator 1

Does your board of health conduct data analysis of health outcomes of public health importance stratified by demographic and socioeconomic variables?
Yes □ No □

Please check each variable for which information is included and stratified (as appropriate):
- □ sex,
- □ age group,
- □ at least 2 social markers (e.g. education, income, ethnicity, immigrant status),
- □ at least 1 geographical marker (e.g. municipality, urban or rural, neighbourhood),
- □ Aboriginal or indigenous identity (where possible),
- □ a summary measure of absolute inequity, (e.g. absolute difference slope index of inequality, summary measures of socioeconomic inequalities in health)
- □ a summary measure of relative health inequity (e.g. disparity rate ratio, population attributable fraction, relative index of inequality, concentration index).

Please check which health outcomes of interest are explored:
- □ mortality,
- □ early child development,
- □ mental health,
- □ morbidity and disability,
- □ self-reported physical and mental health,
- □ cause-specific outcomes.

Background/Rationale

The World Health Organization (WHO) recommends creation of "a national health equity surveillance system, with routine collection and data on social determinants of health and health inequity" (recommendation 16.2, WHO, 2008, p. 180). According to the WHO Commission on Social Determinants of Health, a health equity surveillance framework should "include information on health inequities and determinants and the consequences of ill-health" and be presented in a stratified manner based on both social and regional variables (WHO, 2008, p. 181). The recommendation itself refers to the development of a national health surveillance system; however, the components are considered relevant to the task of assessing and reporting within local public health context. This recommendation has been taken up by groups working on the development of the Chronic Disease Indicator Framework, who likewise recommend basic stratification in reporting that reflects adoption of a minimum health surveillance system (Betancourt et al. 2014). In Health for All13, 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. (Sutcliffe et al., 2009, p. 9)

The Populations Health Assessment and Surveillance Protocol of the Ontario Public Health Standards (OPHS) states that "[t]he board of heath shall use population health, determinants of health and health inequities information to assess the needs of local populations, including the identification of populations at risk, to determine those groups that would benefit from public health programs and services (i.e. priority populations)" (OPHS, 2008, p. 16). Further, the OPHS states "boards of health shall engage in ongoing population health assessment and surveillance. Information to support this analysis shall be derived from a range of provincial and local indicators using identified data sets and methodologies. These analyses shall use specific information on the following: demographics; burden of disease, including mortality and

morbidity rates; reproductive outcomes; risk factor prevalence; cultural and social behaviours related to health; health conditions (including injury and substance misuse); environmental conditions and hazards; health determinants; and other risks to the public's health)."

Working Definitions

Measures of absolute and relative health inequity: To best interpret patterns of inequity, the WHO commission recommended that at least one summary measure of absolute health inequity and one relative measure of relative health inequity between social groups be included (WHO report, 2008). These measures are complementary and further aid in the interpretation of patterns of inequity within the community (WHO report, 2008).

Summary measure of absolute inequity: "the difference in the rates of health outcomes between the lowest income group and the highest income group" (TPH, 2008, p. 24).

Summary measure of relative health inequity: "the ratio of the rate of health outcomes in the lowest income group compared to the highest income group" (TPH, 2008, p. 24).

An example of both measures of absolute and relative health inequities can be found in the *The Unequal City: Income and Health Inequities in Toronto, 2008*. An example of relative health inequities may also be found in *Opportunity for All. The Path to Health Equity, 2013*.

Surveillance is the systematic and ongoing collection, collation, and analysis of health- related information that is communicated in a timely manner to all who need to know, so that action can be taken. Surveillance contributes to effective public health program planning, delivery, and management. (OPHS, 2008)

Role 1 - Indicator 2

Does your Board of Health identify and plan for priority populations that have experienced (or are at risk for experiencing) health inequities?

Yes □ No □

If yes, what is the process?

1. Identification of priority populations

   a) Standardized and explicit process (e.g. specified in a policy and procedure for operational planning)
   Yes □ No □

   b) Standardized and explicit template (e.g. separate column for priority population).
   Yes □ No □

   c) Other (please describe).
   Yes □ No □

2. Process for identification of priority populations

   a) Health unit has a list of selected priority populations that applies for all programs and services for the entire health unit.
   Yes □ No □

   b) Health unit has a comprehensive list of possible priority populations (e.g. list of 10 subgroups) for consideration.
   Yes □ No □

   c) Health unit relies on staff/management to interpret definition of priority population.
   Yes □ No □

3. Health unit's definition of priority population (tick all that apply)

   a) Based on increased rates of diseases, health outcomes or risk factors regardless of whether it is socially produced (e.g. women, youth, pregnant women, education)
   Yes □ No □

   b) Based on only "socially-produced" differences in health outcomes/risk factors (e.g. income, housing, education)
   Yes □ No □

   c) Based on only qualitative data.
   Yes □ No □

If yes, please describe.

   d) No standard, explicit or agreed-upon interpretation of definition (i.e. inconsistent)
   Yes □ No □

   e) Other
   Yes □ No □ (if yes, please describe)

Background/Rationale:

The OPHS defines priority populations as "those populations that are at risk and for which public health interventions may be reasonably considered to have a substantial impact at the population level". The OPHS does not distinguish between those at risk due to socially-produced factors (e.g. low income, limited education, unemployed, poor housing, discrimination due to culture, race or sexual orientation) and those at risk for biological or physiological reasons (e.g. genetics, sex, age). This indicator is intended to assess how PHU's have interpreted the OPHS' definition of priority populations.

Identification and planning for priority populations may occur through service plans, program plans or program operational plans.

Working Definitions

Priority Populations: "Those populations that are at risk and for which public health interventions may be reasonably considered to have a substantial impact at the population level" (OPHS, 2008). The OPHS does not distinguish between those at risk due to socially-produced factors (e.g. low income, limited education, unemployed, poor housing, discrimination due to culture, race or sexual orientation) and those at risk for biological or physiological reasons (e.g. genetics, sex, age).

Health Inequities vs. Health inequalities: From the OPHS (2008) – "Health inequalities can be defined as differences in health status or in the distribution of health determinants between different population groups. For example, differences in mobility between elderly people and younger populations or differences in mortality rates between people from different social classes. It is important to distinguish between inequality in health and inequity. Some health inequalities are attributable to biological variations or free choice, and others are attributable to the external environment and conditions mainly outside the control of the individuals concerned. In the first case it may be impossible or ethically or ideologically unacceptable to change the health determinants, and so the health inequalities are unavoidable. In the second, the uneven distribution may be unnecessary and avoidable as well as unjust and unfair, so that the resulting health inequalities also lead to inequity in health."

Role 1 - Indicator 3

In addition to surveys, are community members from priority populations who are experiencing (or who are at risk for experiencing) health inequities involved in data collection activities (e.g. using community asset mapping, photovoice, digital storytelling, walking audits, focus group, or other methods)?
Yes □ No □

Please provide examples.

Background/Rationale

The Populations Health Assessment and Surveillance Protocol of the OPHS states that "[t]he board of health shall, collect, manage, and use data and information from multiple sources in order to undertake population health assessment and surveillance. This shall include quantitative and qualitative data and information obtained through various sources" (OPHS, 2008, p.7), including "primary data collection (qualitative and quantitative), as well as data and information from other local, regional, provincial, and national sources" (OPHS, 2008, p. 7). Training may be provided to community members to "enable them to participate in data collection activities (e.g., community asset mapping, PhotoVoice, digital storytelling, walking audits). Once data are collected, community members and partners can also be included in interpreting findings, refining priorities, and developing solutions. The perspectives of community members can bring static data to life by revealing the lived experiences behind the data." (Centre for Disease Control and Prevention,. p. 19)

Role 1 - Indicator 4

Is there a written plan in place for the active dissemination of your board of health reports to the community?
Yes □ No □

Are there specific plans to include dissemination to identified priority populations that have experienced health inequities?
Yes □ No □

Please list the strategies used by your board of health to disseminate information to priority populations that have experienced health inequities.

Background/Rationale

The Populations Health Assessment and Surveillance Protocol of the OPHS states that "[t]he board of health shall provide population health information, including determinants of health and health inequities to the public, community partners, and health care providers, in accordance with the *Population Health Assessment and Surveillance Protocol, 2008"* (OPHS, 2008, p.16). Further, the Ontario Public Health Organizational Standards state that "[t]he board of health shall ensure that the administration develops and implements a community engagement strategy which includes:

- The provision of information to the public on the board of health's mission, processes, programs and activities to improve the health of its community;
- The dissemination of results of population health assessments to its communities;
- **Providing all information noted above in formats that are accessible to everyone in local communities and are available through a variety of methods, including a website** (OPHOS, p. 17)

According to a recent report from the NCCDH (2014), public health activities that are commonly associated with advancing health equity include (in addition to surveillance and research): raising awareness or "raising the red flag" about inequities, reframing what health means in communities, using data and stories to build understanding, and bringing critical issues to light.

Role 2 - Modify/re-orient Public Health Programs

Role 2 - Indicator 1

In the past 12 months, has your Board of Health assessed cultural competencies in programs\services provided to priority populations experiencing health inequities?
Yes □ No □

If yes, in what proportion of these programs/services was there an assessment of cultural competence conducted? (%)

a) What form did your assessment take? Please describe.

b) Did the assessment include an evaluation of participant perception of cultural safety?
Yes □ No □

Please provide an example of the evaluation or assessment used to assess cultural safety from the client perspective:

c) Do program plans incorporate the information gathered from cultural competence assessments?
Yes □ No □

Please provide an example below:

Background/Rationale

The Ontario Public Health Standards (*http://www.health.gov.on.ca/en/pro/programs/publichealth/oph_standards/docs/ophs_2008.pdf*) state that "principle of need acknowledges the importance of using data and information to inform decision-making at the local level regarding program assessment, planning, delivery, management, and evaluation. This principle must be continuously applied at all levels of program and service delivery to ensure optimal performance. **In order to be successful in achieving outcomes, boards of health shall continuously tailor their programs and services to address needs that are influenced by differences in the context of their local communities."**

"The determinants of health will often inform **the needs of a community**. It is evident that population health outcomes are often influenced disproportionately by sub-populations who experience inequities in health status and comparatively less control over factors and conditions that promote, protect, or sustain their health. By tailoring programs and services to meet the needs of priority populations, boards of health contribute to the improvement of overall population health outcomes. Boards of health shall also ensure that barriers to accessing public health programs and services are minimized. Barriers can include, but are not limited to, education; literacy levels; language; culture; geography; economic circumstances; discrimination (e.g., age, sexual orientation, race, etc.); social factors, including social isolation; and mental and physical ability."

If we broaden the concept of culture and apply it to these sub or priority populations (as opposed to a racial or ethnic definition) we can recognize the need to become culturally aware/competent in order to minimize barriers and improve access to services and programs i.e. understanding youth as a sub-culture and minimizing barriers that would foster health inequities in service access.

Working Definitions

Cultural Competence: *http://www.nccccurricula.info/culturalcompetence.html*

Cultural Safety: "Cultural safety takes us beyond cultural awareness and the acknowledgement of difference.

It surpasses cultural sensitivity, which recognizes the importance of respecting difference. Cultural safety helps us to understand the limitations of cultural competence, which focuses on the skills, knowledge, and attitudes of practitioners. Cultural safety is predicted on understanding power differentials inherent in health service delivery and redressing these inequities through educational processes (Spence, 2001)."

Aboriginal Nurses Association of Canada. (2009b). Cultural competence & cultural safety nursing education: A framework for first nations, Inuit and Métis nursing education. Retrieved from *http://www.anac.on.ca/Documents/Making%20It%20Happen%20Curriculum%20Project/FINALFRAMEWORK.pdf*

Culturally-relevant: "Recognizing, understanding and applying attitudes and practices that are sensitive to and appropriate for people with diverse cultural socioeconomic and educational backgrounds, and persons of all ages, genders, health status, sexual orientations and abilities" (PHAC Core Competencies, 2008 p.10)

Role 2 - Indicator 2

Does your Board of Health employ a mechanism to ensure that operational planning includes a health equity assessment of programs and services provided by the health unit?

a) Does the Board of Health provide a standardized health equity assessment tool for staff to assess programs and services?
Yes □ No □

If yes, please provide a list of tools used.

b) Have any Board of Health programs or services been modified as the result of a health equity assessment?
Yes □ No □

If yes, please list and describe:

Role 2 - Indicator 3

Please indicate (and describe where possible) in which of the following ways members of priority populations experiencing health inequities have participated in the development and delivery of Board of Health programs and services:

- □ representatives on committees or boards (please specify),
- □ client advisory mechanisms (describe),
- □ peer workers,
- □ volunteers,
- □ other (please describe)

Background/Rationale

The Ontario Public Health Standards (2008) under the section on guiding principles notes that "Boards of health shall foster the creation of a supportive environment for health through community and citizen engagement in the assessment, planning, delivery, management, and evaluation of programs and services. This will support improved local capacity to meet the public health needs of the community."

Role 3 - Engage in Community and Multi-sectoral Collaboration

Role 3 - Indicator 1

Does your BoH have a community engagement strategy?
Yes □ No □

a) If so, does this strategy include or address priority populations experiencing health inequities?
Yes □ No □

b) If yes, please elaborate.

Background/Rationale

The Ontario Public Health Standards state that Boards of Health shall "foster the creation of a supportive environment for health through community and citizen engagement in the assessment, planning, delivery, management, and evaluation of programs and services"(OPHS, 2008, p. 22). In the Ontario Public Health Organizational Standards, it is stipulated that each board of health "shall ensure that the administration develops and implements a community engagement strategy"(p.17). Each strategy will include "the recruitment and engagement of community partners and the public to participate in the development of the strategic and operational plans for the board of health, and in the evaluation of programs and services."(p.17)

Working Definitions

Community Engagement: As cited in the National Collaborating Centre for Determinants of Health Guide to Community Engagement Frameworks for Action on the Social Determinants of Health and Health Equity (2013) "Community engagement is a process, not a program. It is the participation of members of a community in assessing, planning, implementing, and evaluating solutions to problems that affect them. As such, community engagement involves interpersonal trust, communication, and collaboration. Such engagement, or participation, should focus on, and result from, the needs, expectations, and desires of a community's members." This definition was provided by the Minnesota Department of Health (2013) and may be found at *www.health.state.mn.us/communityeng/*

Role 3 - Indicator 2

Does your board of health establish and participate in collaborative partnerships and/or coalitions to address health equity and social determinants of health issues?

Yes □ No □

a) Please identify with which partners active partnerships or coalitions have been formed:
   i. Non-health sector:
      - □ community planning organizations,
      - □ boards of education,
      - □ social housing authorities,
      - □ labour organizations,
      - □ children & youth services,
      - □ local chambers of commerce,
      - □ other
   ii. Health sector:
      - □ CEO of the local health integration network (LHIN),
      - □ hospital administrators,
      - □ long-term care facility administrators,
      - □ community health centre administrators,
      - □ community care access centre administrators,
      - □ other

Background/Rationale

Many of the requirements outlined in the Ontario Public Health Standards document (2008) can be facilitated via extensive partnerships established within "the health sector (e.g., Local Health Integration Networks and primary health care) and other sectors (e.g., education, social services, housing, workplace health and safety system, and environment)" (OPHS, 2008, pp 20, 22). Further, "the attainment of desired population outcomes, as identified in the Ontario Public Health Standards, is dependent upon the degree of integration of public health programs and services with broader community goals. Collaboration among boards of health, their local community partners, academic institutions, and government is integral to the interpretation and prioritization of needs." (OPHS, 2008, p. 20). The quality and scope of local partnerships shall be an essential indicator of success for boards of health in achieving and maintaining the leadership role required to create the conditions necessary for effective change. (OPHS, 2008, p. 22)

Similarly, the Ontario Public Health Operational Standards direct boards of health to ensure development of a "stakeholder engagement strategy" includes "establishing and participating in collaborative partnerships and coalitions that address public health issues" with the non-health and health sector partners listed above (OPHOS, 2008, p.17).

Working Definitions

Partnership: From the Public Health Agency of Canada (PHAC Core Competencies, 2008), partnership is defined as "collaboration between individuals, groups, organizations, governments or sectors for the purpose of joint action to achieve a common goal. The concept of partnership implies that there is an informal understanding or a more formal agreement (possibly legally binding) among the parties regarding roles and responsibilities, as well as the nature of the goal and how it will be pursued".

Collaboration: Collaboration is defined as a "recognized relationship among different sectors or groups, which have been formed to take action on an issue in a way that is more effective or sustainable than might be achieved by the public health sector acting alone" (PHAC Core Competencies, 2008)

Role 4 - Lead/Support/Participate

Role 4 - Indicator 1

How many position and policy statements, produced by the Board of Health (over the past year), reflect advocacy for priority populations experiencing health inequities?

Background/Rationale

The Ontario Public Health Standards (2008) state that Boards of Health shall contribute to the development or modification of healthy public policy "by facilitating community involvement and engaging in activities that inform the policy development process".

Working Definitions

Advocacy: Speaking, writing or acting in favour of a particular cause, policy or group of people (PHAC Core Competencies, 2008)

Priority Populations: As per the Ontario Public Health Standards (2008), priority populations are identified by surveillance, epidemiological, or other research studies and are those populations that are at risk and for whom public health interventions may be reasonably considered to have a substantial impact at the population level.

Role 4 - Indicator 2

Please indicate in which SDoH area(s) public health unit staff have been engaged in cross-sectoral advocacy for policy development:

- □ Aboriginal status
- □ gender
- □ disability
- □ housing
- □ early life/early childhood development
- □ income and income distribution
- □ education
- □ race
- □ employment and working conditions
- □ unemployment and job security
- □ social exclusion
- □ food insecurity
- □ social safety net
- □ health services (access to care)

Background/Rationale

The Ontario Public Health Standards incorporate determinants of health throughout (both personal and social), and include a broad range of activities intended to promote population health and reduce health inequities by working with community partners. (OPHS, 2008)

Working with others in order to improve, influence or advocate for improved health and well-being of the public is among the core competencies in public health (PHAC, 2008). Partnership and collaboration uses shared resources and responsibilities to pursue a common goal and, in the case of advocacy, "often aims to reduce inequities in health status or access to health services" (PHAC Core Competencies 2008).

Please note that the list of social determinants of health (SDoH) areas provided above have been taken from "Social Determinants of Health: The Canadian Facts" (Mikkonen and Raphael, 2010). This list, as presented by the authors, was derived from The Toronto Charter, originally created in 2002.

Working Definitions

Advocacy: Speaking, writing or acting in favour of a particular cause, policy or group of people (PHAC Core Competencies, 2008)

Social determinants of health (SDoH): The interrelated social, political and economic factors that create the conditions in which people live, learn, work and play. The intersection of the SDoH causes these conditions to shift and change over time and across the life span, impacting the health of individuals, groups and communities in different ways. (NCCDH, *http://nccdh.ca/resources/glossary/*)

Policy: A course or principle of action adopted or proposed by a government, party, business, or individual: the written or unwritten aims, objectives, targets, strategy, tactics and plans that guide the actions of a government or an organization. Policy includes the decisions and actions that maintain or change what would otherwise occur. Policy sets priorities and guides resource allocation to achieve a desired objective (Winnipeg Regional Health Authority, 2012).

Role 5 - Organizational and System Development

Role 5 - Indicator 1

Does the Board of Health's (BOH) strategic plan describe how equity issues will be addressed?
Yes □ No □

If yes, please explain.

a) What time period (in years) does the current strategic plan cover? Please provide dates.

b) Does the strategic plan include outcome targets?
Yes □ No □

If yes, please provide.

Background/Rationale

According to the Ontario Council on Community Health Accreditation (OCCHA), "the existence of a strategic plan is an indicator of good governance because it signals a purposeful approach to planning and priority setting for the organization. Such plans are also a key element in capacity building because they provide an opportunity for an organization to consider its strengths and weaknesses, and to make plans to address these." This indicator addresses the requirement in the Organizational Standard for strategic plans to address health equity, specifically. According to the OPHOS, each Board of Health shall have a strategic plan covering a period of 3 – 5 years that describes how equity issues will be addressed in the delivery and outcomes of programs and services. Strategic plans should be reviewed at least every other year and revised as appropriate (p.14, OPHOS)

Working Definitions

Strategic Plan: An organizational document that generally covers a period of 3 – 5 years, presents the organization's mission and vision, describes the relationship of programs to community needs and established priorities for action within a specific timeframe and with specific resources. (OCCHA)

Role 5 - Indicator 2

Does the Board of Health have a human resource strategy in place to consider the workforce diversity (e.g. by age, gender, race/ethnicity, disability, Indigenous/Aboriginal identity) within the public health unit?

Yes □ No □

a) If yes, please describe?

b) How does this distribution compare to the overall population diversity of your geographic catchment?

Background/Rationale

According to the OPHOS, "The Board of Health shall ensure that the administration establishes a human resources strategy, based on a workforce assessment which **considers the competencies, composition and size of the workforce, as well as community composition**, and includes initiatives for the recruitment, retention, professional development and leadership development of the public health unit workforce" (p.22). Toronto Public Health (TPH) lists strategies to address health inequities that includes creation of a diverse workforce that reflects the communities served by the health unit in order to "leverage the perspectives, experiences and community connections" available within that workforce (*http://www1.toronto.ca/wps/portal/contentonly?vgnextoid=31a64485d1210410VgnVCM10000071d60f89RCRD*)

Working Definitions

Diversity: The demographic characteristic of populations attributable to perceptible ethnic, linguistic, cultural, visible or social variation among groups of individuals in the general population (PHAC Core Competencies, 2008)

Role 5 - Indicator 3

Does your Board of Health provide health equity training to **all staff**?
Yes □ No □

a) If no, what proportion of staff receive training?

b) Does the training include… (check all that apply)

	Which staff receive this training?
□ health equity	
□ cultural competency	
□ social marketing	
□ impact assessment	
□ community engagement	
□ program planning and evaluation	
□ other (please specify)	

Does your Board of Health conduct evaluations of health equity training efforts?
Yes □ No □

a) If yes, please describe your evaluation process.

b) How frequently are evaluations conducted?

Background/Rationale

According to the OPHS (2008), Boards of Health shall ensure a competent and diverse public health workforce by providing ongoing staff development and skill building related to public health competencies. The OPHOS also state that the Board shall ensure the development of a plan to identify the training needs of staff that encourages opportunities for the development of core competencies (OPHOS 2008).

The PHAC (2008) core competency statements stipulate that a public health practitioner should be able to:
- Recognize how the determinants of health (biological, social, cultural, economic and physical) influence the health and well-being of specific population groups;
- Address population diversity when planning, implementing, adapting and evaluating public health programs and policies;
- Apply culturally-relevant and appropriate approaches with people from diverse cultural, socioeconomic and educational backgrounds, and persons of all ages, genders, health status, sexual orientations and abilities.

In their Conceptual Framework of Organizational Capacity for Public Health Equity Action, Cohen and colleagues (2013) identified the following equity-specific knowledge/skills required among the workforce as a whole: *"A skilled workforce that demonstrates competencies (knowledge, skills and attitudes) essential for equity action: ability to frame, articulate and promote equity concepts in ways that resonate with various specific audiences; skilled in education, awareness-raising and social marketing with the public and decision-makers about equity issues; uses evidence-based advocacy for policy changes to support health equity; possesses relational competencies to establish and manage intersectoral alliances and*

meaningful community engagement (particularly with equity-seeking populations); proficient in community development, including building capacity for social change; employs a repertoire of evidence-based policy options and practice and program interventions to create equity within and outside the health system; and an ability to use health equity assessment, audit, and program planning & evaluation tools."

Working Definitions

Evaluation: Efforts aimed at determining as systematically and objectively as possible the effectiveness and impact of health-related (and other) activities in relation to objectives, taking into account the resources that have been used. (PHAC Core Competencies, 2008)

Role 5 - Indicator 4

a) Do performance appraisals for your public health unit staff require health equity goals?
Yes □ No □

If no, what other mechanisms are being used to reflect or appraise staff member's health equity goals?

b) Do performance appraisals for your public health unit management require health equity goals?
Yes □ No □

If no, what other mechanisms are being used to reflect or appraise management's health equity goals?

Background/Rationale

According to the OPHOS (2008), Boards of Health should establish and implement human resource policies and procedures for all staff that include the evaluation of performance with regard to core competencies in public health (including those related to health equity and cultural competence).

Working Definitions

Performance (appraisal) standards: The criteria, often determined in advance, e.g., by an expert committee, by which the activities of health professionals or the organization in which they work, are assessed (PHAC Core competencies, 2008)

Appendix D: Interview Guides for Steps 2 and 4, and 5

Telephone Focus Group Interview Guide (Steps 2 and 4)

Note: *The second and third focus groups will build on the results of the first and the guides used will be revised to reflect the findings as analysis is iterative.*

Interviewer script: *"Now that you have had an opportunity to use the health equity performance indicators, we would like to learn more about your experience and your evaluation of their usefulness."*

"Let's start with indicator #1…"

[RE: UNDERSTANDABILITY]

1. What are your thoughts about the clarity of indicator #1—that is, how understandable is it?
   [Probe: Would there be a shared understanding of this indicator within your organization?]

[RE: RELEVANCE]

2. What are your thoughts about the relevance of indicator #1—that is, to what extent does it measure something that will make a significant difference towards decreasing health inequities in the populations that you serve?

[RE: FEASIBILITY]

3. What were some of the factors that facilitated your ability to collect the data for Indicator #1?

4. What were some of the factors that constrained your ability to collect the data for Indicator #1?

[note to interviewer: facilitators/constraints can include access to necessary data, time, burden on resources, supportive/non supportive relationships, politics, structural barriers]

5. What would you need to increase your ability to collect data for this indicator?

Interviewer script: "Now let's talk about indicator #2…"

[Repeat questions 1-5 above for indicator #2, and then each subsequent indicator]

6. Is there anything else that you would like to add before we end this interview?

Interview Guide for Step 5

In the workbooks provided Role 1 is described as: *{provide description of public health Role 1}*
Indicator 1 addresses data collection, analysis and production of stratified reports at the organizational level.

1. Does this indicator represent work that is relevant to the public health role as described? *(Why or why not? Please elaborate.)*

2. What do you perceive to be the biggest single barrier preventing data collection for this indicator?
   a) *If you could change one thing to increase your agencies' ability to complete this item (collect data for this item) what would it be? (why?)*

3. Having collected information to complete this indicator, how might you apply what you have learned within your own agency?

{Repeat questions 1-3 for each indicator, filling in a description of the public health role as appropriate}

Appendix E: Standard Workbook for Steps 1 and 3

Indicator Data Collection Worksheet (Step 1 and Step 3)

Note: *The Workbook distributed will include a complete set of indicators accompanied by definitions as will be derived from Phase 1 of the project.*

Test Site:

Date:

For each of the indicators, please discuss the *clarity* of the indicator definition and measurement questions (if not clear, please identify specific problem), the *relevance* of the indicator (measures what makes the most difference towards taking action to reduce inequities in your local context), the ease of data generation (e.g., access, time, burden on resources), factors that are either facilitating or constraining your ability to collect the data (e.g., relationships, politics, structural barriers); and *actual data* that was collected.

Indicator (write the name in full):

Clarity of the indicator definition:

Clarity of the measurement question:

Relevance of the measurement question:

Ease of data generation:

Factors that are facilitating your ability to collect data (internal and/or external):

Factors that are constraining your ability to collect data (internal and/or external):

Actual data collected:

[this would be repeated for each of the remaining indicators]

Appendix F: Proposed Indicators Following Phase 2 Testing

Role 1 - Assess and Report

Role 1 - Indicator 1

Does your public health agency conduct routine data analysis of health outcomes of public health importance stratified by demographic and/or socioeconomic variables?
Yes □ No □

How frequently?
□ Monthly
□ Semi-annually
□ Annually
□ Other (please specify)

Please check each variable for which information is included and stratified (as appropriate). Please note that the list provided is not exhaustive.
□ sex,
□ gender,
□ age group,
□ at least 2 social markers (e.g. education, income, ethnicity, immigrant status, sexual orientation),
□ at least 1 geographical marker (e.g. municipality, urban or rural, neighbourhood),
□ Aboriginal or indigenous identity (where possible),
□ a summary measure of absolute inequity, (e.g. absolute difference slope index of inequality, summary measures of socioeconomic inequalities in health),
□ a summary measure of relative health inequity (e.g. disparity rate ratio, population attributable fraction, relative index of inequality, concentration index),
□ other (please specify).

Please check which health outcomes of interest are explored:
□ mortality,
□ early child development,
□ mental health,
□ morbidity and disability,
□ self-reported physical and mental health,
□ cause-specific outcomes (e.g. diabetic renal failure),
□ other (please specify).

Role 1 - Indicator 2

Does your public health agency identify and plan for priority populations that have experienced (or are at risk for experiencing) health inequities?
Yes □ No □

What process is used to identify priority populations?

1. Identification of priority populations
   a) Standardized and explicit process (e.g. specified in a policy and procedure for operational planning).
      Yes □ No □

   b) Standardized and explicit template (e.g. separate column for priority population).
      Yes □ No □

   c) Other (please describe).
      Yes □ No □

2. Your public health agency's definition of priority population (tick all that apply) is:
   a) Based on socially-produced differences in health outcomes or risk factors (e.g. a priority population could be smokers in low income social housing as this group has been shown to have higher rates of daily smoking compared with the general population).
      Yes □ No □

   b) Based on differences in health outcomes or risk factors, but not necessarily socially-produced (e.g. a priority population could be youth smokers as this group was shown to have higher rates of daily smoking compared to older adults).
      Yes □ No □

   c) No standard, explicit or agreed-upon interpretation of definition (i.e. inconsistent).
      Yes □ No □

   d) Other
      Yes □ No □ (if yes, please describe).

Role 1 - Indicator 3

In addition to surveys, have community members from priority populations who are experiencing (or who are at risk for experiencing) health inequities been involved in data collection activities (e.g. using community asset mapping, photovoice, digital storytelling, walking audits, focus group, or other methods) over the past year? This may include data collection opportunities gained through work with partner organizations that may be considered to be supportive of the role played by public health in population health assessment and surveillance as specified by the OPHS.
Yes □ No □

Please list the different types of data collection methods used:

Role 1 - Indicator 4

Is there an overarching, written plan in place that addresses public health agency reporting to the the community?
Yes □ No □

Are there specific plans in place that include dissemination to identified priority populations that have experienced (or are at risk of experiencing) health inequities?
Yes □ No □

Please list the strategies used by your public health agency to disseminate information to priority populations that have experienced health inequities.

Role 2 - Modify/Re-orient Public Health Programs

Role 2 - Indicator 1

In the past 12 months, has your public health agency assessed program / services provided to priority populations experiencing health inequities to ensure that they are provided in a culturally competent manner?
Yes □ No □

If yes, in what proportion of these programs/services was there an assessment of cultural competence conducted? (%)

a) What form did your assessment take? Please describe.

b) Did the assessment include an evaluation of participant perception of cultural safety?
Yes □ No □

Please provide an example of the evaluation or assessment used to assess cultural safety from the client perspective:

c) Do program plans incorporate the information gathered from cultural competence assessments?
Yes □ No □

Please provide an example below:

Role 2 - Indicator 2

Does your Public Health Agency employ a mechanism to ensure that operational planning includes a health equity assessment of programs and services provided by the health unit, at least annually (or with any updates)?
Yes □ No □

a) Does the Public Health Agency provide a standardized health equity assessment tool for staff to use in the assessment of programs and services?
Yes □ No □

If yes, please provide a list of tools used.

b) Have any Public Health Agency programs or services been modified as the result of a health equity assessment?
Yes □ No □

If yes, please list and describe:

Role 2 - Indicator 3

Please indicate (and describe where possible) in which of the following ways members of priority populations experiencing health inequities have participated in the development and delivery of public health agency-led programs and services, over the past year:

- □ representatives on committees or boards (please specify),
- □ client advisory mechanisms (e.g. surveys, focus groups, social media, story sharing strategies, established client advisory committees or advisory groups),
- □ peer workers,
- □ volunteers,
- □ other (please describe).

Role 3 - Engage in Community and Multi-sectoral Collaboration

Role 3 - Indicator 1

Does your public health agency have an organizational level community engagement strategy?
Yes □ No □

a) If so, does this strategy include or address priority populations experiencing health inequities?
Yes □ No □

b) If yes, please elaborate.

Role 3 - Indicator 2

Does your public health agency establish and participate in collaborative partnerships and/or coalitions to address health equity and social determinants of health issues?
Yes □ No □

a) Please identify with which partners active partnerships or coalitions have been formed, over the past year. (Note that this list is not intended to be exhaustive):
   i. Non-health sector:
      - □ local government,
      - □ provincial ministries,
      - □ federal departments,
      - □ broader public sector,
      - □ education sector (including colleges and universities),
      - □ First Nations organizations,
      - □ other
   ii. Health sector:
      - □ primary care,
      - □ community care,
      - □ acute care,
      - □ long-term care,
      - □ non-governmental organizations
      - □ Health Canada
      - □ Public Health Agency of Canada
      - □ First Nations organizations ,
      - □ other

Role 4 - Lead/Support/Participate

Role 4 - Indicator 1

How many position and policy statements, vetted and approved by the board of health (over the past year), reflect advocacy for priority populations experiencing (or at risk for experiencing) health inequities?

Role 4 - Indicator 2

Please indicate in which SDoH area(s) public health unit staff have been engaged in cross-sectoral advocacy for policy development:

- □ Aboriginal or indigenous identity
- □ gender
- □ disability
- □ housing and homelessness
- □ early life / early childhood development
- □ income and income distribution
- □ education
- □ race
- □ immigration status
- □ employment and working conditions
- □ unemployment and job security
- □ social exclusion
- □ food insecurity
- □ social safety net
- □ health services (access to care)

Role 5 - Organizational and System Development

Role 5 - Indicator 1

Does the Board of Health's (BOH) strategic plan describe how health equity issues will be addressed?
Yes □ No □

If yes, please explain.

a) What time period (in years) does the current strategic plan cover? Please provide dates.

b) Does the strategic plan include outcome targets?
Yes □ No □

If yes, please provide.

Role 5 - Indicator 2

Is there a human resource strategy in place to consider the workforce diversity (e.g. by age, gender, race / ethnicity, disability, Indigenous / Aboriginal identity) within the public health agency?
Yes □ No □

a) If yes, please describe?

b) How does this distribution compare to the overall population diversity of your geographic catchment?

Role 5 - Indicator 3

Does your Board of Health provide health equity training to **all staff**?
Yes □ No □

a) If no, what proportion of staff receive training?

b) Does your health equity training include… (check all that apply)

	Which staff receive this training?	How frequently is training offered?
□ health equity		
□ cultural competency		
□ social marketing		
□ impact assessment		
□ community engagement		
□ program planning and evaluation		
□ other (please specify)		

Does your public health agency conduct evaluations of health equity training efforts?
Yes □ No □

a) If yes, please describe your evaluation process.

b) How frequently are evaluations conducted?

Role 5 - Indicator 4

a) Do performance appraisals or your organization's equivalent processes for your public health agency's staff require health equity goals be included?
Yes □ No □

If no, what other mechanisms are being used to reflect or appraise staff member's health equity goals?

b) Do performance appraisals or your organization's equivalent process for your public health agency's management require the inclusion of health equity goals?
Yes □ No □

If no, what other mechanisms are being used to reflect or appraise management's health equity goals?