Evidence Brief: Identifying Facilitators and Processes for Sharing Local Data with Community Partners to Enable Improvement in Health Equity



Public health sharing information with community organizations to promote healthy living for all

Table of Contents

Glossary of Terms	1
Summary	2
Background	3
The Issue	3
This Evidence Brief	4
Survey	4
Research Evidence Review	
What is the Problem?	6
There is currently not enough capacity in community partners to analyze, interpret, and into the use of health outcome data into their work.	-
2. Established relationships and communication channels between community partners and analytics teams in public health are lacking	
3. Mutual goals for sharing health outcome data are not defined	8
Three Options to Address the Problem	9
Summaries (e.g., executive summaries, fact sheets, and detailed reports) are the recommon formats of data sharing, sent electronically	
Data sharing networks of a LPHA and community partners within its catchment should be formed/enhanced	10
3. Public health support to assist with capacity-building in order to efficiently analyze, interpresent integrate health data into community partners' work.	
Implementation Considerations	12
References	16
Appendices	
Appendix A: Graphics of Survey Results	18
Appendix B: Description of Survey Results	21
Demographics of Community Partners Surveyed	21
Types of Data Used and Requested by Community Partners	21
Community Partners Preferred Methods for Receiving Data	22
Appendix C: Survey Tables	24
Table 1: Percent of Survey Participants that Collect or Want to Receive Various Types of Client Demographic Data*	24
Table 2A: Percent of Survey Participants that Collect or Want to Receive Various Types of Health Outcome Data*	25
Table 2B: Percent of Survey Participants that Collect or Want to Receive Various Types of Health Outcome Data*	26
Appendix D: Diagram of Literature Search	27
Appendix E: Literature Review Search Terms	28
Appendix F: Survey Questionnaire	36

Locally Driven Collaborative Project (LDCP)

This Evidence Brief is part of an LDCP funded by Public Health Ontario. The purpose of this LDCP is to provide insight on health data sharing methods and practices with community partners, with an ultimate goal to increase the use of this information to address health inequities in the community.

Authors

Andruszkiewicz, Nicole; MPH, Research Assistant, Niagara Region Public Health Branston, Allison; MPH, Project Assistant, Niagara Region Public Health

Funding

The survey, evidence brief, and the stakeholder dialogue they were developed for, were both funded by Public Health Ontario. The views expressed in the evidence brief are the views of the authors and do not represent the views of Public Health Ontario.

Conflict of Interest

The authors declare that they have no professional or commercial interests relevant to the evidence brief. The funders listed above did not participate in the development of this evidence brief.

Merit review

The evidence brief was reviewed by Dr. James Dunn¹, Dr. Sean Rourke², Glen Walker³ and Lesley Dyck⁴ in order to ensure its relevance. We would like to thank them for taking the time to provide their contributions.

Acknowledgements

The authors wish to thank Dr. Mustafa Hirji and Cassandra Ogunniyi for their guidance in developing this report. We would like to thank all our LDCP team members: Andrew Hendriks, Clare Mak, Elaine Murkin, Ellen Wodchis, Kaelan Moat, Karen Graham, Marty Mako, Marjan White, Matthew Tenenbaum, Sinéad McElhone, Shailee Tanna, Tanis Brown, Tanya Scarapicchia, and Tina Leung for all their help on this project. We are grateful to Carolynne Gabriel from the Middlesex-London Health Unit Library for assisting us with the literature search. Many thanks to all the community partners who participated in our survey.

¹ Professor & Chair, McMaster University Department of Health Ageing & Society; Scientist, St. Michael's Hospital

² Scientist, Li Ka Shing Knowledge Institute of St. Michael's Hospital; Professor of Psychiatry, University of Toronto

³ Executive Director, Positive Living Niagara

⁴ Knowledge Translation Specialist, NCCDH

Glossary of Terms

Community Partners: Encompasses all the types of organizations selected to take our survey. This includes government bodies, health service providers, community health centres, locally-based non-profit/community partners and local branches of (Provincial/National/International) non-profit organizations. Examples for each category are provided in the report.

Local Public Health Agencies (LPHAs): Refers to the 36 agencies/units which provide public health programs and services to communities in Ontario. Each of which is governed by a Board of Health as defined by the Health Promotion and Protection Act (HPPA).¹

Health Equity: Defined as "all people (individuals, groups and communities) have a fair chance to reach their full health potential and are not disadvantaged by social, economic and environmental conditions".²

Social Determinants of Health: The "interrelated social, political and economic factors that create the conditions in which people live, learn, work and play. The intersection of the social determinants of health 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". Social determinants of health include gender, income, ethnicity, and housing among other factors.

Demographic Data: One type of data focused on in this brief. This type of data includes characteristics of a population such as age, gender, income, and geographic location.

Health Outcome Data: One type of data focused on in this brief. Health outcomes are "changes in health that result from measures or specific health care investments or interventions". This type of data includes early childhood development, mental health, morbidity and mortality.

Summary

Access to community demographics as well as behavioural and health outcome data is important for identifying opportunities and gaps to advance health equity work in communities. This requires collaboration between Local Public Health Agencies (LPHAs) and community partners (e.g. YMCA, Children's Services). This Locally Driven Collaborative Project (LDCP) funded by Public Health Ontario aims to identify ways to best engage in behavioural and health outcome data sharing between local community partners and local public health agencies.

An online survey was distributed to 401 community partners with a 25% response rate (n=99). Survey results together with the results of a literature review are the foundation of this evidence brief. The purpose of this brief is to summarize evidence related to data sharing for community partners which will inform the discussion at the deliberative dialogue.

Three specific barriers of this issue have been identified:

- 1. There is currently not enough capacity in community organizations to analyze, interpret, and integrate the use of health outcome data into their work.
- 2. Established relationships and communication channels between community organizations and data analytics teams in public health are lacking.
- 3. Mutual goals for sharing health outcome data are not defined.

Three potential solutions for these barriers have been identified as:

- 1. Providing easy to use summaries of analyzed data rather than raw data for community partners electronically in their preferred format. Summaries (e.g., executive summaries, fact sheets, and detailed reports) are the recommend formats of data sharing, sent electronically.
- 2. Enhancing data sharing networks of LPHAs and community organizations within their catchment. These networks can assist with developing data sharing agreements as well as building trust and ensuring transparency.
- 3. Providing public health support to assist with capacity-building in order to efficiently analyze, interpret and integrate health equity data into community organizations' work. This includes linking to relevant sources of data, providing training opportunities for community partners and providing workshops to facilitate learning about data analysis as recommended in the literature. This recommendation also

includes having a contact person within LPHAs for community partners to alleviate communication barriers, assist with building trust, and provide support for data sharing initiatives.

Discussion at the dialogue will be centered on three themes: the highlighted elements of the issue and potential solutions along with associated implementation considerations.

Background

The Issue

Health inequities are the differences in health status between population groups that result from unjust differences in opportunities to be healthy arising from socially modifiable factors, for example, from experiencing unsafe working conditions, from living in areas with high levels of polluted air, or from experiencing poverty. Health equity is defined as when "all people have a fair chance to reach their full health potential and are not disadvantaged by social, economic and environmental conditions". It is guided by the notion that improving overall population health involves a social dimension and includes striving to reduce health disparities based on differences between groups related to economics, geography, demographics, or social status. Some of the largest improvements in population health have occurred by improving the social determinants of health (e.g., increased public sanitation in the late 1800s and early 1900s), and consistently continuing to address the social determinants of health has the greatest potential to achieve health equity.

However, social determinants of health, such as income level, race, or gender, are complex and the ability to address them does not lie solely within the health sector. Agencies operating outside the health sector can provide substantial support to individuals and families related to the social determinants of health as well as working to modify the underlying causes of these. These agencies include organizations or networks with a variety of mandates, such as drop-in shelters, food banks, community health centres, mental health support organizations, poverty reduction networks, and municipal social services.

Local Public Health Agencies (LPHAs) have access to large quantities of demographic and health outcome data that describe the population they serve. In previous consultations, it was suggested that this data would be helpful to local community partners in addressing health equity. Currently, LPHAs and community partners may experience difficulties with collaborating on data sharing initiatives. As a result, there is an opportunity to support community partners to

- better understand priority populations⁵ in their community;
- inform programs and services that address priority needs;
- support funding proposals; and
- participate in local advocacy efforts in their communities.

This Evidence Brief

This evidence brief is part of a larger project looking to address issues related to public health data sharing with community partners. The evidence brief synthesizes and summarizes findings from a survey and the current research evidence (discussed below). The purpose of this brief is to supply evidence related to data sharing for community partners which will inform a deliberative dialogue taking place on September 26, 2017 with representatives from community partners that work with the six LPHAs involved in this project. The types of data being referred to in this brief include demographic and health outcome data which inform health equity work.

Survey

A total of 401 local community partners were identified within the catchment of 6 participating LPHAs:

- Kingston, Frontenac and Lennox & Addington Public Health Unit (KFL&A);
- Leeds, Grenville and Lanark District Health Unit (LGLDHU);
- Niagara Region Public Health (NRPH);
- North Bay Parry Sound District Health Unit (NBPSDHU);
- Ottawa Public Health (OPH); and
- York Region Public Health (YRPH).

For the purposes of this survey, the focus was on community partners involved in addressing social determinants of health and who have existing working relationships with participating LPHAs. These community partners include:

⁵ Priority populations is a term used in public health, other variations of this term include marginalized, disadvantaged, at risk, etc.

- government bodies (e.g., townships, counties, municipalities);
- health service providers (e.g., community health centres, mental health services);
- locally-based non-profit/community partners (e.g., sexual assault centres, groups promoting physical activity for children, senior services in the community);
- local branches of (Provincial/National/International) non-profit organizations (e.g., John Howard Society, Habitat for Humanity);
- other related organizations that may not fit into the categories above.

In July 2017, the identified community partners were contacted by email to participate in a survey related to health equity and demographic data sharing. Examples of health outcome data includes indicators such as early childhood education, hospitalization, injuries, mental health and mortality while demographic data includes indicators such as age or gender. Out of the 401 surveys sent the response rate was approximately 25%, with 99 surveys completed (surveys were considered 'completed' when the participant clicked 'submit'. This means the participant had to navigate through the entire survey, however they did not have to answer all the questions in order to submit the survey). Only data from completed surveys are used for this evidence brief. The survey asked questions related to the types of data community partners currently use, what types of data they would like to receive, and how they would like to receive that data. Details of the survey findings are located in the Appendices.

Research Evidence Review

The project team conducted a review of both academic and non-academic literature related to Public Health data sharing with community stakeholders. A diagram detailing the search for these studies can be found in Appendix D.

The research questions used to guide the search were

- 1) What are local community partners' needs, challenges, and enablers to collecting, analyzing, presenting and sharing healthy equity-related data for decision-making?
- 2) What does the best available evidence indicate about how to optimally collect, analyze, and share healthy equity-related data to facilitate uptake, and what are stakeholders' views and opinions about these approaches?
- 3) How can local health equity-related data be most effectively presented and shared with community partners to support their needs?

What is the Problem?

A review of the relevant research and survey results identified three specific barriers to data sharing and use between LPHAs and community partners.

1. There is currently not enough capacity in community partners to analyze, interpret, and integrate the use of health outcome data into their work.

It is evident that there is a demand for various types of data that community partners would like to receive. For example, Kanaan et al. state that:

"Communities need many types of data, including data drawn from health records, environmental and resource measures, vital statistics, and a myriad of surveys of community attitudes and behaviors, as well as qualitative...data on the experiences and opinions of local citizens." ^{7(p1)}

Both the definition of health and the available data must be broad in scope in order to address the social determinants of health.⁷ Additionally, having a broad range of data, including environmental data and other social determinants of health data, allows community partners to be "proactive instead of reactive" in their program/service planning to meet local needs.⁸

The results of the survey conducted as a part of this project also indicate that there is a demand for health equity more so than demographic data. For example, the majority of community partners already collect demographic data and therefore do not need to receive this type of data from LPHAs (Appendix C: Table 1). On the other hand, many survey participants do not currently collect health outcome data and high proportions of survey respondents would like to receive it from LPHAs. For example, 10% of the survey respondents from local branches of non-profit or community partners (e.g. local food banks or shelters) currently collect hospitalization data and 80% of respondents from this category indicated they would like to receive it (Appendix C: Table 2A & 2B). These findings suggest that many community partners may not have the capacity to access or use health outcome data that would be useful to them.

Furthermore, research evidence shows that community partners often do not have the skills, technological capacity, or funding to analyze and interpret data shared with them.^{9,10} The survey had similar findings: the most prevalent internal factor to assist community partners with using shared data was improved capacity (i.e., human or

financial resources) to conduct analyses (39% of respondents ranked this as their first choice). Five survey respondents commented that they lack the skills, tools, or time within their agencies to process and analyze data; one survey comment stated: "we do not have the capacity to receive and analyze raw data".

Data that has been analyzed and interpreted was the most preferred type of data to receive among community partners surveyed. Only 13% of community partners selected analyzed, not interpreted data their preference for type of data received from LPHAs, as it can lead to misinterpretation of results (Appendix A: Figure 8). This concern is also noted in the research evidence, as LPHAs may be hesitant to provide data to users because of the potential to misinterpret the data. 10 The research evidence and survey both identify hesitancy with sharing and using data due to potential misuse. This hesitancy may be due to community partners not having the technical skills to interpret analyzed data or the capacity to take the time to interpret results. Another barrier identified in the literature is the potential for some uncertainty among agency staff to on how to best prioritize data in an evidence-informed approach, (i.e., having an agency culture that places precedence on experiential knowledge over data). 11 The research evidence identifies a lack of resources for LPHAs and users to collect and interpret data as a major barrier. 12 As indicated above, similar results were found in the survey comments: data sharing tasks need to be prioritized as they compete against other deadlines.

2. Established relationships and communication channels between community partners and data analytics teams in public health are lacking.

The literature indicates that a significant barrier to effective data sharing is a lack of communication between LPHAs and community partners. This lack of communication may be due to insufficient resources and capacity for LPHAs and community partners to develop effective data sharing relationships. Survey findings indicate that over 35% of community partners ranked improved processes to access relevant data as their top choice for an external factor that would allow them to use data more efficiently (e.g. better communication between people who collect and analyze data and decision-makers). The importance of relationship-building to facilitate collaboration is also consistently shown in the research evidence. ^{7,8,13}

Research evidence emphasizes the effectiveness of direct communication between LPHAs and users, suggesting emails, face-to-face meetings, policy briefs, professional

organizations, or workshops.^{9,12} In contrast, the survey results indicate that less than 40% of community partners prefer meetings, instead selecting email notices and interactive websites as their top choices for method of data delivery (Appendix A: Figure 11). Survey comments suggest that respondents chose these two time saving methods of data delivery due to limited capacity to invest in more time-intensive forms of data delivery such as in-person meetings.

As mentioned in problem 1 above, the research evidence demonstrates a lack of trust between LPHAs and users, which can hinder data sharing opportunities.^{7,8,10,13,14} A report by the Robert Wood Johnson Foundation notes trust as the limiting factor for all data sharing arrangements: "Data exchange moves at the speed of trust".^{8(p3)} Therefore, the absence of consistent communication between LPHAs and users is a substantial barrier that prevents trust and increases hesitancy to share and use data.

3. Mutual goals for sharing health outcome data are not defined.

The research evidence emphasized the importance of communicating the objectives and goals of data sharing with partners in order to confirm shared goals. ^{7,8,14} One tool to achieve these shared goals is a 'value proposition', which is a document that explains how data will be used and to define project goals among all parties invovled. ^{8,14} Data sharing can be a challenging task, sometimes seen as risky, and although there are long-term and large scale benefits, these benefits often do not substantially impact individual agencies. The Robert Wood Johnson Foundation notes that community partners want to know that their data is being used safely and productively in pursuit of community-wide goals, but also lack the understanding themselves of what broad issues exist outside their areas of expertise, and how aggregate data can be used to address these issues. ⁸ Outlining these high-level goals and processes together can encourage agencies to participate as they become aware of the potential impacts of data sharing. Additionally, data sharing networks depend on their participants: the more agencies share data, the more others will want to be involved.

The survey identifies the main reasons community partners collect data. The top three ranked reasons include:

- maintaining a record of individual client information;
- to inform the development of programs and services; and
- to evaluate programs and services.

These results indicate that there is currently no standard method to discuss health data sharing, it is essential that mutual goals for shared data among LPHAs and community partners are discussed.

Three Options to Address the Problem

Using evidence from the research review and survey, three potential solutions to the aforementioned problems have been identified:

1. Summaries (e.g., executive summaries, fact sheets, and detailed reports) are the recommend formats of data sharing, sent electronically.

As noted in the first barrier, community partners may have limited time, resources, and capacity for data-sharing initiatives. Survey respondents noted that raw data has little utility, is time consuming to analyze, may be misinterpreted, and community partners have limited capacity to analyze and interpret findings. As a result, a majority of respondents preferred to receive data that has been fully analyzed and interpreted, as opposed to receiving raw or partially analyzed data that would require further analysis and/or interpretation (Appendix A: Figure 8). Research evidence demonstrates that providing small amounts of data consistently over a period of time allows LPHAs to meet community partners' short term objectives and prevents delays in the use of the data shared.⁹

Furthermore, time saving methods to receive shared data were favoured by the community partners surveyed. They preferred executive summaries to evidence briefs of data findings, and email notices or interactive websites to face-to-face meetings with health LPHAs (Appendix A: Figure 11). Approximately 33% of community partners ranked executive summaries as their first choice for ways in which to receive data, followed by fact sheets (26%) and full detailed reports (23%) (Appendix A: Figure 9). Apart from meeting face-to-face, the research evidence suggested communicating via email or over the phone to assist with sharing and evaluating data. Community partners have diverse backgrounds and encompass many disciplines. Because of this diversity, borrowing tools of communication from other fields (e.g. advertising, journalism) by considering graphics, compelling statistics, and working collaboratively with community partners to understand their needs can help effectively communicate data with the intended users. Therefore, based on the literature and survey findings, consistent communication of data in summarized formats such as executive summaries sent via email or interactive websites is recommended.

2. Data sharing networks of a LPHA and community partners within its catchment should be formed/enhanced

Developing a network with the goal of establishing two-way communication channels and ensuring shared goals for health data sharing holds much promise. Increasingly, these types of networks are being created between public health and community partners which are being used to address social determinants of health and health equity. Kothari et al. note that this type of partnership counters the silo effect of individual agencies by addressing community-wide issues together, and engaging in knowledge sharing to improve all participating agencies.^{11(p2)}

The Robert Johnson Foundation notes that such networks are necessary for improved collaboration:

"Communities, broadly defined, have a greater chance of succeeding at improving health and wellbeing when organizations work together to create both formal and informal networks that integrate health with social and community services. Leadership, mutual respect, a shared vision, and common goals are essential to spurring these kinds of networks and systems". 8(p9)

Furthermore, consistent communication is identified as an important way for all parties to understand and properly interpret the results of data findings. Trust can be built when LPHAs and users are familiar with each other, and when the project goals and purpose of the data sharing project are clear to everyone involved.^{8,13,14} The research indicates that LPHAs and users should work together from the onset of data collection to build trust and ensure transparency, which in turn develops a favorable setting to facilitate data sharing. The research evidence outlines the importance of having a transparent network in which the community partners are heard, noting that careful consideration is required to ensure all types of community partner organizations representing diverse clients are included. Populations who experience health inequities should also be considered in this process and goals should be set around the needs of those who experience health inequities.^{8,14,15} Networks allow community partners to share data they have collected with their LPHA to be analyzed and interpreted. This connection to the LPHA also enables community partners to access health equity and population health data while gaining knowledge and skills regarding data management, analysis, and interpretation which they may not have.

Having a network to support the creation of data sharing agreements can assist with the development of a standard method to share data. Data sharing agreements assist community partners to integrate health data into their practice and ensures the development of mutual goals among LPHAs and community partners. The research evidence points out that data sharing agreements should consist of mutual and feasible data sharing goals for all parties involved and should describe how the data can be used. Data sharing agreements help identify common goals, understand how data will be used by community partners, ensure data confidentiality standards are maintained, and clarify any ethical implications.

Within these networks it is important to attain the views of community partners. Woolf et al. recommend using community based participatory research methods:

"Principles of community based participatory research (CBPR) are important to research translation, including mutual respect and trust, co-learning, shared decision making, equitable involvement, respect for indigenous knowledge, cultural humility, capacity building, empowerment, valuing diversity, prioritization of research that benefits the community, co-ownership of data and research products, and dissemination of findings to the community." 11 (p470)

Survey results indicate that about 40% of community partners ranked making data sharing agreements as their top choice for external factors their organizations would like to address in order to use data more efficiently. Both the research evidence and community partners state that data sharing agreements are an essential first step to data sharing. Therefore, networks can provide support for communication, cooperation, goal definition, and data sharing agreement development among LPHAs and community partners. This can alleviate capacity barriers faced by community partners who may not have the time and resources to participate in data sharing initiatives.

3. Public health support to assist with capacity-building in order to efficiently analyze, interpret and integrate health data into community partners' work.

This recommendation suggests having LPHAs assist with capacity-building activities within their communities. This support includes linking to relevant sources of data and providing training opportunities for community partners. The research evidence states that workshops are recommended to facilitate learning about data analysis and results, and can assist with developing relationships between LPHAs and users. ^{12,13} LPHAs can

help community partners to identify relevant data sources from provincial, regional and local levels, they can help community partners to understand how data has been collected and analyzed.¹³ Furthermore, LPHAs can explain the value and potential risks of sharing health data, and can help community partners understand how to best use the data available to them.^{11,13} Additionally, community partners provide an opportunity to contextualize data by gathering more qualitative data regarding lived experience.

Another recommendation is to have a community liaison within each LPHA to assist community partners with data sharing initiatives. This contact person could facilitate communication between LPHAs and users, they could provide accurate and timely information regarding health data, data analysis, and could assist with developing data sharing agreements. A contact person would be able to help all parties understand their individual roles and would therefore enable more efficient use of shared data. The contact person could work with community partners from the onset of data collection to build trust and ensure transparency, which as noted previously, can facilitate data sharing. There should be clear communication about the data sharing purpose, needs, and expectations for all parties involved to ensure goals are met efficiently. Furthermore, this contact person could assist with providing analyzed health data to community partners and ensure results are properly interpreted, as well as working with community partners in assessing their data needs.

Implementation Considerations

The main barriers at the systemic, LPHA, and community-partner level for each of the above options are identified in the table below based on survey and literature findings. Barriers to implementation should be considered in order to identify the most effective and efficient option. Barriers are found at every level and include those related to capacity, resource availability, and financial investment.

Option #1: Summaries (e.g. executive summaries, fact sheets, and detailed reports are the recommend formats of data sharing, sent electronically	Option #2: Data sharing networks of a LPHA and community partners within its catchment should be formed/enhanced	Option #3: LPHA support to assist with capacity-building in order to efficiently analyze, interpret and integrate health data into community partners' work
--	--	--

	LPHA Barriers						
-May not have the capacity to provide synthesized summaries for all data requests from community partners -May not be able to share sensitive data due to ethical concerns	-May not have the capacity or resources to develop and support a network of LPHA and local community partners, including reaching those in rural/remote areas -May not be able to share sensitive data due to ethical concerns	-May not have the capacity to dedicate as a key contact for community partners -A single person contact for community partners may not fit with the organizational structure of some LPHAs -May not have the capacity for providing training -May lack the knowledge of available resources, data sources, or data analysis (some LPHAs do not employ epidemiologists) -May not be able to share sensitive data due to ethical concerns					
	Community Partner Barriers						
-May not have the skills to efficiently translate synthesized findings into practice -May not prioritize using summaries without consistent two way communication with LPHA -May not prioritize data over experiential knowledge	-May not have the capacity in terms of staff time to contribute to network -May not feel they have the baseline knowledge required to contribute to the network -May not be interested in investing scarce resources in order to participate in network -May not want to participate in network without knowing what tangible benefits may result	-May not have the capacity to work with LPHA support -May not have the resources or want to invest resources in order to receive LPHA support -May not share the same vision for data sharing project as LPHA support -Capacity building may not be distributed equally throughout community partners					

	-May not value data over experiential knowledge -May not know where to access data needed or have funds to access costly data -May experience compatibility issues when using different programs for data analysis -May not know what constitutes data or what type of data to collect	-Staff may not prioritize data over experiential knowledge
	System Barriers	
-Provincial funders may not want to invest in a more coordinated approach to data sharing -Provincial funders may not be able to include all community partners due to financial constraints, increasing inequities	-Provincial funders may not want to invest in a more coordinated approach to data sharing -May resist any new expenditures for network -Provincial funders may not want to invest in a more coordinated approach to data sharing may not be able to include all community partners, increasing inequities -Some agencies may lack more resources than others, limiting their ability to participate -Some agencies may hesitate to partner with other community partners and LPHAs if transparent and beneficial relationship have been lacking in the past	-May not want to invest in a more coordinated approach to data sharing -May resist any new expenditures for LPHA support -Provincial funders may not be able to include all community partners due to financial constraints, increasing inequities -Agencies may not have pre-existing relationship with LPHA to encourage them to undertake LPHA-led capacity building -No standardized processes across LPHA in Ontario to support these activities -May be a lack of knowledge and skills regarding privacy of data

-May be a lack of knowledge and skills regarding privacy of data	
-Individuals with lived experience may face barriers to engagement (e.g. time constraints, transportation limitations, feeling uncomfortable)	

References

- Public Health in Ontario Association of Local Public Health Agencies. http://www.alphaweb.org/page/Public_Health_ON. Accessed September 13, 2017.
- 2. Glossary of essential health equity terms NCCDH | National Collaborating Centre for Determinants of Health. http://nccdh.ca/resources/glossary/. Accessed August 30, 2017.
- 3. Outcomes | CIHI. https://www.cihi.ca/en/health-system-performance/quality-of-care-and-outcomes/outcomes. Accessed September 13, 2017.
- WHO | Glossary of terms used. WHO. 2010. http://www.who.int/hia/about/glos/en/index1.html. Accessed August 23, 2017.
- 5. Frequently Asked Questions | Social Determinants of Health | NCHHSTP | CDC. https://www.cdc.gov/nchhstp/socialdeterminants/faq.html#c. Accessed August 30, 2017.
- 6. Tenenbaum M. Advancing Health Equity in Niagara Region: Evidence Brief to Support a Deliberative Dialogue. *Niagara Reg Public Heal*. 2016.
- 7. Kanaan S. The Community as a Learning System for Health: Using Local Data To Improve Local Health. *Natl Comm Vital Heal Stat.* 2012. http://ncvhs.us/wp-content/uploads/2014/05/111116lt1.pdf.
- 8. Data for Health Advisory Committee. Data for Health -- Learning What Works. *Robert Wood Johnson Found*. 2015:82. http://www.rwjf.org/content/dam/farm/reports/reports/2015/rwjf418628.
- 9. David Hailey, Jeremy Grimshaw, Martin Eccles, Craig Mitton, Carol E. Adair, Emily McKenzie, Scott Patten, Brenda Waye-Perry, Leif Rentzhog, Paul Taenzer, Christa Harstall, Saifee Rashiq, Pamela Barton, Don Schopflocher LJ. Effective Dissemination of Findings from Research. *Inst Heal Econ*. 2008;(June):79. doi:x.
- 10. van Panhuis WG, Paul P, Emerson C, et al. A systematic review of barriers to data sharing in public health. *BMC Public Health*. 2014;14(1):1144. doi:10.1186/1471-2458-14-1144.
- 11. Kothari A, McPherson C, Gore D, Cohen B, MacDonald M, Sibbald SL. A multiple case study of intersectoral public health networks: experiences and benefits of using research. *Heal Res Policy Syst.* 2016;14(1):11. doi:10.1186/s12961-016-0082-7.
- 12. Jacob RR, Allen PM, Ahrendt LJ, Brownson RC. Learning About and Using Research Evidence Among Public Health Practitioners. *Am J Prev Med*. 2017;52(3):S304-S308. doi:10.1016/j.amepre.2016.10.010.

- 13. Harper D, Edelstein M, Herten-Crabb A, Brack M, Heymann D. *A Guide to Sharing the Data and Benefits of Public Health Surveillance | Chatham House.*; 2016. https://datasharing.chathamhouse.org/about/. Accessed July 31, 2017.
- 14. Brack M, Castillo T. Data Sharing for Public Health: Key Lessons from Other Sectors. *Cent Glob Heal Secur*. 2015. https://scholar.google.ca/scholar?q=data+sharing+and+public+health+and+castill o+and+brack&btnG=&hl=en&as sdt=0%2C5. Accessed July 4, 2017.
- 15. Woolf SH, Purnell JQ, Simon SM, et al. Translating Evidence into Population Health Improvement: Strategies and Barriers. *Annu Rev Public Health*. 2015;36(1):463-48. doi:10.1146/annurev-publhealth-082214-110901.

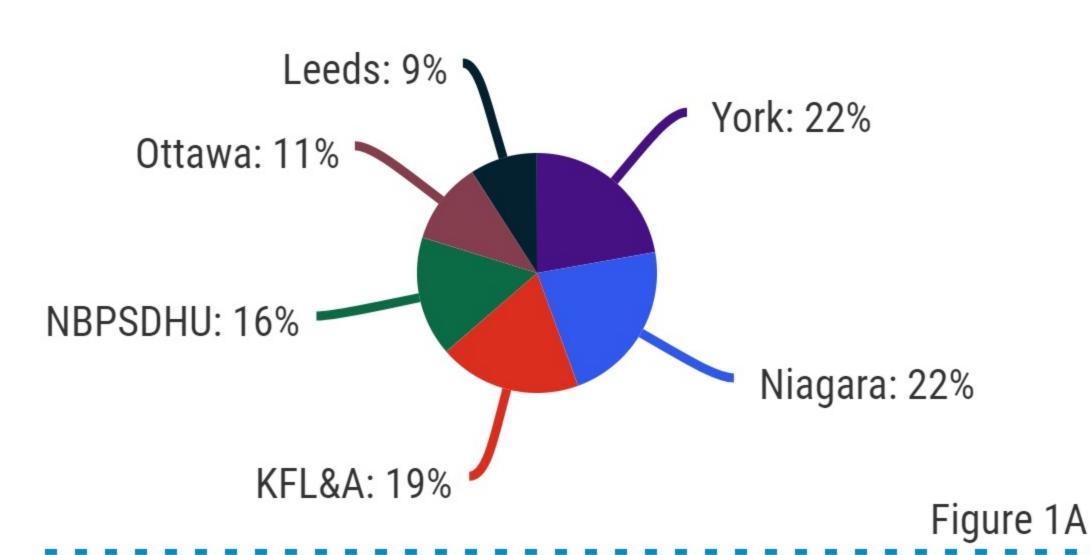
Appendix A: Graphics of Survey Results



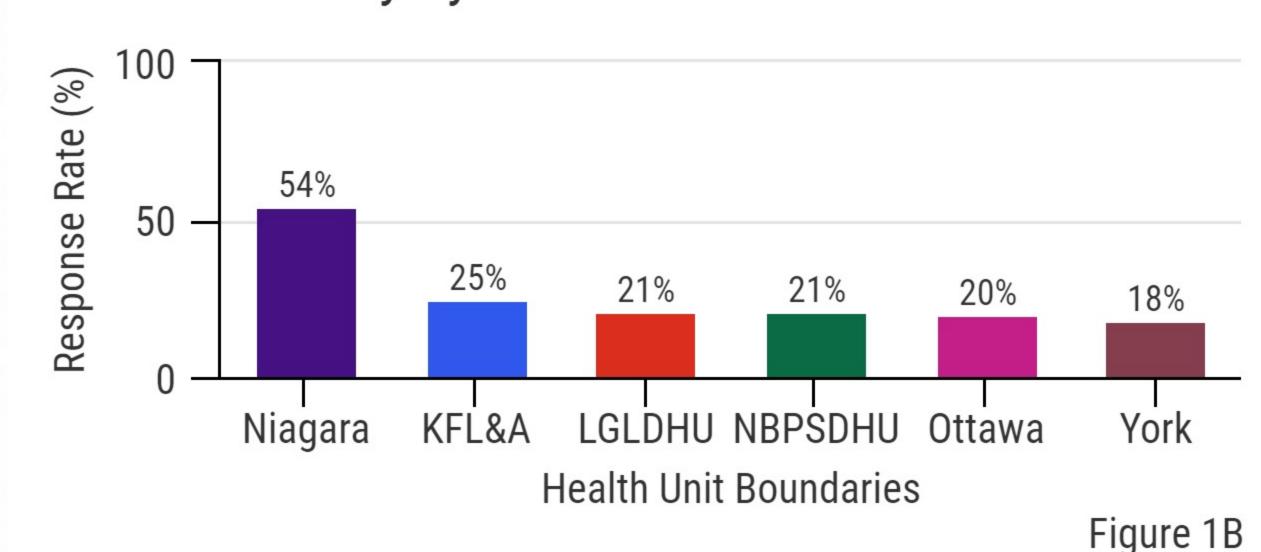
Shairng Health Information Survey

Community Partner Demographics

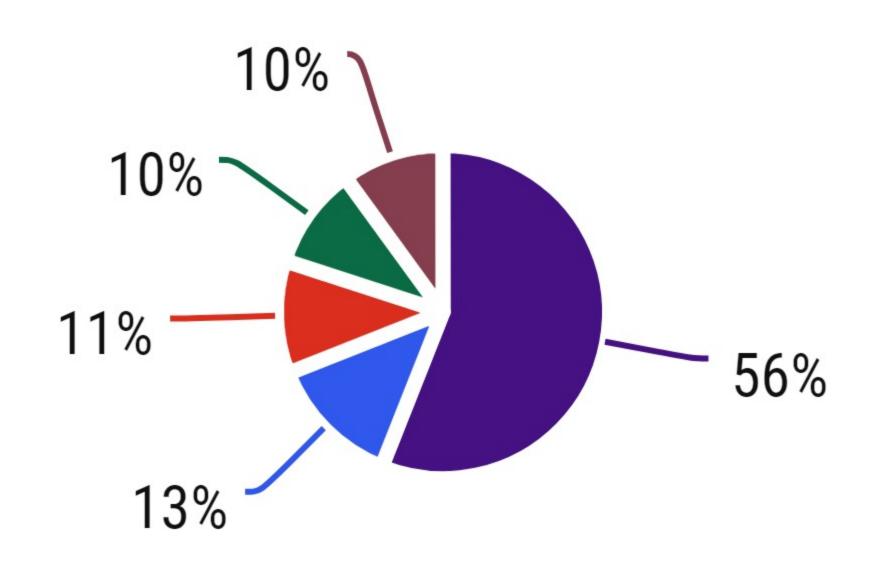
Distribution of Completed Surveys by Health Unit Boundaries



Community Partners Response Rate to Survey by Health Unit Boundaries



Percentage of Respondents by Type of Organizations

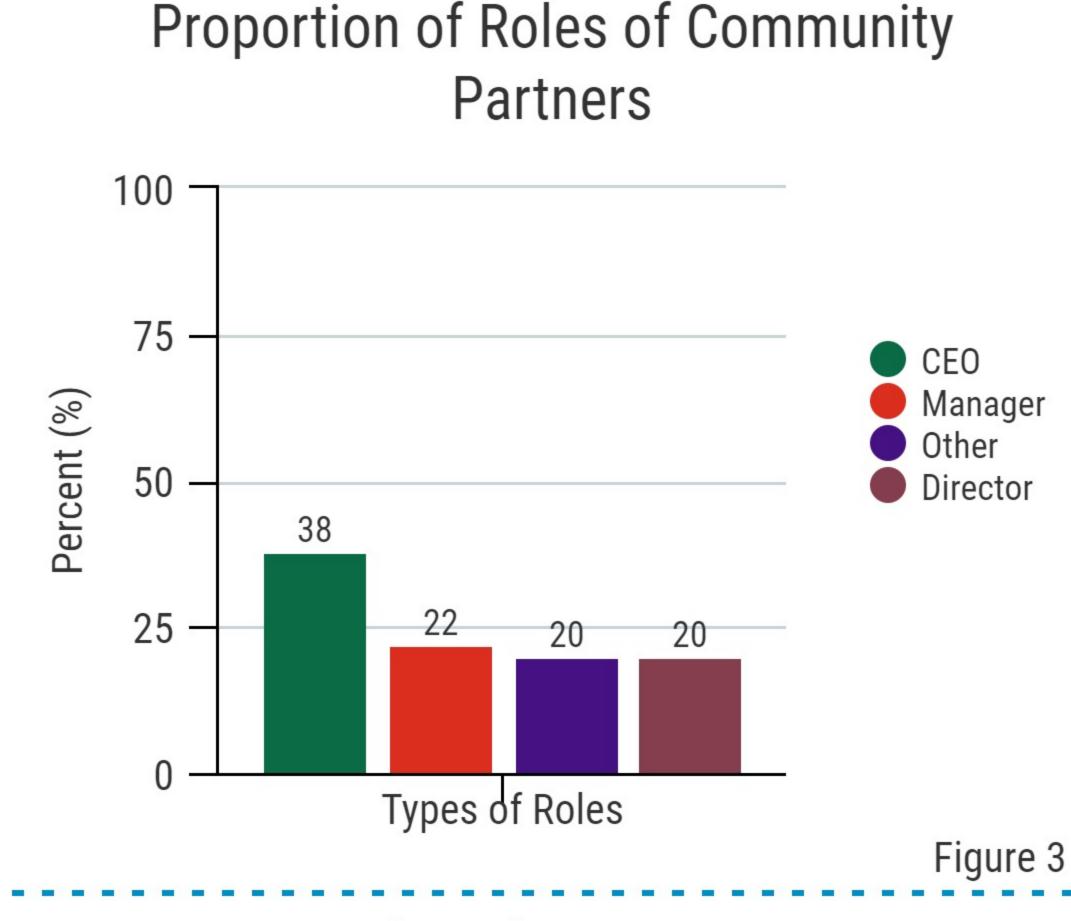


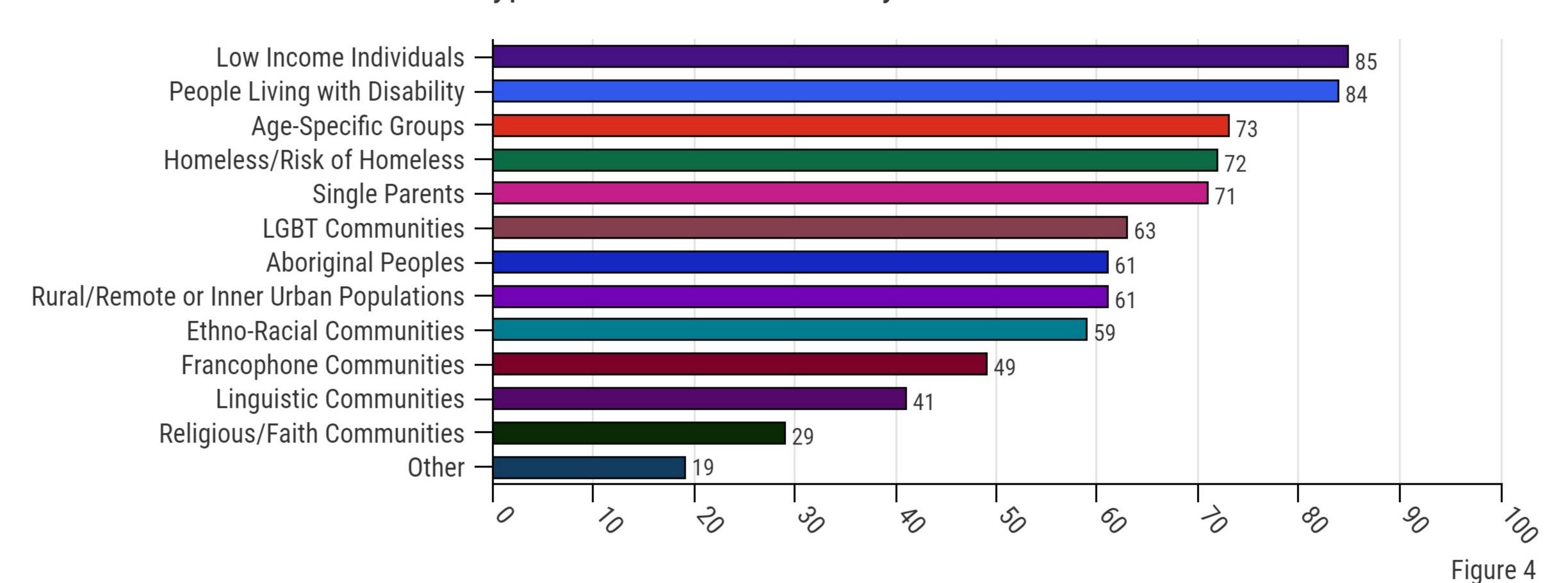
Locally-Based Non-Profit/Community

Any Agency Not Defined by These Categories Health Service Provider

Local Branch of (Provincial/National/International) Non-Profit Government Body







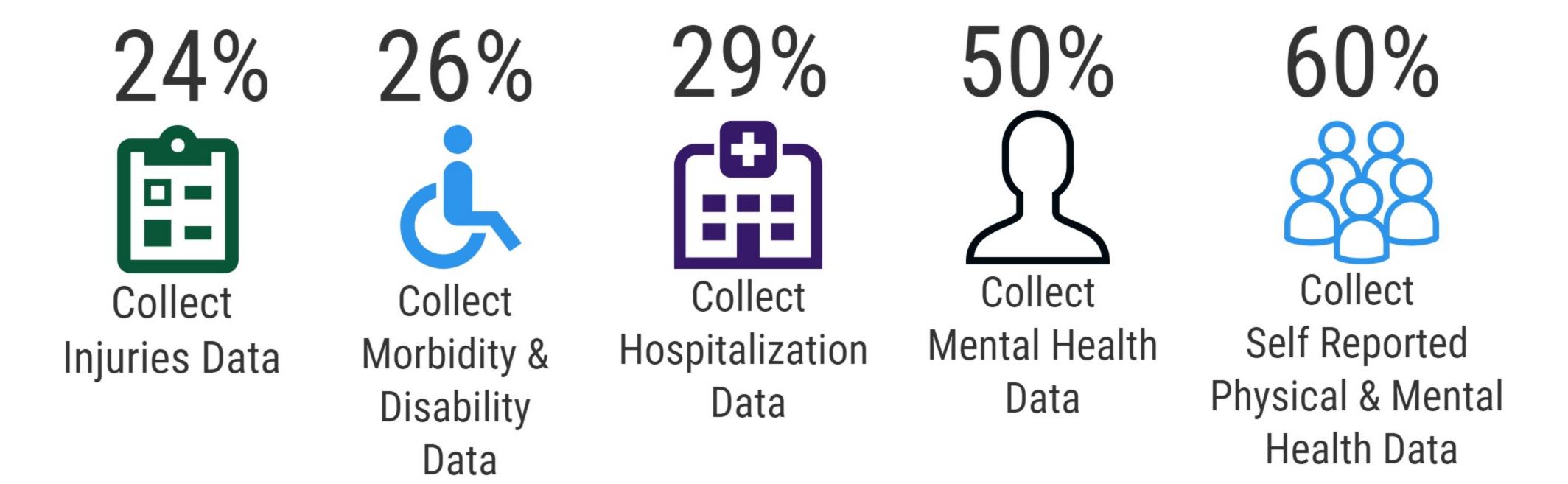


Sharing Health Information Survey

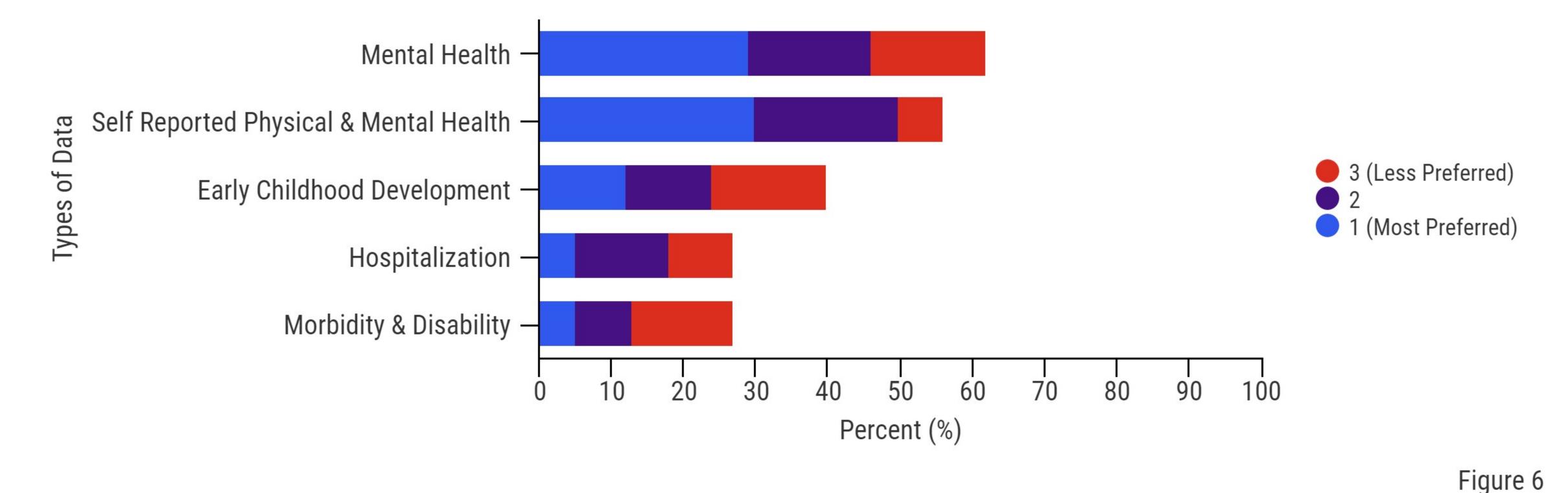
Types of Data Used and Requested by Community

Partners

Top Five Health Outcomes Currently Collected by Community Partners



Top Five Types of Data Community Partners would like to Receive Ranked as 1 to 3 out of 7



Top Five Demographic Factors Community Partners would like to Receive Ranked as 1 to 3 out of 7

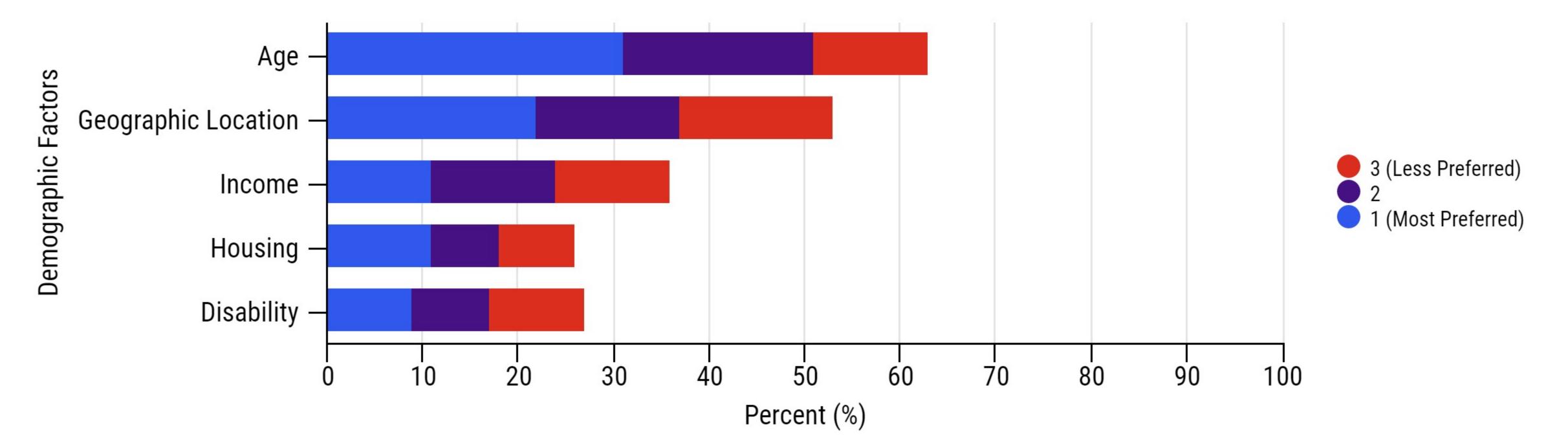
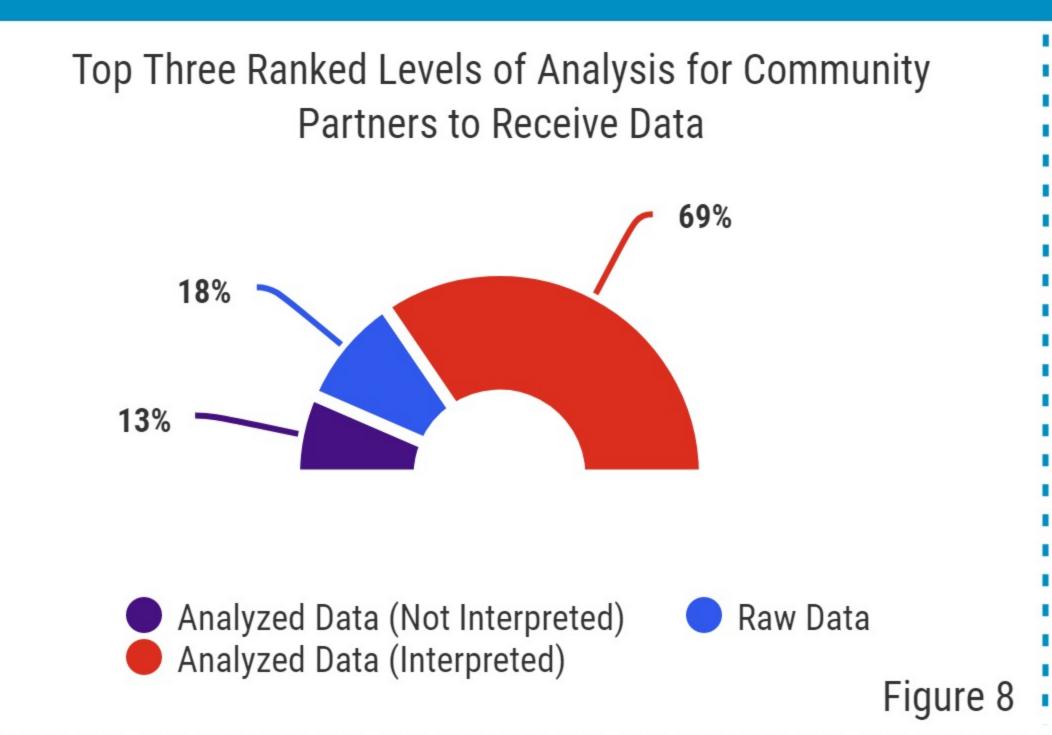


Figure 5



Sharing Health Information Survey

Community Partners Preferred Methods for Receiving Health Data



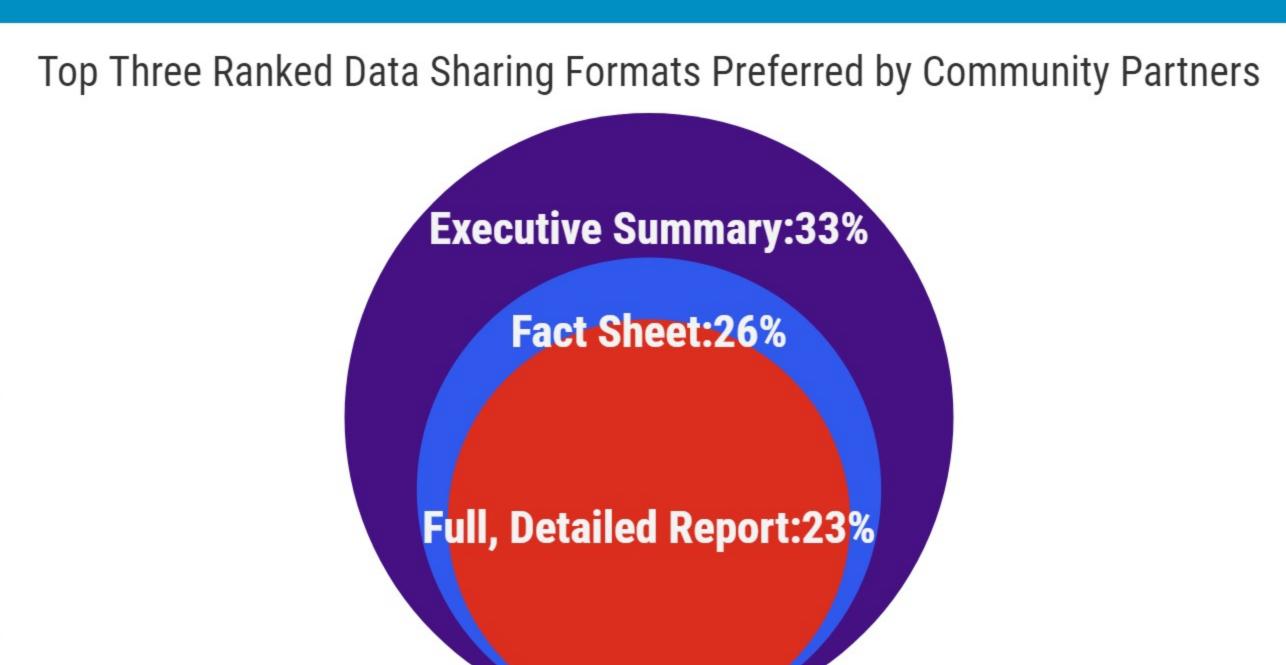
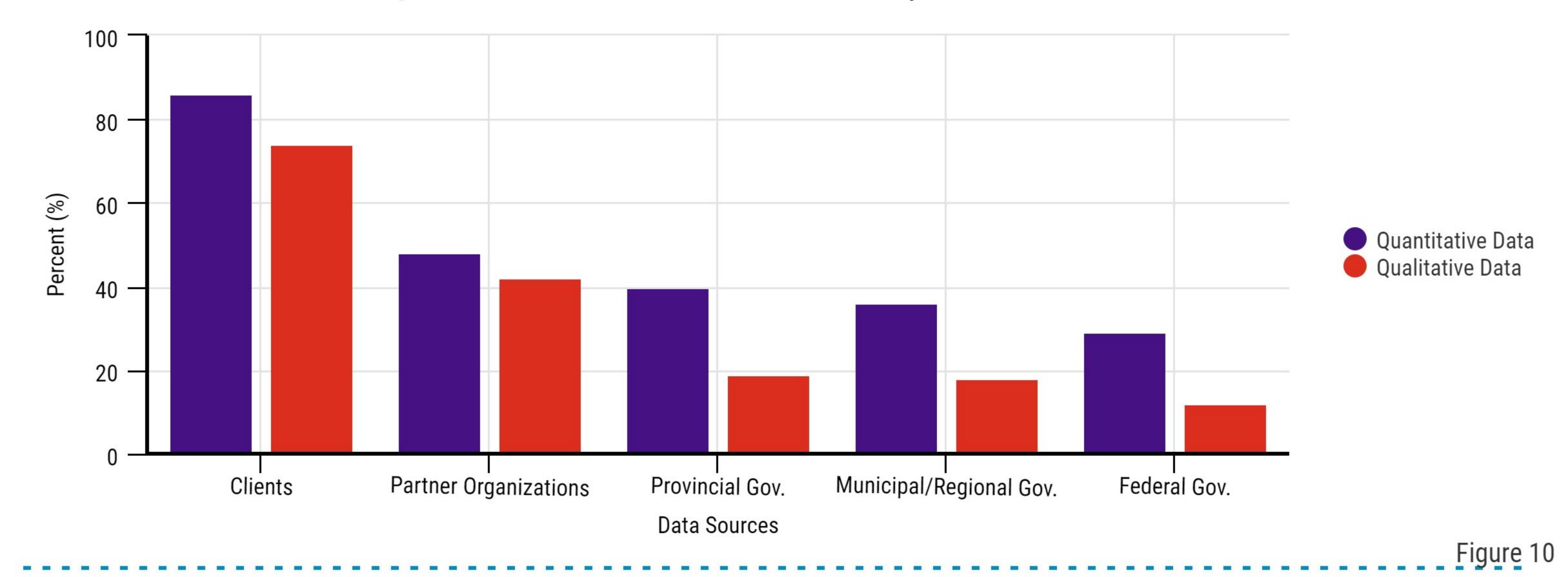
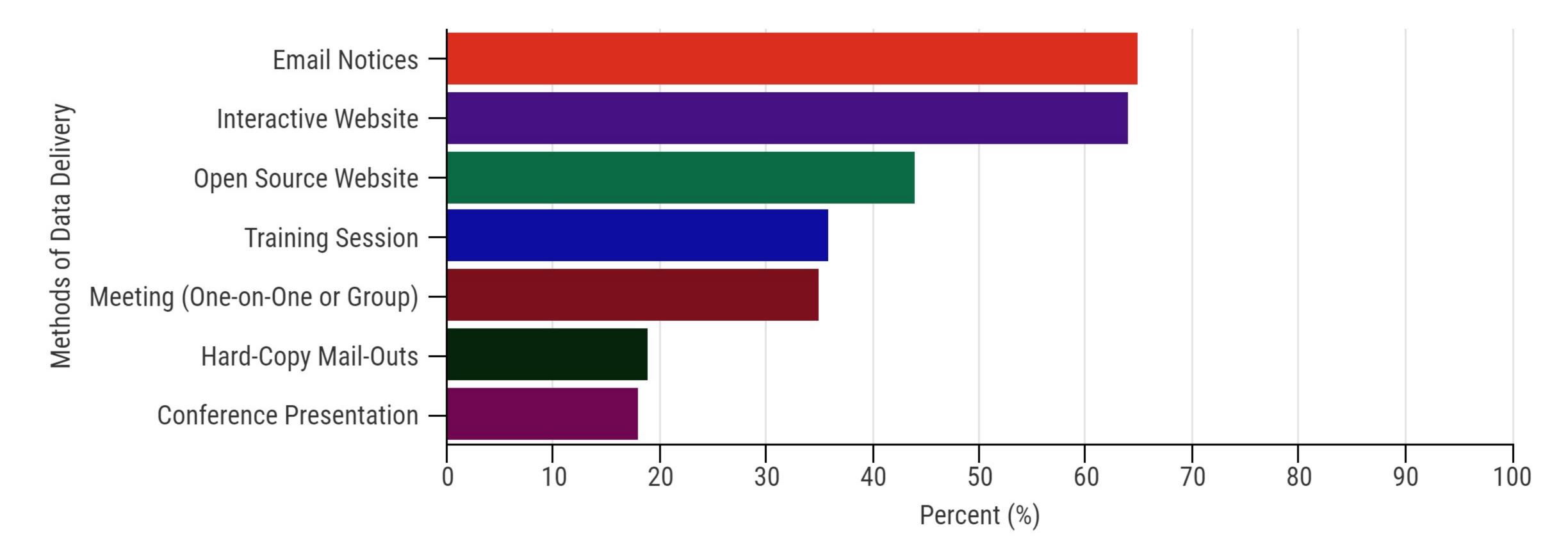


Figure 9

Top Five Sources from which Community Partners Collect Data



Preferred Methods of Data Delivery to Community Partners



Appendix B: Description of Survey Results

Demographics of Community Partners Surveyed

The number of completed surveys and the response rate by the LPHAs the community partners are affiliated with is illustrated in Appendix A, Figure 1A and 1B. Niagara region has the highest response rate at 55% with 22 surveys completed out of 41 sent. This may be due to the fact that the survey was sent from a Niagara Region email address. KFL&A, LGLDHU and NBPSDHU has response rates ranging from 20%-25% followed by YRPH at 18% with 22 surveys completed out of 125 surveys sent.

About 56% of community partners surveyed stated they are from a locally based non-profit or community organization (Appendix A; Figure 2). Other organizations represent 13% of survey respondents which included boards of education, police, and a public library. This was followed by health service providers (11%), government bodies (10%), and local branches of (provincial/national/international) non-profit organizations (10%).

The survey was aimed at those holding leadership roles within their organizations that could give feedback on data sharing. The majority of community partners were made up of CEOs (37%) followed by Managers (21%), Directors (20%) and other roles (20%) such as Executive Directors, Superintendents, and Supervisors (Appendix A, Figure 3).

The survey asked what types of clients community partners work with to get a better understanding of what types of data they use (Appendix A, Figure 4). As the majority of respondents were from locally based non-profit organizations, the majority of clients were low income individuals (85%), individuals living with a disability or condition (84%), age specific groups (73%), individuals who are homeless or at risk of homelessness (72%) and single parents (71%).

Types of Data Used and Requested by Community Partners

The majority of quantitative and qualitative data collected comes from clients of community partners followed by partner organizations (Appendix C, Figure 10). The top five types of demographic data community partners collect from clients are their age, gender, postal code, sex, and primary language. Other types of data community partners collect include clients' health card information, housing, health condition, and marital status. The top five reasons survey participants collect demographic data, in order of preference, are to maintain a record of individual client information, to inform the development of programs and services, to evaluate programs and services, to

report to funders or funding agencies, and to identify the populations they provide services to. Community partners were asked to rank their top five types of demographic data they would like to receive with one being most preferred to seven being the least preferred as shown in Appendix A, Figure 6. The top five most preferred types of demographic data, in order of average total rank (\overline{X}) , are age $(\overline{X} = 2.22)$, geographic location $(\overline{X} = 2.40)$, income $(\overline{X} = 2.73)$, housing $(\overline{X} = 3.02)$, and disability $(\overline{X} = 3.09)$. This shows that preferred data consists of more detailed information that may be more difficult to collect directly from current or potential clients.

Survey participants were asked to select all the health outcome data they currently collect. The top five health outcome data collected include self-reported physical and mental health (62%), mental health (50%), hospitalization (29%), morbidity or disability (26%), and injuries (24%) (Appendix A, Figure 5). Community partners were asked to rank their top five types of health outcome data they would like to receive with one being most preferred to five being the least preferred as shown in Appendix A, Figure 7. The top five health outcome data community partners would like to receive in order of average rank are mental health (\overline{X} = 2.38), self-reported physical and mental health (\overline{X} = 2.50), early child development (\overline{X} = 3.69), hospitalization (\overline{X} = 3.87) and morbidity or disability (\overline{X} = 3.91). These findings show that the top five types of health outcome data that community participants would like to receive do not directly reflect the data they already collect. This may be due to the fact that they do not have access to all types of health outcome data they would like to receive, such as early childhood development data.

Community Partners Preferred Methods for Receiving Data

The survey identified ways community partners would like to receive health data. The top three ranked internal factors which would aid data sharing include: improving community partners' capacity to conduct analyses, enhancing their data analysis skills, and increasing their understanding of data's value. The top three external factors include having data sharing agreements with community partners, improved communication between LPHAs and community partners, and enhanced partnerships with external experts (such as those at academic institutions, or in public health organizations). Also, as shown in Appendix A, Figure 8, community partners prefer analyzed data with interpretation (69%), over raw data (18%) and analyzed data without interpretation (13%). Survey comments suggest that community partners do not have the skills or software to analyze raw data.

Community partners were asked to rank their most preferred data sharing formats from one (most preferred) five (least preferred). The top three methods are shown in Appendix A, Figure 9. The percentages indicate the proportion of community partners that gave them a ranking of one. These include executive summaries (33%), fact sheets (26%) and full, detailed reports (Methods, data analysis, interpretation and recommendations) (23%). The top three ways in which community partners would like to receive data include email notices, an interactive website, and an open source website as shown in Appendix A, Figure 11.

Appendix C: Survey Tables

Table 1: Percent of Survey Participants that Collect or Want to Receive Various Types of Client Demographic Data*

	Collect Income Data	Want Income Data	Collect Age Data	Want Age Data	Collect Postal Code Data	Want Geographi c Data	Collect Disability data	Want Disability Data
Government	60.0	60.0	100.0	80.0	80.0	30.0	90.0	20.0
Any Other Agency	58.3	33.3	75.0	83.3	75.0	75.0	100.0	75.0
Health Service Provider	27.3	54.5	100.0	63.6	72.7	90.9	63.6	36.4
Local Branch of (Provincial/National/Inter national) Non-Profit Organization	70.0	50.0	100.0	100.0	100.0	60.0	100.0	40.0
Locally-Based Non- Profit/Community Organization	49.1	60.0	89.1	74.5	76.4	67.3	40.0	41.8

^{*}Table identifies percentage of survey participants that collect or want to receive different types of client demographic data. Differences of >=30% between data collected versus data wanted by a type of organization are in bold.

Table 2A: Percent of Survey Participants that Collect or Want to Receive Various Types of Health Outcome Data*

	Collect Self- Reported Physical and Mental Health Data	Want Self- Reported Physical and Mental Health Data	Collect Mental Health Data	Want Mental Health Data	Collect Early Childhood Development Data	Want Early Childhood Development Data
Government	50	70	10	80	40	70
Other	50	58	42	58	25	67
Health Service Provider	73	91	91	82	18	73
Local Branch of (Provincial/National/ International) Non- Profit Organization	40	100	30	80	20	60
Locally-Based Non- Profit/Community Organization	71	76	56	80	16	67

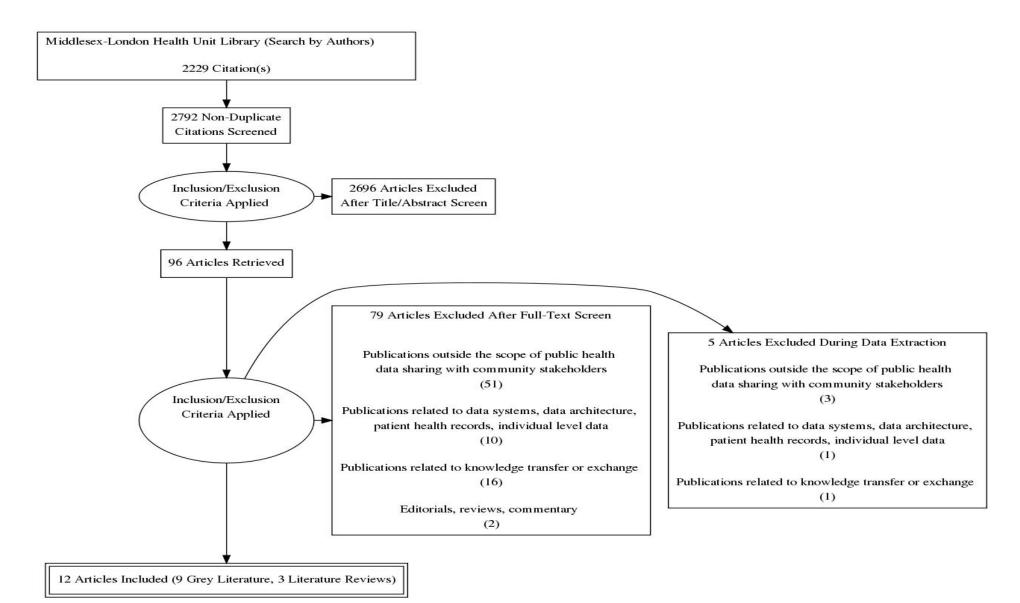
^{*}Table identifies percentage of survey participants that collect or want to receive different types of health outcome data. Differences of >=30% between data collected versus data wanted by a type of organization are in bold.

Table 2B: Percent of Survey Participants that Collect or Want to Receive Various Types of Health Outcome Data*

	Collect Morbidity and Disability Data	Want Morbidity and Disability Data	Collect Hospitalization Data	Want Hospitalizatio n Data	Collect Mortality Data	Want Mortality Data	Collect Injury Data	Want Injury Data
Government	0	40	0	60	10	60	20	60
Other	25	50	8	50	8	42	25	42
Health Service Provider	45	82	82	82	36	91	27	91
Local Branch of (Provincial/National/ International) Non- Profit Organization	20	70	10	80	10	70	20	70
Locally-Based Non- Profit/Community Organization	29	78	33	73	11	67	25	69

^{*}Table identifies percentage of survey participants that collect or want to receive different types of health outcome data. Differences of >=30% between data collected versus data wanted by a type of organization are in bold.

Appendix D: Diagram of Literature Search



Appendix E: Literature Review Search Terms

Database(s): Ovid MEDLINE(R) Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Ovid MEDLINE(R) Daily, Ovid MEDLINE and Versions(R)
Search Strategy:

Searches Results

health services accessibility/ or health equity/ or healthcare disparities/ or exp
Socioeconomic Factors/ or Social Justice/ or "Social Determinants of Health"/ or crime
victims/ or criminals/ or exp disabled persons/ or drug users/ or exp "emigrants and
immigrants"/ or exp homeless persons/ or medically uninsured/ or exp prisoners/ or
refugees/ or sex workers/ or exp sexual minorities/ or "transients and migrants"/ or
vulnerable populations/ or working poor/ or minority groups/ or social capital/ or social
isolation/ or social alienation/ or Medically Underserved Area/ or unemployment/ or
income/ or social conditions/

597306

((health* adj2 (equit* or inequit* or equal* or unequal* or inequal* or indicator? or determinant? or insecur* or underserv* or disparit* or gap or gaps or divide or divides or justice? or injustice? or barrier?)) or socioeconomic* or income? or poverty or impoverish* or lowincome? or (low adj1 income?) or unemploy* or (working adj1 poor?) or ((precarious* or parttime* or "part time*" or "part-time*" or seasonal*) adj3 (work* or employ* or job?)) or (shift adj1 work*) or shiftwork* or ((vulnerable or risk or "at-risk") adj2 (population? or people? or person? or individual? or family or families)) or migrant? or immigrant? or immigration or emigrant? or refugee? or homeless* or (street? adj2 (people? or person? or individual? or family or families or adult? or adolescen* or teen* or youth* or kid? or child or children)) or SDoH or SDoHs or minority or minorities).ti,kw. or ((health* adj2 (equit* or inequit* or equal* or unequal* or inequal* or indicator? or determinant? or insecur* or underserv* or disparit* or gap or gaps or divide or divides or justice? or injustice? or barrier?)) or socioeconomic* or income? or poverty or impoverish* or lowincome? or (low adj1 income?) or unemploy* or (working adj1 poor?) or ((precarious* or parttime* or "part time*" or "part-time*" or seasonal*) adj3 (work* or employ* or job?)) or (shift adj1 work*) or shiftwork* or ((vulnerable or risk or "at-risk") adj2 (population? or people? or person? or individual? or family or families)) or migrant? or immigrant? or

immigration or emigrant? or refugee? or homeless* or (street? adj2 (people? or person? or individual? or family or families or adult? or adolescen* or teen* or youth* or kid? or child

or children)) or SDoH or SDoHs or minority or minorities).ab. /freq=2

171660

3 1 or 2 [HEALTH EQUITY]

668600

4	public health/ or public health practice/ or public health administration/ or public health nursing/ or nurses, public health/ or exp community health services/ or community health nursing/ or nurses, community health/	373985
5	((public or communit*) adj2 (health* or care? or service? or prevention* or promot* or practice?)).tw,kw.	253093
6	4 or 5 [PUBLIC HEALTH]	553965
7	exp "diffusion of innovation"/ or information dissemination/ or translational medical research/	39406
8	(((information or data or datum or knowledge or intelligence or research or statistic*) adj2 (disseminat* or transfer* or exchang* or share? or sharing or translat* or distribut* or broker* or diffus*)) or KT or KTE?).ti,kw. or (((information or data or datum or knowledge or intelligence or research or statistic*) adj2 (disseminat* or transfer* or exchang* or share? or sharing or translat* or distribut* or broker* or diffus*)) or KT or KTE?).ab. /freq=2	20149
9	7 or 8 [KTE]	55553
10	exp data collection/ or exp statistics as topic/ or epidemiological monitoring/ or sentinel surveillance/ or Data Display/	3706461
11	(data or datum or statistic? or indicator? or measure or measures or measurements or epidemiolog* or surveillance?).tw,kw.	4772955
12	2 10 or 11 [DATA]	7114718
13	intersectoral collaboration/ or interpersonal relations/ or interprofessional relations/ or interdisciplinary communication/ or federal government/ or government agencies/ or local government/ or organizations/ or "academies and institutes"/ or consumer organizations/ or community participation/ or health planning organizations/ or health planning councils/ or exp organizations, nonprofit/ or public-private sector partnerships/ or exp societies/ or exp policy/	465265
14	(partner? or partnership? or coalition? or collaborat* or cooperat* or relation or relations or relationship? or agency or agencies or organi?ation? or institute? or institution? or congress or congresses or council? or policy or policies or policymaker? or government? or sector? or interagenc* or interprofessional* or intraprofessional* or interdisciplinar* or intersector* or network? or interconnect* or connect* or leader? or leadership or stakeholder? or informant? or public or publicly or communit*).tw,kw.	3797872

15 13 or 14 [COMMUNITY PARTNERS]	4073743
16 3 and 6 and 9 and 12 and 15	412
17 limit 16 to (english and yr=2010-current)	229
18 remove duplicates from 17	207
19 (letter or editorial or comment or news).pt.	1770582
20 18 not 19	205

Database(s): Embase 1996 to 2017 Week 29 Search Strategy:

Searches Results

income group/ or exp lowest income group/ or "social determinants of health"/ or socioeconomics/ or educational status/ or poverty/ or health care disparity/ or health equity/ or social class/ or health disparity/ or social justice/ or unemployment/ or exp homeless person/ or social problem/ or crime/ or cultural deprivation/ or food insecurity/ or homelessness/ or prostitution/ or public health problem/ or social discrimination/ or social exclusion/ or social stress/ or violence/ or immigrant/ or migrant/ or sex worker/ or shift worker/ or working poor/ or exp sexual minority/ or vulnerable population/ or minority group/

((health* adj2 (equit* or inequit* or equal* or unequal* or inequal* or indicator? or determinant? or insecur* or underserv* or disparit* or gap or gaps or divide or divides or justice? or injustice? or barrier?)) or socioeconomic* or income? or poverty or impoverish* or lowincome? or (low adj1 income?) or unemploy* or (working adj1 poor?) or ((precarious* or parttime* or "part time*" or "part-time*" or seasonal*) adj3 (work* or employ* or job?)) or (shift adj1 work*) or shiftwork* or ((vulnerable or risk or "at-risk") adj2 (population? or people? or person? or individual? or family or families)) or migrant?

or immigrant? or immigration or emigrant? or refugee? or homeless* or (street? adj2 (people? or person? or individual? or family or families or adult? or adolescen* or teen* or youth* or kid? or child or children)) or SDoH or SDoHs or minority or minorities).ti,kw. or ((health* adj2 (equit* or inequit* or equal* or unequal* or inequal* or indicator? or determinant? or insecur* or underserv* or disparit* or gap or gaps or divide or divides or justice? or injustice? or barrier?)) or socioeconomic* or income? or poverty or impoverish* or lowincome? or (low adj1 income?) or unemploy* or (working adj1 poor?) or ((precarious* or parttime* or "part time*" or "part-time*" or seasonal*) adj3 (work* or

169357

347335

employ* or job?)) or (shift adj1 work*) or shiftwork* or ((vulnerable or risk or "at-risk") adj2 (population? or people? or person? or individual? or family or families)) or migrant? or immigrant? or immigration or emigrant? or refugee? or homeless* or (street? adj2 (people? or person? or individual? or family or families or adult? or adolescen* or teen* or youth* or kid? or child or children)) or SDoH or SDoHs or minority or minorities).ab. /freq=2

3 1 or 2 [HEALTH EQUITY] 424411 public health/ or public health campaign/ or public health message/ or public health problem/ or public health service/ or public health systems research/ or community care/ 236991 or exp community health nursing/ or community integration/ or community program/ or preventive health service/ ((public or communit*) adj2 (health* or care? or service? or prevention* or promot* or 252963 practice?)).tw,kw. 6 4 or 5 [PUBLIC HEALTH] 394446 7 *translational research/ or *mass communication/ or *information dissemination/ 15140 (((information or data or datum or knowledge or intelligence or research or statistic*) adj2 8 (disseminat* or transfer* or exchang* or share? or sharing or translat* or distribut* or 83621 broker* or diffus*)) or KT or KTE?).tw,kw. 9 7 or 8 [KTE] 95445 exp data collection method/ or data extraction/ or exp data mining/ or statistics/ or exp biostatistics/ or disease surveillance/ or epidemiological monitoring/ or exp epidemiology/ 3279326 or information processing/ or bioinformatics/ or data analysis/ or data synthesis/ or medical informatics/ or nursing informatics/ (data or datum or statistic? or indicator? or measure or measures or measurements or 5037716 epidemiolog* or surveillance?).tw,kw. 12 10 or 11 [DATA] 6870836 cooperation/ or intersectoral collaboration/ or public relations/ or interdisciplinary education/ or interdisciplinary communication/ or interdisciplinary research/ or 13 government/ or organization/ or public-private partnership/ or trade union/ or community 561175

participation/ or social participation/ or health care organization/ or non profit

organization/ or nursing organization/ or policy/ or organizational policy/ or exp public

policy/

(partner? or partnership? or coalition? or collaborat* or cooperat* or relation or relations or relationship? or agency or agencies or organi?ation? or institute? or institution? or congress or congresses or council? or policy or policies or policymaker? or government? or sector? or interagenc* or interprofessional* or intraprofessional* or interdisciplinar* or intersector* or network? or interconnect* or connect* or leader? or leadership or stakeholder? or informant? or public or publicly or communit*).tw,kw.

15 13 or 14 [COMMUNITY PARTNERS]	3990550
16 3 and 6 and 9 and 12 and 15	610
17 limit 16 to (english and yr=2010-current)	441
18 remove duplicates from 17	424
19 (article or article in press or report or "review" or erratum).pt.	15121651
20 18 and 19	292

CINAHL

Limits: English, Peer-reviewed, 2010-2017

#	Query	Results
S16	S3 AND S6 AND S9 AND S12 AND S15	244
S15	S13 OR S14	851,216
S14	TI ((partner# or partnership# or coalition# or collaborat* or cooperat* or relation or relations or relationship# or agency or agencies or organi#ation# or institute# or institution# or congress or congresses or council# or policy or policies or policymaker# or government# or sector# or interagenc* or interprofessional* or interdisciplinar* or intersector* or network# or interconnect* or connect* or leader# or leadership or stakeholder# or informant# or public or publicly or communit*)) OR AB ((partner# or partnership# or coalition# or collaborat* or cooperat* or relation or relations or relationship# or agency or agencies or organi#ation# or institute# or institution# or congress or congresses or council# or policy or policies or policymaker# or government# or sector# or interagenc* or interprofessional* or intraprofessional* or	649,817

	interdisciplinar* or intersector* or network# or interconnect* or connect* or leader# or leadership or stakeholder# or informant# or public or publicly or communit*))	
S13	(MH "Interpersonal Relations") OR (MH "Collaboration") OR (MH "Interprofessional Relations+") OR (MH "Intraprofessional Relations") OR (MH "Decision Making, Organizational") OR (MH "Joint Ventures") OR (MH "Networking, Professional") OR (MH "Multiinstitutional Systems") OR (MH "Organizational Policies+") OR (MH "Public Relations") OR (MH "Community-Institutional Relations") OR (MH "Interdepartmental Relations") OR (MH "Interinstitutional Relations") OR (MH "Shared Governance") OR (MH "Quality Circles") OR (MH "Shared Services, Health Care") OR (MH "Joint Practice") OR (MH "Coalition") OR (MH "Organizations") OR (MH "Committees") OR (MH "Congresses and Conferences") OR (MH "Consortia") OR (MH "Government Agencies+") OR (MH "Health Systems Agencies") OR (MH "Joint Commission") OR (MH "Organizations, Nonprofit") OR (MH "Voluntary Health Agencies") OR (MH "Professional Organizations") OR (MH "Consumer Organizations") OR (MH "Consumer Participation") OR (MH "Public Policy") OR (MH "Policy Making") OR (MH "Health Policy")	304,488
S12	S10 OR S11	1,081,870
S11	TI ((data or datum or statistic# or indicator# or measure or measures or measurements or epidemiolog* or surveillance#)) OR AB ((data or datum or statistic# or indicator# or measure or measures or measurements or epidemiolog* or surveillance#))	561,008
S10	(MH "Informatics+") OR (MH "Data Collection+") OR (MH "Access to Information") OR (MH "Data Display") OR (MH "Data Communications") OR (MH "Epidemiology") OR (MH "Biosurveillance") OR (MH "Disease Surveillance") OR (MH "Health Impact Assessment") OR (MH "Population Surveillance")	759,449
S 9	S7 OR S8	23,574
S8	TI ((((information or data or datum or knowledge or intelligence or research or statistic*) N2 (disseminat* or transfer* or exchang* or share# or sharing or translat* or distribut* or broker* or diffus*)) or KT or KTE#)) OR AB ((((information or data or datum or knowledge or intelligence or research or statistic*) N2 (disseminat* or transfer* or exchang* or share# or sharing or translat* or distribut* or broker* or diffus*)) or KT or KTE#))	16,627
S7	(MH "Selective Dissemination of Information") OR (MH "Health Information Networks") OR (MH "Diffusion of Innovation")	7,654

S6	S4 OR S5	381,479
S 5	TI (((public or communit*) N2 (health* or care# or service# or prevention* or promot* or practice#))) OR AB (((public or communit*) N2 (health* or care# or service# or prevention* or promot* or practice#))) OR SO (((public or communit*) N2 (health* or care# or service# or prevention* or promot* or practice#)))	136,392
S4	(MH "Public Health") OR (MH "Public Health Nutrition") OR (MH "Public Health Dentistry+") OR (MH "Public Health Administration") OR (MH "Community Medicine") OR (MH "Community Health Services+") OR (MH "Community Health Centers") OR (MH "Community Health Nursing+")	289,888
S3	S1 OR S2	258,344
S2	TI (((health* N2 (equit* or inequit* or equal* or unequal* or inequal* or indicator# or determinant# or insecur* or underserv* or disparit* or gap or gaps or divide or divides or justice# or injustice# or barrier#)) or socioeconomic* or income# or poverty or impoverish* or lowincome# or (low N1 income#) or unemploy* or (working N1 poor#) or ((precarious* or parttime* or "part time*" or "part-time*" or seasonal*) N3 (work* or employ* or job#)) or (shift N1 work*) or shiftwork* or ((vulnerable or risk or "at-risk") N2 (population# or people# or person# or individual# or family or families)) or migrant# or immigrant# or immigration or emigrant# or refugee# or homeless* or (street# N2 (people# or person# or individual# or family or families or adult# or adolescen* or teen* or youth* or kid# or child or children)) or SDoH or SDoHs or minority or minorities)) OR AB (((health* N2 (equit* or inequit* or equal* or unequal* or inequal* or indicator# or determinant# or insecur* or underserv* or disparit* or gap or gaps or divide or divides or justice# or injustice# or barrier#)) or socioeconomic* or income# or poverty or impoverish* or lowincome# or (low N1 income#) or unemploy* or (working N1 poor#) or ((precarious* or parttime* or "part time*" or "part-time*" or seasonal*) N3 (work* or employ* or job#)) or (shift N1 work*) or shiftwork* or ((vulnerable or risk or "at-risk") N2 (population# or people# or person# or individual# or family or families)) or migrant# or immigrant# or immigration or emigrant# or refugee# or homeless* or (street# N2 (people# or person# or individual# or family or families or adult# or adolescen* or teen* or youth* or kid# or child or children)) or SDoH or SDoHs or minority or minorities))	111,504
S1	(MH "Health Status Disparities") OR (MH "Social Determinants of Health") OR (MH "Minority Groups") OR (MH "Social Capital") OR (MH "Social Class") OR (MH "Social Mobility") OR (MH "Social Problems") OR (MH "Crime") OR (MH "Homelessness") OR (MH "Poverty+") OR (MH "Prostitution") OR (MH "Runaways") OR (MH "Substance Abuse") OR (MH "Socioeconomic Factors") OR (MH "Illiteracy") OR (MH "Educational Status") OR (MH "Temporary Employment") OR (MH "Part Time Employment") OR (MH	199,574

"Job Security") OR (MH "Single Person") OR (MH "Widows and Widowers") OR (MH "Divorce") OR (MH "Income") OR (MH "Unemployment") OR (MH "Homeless Persons") OR (MH "GLBT Persons+") OR (MH "Ethnic Groups") OR (MH "Indigenous Peoples+") OR (MH "Crime Victims") OR (MH "Disabled") OR (MH "Immigrants+") OR (MH "Medically Underserved") OR (MH "Medically Uninsured") OR (MH "Prisoners") OR (MH "Refugees") OR (MH "Transients and Migrants") OR (MH "Victims") OR (MH "Healthcare Disparities") OR (MH "Social Justice")

Appendix F: Survey Questionnaire

ONLINE SURVEY

Sharing Health Information with Community partners to Promote Healthy Living for All

A Locally Driven Collaborative Project

The purpose of this project is to identify the best ways to share key population information so that community partners can better address inequalities in the populations they serve. Your local public health organization is participating in this project along with several others from across the province. We are currently surveying community partners whose work involves providing programs, services, advocacy and/or policy direction for populations at risk in order to understand their context and their needs.

Participation is voluntary and the information you share will be kept confidential; all information provided will be summarized and anonymized. You are free to skip a question or stop your participation at any time, if you stop participation, your answers will not be saved for future use. The information gathered will be used to develop a process for public health organizations to share data with community partners. Due to organizational capacity, not all of the options discussed below may be available in your area.

The survey results will be shared with all participating organizations that provide contact details by December, 2017. Thank you for agreeing to participate in this survey.

This survey is being done as part of a Locally Driven Collaborative Project (LCDP) funded by Public Health Ontario.

Section 1 - Background

- 1) Please identify which public health organization you received this survey from: [one option]
 - a. Kingston, Frontenac and Lennox & Addington Public Health
 - b. Leeds, Grenville and Lanark District Health
 - c. Niagara Region Public Health
 - d. North Bay Parry Sound District Health Unit
 - e. Ottawa Public Health
 - f. York Region Public Health Services
- 2) What would best describe your organization? [one option]
 - a. Locally-Based Non-Profit/Community Organization
 - b. Local Branch of (Provincial/National/International) Non-Profit Organization
 - c. Government
 - d. Health Service Provider
 - e. Other (please describe)
- 3) What role do you hold within your organization? [one option]
 - a. Chief Executive Officer
 - b. Director
 - c. Manager
 - d. Other (please describe) _____

- •		
4)	_	zation size and capacity: [text response for each]
		Approximate number of employees
		Approximate number of volunteers
	C.	Approximate number of clients who receive direct services from your organization in a
		typical month?
		Additional Comments:
5)		groups of clients does your organization work with? (Select all that apply) [multiple
	option	
		Aboriginal peoples (e.g., First Nations, Inuit, Metis)
	b.	Age-specific groups (e.g., children, youth, seniors)
	C.	People living with disability/condition (e.g., physical, deaf, deafened or hard of hearing, visual, learning, mental illness, addictions/substance use)
	d.	Ethno-racial communities (e.g., racial/racialized or minority communities, recent
		immigrants, refugees)
	e.	Francophone communities
	f.	People who are homeless or at risk of becoming homeless (including marginally or
		under-housed)
	g.	Linguistic communities (e.g., uncomfortable using English or French)
	h.	Low income individuals or groups (e.g., unemployed, underemployed, precariously
		employed)
	i.	Religious/faith communities
	j.	Rural/remote or inner urban populations
	k.	LGBT communities (e.g., lesbian, gay, bisexual, transgender)
	I.	Single parents
	m.	Other (please list)
Coation	2 1060	www.ation/Data Callected by Vous Organization
Section	<u> </u>	ormation/Data Collected by Your Organization
6)	What o	demographic information does your organization typically collect from clients? (Select all
	that ap	pply) [multiple options]
	a.	Gender
	b.	Sex
	c.	Age
	d.	Income
	e.	Disability
	f.	Education
	g.	Employment/Occupation
	•	Ethnicity
	i.	Primary language
	j.	Immigrant status/length of time in Canada
	k.	Postal code
	1	Other (please describe)

7) Does your organization collect quantitative or qualitative information/data from the following sources? Please check all boxes that apply. [multiple options]

	Quantitative*	Qualitative*
Clients		
Partner Organizations		
Municipal/Regional Government		
Provincial Government		
Federal Government		
Other: (please describe)		

8) Select the top five ways your organization most frequently uses the information/data collected: [five options]

		Select 5
a	To maintain a record of individual client information	
b	To identify the populations we provide services to	
С	To identify historical trends occurring in the populations we serve	
d	To inform the development of our programs and services	
е	To evaluate our programs and services	
f	To identify populations who may need our services in the future	
g	Information sharing to raise public awareness	
h	Funding and/or grant applications	
i	Reporting to funders/funding agencies (e.g., Ministry)	
j	Advocacy	
k	Research	
ı	None of the above	
m	Other (please describe)	

- 9) Do you collect data related to any of the following health outcomes? (Select all that apply) [multiple options]
 - a. Self-reported physical and mental health
 - b. Early child development (e.g., low birth weight, Early Development Instrument)
 - c. Morbidity and disability
 - d. Hospitalization
 - e. Mental health
 - f. Mortality
 - g. Injuries
 - h. None of the above
 - i. Other (please describe)

10) Please rank the following <u>internal</u> factors that would help your organization use information/data better (where 1 = most important): [rank]

		Rank
а	Increased understanding of information/data's value to our work	
b	Enhanced data analysis skills (e.g., data analysis training for staff)	
С	Improved capacity to conduct analyses (e.g., human or financial resources)	
d	Consistent data saving methods (e.g., data retention policy)	
е	Improved access to analytic software	
f	IT infrastructure support	
g	Other (please describe)	

11) Please rank the following <u>external</u> factors that would help your organization use information/data better (where 1 = most important): [rank]

		Rank
а	Consistent data sharing agreements with community partners	
b	Improved processes for accessing relevant data for decision making (e.g.,	
	better communication between people who collect and analyze data and	
	decision makers)	
С	Enhanced partnerships/agreements with external experts (e.g., at	
	academic institutions, or in public health organizations)	
d	Improved communication about the value of information/data to our work	
е	Other (please describe)	

12) How do you	currently identify	the needs or g	aps in your sei	rvices? (Selec	ct all that	apply)
[multiple op	tions]					

- a. We ask clients' perspectives (e.g., Ask for feedback, conduct client surveys)
- b. We review clients' health records
- c. Based on funding opportunities
- d. Based on mandates (e.g., from Board of Directors, external standards)
- e. We obtain data from other community partners
- f. Other (please describe)

13)	Describe the information that you currently do not have that you feel could improve your
	services. [text response]
_	

<u>Section 3 – Additional Data to Address Health Inequities</u>

14) Please rank following types of additional information/data that your organization would be interested in receiving (where 1= most useful): [rank]

		Rank
а	Self-reported physical and mental health data	
b	Early child development data	
С	Morbidity and disability data	
d	Hospitalization data	
е	Mental health data	
f	Mortality data	
g	Injuries data	
i	Other (please describe)	

15) The following demographic factors can be used to group health data. Please select and rank the top 5 grouping factors that would be most useful to your organization to inform your program, service, advocacy, or policy development (where 1= most useful): [rank]

		Rank
а	Age	
b	Gender identity	
С	Sex	
d	Sexual orientation	
е	Geographic location	
f	Income	
g	Education	
h	Race/ethnicity (including Aboriginal identity)	
i	Housing	
j	Disability	
k	Language	
	Health insurance	
m	Immigration status	
n	Other (please describe)	

Section 4 – Sharing the Data

16) Please rank the following methods as to your preference to receive data from your area public health organization in raw versus analyzed information (where 1= most preferred): [rank]

		Rank
a	Raw data (e.g., computer files with spreadsheets, pivot tables)	
b	Analyzed data without interpretation (e.g., tables, pie graphs)	
С	Analyzed data with interpretation (e.g., tables and pie graphs with	
	interpretations, infographics)	
d	Other (please describe)	

17) Please rank the following information/data sharing formats that would be useful for your organization to receive data (e.g., type of product) (where 1= most useful): [rank]

		Rank
a	A full, detailed report (Methods, data analysis, interpretation and recommendations)	
b	Executive summary (One-page data analysis highlights)	
С	Fact sheet (Categorized data in bullet format)	
d	Evidence Brief (analyzed data with academic evidence relevant to the topic)	
е	Diagram/infographic/image	
f	Maps	
g	Other (please describe)	

18) Please select three delivery methods your organization would like to receive data/information: [three options]

		Select 3
а	Social media (e.g., Facebook, Twitter)	
b	Meeting (one-on-one or group)	
С	Conference presentation	
d	Hard-copy mail-outs	
е	Interactive website	
f	Open source website	
g	Training session	
h	Email notices	
i	Other (please describe)	

19) Ontario's public health organizations are required to track the use of shared data and record how it is being used. Please rank the following methods according to the best way for your organization to provide this information (where 1= best method): [rank]

		Rank
а	Email updates	
b	Direct contact with a public health employee	
С	A shared, confidential electronic database (i.e., database that public health shares	
	with a specific community organization for sharing information/data with each other)	
d	Other (please describe)	

Section 5 - Next Steps

- 20) May we contact you if we require clarification of the information you have provided? [One option, if yes, link to collect contact info]
 - a. Yes
 - b. No
- 21) Would you be willing to participate in a follow-up group discussion* to be held in Toronto in the fall, 2017 regarding the findings of this survey? This group discussion would include representatives from public health and social services agencies from around the province. [One option, if yes, link to collect contact info]
 - a. Yes
 - b. No

*NOTE: Due to limited capacity, we may not be able to include all who express interest in participating in this activity. We sincerely appreciate your consideration of this request. Travel and accommodation costs will be covered for participants who are selected to attend.

22) Please provide any additional comments you feel may be pertinent to this survey. [text response]

Thank you for taking the time to complete this survey.