



## STRENGTHENING A POPULATION HEALTH APPROACH FOR HEALTH SYSTEM PLANNING

### A Public Health Ontario 2017-18 Special Edition Locally Driven Collaborative Project (LDCP)

#### Key Findings

In the first phase of this research study Local Health Integration Networks (LHINs) and Public Health Units (PHUs) **defined Population Health** similarly. The study showed that both sectors were engaged and interested in working together to implement a population health approach in health system planning. They provided concrete examples of how they are already working together.

**The following results report on the second phase of the research that involved a survey.**

**The top ways to foster better collaboration** (n=251 respondents), for the most part, are:

- To work in partnerships on specific projects (small or large) with clear goals and shared indicators (67%)
- To collaborate on data sharing and analysis (60%)

The **top 3 processes** to promote role clarity (n=248 respondents) are:

- To have shared indicators for a health outcome of common interest in both LHIN and PHU accountability agreements (57%)
- To identify PHU and LHIN leads to work with leadership teams of each organization (50%)
- To have face-to-face meetings involving all levels of LHINs and PHUs staff in their jurisdiction (43%)

Actions that were reported to likely or very likely overcome **geographic challenges** for collaboration and for data sharing were identified. Both LHINs and PHUs agreed and supported, to a high degree, concrete ideas for overcoming boundary issues:

- Geocoding health data (89% of 240 respondents) and making that available to all agencies or embedded into health datasets (82% of 235 respondents)
- Ensuring that LHIN sub-regions align with PHU boundaries (77% out of 236 respondents)
- Reducing or eliminating overlap between LHIN and PHU boundaries (57% of 235 respondents) received less support
- Collaborating on local needs assessments (77% of 235 respondents) including LHIN sub-regions
- Identifying one LHIN executive lead to work with each PHU leadership team (57% of 231 respondents)
- Identifying one PHU lead to work with each LHIN sub-region leadership team (57% of 230 respondents)

Barriers identified in Phase I that were not further explored in Phase 2 are as follows: limited resources, capacities, and small populations

There was agreement on the **top categories of tools** (n=236 respondents) that would have the most impact when jointly used by PHUs and LHINs:

- Program planning, management, and evaluation (64%)
- Knowledge exchange and translation (52%)
- Health equity impact assessments (51%)

Differences were observed in the top tools of interest for each sector. LHINs mentioned business intelligence and quality improvement tools whereas PHUs mentioned communications and collaboration tools as of greater priority for collaboration.



## Criteria for a common set of health indicators to inform health system planning

Respondents supported the criteria presented in the survey – all were rated as very important/important:

- Potential to identify inequity (92% of 223 responses)
- Cover a range of indicator categories, e.g., risk factors in addition to health system utilization (92% of 223 responses)
- Meaningful at different geographical levels, e.g., can roll up and down from local/ neighbourhood to regional to provincial levels (87% of 221 responses)
- Both LHINs and PHUs have a role in improvement of the measured population health outcome (83% of 223 responses)

Of note, while all respondents supported the criteria, when broken down by sector, PHU responses leaned more towards the “very important/important” end of the scale while LHIN responses leaned towards “neutral”.

## Types of Data that help us understand population health

Both sectors use a range of types of data (352 responses)

The **top 3 types of data** stated by both LHINs and PHUs were:

- Health Status/Health Outcome (31%)
- Demographics and Determinants of Health (24%)
- Health service utilization (23%)

**The top 2 types of data for LHINs** were: Health Services Utilization data and Health Status/Health Outcomes.

**The top 2 types of data for PHUs** were: Health Status/Health Outcomes and Demographics/Determinants of Health.

Many respondents also provided sources of data as opposed to types of data (n=361 responses). These sources differed by sector.

**Top 5 sources of data for LHINs:** Census; Organizations providing data, e.g., Cancer Care Ontario; Canadian Institute for Health Information databases and reports; Risk Factor Surveys; and other surveys, e.g., priority population surveys.

**Top 5 sources of data for PHUs:** Risk Factor Surveys; Census; Organizations providing data, e.g., Cancer Care Ontario; Better Outcomes Registry and Network (BORN); and Existing profiles reports, and Snapshots.

## Indicators that will strengthen collaborative health system planning

When asked about the top 2 indicators for each of the following categories, the most frequent responses were:

### Health Outcomes (n=251 responses):

- Mortality (n=90): measured in various ways: mortality by cause, preventable
- Life expectancy (n=43): by income quartile, disability free life expectancy

### Health Status (n=254 responses):

- Diseases: including chronic disease, infectious diseases, multi-morbidity (n=92)
- General reported health status (n=49): e.g., self-rated health, excellent to very good health

### Population/Demographics (n=251 responses):

- Age, sex distribution (n=95)
- Birth and death rates (n=40)



### Health Risk Factors (n=314 responses):

- Substance use including: tobacco (n=80), alcohol (n=42) and drugs (n=32)
- Energy imbalance (n=92): e.g., food intake, weight, physical activity

### Social Determinants of Health/Health Inequities (n=286 responses):

- Income indicators (n=104): e.g., Low-income measure (LIM), poverty, deprivation index, and living wage
- Housing indicators (n=41): e.g., affordability, safety, security, access, and transient housing

### Health Service Capacity/Health System Characteristics (n=200 responses):

- Numbers and ratios of health and community care providers per capita (n=64): including primary care, health care and community care, health services, as well as, public health providers
- Access to health and community services and providers (n=61): including wait times, bed care spaces, access to providers and quality of access: e.g., same day and consistency across geography

### Health System Performance (n=177 responses):

- Appropriate and inappropriate use of service (n=34): e.g., visits and ambulatory care sensitive conditions best managed elsewhere, inappropriate emergency room (ER) use; hospital and ER admissions, readmissions and discharges including use of Alternate Level of Care (ALC) beds (n=26)
- Prenatal, well baby including breastfeeding support and HBHC visits (n=25)

### Health System Utilization (n=218 responses):

- Emergency room utilization (n=74): including rates by cause and return visits
- Hospitalization rates (n=48): such as admissions and readmissions, use of ALC beds, length of stay, and reasons for admissions

Note: For the indicators above, some responses are repeated in different categories. They reflect actual answers provided by respondents.

### What is missing? – Data unavailable/ data gaps for collaborating for population health

- A key gap reported is data on **populations of interest (n=83)**: such as indigenous (29%), children and youth (28%), ethno-cultural groups (12%) and seniors (12%)
- Respondents identified that there were significant gaps in relation to **health issues (n=151)**: health behaviours (38%) and mental health (23%)
- Gaps in **health system issues (n=52)** were: access to health and community care (37%), utilization of health services (27%) and health system performance (21%)
- Gaps in **data accessibility (n=78)**: included data for areas with small numbers of people living in them/community data/neighbourhood data, i.e., more granular data to aid in decision making (41%). There were also several comments (21%) in relation to the notion that data are available but not accessible (e.g., coroner's data, emergency medical services (EMS) data, primary care billing codes). Linked disparate health data sources and systems was a noted gap for some (14%).



## Methods

A total of **310 respondents completed the survey**, and of those, 97% worked in Ontario.

- Overall, the majority of respondents (74%) worked at Public Health Units (PHUs), while 14% worked at Local Health Integration Networks (LHINs). The variation in response rates from public health and LHIN employees is likely representative of the numbers of employees working in each area. About 8% worked in other sectors, and 4% worked at either the Ministry of Health (MOHLTC) or Public Health Ontario (PHO).
- Just over a fifth of respondents were managers (22%). The remaining respondents covered a wide range of positions and levels (e.g., 17% data experts)
- Close to half (45%) had worked in the health sector for more than 15 years and a fifth (21%) had worked less than 5 years

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The views expressed in this publication are the views of the research team, and do not necessarily reflect those of PHO.

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