UPHN Public Health Services and Systems Research Pilot

Early Insights and Results

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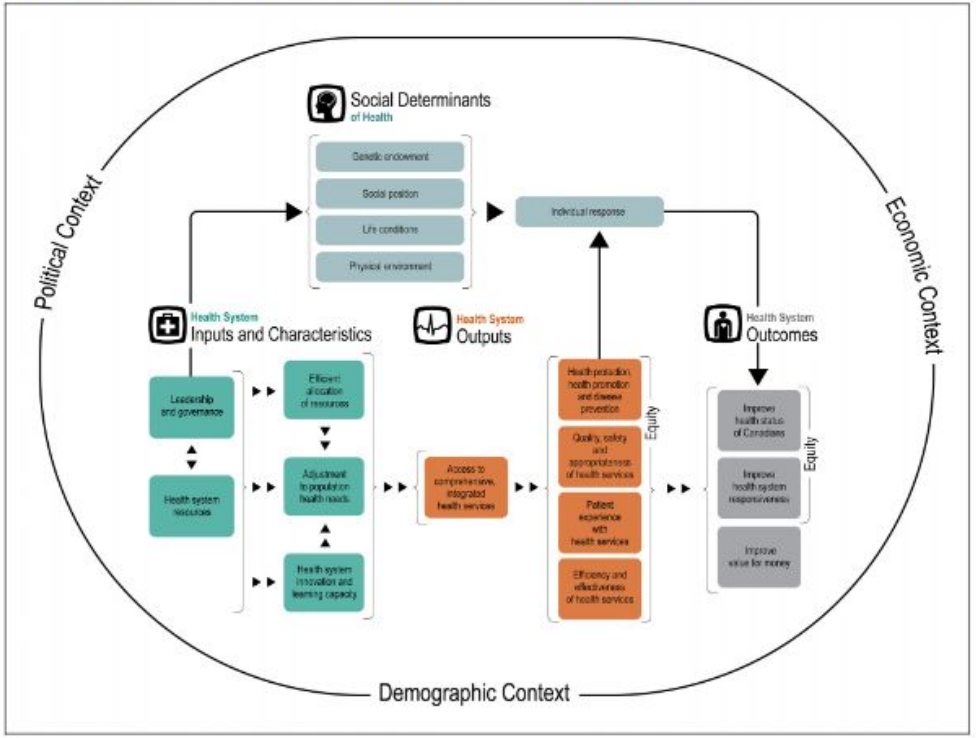
Overview

- Introduce Public Health Systems and Service Research (PHSSR) project
- Summarize UPHN efforts to develop and pilot PHSSR survey among member cities
- Report results from pre-pilot survey conducted earlier this month

Public Health Systems and Service Research

- Emerged in the United States in the 1990s
- Relatively little work like this has been done in Canada

Figure 1: CIHI's New Health System Performance Measurement Framework



Example: Glen P. Mays' work

WEB FIRST

By Glen P. Mays and Sharla A. Smith

Evidence Links Increases In Public Health Spending To Declines In Preventable Deaths

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ABSTRACT **Public health encompasses a broad array of programs designed to prevent the occurrence of disease and injury within communities. But policy makers have little evidence to draw on when determining the value of investments in these program activities, which currently account for less than 5 percent of US health spending. We examine whether changes in spending by local public health agencies over a thirteen-year period contributed to changes in rates of community mortality from preventable causes of death, including infant mortality and deaths due to cardiovascular disease, diabetes, and cancer. We found that mortality rates fell between 1.1 percent and 6.9 percent for each 10 percent increase in local public health spending. These results suggest that increased public health investments can produce measurable improvements in health, especially in low-resource communities. However, more money by itself is unlikely to generate significant and sustainable health gains; improvements in public health practices are needed as well.**

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Despite devoting far more resources to health than any other country in the world, the United States continues to lag behind many other industrialized nations in health outcomes, including morbidity and mortality.[1] Although there are many factors that contribute to this gap between resources and outcomes, one possible contributor is the relatively limited investment in public health activities that are designed to promote health and prevent disease and disability.[2,3] These activities include efforts to monitor community health status; investigate and control disease outbreaks; educate the public about health risks and prevention strategies; enforce public health laws and regulations such as those concerning tobacco use; and inspect and ensure the safety and quality of water, food, air, and other resources necessary for health.[4]

Although national data on public health spending are scarce and imperfect, estimates consistently indicate that less than 5 percent of national health spending is devoted to public health activities.[5–9] In fact, the United States spends more on administrative overhead for medical care and health insurance than it does on public health activities.[10]

The resources invested in public health strategies within the United States vary widely across states and communities, yet the effects of this variation on population health remain poorly understood. Consequently, public health officials and policy makers face considerable uncertainty regarding the appropriate levels and targets of investing in public health activities.

The Affordable Care Act of 2010 authorized the largest expansion in federal public health spending in decades—a projected $15 billion in new spending over ten years—with the goals of improving population health, reducing health disparities, and helping to "bend the cost curve" by moderating growth in medical care spending. However, uncertainties regarding the expected

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Understanding the Organization of Public Health Delivery Systems: An Empirical Typology

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Context: Policy discussions about improving the U.S. health care system increasingly recognize the need to strengthen its capacities for delivering public health services. A better understanding of how public health delivery systems are organized across the United States is critical to improvement. To facilitate the development of such evidence, this article presents an empirical method of classifying and comparing public health delivery systems based on key elements of their organizational structure.

Methods: This analysis uses data collected through a national longitudinal survey of local public health agencies serving communities with at least 100,000 residents. The survey measured the availability of twenty core public health activities in local communities and the types of organizations contributing to each activity. Cluster analysis differentiated local delivery systems based on the scope of activities delivered, the range of organizations contributing, and the distribution of effort within the system.

Findings: Public health delivery systems varied widely in organizational structure, but the observed patterns of variation suggested that systems adhere to one of seven distinct configurations. Systems frequently migrated from one configuration to another over time, with an overall trend toward offering a broader scope of services and engaging a wider range of organizations.

Conclusions: Public health delivery systems exhibit important structural differences that may influence their operations and outcomes. The typology developed through this analysis can facilitate comparative studies to identify which delivery system configurations perform best in which contexts.

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PHSSR-Pilot

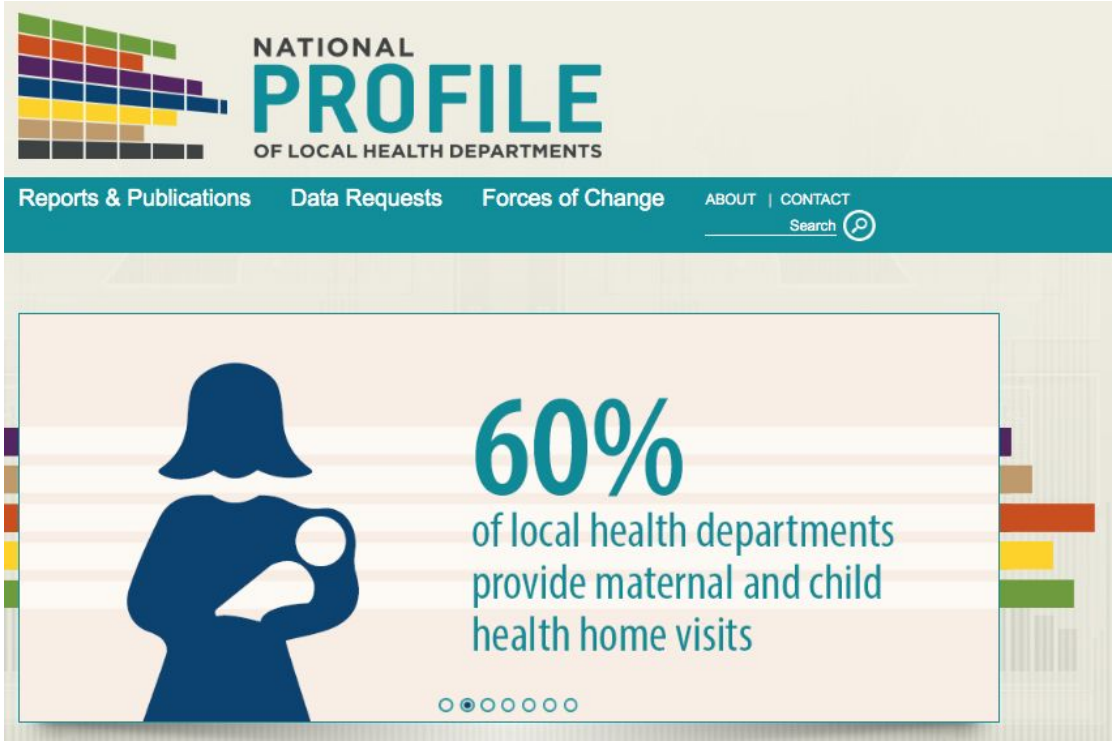
- In 2018, Marjorie MacDonald (University of Victoria) spearheaded an effort to assemble researchers and advance PHSSR in Canada
- At the same time, UPHN members have been keen to move this research program forward
- The UPHN started PHSSR-Pilot to lay groundwork for PHSSR research and support future efforts
- Also, to measure governance, resources, and capacity among UPHN membership

UPHN cities

+ Surrey
+ Mississauga
+ Laval
+ Longueuil
+ Sherbrooke
+ Fredericton

NPLHD

- National Profile of Local Health Departments Study administered routinely
- Administered regularly by National Association of County and City Health Officials (NACCHO)



National Profile of Public Health Departments in Canada (NPPHD)

- PHSSR Pilot is adapting NPLHD core component to Canada
- Like NPLHD, core components and modular components; opportunities for researchers to add supplements in the future
- Regularly collect data on:
    - Governance, partnerships and collaboration, workforce, service provision/functions, revenue and expenditures

Major Challenges

- Public health departments are organized very differently throughout the country
- Great variability in terms of capacity generally, and capacity to complete the survey specifically
- Governance is highly variable and it is not clear who should fill out the survey; nor what we should be trying to measure
    - Do we want to survey the administration of public health…
    - ...or public health administration?
- Language used for talking about all these is highly variable

Progress so far

- Draft of NPPHD has been prepared and shared with UPHN leads
- Seeking ethics approval from U of S to carry out pilot study
- Consulting with UPHN members and staff about survey design and administration
- In discussions with working group on International Classification of Health Interventions (ICHI) can inform out work—vice versa
- Assembling literature

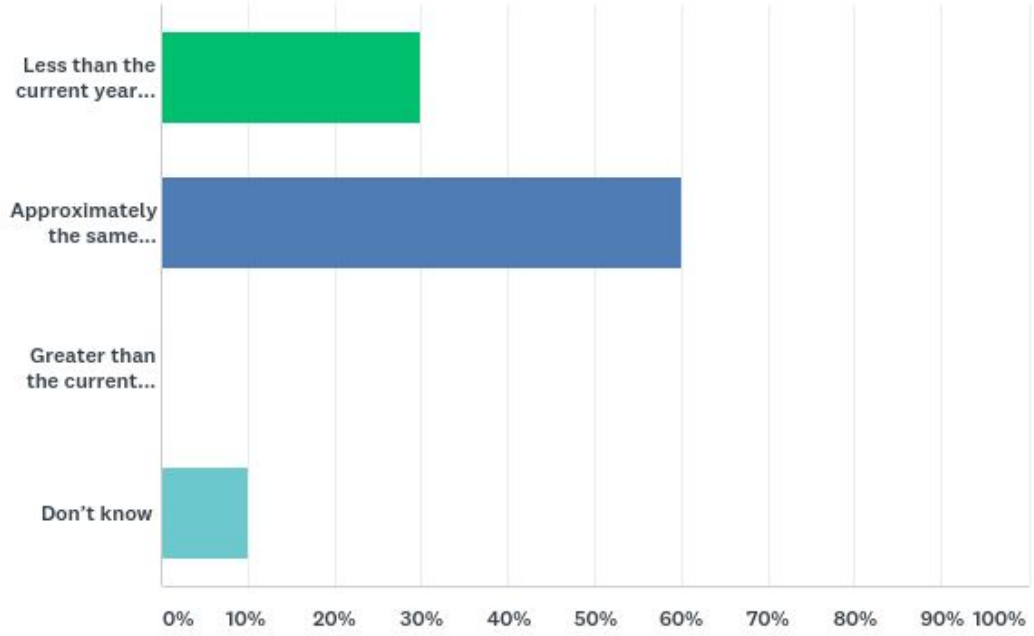
Pre-pilot study

- In advance of the conference, we trialed a few of our questions with the membership
- Did so using SurveyMonkey
- Specifically:
    - Open ended questions on governance arrangements
    - Human resources instrument
    - Several short-form budget questions
- 50% response rate since beginning of April 2019

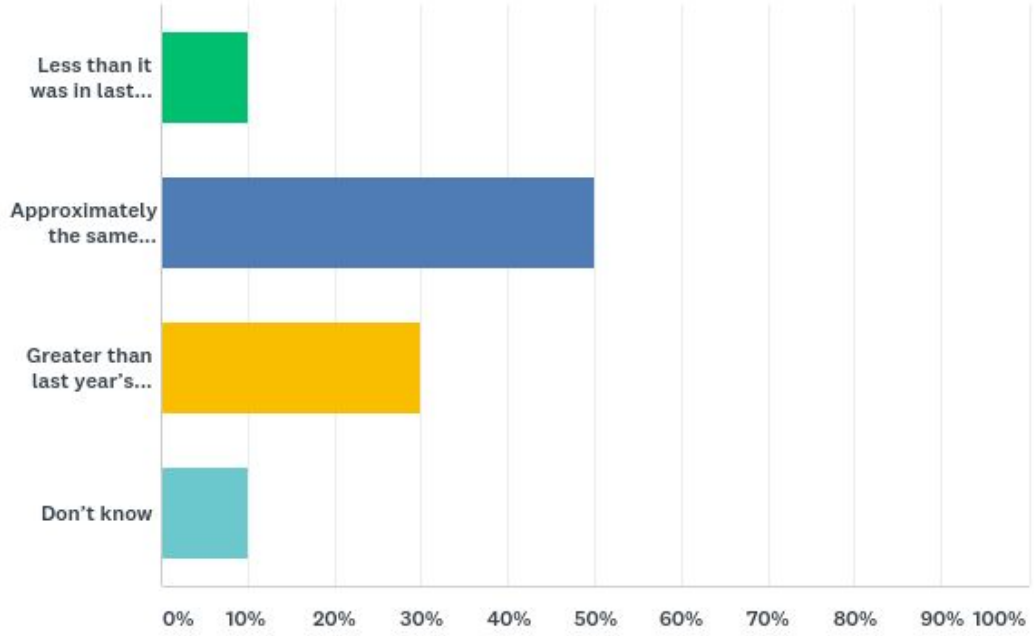
Results from a pre-pilot

- Numbers are too small to draw definite conclusions
- Wide range in extent of human resources: between ~30 and ~50 per 100,000 population served
- Per capita spending ranges between $10 and $60 per capita (compared to well over $1000 on health)
- Between 1% and 2.5% of overall health authority spending

Q19 I expect my PHD's budget in the next fiscal year will be… (Select only one)



Q17 My PHD's current fiscal budget is… (Select only one)



Lessons from pre-pilot

- Struggle to define scope of public health departments as this is a highly variable concept from region to region
- This is translating to difficulties in asking respondents about human resources and budgeting
- Specifically, some UPHN members departments play more of a supporting/advisory role and are not necessarily directly responsible for the administration of services and programs

Next Steps

- Work with lessons from pre-pilot to improve pilot study
- Continue to work with UPHN members to improve NPPHDC
- Administer complete version of NPPHDC with as many UPHN members as possible
- Locate funding sources to scale the project and sustain it over the long-term

Thank you.

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