

Checking Kingston's Equity Pulse:

An application and critical evaluation of the Urban HEART@Toronto Methodology to investigate the intra-city social and health inequities of Kingston, ON.

Kyle Pakeman

Queen's University

Kingston, Ontario, Canada

March 2017

Copyright © Kyle Pakeman, 2017

A report submitted to the School of Urban and Regional Planning in partial fulfillment of the requirements for the degree of Master of Urban and Regional Planning

Executive Summary

The relationship between social and material well-being and a good state of health is not spurious. This relationship has been regarded to be a significant explanatory factor in understanding the existence of health disparities between groups of people. The World Health Organization (WHO) has recently created its own tool for measuring social and health inequities called the Urban Health Equity Assessment and Response Tool (Urban HEART). Unlike most other Area-Based Deprivation Indices (ABDIs), the Urban HEART includes indicators for physical environment and infrastructure, population health, and governance and civic engagement. In this way, the tool stands out as a *sui generis* ABDI that expands the traditional model of how social and health inequities are measured. The Centre for Research in Inner City Health has since adapted the tool to fit the context of Canada's largest city: Toronto, Ontario. This study will apply the Urban HEART@Toronto methodology in a medium-size city in Canada: Kingston, Ontario. The intention is to not only map out the social and health inequities within the city, but to critically investigate the methodology's effectiveness and suitability in a medium-size city context, as compared with other ABDIs. With this information, the research will be able to speak to whether or not the Urban HEART@Toronto methodology is a more valuable tool for measuring social and health inequities than the alternatives.

Research Questions

This report examined intra-city social and health inequities in Kingston, Ontario using the Urban HEART@Toronto methodology, guided by the following four research questions:

1. What are the similarities and differences between the Urban HEART@Toronto methodology and two of the most widely used ABDIs: The Deprivation Index for Health and Welfare Planning in Quebec (INSPQ Index) (Pampalon and Raymond 2000) and the Ontario Marginalization Index (ON-Marg) (Matheson et al. 2012a)?
2. What is the geographical pattern of social and health inequities in Kingston, Ontario as demonstrated by the Urban HEART@Toronto? And how do these results compare to the INSPQ Index and ON-Marg?
3. What interventions are supported by the analysis of social and health inequities in Kingston, Ontario, according to Urban HEART@Toronto? And do the two other ABDIs support similar recommendations?
4. What are the strengths, weaknesses, opportunities, and challenges of using the Urban HEART@Toronto in a medium-size city context?

Methods

This research applied a comparative case study method, using quantitative methods to analyse social and health inequities in the City of Kingston.

The quantitative analysis was derived from the Urban HEART@Toronto methodology. This involved the calculation and selection of benchmarks and targets, which set the standards for the comparison of neighbourhoods within Kingston. In keeping with the Urban HEART@Toronto methodology, several types of benchmarks and targets (e.g. internal and external) were calculated for each indicator and one was selected based on a comprehensive criteria.

With the data acquired for each indicator and the data analysis completed, the results were inputted into ArcGIS. Findings from the GIS analysis were summarized in a series of maps that represent the differing levels of social and health inequities in Kingston's neighbourhoods. In total 11 maps were produced; 1 for each indicator that was calculable. The maps were colour-coded to indicate whether the results for each neighbourhood: (1) does not meet the benchmark (Red); (2) exceeds the target (Green); or neither exceeds the target nor meets the benchmark (Yellow).

In addition, a literature review provided both a theoretical and substantive framework for establishing links among existing research, the research questions, and findings. Consulting previous studies that explore the theoretical underpinning of ABDIs helped to substantiate the purpose and usefulness of this tool. Further, reviewing research that explores new ABDI models or investigates the benefits and limitations of ABDIs allowed for a critical comparative analysis of pre-existing indices and Urban HEART@Toronto.

Finally, four qualitative semi-structured interviews were completed to help substantiate and provide new insights into the Urban HEART@Toronto methodology and interventions to redress social and health inequities. Detailed notes were taken during the interviews to capture the contents of the discussion. As some technical difficulties with recording equipment were encountered, 2 interviews were not audio-recorded and transcribed. However, 2 interviews were audio-recorded and transcribed verbatim. Analyses of the interview results were conducted to distill what information collected was most pertinent to the research questions due to its originality or reinforcement of existing understandings.

Recommendations and Considerations for other Mid-Size Cities

This study provided numerous lessons that would be beneficial for other mid-size cities to consider before undertaking a similar study. These lessons here are targeted to public health, planning, housing, and/or social service departments within these municipalities as they are well positioned to spearhead such an initiative, due primarily to their expertise and mandate.

1. Urban HEART@Toronto can reveal new dimensions of health and social inequities

Perhaps one of the greatest assets of the Urban HEART@Toronto is that it includes indicators and domains that are absent from the most widely used ABDIs, namely the ON-Marg (or CAN-Marg) and INSPQ Index. By including these new indicators and domains, the Urban HEART@Toronto has the potential to stimulate conversations at the political and grass roots level about the different structural factors that influence population health, and could lead to greater evidence-based decision making around health interventions and policies.

2. Consult with your local Public Health Unit

While the data for the majority of indicators was accessible and suitable for Kingston CSD, it was ultimately felt that some of the indicators could have been modified to better reflect the local context. Other mid-size cities considering carrying out a similar study would benefit from consulting and working closely with their public health unit to modify indicators to fit their own social, political, economic, cultural and environmental context.

3. Consider adding new indicators as suggested in the SWOC analysis

While the indicators and ideas provided in the SWOC analysis was not exhaustive, they provide a good starting point for understanding how the Urban HEART@Toronto can be built upon to include new indicators that better capture some of the social and health inequities a mid-size city would be interested in having more data on.

4. Allocate an appropriate amount of time to the study and establish a steering committee

One of the limiting factors with accessing the data sought was the timeline of the study. To properly carry out this study, sufficient time is necessary because applying for data can be a time consuming process, both in terms of completing data request applications and waiting for approval. Moreover, it is likely that accessing data, especially administrative data with the school board, would have been facilitated if the appropriate connections had been made. Establishing a steering committee comprised of key stakeholders that have access to relevant data would be a good tactic for gaining access to highly confidential data sets, by building buy-in for the study.

5. Allocate funding to project and work closely with a post-secondary academic to access population health data

The study should have a dedicated fund to facilitate access to population health data that has a fee. Further, to access population health data stored at an RDC, it is advisable to work closely with a post-secondary academic who will be able to help gain access to the RDC. In addition, this post-secondary academic could help ensure that the geographic units being applied in the study are of a sufficient size to ensure that minimum sample sizes for key population health surveys is met.