6 H1N1 AND HOMELESSNESS IN TORONTO: IDENTIFYING STRUCTURAL ISSUES IN THE HOMELESSNESS SECTOR

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The H1N1 pandemic outbreak of 2009–2010 provided a unique set of circumstances from which to evaluate the readiness of homelessness sectors across Canada to deal with infectious outbreaks. In Toronto, the previous occurrence of SARS meant that policy-makers, social service managers and front-line workers had already faced the challenge of working through a major public health crisis. Even before SARS, managing public health issues was not a new concern for the homelessness sector of Toronto, as outbreaks of tuberculosis, lice and bedbugs have occurred within that context (Basrur, 2004; Tuberculosis Action Group, 2003). This chapter examines the homelessness sector's experience of the H1N1 pandemic outbreak in Toronto.[1] Mixed methods research was conducted with key stakeholders, social service providers and homeless individuals in the city to gain a better understanding of how the sector prepared for, experienced and recovered from the outbreak.

Through this research, many of the structural issues facing Toronto's homelessness sector were apparent. Although this study examined the H1N1 outbreak in particular, these issues are arguably not limited to a pandemic. For instance, the study showed chronically high rates of service reliance among Toronto's homeless population, limited capacity for public health and pandemic planning within the sector, congregate service designs that create close proximity between clients, and the many challenges service providers had in accessing and retaining necessary supplies. These structural issues are discussed throughout this chapter, with research findings and recommendations being provided. While this research was conducted in Toronto — and thus represents findings particular to that city — the themes and recommendations should be of interest and value to municipalities across Canada.

[1] For a complete analysis of the Toronto site, please see Buccieri & Gaetz, 2015.

Homelessness and Pandemic Vulnerability

In the spring of 2009, Dr. Margaret Chan, Director-General of the World Health Organization, announced the world was experiencing an H1N1 influenza pandemic. She declared, "Above all, this is an opportunity for global solidarity as we look for responses and solutions that benefit all countries, all of humanity. After all, it really is all of humanity that is under threat during a pandemic" (Chan, 2009, n.p.). However, while the threat might be universal, research shows the risk of negative outcomes is greater for vulnerable populations (Ng, 2009). As Appleyard (2009) notes, the ways in which emergencies unfold are directly rooted in the pre-existing social patterns that are established in non-emergency times.

Marginalized populations are often at greater risk during a pandemic outbreak, making it particularly important to consider their needs in the planning process. A sound response to a pandemic rests on the ability of planners to identify sources of risk, populations likely to experience the greatest hardships during a crisis and concrete strategies to overcome inequities. There is a growing body of literature that documents efforts to include at-risk individuals in pandemic planning (Appleyard, 2009; Blickstead & Shapcott, 2009; Blumenshine et al., 2008; Chen, Wilkinson, Richardson, & Waruszynski, 2009; Hutchins, Truman, Merlin, & Redd, 2009; John Hopkins Berman Institute of Bioethics, n.d.; Ng, 2009; Upshur et al., 2005; Uscher-Pines, Duggan, Garron, Karron, & Faden, 2007).

Homeless individuals have multiple vulnerabilities that may put them at greater risk during a pandemic outbreak. For instance, homelessness has been described as a health inequity cliff in which homelessness causes health to drop off significantly (Story, 2013). Research documents many of the physical and mental ailments associated with homelessness, such as premature aging, respiratory illness, fatigue, traumatic brain and other injuries, sexually transmitted infections, hepatitis and HIV/AIDS (Daiski, 2007; Frankish, Hwang, & Quantz, 2005; Haldenby, Berman, & Forchuk, 2007; Hwang, 2001; Hwang et al., 2008a; Topolovec-Vranic et al., 2012).

Homelessness may also leave individuals disconnected from positive social support networks (Gaetz, O'Grady, & Buccieri, 2010). While some homeless persons may find sources of support in street communities (Kelly & Caputo, 2007) or social service workers (Thompson, McManus, Lantry, Windsor, & Flynn, 2006), homelessness is often described as an experience of loneliness and isolation (Rokach, 2005). Consequently, researchers have found that homeless persons are at higher risk of mental health conditions such as depression, anxiety and post-traumatic stress disorder (Bender, Ferguson, Thompson, Komlo, & Pollio, 2010; Forchuk, Csiernik, & Jensen, 2011; Kirst, Frederick, & Erickson, 2011). Many homeless individuals also use substances and/or have addiction-related issues, and these findings are particularly well documented in Toronto (Barnaby, Penn, & Erickson, 2010; Grinman et al., 2010; Hwang, 2006).

Pandemic outbreaks are becoming an increasingly common occurrence in modern global cities like Toronto (Ali & Keil, 2008). While each outbreak may be different in scope and nature, the potential for harm is a risk that is common to all pandemics. The experience of homelessness — and the associated declines in physical health, mental health and social supports — puts individuals at a greater disadvantage before, during and after an outbreak. Planners are increasingly considering the needs of populations at greater risk during a pandemic. This chapter draws on research conducted in Toronto that examines how the homelessness sector managed the H1N1 pandemic, and lessons that can be learned for future outbreaks.

Methodology[2]

This chapter discusses the findings from the Toronto site, drawing on data collected from 2010 to 2011.[3] Interviews and surveys were conducted with three key participant groups: homeless people, social service providers and stakeholders working in policy and health care roles. The statistical software program SPSS was used for analysis. The project was funded by the

[2] An overview of the project methodology can be found in the introductory chapter of this book.
[3] Findings from other cities, and comparisons, can be found in other chapters within this book.

Canadian Institutes of Health Research and approved by the York University Research Ethics Board. Participants were recruited based on their affiliation with the homelessness sector in Toronto as employees, consultants or clients.

A total of 149 homeless individuals participated in the study, completing both an interview and a survey. The majority were self-identified males (64.4%), with a minority of female (30.2%) or transgender (2.7%) individuals. The average age of participants was 34, and participants experiencing homelessness ranged in age from 16 to 75 (45% were street youth, aged 16 to 24). The participants primarily self-identified as straight (72.5%), while a large minority reported being LGBTQ (18.9%). Ethnically, the homeless participants were a diverse sample, with 36.9% considering themselves to be members of a visible minority. While the majority were Canadian citizens (83.9%), only one-third were born in Toronto (33.6%). One-quarter of the respondents identified themselves as Aboriginal (24.8%). These demographics are similar to those reported in a 2013 Toronto street needs assessment, in which the average age of homeless individuals was 42 years, 65% were male, 1% reported being transgender, 9% reported being LGBTQ, and 16% self-identified as Aboriginal (City of Toronto, 2013).[4] The present study had higher response rates from those who self-identified as Aboriginal and LGBTQ than the street needs assessment, but diverse populations were intentionally sought for this study by conducting research in partnership with agencies that have mandates to support those populations.

In addition to individuals experiencing homelessness, 15 social service providers were interviewed as part of this study. Each of these participants interviewed worked in an agency that provided services for homeless, vulnerable, marginally housed, and/or street-involved persons in Toronto. These participants included seven individuals who worked as Managers of Health Care/Nursing, three Nurses and Nurse Practitioners, two Directors, one Executive Director, one Residential Supervisor, and one Chaplain. These individuals had served in their current positions between 8 months and 19 years, with the majority having been in their position between 2 and 10 years at the time of the interview. Another seven social service provider

[4] Ethnicity of respondents was not reported in the street needs assessment.

participants had worked in other inter-agency positions prior to undertaking their current roles. Most began in non-managerial positions before being promoted. Those participants had been working in their respective agencies between 1 and 20 years, with most being there 2 to 10 years.

Finally, five key stakeholders were interviewed for this study. These individuals served in roles related to homelessness sector policy, public health and homelessness sector service coordination in Toronto. Each of the five individuals was actively involved in key stakeholder roles during the H1N1 pandemic. During the interviews, they described their roles as advocacy, liaising, health care, influencing planning and policy, and serving on the front line during the outbreak.

A Brief Overview of Toronto's Homelessness Sector

Toronto's homelessness sector comprises a range of services and supports that are intended to reduce homelessness, support those in crisis and aid in transitioning the homeless from the streets into stable and suitable housing. The kinds of supports that operate within the sector include, but are not limited to, emergency shelters, drop-in centres, day programs, community health centres and food banks. These services are important to Toronto's homeless population. For instance, in this study, high rates of service usage were noted by participants, with 57.7% indicating shelter use and 84.6% reporting drop-in centre use. Many homeless individuals are reliant on social service agencies for a range of support needs. Among the most commonly accessed services at shelters and drop-in centres, as reported by participants in this study, were food services, case workers, computers, showers, health care and laundry facilities, among others.

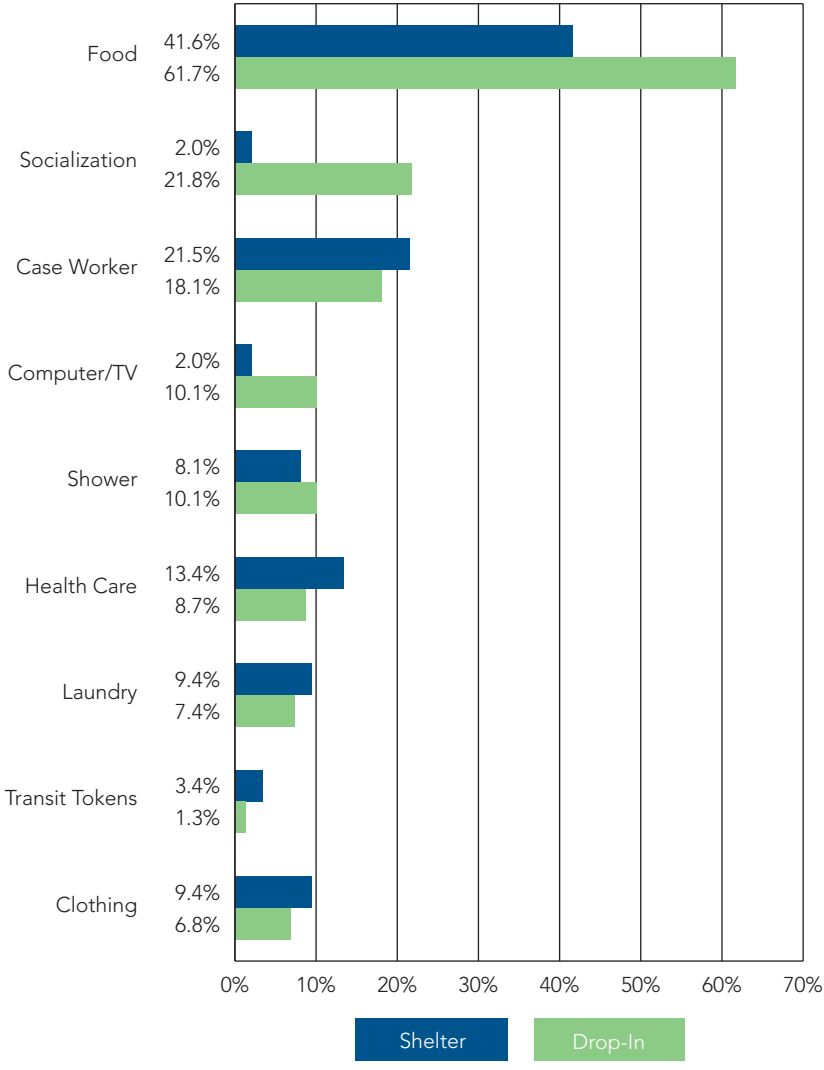

Figure 1: Most Commonly Accessed Services

High rates of service usage may put a strain on the sector's ability to meet the needs of every client. According to one high-level administrator interviewed for this study, Toronto has a "hybrid-model shelter system," in which there is a mix of shelters operated by the city and by other providers. The City of Toronto's Shelter, Support and Housing division operates 30 to 40 shelters, while the remaining shelters in the city are operated through non-profit and community organizations. There is a disproportionate number of beds in each shelter. Figures presented by one key stakeholder suggested that at the time of the interview (in 2011), there were 1,500 beds in city-operated shelters and approximately 2,650 beds in purchase-of-service shelters, for a total of approximately 3,800 emergency shelter beds (not including violence against women shelters and domestic hostels). Statistics collected and reported on by the City of Toronto (n.d.) indicate that in the same year as this study, the average nightly occupancy of emergency shelter beds was approximately 3,716 individuals. Taken together, these figures indicate an average occupancy rate of 97.8% in emergency shelters in Toronto during 2011.

Several of the key stakeholders and service providers interviewed for this study identified many existing structural issues in the homelessness sector, but among the most pressing concerns are the recurrently high usage rates of essential services such as emergency shelters and drop-in centres. Meeting this high demand for service requires adequate funding and resources. During the H1N1 outbreak, the rates of service usage fluctuated, but remained relatively high. For instance, drop-in centre usage dropped from 84.6% when there was not a pandemic, to 71.8% during the H1N1 outbreak, but shelter usage rose from 57.7% to 62.4% during the outbreak.[5] Given these high rates of use, the sector is already burdened by having to operate services at or near full capacity, even before an emergency outbreak occurs.

[5] The figures were reported by participants, based on their recollection following the end of the H1N1 outbreak. It is possible that factors such as memory and time of year may have impacted their reporting.

Identifying Structural Challenges

While very few individuals within the homelessness sector of Toronto became infected with H1N1, the experience of managing the outbreak highlighted key structural issues within that sector. These included congregate service designs that create close proximity between clients, the limited capacity for public health and pandemic planning within the sector and the challenges service providers had in accessing and retaining necessary supplies.

Congregate service design

The high occupancy rates of homelessness services, such as shelters and drop-in centres, are made more problematic by inadequate physical design. Many service agencies are housed in adapted buildings that were not purposely designed to meet the needs of large numbers of homeless clients. Often this means that individuals are placed together in close proximity while in a service agency. When shelter users in the H1N1 study were asked how many other people generally shared their room at night, the most common response was one to five other people (33.6%). Several participants reported sleeping in bunk beds (12.8%), and the distance between sleeping spaces was commonly described as being one to five feet (21.5%). Participants also reported that at their preferred drop-in centre there were often more than 20 (20.1%) or more than 50 (30.9%) other individuals in the room with them at any given time. It was also quite common to have at least five other people within touching distance when at a drop-in centre, as reported by 41.6% of participants.

Congregate settings are a challenge for enacting public health measures that reduce the spread of infectious disease. Because very few social service agencies are purpose-built, they experience a range of infection control challenges related to the physical spaces they occupy. As one stakeholder with advanced medical knowledge noted, “Any time you have a congregate setting it’s easier to spread anything. This is the case with drop-ins and shelters. Ideally you should have smaller groups, more rooms, more bathrooms — that would be better and reduce transmissions between groups.” The physical design of service agencies is a concern,

not only because of small rooms and the limited number of bathrooms, but because such locations are not equipped to manage large-scale pandemic outbreaks. During the H1N1 pandemic, service providers experienced several challenges related to the spatial layouts of their agencies. Among the most common concerns were small or inconveniently located quarantine rooms (for example, on higher floors, which ill clients had to climb stairs to access), being in public buildings where entry/access is not controlled, shared ventilation throughout the building, shared sleeping accommodations (and the use of bunk beds), not having access to a negative pressure chamber and not having rooms for screening potentially infected clients.

Many homeless people rely on social services such as drop-in centres and shelters to meet basic needs (Sager, 2011), but the congregate nature of these settings results in exposure to a range of potential bacteria and viruses (Ali, 2010; Hwang, Kiss, Gundlapalli, Ho, & Leung, 2008b), while the large number of clients creates barriers to accessing limited resources, including shower stalls and washing machines. Sasaki, Kobayashi, and Agui (2002) have written that it is likely that factors such as overcrowding affect the transmission and spread of diseases among the homeless.

Limited capacity for public health and pandemic planning

In Toronto, a number of key organizations were involved in helping prepare the homelessness sector for H1N1. Toronto Public Health was at the forefront of the planning and preparedness initiative. Given its role as the municipal body overseeing the city's response to H1N1, Toronto Public Health took the lead in working with agencies and organizations to prepare for the outbreak. According to one key stakeholder, "It was good that Toronto Public Health stepped up with a specific identifiable group of people to deal with the homelessness sector. It worked very well in Toronto." Toronto Public Health and another city department, Shelter, Support and Housing, have a long history of working together on infection control and public health promotion with the homelessness sector of Toronto, including during previous outbreaks of tuberculosis in shelters (Basrur, 2004; Tuberculosis Action Group, 2003) and SARS (Svaboda et al., 2004; The SARS Commission, 2004, 2006a, 2006b, 2006c).

Although Toronto Public Health had published a pandemic plan for the city (Toronto Public Health, 2011), most service providers interviewed in this study were not very familiar with its details. Officials from Toronto Public Health offered support to service agencies in creating their pandemic plans, but were unable to offer one-to-one consultations. As one stakeholder stated, "Living through H1N1, one of the biggest issues was that so many agencies had not even a generic emergency plan. So in dealing with H1N1, many were starting from scratch." According to service providers, the plans that existed largely emerged as a result of the previous SARS outbreak in Toronto.

The reported lack of preparedness occurred primarily because most agencies within the homelessness sector do not have a health mandate, and therefore do not have the personnel, expertise, funding or resources needed to focus on public health and pandemic plan creation. In the words of one stakeholder, "One of the things that struck me was the difficulty so many organizations had with organizational depth. They just didn't have the staff time to free up to think things through. They are funded in a very strict way that limits their mandate — this is really true in social services. The fact that health issues occur in the realm of social services becomes really difficult, and they are not always able to pick it up."

The general lack of funding available to social service agencies for pandemic preparedness inhibited planning initiatives. Many agencies had small operating budgets, with little to no funds for discretionary spending. As a stakeholder noted, "Because the budgets of agencies were so small, they had almost no leeway to deal with these kinds of things [such as a health emergency] when they popped up." Many social service providers identified the lack of funding as a primary challenge in planning and getting their agencies prepared for the outbreak. Although the limited funds proved to be challenging, one stakeholder mentioned witnessing a strong will by many agencies to find alternative ways to get what they needed. To this end, one service provider stated, "You can't always wait for others. Sometimes we have to go ahead and get things done ourselves."

Within the sector, most service providers reached out to other agencies for guidance and advice on pandemic planning. Many took advantage of existing relationships, partnerships and committee meetings to gain insight into how others were approaching the planning and preparation process. Notably, many service providers took advantage of the opportunity to connect with other agency staff by participating in sector-wide meetings. Those who did reach out to other service providers reported discussing a range of topics, including coordination in the event of a more serious outbreak, under what circumstances to close, the health status of clients at each agency in relation to H1N1, vaccination clinic times and locations, access to medical supplies, measures to take if clients became ill and strategies for cancelling programs with as little disruption as possible. Unfortunately, despite these conversations, very few concrete action plans were developed through these interactions, due to lack of funding and personnel resources.

Challenges accessing and retaining supplies

The H1N1 outbreak required homelessness sector agencies to access and store many supplies (such as cleaning products, hand sanitizer, masks and gloves) that may have been outside or beyond their regular stock. Social service providers interviewed for this study were evenly divided on whether gaining access to supplies was a challenge for their respective agencies. Half the providers (such as those in large agencies and/or agencies that offered onsite health services) stated there were no problems getting supplies, or they already carried many of the items needed, while the other half (i.e., smaller agencies and those without health services onsite) had trouble keeping supplies in stock or obtaining more supplies. Four challenges were repeatedly noted by service providers in accessing and retaining supplies during H1N1.

The first and most common challenge was the cost of supplies. Social service providers from several agencies said the cost of H1N1 supplies came out of their regular operating budgets (thus redirecting funds away from other resources). According to one stakeholder, “The homelessness sector is always short of supplies and resources.” When agencies were able to gain access to supplies, another challenge they faced was trying to keep them in stock. The high demand for supplies meant that agencies had difficulty

maintaining the necessary levels. Thus, many social service providers faced situations in which supplies were depleted as rapidly as they became available. Stockpiling supplies was not an option for several reasons. First and foremost, as one stakeholder noted, creating a stockpile does not work when an agency is already short of supplies. Not having enough room to store supplies was another barrier some social service providers identified. Having a sector-wide communal stockpile was suggested as a potential solution to the shortage, but this idea poses the logistical challenges of deciding how supplies would be divided, where they would be stored, and who would fund their purchase. As one stakeholder noted, creating a communal stockpile would be difficult unless other mechanisms, like government fund-matching programs, were put in place.

The third challenge pertained to hand sanitizer. While many agencies understood its importance, and wanted to distribute it to clients, there was a concern that some clients might ingest the sanitizer. This was noted as a concern of many agencies, according to one key stakeholder. One social service agency had to tie the bottle to a staff member's desk to prevent clients from attempting to drink the hand sanitizer. Finally, the issue of masks caused considerable confusion, particularly at the beginning of the outbreak. Among the most common questions were whether surgical masks were needed, what the fit-testing requirements were for different masks, and where the money would come from to pay consultants to do the fitting. Despite the early confusion, not many agencies reported having challenges with masks (likely due to the low rates of illness among the homeless population).

Recommendations: Overcoming Structural Challenges

The H1N1 outbreak highlighted many pre-existing structural challenges in the Toronto homelessness sector, while also identifying opportunities for improvement. Among the challenges that emerged in this study were the chronically high rates of service reliance among Toronto's homeless population, congregate service designs that create close proximity between clients, the limited capacity for public health and pandemic planning within the sector, and the challenges service providers had in accessing

and retaining necessary supplies. Structural issues are deep-seated, and not quickly resolved. However, once they are recognized, measures can be taken to begin to address them. The following recommendations are offered, not as quick fixes, but as steps to improve homelessness sector operations in advance of the next pandemic outbreak.

1. **New social service agencies should be purpose-built with public health considerations in mind**. Newly constructed agencies should consider the health risks associated with congregate living and build solutions, such as independent quarters, into their designs (Davis, 2004; Graham, Walsh, & Sandalack, 2008).

2. **More funding is needed for shelters and drop-in centres to cover the costs associated with operations, supplies and staff salaries**. At least part of these funds should be made available for executive directors to use at their own discretion (as opposed to being earmarked for specific expenses or initiatives).

3. **Internal agency pandemic planning should be a collaborative effort, but led by a designated public health staff member**. This person would remain up to date on public health issues within their agency and help with public health training, pandemic planning and network-building within their agency. These duties should be written into the staff member's job description to allow adequate time to undertake them.

4. **Sector-wide pandemic planning should be an ongoing and collaborative effort, facilitated through yearly meetings**. During the H1N1 outbreak, Toronto Public Health and Shelter, Support and Housing jointly hosted meetings for service providers, to facilitate sector-wide information sharing and discussion. Holding similar meetings on a yearly basis, even when there is no pandemic, would help agencies to develop and strengthen their existing networks, form new partnerships and keep public health considerations at the forefront.

5. **Designated funding should be made available to allow homelessness sector agencies to enact public health initiatives**. During H1N1, many social service workers consulted with partner agencies for support and advice, but were unable to enact any concrete plans due to a lack of funding. The City of Toronto could offer a funding program in which partner agencies could apply for small grants to fund specific public health initiatives.

6. **Alcohol-based hand wipes could be distributed to homeless individuals instead of liquid sanitizer, to reduce the risk of ingestion**. Hand washing and sanitizing were encouraged during H1N1 to reduce the spread of disease. However, some agencies reported that difficulties arose as some clients tried to drink the alcohol-based hand sanitizing liquids. To address this, individual alcohol-based wipes could be distributed to clients instead.

7. **The homelessness sector should develop a communal stockpile for pandemic supplies, to be rationed between agencies, as determined by factors such as agency size, client need and type of facility**. This communal stockpile would be funded through a number of sources, such as individual agency budgets (on a sliding scale), Toronto Public Health and the Ministry of Health and Long-Term Care. Logistical issues would need to be addressed, such as finding a warehouse or space where supplies could be held, formalizing policies for supply distribution and organizing delivery of supplies.

Concluding Remarks

Pandemic outbreaks are difficult for many individuals, but may be particularly challenging for those with the pre-existing vulnerabilities of homelessness, poor physical and/or mental health and social isolation. Informed advance planning will ensure the needs of these individuals are not overlooked in a health crisis. While it may not be possible to avoid a pandemic altogether, advance planning and preparation will help alleviate the burden on the homelessness sector.

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