

# **The Homeless Individuals and Families Information System (HIFIS) Initiative: Using Information and Communication Technologies to Build Knowledge and Understanding on Homelessness**

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## **ABSTRACT**

A growing yet limited body of knowledge points to alarming trends in the housing situation of some Canadians. An estimated 150,000 Canadians are living in absolute homelessness, in over crowded or unsuitable accommodations. In addition, there are many Canadians living in shelters, and on the streets. The Government of Canada (GOC) has implemented a number of policies and programs to respond to the housing needs of Canadians, including the National Homelessness Initiative (NHI), which aims to strengthen the capacity of communities in all provinces and territories to contribute to the reduction and prevention of homelessness.

One program under the NHI is the Homeless Individuals and Families Information System (HIFIS) Initiative, which aims to contribute to the alleviation of homelessness by increasing knowledge and understanding of homelessness issues, in part through the implementation of information and communication technologies (ICT) in shelters across the country. Through a presentation of the HIFIS Initiative, this paper examines how ICT can strengthen community capacity to increase knowledge and understanding of homelessness and how it contributes to the development of effective solutions to the issue. This paper also presents some of the more innovative solutions found to address the barriers shelters have faced while implementing the HIFIS Initiative.

**Keywords:** Homelessness, shelter, data, community capacity, knowledge.

## **1. INTRODUCTION**

The October 5<sup>th</sup> 2004 Speech From the Throne, which sets out the Government of Canada's (GOC) broad goals and directions, stated that "shelter is the foundation upon which healthy communities and individual dignity are built" [1]. While Canada enjoys a strong and growing economy and a prosperous society, homelessness, in its many forms, persists across the country. The Government of Canada (GOC) has implemented a

number of policies and programs to respond to the housing needs of Canadians, including the National Homelessness Initiative (NHI), which aims to strengthen the capacity of communities in all provinces and territories to contribute to the reduction and prevention of homelessness [2]. In pursuit of its objective, the NHI encourages community planning and engagement by a variety of stakeholders and provides communities with the tools and supports needed to develop longer term, sustainable homelessness strategies.

Communities and the NHI have identified the lack of reliable data on homelessness in Canada as a barrier to developing effective solutions to the issue [3]. To bridge this knowledge gap, the NHI supports national and local research efforts to help identify the current landscape, monitor trends and probe the underlying causes of homelessness. Research points to shelter data as an important source of information on homelessness [4, 5]. The Homeless Individuals and Families Information System (HIFIS) Initiative aims to strengthen the capacity of shelters to collect and share data by supporting in situ implementation of electronic client management software and by facilitating the development of data-sharing networks among and between shelters and their stakeholders, including the NHI.<sup>1</sup>

Through a presentation of the HIFIS Initiative, this paper examines how ICT strengthens community capacity to increase knowledge and understanding of homelessness and how it contributes to the development of effective solutions to the issue.

## **2. HOMELESSNESS AND SHELTERS IN CANADA**

### **Homelessness in Canada**

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<sup>1</sup> For the purpose of this discussion, stakeholders includes all levels of government, shelter funding agencies, researchers, not-for profit organizations and the private sector.

accommodations [6]. In addition, there are many Canadians living in shelters, and on the streets. A further 891,000 Canadians are at risk of homelessness, unable to access affordable, suitable or adequate housing, for less than 50% of household income [7, 8].

Homelessness in Canada is a product of its economy, society and geography. Increasing levels of poverty and a declining stock of affordable housing have conspired to push rents out of reach of low income households [7]. Gaps in social services have allowed those most vulnerable to homelessness, including youth, seniors, ex-offenders and those with mental health problems fall through the cracks [9]. In 2001, nearly one quarter of families and individuals seeking emergency shelter in Toronto were refugee claimants [10]. Isolated Northern communities face extreme housing shortages and severe overcrowding [11]. Although Canada supports housing as a human right, many Canadians are being left behind [12, 13].

### **The Role of Information and Research**

Addressing homelessness requires an awareness of the scope of the issue. Research suggests that shelter data is a powerful tool for monitoring trends in the size and demographic make-up of the homeless population and in their patterns of service use. Over 850 shelters are known to provide accommodation and support services to the Canadian homeless population [14]. Until recently, the ability of these shelters to collect, manage and share nationally comparable data was restricted by their isolation from each other, and due to limited resources and capacity to adopt and employ relevant technologies [15].

## **2. THE HIFIS INITIATIVE**

### **The HIFIS Initiative**

The HIFIS Initiative was launched in 2001 with the aim of contributing to the alleviation of homelessness by increasing knowledge and understanding of homelessness issues [16]. To achieve this vision the HIFIS Initiative pursues the following strategic objectives:

- Create and implement information services, tools and technology to support capacity development in shelters;
- Create a sustainable national network of data-sharing partnerships and manage a national database; and,
- Negotiate and manage multi-stakeholder partnerships for long-term sustainability [16].

The HIFIS Initiative is implemented in partnership with communities across the country, mirroring the approach of the NHI Supporting Communities Partnership Initiative (SCPI), a UN-HABITAT award-winning model for community engagement. This approach is based on the premise that communities are best placed to devise

effective strategies to both prevent and alleviate homelessness [17].

The administrative body of the HIFIS Initiative and the NHI, the National Secretariat on Homelessness (NSH), benefits from a countrywide infrastructure, with a national headquarters as well as regional and local presence in all provinces and territories [18]. National team members lead the overall operations and development of the HIFIS Initiative while regional HIFIS coordinators liaise with individual shelters to introduce and implement the HIFIS Initiative at the community level [5]. Together, the HIFIS Initiative team works directly with community stakeholders to establish a sustainable information system that serves the needs of homeless service clients, shelters, the communities that host them, and social policy makers.

Shelters in communities across Canada are at different levels of HIFIS implementation, depending on how long they have been engaged, the particular resource and technological barriers they faced during implementation and the success with which they were able to access the tools and supports necessary to overcome these barriers. The following section of this paper highlights some of the more innovative solutions found to address these barriers.

Engaging communities in the various stages of the HIFIS Initiative has proven to be fruitful. Since 2001, the HIFIS Initiative has engaged over one third of all known emergency and transitional shelters in urban and rural communities from across the country, of which one third have agreed to share basic data with the NSH in order to build the HIFIS database [14].

### **HIFIS Initiative Tools**

HIFIS Initiative operations and activities are geared towards providing communities with tools and supports to enhance their capacity to collect and share homelessness data [16]. These tools, developed in response to identified needs, are available for free to homelessness stakeholders and the general public [19]. From specific tools such as the HIFIS Software, to more general communication tools such as the NSH Website, the HIFIS Initiative employs a wide range of ICT tools and supports in order to meet its strategic objectives.

The core tool of the HIFIS Initiative is the HIFIS Software, an electronic data management software application that assists shelters in the collection, management and reporting of information on their operations and the clients they serve [16]. Canadian shelters are diverse in the clientele they serve and the supports they offer. Many are limited both in terms of time and technological capacity and thus require a software application that is simple to learn and use, flexible and can run on less powerful computers. Designed to respond to these needs, The HIFIS software is a bilingual, user-friendly application that can be easily

customized to collect and report on specialized data beyond its standard fields. The HIFIS Software is built to run on stand alone units, however, it can be networked across a Local Area Network (LAN) to allow client data collection and management at multiple stations within a single shelter site [16].

The development of the HIFIS Software is driven by individual users, both existing and potential. This is achieved through a number of user engagement mechanisms, such as local, regional and national workshops, surveys, feedback forms and a listserv. Development of the HIFIS Software is ongoing, including the creation of an application to support its use on a Wide Area Network (WAN).

In addition to the HIFIS Software, various other tools forward the goals of the HIFIS Initiative. A number of tools and supports are available for free via the NSH Website or through the regional coordinators, including HIFIS Software training manuals and guides, a basic computer user training manual, and a community resource toolkit. Communities' use of the HIFIS Initiative tools is further supported through training sessions conducted by HIFIS Trainers as well as a national support desk, available through a toll-free phone line and staffed by knowledgeable IT specialists during business hours. Finally, the efforts of the HIFIS Initiative team are aided through a collection of online promotional and information tools. Web-based resource toolkits allow HIFIS Initiative staff to access a wide range of marketing, communication, planning and evaluation tools as well as to document and share best practices [16].

### **3. INCREASING KNOWLEDGE AND UNDERSTANDING OF HOMELESSNESS THROUGH ICT**

The HIFIS Initiative has contributed to increased knowledge and understanding of homelessness issues by implementing ICT at the community level to support the collection and management of standardized data in shelters, and by connecting shelters with each other and their stakeholders as a means to facilitate the sharing of this knowledge. Since 2001, the HIFIS Initiative has successfully engaged over one third of all known emergency and transitional shelters in over 60 urban and rural communities from across all provinces and territories in Canada [14].

#### **Data-sharing networks**

The scope and momentum of the HIFIS initiative has led to the development of partnerships with other government departments, voluntary organizations and the private sector, which all play a role in the future development and sustainability of the Initiative. A number of data-sharing networks have been established, defined as partnerships between and among shelters and their stakeholders for the purpose of sharing data. To date, networks have been

developed not only between the NHI and the individual shelters, but also among and between shelters and other community homelessness stakeholders for the purpose of sharing knowledge and best practices in data collection and information management.

Two types of data-sharing networks have developed: national and community. At the national level these networks consist of data-sharing agreements between shelters and the NSH, the outcome of which is the creation of a national database on the characteristics and distribution of sheltering services across the country, and demographic and service use data for the individuals who access these services.

Shelters that voluntarily choose to share data with the HIFIS Initiative Team, or indeed any homelessness stakeholder, can use the HIFIS software data export function to generate export files which are stripped of any client identifying information. Exported data is added to the national database only after the shelter, any intermediate parties, and the NHI have signed a Data Sharing Protocol (DSP), a legal document that formalizes the national data-sharing network by outlining for all parties the terms of the agreement for data sharing. To date, over one third of all shelters participating in the HIFIS Initiative have agreed to share basic data with the NSH in order to build the HIFIS database.

Within the HIFIS community, data sharing partnerships have been shifting from unilateral agreements between the federal government and individual shelters to the establishment of partnerships between the federal government and larger organizations representing a particular network of shelters. The HIFIS Initiative's implementation strategy encourages processes through which shelters can participate in the HIFIS Initiative as a community of users rather than as individual service providers. Via these community data-sharing networks, shelters and their local stakeholders can come together to discuss local homelessness issues, and share knowledge on homelessness.

The HIFIS Initiative has facilitated a number of community committees and workshops, where shelter representatives and other community homelessness stakeholders can come together to establish standard data collection practices and safety and privacy protection policies. These committees and workshops provide a space in which community homelessness stakeholders can unite to define homelessness from a local perspective, identify and address knowledge gaps in homelessness, build a collective picture of homelessness in their community by sharing data, and determine their needs from a community perspective, all while building the HIFIS software to address these needs [20].

Other data-sharing networks have arisen as a result of the development of larger scale partnerships between shelters and their stakeholders. These networks, typically

formed in accordance with funding structure or according to an existing association of shelters, are seminal to HIFIS data playing a larger role in increasing the capacity of shelters across Canada to generate and share knowledge on homelessness. The HIFIS Initiative is pursuing activities to widen participation in data-sharing networks beyond shelters traditional stakeholders, including efforts to engage more researchers and research organizations by developing a toolkit to facilitate the use of HIFIS data for academic research purposes.

#### 4. FROM KNOWLEDGE TO ACTION

The activities of the HIFIS Initiative have led to a virtuous cycle of partnership development. The proliferation of data-sharing networks under the HIFIS Initiative has been instrumental in strengthening knowledge and understanding of homelessness issues at both the national and community levels, through such outputs as the creation of a national database and the facilitation of shelter data analysis at the community level. This increased knowledge and understanding has in turn contributed to the development of effective solutions to homelessness, both within the NHI and on the ground.

##### **National Database**

The national database aggregates basic data collected from shelters across Canada, including information on the characteristics and distribution of sheltering services across the country, and demographic and service use data for the individuals who access these services.

The shelter list provides the foundation for the national database. The shelter list, a comprehensive list of all shelters known to the HIFIS Initiative to exist across Canada, includes such basic information as the shelter name, location, and its number of beds. If known, the age group and gender of clients the shelter serves is noted. The shelter list is useful for macro-level analyses and is geared towards a better understanding of the shelter landscape in Canada with a focus on the type and concentration of shelter services.

This baseline information is complemented by data exported by shelters from across the country. This export data consists of the demographic characteristics of shelter users and information on their service use. Shelters voluntarily share data with the NSH where it is aggregated into the national database via a process that protects the identities of the individuals represented by the data. Shelters using information management software other than HIFIS can also participate in the Initiative by contributing data to the national database through a data conversion process. Export data contributes to knowledge and understanding of homelessness issues by permitting point in time, time series, and longitudinal analysis of the patterns of shelter use of different demographic groups among the Canadian homeless population

The national database has informed NHI policies, and the programs established to achieve them, in a number of ways. NHI corporate reporting tools use the data to measure program output, outcomes and impact [21, 22]. Data from the national database serves to gauge and inform future policy directions of the NHI as HIFIS data can be triangulated with other federal research outputs to monitor trends in the characteristics of the homeless population and their patterns of shelter and other service use [23]. This data can also inform NHI programs that provide funding to communities for projects by helping to identify service gaps. Finally, data from the national database can be reported back to communities, thus providing a platform from which communities can assess their homelessness issues relative to others.

##### **Community Data**

Communities are seeing the benefits of gaining a collective picture of the demographic and shelter service use trends within the homeless population. While continuing to work with the shelters to identify information needs, cities are now beginning to take the lead in coordinating homelessness data collection and information management.

One such example is the City of Ottawa data-sharing network, which has been in development since the HIFIS software was first conceptualized in 1995 [15]. Under the guidance of a municipal level community coordinator, all emergency shelters in the city are now using electronic data management software and are sharing data on a regular basis. This community data has supported statistical analysis to inform the first *Report Card on Homelessness in Ottawa*, a tool designed to measure progress in achieving the community's homelessness alleviation goals [24].

The City of Toronto provides another example of a data-sharing network facilitated by the HIFIS Initiative. In this case the city is using the HIFIS software as a launching point to develop its Shelter Management Information System (SMIS) as a single, Web based information system for the 65 City-operated and City-funded shelters serving homeless families, singles and youth. SMIS serves to build the capacity of shelter operators to provide quality client services while enhancing the City's capacity to administer Toronto's homeless shelter system effectively.

The sharing of HIFIS data at the local level informs communities from within and allows external comparisons, increasing community capacity to coordinate local service responses for homeless individuals. Genuine community involvement in the HIFIS Initiative, through both national and community data-sharing networks, also helps ensure that HIFIS and accompanying data sharing agreements are integrated into a community's homelessness plan in a manner that is relevant and sustainable.

#### 4. TECHNOLOGICAL BARRIERS TO IMPLEMENTATION

The implementation of a national, ICT based program at the community level has led to many challenges which have threatened to hinder the progress of the HIFIS Initiative. The diversity of technological abilities and interests in shelters across the country was the source of most of the challenges associated with this program.

Shelters across Canada experience accessibility barriers to computers, software and technical support and training. The lack of access to IT resources makes it difficult for shelters to collect and manage information, to communicate with others, and to own and maintain up-to-date hardware and software, all of which is crucial for a coordinated response to homelessness. To overcome these barriers the HIFIS Initiative has initiated the Multi-sector IT Accessibility Partnerships for Homelessness (MITAPH) which provides shelters with the hardware, software and technical support needed to strengthen their capacity to use IT in their daily operations and participate in the HIFIS Initiative.

The HIFIS Initiative has been successful in building key partnerships, such as the MITAPH, in order to build community capacity to participate in the Initiative and thus contribute to increasing knowledge and understanding of homelessness across Canada.

#### 5. CONCLUSION

The efforts of the HIFIS Initiative have served to build the infrastructure for a variety of data-sharing networks among and between shelters and their other stakeholders, including the NHI. By enabling an organized approach to data collection and information management at both the national and local levels, the HIFIS Initiative has led to increased knowledge and understanding of homelessness issues, including the development of a shared vocabulary facilitating a national dialogue on homelessness.

Canada's NHI has recently gained significant attention from the international community and is increasingly being recognized as a model in its approach to addressing the issues surrounding homelessness and affordable housing. Over the past year, Canada has cultured relations with the United States and the United Kingdom and was invited to attend tri-partite discussions on homelessness hosted by the United States and the United Kingdom.

Only in its second year of implementation, the HIFIS Initiative has yet to meet its full potential. As participation in the initiative grows, more complete data on the shelter population and its characteristics will serve to strengthen the capacity of communities in all provinces and territories to contribute to the reduction and prevention of homelessness and thereby contribute to the

Government of Canada's strategy to address homelessness [18].

#### 6. REFERENCES

- [1] Office of the Prime Minister, Speech From the Throne, October 5, 2004. 10 Mar. 2005. <http://pm.gc.ca/eng/sft-ddt.asp?id=2>
- [2] Human Resources and Skills Development Canada, Report on Plans and Priorities 2004-2005, 15 Sept. 2004. 10 Mar. 2005. <[http://www.tbs-sct.gc.ca/est-pre/20042005/HRSDC-RHDCC/HRSDC-RHDCCr4501\\_e.asp#plans](http://www.tbs-sct.gc.ca/est-pre/20042005/HRSDC-RHDCC/HRSDC-RHDCCr4501_e.asp#plans)>
- [3] National Secretariat on Homelessness. NSH Research Agenda. 4 Jan. 2004. 25 Mar. 2005. <[http://www.homelessness.gc.ca/research/index\\_e.asp](http://www.homelessness.gc.ca/research/index_e.asp)>
- [4] P.W. Dail, M.C. Shelley II, and S.T. Fitzgerald, "Methodologies for Examining Homelessness and Their Application to a Mandated Statewide Study", **Policy Studies Journal**, Vol. 28, no.2, 2000, pp. 421-444.
- [5] D.P. Culhane and R. Kuhn, "Patterns and Determinants of Public Shelter Utilization Among Homeless Adults in New York City and Philadelphia", **Journal of Policy Analysis and Management**, Vol. 17, No. 1, 1998, pp. 23-43.
- [6] National Homelessness Initiative, "Number of Homeless Individuals and Families in Canada", 2004.
- [7] E. Moore and A. Skaburskis, "Shelter Costs and Income in Canada: Social and Geographic Dimensions", National Homelessness Initiative. 03 Jul. 2003. 25 Mar. 2005. <[http://www.homelessness.gc.ca/research/projects/rp02/abstract\\_e.asp](http://www.homelessness.gc.ca/research/projects/rp02/abstract_e.asp)>
- [8] Canada Mortgage and Housing Corporation, « 2001 Census Housing Series: Issue 3, The Adequacy, Suitability and Affordability of Canadian Housing », 2004. 14 Mar. 2005. <[http://www.cmhc-schl.gc.ca:50104/b2c/catalog/updateItems.do;z\\_ProductID=63403;jsessionid=ID1253371108DB0.11767757339897789End#](http://www.cmhc-schl.gc.ca:50104/b2c/catalog/updateItems.do;z_ProductID=63403;jsessionid=ID1253371108DB0.11767757339897789End#)>
- [9] Canadian Council on Social Development, "Structural and Systematic Determinants of Homelessness", Completed Phase I Projects, 3 Jul. 2003. 25 Mar. 2005 <[http://www.homelessness.gc.ca/research/projects/rp01/abstract\\_e.asp](http://www.homelessness.gc.ca/research/projects/rp01/abstract_e.asp)>
- [10] City of Toronto. **The Toronto Report Card on Homelessness: 2001**, 2001. 21 Mar. 2005. <<http://www.city.toronto.on.ca/homelessness/homelessnessreport2001.pdf>>

[11] J. Engeland, L. Jakubec, and R. Lewis, **The Geography of Household Growth and Core Housing Need, 1996-2001**, Ottawa: Canada Mortgage and Housing Corporation, 2004.

[12] United Nations General Assembly, Universal Declaration of Human Rights, 1948. 20 Mar. 2005. <<http://www.un.org/Overview/rights.html>>

[13] United Nations High Commission for Human Rights, International Covenant on Economic, Social and Cultural Rights, 1966. 20 Mar. 2005 <[http://www.unhcr.ch/html/menu3/b/a\\_ceser.htm](http://www.unhcr.ch/html/menu3/b/a_ceser.htm)>

[14] National Homelessness Initiative, **HIFIS National Progress Indicators 2004-2005**, About the HIFIS Initiative, Oct. 2004. 15 Mar. 2005 <[http://www.homelessness.gc.ca/hifis/information/docs/nationalprogressindicators2003-2004\\_e.pdf](http://www.homelessness.gc.ca/hifis/information/docs/nationalprogressindicators2003-2004_e.pdf)>

[15] Peressini, T., Engeland, J. 2004. "The Homelessness Individuals and Families Information System: A Case Study in Canadian Capacity Building." **Canadian Journal of Urban Research**. Vol. 13, No. 2, 2004, pp. 347-361.

[16] national Homelessness Initiative, **HIFIS Initiative Business Plan 2004-2005**, About the HIFIS Initiative, 15 Dec. 2004. 10 Mar. 2005, <[http://www.homelessness.gc.ca/hifis/information/docs/businessplan2004-05\\_e.pdf](http://www.homelessness.gc.ca/hifis/information/docs/businessplan2004-05_e.pdf)>

[17] National Homelessness Initiative, "Supporting Communities Partnership Initiative (SCPI): A Best Practice Model for Government Collaboration with Communities", March 2002.

[18] National Homelessness Initiative, **National Homelessness Initiative: 2003-2006 Business Plan**, Publications, 26 Apr. 2004. 14 Mar. 2005. <[http://www.homelessness.gc.ca/publications/businessplan/businessplan\\_e.pdf](http://www.homelessness.gc.ca/publications/businessplan/businessplan_e.pdf)>

[19] National Homelessness Initiative, Home Page, 31 Aug. 2004. 25 Mar. 2005. <[http://www.homelessness.gc.ca/home/index\\_e.asp](http://www.homelessness.gc.ca/home/index_e.asp)>

[20] Waterloo Regional Community Homelessness Network, Home Page, 10 May 2004. 20 Mar. 2005 <<http://www.waterlooregion.org/homelessness/>>

[21] Human Resources and Skills Development Canada, Report on Plans and Priorities 2005-2006, 24 Mar. 2005. 24 Mar. 2005. <[http://www.tbs-sct.gc.ca/est-pre/20052006/HRSDC-RHDCC/HRSDC-RHDCCr56\\_e.asp](http://www.tbs-sct.gc.ca/est-pre/20052006/HRSDC-RHDCC/HRSDC-RHDCCr56_e.asp)>

[22] National Homelessness Initiative, National Investment Analysis, Sept 2004. 15 Mar. 2005

<[http://www.homelessness.gc.ca/reportcard/accomplishmentsinvestments\\_e.pdf](http://www.homelessness.gc.ca/reportcard/accomplishmentsinvestments_e.pdf)>

[23] National Homelessness Initiative, "Briefing Note on the Number of Homeless People in Canada with a Focus on the Aboriginal Sub-Population", 2005.

[24] Alliance to End Homelessness, "Experiencing Homelessness: The First Report Card on Homelessness in Ottawa, 2005", 2005.

[25] City of Toronto. Shelter Management Information System. 2005. 24 mar. 2005. <<http://www.city.toronto.on.ca/housing/smis/>>