Chapter 2.7

Primary Health Care for Homeless Persons: Evaluating the Options Using a Policy Analysis Approach

S.E.D. Shortt, Stephen W. Hwang, Heather Stuart, Melanie Bedore, Nadia Zurba, Margaret Darling

The 1999 Canadian National Homelessness Initiative (now the Homeless Partnering Strategy [Human Resources and Social Development Canada (HRSDC), 2008]) defined as homeless “any person, family or household that has no fixed address or security of tenure.” How many people fall within this definition is unknown, particularly since “rough sleepers” (persons on the streets) and “couch surfers” (individuals chronically staying with others) are almost impossible to enumerate. However, the 2001 Census found that 14,145 persons were using shelters at any given time in Canada; by the 2006 Census, that number had risen to 19,630 (Statistics Canada, 2002, 2008).

Males, aged 35 to 64 years, were the most common subgroup within this population, followed by males, aged 15 to 34 years (Statistics Canada, 2002). Data from Toronto and Ottawa revealed that families constitute a significant portion of shelter users, occupying 42 percent and 35 percent of shelter beds in each city, respectively (Hwang, 2001). Aboriginal people are overrepresented in the homeless population; in Toronto,
they accounted for 2 percent of the total population in 1999 but 25 percent of the homeless population (Begin, Casavant, Chenier, & Dupuis, 1999).

It is difficult to describe with precision the health problems of homeless persons, in part because of the heterogeneity of this population across geographical regions (Lindsey, 1995). A number of studies have attempted to document the health conditions encountered by homeless populations in specific facilities or regions (Blewett, Barnett, & Chueh, 1999; Nuttbrock, McQuiston, Rosenblum, & Magura, 2003; Plescia, Watts, Neibacher, & Strelnick, 1997; Spanowicz, Millsap, McNamee, & Bartek, 1998). It is apparent that certain conditions, such as trauma, respiratory infections, dermatological conditions, mental illness and substance abuse, are strongly associated with homelessness. Almost all other forms of chronic illness — such as diabetes, osteoarthritis and high blood pressure — that are common in both housed and homeless populations are made worse by homelessness because of the inability of homeless people to receive regular care or to self-manage the condition appropriately. Moreover, diseases such as HIV/AIDS or tuberculosis, which require aggressive treatment, undoubtedly carry a much less favourable prognosis for homeless persons than for the general population. One indicator of the severity of these morbidities is the much higher rate of premature death among homeless persons compared to the housed population (Hwang, 2000; Roy, Boivin, Haley, & Lemke, 1998).

Despite this substantial burden of illness, homeless persons face a variety of barriers to receiving appropriate health care. A significant obstacle to accessing care in Canada is the absence of a valid entitlement document, i.e., a provincial health card (Hwang, Windrim, Svoboda, & Sullivan, 2000). Homeless people may be unable to afford supplies or medications that are not covered under provincial health care plans (Ontario Medical Review [OMR], 1996). Physicians’ offices are seldom located in areas where homeless people tend to congregate and are usually open only during regular office hours, posing transportation and scheduling challenges (Gelberg et al., 2002; Kurtz, Surratt, Kiley, & Inciardi, 2005). Homeless people may encounter psychological barriers, such as fear that they will be refused care (Bunce, 2000) or feelings of stigmatization by health care providers (Gelber, Browner, Lejano, & Arangua, 2003).
Finally, homeless individuals may delay seeking medical care because other needs, such as securing food and shelter, are more critical to their daily survival.

This chapter asks the question: What is the most effective way to deliver point-of-first-contact or primary health care to homeless persons? A search of the literature revealed insufficient empirical sources to answer the question using standard systematic review methodology. Instead, we used a policy analysis approach.

Data Retrieval

A structured literature search was conducted for English-language publications from 1990 to 2006 in the following databases: Medline, Embase, Cinahl and the Cochrane Library, Social Services Abstracts, Social Sciences Citation Index, Social Sciences Index, Sociological Abstracts, CBCA, Canadian Newsstand, JStor, Readers’ Guide and PAIS International. Throughout the study period, a “My NCBI Alert” was used to deliver new search results from Medline (PubMed) on a weekly basis, and periodic update searches were conducted in the other databases.

Search strategies for each database were developed using natural-language keywords and controlled vocabulary terms specific to each database. Three related searches covered the following topics: primary health care services for homeless persons; impact of primary health care services for homeless persons; and health problems of homeless persons.

Additional sources were identified through a manual search of bibliographies and references, and the World Wide Web was searched using Google (advanced search mode) to identify grey literature, organizations involved in providing services to the homeless, and examples of programs providing primary care services to homeless persons. All references were recorded in a database created using Reference Manager 11.

Analysis

The search revealed that the literature, though extensive, was largely descriptive. There was insufficient empirical data to conduct a systematic review (Bravata, McDonald, Shojania, Sundaram, & Owens, 2005) of primary care delivery methods. There were also too few robust evalua-
tions of primary care programs for homeless persons to permit a narrative synthesis (Dixon-Woods, Agarwal, Young, Jones, & Sutton, 2004). However, the existing literature did lend itself to a policy analysis approach. Such an approach involves examining the relevance of specific research findings to a policy issue, weighing the evidence, and constructing a logical case about the utility of specific policy options for addressing the issue in light of predetermined policy objectives (Aday & Begley, 1993).

The key steps in policy analysis are articulating a broad policy goal; dividing that goal into measurable objectives; selecting evaluation criteria by which the attainment of objectives will be assessed; and judging how various policy options are most likely to perform when measured by these predetermined evaluation criteria. In the absence of definitive empirical evidence about the various policy options, this process necessarily represents the informed opinion of the policy analysis team.

Results
The policy goal is to ensure use of the most effective way to provide point-of-first-contact health care to homeless persons. Measurable objectives that support this goal may be taken from the seven defining attributes of appropriate primary health care recently identified by the Canadian Institute for Health Information through a comprehensive consultation process (Canadian Institute for Health Information [CIHI], 2006). These attributes correspond closely to the seven desirable system-level service delivery attributes identified by the Working Group on Homeless Health Outcomes for the United States Department of Health and Human Services (United States Bureau of Primary Health Care, 1996). The objectives are:
1. Ensuring access to primary health care through a regular primary health care provider.
2. Enhancing the population orientation of primary health care — for example, health promotion strategies that engage and mobilize the community.
3. Providing comprehensive whole-person care that addresses physical, social and psychological dimensions.
4. Enhancing an integrated approach to 24/7 access.
5. Strengthening the quality of primary health care.
6. Building patient-centred care, that is, taking into account the patient’s desire for information and decision-making in an empathetic and open manner.
7. Promoting continuity through integration and coordination.

To ensure that the evaluation criteria for each of these objectives are specific to the needs of homeless persons, it is necessary to consult the literature describing the barriers that this disadvantaged population faces in obtaining primary care. That is, evaluation criteria are the adaptations to the delivery and structure of care necessary to counter the barriers. Such adaptations were summarized at the 1998 National Symposium on Homeless Research in the United States (McMurray-Avila, Gelberg, Breakey, & the National Symposium on Homelessness Research, 1998) and may be inferred from the many discussions of barriers to care faced by homeless persons (Bunce, 2000; Gelberg et al., 2004; McMurray-Avila et al., 1998; Ontario Women’s Health Council, 2002). The criteria deemed most relevant are listed in Table 1.

What are the options for delivering primary care to homeless persons? The literature suggests four broad options, distinguished largely by the location at which care is delivered, but also by associated organizational features: the status quo based on independent family doctors’ offices and three models directed specifically at homeless clients — standard facility/clinic site, fixed outreach site, and mobile outreach service.

Although the literature on homelessness and health includes many brief descriptions of local interventions, no single paper provides a sufficiently generic experience upon which broad generalizations can be based. However, from papers on each specific model of care, it is possible to extract common characteristics, which can then be reassembled into an archetypal description of that model. The idealized composite picture that emerges may serve as a paradigm of that model of care when assessing its potential effectiveness.
Table 1. Evaluation criteria for homeless primary care

<table>
<thead>
<tr>
<th>Goal</th>
<th>Objectives</th>
<th>Evaluation criteria</th>
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| To enhance the health of homeless persons through the provision of optimal primary care | Ensuring access to primary health care through a regular primary health care provider | • Entitlement documents not required for care or for ancillary services  
• Service available at venues likely to suit homeless persons |
| Enhancing the population orientation of primary health care          |                                                                                                                                 | • Collaboration with public health authorities on harm reduction strategies |
| Providing comprehensive whole-person care                           |                                                                                                                                 | • Multidisciplinary team care  
• Established referral routes for specialty services  
• Social work assistance available for benefit entitlement, housing |
| Enhancing an integrated approach to 24/7 access                     |                                                                                                                                 | • Service available at times likely to suit homeless persons  
• Evidence of reduced emergency room use |
| Strengthening the quality of primary health care                     |                                                                                                                                 | • Special expertise in areas germane to the clinical conditions of homeless persons, e.g., substance abuse, sexually transmitted diseases |
| Building patient-centred care                                       |                                                                                                                                 | • User involvement in service planning and operation |
| Promoting continuity through integration and coordination            |                                                                                                                                 | • Appropriate access to electronic medical records by multiple providers  
• Mechanisms to contact patients  
• Hospital liaison for planning discharge |

Primary care status quo

Many types of practices can be found in Canada, but physician-centred solo and small group practices are the norm. In the 2001 National Family Physician Workforce Survey, 73 percent of family doctors reported that private offices were their main practice setting. Solo practice is more common in inner cities, with 46 percent of family doctors in these areas reporting solo practice, compared to 19 percent in isolated or remote areas. Between 1989 and 2000, the number of physicians reporting that they operate “office-only” practices — meaning they did not make house calls, provide hospital or nursing home care, work in emergency de-
Most family doctors in Canada are paid on a fee-for-service basis. Physicians submit bills to provincial or territorial health insurance plans for each service provided. Alternative payment structures accounted for 11 percent of total clinical payments in 2000-2001 but are increasing (CIHI, 2003). In 2001, 94 percent of Canadians aged 15 and over received care from a family physician, commonly during regular office hours. However, almost one in five of those who sought “first-contact” services in 2001 had difficulty accessing care at some point in that year (CIHI, 2003). The 2004 National Physician Survey found that only 20 percent of practices were open to new patients, and a Decima poll reported that five million Canadians over 18 years of age were unable to find a family doctor in the 12 months preceding the survey (College of Family Physicians of Canada [CFPC], 2004).

A recently described typology of Canadian primary care models summarized the status quo under the term “professional contact model.” This model facilitates a care-seeking person’s ability to make first contact with the health care system. Individuals usually travel to the physician’s office, a single location where the physician may practise alone or in a group. Such physicians are rarely associated with other health professionals and are commonly paid on a fee-for-service basis. With the professional contact model, there is no tool beyond patient loyalty to ensure long-term continuity of care, and there is no formal mechanism to ensure integration with other health services. The model facilitates accessibility and responsiveness to patients, but performs poorly in terms of effectiveness, productivity, equity, and quality (Canadian Health Services Research Foundation [CHSRF] et al., 2003).

Standard facility or clinic site

Descriptions are available in the literature of standard facilities or clinic sites exclusively dedicated to serving homeless persons in Miami (Fournier, Perez-Stable, & Greer, 1993), New York (Morrow, Halbach, Hopkins, Wang, & Shortridge, 1992) and Los Angeles (Gelber, Doblin, Leake, 1996); some additional details on the operation of such initiatives were drawn from other published sources. Such clinics may originate as
charitable and volunteer initiatives, but generally are affiliated with an institution such as a hospital or community health centre. Academic links providing training for nursing and medical students are common. Care is delivered by multidisciplinary teams, with non-clinical services available from social workers or legal staff. Close connections are maintained with social service agencies and public health units to which clients can be referred. A hospital affiliation facilitates referrals to specialists, but some specialty care may be available on site.

Clinics are often found near shelters, and in some cases outreach visits to these sites may take place. Typically, clinics have both daytime and evening hours of operation. The emphasis is on immediate care for acute illnesses, with the hope that persons requiring more complex care can be successfully integrated into the general health system. Screening and health education are common elements of care (Edwards, Kaplan, Barnett, & Logan, 1998; Macnee, Hemphill, & Letran, 1996). Care is provided without charge, as are a limited range of medications and laboratory tests. More sophisticated testing may be available from affiliated organizations. A significant number of patient encounters are repeat visits. A broad array of clinical services available in a timely manner may reduce emergency room use.

Fixed outreach model

A composite picture of fixed outreach programs can be constructed from descriptions of initiatives in New York (Plescia et al., 1997), Boston (Kline & Saperstein, 1992), New Orleans (Steele & O’Keefe, 2001), California (Fiore, 1995) and Ohio (DiMarco, 2000), with additional details extracted from other sources. “Outreach” in this model refers to care that is provided in non-traditional settings frequented by, or convenient to, homeless persons, in the absence of which such individuals would be unlikely to access services (Morse et al., 1996).

The care may be delivered at schools (Berti, Zylbert, & Rolnitzky, 2001; Nabors et al., 2004), in community drop-in centres (Cunnane, Wyman, Rotermund, & Murray, 1995; Reuler, 1991) or in transitional housing settings (Rog, Holupka, & Combs-Thornton, 1995), but the most common location is at shelters for the homeless. Regularly scheduled sessions are held at these venues and are staffed predominantly by
nurses but with physicians, social workers, and counsellors on the team as well. Care is delivered without charge, and some medications may be available free of charge to patients. Mechanisms may be in place to expedite registration for benefit programs for those patients who are eligible.

Services include acute care for minor and chronic conditions, preventive care and education, and referral to other providers or agencies. Outreach clinics usually have good linkages with many other health and social agencies, including public health units to which patients can be referred; referrals to community clinics and specialty care at nearby hospitals are common. There may be formal administrative and funding ties between the outreach clinic and established health care facilities in the region. Brief clinical records are commonly kept, providing the basis for activity reports that focus on types and volume of services but only rarely on outcomes (Bradford, Gaynes, Kim, Kaufman, & Weinberger, 2005; Cunningham et al., 2005; Tischler, Vostanis, Bellerby, & Cumella, 2002). Increasingly, these records are kept in electronic format (Blewett et al., 1999). In a large number of cases patients are seen on only one occasion, but a small number of patients become regular users of these sites. By becoming frequent users with attendant documentation, such individuals assist the clinics accomplish what is often their main goal in addition to the provision of immediate care: helping individuals reintegrate into mainstream care programs by eventually transferring care to more traditional care venues.

Mobile outreach service model

Descriptions from New York (Redlener & Redlener, 1994) and Georgia (Testani-Dufour, Green, Green, & Carter, 1996; Tollett & Thomas, 1995), supplemented with details from other programs, provide sufficient information to construct a composite picture of the mobile outreach service model. Mobile services operate from vehicles of various descriptions at sites convenient to homeless persons, such as at shelters or on the streets. Often the units visit their sites on a regular schedule so that clients can anticipate their arrival. The target population may be specialized, such as youth (Auerswald, Sugano, Ellen, & Klausner, 2006) or persons with
mental illness (Farrell, Huff, MacDonald, Middlebro, & Walsh, 2005; Morris & Warnock, 2001), or it may focus on anyone without a home.

Visits may be scheduled or offered on a walk-in basis, and there is no cost to the user. The services provided may be determined by a preliminary needs assessment and modified on the basis of subsequent client input. Space may limit the range and volume of services available, but common services include diagnosis, including the performance of basic laboratory tests; the treatment of acute and chronic conditions, for which a limited range of medications may be dispensed; screening and prevention activities; educational interventions; and referrals to other community agencies or specialized care.

These services are provided by a team weighted towards nurses, but including a variable physician presence and other providers, such as social workers. Point-of-contact electronic records may be linked to a central database, and handheld devices may be used to enter new encounter data (Buck, Rochon, & Turley, 2005; Bunschoten, 1994). Success may be measured by such programs on the basis of tabulations of the numbers of client encounters, repeat visits or referrals, or by surveying clients and providers. Sponsors may include independent charitable organizations or health care institutions such as hospitals; extensive collaboration with other agencies is common. Costs relative to other delivery methods are seldom reported because they are challenging to assess and may depend on location or funding source (Wray et al., 1999).

Based on the data presented above, it is now possible, as shown in Table 2, to apply the evaluation criteria to the four options.
Table 2. Evaluation of four models

<table>
<thead>
<tr>
<th>Evaluation criteria</th>
<th>Status quo model</th>
<th>Standard facility/clinic site</th>
<th>Fixed outreach site</th>
<th>Mobile outreach service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entitlement documents not required for health care or for ancillary services</td>
<td>poor</td>
<td>excellent</td>
<td>excellent</td>
<td>excellent</td>
</tr>
<tr>
<td>Service available at venues likely to suit homeless persons</td>
<td>poor</td>
<td>well</td>
<td>excellent</td>
<td>excellent</td>
</tr>
<tr>
<td>Collaboration with public health authorities on harm reduction strategies</td>
<td>poor</td>
<td>well</td>
<td>adequate</td>
<td>adequate</td>
</tr>
<tr>
<td>Multidisciplinary team care</td>
<td>poor</td>
<td>excellent</td>
<td>excellent</td>
<td>excellent</td>
</tr>
<tr>
<td>Established referral routes for specialty services</td>
<td>excellent</td>
<td>excellent</td>
<td>excellent</td>
<td>adequate</td>
</tr>
<tr>
<td>Social work assistance available for benefit entitlement, housing</td>
<td>poor</td>
<td>excellent</td>
<td>excellent</td>
<td>well</td>
</tr>
<tr>
<td>Service available at times likely to suit homeless persons</td>
<td>poor</td>
<td>well</td>
<td>adequate</td>
<td>excellent</td>
</tr>
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<td>Evidence of reduced emergency room use</td>
<td>poor</td>
<td>adequate</td>
<td>unknown</td>
<td>unknown</td>
</tr>
<tr>
<td>Special expertise in areas germane to the clinical conditions of homeless persons, e.g., substance abuse, sexually transmitted diseases</td>
<td>poor</td>
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<td>excellent</td>
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<td>User involvement in service planning and operation</td>
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<td>Appropriate access to electronic medical records by multiple providers</td>
<td>poor</td>
<td>well</td>
<td>adequate</td>
<td>well</td>
</tr>
<tr>
<td>Mechanisms to contact patients</td>
<td>poor</td>
<td>well</td>
<td>Fair</td>
<td>Fair</td>
</tr>
<tr>
<td>Hospital liaison for planning discharge</td>
<td>poor</td>
<td>unknown</td>
<td>poor</td>
<td>poor</td>
</tr>
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</table>

The status quo performs poorly by all but one of the 13 evaluation criteria. While there is variable performance on individual measures, the remaining three models all perform well. This finding implies that some factor other than performance on the specified measures should be used.
to choose a specific model. Such factors might include comparative costs, feasibility for staffing, geographic distribution of the population served or local preferences.

Conclusion
Primary care in Canada has witnessed the appearance of a number of new models of payment and organization over the last two decades. Some of these may be better suited to meeting the needs of homeless persons than others, but the literature as yet contains no evidence to support this assertion. Indeed, the lack of published research on Canadian programs for the care of homeless persons was a striking finding in this project.

To better understand this deficit, 42 primary care programs targeting homeless individuals across Canada were approached to take part in key-informant interviews; 18 agreed. Not one was able to provide published or unpublished program descriptions or evaluations. There was a consensus among informants that the programs lacked the evaluation skills to create such documents and that any costs associated with creating documents would reduce already inadequate clinical care budgets.

It is easy to assume that a health system such as Canada’s, which provides universal first-dollar coverage, meets the health needs of homeless persons. But the concept of “horizontal equity” that underlies the system — equal needs receive equal resources — fails to appreciate the different and far greater needs present in vulnerable groups.

These populations require a system that incorporates “vertical equity,” that is, the capacity to meet unequal needs with unequal resources. The disproportionate burden of illness borne by the homeless population constitutes a dramatic inequality of health need, yet in comparison to specialized services designed to meet these needs, the current model of primary care in Canada is inadequate. To ignore this inadequacy by failing to provide specialized care is to permit the operation of what has been termed the “inverse care law,” which states that “the availability of good medical care tends to vary inversely with the need for it in the population served” (Hart, 1971, p. 405). If, as has been proposed, a measure of any health system’s merit is the way in which it treats its most vulnerable citizens (Brownell, Roos, & Roos, 2001), Canada’s pri-
Primary health care system must urgently address the health needs of the homeless population.

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