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The Yukon: Pioneers in Home Care Information

Introduction

In Canada today, home care programs deliver a wide range of services: short-term care to those recovering from surgery or acute medical conditions; long-term care and support to allow people with chronic conditions to continue living in the community; and other specialized programs such as end-of-life care and rehabilitation. These programs help people to live as independently as possible by allowing them to receive care at home, rather than in a hospital or long-term care facility.¹

Home care is a rapidly growing sector of the Canadian health care system. Government spending on home care grew from \$1.6 billion in 1994–1995 to \$3.4 billion in 2003–2004.² According to Statistics Canada estimates, in 2003 there were 647,800 people who received some form of government-subsidized home care—up by almost a quarter (24%) from 1994–1995.³

The Canadian Institute for Health Information (CIHI) developed the Home Care Reporting System (HCRS) to provide high-quality information on publicly funded home care to enable policy-makers and health planners to manage, evaluate and improve the quality of home care services in Canada.

As home care is provided to diverse populations, the HCRS classifies home care clients into five client groups. Clients in three of these—Acute, Rehabilitation and End-of-Life—are considered short-term home care clients; they are expected to receive home care for a limited period of time to achieve specific goals of care. There are two categories of longer-term home care clients—Long-Term Supportive Care and

Maintenance—who may receive service for a number of years. Longer-term home care clients are assessed with the RAI-HC instrument, which provides clinical, functional and utilization data for quality improvement and planning (see About RAI-HC).

About RAI-HC

The RAI Home Care (RAI-HC)© is a standardized clinical instrument for the assessment of home care clients. Developed by the international research consortium, interRAI, the RAI-HC supports quality of care through:

- Real-time feedback on client risks and needs for care planning;
- Clinical benchmarking using indicators and outcome scales at regional, national and international levels; and
- A better understanding of the resource needs of diverse home care populations.

Many jurisdictions across Canada have or are implementing the RAI-HC to assess their longer-term home care clients. The RAI-HC forms part of the HCRS data standard. For more information on the RAI-HC, visit www.interrai.org.

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The Yukon Territory

In February 2007, the Yukon Territory became the first jurisdiction to submit data to the HCRS. This Analysis in Brief provides a first glimpse of home care in the Yukon based on the initial data submissions.

The Yukon has some key features that have a bearing on the delivery of its home care services. Much of this northern territory is sparsely populated, and compared to residents of Canada as a whole, Yukon residents are twice as likely to live in rural areas (see Key Facts About the Yukon). The Yukon's population is slightly younger, and a relatively large proportion of residents identify themselves as Aboriginal.

The Yukon has only two hospitals (in the capital city, Whitehorse, and in Watson Lake, a town near its border with B.C.) and 59 hospital beds to serve the entire territory.⁷ However, it has a slightly higher number of physicians per 100,000 population than Canada as a whole (205 compared with 190).

Key Facts About the Yukon

	Yukon	Canada
Population ⁴	30,372	31,612,897
Land area (km ²) ⁴	474,711	9,017,699
Population density (per km ²) ⁴	0.1	3.5
People living in rural areas ⁵	40.3%	19.8%
People aged 75 and over ⁴	2.7%	6.5%
Females ⁴	49.7%	51.0%
People who stated Aboriginal identity ⁶	22.9%	3.3%
Hospitals ^{7, 8}	2	661
Physicians/100,000 ⁹	205	190
People aged 18 and over receiving home care ¹⁰	3.3%	2.7%
People aged 65 and over receiving home care ¹⁰	21.2%	15.0%

The Analysis

This analysis explores client pathways to and from the Yukon's home care sector, as well as the formal and informal care needs of home care clients and their relationship to caregiver stress. The results are based on 243 home care clients who received home care during the first nine months of the Yukon's HCRS implementation (July 2006 to March 2007).

The data set is based on a subset of Yukon's home care clients, consisting of 166 shorter-term clients admitted to home care during the first nine months of implementation. It also includes 77 longer-term home care clients who were admitted during this period or who were admitted prior to the Yukon's implementation and had just received their first RAI-HC assessment. The sample of clients included:

- 121 Acute clients
- 21 End-of-Life clients
- 24 Rehabilitation clients

- 77 Maintenance and Long-Term Supportive Care clientsⁱ

The average age of clients in the sample was 65, and just over half (56%) were female.

The results should be interpreted with care, as they are based on a subset of Yukon home care clients and may not reflect the characteristics of the entire home care population. This early sample of data is made up predominately of new admissions. Acute clients, therefore, represent a large proportion of the total available records because of their shorter lengths of stay and higher turnover. The sample did not include many of the longer-term clients who were admitted prior to HCRS implementation. Their data will be submitted to CIHI once they receive a RAI-HC assessment, and subsequent analyses will more fully represent the distribution of Yukon home care clients. Still, the information presented is an interesting early glimpse of a little-known area of health care, and a demonstration of the value of the RAI-HC and HCRS.

Pathways in Home Care

A key dimension of quality health care is continuity of care across the system. The information from the HCRS sheds light on the role of home care within the larger health system, as well as supporting managers in improving access and transitions between home care and other health services.

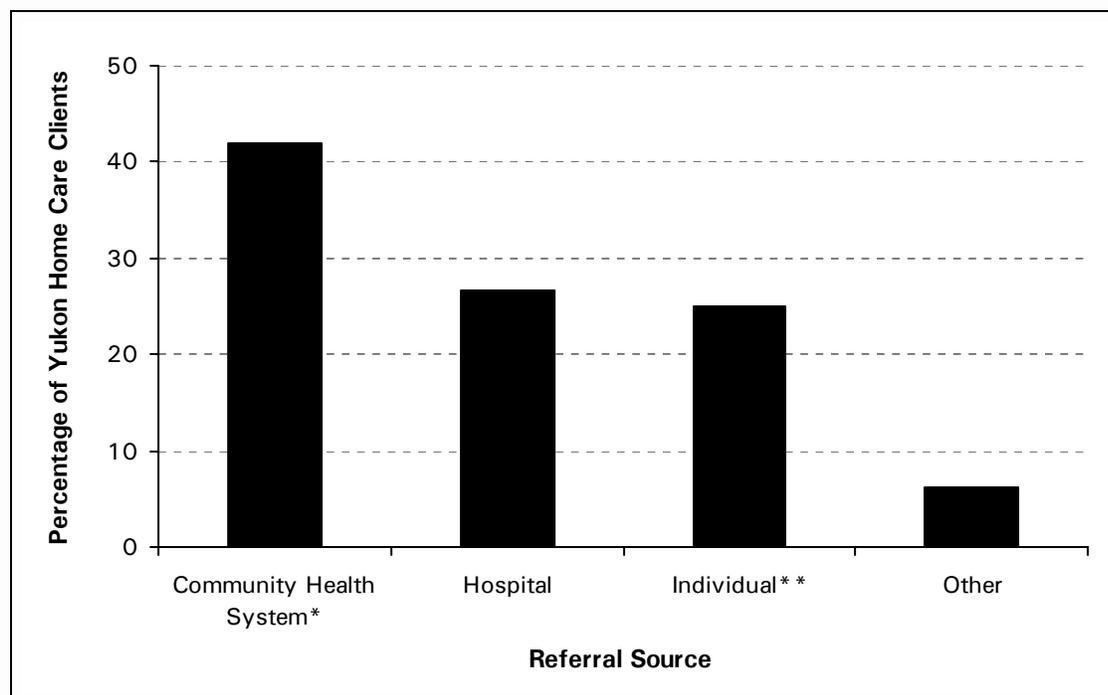
Accessing Home Care

Figure 1 shows that, in the Yukon, health providers in the community (that is, outside of hospitals), accounted for the largest proportion of referrals to home care (42%). This included referrals from physicians (19%) and nurses and other health professionals (18%). A further 27% of clients were referred through hospitals. A significant proportion of these were Acute clients—those requiring immediate or urgent intervention to stabilize a medical or post-surgical condition.

A quarter of Yukon home care clients were self-referrals or were referred by a family member, friend or neighbour. This type of referral was highest among Rehabilitation clients and longer-term clients, 38% and 30% respectively. These results highlight the important role of home care as a primary health care service, supporting individuals and families in managing their care in the community.

i. Due to the small sample size, data for the Long-Term Supportive Care clients were combined with the data for Maintenance clients.

Figure 1. Referral Source, Yukon Home Care, 2006–2007



Notes:

* Community health system includes physicians, other health professionals, community service organizations, other home care programs, residential care facilities and assisted living settings.

** Individual includes self, family, friend and neighbour.

Based on 243 home care clients.

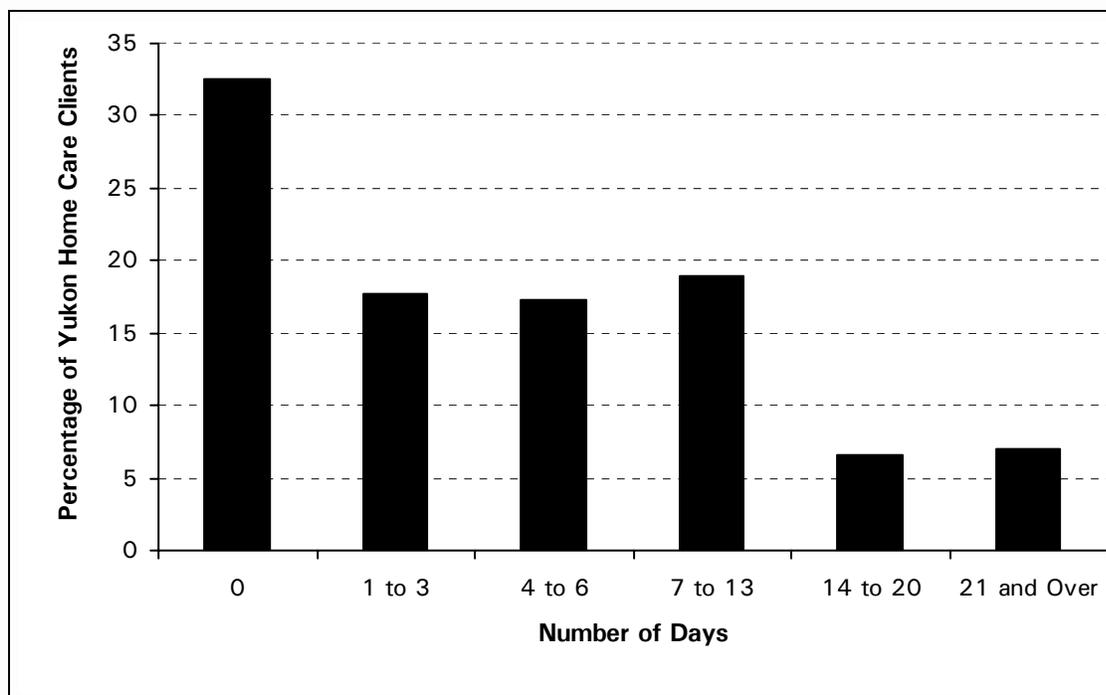
Source: Home Care Reporting System, CIHI, 2006–2007.

Waiting for Home Care

Wait times are a key measure of access to health services. The HCRS is designed to provide standardized wait-time information—the time between a client’s referral to home care and when he or she begins to receive service. One type of service provided by home care is “case management,” which is a service designed to support the effective and efficient use of available home care resources to meet the service goals. Case management services may include such interventions as assessment, care planning and monitoring of outcomes.

Figure 2 illustrates the length of time between the clients’ referral to home care and the start of case management services. A third of Yukon home care clients had their case management services start on the same day that they were referred, and two-thirds had access within a week of referral. Only 7% of the Yukon’s home care clients had to wait three weeks or more for service.

Figure 2. Time Between Referral to Home Care and Start of Case Management, Yukon Home Care, 2006–2007



Note: Based on 243 home care clients.

Source: Home Care Reporting System, CIHI, 2006–2007.

Discharging Clients

Because of the limited time for which the Yukon has been submitting data to CIHI, most of the discharge information currently available in the HCRS is for shorter-term home care clients. Eighty-eight of these clients were discharged from home care during the first nine months of the Yukon's HCRS implementation.

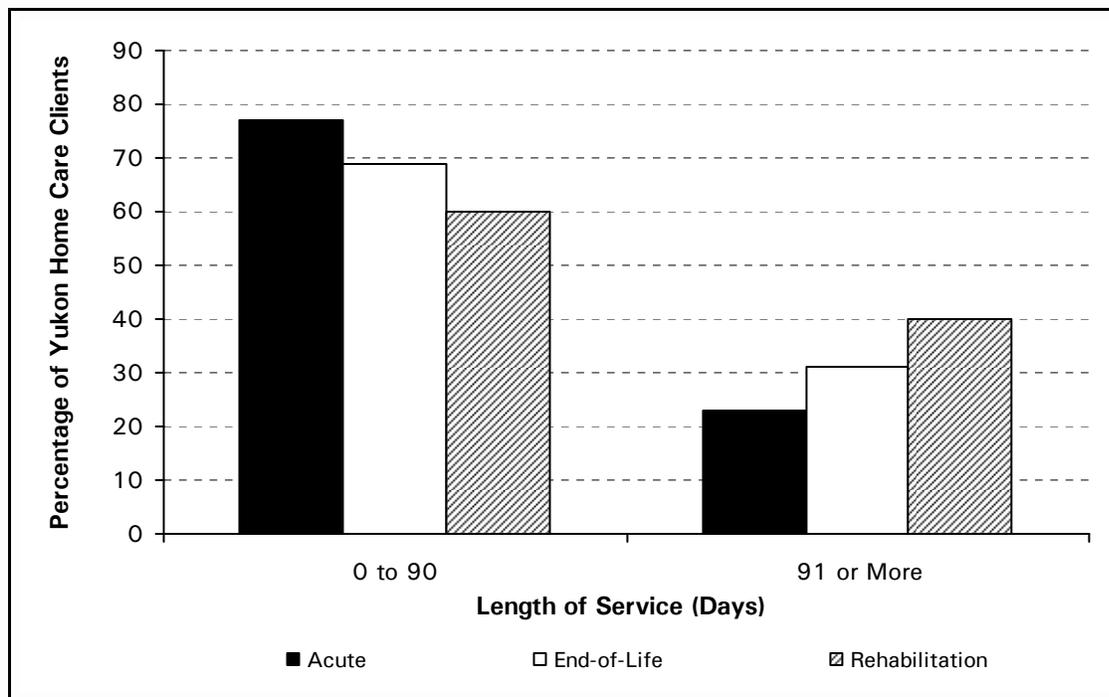
The average length of service for the shorter-term home care client groups was 64 days. Figure 3 illustrates the variation in length of service across the shorter-term groups: Acute, Rehabilitation and End-of-Life. Of note are the nearly one in five clients in the Acute client group who have lengths of service in excess of 90 days, which is the expected maximum for this client group. Further research is required to understand the clinical characteristics of these clients and whether they might have benefited from the comprehensive assessment generally reserved for longer-term clients.

The majority of Acute and Rehabilitation clients were discharged from home care, because they no longer required service (77% and 60% respectively). All the End-of-Life clients who were discharged from home care during the same period were recorded as having died. This is the expected outcome: for these clients, death is expected within six months of admission to home care.

Analysis in Brief

Taking health information further

Figure 3. Length of Service by Client Group, Shorter-Term Clients, Yukon Home Care, 2006–2007



Note: Based on 88 home care clients.

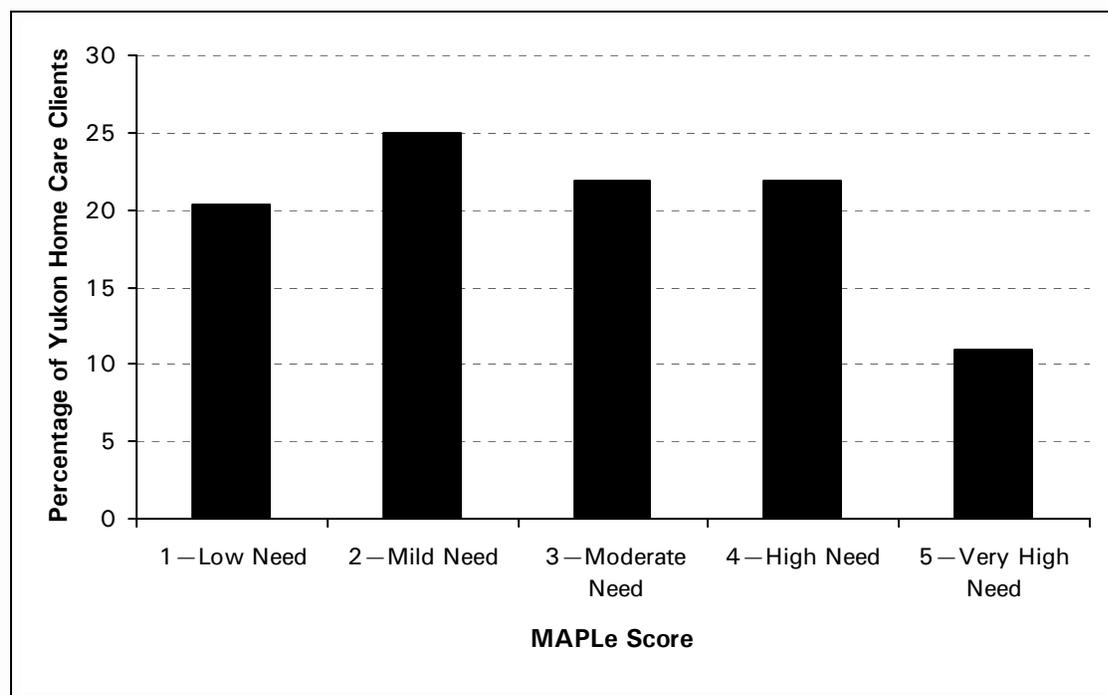
Source: Home Care Reporting System, CIHI, 2006–2007.

Measuring Need in Home Care

Comprehensive clinical, functional and environmental information for longer-term home care clients comes from the RAI-HC assessment. One of the standardized clinical outputs from the RAI-HC is the MAPLe (Method of Assigning Priority Levels), which classifies clients into five groups based on their relative need for care and risk of adverse outcomes.¹¹ The MAPLe facilitates individual care planning at the time of initial assessment and the monitoring of changes in need over time. The data may also be used to provide managers with evidence to support a better understanding of their home care populations and the related impacts on residential care or other services.

Figure 4 shows the distribution of MAPLe scores among the 64 longer-term home care clients from the Yukon assessed with the RAI-HC. A third (33%) of these clients scored high or very high on the MAPLe. These individuals require considerable support to remain safely at home.

Figure 4. MAPLe Score Distribution, Assessed Longer-Term Clients, Yukon Home Care, 2006–2007



Note: Based on 64 longer-term home care clients, assessed with the RAI-HC.

Source: Home Care Reporting System, CIHI, 2006–2007.

Table 1 shows that there were some key differences in the demographics, clinical characteristics and informal supports between clients classified as having higher needs and those classified as having lower needs.

Table 1. Selected Characteristics by MAPLe Score, Assessed Longer-Term Clients, Yukon Home Care, 2006–2007

Selected Characteristic	Low-to-Moderate Need (MAPLe < 4)	High-to-Very-High Need (MAPLe ≥ 4)
Number of clients	43	21
Demographics		
Percentage of males	30.2%	42.9%
Average age	70	74
Clinical Characteristics		
Indication of health instability*	51.2%	71.4%
Some difficulty with instrumental activities of daily living†	41.9%	57.1%
Symptoms of depression‡	11.6%	47.6%
Informal Supports		
Lived alone at referral	48.9%	52.4%
Informal caregiver present	72.1%	85.7%
Average hours of informal care/week§	11.6	19.4
Symptoms of caregiver burden**	16.1%	33.3%

Notes:

* CHES > 0.

† IADL difficulty > 2.

‡ DRS > 2.

§ Among clients with at least one informal caregiver.

** Among clients with at least one informal caregiver. Calculation based on the expression of one or more of the following symptoms: caregiver is unable to continue in caring activities; primary caregiver is not satisfied with support received from family and friends; primary caregiver expresses feelings of distress, anger or depression.

Source: Home Care Reporting System, CIHI, 2006–2007.

Compared with the lower-need group, clients with higher needs tended to be older and were more likely to be male.

The Changes in Health, End-stage disease and Signs and Symptoms (CHES) is an outcome scale that measures the degree of health instability of a home care client.¹² Not surprisingly, the higher-need home care clients were more likely to have some level of health instability than clients in the lower-need group (71% and 51% respectively).

The higher-need groups were also more likely to have difficulty in performing key instrumental activities of daily living (IADL)—preparing meals, doing ordinary housework and using the telephone.¹³ Fifty-seven percent of those in the higher-need group had at least some difficulty in these three IADL compared with 42% in the lower-need group. These results show that care needs identified by the MAPLe may be medical and/or functional in nature.

An interesting finding was that there were also differences in the symptoms of depression identified in the higher- and lower-need groups. The Depression Rating Scale (DRS) reflects reported symptoms of depression. A score of three or more has been associated with a risk for depression.¹⁴ When comparing the two groups, almost half (48%) of the higher-need group were identified as being at risk for depression compared with 12% of the lower-need group.

Informal Support: A Critical Resource

Formal home care services are only one part of the support system that allows individuals to remain at home. For many people, the informal support provided through family, friends and neighbours makes the difference between living in the community and requiring an alternate level of care, such as a residential care facility or hospital. While half (50%) of the assessed Yukon home care clients lived alone at referral, over three-quarters (77%) of home care clients had an informal caregiver available to support them.

The initial data on the Yukon's assessed home care clients showed some differences in the availability and amount of informal support provided to the higher- and lower-need clients. The availability of an informal caregiver was higher among the higher-need clients (86%) compared to the lower-need group (72%). There were also differences in the amount of support these informal caregivers provided. Higher-need clients received on average over 19 hours per week of care from their informal care providers compared to just under 12 hours per week for those in the lower-need group.

Caregiver Burnout: Managing the Risk

Overall, one in five caregivers expressed symptoms of caregiver burden. Caregivers of the higher-need group were twice as likely to express symptoms of burden compared with those of the lower-need group (33% and 16% respectively). This result may be partially explained by the longer hours of support provided by the caregivers of the higher-need group.

Clients can become at risk of institutionalization when they do not have a stable informal support network. The MAPLe was designed to identify clients who are at risk of adverse outcomes and to help predict caregiver stress. It is just one example of how the RAI-HC assessment provides vital information to clinicians on clients' risks and needs. This information is used to develop appropriate care plans that proactively manage those risks and enable clients to continue living at home for as long as possible.

Conclusion

This analysis provides a first glimpse of the Yukon's initial submissions to the HCRS, highlighting the emerging portrait of its home care population. Over time, there will be a rich source of longitudinal data for the Yukon, which will allow tracking of progress toward quality goals and monitoring of trends in client characteristics.

A number of provinces in Canada are currently working toward submission of home care data to the HCRS. As these jurisdictions begin their submissions over the coming months and years, the true potential of the HCRS will be realized, and it will be possible to compare home care information across Canada for the purposes of planning, quality improvement and accountability.

Technical Notes

Data Source

Results are based on data submitted to CIHI's Home Care Reporting System (HCRS) by the Yukon Department of Health and Social Services for the first nine months of its HCRS implementation (July 2006 to March 2007).

The data exclude:

- Home care clients admitted to home care prior to July 1, 2006, who have not had a RAI-HC assessment submitted to the HCRS system.
- New admissions to home care in remote communities that do not currently have the ability to submit data to the HCRS (estimates by the Yukon are that this would represent only one or two home care clients).
- People receiving formal home care services provided directly through an organization other than the Department of Health and Social Services (for example, the First Nations and Inuit Health Branch of Health Canada).

Table 2 summarizes the number of clients used in the analysis.

Table 2. Number of Clients Used in Analysis by Client Group, Yukon Home Care, 2006–2007

	Accessing Home Care/Wait Times	Discharges	Measuring Need
Acute	121	57	–
Rehabilitation	24	16	–
End-of-Life	21	15	–
Longer-Term	77	–	64
Total	243	88	64

Source: Home Care Reporting System, CIHI, 2006-2007.

Client Groups

The HCRS Client Group is a high-level, client-focused description of clients based on their assessed needs and their health status. It is a standard categorization developed by CIHI, to be used to facilitate comparative reporting on home care clients across Canada. There are five home care client groups: Acute, End-of-Life, Rehabilitation, Maintenance and Long-Term Supportive. For more information on client groups, please go to the Education section of the Home Care web page at www.cihi.ca/homecare.

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