

CADTH ENVIRONMENTAL SCAN REPORT

Dialysis Programs in Canada: Implementation Considerations and Funding Practices

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Context

An increasing number of patients with end stage kidney disease (ESKD) are being initiated on long-term dialysis every year in Canada.¹ According to data published by the Canadian Institute for Health Information in 2013, an estimated 41,931 Canadians were living with ESKD, with most (24,114 or 57.5%) being treated with dialysis.¹ Hemodialysis (HD) and peritoneal dialysis (PD) are the two main types of dialysis provided under Canadian renal care programs. In HD, the patient's blood is circulated to an external dialysis machine, which filters wastes and extra water from the blood before returning it to the body. In PD, a permanent catheter affixed to the abdomen is used to fill the peritoneal cavity with a dialysis solution. The peritoneal membrane functions as a filter for wastes and extra water, and the dialysis solution is exchanged, either intermittently or continuously.

In all provinces, HD remains the modality most frequently used for new patients who require dialysis. In 2013, the rate of patients with ESKD initiated on HD varied from 91% in Newfoundland and Labrador to 71% in Manitoba.¹ Moreover, for the same year, most Canadian dialysis patients (76%) received in-centre HD, which describes HD performed in an institution such as a hospital, satellite unit, or a dialysis facility, with the assistance of a health care professional.¹ In contrast, home-based therapies such as PD and home HD (HHD) show low rates of usage according to the latest available data. In 2013, about 19% of new patients with ESKD in Canada were initiated on PD; this rate was 0.6% for HHD.¹ For the same year, the prevalence of patients being treated by home dialysis across the country was about 17% for PD and 2.5% for HHD.¹

Available evidence suggests that PD and HHD may achieve similar clinical outcomes for eligible patients compared with in-centre HD.^{2,3} Studies also indicate that PD and HHD are potentially more cost-effective than in-centre HD.^{2,4-6} On the basis of the potential comparable clinical effectiveness and cost savings that the therapies may yield, it is often argued that home dialysis therapies, particularly PD, may be underutilized by eligible patients in Canada and other developed countries.⁷⁻⁹ Similarly, the literature and Canadian jurisdictional input suggest growing interest in other dialysis delivery models — namely, in-centre self-care HD, assisted PD, and assisted HHD. These options may produce effective clinical results while being potentially less costly than standard in-centre HD and may also be more desirable from a patient and caregiver perspective.¹⁰⁻¹³

Increasing the appropriate use of home-based modalities, however, would not come without challenges.¹⁴ Factors such as home infrastructure and utility needs are important in ensuring reliable access to dialysis.¹⁵ If the electricity supply is prone to outages, a backup supply is needed;¹⁵ in rental accommodation, there may need to be legal agreements regarding payment for utilities, land compliance, waste water, or modifications to the dwelling to accommodate water or equipment needs.¹⁵ It may be even more complicated in remote communities, where consistent access to water, the quality of the water, the cost and consistency of supply delivery, and access to emergency medical services can make planning home dialysis more challenging.¹⁶

Regardless of living conditions, factors such as appropriate funding conditions,¹⁷ appropriate education and training of clinicians and patients,¹⁸ environmental issues,^{19,20} and policy considerations will contribute to successful or unsuccessful implementation and uptake of HHD and PD. Strategies to implement HHD and PD programs for eligible patients have been used in the Canadian context, but it is unclear what those strategies have been and which ones have been the most successful.

Objectives

The objective of this Environmental Scan is to identify and summarize information regarding the implementation of dialysis programs in Canada. The following questions are addressed:

1. What strategies and processes have been used to implement home-based hemodialysis, home-based peritoneal dialysis, and in-centre self-care dialysis programs for eligible patients with end stage kidney disease?
2. What contextual factors contribute to the implementation of home-based hemodialysis, home-based peritoneal dialysis, and in-centre self-care dialysis programs for eligible patients with end stage kidney disease?
3. What is the availability of public funding for the various components of dialysis programs in Canada?

Methods

The findings of this Environmental Scan are based on responses to two Web-based surveys (Appendices 1 and 2) and a focused literature search. The surveys were offered in both English and French.

Surveys / Consultation

Web-Survey – National Stakeholders

The first survey was distributed to national stakeholders, defined primarily as health professionals other than nephrologists, involved in dialysis care in Canada. (Although the survey was aimed at health professionals other than nephrologists, some respondents identified as nephrologists.) Survey respondents were identified by CADTH's Knowledge Mobilization and Liaison Officer team and the Canadian Society of Nephrology, in conjunction with clinical experts. The survey included a combination of open-ended and multiple-choice questions and was distributed using the Web-based Fluid Surveys platform.

Web-Survey – Nephrologists

The second survey was based on a previously unpublished survey, first administered in May 2013,²¹ which was modified and administered to nephrologists across Canada. The items in the original survey were determined on the basis of interviews with key informants. In the updated survey, questions were included if they focused mainly on nephrologists' current practices and perspectives about various facilitators and resources as they related to the implementation of the dialysis modalities of interest. The nephrologists were asked about their support for various suggested policies, initiatives, practices, and resources that could play a role in supporting the uptake of home-based dialysis or in-centre self-care dialysis.

In addition to multiple-choice and open-text questions, in one section of the survey, items were rated on a five-point ordinal scale according to agreement with a statement (the possible responses were "not at all," "slightly," "somewhat," "very," and "extremely"). The survey was distributed to nephrologists via the Canadian Society of Nephrologists distribution list, using the Web-based Fluid Surveys platform.

Both surveys included questions that aimed to retrieve specific information about implementing these dialysis modalities in rural or remote settings. In both surveys, complete and partial responses were tabulated and described. Data were collected until October 24, 2016, for the survey of national stakeholders and until November 1, 2016, for the survey of nephrologists.

Literature Search

The literature search was performed by an information specialist, using a peer-reviewed search strategy.

Published literature was identified by searching the following bibliographic databases: MEDLINE (1946–) and Embase (1974–) via Ovid; Cumulative Index to Nursing and Allied Health Literature (CINAHL) through EBSCO; PubMed and Scopus. The search strategy was comprised of both controlled vocabulary, such as the National Library of Medicine’s MeSH keywords. The main search concepts were home dialysis, PD, in-centre self-care dialysis, and implementation issues.

A filter was applied to limit retrieval to Canadian studies. Retrieval was limited to documents published since January 1, 2000. The search was limited to English- or French-language publications. Conference abstracts were excluded from the search results.

Grey literature was identified by searching relevant sections of the *Grey Matters* checklist (<https://www.cadth.ca/grey-matters>).

Screening and Selecting Articles for Inclusion and Data Extraction

Citations arising from the literature searches were screened independently in duplicate for information related to implementation issues in Canada. From each relevant article, one reviewer extracted the bibliographic details (i.e., the authors, the year of publication, and the country of origin), the implementation issue under review, the population of interest, and other relevant study information, including special population considerations. The information from the identified literature supplemented and augmented the information provided by the two surveys, primarily with respect to contextual factors, and addressed potential information gaps about implementation.

Findings

National Stakeholder Survey

Of the 117 potential respondents, 34 (29%) provided information. Responses to all or some of the questions were received from stakeholders in Alberta (n = 3), British Columbia (n = 8), Manitoba (n = 2), New Brunswick (n = 1), Newfoundland and Labrador (n = 2), Nova Scotia (n = 2), Ontario (n = 2), Prince Edward Island (n = 3), Quebec (n = 5), and Saskatchewan (n = 6). No responses were received from stakeholders in the Canadian territories.

Of the respondents, 13 (38.2%) provided information on aspects of implementation (i.e., current strategies, barriers, and facilitators) and the availability of funding and reimbursement policies for HHD, PD, and in-centre HD.

Twenty respondents (58.8%) identified themselves as administrators (nurse manager, manager of a renal care program, medical lead, lead unit coordinators, director and director of renal programs, nurse supervisor, manager of clinical services, provincial coordinator, and strategy lead); other respondents included nurses (n = 4 or 11.8%) and other physicians and nephrologists (n = 5 or 14.7%).

Nephrologist Survey

Of 249 potential respondents, 28 (11.2%) provided information. Responses to all or some of the questions were received from nephrologists in Alberta (n = 4), British Columbia (n = 2), Manitoba (n = 4), New Brunswick (n = 2), Newfoundland and Labrador (n = 1), Nova Scotia (n = 1), Ontario (n = 12), and Quebec (n = 2). No responses were received from nephrologists in the Northwest Territories, Nunavut, Prince Edward Island, Saskatchewan, or Yukon. The majority of respondents (26/27 or 96%) were affiliated with a university. The respondents had been practising nephrology for a mean of 15 years (range three to 30 years).

With respect to training, 86% of respondents had completed a PD rotation (for at least two months) during their nephrology fellowship; 48% had completed at least a two-month HHD rotation during their nephrology fellowship.

What Strategies and Processes Have Been Used to Implement Home-Based HD, Home-Based PD, and In-Centre Self-Care Dialysis Programs for Eligible Patients with ESKD?

National Stakeholder Survey

Home-Based Hemodialysis and Peritoneal Dialysis

Respondents from Alberta, British Columbia, New Brunswick, Newfoundland and Labrador, Ontario, Prince Edward Island, and Saskatchewan provided information on provincial strategies or processes that aided in either implementing or increasing the uptake of home-based dialysis. No responses related specifically to home-based dialysis strategies were received from Manitoba, Nova Scotia, the Northwest Territories, Nunavut, or Yukon. Complete response information is presented in Table 1.

Prince Edward Island is considering implementing a PD-first policy (in which all patients eligible for home-based PD start home-based PD as a first dialysis treatment). The province is also in the process of adopting in-centre self-care that may facilitate the transition of patients to HHD care. Other provincial strategies and processes currently or previously used, as reported by the survey respondents, included:

- dialysis management, analysis, and reporting programs and databases examining barriers to home therapies (Alberta, British Columbia, Ontario)
- modality education (Alberta, Ontario)
- activity-based funding programs, in which funding is based on the activity, not the number of patients (British Columbia)
- multidisciplinary representation on provincial home therapy committees (British Columbia, Ontario)
- human resources and funds dedicated to HHD and PD therapies (British Columbia, Ontario)
- standardization of practices for HHD nursing (British Columbia)
- video links to nephrologists at satellite centres (New Brunswick)
- review of how PD is promoted in the province (Prince Edward Island)
- specific targets for HHD training (Saskatchewan, Ontario)
- PD catheter insertions at local rather than regional or out-of-province centres (Ontario, Saskatchewan, Prince Edward Island [scheduled to start in September 2016]).

Information on home-based dialysis strategies was provided by respondents from Correctional Service Canada (CSC) in British Columbia, Manitoba, and Ontario (Appendix 4). According to the respondent in British Columbia, HD and PD therapies within CSC are “customized individually” to the inmate population. In Manitoba, the Regional Psychiatric Centre has partnered with a community dialysis program to establish a small HD satellite unit within the correctional unit. This small unit provides services to offenders from institutions in Manitoba, Saskatchewan, and Alberta. Incarcerated patients on PD can be managed within their own institutions (the units have nurses who can aid in PD management). Some incarcerated patients attend community-based dialysis programs. In Ontario, the satellite dialysis unit within the correctional facility would facilitate transfer to the communities on release. The suitability of patients for home treatment modalities is determined by the community HD centre.

Table 1: Home-Based Hemodialysis and Peritoneal Dialysis – National Stakeholders

Jurisdiction	Strategies and Processes
AB	<ul style="list-style-type: none"> • Implementation of Dialysis Management Analysis and Reporting program, which looks at barriers to home therapies – effective at increasing the incidence of home therapy choice • Overhaul of all modality education to provide a provincial rather than local program focus • Home Sweet Home project by the Northern AB Renal Program
BC	<ul style="list-style-type: none"> • Activity-based funding (programs are funded for activities, not numbers) • Provincial home therapy committees with representation from all disciplines and health authority renal programs • Provincial medical director role for PD and HHD • Strong support from BC Renal Agency, including human resources and allocated funds dedicated to home therapies and a strong home-first philosophy • Provincial home therapies research group • Centralized approach to funding home therapy equipment (provincial contract for supplies and equipment) • Standardization of practices for HHD nurses • Provincial outcomes database, which provides data to support home therapies to the BC Ministry of Health
NB	<ul style="list-style-type: none"> • Satellite dialysis centres throughout the province, with video links to nephrologists and the dialysis centre at the Dr. Georges-L.-Dumont Hospital in Moncton, NB
NL	<ul style="list-style-type: none"> • PD-first Program^a
ON	<ul style="list-style-type: none"> • CKD educational interventions promoting independent therapy • Promotion of home dialysis (provincial focus) by an integrated network of clinicians—includes specific targets (tailored for each program) and allocated funding provided by the provincial network to the hospitals²² • Assisted PD model to help patients transition from in-centre HD to self-care PD • PSW-assisted HD at home (pilot program)²² • Centres of practice for PD catheters (pilot program)²² • Assignment of program coordinators²²
PEI	<ul style="list-style-type: none"> • A PD-first policy is under consideration (targeting 25% to 30% of all renal replacement to be on PD). • Philosophy of in-centre or home self-care HD will be explored. • Prior to January 2016, PD patients in PEI were part of the program in NS. PEI started training patients for PD starting in February 2016 and started inserting PD catheters at local hospitals in September 2016 to provide services closer to home. • Review of the promotion of PD as a therapy option has taken place to try to decrease bias toward HD. • PEI does not have an HHD program; the province is exploring strategies to move toward in-centre self-care and is hoping to use this type of care as a bridge to HHD. • Health care providers have had enhanced education on strategies to educate patients about the pros and cons of PD. • Began embedding PD catheters under the skin before being required to decrease the need for acute HD in patients who have opted for PD • The promotion of PD is currently underway, and government support is being sought to create and implement a PD-first policy.
SK	<ul style="list-style-type: none"> • Specific goals for HHD training for patients (2 patients training; staggered starts) • PD catheter insertions (surgical and interventional radiology guided) and support for parachute starts (for patients in central and northern Saskatchewan)

AB = Alberta; BC = British Columbia; CKD = chronic kidney disease; HD = hemodialysis; HHD = home hemodialysis; NB = New Brunswick; NL = Newfoundland and Labrador; NS = Nova Scotia; ON = Ontario; PD = peritoneal dialysis; PEI = Prince Edward Island; PSW = personal support worker; SK = Saskatchewan.

^a Unclear whether this is a current strategy or a strategy being considered.

Table 2: In-Centre Self-Care

Jurisdiction	Strategies and Processes
PEI	<ul style="list-style-type: none"> • In early stages of reviewing what other programs are doing • Currently screening patients for the potential to perform and complete self-care • Beginning to educate health care providers about self-care and defining what this might look like in PEI • Aiming to adopt a similar program to the one at the Dr. Georges-L.-Dumont University Hospital Centre in Moncton, New Brunswick

PEI = Prince Edward Island.

In-Centre Self-Care

One response was received regarding strategies and processes for implementing in-centre self-care dialysis. A respondent from Prince Edward Island reported that the province is reviewing what other jurisdictions are providing with respect to self-care dialysis and is considering implementing a program of its own. We did not receive any responses specific to provincial in-centre self-care programs in Alberta, British Columbia, Manitoba, New Brunswick, Newfoundland and Labrador, the Northwest Territories, Nova Scotia, Nunavut, Ontario, Quebec, Saskatchewan, or Yukon. Further detail is presented in Table 2.

CSC (in British Columbia) provided the information that self-care models can be implemented in correctional facilities but may pose security risks (Appendix 4). The CSC respondent in Manitoba reported that self-care was not applicable to the inmate population.

Rural Setting Considerations

Respondents from six provinces (Alberta, British Columbia, New Brunswick, Ontario, Prince Edward Island, and Saskatchewan) provided information about the delivery of dialysis to patients living in rural areas.

In Alberta, there are no resources to provide assistance for PD programs outside of major urban areas.

The BC Renal Agency provides supplies, equipment, and funds for home renovation to support rural patients who opt for home-based dialysis. Training for the home modalities occurs at a regional centre.

The response from New Brunswick indicated similar supports for rural and nonrural patients.

In Ontario, no information was provided specifically about current strategies that aim to increase the uptake of home-based dialysis in rural areas.

In Saskatchewan and Prince Edward Island, the dialysis program supports rural patients; the vendor contract provides technical support and the delivery of supplies.

Remote Setting Considerations

The survey responses indicate that there are a limited number of strategies to support home-based dialysis modalities for patients in remote areas. Other than the information provided by respondents in British Columbia and Saskatchewan, no information was provided about the implementation of these programs in remote settings.

In British Columbia, patients living in remote areas receive a backup machine for HHD as a safeguard.

In Saskatchewan, the dialysis program supports remote patients; the vendor contract provides technical support and the delivery of supplies.

Respondents from Alberta and New Brunswick reported that there were no strategies or programs (or they were not aware of any strategies or programs) to support home-based dialysis for patients living in remote areas. Prince Edward Island does not have areas considered to be remote because of the island's size.

On the basis of a post-survey consultation with a clinical expert from the Ontario Renal Network, a demonstration project that created a self-care dialysis space to provide home dialysis to Indigenous patients living in remote areas has been completed in Ontario. In remote northern Ontario, a PD unit medical team works with Indigenous leaders and community liaisons to address barriers (e.g., heat and water conditions and cultural and language challenges) and facilitate PD care for patients living in remote areas. The team provides training and support to community-based primary care nurses and physicians; telemedicine assistance is also provided.²²

To facilitate dialysis treatments, dialysis patients who are incarcerated in a CSC facility in Manitoba, Ontario, or Quebec are not placed in remote institutions.

Nephrologist Survey

Promoting the Optimal Use of Home Hemodialysis and Home-Based Peritoneal Dialysis

Personnel and Infrastructure

As a group, nephrologists were “extremely” or “very” supportive of personnel and infrastructure interventions, such as:

- the establishment of local or regional long-term care facilities with the capacity for providing HD and PD
- the provision of funding for formal caregivers to provide full-care HD or PD for patients at home
- funding for electrical and water costs associated with HHD.

PD and HD within long-term care facilities are available to the nephrologist respondents in some jurisdictions; however, full-care HD and PD as well as nurse-assisted HD in patients' homes are less widely available. Approximately 50% of the respondents indicated that funding for water or electricity costs associated with HHD is available in their jurisdictions.

Further detail regarding the level of support and availability for various personnel and infrastructure interventions in each jurisdiction is provided in Appendix 5 (Tables 10 and 11).

No responses were received from nephrologists in the Northwest Territories, Nunavut, Prince Edward Island, Saskatchewan, or Yukon.

Respondents also provided additional suggestions regarding other personnel and infrastructure interventions that may be relevant to promoting the optimal use of HHD and PD. They included:

- a rehabilitation unit with HD and PD (Alberta)
- home care respite for PD (Manitoba)
- facilities for in-centre self-care HD (Nova Scotia)
- financial support for patient costs incurred when staying away from home for training (Ontario)
- increased availability of long-term care dialysis (Ontario)
- personal support workers to assist with HHD (pilot is underway) (Ontario).

External Support Systems

As a group, nephrologists were moderately, slightly, or not supportive of external support systems, such as regional centres of excellence and 24-hour regional on-call support (from nephrologists) for HHD as interventions or policies to promote the optimal use of home-based dialysis modalities. According to the survey responses, some jurisdictions (Alberta, British Columbia, Manitoba, New Brunswick, Newfoundland and Labrador, Nova Scotia, and Ontario) currently have access to one or both of those options. Further detail regarding the level of support by nephrologists in the jurisdictions is provided in Appendix 5, Table 12. The availability of support systems in each jurisdiction is provided in Appendix 5, Table 13.

Some respondents also provided additional suggestions about external support systems that may promote the optimal use of HHD and PD in their jurisdictions.

These suggestions included:

- 24-hour on-call nursing support (New Brunswick)
- nursing support to provide HD (Nova Scotia).

Health System Policy

Nephrologists were generally either “extremely” or “very” supportive of mandatory modality education for patients approaching dialysis as a health system policy intervention to optimize the use of home-based dialysis modalities. Further detail about the level of support for other queried health system policies and interventions in each jurisdiction is provided in Appendix 5, Table 14. The availability of policies in each jurisdiction is provided in Appendix 5, Table 15.

Respondents also provided suggestions for additional health system policies or interventions. These suggestions included:

- addressing issues of physician remuneration with respect to PD versus in-centre HD (Nova Scotia)
- home-first education and decision support (Ontario)
- not restricting patient choice (Ontario).

Nephrology Training and Continuing Education

As a group, nephrologists were moderately, slightly, or not supportive of the training and continuing education policies or interventions available to them that were queried in the survey. HD and PD certification programs were reported to be available to respondents in Quebec. Further detail about the level of support of the training or continuing education policies and interventions as reported by nephrologists in each jurisdiction is provided in Appendix 5, Table 16. The availability of these policies and interventions in each jurisdiction is provided in Appendix 5, Table 17.

Respondents also provided suggestions for additional training and continuing education. These suggestions included:

- difficult case or teaching rounds by experts that are accessible to community nephrologists (British Columbia)
- advanced nephrology training or home therapies special certificate training (British Columbia)
- potential adjustment of the training requirements under the Royal College of Physicians and Surgeons of Canada (Nova Scotia).

Decision Support Tools

With respect to decision support tools for nephrologists, the respondents provided mixed feedback in terms of supporting online or paper clinical tools to assist with patient selection for independent dialysis. Nephrologists were “extremely” or “very” supportive of patient education tools for the different dialysis modalities and the provision of information about dialysis care, when it is appropriate. Further detail about the level of support for decision support tools in each jurisdiction is provided in Appendix 5, Table 18.

Other tools suggested by the nephrologist respondents were:

- anonymized quality improvement reporting by nephrologists to reflect individual rates of reaching modality targets (British Columbia)
- nurse educator to assist patients with modality decisions (Nova Scotia).

Strategies, Policies, or Interventions in Rural and Remote Communities

Ten nephrologists identified strategies to increase the uptake of home dialysis in rural settings. These strategies included:

- decreasing the financial, travel, and time burden on patients by facilitating education and training closer to the patient, providing financial support for travel and accommodation, and determining optimal training time to limit the time away from home (Alberta, British Columbia, Ontario)
- focusing on patient education and support as opposed to limiting patient choice (Ontario)
- funding increased utility costs, supportive care, and home visits for home dialysis (Alberta, Newfoundland and Labrador, Nova Scotia, Ontario)
- examining water quality, as poor water quality (such as well water) can be a barrier to HHD (Manitoba, New Brunswick, Ontario)
- increasing PD access, as those who do not have initial access to PD often opt for treatment in a satellite HD centre (Nova Scotia)
- providing cluster or community dialysis (small self-care units in rural areas) (Ontario)
- leveraging telemedicine support (Newfoundland and Labrador, Ontario).

Many of the aforementioned strategies were also identified as being applicable to remote settings. Additional remote strategies identified included:

- examining the availability of running water (Manitoba)
- increasing support service (as it is currently limited) (Newfoundland and Labrador)
- increasing the availability of technical backup (Newfoundland and Labrador)
- providing flexibility in the scheduling and training of family and community members (British Columbia)
- providing dedicated, secure, and well-heated storage space for dialysis supplies to avoid service and access interruption during difficult weather conditions (New Brunswick, Newfoundland and Labrador, Ontario).

What Factors Contribute to the Implementation of HHD, Home-Based PD, and In-Centre Self-Care Dialysis Programs for Eligible Patients with ESKD?

A culture of support for in-centre and assisted care is one of the factors that needs to be considered in the implementation of home-based and self-care dialysis. One nephrologist in British Columbia identified that adjusting to a home-first culture has not been easy, particularly for practices such as a new fistula cannulation. An increased uptake of home and self-care dialysis may require shifts in perceptions and risk tolerance and acceptance of different ways of doing dialysis among health care providers and patients.

Prince Edward Island is currently in the process of exploring the PD-first approach, and in New Brunswick and British Columbia, it was reported that a home-first approach is strongly supported. Negative staff perceptions of self-care as well as negative patient perceptions of self-care may contribute to difficulties in implementing a home-based or self-care dialysis program. However, successful implementation is possible; in British Columbia, reported rates for patients on home therapies (combined PD and HHD) are approximately one-third of the dialysis population, and in Ontario, approximately 25% of

patients are receiving dialysis at home.^{22,23} Providing appropriate education and training to providers and patients and involving patients and integrating their experiences related to the barriers, goals, and priorities of treatment are important in culture change and quality improvement efforts.

Although culture change is important, having staff, appropriate infrastructure, and financial support in place to facilitate patient initiation on home and self-care dialysis is also important. Respondents to both surveys identified that current staffing levels may not allow for easy access to a home-based dialysis option. A respondent from Nova Scotia also identified that without timely access to arteriovenous fistula creation, patients may end up with central venous catheters and settle into an in-centre treatment program. Once treatment is established, patients tend to avoid switching. A respondent in Prince Edward Island also pointed to the lack of resources for implementation by indicating that the increase in the number of patients who need renal care is outpacing the growth in financial and human resources. The lack of financial support to develop such programs or provide resources to train staff and patients creates a context in which optimal home and self-care treatment may not be feasible.

Appropriate infrastructure further contributes to a context in which the various dialysis modalities can be implemented. One nephrologist from Alberta suggested that having patients doing the self-care in the unit, where they could become confident under the support of nurses, may result in those patients switching to a home-based modality. According to his experience, this strategy had been successful with patients in the in-centre nocturnal hemodialysis population. However, this infrastructure is not available in every facility. The same respondent, for example, reported that a separate self-care HD unit, which existed a few years ago within the facility, has now been eliminated because of a facility renovation. Additional facilitators and barriers to HHD and PD by jurisdiction are included in Table 3 and to in-centre self-care dialysis in Table 4.

Social and financial factors further contribute to the implementation of home-based dialysis. Social barriers such as lack of social support,^{24,25} reluctance to burden family members with the responsibility of care at home, or homelessness with no access to community housing were also mentioned in the literature.^{26,27} Financial factors associated with having dialysis at home (e.g., paying a formal caregiver, increased utility costs) may also need to be considered.

As with environmental and social barriers, negative perceptions regarding home or self-care dialysis are not insurmountable. Established policies that require modality education to be available to all patients and that all patients be reviewed for eligibility for home therapy have been shown to provide a context in which home modalities have greater acceptance.²⁷

Table 3: Facilitators and Barriers to the Implementation of Home-Based HD and PD – National Stakeholders

Jurisdiction	Facilitators	Barriers
AB	<ul style="list-style-type: none"> • Buy-in from operations • Data acquisition support 	<ul style="list-style-type: none"> • Limited acute funding
BC	<ul style="list-style-type: none"> • Research-based, outcomes- focused care in-home therapies 	<ul style="list-style-type: none"> • Change in management and taking time to understand evolving strategies to reflect the population and the changes in the health care environment
NB	<ul style="list-style-type: none"> • Driven by the needs of patients, primarily from northern NB, who had to travel long distances 	NR
NL	NR	<ul style="list-style-type: none"> • Most of the population is elderly with multiple comorbidities, have limited access to support people, and live in rural sites.
ON	<ul style="list-style-type: none"> • Uniform, mandatory reporting • Provincial body endorsing HHD²² • Specific targets²² • Increased funding²² 	<ul style="list-style-type: none"> • Assigning roles and responsibilities to each initiative • Integrating all programs to form a provincial network²² • Working effectively with the ministry²²
PEI	<ul style="list-style-type: none"> • Education and support for all staff and physicians to facilitate consistent messaging to patients • Patient education • Option for patients to speak with others who are successful with home-based PD • Support from all levels of health administration • Staff buy-in • Infrastructure to support PD growth (staffing, training space, etc.) • “Repatriating” the program from NS • Researching other provinces’ successes and sharing of information • Numerous sites promoting this practice • National directive 	<ul style="list-style-type: none"> • Ethical concerns about promoting one modality over another in the absence of a clear PD-first policy • Lack of funding for staffing resources • Challenge during fiscal restraint to provide adequate resources to meet demands, which must be in place to effectively create new program areas • Need for education of decision-makers, and those providing funding, regarding the benefits and cost-effectiveness of PD • Need for ongoing collaboration between administrators, clinicians, and experts • Slow process, especially when funding new programs
SK	<ul style="list-style-type: none"> • Support from leadership, other key departments, nephrologists, and physicians • Appropriate staffing model to support training • On-call RN support • Option program to support patient preference for modality choice 	<ul style="list-style-type: none"> • Nephrologist preference for referral to in-centre HD • Cost of power and water for patient • Housing availability and social barriers for patient

AB = Alberta; BC = British Columbia; HD = hemodialysis; HHD = home hemodialysis; NB = New Brunswick; NL = Newfoundland and Labrador; NR = not reported; NS = Nova Scotia; ON = Ontario; PD = peritoneal dialysis; PEI = Prince Edward Island; RN = registered nurse; SK = Saskatchewan.

Table 4: Facilitators and Barriers to the Implementation of In-Centre Self-Care Dialysis – National Stakeholders

Jurisdiction	Facilitators	Barriers
PEI	<ul style="list-style-type: none"> Looking at other successful models Patient Advocacy Group (meeting with patients and staff), which has been requesting self-care in HD 	<ul style="list-style-type: none"> Negative staff perceptions of self-care Lack of resources (patients may be in the care of the program before the staff is in place to care for them) Challenge of implementing innovative ideas Lack of financial support to help develop the program or provide resources to train staff so that staff can train patients Quick growth of new PEI program (applicable resources may be a challenge) Need for dedicated and formal program and staff to recruit, educate, support, and retain patients for in-centre self-care programming (initial scan indicates there are several potential candidates for self-care)

HD = hemodialysis; PEI = Prince Edward Island.

Rural and Remote Considerations

Environmental considerations were reported by respondents in Manitoba, Newfoundland and Labrador, and Ontario. These respondents identified issues such as a lack of reliable running water, weather-related transportation disruptions, and storage difficulties as implementation barriers, particularly in rural and remote locations. These issues are further confirmed in the literature. Osterland et al. found that the geography or climate of a region can be a challenge for home-based dialysis, as remote settings and weather conditions can make shipping supplies to patients more difficult.²⁷ Zacharias et al.¹⁶ examined implementation challenges for PD in remote northern Manitoba.

Other issues, such as water quality (not meeting drinking standards, lack of running water, or varied water pressure), frozen pipes, difficulty accessing plumbers, poor road access for home delivery of supplies (some northern communities are only accessible by air for most of the year), crowded housing without enough room for equipment, lack of warm storage for supplies, and lack of emergency medical service (no laboratory or hospital service), were reported. These issues were not considered insurmountable barriers to implementation, but rather challenges to consider when planning the implementation of PD (and HHD) for patients in remote settings.

What Is the Availability of Public Funding for the Various Components of Dialysis Programs in Canada?

In-Centre Dialysis

Respondents from Alberta, British Columbia, New Brunswick, Ontario, Prince Edward Island, Saskatchewan, and CSC (in various jurisdictions) provided information about public funding and patient-borne costs for in-centre HD treatment.

The responses indicated that patients in most of the jurisdictions represented in the survey are responsible for all the costs related to their dialysis treatment other than the direct dialysis costs. Transportation to and from urban dialysis centres within the urban centre is covered for patients in Alberta and Saskatchewan. In the past, some patients in Prince Edward Island undergoing dialysis in centres other than the dialysis unit closest to

their home (because of capacity issues) were being reimbursed for transportation costs. However, it was reported that because of inequities with patients with other illnesses who were not being given funding for transportation costs, this practice has been discontinued.

Of the provincial jurisdictions for which there were responses (Alberta, British Columbia, Ontario, Prince Edward Island, and Saskatchewan), only Saskatchewan is reported to allocate public funding for transportation costs to and from dialysis centres for patients living in remote or rural areas. No public funding is available for transportation costs to and from dialysis centres for patients living in remote or rural areas in the other jurisdictions, as reported by the survey respondents. Full detail on the out-of-pocket costs for in-centre dialysis, as reported by the survey respondents, is presented in Appendix 6, Table 19.

Patients incarcerated in federal facilities (served by CSC) do not incur out-of-pocket costs related to their dialysis treatment. The survey responses indicated that federal (not provincial) funding covers expenses related to dialysis. A major component of the cost of providing transportation to and from dialysis facilities for incarcerated patients is the salary of the escort officer; this cost can be significant, depending on the distance to the dialysis centre.

Home Dialysis – Hemodialysis and Peritoneal Dialysis

The survey results indicated that in the jurisdictions for which there were responses (Alberta, British Columbia, Ontario, and Prince Edward Island), public funding for accommodation and travel costs associated with receiving training for home-based dialysis is not available. With respect to utility costs (power and water) that may be incurred when dialyzing at home, public funding is also not available in the jurisdictions represented in the survey responses. Public funding for home renovation costs (potentially up to a certain dollar value) seems to be available for patients in all the jurisdictions that responded (Alberta, British Columbia, Ontario, and Prince Edward Island [one of two respondents]). Public funding for formal and informal caregiving at home does not seem to be widely available; none of the respondents indicated that there was funding for informal caregiving, and one of two Alberta respondents indicated that there was funding for formal caregiving. Further detail on out-of-pocket costs for patients on HHD or PD, as reported by the survey respondents, is presented in Appendix 6, Table 20.

Dialyzing within a correctional facility may be considered home-based dialysis. As indicated by the survey responses from stakeholders in British Columbia, Manitoba, Ontario, and Quebec, incarcerated patients do not incur costs related to dialysis treatments. The costs are absorbed by the Health Service Units (federal funding).

In-Centre Self-Care Dialysis

Of the jurisdictions for which there were responses, in-centre self-care dialysis was reported to be a publicly funded dialysis option in Alberta, British Columbia, and Ontario. Some patients in Alberta may receive funding for transportation costs within urban centres, and some patients in British Columbia may be eligible for funding for formal caregiving. Further detail on the out-of-pocket costs for patients on in-centre self-care dialysis, as reported by the survey respondents, is presented in Appendix 6, Table 21.

The responses from CSC representatives in Manitoba, Ontario, and Quebec stated that patients may receive dialysis treatments within the facility as self-care; however, self-care models for patients in correctional facilities may be different or not available because of security requirements. Patients do not incur costs related to their treatment; these costs are covered by a federal program.

Limitations

This Environmental Scan aims to present an overview of examples and current information regarding the implementation of dialysis programs in Canada. A main limitation of this Environmental Scan is the low response rates to the surveys. The response rates of 11% for the survey of nephrologists and 29% for the survey of national stakeholders likely does not provide a complete representation of the practices and programs in Canada. Despite the low response rate, information was received from respondents (nephrologists or other stakeholders) in each of the provinces. However, the lack of responses from stakeholders in the Canadian territories limits the ability to generalize the information and our understanding of the current dialysis practices in those areas. In addition, the answers to the survey were not always applicable to provincial policies and programs; some responses were relevant to patients served by federal rather than provincial programs. The identified literature and post-survey consultation with clinical experts supplemented the survey responses with additional information to be considered regarding the implementation of such programs; however, it is possible that other provincial strategies and contextual factors are missing. Funding and reimbursement conditions for dialysis-related costs vary from province to province. Respondents provided limited information about funding conditions for various dialysis options. As such, more information is needed to have a complete per-province listing for the funding and reimbursement of dialysis-related costs. Limited information was identified on the availability as well as the implementation considerations relevant to in-centre self-care dialysis, both from the surveys and from the literature. However, the barriers and supports relevant to implementing other self-care models, such as home-based dialysis, may be applicable to in-centre self-care. For example, having appropriate funding, infrastructure, staff, and training programs in place are likely supportive to in-centre self-care dialysis.

Conclusion

The Environmental Scan comprised two surveys (one to national stakeholders; one to nephrologists) and a limited search of the literature. Representatives from Alberta, British Columbia, Manitoba, New Brunswick, Newfoundland and Labrador, Nova Scotia, Ontario, Prince Edward Island, Quebec, and Saskatchewan responded to the national stakeholder survey. We received responses from nephrologists in Alberta, British Columbia, Manitoba, New Brunswick, Newfoundland and Labrador, Nova Scotia, Ontario, and Quebec. Neither survey was answered by stakeholders or nephrologists in the Northwest Territories, Nunavut, or Yukon. The national stakeholder survey respondents included representatives from CSC.

Support for the optimal use and implementation of home-based dialysis modalities varies widely across Canadian jurisdictions. Strategies include a provincial endorsement approach in Ontario, the Dialysis Management Analysis and Reporting program in Alberta, a provincial home therapies research group in British Columbia, video links to nephrologists in New Brunswick, consideration of a PD-first program in Prince Edward Island, and specific goals for HHD training in Saskatchewan. In-centre self-care is not widely available but is being considered for implementation in Prince Edward Island, particularly as a way of easing the transition from in-centre dialysis to home-based dialysis. Learning to self-dialyze within

a centre may give some patients the confidence to dialyze at home. This shift is currently occurring in patients who are involved in in-centre nocturnal dialysis in Alberta.

A culture in the dialysis community that promotes in-centre and assisted care and a lack of infrastructure and appropriate support for home-based and in-centre self-care dialysis are identified as some of the main barriers to the successful implementation of these modalities.

The availability of public funding for costs such as utilities, home renovations, and transport to and from dialysis treatment centres (particularly in rural and remote areas) also varies across the country. The limited number of responses indicated that funding for formal and informal in-home caregiving does not seem to be widely available in the jurisdictions from which we received responses.

Although many programs and nephrologists identified that they served rural and remote populations, a limited number of strategies and processes that promote the uptake of home modalities in rural and remote communities were identified. In addition to challenges such as limited access to emergency care and the need to have dialysis training away from home, other contextual considerations, such as water quality issues, transportation difficulties, and supply storage, can be barriers to care for these patients. However, these are not considered insurmountable barriers to providing dialysis to patients within their own communities, if the desire and the funding is available.

Clinicians, non-nephrologist stakeholders, and the literature all highlighted the importance of patient choice in decision-making. Promoting the optimal uptake of HHD, PD, and in-centre self-care dialysis programs for eligible patients with ESKD should also include consideration of the patient experience.

As with many health care interventions in Canada, the landscape of the public funding options, the infrastructure, and the availability of strategies and processes for the implementation of HHD, PD, and in-centre self-care dialysis programs for eligible patients with ESKD vary widely across the country. Although in-centre dialysis is the most widely available and most prescribed dialysis modality in Canada, many nephrologists and professionals involved in dialysis care are committed to the promotion of home-based and self-care modalities for eligible patients.

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Appendix 1: National Stakeholder Survey

Dialysis Modalities Environmental Scan Survey – National Stakeholder

Part I: ABOUT YOUR PRACTICE OR PROGRAM

Prior to starting the survey, a few questions about you and your practice or program.

1. In which province or territory do you practice/are located?

- Alberta
- British Columbia
- Manitoba
- New Brunswick
- Newfoundland and Labrador
- Northwest Territories
- Nova Scotia
- Nunavut
- Ontario
- Prince Edward Island
- Quebec
- Saskatchewan
- Yukon

2. Please identify your main role:

- Nurse
- Other clinician (please specify) _____
- Administrator (please specify) _____
- Other (please specify) _____

3. Would you consider that your practice/program includes rural populations?

- Yes
- No

4. Would you consider that your practice/program includes remote populations?

Yes

No

5. Which of the following services are available within your practice or program?

Centre HD

Centre, self-care HD

Satellite HD

Home PD

Home PD training

Home PD - assisted

Home HD

Home HD training

Home HD - assisted

Renal Transplantation

6. Which of the following services require referral to a program outside of your practice or partnership?

Centre HD

Centre, self-care HD

Satellite HD

Home PD

Home PD training

Home PD - assisted

Home HD

Home HD training

Home HD - assisted

Renal Transplantation

7. Please enter the approximate number of patients who receive each of these modalities at your facility/through your program each year.

Centre HD (including Satellite)_____

Centre, Self-Care HD_____

Home PD (all prescriptions)_____

Home HD (all prescriptions)_____

Part II: STRATEGIES FOR IMPLEMENTING HOME HEMODIALYSIS AND PERITONEAL PROGRAMS

8. Please briefly describe any strategy, policy or intervention that you are aware of that has the goal to increase the uptake of home-based dialysis modalities, including home hemodialysis or home peritoneal dialysis. Please provide the name of the strategy or program, and if possible any supporting information such as the target population, description of the strategy, who was involved, and links to any related websites, reports, training materials, etc.

9. In relation to the strategy(ies) you described above, please describe any factors you believe helped to make this strategy successful. What worked well? What was needed in order to ensure successful implementation?

10. In relation to the strategy(ies) you described above, please describe any factors you believe hindered the success of the strategy. What did not work well? What were some of the barriers to implementation?

Part III: STRATEGIES FOR IMPLEMENTING IN-CENTRE SELF-CARE HEMODIALYSIS

11. Please briefly describe any strategy, policy or intervention that you are aware of that has the goal to increase the uptake of in-centre self-care hemodialysis. Please provide the name of the strategy or program, and if possible any supporting information such as the target population, description of the strategy, who was involved, and links to any related websites, reports, training materials, etc.

12. In relation to the strategy(ies) you described above, please describe any factors you believe helped to make this strategy successful. What worked well? What was needed in order to ensure successful implementation?

13. In relation to the strategy(ies) you described above, please describe any factors you believe hindered the success of the strategy. What did not work well? What were some of the barriers to implementation?

Part IV: DIALYSIS FOR PATIENTS FROM RURAL OR REMOTE AREAS

14. Please describe any strategy that you are aware of that had the goal to facilitate the implementation of home dialysis or in-centre self-care dialysis programs for patients in rural settings. For rural patients undergoing home dialysis or in-centre self-care dialysis, what specifically are they provided with to help them participate in these programs?

15. Please describe any strategy that you are aware of that had the goal to facilitate the implementation of home dialysis or in-centre self-care dialysis programs for patients in remote settings. For patients in remote settings undergoing home dialysis or in-centre self-care dialysis, what specifically are they provided with to help them participate in these programs?

Part V: PUBLIC FUNDING OF DIALYSIS PROGRAMS

16. In your province or territory, please indicate if public funding is available for the following and whether the funding comes through a specific program. If funding is available, please specify what is included

17. *Traditional in-centre hemodialysis*

Transportation costs (urban, from patient living in a city to dialysis centre):

Yes

No

Transportation costs (rural, from patients living in rural areas to dialysis centre):

Yes

No

Transportation costs (remote, from patients living in remote areas to dialysis centre):

Yes

No

What costs are typically paid out-of-pocket by the patient relating to their dialysis treatment:

Any additional details (e.g., name of program, maximum coverage, etc.):

18. *Home hemodialysis or home peritoneal dialysis*

Training, accommodations:

Yes

No

Training, travel:

Yes

No

Utilities, power:

Yes

No

Utilities, water:

Yes

No

Formal caregiving:

Yes

No

Reimbursement for informal caregiver support (family, friend):

Yes

No

Home renovations:

Yes

No

What costs are typically paid out-of-pocket by the patient relating to their dialysis treatment:

Any additional details (e.g., name of program, maximum coverage, etc.):

19. *In-centre self-care hemodialysis*

Is this a publicly funded option in your region?

Yes

No

Transportation costs (urban):

Yes

No

Transportation costs (rural):

Yes

No

Transportation costs (remote):

Yes

No

Formal caregiving:

Yes

No

Reimbursement for informal caregiver support (family, friend):

Yes

No

What costs are typically paid out-of-pocket by the patient relating to their dialysis treatment:

Any additional details (e.g., name of program, maximum coverage, etc.):

Part VI: GENERAL QUESTIONS

20. Do you have any other comments you would like to share regarding the implementation of home-based hemodialysis, home-based peritoneal dialysis, or in-centre self-care hemodialysis in Canadian jurisdictions?
21. If you are willing to be contacted by us in case we need to clarify any of your responses, please provide your name and contact information: (optional)
22. Thank you for completing this survey.

Appendix 2: Survey of Nephrologists

Dialysis Environmental Scan – Nephrologists

Part I: ABOUT YOUR PRACTICE OR PROGRAM

Prior to starting the survey, a few questions about you and your practice or program.

1. In which province or territory do you practice?

- Alberta
- British Columbia
- Manitoba
- New Brunswick
- Newfoundland and Labrador
- Northwest Territories
- Nova Scotia
- Nunavut
- Ontario
- Prince Edward Island
- Quebec
- Saskatchewan
- Yukon

2. Is your practice or program affiliated with a university?

- Yes
- No

3. How many years have you been practising nephrology? _____

4. Did you participate in a peritoneal dialysis rotation for 2 months or longer during your nephrology fellowship?

- Yes
- No

5. Did you participate in a home hemodialysis rotation for 2 months or longer during your nephrology fellowship?

Yes

No

6. Would you consider that your practice or program includes or serves a rural population?

Yes

No

7. Would you consider that your practice or program includes or serves a remote population?

Yes

No

8. Which of the following services are available within your practice or program? (select all that apply)

Centre HD

Centre, self-care HD

Satellite HD

Home PD

Home PD training

Home PD - assisted (e.g., home care)

Home HD

Home HD training

Home HD - assisted (e.g., home care)

Renal Transplantation

SELECT ALL

9. Which of the following services require referral to a program outside of your practice or partnership? (select all that apply)

- Centre HD
- Centre, self-care HD
- Satellite HD
- Home PD
- Home PD training
- Home PD - assisted
- Home HD
- Home HD training
- Home HD - assisted
- Renal Transplantation
- SELECT ALL

10. Please enter the approximate number of patients who receive each of these modalities at your facility/through your program each year.

Centre HD (including Satellite)_____

Centre, Self-Care HD_____

Home PD (all prescriptions)_____

Home HD (all prescriptions)_____

Part II: FACILITATORS FOR PD OR HHD

Several facilitators to the promotion of optimal use of home-based dialysis modalities, including home HD (HHD) or PD (as well as self-care in-centre HD) have been identified in the literature. We would like to know, based on your experience, whether you agree that these are facilitators within your program or practice. Additionally, we are interested in your feedback on decision support tools.

11. Funding for Personnel and Infrastructure

The following policies, practices or interventions might promote optimal use of HHD or PD. Please indicate the degree to which you would support each of them:

	Not at all supportive	Slightly supportive	Moderately supportive	Very supportive	Extremely supportive
Establishment of a local or regional long-term care facility with capacity for HD provision	<input type="checkbox"/>				
Establishment of a local or regional long-term care facility with capacity for PD provision	<input type="checkbox"/>				
Funding for a formal caregiver (nurse) to provide full-care HD or PD at home, assuming that it shown to be cost-neutral or cost-saving	<input type="checkbox"/>				
Funding for nurse-assisted home hemodialysis, specifically to assist patients with cannulation (patient or informal caregiver would be responsible for other components of dialysis prescription)	<input type="checkbox"/>				
Funding for electrical and water costs for HHD so that patients don't have to pay	<input type="checkbox"/>				

12. Which of the above policies, practices or interventions are available to you?

	Yes	No
Long-term care with HD provision	<input type="checkbox"/>	<input type="checkbox"/>
Long-term care with PD provision	<input type="checkbox"/>	<input type="checkbox"/>
Full-care HD or PD at home	<input type="checkbox"/>	<input type="checkbox"/>
Nurse-assisted HHD	<input type="checkbox"/>	<input type="checkbox"/>
Electrical and water costs for HHD	<input type="checkbox"/>	<input type="checkbox"/>

13. Other suggested personnel and infrastructure interventions? Please describe.

14. External Support Systems:

The following policies, practices or interventions might promote optimal use of HHD or PD. Please indicate the degree to which you would support each of them:

	Not at all supportive	Slightly supportive	Moderately supportive	Very supportive	Extremely supportive
A regional “centre of excellence” to whom patients can be referred for modality education, dialysis training and vascular or peritoneal access (while you remain most responsible physician during training and treatment)	<input type="checkbox"/>				
24-hour regional on-call physician support by local HHD expert, to assist with home dialysis prescription or other technical issues	<input type="checkbox"/>				

15. Which of the above policies, practices or interventions are available to you?

	Yes	No
Regional “centre of excellence”	<input type="checkbox"/>	<input type="checkbox"/>
24hr on-call physician support	<input type="checkbox"/>	<input type="checkbox"/>

16. Other suggested external support systems? Please describe.

17. Health Systems Policy:

The following policies, practices or interventions might promote optimal use of HHD or PD. Please indicate the degree to which you would support each of them:

	Not at all supportive	Slightly supportive	Moderately supportive	Very supportive	Extremely supportive
Policy of mandatory modality education in which all patients approaching dialysis are offered the opportunity to receive HHD or PD	<input type="checkbox"/>				
Centre-specific target for independent dialysis rates (incident or prevalent) that is linked to quality improvement initiatives intended to identify and overcome local barriers	<input type="checkbox"/>				
Regular external (e.g., provincial agency) panel review to provide your program with feedback on where to target interventions to improve your local PD and HHD adoption rates	<input type="checkbox"/>				

18. Which of the abovementioned practices, or interventions are available to you?

	Yes	No
Mandatory modality education	<input type="checkbox"/>	<input type="checkbox"/>
Dialysis rate targets linked to quality improvement initiatives	<input type="checkbox"/>	<input type="checkbox"/>
Regular external program review	<input type="checkbox"/>	<input type="checkbox"/>

19. Other suggested health systems policy? Please describe. _____

20. Nephrology training and continued health education:

The following policies, practices or interventions might promote optimal use of HHD or PD. Please indicate the degree to which you would support each of them:

	Not at all supportive	Slightly supportive	Moderately supportive	Very supportive	Extremely supportive
Hemodialysis certification program for physicians through the Canadian Society of Nephrology.	<input type="checkbox"/>				
Peritoneal dialysis certification program for physicians through the Canadian Society of Nephrology.	<input type="checkbox"/>				

21. Which of the abovementioned practices, or interventions are available to you?

	Yes	No
HD certification program	<input type="checkbox"/>	<input type="checkbox"/>
PD certification program	<input type="checkbox"/>	<input type="checkbox"/>

22. Other suggested training? Please describe.

23. Decision support tools:

The following tools might promote optimal use of HHD or PD. Please indicate the degree to which you would support each of them:

	Not at all supportive	Slightly supportive	Moderately supportive	Very supportive	Extremely supportive
An online clinical decision support tool to assist with patient selection for independent dialysis	<input type="checkbox"/>				
A paper-based clinical decision support tool to assist with patient selection for independent dialysis	<input type="checkbox"/>				
Patient education tools about the different dialysis modalities	<input type="checkbox"/>				
General information about dialysis care and when it is appropriate	<input type="checkbox"/>				

24. Other suggested tools? _____

Part III: REMOTE OR RURAL POPULATIONS

25. For any strategy intended to increase the uptake of home-based dialysis modalities, please enter your comments here as they may relate to RURAL populations:

26. For any strategy intended to increase the uptake of home-based dialysis modalities, please enter your comments here as they may relate to REMOTE populations:

Part IV: GENERAL COMMENTS

Additional comments?

If you are willing to be contacted by us in case we need to clarify any of your responses, please provide your name and contact information: (optional)

Appendix 3: Availability of Dialysis Modalities

The most widely available dialysis modalities available to Canadian patients according to the national stakeholders who responded to the survey are in-centre hemodialysis (HD), HD in a satellite centre, and peritoneal dialysis (PD); the least available services, as reported by the respondents, are in-centre self-care HD, assisted home HD (HHD), and assisted PD. With respect to populations served outside of urban centres, most respondents indicated that their program served patients living in rural (85%) or remote (76%) settings. Further detail is presented in Tables 5 and 6.

As reported by the nephrologists who responded to the survey, the most widely available dialysis modalities in Canadian practices or programs are in-centre HD, home-based PD, home-based HD, and HD in a satellite centre. In-centre self-care HD is the least available. Most respondents reported that they worked in programs and practices that served patients living in rural (93%) or remote (75%) communities. Further detail about the availability in each province, as reported by the survey nephrologists, is presented in Tables 7 and 8.

Because of the limited number of responses to both surveys, the results may not accurately represent the availability of dialysis modalities in Canada. The Canadian Organ Replacement Register provides more complete information about the availability of dialysis programs, including training for home-based PD and HHD, per province in Canada.¹ Additional information about the availability of various dialysis modalities across Canada can also be found in the Canadian Kidney Knowledge Translation and Generation Network 2014 report on establishing a network of multidisciplinary chronic kidney disease clinics across Canada.²⁸ According to the Canadian Kidney Knowledge Translation and Generation Network survey results, the most frequently offered dialysis modalities in the 71 multidisciplinary chronic kidney disease clinics that were included in the survey were in-centre HD (99%) and PD (94%); in-centre self-care HD was among the less frequently offered renal programs.

Table 5: Availability of Dialysis Modalities According to National Stakeholders

Modality or Training	Responding That the Modality Is Available Within the Jurisdiction										
	AB	BC	MB	NB	NL	NS	ON	PEI	QC	SK	Total
In-centre HD	2 (100%)	4 (80%)	0	1 (100%)	0	2 (100%)	1 (50%)	2 (67%)	4 (80%)	4 (67%)	20 (67%)
In-centre self-care HD	1 (50%)	1 (20%)	0	0	0	1 (50%)	0	0	1 (20%)	1 (17%)	5 (17%)
Satellite HD	2 (100%)	4 (80%)	0	0	0	1 (50%)	2 (100%)	3 (100%)	4 (80%)	4 (67%)	20 (67%)
Home PD	2 (100%)	4 (80%)	0	0	0	2 (100%)	1 (50%)	2 (67%)	3 (60%)	4 (67%)	18 (60%)
Home PD training	2 (100%)	3 (60%)	0	0	0	1 (50%)	1 (50%)	2 (67%)	3 (60%)	4 (67%)	16 (53%)
Home PD, assisted	2 (100%)	3 (60%)	1 (50%)	0	0	1 (50%)	1 (50%)	0	0	0	8 (27%)
Home HD	2 (100%)	1 (20%)	0	0	0	1 (50%)	1 (50%)	0	1 (20%)	4 (67%)	10 (33%)
Home HD training	2 (100%)	1 (20%)	0	0	0	1 (50%)	1 (50%)	0	1 (20%)	4 (67%)	10 (33%)
Home HD, assisted	0	0	0	0	0	1 (50%)	1 (50%)	0	1 (20%)	0	3 (10%)
Renal transplantation	2 (100%)	1 (20%)	0	0	0	1 (50%)	1 (50%)	0	2 (40%)	4 (67%)	12 (40%)
Total respondents	2	5	2	1	2	2	2	3	5	6	30

AB = Alberta; BC = British Columbia; HD = hemodialysis; MB = Manitoba; NB = New Brunswick; NL = Newfoundland and Labrador; NS = Nova Scotia; ON = Ontario; PD = peritoneal dialysis; PEI = Prince Edward Island; QC = Quebec; SK = Saskatchewan.

Table 6: Practices or Programs Serving Rural and Remote Populations According to National Stakeholders

Modality or Training	Responding That the Modality Is Available Within the Jurisdiction										
	AB	BC	MB	NB	NL	NS	ON	PEI	QC	SK	Total
Rural	3 (100%)	6 (86%)	2 (100%)	0	2 (100%)	2 (100%)	1 (50%)	3 (100%)	3 (60%)	6 (100%)	28 (85%)
Remote	3 (100%)	6 (86%)	2 (100%)	0	2 (100%)	2 (100%)	0	0	5 (100%)	5 (83%)	25 (76%)
Total respondents	3	7	2	1	2	2	2	3	5	6	33

AB = Alberta; BC = British Columbia; HD = hemodialysis; MB = Manitoba; NB = New Brunswick; NL = Newfoundland and Labrador; NS = Nova Scotia; ON = Ontario; PD = peritoneal dialysis; PEI = Prince Edward Island; QC = Quebec; SK = Saskatchewan.

Table 7: Availability of Dialysis Modalities According to Nephrologists

Modality or Training	Responding That the Modality Is Available Within the Jurisdiction								Total
	AB	BC	MB	NB	NL	NS	ON	QC	
In-centre HD	4 (100%)	2 (100%)	4 (100%)	2 (100%)	1 (100%)	1 (100%)	11 (92%)	2 (100%)	27 (96%)
In-centre self-care HD	1 (25%)	1 (50%)	0	0	0	0	5 (42%)	2 (100%)	9 (32%)
Satellite HD	4 (100%)	2 (100%)	2 (50%)	2 (100%)	1 (100%)	1 (100%)	11 (92%)	2 (100%)	25 (89%)
Home PD	4 (100%)	2 (100%)	3 (75%)	2 (100%)	1 (100%)	1 (100%)	11 (92%)	2 (100%)	26 (93%)
Home PD training	4 (100%)	2 (100%)	3 (75%)	2 (100%)	1 (100%)	1 (100%)	10 (83%)	2 (100%)	25 (89%)
Home PD, assisted	3 (75%)	1 (50%)	4 (100%)	0	0	1 (100%)	11 (92%)	1 (50%)	21 (75%)
Home HD	4 (100%)	2 (100%)	3 (75%)	1 (50%)	1 (100%)	1 (100%)	11 (92%)	2 (100%)	25 (89%)
Home HD training	4 (100%)	2 (100%)	3 (75%)	1 (50%)	1 (100%)	1 (100%)	11 (92%)	2 (100%)	25 (89%)
Home HD, assisted	0	1 (50%)	0	0	0	1 (100%)	8 (67%)	1 (50%)	11 (39%)
Renal transplantation	4 (100%)	1 (50%)	3 (75%)	0	0	1 (100%)	8 (67%)	2 (100%)	19 (68%)
Total respondents	4	2	4	2	1	1	12	2	28

AB = Alberta; BC = British Columbia; HD = hemodialysis; MB = Manitoba; NB = New Brunswick; NL = Newfoundland and Labrador; NS = Nova Scotia; ON = Ontario; PD = peritoneal dialysis; PEI = Prince Edward Island; QC = Quebec; SK = Saskatchewan.

Table 8: Nephrology Practices or Programs Serving Rural and Remote Populations

Setting	AB	BC	MB	NB	NL	NS	ON	QC	Total
Rural	4 (100%)	2 (100%)	4 (100%)	2 (100%)	1 (100%)	1 (100%)	10 (83%)	2 (100%)	26 (93%)
Remote	3 (75%)	2 (100%)	4 (100%)	2 (100%)	1 (100%)	1 (100%)	6 (50%)	2 (100%)	21 (75%)
Total respondents	4	2	4	2	1	1	12	2	28

AB = Alberta; BC = British Columbia; HD = hemodialysis; MB = Manitoba; NB = New Brunswick; NL = Newfoundland and Labrador; NS = Nova Scotia; ON = Ontario; PD = peritoneal dialysis; PEI = Prince Edward Island; QC = Quebec; SK = Saskatchewan.

Appendix 4: Responses from Correctional Service Canada

Table 9: Responses for Home-Based HD and PD and In-Centre Self-Care from CSC Respondents to the National Stakeholder Survey

Jurisdiction	Strategies and Processes	Barriers and Facilitators
Home-Based HD and PD		
BC	<ul style="list-style-type: none"> • HD and PD therapies within CSC are customized individually to the inmate population for the required needs. 	<p>Barriers:</p> <ul style="list-style-type: none"> • Need for a better understanding by CSC of the importance of pre-renal diagnosis and prevention for aging populations <p>Facilitators:</p> <ul style="list-style-type: none"> • Security and health care working closely together to assist in optimum care quality for the required clients.
MB	<ul style="list-style-type: none"> • “Home” in this instance means within the institution. RPC has partnered with a community dialysis program and created a small HD satellite unit within the correctional unit. This small unit provides services to offenders from institutions in MB, Saskatchewan, and Alberta. Incarcerated patients on PD can be managed within the institutions. 	<p>Barriers:</p> <ul style="list-style-type: none"> • Dialysis training for nursing. Dialysis is a specialized training area. Only a very small number of offenders uses the services each year, which makes it challenging to keep up the skill sets of nurses. • Offenders from MB and Alberta are required to transfer to Saskatchewan to receive dialysis in the institution. <p>Facilitators:</p> <ul style="list-style-type: none"> • RPC obtaining dialysis units and training CSC nurses to run the units • Successful partnership with community dialysis program • Positive relationship between CSC and community program; shared goal to provide service within the institution
	<ul style="list-style-type: none"> • Only RPC has dialysis units and trained nurses in the institution. When transfer is not an option, offenders must attend community-based dialysis programs. Institutions have nurses who can manage PD in the institutions on an as-needed basis. 	<p>Barriers: NR</p> <p>Facilitators: NR</p>
ON	<ul style="list-style-type: none"> • Transfer to the communities on release would be facilitated. • Suitability for home treatment modalities would lie with the HD centre. 	Barriers: NR
		Facilitators: NR

Table 9: Responses for Home-Based HD and PD and In-Centre Self-Care from CSC Respondents to the National Stakeholder Survey (cont.)

Jurisdiction	Strategies and Processes	Barriers and Facilitators
In-Centre Self-Care		
BC	<ul style="list-style-type: none"> Self-care models are completely different because of CSC security requirements. Self-care models can be implemented; however, the population of incarcerated patients requiring this type of dialysis is small. 	Barriers: <ul style="list-style-type: none"> When the novelty of self-care wears off, the patient population gives up and returns to standard care models.
MB	<ul style="list-style-type: none"> Not applicable to offender populations. 	Barriers: NR
		Facilitators: NR

BC = British Columbia; CSC = Correctional Service Canada; HD = hemodialysis; MB = Manitoba; NR = not reported; ON = Ontario; PD = peritoneal dialysis; RPC = Regional Psychiatric Centre.

Appendix 5: Nephrologist Survey Data

Table 10: Nephrologist Support of Personnel and Infrastructure Policies and Interventions

Policy or Intervention	Level of Support	AB	BC	MB	NB	NL	NS	ON	QC	Total
Establishment of a local or regional long-term care facility with capacity for HD provision	Extremely or very supportive	3 (75%)	1 (50%)	1 (33%)	2 (100%)	-	-	8 (80%)	1 (100%)	16 (67%)
	Moderately supportive	1 (25%)	-	-	-	1 (100%)	-	1 (10%)	-	3 (12.5%)
	Slightly or not at all supportive	-	1 (50%)	2 (67%)	-	-	1 (100%)	1 (10%)	-	5 (21%)
Establishment of a local or regional long-term care facility with capacity for PD provision	Extremely or very supportive	4 (100%)	1 (50%)	2 (67%)	2 (100%)	1 (100%)	1 (100%)	8 (80%)	1 (100%)	20 (83%)
	Moderately supportive	-	-	-	-	-	-	1 (10%)	-	1 (4%)
	Slightly or not at all supportive	-	1 (50%)	1 (33%)	-	-	-	1 (10%)	-	3 (12.5%)
Funding for a formal caregiver (nurse) to provide full-care HD or PD at home, assuming that it is shown to be cost-neutral or a cost-saving	Extremely or very supportive	4 (100%)	2 (100%)	3 (100%)	2 (100%)	1 (100%)	1 (100%)	9 (90%)	-	22 (92%)
	Moderately supportive	-	-	-	-	-	-	1 (10%)	1 (100%)	2 (8%)
	Slightly or not at all supportive	-	-	-	-	-	-	-	-	0
Funding for nurse-assisted HHD, specifically to assist patients with cannulation (patient or informal caregiver would be responsible for other components of dialysis)	Extremely or very supportive	2 (50%)	2 (100%)	2 (67%)	2 (100%)	1 (100%)	1 (100%)	8 (80%)	-	18 (75%)
	Moderately supportive	-	-	1 (33%)	-	-	-	1 (10%)	1 (100%)	3 (12.5%)
	Slightly or not at all supportive	2 (50%)	-	-	-	-	-	1 (10%)	-	3 (12.5%)
Funding for electrical and water costs for HHD so that patients do not have to pay	Extremely or very supportive	4 (100%)	2 (100%)	3 (100%)	2 (100%)	-	1 (100%)	9 (90%)	1 (100%)	22 (92%)
	Moderately supportive	-	-	-	-	1 (100%)	-	1 (10%)	-	2 (8%)
	Slightly or not at all supportive	-	-	-	-	-	-	-	-	0
Number of respondents		4	2	3	2	1	1	10	1	24

AB = Alberta; BC = British Columbia; HD = hemodialysis; HHD = home hemodialysis; MB = Manitoba; NB = New Brunswick; NL = Newfoundland and Labrador; NS = Nova Scotia; ON = Ontario; PD = peritoneal dialysis; QC = Quebec.

Table 11: Availability of Personnel and Infrastructure Practices or Policies

Policy or Practice	Responding Yes								
	AB	BC	MB	NB	NL	NS	ON	QC	Total
LTC with HD provision	4 (100%)	1 (50%)	0	1 (50%)	0	0	6 (60%)	1 (100%)	13 (54%)
LTC with PD provision	4 (100%)	1 (50%)	2 (66%)	1 (50%)	0	1 (100%)	8 (80%)	0	17 (71%)
Full-care HD or PD at home	2 (50%)	0	1 (33%)	0	0	0	5 (50%)	0	8 (33%)
Nurse-assisted HHD	0	0	0	1 (50%)	0	0	4 (40%)	0	5 (21%)
Funding electrical and water costs for HHD	1 (25%)	2 (100%)	1 (33%)	1 (50%)	0	1 (100%)	5 (50%)	1 (100%)	12 (50%)
Total respondents	4	2	3	2	1	1	10	1	24

AB = Alberta; BC = British Columbia; HD = hemodialysis; HHD = home hemodialysis; LTC = long-term care; MB = Manitoba; NB = New Brunswick; NL = Newfoundland and Labrador; NS = Nova Scotia; ON = Ontario; PD = peritoneal dialysis; QC = Quebec.

Table 12: Nephrologist Support of External Support System Policies or Interventions

Policy or Intervention	Level of Support	AB	BC	MB	NB	NL	NS	ON	QC	Total
A regional “centre of excellence” to which patients can be referred for modality education, dialysis training, and vascular or peritoneal access (while respondent remains most responsible physician during training and treatment)	Extremely or very supportive	3 (75%)	0	1 (33%)	1 (50%)	1 (100%)	1 (100%)	4 (40%)	-	11 (46%)
	Moderately supportive	-	1 (50%)	2 (67%)	1 (50%)	-	-	2 (20%)	1 (100%)	7 (29%)
	Slightly or not at all supportive	1 (25%)	1 (50%)	-	-	-	-	4 (40%)	-	6 (25%)
24-hour regional on-call physician support by local HHD expert to assist with home dialysis, prescriptions, or other technical issues	Extremely or very supportive	2 (50%)	0	1 (33%)	0	1 (100%)	1 (100%)	4 (40%)	-	9 (37.5%)
	Moderately supportive	-	1 (50%)	-	1 (50%)	-	-	1 (10%)	1 (100%)	4 (17%)
	Slightly or not at all supportive	2 (50%)	1 (50%)	2 (67%)	1 (50%)	-	-	5 (50%)	-	11 (46%)
Number of respondents		4	2	3	2	1	1	10	1	24

AB = Alberta; BC = British Columbia; HD = hemodialysis; HHD = home hemodialysis; MB = Manitoba; NB = New Brunswick; NL = Newfoundland and Labrador; NS = Nova Scotia; ON = Ontario; PD = peritoneal dialysis; QC = Quebec.

Table 13: Availability of External Support System Practices or Policies

Policy or Practice	Responding Yes							
	AB	BC	MB	NB	NL	NS	ON	QC
Regional “centre of excellence”	3	1	3	1	0	1	8	0
24 hour on-call physician support	2	1	3	1	1	1	6	0
Total respondents	4	2	3	2	1	1	10	1

AB = Alberta; BC = British Columbia; MB = Manitoba; NB = New Brunswick; NL = Newfoundland and Labrador; NS = Nova Scotia; ON = Ontario; PD = peritoneal dialysis; QC = Quebec.

Table 14: Nephrologist Support of Health System Policies or Interventions

Policy or Intervention	Level of Support	AB	BC	MB	NB	NL	NS	ON	QC	Total
Policy of mandatory modality education in which all patients approaching dialysis are offered the opportunity to receive HHD or PD	Extremely or very supportive	3 (75%)	1 (50%)	1 (50%)	2 (100%)	1 (100%)	1 (100%)	8 (80%)	1 (100%)	18 (78%)
	Moderately supportive	1 (25%)	1 (50%)	1 (50%)	-	-	-	1 (20%)	-	4 (17%)
	Slightly or not at all supportive	-	-	-	-	-	-	1 (10%)	-	1 (4%)
Centre-specific target for independent dialysis rates (incident or prevalent) that is linked to quality improvement initiatives intended to identify and overcome local barriers	Extremely or very supportive	2 (50%)	2 (100%)	1 (50%)	-	1 (100%)	1 (100%)	3 (30%)	1 (100%)	11 (48%)
	Moderately supportive	-	-	1 (50%)	1 (50%)	-	-	3 (30%)	-	5 (22%)
	Slightly or not at all supportive	2 (50%)	-	-	1 (50%)	-	-	4 (40%)	-	7 (30%)
Regular external (e.g., provincial agency) panel review to provide respondent’s program with feedback on where to target interventions to improve respondent’s local PD and HHD adoption rates	Extremely or very supportive	4 (100%)	2 (100%)	1 (50%)	-	1 (100%)	-	4 (40%)	-	12 (52%)
	Moderately supportive	-	-	1 (50%)	1 (50%)	-	1 (100%)	3 (30%)	1 (100%)	7 (30%)
	Slightly or not at all supportive	-	-	-	1 (50%)	-	-	3 (30%)	-	4 (17%)
Number of respondents		4	2	2	2	1	1	10	1	23

AB = Alberta; BC = British Columbia; HHD = home hemodialysis; MB = Manitoba; NB = New Brunswick; NL = Newfoundland and Labrador; NS = Nova Scotia; ON = Ontario; PD = peritoneal dialysis; QC = Quebec.

Table 15: Availability of Health System Practices or Policies

Policy or Practice	Responding Yes							
	AB	BC	MB	NB	NL	NS	ON	QC
Mandatory modality education	2	1	1	1	0	0	8	0
Dialysis rate targets linked to quality improvement initiatives	1	2	0	1	1	0	9	0
Regular external program review	1	2	0	0	0	0	5	0
Total respondents	4	2	3	2	1	1	10	1

AB = Alberta; BC = British Columbia; MB = Manitoba; NB = New Brunswick; NL = Newfoundland and Labrador; NS = Nova Scotia; ON = Ontario; PD = peritoneal dialysis; QC = Quebec.

Table 16: Nephrologist Support of Training or Continuing Education Policies or Interventions

Policy or Intervention	Level of Support	AB	BC	MB	NB	NL	NS	ON	QC	Total
Hemodialysis certification program for physicians through the Canadian Society of Nephrology	Extremely or very supportive	2 (50%)	-	-	1 (50%)	-	-	3 (33%)	-	6 (27%)
	Moderately supportive	1 (25%)	1 (50%)	1 (50%)	1 (50%)	-	-	3 (33%)	-	7 (32%)
	Slightly or not at all supportive	1 (25%)	1 (50%)	1 (50%)	-	1 (100%)	1 (100%)	3 (33%)	1 (100%)	9 (41%)
Peritoneal dialysis certification program for physicians through the Canadian Society of Nephrology	Extremely or very supportive	2 (50%)	-	-	2 (100%)	-	-	3 (33%)	-	7 (32%)
	Moderately supportive	1 (25%)	1 (50%)	1 (50%)	-	-	-	3 (33%)	-	6 (27%)
	Slightly or not at all supportive	1 (25%)	1 (50%)	1 (50%)	-	1 (100%)	1 (100%)	3 (33%)	1 (100%)	9 (41%)
Number of respondents		4	2	2	2	1	1	9	1	22

AB = Alberta; BC = British Columbia; HHD = home hemodialysis; MB = Manitoba; NB = New Brunswick; NL = Newfoundland and Labrador; NS = Nova Scotia; ON = Ontario; PD = peritoneal dialysis; QC = Quebec.

Table 17: Availability of Training or Continuing Education Policies or Interventions for Nephrologists

Policy or Practice	Responding Yes							
	AB	BC	MB	NB	NL	NS	ON	QC
HD certification program	0	0	0	0	0	0	0	1
PD certification program	0	0	0	0	0	0	0	1
Total respondents	4	2	2	2	1	1	9	1

AB = Alberta; BC = British Columbia; MB = Manitoba; NB = New Brunswick; NL = Newfoundland and Labrador; NS = Nova Scotia; ON = Ontario; PD = peritoneal dialysis; QC = Quebec.

Table 18: Nephrologist Support of Decision Support Tool Policies or Interventions

Policy or Intervention	Level of Support	AB	BC	MB	NB	NL	NS	ON	QC	Total
An online clinical decision support tool to assist with patient selection for independent dialysis	Extremely or very supportive	3 (75%)	1 (50%)	1 (50%)	1 (50%)	1 (100%)	-	4 (44%)	-	11 (50%)
	Moderately supportive	-	1 (50%)	1 (50%)	-	-	1 (100%)	1 (11%)	1 (100%)	5 (23%)
	Slightly or not at all supportive	1 (25%)	-	-	1 (50%)	-	-	4 (44%)	-	6 (27%)
A paper-based clinical decision support tool to assist with patient selection for independent dialysis	Extremely or very supportive	2 (50%)	1 (50%)	1 (50%)	1 (50%)	1 (100%)	-	4 (44%)	-	10 (45%)
	Moderately supportive	-	1 (50%)	1 (50%)	-	-	1 (100%)	-	-	3 (14%)
	Slightly or not at all supportive	2 (50%)	-	-	1 (50%)	-	-	5 (56%)	1 (100%)	9 (41%)
Patient education tools about the different dialysis modalities	Extremely or very supportive	4 (100%)	2 (100%)	2 (100%)	2 (100%)	1 (100%)	1 (100%)	7 (78%)	1 (100%)	20 (91%)
	Moderately supportive	-	-	-	-	-	-	2 (22%)	-	2 (9%)
	Slightly or not at all supportive	-	-	-	-	-	-	-	-	
General information about dialysis care and when it is appropriate	Extremely or very supportive	2 (50%)	2 (100%)	2 (100%)	1 (50%)	1 (100%)	1 (100%)	6 (67%)	-	15 (68%)
	Moderately supportive	1 (25%)	-	-	1 (50%)	-	-	3 (33%)	-	5 (23%)
	Slightly or not at all supportive	1 (25%)	-	-	-	-	-	-	1 (100%)	2 (9%)
Number of respondents		4	2	2	2	1	1	9	1	22

AB = Alberta; BC = British Columbia; HDD = home hemodialysis; MB = Manitoba; NB = New Brunswick; NL = Newfoundland and Labrador; NS = Nova Scotia; ON = Ontario; PD = peritoneal dialysis; QC = Quebec.

Appendix 6: Availability of Public Funding for Various Components of Dialysis Programs in Canada

Table 19: Public Funding and Patient-Borne Costs for In-Centre Dialysis

Jurisdiction (Number of Responses)	Out-of-Pocket Costs
AB (2)	All costs, except the direct dialysis costs (supplies)
	Transportation
	Medication co-pay
BC (2)	Transportation costs to and from dialysis centre
	Transportation costs to and from dialysis centre
ON (1)	Transportation costs to and from dialysis centre
	Medications
PEI (2)	Transportation costs to and from dialysis centre
	All transportation costs are the responsibility of the patients. Transportation for patients who were not able to be dialyzed at their "home" centre had been reimbursed; however, this reimbursement will no longer occur because of inequities with other types of treatments (e.g., cancer).
	Access transit, medical taxi, and gas are reimbursed by social assistance as applicable. Kidney Foundation can provide minimal assistance for those with greatest financial need.
SK (1)	Access transit, medical taxi, gas are reimbursed by social assistance as applicable.

AB = Alberta; BC = British Columbia; ON = Ontario; PEI = Prince Edward Island; PD = peritoneal dialysis; SK = Saskatchewan.

Table 20: Public Funding and Patient-Borne Costs for In-Home Hemodialysis and Peritoneal Dialysis

Jurisdiction (Number of Responses)	Out-of-Pocket Costs
AB (2)	All costs, except the direct dialysis costs
	Utilities
BC (2)	Most costs associated with dialysis are paid by a provincial program (BCPRA); however, there are many limits and exceptions.
	Transportation and accommodations during training
	All utility costs
ON (1)	Transportation costs
	Medications costs
PEI (2)	Uncertain
	NR

AB = Alberta; BC = British Columbia; NR = not reported; ON = Ontario; PEI = Prince Edward Island.

Table 21: Public Funding and Patient-Borne Costs for In-Centre Self-Care

Jurisdiction (Number of Responses)	Out-of-Pocket Costs
AB (2)	Everything except the direct dialysis costs
	NR
BC (2)	Costs associated with dialysis are paid by a provincial program; however, there are many limits and exceptions.
	NR
ON (1)	NR
PEI (2)	In-centre self-care not available
	In-centre self-care not available

AB = Alberta; BC = British Columbia; NR = not reported; ON = Ontario; PEI = Prince Edward Island.