

**Ministry of
Health & Long-Term Care**

**THE PROVINCIAL CHRONIC KIDNEY
DISEASE ADVISORY COMMITTEE**

— REPORT —

September 21, 2004

 **Ontario**

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SECTION 1.0

–EXECUTIVE SUMMARY–

Executive Summary

The Provincial Chronic Kidney Disease (CKD) Advisory Committee extends its appreciation to the Ministry of Health and Long-Term Care (MOHLTC) for granting a 2-year term to help further the goal of an accessible, efficient, and effective system of CKD service delivery in Ontario. The Committee is pleased to report to the Ministry on its accomplishments to date and on its conviction of the need for standing Advisory Committee in Ontario.

Chronic Kidney Disease (CKD) is a condition in which the kidneys are permanently impaired and can no longer function normally. CKD services can range from chronic renal insufficiency programs (stage 1) to dialysis treatments and renal transplantation (stage 5), the latter being the most extreme treatments option. Stage 5 chronic kidney disease may advance to the phase when it becomes impossible to maintain life without dialysis or kidney transplant. Chronic kidney disease is growing at an increasing rate in Ontario. According to the Canadian Organ Replacement Registry (CORR)¹, the incidence² of End Stage Renal Disease (ESRD) among Ontario patients climbed over 25% in five years, from 1,557 in 1997 to 1,950 in 2001. Likewise the prevalence³ of ESRD among Ontario patients increased over 44% from 4,923 in 1997 to 7,102 in 2001. These numbers show that exit rate from dialysis by transplant or death is exceeded by the entrance rate. Today, Ontario has the highest incidence and prevalence of ESRD in Canada and it's continuing to grow rapidly.

The current Ontario system for managing patients with ESRD and other stages of chronic kidney disease is not sufficient to address the growing needs of its future population. Ontario needs a planning tool that will provide comprehensive, reliable, accurate and easily accessible information on the multi-faceted components of chronic kidney disease services. Ontario also needs standardization of the service delivery model and of programmatic and clinical guidelines to address the blurred and inconsistent CKD practices.

In 2002, the MOHLTC established a 2-year Provincial Chronic Kidney Disease Advisory Committee to provide evidence-based programmatic and clinical expert advice on the development of a provincial information system framework to enable population-based planning for a continuum of CKD services throughout the province and to support the monitoring of program utilization and outcomes. In addition, the Committee was mandated to provide advice on programmatic and clinical standards as well as options for the organization of CKD service delivery in Ontario.

During its mandate, the Provincial CKD Advisory Committee has developed a draft *CKD Program Model of Care, Expectations* document that has been circulated for feedback to CKD stakeholders. A draft document on the *Purpose and Scope for the CKD Information System* has been developed. In addition, the Advisory Committee has developed a comprehensive minimum data set for the collection of information with the CKD Information System. The Committee has also developed a draft *CKD Program Proposal Requirements* document, including a preliminary standardized list of furniture and equipment items for the delivery.

Following are a number of recommendations that the Provincial Advisory Committee is making to the Ministry of Health and Long-Term Care. These recommendations are categorized below into Strategic Direction, Programmatic and Clinical Standards and Communications.

¹ Source: CORR / CIHI, 2004.

² **Incidence of End Stage Renal Disease (ESRD)** is defined as the number of new cases of patients with kidney disease requiring renal replacement therapy (either chronic dialysis or kidney transplant).

³ **Prevalence of End Stage Renal Disease (ESRD)** is defined as the number of patients with ESRD on December 31 of the prevalence year (point prevalence).

Recommendations:

Strategic Direction

1. The appointment of a Standing Provincial Chronic Kidney Disease Advisory Committee to the Ministry of Health and Long-Term Care, is essential to continue present advances and realize dividends on invested efforts. Efforts should be taken to ensure that the new Standing Committee includes representation from this interim Advisory Committee, recognising the wealth of knowledge and expertise of the current membership has. In addition, representation from the Alternative Payment Branch of the MOHLTC should be considered given their responsibility into the provision of hemodialysis services by Independent Health Facilities in Ontario. Given this essential representation from two Branches, appropriate reporting structure is key.
2. The development and implementation of the CKD Information System is essential to provide timely, reliable and accurate data; enabling population-based planning for a continuum of CKD services throughout the province; coordination of the delivery of integrated CKD services and support; and monitoring of program utilization and outcomes.
3. The establishment of linkages with other health care providers, such as long-term care facilities, will enable dialysis modalities (both hemodialysis and peritoneal dialysis) provision in more appropriate environments.
4. The development of a human resources plan will support the short-term and long-term infrastructure plan for CKD services in the province. In addition, the development of staffing guidelines and ratios within a dialysis unit, both for a Regional Centre and a Satellite would be beneficial to both the service providers as well as the Ministry.

Programmatic and Clinical Standards

5. The finalization of the *CKD Model of Care Program, Expectations* Document by the new Standing Provincial Chronic Kidney Disease Advisory Committee will initiate the process of standardization within the provincial care system. The Advisory Committee sent out the draft Model of Care document for feedback from the CKD stakeholders, the new Standing Committee should finalize the document to reflect the comments received for approval by the Ministry of Health and Long-Term Care.
6. The completion of the *CKD Program, Proposals Requirements* Document, including the standardized CKD furniture and equipment items list for approval by the Ministry of Health and Long-Term Care.
7. The development of programmatic and clinical standards and/or guidelines which includes:
 - The development of a model of care for vascular access;
 - The development of a model of care for access to peritoneal dialysis treatments;
 - The funding of related drugs for CKD patients not covered by the current Ontario Drug Program;
 - The development of guidelines for the management of biomedical waste by dialysis health facilities;
 - The transportation of dialysis patients;
 - The funding compensation for uninsured OHIP patients; and

- The evaluation of health promotion and prevention initiatives as a component for CKD services.

8. The development and implementation of a program review for CKD providers.

Communications

9. The maintenance of the Ministry's current CKD website to support on-going communication to CKD stakeholders on chronic kidney disease services, including approved documents, publications and updates.

Complementary Work

10. The establishment of a Daily/ Nocturnal Hemodialysis Costing Working Group to develop a funding methodology for Daily/Nocturnal Hemodialysis giving that there is no provision under the current JPPC ESRD Funding Methodology for Daily/Nocturnal Hemodialysis treatments.
11. The assessment on the maximum appropriate time for kidney transplantation availability and the rates in the province of Ontario.

SECTION 2.0

– INTRODUCTION –

Introduction

Chronic Kidney Disease (CKD) is a major health care problem that consumes a significant amount of health care resources. There are approximately 10,102 Ontarians with CKD (stage 5) known to nephrologists, based on December 2000 statistics from the Canadian Organ Replacement Register (CIHI *ESRD Preliminary Report*, 2002).

Growth in demand for CKD services has exceeded 10% per year since 1998/99. Reasons for this growth include a growing and aging population, increased prevalence of diseases that result in CKD (e.g. diabetes) and the success of dialysis treatment. A number of conditions can result in kidney failure. The three leading causes are diabetes, glomerulonephritis, and hypertension (including renal vascular disease).

Stage 5 CKD is the final stage of chronic kidney disease and is fatal if untreated. The only treatments for CKD are dialysis (various forms of either hemodialysis or peritoneal dialysis) or a kidney transplant. The wait list for kidney transplant in Ontario exceeded 1,328 in March 2004.

Ontario currently provides CKD services in over 70 hospitals/facilities. CKD services include disease prevention, life saving dialysis treatments for chronic and acutely ill patients (peritoneal dialysis and hemodialysis), patient training, vascular access services, pre-dialysis and follow-up clinics care, conservative management and palliative care.

The Ministry of Health and Long-term Care established in February 2002 the Provincial Chronic Kidney Disease Advisory Committee. The CKD Advisory Committee's work is important to the future management of the growing CKD services in Ontario. The work achieved through the Advisory Group is also enriching the relationship and trust between the Ministry and the health care providers.

CKD ADVISORY COMMITTEE AND PROCESS

2.1 MANDATE & DELIVERABLES

2.1.1 MANDATE:

Comprised of service providers and leaders in CKD care, the Provincial CKD Advisory Committee was mandated to provide evidence-based advice to further the goal of an accessible, efficient, and effective system of CKD service delivery in Ontario. Specifically, the CKD Advisory Committee was appointed to:

1. Advise on the development of a provincial information system framework for the CKD program based on clinical and programmatic needs. The data from the information system will aid the ministry in its planning and development of tools for monitoring and evaluation;
2. Provide evidence-based programmatic and clinical advice, including advising on clinical and program standards; and
3. Advise on options for the organization of CKD service delivery.

The terms of reference of the Provincial CKD Advisory Committee are included in Appendix 7.1.

2.1.2 DELIVERABLES:

Based on the Committee's mandate, a list of short-term and long-term issues and priorities to be addressed was developed (Appendix 7.2). The Committee identified the following as high priority items:

1. A CKD provincial information system that includes clinical, financial, and demographic information;
2. A CKD clinical and program standards document;
3. A CKD service delivery model; and
4. A CKD proposal requirement document including standardized CKD equipment list with unit cost to ensure consistency and equitable funding for equipment across the province.

2.2 TERM AND MEMBERSHIP:

The CKD Advisory Committee's term started in February of 2002. The Committee is expected to report back to the Assistant Deputy Minister of the MOHLTC in Spring 2004. The CKD Committee includes representation from the seven regions across the province, as well as clinicians and administrative experts in CKD services. The Committee membership is provided below.

The Provincial CKD Advisory Committee	
Membership:	
Stuart, Allison (Co-Chair: Feb. 2002 – March 2003)	Director, Hospitals Branch, MOHLTC
Biasucci, Peter (Co-Chair: March 2003 – present)	A/Director, Hospitals Branch, MOHLTC; Manager of Priority Programs Unit until March 2003)
Toffelmire, Dr. Edwin (Co-Chair)	Medical Director of Kingston General Hospital and Brockville IHF Dialysis Clinics; Professor of Medicine, and Pharmacology and Toxicology, Queen's University; Chair of Medical Advisory Committee, Kidney Foundation of Canada
Carlisle, Dr. Euan	Director of Hemodialysis, St Joseph's Healthcare, Hamilton; Associate Professor of Medicine, McMaster University
Chaperon, Judy	Clinical Manager, Nephrology, Sudbury Regional Hospital
Goldstein, Dr. Marc	Medical Director, Hemodialysis and Diabetes Comprehensive Care Programs, St Michael's Hospital; Professor of Medicine, University of Toronto
Henseleit, Suzanne	Manager, Medical Health System, Trillium Health Centre (Patient Care Manager of Renal Unit, Halton Healthcare Services Corporation until September 2003)
Hux, Dr. Jan	Scientist, Institute for Clinical Evaluative Sciences (ICES)
Jones, Colleen	Program Director, Humber River Regional Hospital
Gillespie, Ainsley (Lee)	Director, Dialysis & Medicine Programs, York Central Hospital, Kidney Foundation of Canada
Lindsay, Dr. Robert	Nephrologist, London Health Sciences Centre, Professor of Medicine, University of Western Ontario
McCready, Dr. William	Nephrologist, Thunder Bay Regional Hospital, Associate Clinical Professor at McMaster University
Penney, Randy	President & Chief Executive Officer, Renfrew Victoria Hospital

Pine, Susan	Member-at-large (Nursing Manager, Renal Satellite Program, Kingston General Hospital until June 2003)
Ministry Support:	
Solomon, Rachel (Feb. 2002 – July 2002)	CKD Program Consultant, Hospitals Branch, MOHLTC
Matthews, Shelley (July 2002– September 2003)	CKD Program Consultant, Hospitals Branch, MOHLTC
Daigle, Ginette (September 2003 – present)	CKD Program Consultant, Hospitals Branch, MOHLTC
George, Tellis (March 2003 – present)	CKD Financial Consultant, Hospitals Branch, MOHLTC
Parasram, Hemwanti (May 2003 – May 2004)	Intern, Hospitals Branch, MOHLTC

Recognizing their wealth of experience and expertise in the provision of CKD services in Ontario, committee members, whose working portfolio changed during the committee term, were requested to fulfill their commitment.

2.3 REPORTING:

The CKD Advisory Committee will provide advice to the Ministry of Health and Long-Term Care and present its final report to the Assistant Deputy Minister of the Ministry.

2.4 METHODOLOGY:

In order for the CKD Advisory Committee to achieve its mandate, a variety of methods were used to examine and develop the documents.

The CKD Advisory Committee met 13 times between February 2002 and February 2004. Considerable work was done outside the formal meetings through various ad hoc working groups/subcommittees, such as the Minimum Data Set Working Group, the Equipment Review Sub-Committee and the CKD Website Sub-Committee.

In achieving its various deliverables, the Committees/Sub-groups reviewed various documents including pertinent ministry documentation on end stage renal disease as well as a number of ministry external reports, studies, standards and acts. In addition, the Advisory Committee received numerous presentations from selected stakeholders. A list of the resources consulted and presentations can be found in Appendix 7.3.

SECTION 3.0

– DELIVERABLES –

Deliverables

3.1 THE PROVINCIAL CHRONIC KIDNEY DISEASE INFORMATION SYSTEM

The Ministry of Health and Long-Term Care wishes to ensure the delivery of high quality Chronic Kidney Disease (CKD) services. To fulfill this commitment, the Ministry intends to develop a comprehensive, province-wide CKD Information System that will provide timely, reliable and accurate data to enable population-based planning for a continuum of CKD services throughout the province, to coordinate the delivery of integrated CKD services and to support the monitoring of program outcomes. The purpose of the CKD information system is consistent with the government's themes of reduce wait times and healthier Ontario by providing better access to care, and to coordinate and integrate health care provision between service providers and organizations to decrease preventable chronic diseases' morbidity and mortality rates.

Following are the CKD Advisory Committee goals for the implementation of an information system for renal patients:

- To enable rigorous planning – forecasting need by region and treatment modality; development of methodology and techniques for validating forecasts; capture supply-demand;
- To enable quality decisions around costing and funding methodologies;
- To enable rigorous resource allocation decisions;
- To enable monitoring of access to service, system capacity, and utilization;
- To facilitate the development of clinical standards or practice guidelines, facility standards, and policy related to chronic kidney disease services;
- To enable forecasting of human resource requirements for dialysis services and related care; and
- To complement and work with existing information systems.

The information provided by the system will not be limited to clinical outcomes, patient demographics, resource requirements, and system capacity. The system will also produce recurring reports that can be used for analysis purposes. Overall, the objective for the CKD information system is to measure and monitor the quality of CKD services in Ontario.

A draft document on the purpose and scope of a CKD information system was developed by the CKD Committee, in consultation with the MOHLTC Information Technology (IT) Branch (Appendix 7.4). This planning phase for the CKD Information System is to be completed with the examination of the proposed system in light of various legislation requirements, as well as other Ministry initiatives.

The minimum data set to be captured in the CKD Information System was developed by the Minimum Data Set Working Group of the CKD Advisory Committee (Appendix 7.5). The minimum data set, which is a list of indicators, is the product of consultations with various organizations that collect related renal and dialysis data. For example the Canadian Institute for Health Information (CIHI) collects data through both the Canadian Organ Replacement Registry (CORR) and the National Ambulatory Care Reporting System (NACRS). The data of interest has significant overlap among these information sources, making it possible to implement efficiencies in the task of data collection. This minimum data set which will serve as a basis to the development of a CKD information system, has been posted on the CKD web-site in July 2003 for feedback from service providers.

In the November 2003 Throne Speech, the government has commitment to improving access to selective health care services while reducing wait times. The government's platform provides the opportunity for an integrated information system across the ministry for selected priority services. In February 2004, the

clinical Co-Chair of the CKD Advisory Committee did a presentation to the Ministry, emphasizing the need of a CKD information system and its fit with the government’s commitment. The option of incorporating the CKD Information System into the MOHLTC integrated information system is being explored.

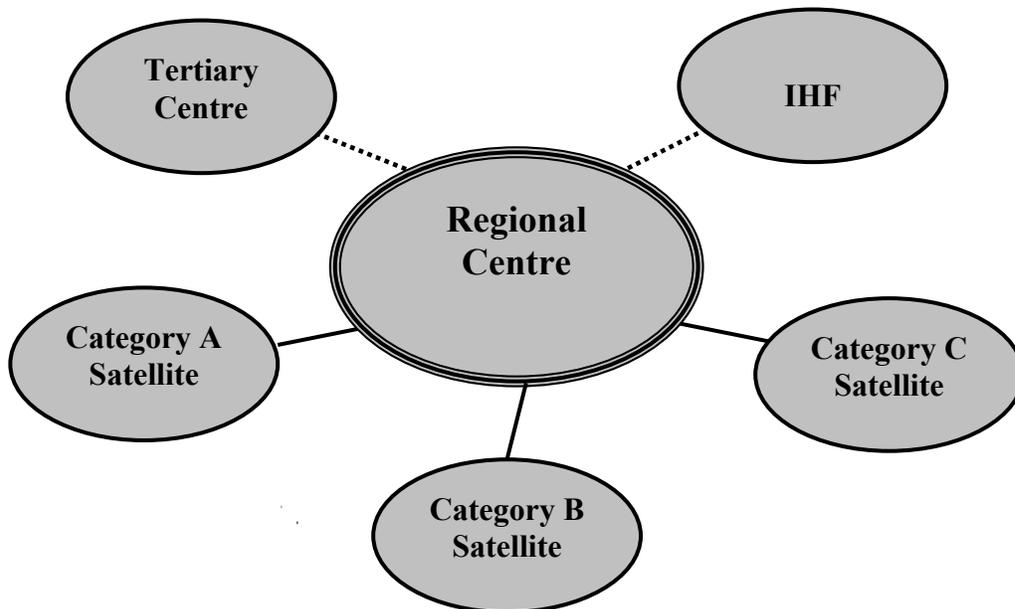
Further work is required to complete the purpose and scope of the CKD information system, and to develop the information required toward implementation of the system, including the request for proposal document.

3.2 THE PROVINCIAL CHRONIC KIDNEY DISEASE PROGRAM, MODEL OF CARE

One of the three priorities of the CKD Advisory Committee was to develop a standard document to advise the Ministry on the service delivery model for CKD services in the province. The **Chronic Kidney Disease Program, Model of Care, Expectations Document** is the result of the CKD Advisory Committee’s work. This document, which builds on the current status in Ontario, will provide the foundation for the Ontario model for Chronic Kidney Disease services. The CKD Model of Care document will assist the Ministry of Health and Long-term Care in providing accessible CKD services while ensuring access to a full continuum of services, service coordination and integration, sufficient critical mass to support specialized services and promote cost efficiency.

CKD programs in Ontario are currently organized as a *hub-and-spoke* model (see Figure 1) comprised of Regional Centres, Satellites, Tertiary Care Centres and Independent Health Facilities (IHF). The Regional Centre is the hub and its satellites and/or service provision partners form the spokes.

Figure 1: Hub-and-Spoke Model



The ministry provides CKD services across the continuum which include, but are not limited to, chronic renal insufficiency programs, dialysis treatments, renal transplants, follow-up services, vascular access services, educational support and professional health support services (dietitians, pharmacists, social workers). The Model of Care document will formalize the Ministry’s expectations of the Regional Centre, Tertiary Centres, and the Satellites in effort to standardize CKD structures, deliverables, and service expectations.

The chart below summarizes the key expectations identified in the *Model of Care* document.

CKD Program Model of Care, Expectations Documents			
Facilities	Description	Responsibilities	Accountabilities
Regional Centre	<p>A Regional Centre is a facility that is:</p> <ul style="list-style-type: none"> ▪ responsible, accountable and has authority for CKD care throughout its assigned catchment area, including the areas served by its satellite operations. ▪ receives directly MOHLTC funding for CKD services. 	<p>Responsible to:</p> <ul style="list-style-type: none"> ▪ Lead the organization and administration of the regional program, program development and strategic direction, implementation and coordination of CKD clinical care, and provision of quality patient care. ▪ Oversee the management of all levels of patients and the co-ordination of services within its network. ▪ Provide the professional, administrative and program expertise, back-up educational support, training, and support services for its satellites. ▪ Provide direct care of any patient being treated within the region and must maintain the ability and capacity to meet fallback needs without delay. ▪ Provide a full range of services to patients with CKD using a multi-disciplinary team approach. If the Regional Centre cannot independently provide a full range of services, the Regional Centre is responsible for ensuring access to these services for the region through negotiated agreements with other facilities. 	<p>Accountable to:</p> <ul style="list-style-type: none"> ▪ Provide the leadership, development, implementation and coordination of all CKD services in its assigned catchment area. ▪ Work with their satellites, IHFs and other stakeholders to fulfill their leadership, program development and strategic direction, organization and coordination of CKD services, and implementation of protocols for care. ▪ Provide services fiscally and for negotiating supply, equipment, and service contracts for the region.

CKD Program Model of Care, Expectations Documents

Facilities	Description	Responsibilities	Accountabilities
Tertiary Centre	<p>A Tertiary Centre is a facility that:</p> <ul style="list-style-type: none"> ▪ provides nephrology service support in order to ensure that each Regional Program is able to provide a full continuum of nephrology care, particularly acute dialysis in conjunction with tertiary health care services and kidney transplantation. ▪ receives directly MOHLTC funding for CKD services. 	<p>Responsible to:</p> <ul style="list-style-type: none"> ▪ Support the full continuum of nephrology care for the population within their primary catchment area in order to ensure that care is available close to home. ▪ Deliver chronic and acute dialysis treatment (hemodialysis and peritoneal dialysis) for patients requiring tertiary care intervention on an in-patient or outpatient basis for services not available in secondary or Regional Centre facility. ▪ Provide in-patient bed capacity to support both their regional role and their tertiary care role. ▪ Conduct research through their association with Academic Centres. 	<p>Accountable to:</p> <ul style="list-style-type: none"> ▪ Participate as a specialized care provider in regional service plan(s) for CKD care across the continuum that builds upon existing networks, resources, and capacity, and that is consistent with the hub-and-spoke model. ▪ Develop a system to provide patient-centred specialized care in the most appropriate environment to attain optimal clinical outcomes in the most cost-effective manner. ▪ Participate in the development of expansion proposals within the service area as the specialized /tertiary care provider for the regional program. ▪ Share knowledge, expertise, and research findings related to nephrology care with the affiliated Regional Centre(s) and other institutions. ▪ Fulfill partnership agreement obligations and notify the Regional Centre(s) in a timely manner of issues that will impact partnership agreement performance. ▪ Ensure that the full scope of CKD specialized/tertiary clinical services is available to the regional program based on negotiated partnership agreements.

CKD Program Model of Care, Expectations Documents

Facilities	Description	Responsibilities	Accountabilities
Satellites	<p>A Satellite is a facility that:</p> <ul style="list-style-type: none"> ▪ has a formal affiliation with a Regional Centre. ▪ can be designated as a Category A, B or C Satellite. ▪ receives funding for CKD services from a Regional Centre through MIS paymaster accounts in order to provide CKD services. 	<p>Responsible to:</p> <ul style="list-style-type: none"> ▪ Provide hemodialysis treatment for chronic CKD patients within their geographic catchment area. ▪ Be able to safely attend to patient care needs during the course of treatment from both a medical and nursing perspective. ▪ Provide care to either Level I and/or Level II chronic hemodialysis patients once approved by the Ministry. ▪ Have clear transfer protocols in place between their facility and the Regional Centre for the transfer of dialysis patients should the need arise. ▪ Have a multi-disciplinary team associated with the Regional Centre to oversee the care patients are receiving during hemodialysis treatments at a satellite. ▪ Provide local leadership to achieve coordinated CKD care throughout their catchment and across the continuum. ▪ Actively participate in continuous learning and to providing CKD care based on best practice and evidence. 	<p>Accountable to:</p> <ul style="list-style-type: none"> ▪ Assist the Regional Centre in implementing the service area strategy by providing local leadership in the satellite catchment area. ▪ Develop the satellite system for CKD care in accordance with the regional program. ▪ Actively participate in the development of new or expanded service proposals. ▪ Actively participate in the capital planning process for the regional program. ▪ Provide input through the regional organizational structure on issues related to program resources and service issues at the satellite. ▪ Collect valid and reliable data, monitor performance, and evaluate outcomes in the satellite service. ▪ Ensure that the satellite uses the standards, policies, procedures, and protocols developed for the regional program. ▪ Ensure written agreements for contracted and/or purchased services are in place and performing to the standard set forth in the agreement. ▪ Provide safe, coordinated care for CKD patients according to the expertise of nursing and medical staff and the back-up services available on-site at the satellite.

The *CKD Model of Care* document underlines that:

1. Funding should follow the patient. Since April 2003, funding for new CKD programs flows through the Regional Centre. The Regional Centre will be responsible for the distribution of funds to their Satellites. The distribution of these funds will be recorded using paymaster accounts in the Management Information System (MIS) chart of accounts.
2. **Every** CKD provider is expected to report to the Ministry their CKD financial and statistical data consistent with MIS Guidelines. Revenues, expenses and statistics must be reported using the matching principle. Ministry directives on CIHI, NACRS requirements must also be followed. The CKD activity reported through MIS and NACRS will be reported by the facility providing the CKD service.
3. **Every** CKD provider is expected to report the volume of activity related to the funded modalities consistent with the definitions for each funded modality. The definitions for the funded modalities are available from the MOHLTC or can be located on the Joint Policy and Planning Committee (JPPC) website.

The *Model of Care* document has been circulated as a draft for feedback to various stakeholders, including the Kidney Foundation of Canada, Regional Centres, Satellites, Independent Health Facility Providers, District Health Councils and the Chair of the Ontario Association of Nephrologists. The *Model of Care* document needs to be revisited and finalized in light of the comments received from the stakeholders.

Upon finalization of the *CKD Model of Care Program, Expectations Document*, the CKD Committee recommends that the document be certified and published by Ministry of Health to ensure that hospitals/facilities offering dialysis services comply with the expectations set out in the *Model of Care* document. The draft *Model of Care* document can be found in Appendix 7.6 or on the CKD web-site at <http://www.health.gov.on.ca/login/kidney03.html>.

3.3 THE PROVINCIAL CHRONIC KIDNEY DISEASE PROGRAM, PROPOSAL REQUIREMENTS DOCUMENT

From time to time, care providers submit a proposal to either establish or expand CKD services in order to meet the population needs. The CKD Advisory Committee developed the draft *Chronic Kidney Disease Program, Proposal Requirements* document intended to guide the writing and preparation of proposals for the establishment or expansion of a Chronic Kidney Disease Program.

The *CKD Proposal Requirements* document is based on the *CKD Program Model of Care, Expectations* document. The *Proposal Requirements* document outlines the minimum standard of information that CKD providers need to write when preparing proposals for CKD programs. It is prepared under the premise that each hospital has unique circumstances and features that may require the provision of additional information.

As part of the proposal requirement document, the CKD Committee developed draft evaluation criteria to be used in the decision-making for funding approval of furniture and equipment items of CKD program sites by the MOHLTC. This standardization process has a view to equitably and appropriately fund equipment in Regional Centres and satellite programs across the province.

The Advisory Committee advises that the *Proposal Requirements* document, including the standardized CKD furniture and equipment list to be funded by the Ministry should be finalized.

3.4 CHRONIC KIDNEY DISEASE WEBSITE

The establishment of the CKD website was not in the mandate of the Advisory Committee. However, the Committee felt that it was important to share and communicate the activities, findings and recommendations of the Committee with CKD stakeholders. The group also agreed that this information should be centrally located and accessible to CKD leaders via the Internet with a login password.

In June of 2003, the CKD Website Sub-Committee, an ad hoc group of the Advisory Committee, established a website with the objective to share key information including, recommendations and documents, to its stakeholders. This is a private ministry site on the Ontario Ministry of Health and Long-Term Care website. The access to this site is limited to stakeholders who have the “login password”. The address to this site is <http://www.health.gov.on.ca/login/kidney03.html>.

Currently, the content on CKD Committee’s website includes the Committee’s mandate and membership, and its publications such as the Minimum Data Set for the Information System and the draft *CKD Program Model of Care, Expectations* document. The website also includes the Committee’s minutes, contact information and the opportunity to pose questions and/or comments at the bottom of each section through e-mail.

Interactive Section on the Website

The CKD Website Sub-Committee was asked to advise on the feasibility to incorporate an interactive section on the CKD website to facilitate the sharing of clinical information across the province. The working group advised that the interactive section is not possible given the Ministry’s policy, which does not support the interactive type web application on its iSERVE-hosting environment. Although, the Sub-Committee prefers an interactive section, and is recommending that the interactive section be developed outside of the Ministry’s internet hosting environment or the contact information at the bottom of each page on CKD website be used to facilitate comment or questions.

The Advisory Committee recommends that its future documents, publications and updates, continue to be posted on the CKD website as a readily available reference to the province’s Kidney Community.

3.5 CHRONIC RENAL INSUFFICIENCY PROGRAM GUIDELINES

Chronic Renal Insufficiency (CRI) programs are interdisciplinary hospital-based programs with the goal to delay the progression of renal disease and to educate and prepare patients for renal replacement therapy. Ontario has 21 adult CRI programs. Ontario is the only province to fund CRI programs separately as a component of its CKD strategy.

The Ontario Ministry of Health and Long-Term Care appointed the Chronic Renal Insufficiency Program Working Group in 1999 to develop guidelines for adult hospital-based Chronic Renal Insufficiency programs and indicators to evaluate the programs, and to make recommendations concerning the implementation of the CRI program components.

The CKD Advisory committee officially endorsed the May 2000 Chronic Renal Insufficiency Program

Guidelines document developed by the Chronic Renal Insufficiency Program Working Group. The document is available on the CKD web-site (<http://www.health.gov.on.ca/login/kidney03.html>).

SECTION 4.0

– OUTSTANDING INITIATIVES –

Outstanding Initiatives

The Provincial Chronic Kidney Disease Advisory Committee initially identified a list of issues and priorities based on its mandate. The high priority items were selected and undertaken by the Advisory Committee. The Committee recognises its accomplished work during the 2-year term as the foundation for more work ahead.

The Provincial Chronic Kidney Disease Advisory Committee is recommending that the Committee become a Standing Provincial Chronic Kidney Disease Advisory Committee for the Ministry of Health and Long-Term Care. In alignment with the government's strategic plan, this Standing Committee will advise on the strategic direction for CKD services in the province of Ontario. Draft terms of reference for the renewed Committee are included in the appendix 7.7.

Following are initiatives identified by the CKD Advisory Committee as outstanding initiatives that were either initially identified as an issue, or brought up during the Advisory Committee's deliberation as issues requiring further attention.

1. Model of Care for Vascular Access

Currently, there is no model of care for vascular access in the province of Ontario recognized as best practice. Given that access related complications result in considerable morbidity conditions, efforts must be directed toward extending the life and adequate functioning of the vascular access. The Advisory Committee recognizes the need for a model of care for vascular access and identified some issues and possible solutions for vascular access care for the CKD patients.

Some of the key issues identified are:

- the availability of vascular surgeons, vascular clinic space, operating rooms, angiography suite, radiology suite;
- the waiting time for creation of vascular access;
- the patient education - patients choose not to have pre-emptive vascular access creation, and when access is required, they end up with a central line;
- the support for angioplasty; and
- the global funding (must support the intervention) - the funding formula offers no funding for angioplasty or angiogram and provides perverse incentives that are not consistent with best practice in vascular access.

Suggested solutions to address the issues are:

- the development of expertise in programs;
- the creation of centers of excellence, being the development of a few dedicated regional access centers with dedicated vascular surgeons and interventional radiologists available for the service; and
- the funding following the patient.

The Committee recommends that a model for care for vascular access be developed and integrated in the *CKD Model of Care Program, Expectations Document*.

2. Model of Care for Peritoneal Dialysis – Access

Statistics show that the ratio of peritoneal dialysis patients to the hemodialysis patients in Ontario is lower than the national average in Canada (*CIHI ESRD Preliminary Report, 2002*). The need for a model of

care has been identified by the Advisory Committee to address the difficulties experienced by Regional Centres in coordinating the creation of dialysis access for peritoneal dialysis.

3. Linkages with other Health Care Providers

The CKD Advisory Committee acknowledges that the linkages with other health care providers, such as long-term care facilities, for the provision of hemodialysis and peritoneal dialysis need to be established.

4. Standards or Guidelines for Staffing Levels

The need for consistent staffing guidelines (e.g. multi-disciplinary team composition) and ratios within a dialysis unit, whether it is a Regional Centre or a Satellite Unit, has been identified. Currently, there are uneven staffing levels across the dialysis units, potentially compromising the quality of care. Consistent staffing ratios across the Province would be the premise for consistent funding for each position.

5. Human Resources Plan

The need for a human resources plan that meets the need for a multi-disciplinary team to support the short-term and long-term infrastructure plan for CKD services in the province is recommended by the Advisory Committee.

6. Guidelines for the Management Of Biomedical Waste

The Advisory Committee recognized the need for guidelines on the management of biomedical waste by dialysis health facilities. Need for specific information on the nature and the standardization of bio-hazardous waste management by facilities offering dialysis services has been identified by the Advisory Committee. It is recommended that Ministry guidelines be developed in collaboration with the Ministry of Environment.

7. Chronic Kidney Disease Program Review

The CKD Committee has identified the need for program review of CKD service providers to ensure that the expectations set out in the *Provincial CKD Model of Care* document are followed. The program review, consisting of possible site visits and audit protocols, would focus on processes and outcomes. The site visit done by a health professional multi-disciplinary team from outside of the region of the dialysis facility could address all aspects of patient care within that dialysis facility with the local team.

The CKD program review should not be viewed as punitive, but rather as a supportive effort to achieve current standards. It could be an educational experience for the program being reviewed as well as for the reviewers, while at the same time it could aim at assuring compliance with goals, criteria and standards for CKD program. It is not the intent of this program review to duplicate other review programs in place, such as the Canadian Health Care Facilities Accreditation survey. Programs, having difficulty meeting current CKD standards, could request a review for assistance. Another option is that for any new program, a 3-year review would be mandatory.

The Advisory Committee conducted preliminary discussion on the CKD program review and many questions were raised such as:

- What are the responsibilities and related confidentiality risks of doing the review?
- What is the role of the Ministry of Health and Long-Term Care?
- What are the objectives of the CKD program review, being processes, outcomes?
- What is the potential interface with the CKD Information System?
- What are the potential criteria for the review?
- What are the performance measurements?

The CKD Advisory Committee recommends that further details for CKD program review are pursued after the *CKD Model of Care, Expectations* Document is approved and published.

8. Burden of Transportation

The burden of transportation has been an issue for some dialysis patients. Patients living in the rural areas are often faced with the challenge and financial burden of travelling many miles to receive their dialysis treatments several times a week. The CKD Committee recognizes that this issue needs further examination in the future.

9. Cost of Medication

The cost of medication (e.g. IV Iron) and nutrition supplements is also a major issue for some dialysis patients. The Committee recommends that this issue be examined in the future.

10. Hemodialysis Patients without OHIP Coverage

Hemodialysis patients without OHIP coverage is a serious problem, especially in some catchment areas, causing some hospitals to bear a large financial burden which is currently not sustainable. The Advisory Committee recognizes the need to develop a mechanism to accommodate the burden of unfunded, dialyzed patients on the healthcare system.

11. Health Promotion and Prevention

The Advisory Committee recommends that health promotion and prevention initiatives as an integrate component of the CKD program, be reviewed to identify the benefits and impact on CKD patients.

12. Funding Methodology for Daily/Nocturnal Dialysis Modality

The need for a funding methodology for Daily/Nocturnal Dialysis modality treatment has been identified. Currently, the Ministry continues to provide funding to maintain two pilot projects implemented to evaluate the Daily/Nocturnal Dialysis modality. Pilot project sites have presented their reports to the Ministry. Presently, work is being done in relation to the ministry's Daily/Nocturnal Dialysis policy under the leadership of the Ontario Health Technology Advisory Committee supported by the Medical Advisory Secretariat of the Ministry.

Given that there is no provision under the current *JPPC ESRD Funding Methodology* for Daily/Nocturnal Hemodialysis modality treatment, a Daily/ Nocturnal Hemodialysis Costing Working Group will develop a costing and funding methodology for Daily/Nocturnal Hemodialysis as per the draft terms of reference in Appendix 7.8.

13. Kidney Transplantation

The only treatment options for patients with stage 5 chronic kidney disease are either dialysis or kidney transplantation. The Advisory Committee's mandate was limited to activities relating to components of CKD treatment services. However, the Advisory Committee recognizes the need for further work to be done in order to improve the rate kidney transplantation in the province of Ontario.

SECTION 5.0

– RECOMMENDATIONS –

Recommendations

Part of its work and deliberations during the course of its 2-year term, the Provincial Chronic Kidney Disease (CKD) Advisory Committee makes the following recommendations to the Ministry of Health and Long-Term Care.

Strategic Direction

1. The appointment of a Standing Provincial Chronic Kidney Disease Advisory Committee to the Ministry of Health and Long-Term Care, is essential to continue present advances and realize dividends on invested efforts. Efforts should be taken to ensure that the new Standing Committee includes representation from this interim Advisory Committee, recognising the wealth of knowledge and expertise of the current membership has. In addition, representation from the Alternative Payment Branch of the MOHLTC should be considered given their responsibility into the provision of hemodialysis services by Independent Health Facilities in Ontario. Given this essential representation from two Branches, appropriate reporting structure is key.
2. The development and implementation of the CKD Information System is essential to provide timely, reliable and accurate data; enabling population-based planning for a continuum of CKD services throughout the province; coordination of the delivery of integrated CKD services and support; and monitoring of program utilization and outcomes.
3. The establishment of linkages with other health care providers, such as long-term care facilities, will enable dialysis modalities (both hemodialysis and peritoneal dialysis) provision in more appropriate environments.
4. The development of a human resources plan will support the short-term and long-term infrastructure plan for CKD services in the province. In addition, the development of staffing guidelines and ratios within a dialysis unit, both for a Regional Centre and a Satellite would be beneficial to both the service providers as well as the Ministry.

Programmatic and Clinical Standards

5. The finalization of the *CKD Model of Care Program, Expectations* Document by the new Standing Provincial Chronic Kidney Disease Advisory Committee will initiate the process of standardization within the provincial care system. The Advisory Committee sent out the draft Model of Care document for feedback from the CKD stakeholders, the new Standing Committee should finalize the document to reflect the comments received for approval by the Ministry of Health and Long-Term Care.
6. The completion of the *CKD Program, Proposals Requirements* Document, including the standardized CKD furniture and equipment items list for approval by the Ministry of Health and Long-Term Care.
7. The development of programmatic and clinical standards and/or guidelines which includes:
 - The development of a model of care for vascular access;
 - The development of a model of care for access to peritoneal dialysis treatments;
 - The funding of related drugs for CKD patients not covered by the current Ontario Drug Program;

- The development of guidelines for the management of biomedical waste by dialysis health facilities;
- The transportation of dialysis patients;
- The funding compensation for uninsured OHIP patients; and
- The evaluation of health promotion and prevention initiatives as a component for CKD services.

8. The development and implementation of a program review for CKD providers.

Communications

9. The maintenance of the Ministry's current CKD website to support on-going communication to CKD stakeholders on chronic kidney disease services, including approved documents, publications and updates.

Complementary Work

10. The establishment of a Daily/ Nocturnal Hemodialysis Costing Working Group to develop a funding methodology for Daily/Nocturnal Hemodialysis giving that there is no provision under the current JPPC ESRD Funding Methodology for Daily/Nocturnal Hemodialysis treatments.
11. The assessment on the maximum appropriate time for kidney transplantation availability and the rates in the province of Ontario.

SECTION 6.0

–CONCLUSION –

Conclusion

Chronic Kidney Disease (CKD) is a chronic health care condition that consumes a significant amount of health care resources. The growth in CKD has implications in terms of both the health of Ontarians and the capacity of the health care system to provide services for this population.

In 2002, the Ministry of Health and Long-Term Care established the Provincial CKD Advisory Committee with the mandate to advise on the development of a provincial information system framework for CKD programs, provide evidence-based programmatic and clinical advice, and advise on the options for the organization of CKD services delivery.

The CKD Advisory Committee has successfully produced the *draft Chronic Kidney Disease Program, Model of Care, Expectations* Document. Additionally, the Committee has completed the background work for the CKD information system and a draft *CKD Program Proposal Requirements* Document.

Furthermore, the Advisory Committee has endorsed the *Chronic Renal Insufficiency (CRI) Programs Guidelines* as well as developed the CKD website, in addition to identifying a number of outstanding initiatives for the recommended new Standing Provincial Chronic Kidney Disease Advisory Committee to address in the future.

It is expected that the work completed by the Provincial CKD Advisory Committee will further the goal of an accessible, efficient, and effective system of CKD service delivery in the province of Ontario. Further, it is anticipated that the upcoming work of the Standing Committee will improve the future management of the growing CKD services in the province and will enrich the relationship and trust between the Ministry and the health care providers.

SECTION 7.0

–APPENDICES –

7.1: PROVINCIAL CKD ADVISORY COMMITTEE TERMS OF REFERENCE

Purpose:

Comprised of service providers and leaders in chronic kidney disease (CKD) care, this Provincial Advisory Committee will provide evidence-based advice to further the goal of an accessible, efficient, and effective system of CKD service delivery in Ontario.

Mandate:

- To advise on the development of a provincial information system framework for CKD program based on clinical and programmatic needs. The data from this information system will aid the ministry in its planning and will enable the ministry to develop tools for monitoring and evaluation.
- To provide evidence based programmatic and clinical advice, including advising on clinical and program standards.
- To advise on options for the organization of CKD service delivery.

Membership:

Names	Affiliation
Stuart, Allison (Co-Chair: Feb. 2000 – March 2003)	Director, Hospitals Branch, MOHLTC
Toffelmire, Dr. Edwin (Co-Chair)	Medical Director of Kingston General Hospital and Brockville IHF Dialysis Clinics; Professor of Medicine, and Pharmacology and Toxicology, Queen's University; Chair of Medical Advisory Committee, Kidney Foundation of Canada
Carlisle, Dr. Euan	Director of Hemodialysis, St Joseph's Healthcare, Hamilton; Associate Professor of Medicine, McMaster University
Chaperon, Judy	Clinical Manager, Nephrology, Sudbury Regional Hospital
Goldstein, Dr. Marc	Medical Director, Hemodialysis and Diabetes Comprehensive Care Programs, St Michael's Hospital; Professor of Medicine, University of Toronto
Henseleit, Suzanne *	Patient Care Manager of Renal Unit, Halton Healthcare Services Corporation (February 2002 – September 2003)
Hux, Dr. Jan	Scientist, Institute for Clinical Evaluative Sciences (ICES)
Jones, Colleen	Program Director, Humber River Regional Hospital
Gillespie, Ainsley (Lee)	Director, Dialysis & Medicine Programs, York Central Hospital, Kidney Foundation of Canada
Lindsay, Dr. Robert	Nephrologist, London Health Sciences Centre, Professor of Medicine, University of Western Ontario
McCready, Dr. William	Nephrologist, Thunder Bay Regional Hospital, Associate Clinical Professor at McMaster University
Penney, Randy	President & Chief Executive Officer, Renfrew Victoria Hospital
Pine, Susan	Nursing Manager, Renal Satellite Program, Kingston General Hospital (February 2002 – June 2003)
Ministry Support:	
Biasucci, Peter	Manager, Priority Programs Unit, Hospitals Branch, MOHLTC

Reporting Relationship:

The Advisory Committee will provide advice to the Ministry of Health and Long-Term Care and will report to the Ministry's Assistant Deputy Minister.

Term:

The term of the CKD Advisory Committee will be for two years. The Committee's scope of activity, deliverables and structure will be reviewed annually.

The Advisory Committee will meet monthly for the first three months, and quarterly thereafter.

Committee Support:

The MOHLTC, Hospitals Branch, CKD Program Consultant will provide support to the CKD Advisory Committee.

7.2: CKD ISSUES & PRIORITY ITEMS (2002)



CKD Advisory Committee - Issues and Priority List

Theme/ Grouping	Issue/Problem	Desired Outcome	Proposed Strategy	Priority
Short-Term				
Transportation for dialysis patients	The burden of transportation for dialysis patients	Undetermined	Undetermined	
Biomedical waste	Safe disposal of dialysis waste	Guidelines on the management of biomedical waste for CKD providers	Review current biomedical waste legislation and recommend a set of guidelines	
Long-Term				
Service delivery model	Assessment of Current Service Delivery model	A more sustainable system of chronic kidney disease service delivery	Evaluate current system and recommend changes if necessary	High Priority; time consuming
	-Availability and costs of ancillary services (i.e. X-ray, vascular access)	Consistent available services necessary to care for renal patients	Part of Assessment of Service Delivery Model	
	-Treatment of Level II patients is against Ministry policy but occurring in many satellites -Should there be patients choice?	Undetermined	-Review policy re: Level II patients. Develop clear policy and enforce. -Part of Assessment of Service Delivery Model	Ministry priority
Information system	Need for an information system with useful data that is not oppressive to collect	A provincial information system that includes clinical, financial, and demographic information	Establish an information system working group to set up the information system	High priority; time consuming
Funding	Descriptions and definitions for components of the funding formula are unclear	Clear definitions that facilitate consistent understanding and reporting	Part of assessment of the service delivery model.	Ministry priority

CKD Advisory Committee - Issues and Priority List

Theme/ Grouping	Issue/Problem	Desired Outcome	Proposed Strategy	Priority
	Patients without OHIP coverage	Undetermined.	-Develop mechanism to accommodate burden of unfunded patients – contact OHIP branch of Ministry	
	Financial burden of transportation, nutrition and non-formulary drugs	Patients should not suffer financial burden of transportation and drug costs	Kidney Foundation has done work on transportation cost of patients	Medium priority; hard to grasp
Standardization	Insufficient linkages with diabetes, rehabilitation and long-term care facilities	Undetermined	Undetermined	
	Relationship between Regional Centres and Satellites undefined and inconsistent	A clear, consistent, relationship between Satellites and Regional Centres	-Clarify Ministry expectations and ideal relationship between Satellites and Regional Centres. -Part of Assessment of Service Delivery Model.	
	Are there new standards of care and technology standards that all sites must adhere to?	Clear standards of care for all dialysis units across the province	Let centres know that they are expected to meet the standards.	
	No standardization of necessary equipment for a dialysis unit.	Consistency in equipment used across the province and Ministry funding for the equipment; should be visibly equitable	-Develop a standard list of equipment required and associated costs. -Needs to be flexible to accommodate differences in programs and not to stifle innovation.	High priority
	Uneven staffing levels across dialysis units, potentially compromising quality of care	Consistent staff ratios across the province with consistent funding for each position	Develop staffing standards and corresponding funding needed. Do a literature review.	Ministry priority

7.3: REFERENCES & PRESENTATIONS

List of Resources Consulted by the CKD Committee

Ministry of Health and Long-Term Care Reference Documents:

- *Chronic Renal Insufficiency Program Guidelines*. Report of \The Chronic Renal Insufficiency program Working Group, May 10, 2000.
- ESRD Proposal Requirements documents - Current Ministry Practices on Dialysis and Proposal Requirements. 2002
- *Laboratory Testing at Local Hospitals*. Ministry of Health and Long-Term Care, Laboratory Branch.
- Ministry of Health and Long-Term Care. *End Stage Renal Disease Program Guidelines and Practices*.
- Ontario Renal Services Advisory Committee. *Final Report*. January 1996.
- *The Status of ESRD Advisory Committees/Planning Groups in Ontario, other provinces and territories* - ESRD Provincial Survey, December 2000.
- The End Stage Renal Disease Funding Working Group of the Joint Policy and Planning Committee (JPPC). *A Methodology for Funding End Stage Renal Disease Final Report*. April 1997.
- *Report of the Working Group on Renal Services in Ontario*. January 1995.

Other Documents:

- Canadian Institute Health Information. *Canadian Organ Replacement Registry (CORR) 2001 Report*
- College of Physicians & Surgeons of Ontario. *Independent Health Facilities Clinical Practice Parameters and Standards: Haemodialysis*.
- ICES and London Health Sciences Centre. *Fallback Study*
- *Independent Health Facilities Act*.
- Key Indicators BCPRA_PHS, August 2002
- Levin, Dr. A. MD FRCPC. *A Tale of Many Functions: Renal Registries as Administrative, Clinical and Research Tools*. Provincial Renal Agency, British Columbia, Canada.
- London Health Sciences Centre study of quotidian hemodialysis
- Mendelssohn, D.C. *Principles of End-Stage Renal Disease Care*. Annuals RCPSC, Vol 30, No. 5, August 1997.
- *Report of the Ontario Renal Services Advisory Committee (ORSAC)*. January 1994.
- *Report of the Working Group on Renal Services in Ontario*. January 1992.
- Steering Committee. *The Central East Region Dialysis Planning Study Report*. 1995.
- The Kidney Foundation of Canada. *Purpose and Scope, Ontario Renal Voices – Mandate*. November 2000.
- Standing Committee on Social Development. *Dialysis Treatment in Ontario Report*. 1994, 3rd Session, 35th Parliament 43 Elizabeth II.

Presentations

Presentations were received* by various CKD stakeholders including 

- Baxter Healthcare Corporation: *Non-employee Security Agreement*, *Understanding Canadian Dialysis Trends*; *Home Peritoneal Dialysis Survey*.
- *Canadian Institute for Health Information. *Data Collection using Canadian Organ Replacement Registry (CORR) and National Ambulatory Care Reporting System (NACRS)*. Presentation by Greg Webster (Manager of Clinical Registries), Kim Badovinca (Consultant), Paula Freedman (Consultant) and Nicholas Smith.
- *Fresenius - NephroCare

* invited presentations are identified with an asterisk.

- Hurst, Debra. – *Regulations, Standards & Guidelines for Management of Biomedical Waste*. Ministry of Environment of Ontario.
- *Levin, Dr. Adeera. *PROMIS - Information System* presentation (videoconference).
- *Lindsay, Dr. R. *Overview of the Ontario Dialysis Fallback Study*. CSN 2003.
- *Special Drugs Program Branch, Ministry of Health and Long-Term Care
- *Sunnybrook and Women’s College Health Sciences Centre (SWCHSC). *The “Home Grown” System, an Overview of the Paper-Based DRACULA (Dynamic Resource Allocation and Utilization) Model*.
- *Walker, Dr. Hugh. *Health Economics Systems* presentation. September 2002.

* an asterisk identifies invited presentations

7.4: CHRONIC KIDNEY DISEASE INFORMATION SYSTEM - PURPOSE & SCOPE (DRAFT)

The **Purpose** statement and **Scope of Work** for the CKD Information System will become integral parts of the Project Charter and the Request for Proposal (RFP) that is ultimately released to acquire the system developer. This is a key component in that BOTH, the author of the Request for Proposal (RFP) and the respondents to the RFP, will clearly understand what the project should accomplish and what should not be considered as part of the project.

1.0 Purpose

The Ministry of Health and Long-Term Care (MOHLTC) wishes to ensure the delivery of high quality Chronic Kidney Disease (CKD) services. In order to fulfill this obligation, the Ministry wishes to develop a comprehensive, province-wide Chronic Kidney Disease Information System that will provide timely, reliable and accurate data that will enable population-based planning for a continuum of CKD services throughout the province, to coordinate the delivery of integrated CKD services and to support the monitoring of program utilization and outcomes.

2.0 Scope of Work

The Scope of Work is the extent of work required to produce the project's deliverables. It should include at a minimum the strategy, the product of the project.

2.1 Strategy

2.1.1 Chronic kidney disease is a significant health care problem that is growing at a rate of approximately 10 per cent annually. Timely and accurate information about clinical services and outcomes, patient demographics, and patient movement through the CKD health care services system is required in order to improve quality of patient care and support provincial planning and policy development for CKD services. Currently, there is a need for a clear understanding of the needs of renal patients, how those needs change over time, or how renal services should respond to those needs.

2.1.2 To create and maintain a comprehensive data repository reflecting current clinical operations and outcomes, patient demographics and clinical status, and resource consumption status of nephrology programs in Ontario.

2.1.3 To develop a comprehensive province-wide CKD Information System that will provide timely, reliable and accurate data to support monitoring of program outcomes, and that will enable population-based planning for a continuum of CKD services throughout the province.

2.1.4 To create a system that is easily extensible and expandable to meet future requirements.

2.1.5 To direct the project through MOHLTC in collaboration with the Provincial Chronic Kidney Disease Advisory Committee.

2.2 Product

2.2.1 An automated, comprehensive, integrated information system for CKD services, developed, implemented, maintained and supported, and evaluated by the user/vendor.

- 2.2.2 The CKD Information System will capture the data elements described in the CKD Minimum Data Set (CKD MDS).
- 2.2.3 A secure bi-directional electronic transfer of relevant information to or from other health sector data sets to minimize duplication of data entry/collection. Examples include, but are not limited to:
- the Canadian Institute for Health Information (CIHI) Discharge Abstract Database (DAD);
 - the CIHI National Ambulatory Care Reporting System (NACRS);
 - the CIHI Canadian Organ Replacement Register (CORR);
 - the MOHLTC Management Information System (MIS);
 - the MOHLTC data on funded modalities within the CKD program;
 - the Laboratory data;
 - the Radiology data;
 - Ontario Drug Benefit (ODB) Formulary utilization (including limited use and Section 8 coverage), and
 - the Special Drug Programs data.
- 2.2.4 A Virtual Private Network (VPN) technology to secure network traffic.
- 2.2.5 A secure web-based client interface.
- 2.2.6 The capability for clients to view its own specific data and the aggregate data at any time.
- 2.2.7 Recurring reports, including but not limited to monthly with quarterly and annually roll-ups, by province, by region, by regional program, by facility, by patient, by stage of renal disease, by provider type, and by intervention, and other reports as required.
- 2.2.8 Ad-hoc reporting capability.

2.3 Objectives - Current

- 2.3.1 Service agreement awarded by February 2004.
- 2.3.2 The system will provide information, but not limited to, on the following:
- Clinical outcomes,
 - Patient demographics,
 - Resource requirements,
 - System capacity.
- 2.3.3 The completed system must provide answers to the following questions:
- Who is in the CKD system? What are the demographics of this population? In what stage of chronic kidney disease are they? What co-morbidities do they have?
 - Who is coming into the CKD system?
 - Where are they located?
 - Where are they receiving service now?
 - Who is exiting the system and why?
 - What dialysis modality are patients using now and likely to use in the future?

- What vascular access procedures are performed and what maintenance procedures are necessary?
- What diagnostic and therapeutic procedures do CKD patients undergo?
- What drugs do CKD patients use and what are the utilization patterns associated with these drugs?
- What inpatient resources does the CKD population utilize?
- What is the current and future capacity of the CKD system?
- What resources are consumed in the delivery of CKD in-patient, out-patient, and diagnostic and therapeutic services?

2.3.4 Recurring reports (including but not limited to monthly with quarterly and annually roll-ups, by province, by region, by regional program, by facility, by patient, by stage of renal disease, by provider type, and by intervention) that can be analysed to assist in determining:

- Current CKD service utilization.
- Current CKD service capacity.
- CKD services required.
- Location of services required.
- Additional service capacity required.
- Human resource requirements.
- Funding requirements.
- Outcomes by treatment/intervention modality.
- Impact of interventions on delay in deterioration of renal function.
- Resource consumption between and among service providers.

2.3.5 Systems must ensure that the limitations of existing external databases that contain information on CKD services are resolved.

- Participation and reporting by all sites on all the patients is mandatory.
- Non Ontario Health Insurance Plan (OHIP) as well as OHIP patients are represented.
- All patients in renal insufficiency programs are captured.
- Individual patients are followed longitudinally to follow deterioration in kidney function or transplant failure.

2.4 Objectives – Future

2.4.1 The ability to measure and monitor the quality of CKD services.

2.5 Chronic Kidney Disease System Functions

To help identify the scope of work required, the following major system functions have been identified:

2.5.1 Identify Patients - capture and manage patient demographic information.

- Who is in the CKD system?
- What are the demographics of this population?
- Where are they located?

2.5.2 Track Patients - follow patients as they enter, traverse, and exit the CKD System.

- Where are they receiving service now?
- Who is coming into the CKD system?

- Who is exiting the system
- Why are they exiting the system?

2.5.3 Identify Service Locations - identify the type, location and capacity of service delivery organizations.

- What are the points of service?
- Where are the points of service?
- What resources are available in each location for the delivery of CKD services?

2.5.4 Track Patient Clinical Condition - capture the clinical condition of the patients as they enter, traverse, and exit the CKD System.

- In what stage of chronic kidney disease are they?
- What co-morbidities do they have?

2.5.5 Capture Services Delivered - capture all CKD services delivered to the patients as they enter, traverse, and exit the CKD System.

- What dialysis modality are patients using now?
- What dialysis modality are patients likely to use in the future?
- What vascular access procedures are performed?
- What maintenance procedures are necessary?
- What diagnostic procedures do CKD patients undergo?
- What therapeutic procedures do CKD patients undergo?

2.5.6 Determine Resources Used - identify all resources consumed in the delivery of CKD services.

- What resources are consumed in the delivery of CKD in-patient services?
- What resources are consumed in the delivery of CKD out-patient services?
- What resources are consumed in the delivery of CKD diagnostic services?
- What resources are consumed in the delivery of CKD therapeutic services?
- What drugs do CKD patients use?
- What are the utilization patterns associated with these drugs?

2.5.7 Protect the Privacy of Individuals - protect privacy in accordance with relevant privacy legislation.

- Personal Information Protection and Electronic Documents Act (PIPEDA).
- Freedom of Information and Protection of Privacy Act (FIPPA).
- Identify and mitigate the effect of the new provincial legislation if it is introduced or enacted.

2.6 Supporting Detail

2.6.1 The system will be owned and maintained by the vendor.

2.6.2 The data will be owned by the MOHLTC.

2.6.3 HL7 based transactions for exchange of information.

2.6.4 Web-based client interface.

7.5: MINIMUM DATA SET FOR THE CHRONIC KIDNEY DISEASE INFORMATION SYSTEM

Patient Demographic Information

- Name
 - Last name
 - First name
 - Middle Name
- Address - include entire Postal Code
- Health Card number
- Date of Birth
- Sex
 - Male
 - Female
 - Other
- Race - use CORR definitions
- Employment status - do not necessarily have to collect this degree of detail
 - Employed full time
 - Employed part time by choice
 - Employed part time due to disease
 - Employed casual by choice
 - Employed casual due to disease
 - Not employed due to disease
 - Seeking full time employment
 - Seeking part time employment - by choice
 - Seeking part time employment - due to disease
 - Seeking casual employment - by choice
 - Seeking casual employment - due to disease
 - Volunteer work ____ hours per week
 - Homemaker
 - Retired due to age/preference
 - Retired due to disability
 - Medical leave of absence
 - Student full time
 - Student part time
- HIV and Hepatitis B and C status
- Living/Support Status
 - Lives alone in house/townhouse/apartment/condo
 - Lives alone in rooming house
 - Lives alone in shelter
 - Lives with caregiver in house/townhouse/apartment/condo
 - Lives with caregiver in rooming house/shelter
 - Lives in long-term care facility
 - Lives in complex continuing care facility
 - Lives in retirement home
 - Alternate Level of Care in acute care hospital

- Preferred Living Support Status
 - Lives in long-term care facility
 - Lives in complex continuing care facility
 - Lives in retirement home
 - Resides in acute care hospital
 - Did patient move to receive care?

Primary Diagnosis - use CORR Primary Renal Diagnosis Codes (as per CORR)

Risk Factors and/or Co-morbidities - as per CORR

- Angina
- Ischaemic heart disease (includes coronary heart disease, coronary artery disease)
- Family history of CAD
- Coronary artery bypass grafts/angioplasty
- Congestive heart failure
- Left ventricular hypertrophy
- Myocardial infarction
- Pulmonary edema
- Cerebrovascular disease (CVA/stroke, TIA, carotid artery surgery)
- Peripheral vascular disease (absent foot pulses, ischemic muscle pain precipitated by exercise, fem-pop bypass graft, iliac or femoral endarterectomy, gangrene, ischemic ulcers, amputation for vascular disease, aortic aneurysm)
- Dependence on illicit drugs
- Hypertension
- Diabetes type I
- Diabetes type II
- Chronic Obstructive Pulmonary Disease
- HIV positive status
- Other serious illness (specify: _____)
- Malignancy prior to first treatment - use CORR definitions/codes

Smoker

- Current
- Quit - date

Source of referral to Pre-Dialysis Program

- Family physician
- Endocrinologist
- Cardiologist
- Nephrologist
- Other

Pre-dialysis treatment information

- Date referred
- Date of first pre-dialysis visit
- Creatinine upon referral
- Weight
- GFR on referral (24 hour urine)
- Modality chosen
- LD workup
- Length of time in predialysis to dialysis initiation

Laboratory values - Date of last test should be collected for all tests

- Hemoglobin
- Hematocrit
- Creatinine
- Urea
- Bicarbonate
- Calcium
- Phosphate
- Albumin
- Parathormone
- Urea and creatinine clearance (at start and ongoing)
- HbAc (for diabetics)
- Proteinuria - 24 hour urine
- %transferrin saturation
- Ferritin
- Lipid status : triglycerides, HDL, LDL, total cholesterol

Height and weight at start of dialysis

Medications

- Erythropoietin - dosage
- Iron - route of administration; total amount of iron received in last 12 months
- Phosphate binders - list drugs: amphojel; vasojel; sucrylphate; calcium acetate; renaljel; calcium carbonate; tums; other (specify)
- Vitamin D: alphacalcidol; calcitriol
- Anti-hypertensives
- Insulin
- ACE inhibitors or A2 Blocker

Treatment modality:

- Preferred modality
 - home conventional HD
 - conventional HD
 - home nocturnal HD
 - home short daily HD
 - Short daily in-centre
 - self-care HD
 - CAPD
 - CCPD
 - APD
 - HD and PD
- Treatment modality - choices as above
- Date of first renal replacement therapy?
- Frequency of treatment - (treatments per week)
- Duration of treatment - in hours

- Is this initial treatment the long-term treatment for this patient?
Yes, No, Unknown
 - If not, why?
 - No facilities/space available
 - Access not mature
 - Change in patient status leading to earlier than planned initiation of dialysis
 - Other _____
 - What is the long-term dialysis treatment for this patient? Choices as above

Wait once decision made?

- Length of wait

Type of vascular access - use CORR definitions

- Access used at time of first dialysis?
- Will this be the permanent access for hemodialysis?
- Was this access chosen based on
 - patient choice?
 - medical necessity?

Peritoneal Dialysis catheter

- Date of referral for catheter insertion
- Date of catheter insertion
- Number of episodes of peritonitis in the last year?

Monitoring of vascular access (CORR data elements)

- How is the fistula monitored?
 - Not monitored
 - Recirculation : last recirculation %, and date
- How is the graft monitored?
 - Not monitored
 - Total access blood flow
 - Venous pressure: last venous pressure (mmHg) and date
- Has the patient required intervention to ensure the patency of the vascular access/adequacy of dialysis? Yes/No
 - What type of intervention? Check all that apply

Intervention	Number of Procedures in past Year	Required Operating Room Time	Required Radiology Suite Time
TPA			
Embolectomy			
Angioplasty			
Other Intervention			
Creation of New Permanent Access			

Changes in modality - provide history

Transplant

- Date
- Type
- Cadaveric
- Living related

Transfers to Another Program - provide history

Monitoring of adequacy of dialysis

- Kt/V
- Frequency of Kt/V testing

Peritoneal Equilibrium Test Results:

- Low
- Low Average
- High
- High Average
- Patient refused test
- Patient not yet tested

Is patient on transplant waiting list?

- Date on list
- Previous transplant

Cause of death - use CORR definitions

Place of death

Data to examine supply/demand mismatch:

Supply Item	Program Resource
Dialysis stations in operation	Number
Dialysis shifts provided per week	Number of treatment shifts
If you provide less than three shifts per day for conventional hemodialysis, what are the barriers to providing additional dialysis treatment shifts?	
Do you have space to add dialysis stations? If yes, specify number of stations that could be added to existing space.	Number of stations
Patient training for Peritoneal Dialysis	Number of patients that can be trained annually
Patient training for Self-Care Hemodialysis	Number of patients that can be trained annually
Patient training for Home Hemodialysis	Number of patients that can be trained annually
Number of hemodialysis treatments planned for upcoming fiscal year based on the number of stations in operation (as above)	
What would limit expansion in the next year?	

Program Resources (? frequency of reporting)

- Treatment modalities supported
- Conventional in-centre HD
- Conventional home HD
- Short daily in-centre HD
- Short daily home HD
- Home Nocturnal HD
- In-centre nocturnal HD
- CAPD
- CCPD
- Combined HD and PD
- Satellite HD
- Self-Care HD
- Other
- Goal is to determine resources required to support the program. Job titles may vary, it is the role/responsibility that we are interested in.

Position	Full Time Equivalent Assigned to ESRD				
	PRI	Hemo-Dialysis	Vascular Access	PD	
RN – direct patient care					
RN – Charge Nurse with no patient care responsibility					
RN – Staff Educator					
RN – Management position					
RN – Vascular Access					
Social Work					
Dietitian					
Pharmacist					
Physiotherapist					
Dialysis Technologist					
Dialysis Technician					
RPN					
Advanced Practice Nurse					
Clerical					
How many nephrologists support the program?					

Patients in program waiting for placement in CCC or LTC facility

Facility	Hemodialysis Number of Patients		Peritoneal Dialysis Number of Patients	
	Placed	Waiting	Placed	Waiting
Long Term Care				
Complex Continuing Care				

Program cost data

- Use MIS accounts and develop additional accounts as required/in next phase

Hospital inpatient activity

Visits to ER

Clinic visits

X-rays/Diagnostic Procedures

7.6: CKD PROGRAM MODEL OF CARE, EXPECTATIONS DOCUMENT (DRAFT)

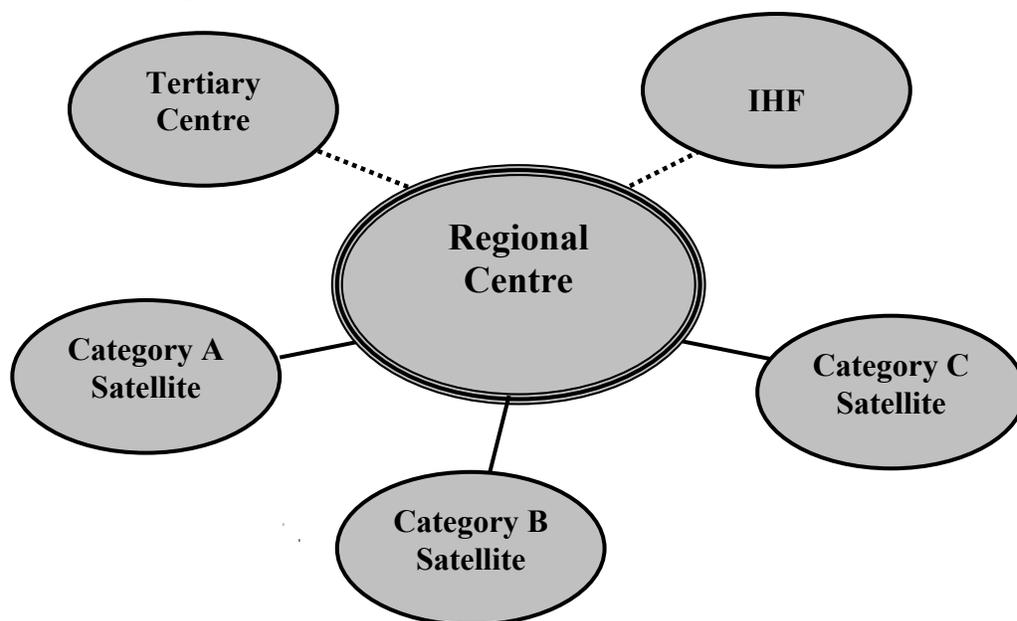
1.0 Background

1.1 Delivery of Chronic Kidney Disease Services in Ontario

The Ministry of Health and Long-term Care (Ministry) promotes a coordinated, quality and cost-efficient, accessible Chronic Kidney Disease (CKD) system that covers the continuum of services for patients. The current approved modalities are listed in the glossary (Appendix A).

CKD programs in Ontario are currently organized as a *hub-and-spoke* model comprised of Regional Centres, Satellites, and Tertiary care centres and Independent Health Facilities (IHF). The Regional Centre is the hub and its satellites and/or service provision partners form the spokes.

Figure 1: *Hub-and-Spoke Model*



Services provided across the continuum include, but are not limited to, chronic renal insufficiency programs (including nephrology clinics for patients with creatinine levels less than 250 $\mu\text{mol/L}$ [Stage 1 and Stage 2], and for those with creatinine levels greater than 250 $\mu\text{mol/L}$ [Stage 3 and Stage 4], dialysis treatments [Stage 5]), renal transplants, follow-up services, vascular access services, educational support and professional health support services (dietitians, pharmacists, social workers).

Kidney disease is determined using the glomerular filtration rate (GFR). The table below demonstrates the stages of kidney disease and the GFR for each stage.

Stage	Description	GFR (mL/min/1.73m)
1	Kidney damage with normal or increased GFR	>90
2	Mild decrease in GFR	60 – 89
3	Moderate decrease in GFR	30 – 59
4	Severe decrease in GFR	15 – 29
5	Kidney failure	<15 or dialysis

Adapted from American Journal of Kidney Disease 2002; 39 (2,Suppl.1) S46-S75.

1.2 Service Provider Status

The expectations of each of the Regional Centre, Tertiary Centre and satellite are outlined in the following sections. As the needs for CKD services in the population changes, there may be a need to change the approved scope of services consistent with local patient needs. Such need for change in scope of services must be identified in advance, and the Ministry must be included prior to any implementation effort. A facility transition plan should be able to demonstrate the service provider's ability to meet, at least the role and accountability expectations as defined in this *Model of Care* document. Requirements for a newly designated Regional Centre will need also to be met prior to ministry consideration for approval.

2.0 Regional Centre

2.1 Role of Regional Centre

The Regional Centre is the "*hub*" of the network of CKD services for a defined geographic region. A listing of the approved dialysis providers is included in appendix B. A description of each Regional Centre's catchment area, including services provided is included in appendix C.

The Regional Centre is responsible, accountable and has authority for CKD care throughout its assigned catchment area, including the areas served by its satellite operations. The Regional Centre is responsible for leading the organization and administration of the regional program, program development and strategic direction, implementation and coordination of CKD clinical care, and provision of quality patient care. For example, the Regional Centre develops and implements patient care protocols ensuring compliance with recognized legislated and endorsed standards, inter-organizational relationships, and service structures to support quality, accessible care for patients, and ongoing communication between providers.

The Regional Centre is responsible for overseeing the management of all levels of patients and the co-ordination of services within its network. Regional Centres provide the professional, administrative and program expertise, back-up educational support, training, and support services for its satellites. The Regional Centres also assume responsibility for the direct care of any patient being treated within the region and must maintain the ability and capacity to meet fallback (patient treated in satellites who required the Regional Centre services) needs without delay. This requires that the Regional Centres have dedicated in-patient bed capacity and associated support services to support the complex clinical needs of the Regional Centre and its satellites. In-patient bed capacity cannot be achieved through a service contract.

Given the expertise required to deliver high quality renal services, only satellites with a sufficient track record of care and a relationship with a designated Regional Centre will be considered for Regional Centre designation. Part of the review criteria will include evidence of sufficient critical mass to sustain the full range of services independently and that it has developed the operational expertise to administrate

the regional service. This linkage is for oversight and mentoring purposes and will remain in place until such time as the new regional program demonstrates that it meets the full operating expectations of a Regional Centre.

The Regional Centre is responsible for providing a full range of services to patients with CKD using a multi-disciplinary team approach. The full range of services includes the following:

- Clinics – pre-dialysis and treatment options, nephrology, and follow-up.
- Home visits by nursing and technical personnel.
- Maintenance of patients on peritoneal dialysis.
- Maintenance of patients on home hemodialysis.
- Vascular access support including vascular surgery and interventional radiology.
- Peritoneal dialysis catheter insertion.
- Chronic and acute hemodialysis.
- Training for patients who wish to perform their own peritoneal dialysis or hemodialysis.
- Service availability 24 hours per day, seven days per week.

The multi-disciplinary team will consist of Nephrologists, Vascular Surgeons, Radiologists, Urologists, Registered Nurses, Dietitians, Pharmacists, Social Workers, Renal Technologists. The multi-disciplinary team may also include Clinical Nurse Specialists and Registered Practical Nurses.

If the Regional Centre cannot independently provide all of the services listed above, the Regional Centre is responsible for ensuring access to these services for the region through negotiated agreements with other facilities. The negotiated agreements must provide guaranteed access to services within 24 hours where appropriate (i.e. vascular access care, complex care), and within reasonable timeframes for other services.

The Regional Centre maintains a linkage with a tertiary health science centre for clinically complex patients. The linkages include, but are not limited to, specialized diagnosis and treatment, and access to kidney transplant assessment and transplantation. Signed agreements outlining service provision between tertiary centres and the Regional Centres must be in place. Such partnership agreements can be signed between the Regional Centre and more than one tertiary centre, or between the Regional Centre and other providers who offer the required services. A sample of the partnership agreement components is included in appendix D.

The Regional Centre demonstrates commitment to continuous learning to support the provision of care based on best practices and evidence. This role is clarified in the sections below.

2.2 Regional Centre Accountability

As outlined above, the Regional Centre is accountable for the leadership, development, implementation and coordination of all CKD services in its assigned catchment area. In partnership with the satellites, and other stakeholders such as District Health Councils, other hospitals, Independent Health Facilities, The Kidney Foundation, primary care providers, community care providers, tertiary and academic organizations, Regional Centres work to fulfill their accountability in leadership, program development and strategic direction, organization and coordination of CKD services, and implementation of protocols for care. A regional structure, such as a Regional Steering Committee, composed of representatives from various partners and stakeholders, including the Ministry, should be considered by the Regional Centre as a means to ensure the services are coordinated and integrated among the many responsible parties.

Regional Centres are fiscally responsible for the provision of services and for negotiating supply, equipment, and service contracts for the region. To facilitate the effective negotiation and implementation

of contracts, the Regional Centre is responsible for decisions related to equipment standardization and the complement of service providers. Given the importance of standardization from a clinical, technical and cost perspective, open and transparent processes involving partners in the regional program must be in place to ensure that standardization occurs.

2.2.1 Leadership in Organization and Administration of Regional Centre

The Regional Centre acts as the transfer payment agency (paymaster) for the funds for the region. This role involves the following responsibilities:

- Ensuring that MIS functional centres are established and utilized for reporting by the Regional Centre and by the satellite sites.
- Ensuring consistent and accurate reporting of activity in annual planning submission and quarterly reports to the Ministry.
- Establishing transfer payment mechanisms for the satellite sites.
- Working with the satellite sites to ensure a strong understanding of the funding modalities and related definitions for CKD programs.
- Ensuring the development of processes for determining capital requirements within the program. Such processes should include a mechanism for standardization within the program as appropriate.

Other administrative responsibilities include the following:

- Administering the regional program and developing and maintaining the regional network.
- Ensuring that agreements and/or policies are in place that describe the budgeting, hiring and staffing, administrative, and accountability relationships between the Regional Centre and satellite(s).
- Developing an organizational structure reflective of the accountability relationships described above. Documenting the organizational structure and the current responsibilities, both clinical and administrative, within the program.
- Developing mechanisms to ensure opportunity for all staff to participate in planning, decision-making and policy setting.
- Developing written agreements for contracted and/or purchased services.

2.2.2 Program Development and Strategic Direction, Implementation, and Coordination of CKD Care

The Regional Centre's responsibilities include the following:

- Developing strategic planning processes for the region including the satellites/service provision partners. This is part of an expectation for overall planning for the region using population health planning principles. Where there is an overlap of responsibilities among Regional Centres, there must be a defined mechanism to achieve planning among those Regional Centres.
- Developing a regional service plan for CKD care across the continuum that builds upon existing networks, resources, and capacity, and that is consistent with the *hub-and-spoke* model.
- Developing a system to provide patient-centred care in the most appropriate environment to attain optimal clinical outcomes in the most cost-effective manner.
- Establishing inclusive organizational structures (including primary care providers) within the program to oversee collaborative planning, coordination, implementation and evaluation of the program and services. A dispute resolution mechanism is to be included within the organizational structure.
- Administering the regional program.
- Overseeing the development of joint proposals for expansion within the regional service area.
- Ensuring the implementation of the regional plan for CKD services, including health promotion and prevention, based on best practices and continuous improvement. The elements shall include:

- A commitment to evaluate the program and service by working collaboratively to develop performance measures and the collection of valid and reliable data.
- Providing leadership in evaluation by working collaboratively to define further data needs, collect data, monitor performance, evaluate outcomes, and develop standards.
- Ensuring that mechanisms are in place for staff to review the results of quality improvement activities, to plan improvement actions/processes, and monitor effectiveness of actions.
- Providing leadership on the use of data to improve coordination and provision of CKD services across the service area and across the continuum of care.
- Assisting the satellites in the development of policies, procedures and protocols that are consistent with regional policies, procedures and protocols.
- Completing needs assessments for continuous learning needs within the program/service area and coordinating education within the service area and/or between service areas.
- Sharing knowledge and expertise with other centres providing CKD care.

2.2.3 Provision of Quality Patient Care

The Regional Centre is responsible to:

- Ensure that the full scope of CKD clinical services, including other related services such as diabetes education, is available to the regional program.
- Ensure the development of care plans that provide for continuity of care, patient education, and seamless transition across the continuum of care for all patients.
- Ensure that consistent policies, procedures and protocols are utilized across the program.
- Ensure that medical coverage protocols and fee sharing arrangements are developed, fair and acceptable to all medical staff involved in CKD patient care.
- Ensure the development and monitoring of adequacy of dialysis measures (e.g. Kt/V) and other quality of care indicators.
- Ensure the development and monitoring of other outcome measures that reflect patient status (e.g. nutritional status, blood sugar, blood pressure, weight, etc.).
- Ensure the development and monitoring of mechanisms for utilization management including monitoring of patients waiting for treatment and kidney transplants.
- Develop referral and transfer protocols that result in timely referrals and transfers.
- Ensure that resources are effectively and efficiently used to support consultation for patients receiving care at the satellites.
- Lead clinical and administrative planning activities. For example, the development of collaborative Human Resources plans, including a medical manpower plan that will support the regional CKD program.
- Develop, coordinate and/or lead continuous learning sessions and orientation programs.
- Conduct an Annual Clinical Symposium for regional staff.
- Ensure compliance of Regional Centre and Satellites with the Canadian Council of Health Services Accreditation (CCHSA) standards.

3.0 Tertiary Centre

3.1 Role of Tertiary Centre

The Tertiary Centres will provide the nephrology service support in order to ensure that each Regional Program is able to provide a full continuum of nephrology care, particularly acute dialysis in conjunction with tertiary health care services and kidney transplantation. The Regional Centres are responsible for negotiating written agreements with their supporting tertiary partners outlining service commitments and

processes. Tertiary centres require in-patient bed capacity to support both their regional role and their tertiary care role. A sample of the partnership agreement components is included in appendix 4.

Tertiary centres fulfill the following functions:

- Support the full continuum of nephrology care for the population within their primary catchment area in order to ensure that care is available close to home.
- Deliver chronic and acute dialysis treatment (hemodialysis and peritoneal dialysis) for patients requiring tertiary care intervention on an in-patient or outpatient basis for services not available in secondary or Regional Centre facility. Examples of this include, but are not limited to the following:
 - In-patient neurosurgery, cardiac surgery, vascular surgery, high-risk pregnancy, oncology treatment including radiation, bone marrow transplant and brachytherapy;
 - Cadaveric and living donor renal transplant programs.
- Conduct research through their association with Academic Centres.

3.2 Tertiary Centre Accountability

3.2.1 Leadership, Program Development, Implementation, and Coordination of CKD Care

The Tertiary Centre is responsible to:

- Participate as a specialized care providers in regional service plan(s) for CKD care across the continuum that builds upon existing networks, resources, and capacity, and that is consistent with the *hub-and-spoke* model.
- Develop a system to provide patient-centred specialized care in the most appropriate environment to attain optimal clinical outcomes in the most cost-effective manner.
- Participate in the development of expansion proposals within the service area as the specialized/tertiary care provider for the regional program.
- Share knowledge, expertise, and research findings related to nephrology care with the affiliated Regional Centre(s) and other institutions.
- Fulfill partnership agreement obligations and notify the Regional Centre(s) in a timely manner of issues that will impact partnership agreement performance.

3.2.2 Provision of Quality Patient Care

The Tertiary Centre is responsible to:

- Ensure that the full scope of CKD specialized/tertiary clinical services is available to the regional program based on negotiated partnership agreements.
- Ensure the development of care plans that provide for continuity of care and seamless transition across the continuum of care for all patients.
- Ensure compliance of Regional Centre and Satellites with the Canadian Council of Health Services Accreditation (CCHSA) standards.

4.0 Satellite

4.1 Role of Satellite

CKD satellites provide hemodialysis treatment for chronic CKD patients within their geographic catchment area. Satellite programs must be able to safely attend to patient care needs during the course of treatment from both a medical and nursing perspective. The capacity and expertise of staff in the individual satellite will determine the appropriateness of caring for patients with known risks such as the following:

- Cardiac compromise (grade IV ventricle) with hypotension during dialysis.
- Vascular access problems, particularly those requiring single needle and tPA instillation.

- High interdialytic weight gain.
- Failure to thrive.

Satellites may offer care to both Level I and Level II hemodialysis patients once approved by the ministry. The approved proposal will clearly identify the level of care that can be safely offered at the satellite and the back-up services available on-site at the satellite location. Satellite approvals will be awarded a designation that reflects the type of service they are able to provide. The *Satellite Designation* section provides the detailed information.

Satellites are expected to have clear transfer protocols in place between their facility and the Regional Centre for the transfer of dialysis patients should the need arise. Endorsement of the satellite Human Resources plan is part of the responsibility of the Regional Centres.

The care of patients receiving hemodialysis treatments at a satellite is overseen by a multi-disciplinary team associated with the Regional Centre. The linkage with the Regional Centre ensures that patients receiving care at satellites have access to the full continuum of CKD services and members of the multi-disciplinary team, and that the patients receive the same standard of care regardless of the site in which they receive the actual dialysis treatment.

The satellite centre will provide local leadership to achieve coordinated CKD care throughout their catchment and across the continuum. The satellites are committed to participating in continuous learning and to providing CKD care based on best practice and evidence.

4.2 Satellite Designation

Satellite designation is based on the level of services available on-site to meet the needs of the chronic CKD patients, including nursing and medical staff expertise and back-up services. Satellite designations are outlined as follow:

Category A Satellite

Satellites given a Category A designation are those facilities that do not have medical back-up services such as cardiac monitoring or resuscitation, and the capacity for more complex patient care. These facilities are restricted to the treatment of self-care and chronic stable patients. *Thus, Category A satellites may only provide level 1 hemodialysis treatment to CKD patients.*

Category B Satellite

Satellites given a Category B designation are satellite dialysis units without a nephrologist on site. These dialysis units have back-up medical services such as cardiac monitoring, resuscitation, and the capacity to provide more complex care for dialysis patients who experience critical episodes during the dialysis treatment. Back-up medical assessment protocols using on-site medical staff must be in place in order to provide appropriate medical attention until the nephrologist or appropriate medical specialist assumes care for the patient. *Thus, Category B satellites may provide level 1 or 2 hemodialysis treatments to CKD patients.*

Category C Satellite

Satellites given a Category C designation are satellite dialysis units with a nephrologist or nephrologists on site. These dialysis units have back-up medical services such as cardiac monitoring, resuscitation, and the capacity to provide more complex care for dialysis patients who experience critical episodes during the dialysis treatment. Back-up medical assessment protocols using on-site nephrologists are in place. *Category C satellites may provide level 1 and 2 hemodialysis treatments to CKD patients.*

Thus, both Category B and C satellites may provide level I & level II hemodialysis treatments to CKD patients.

These satellites may also be approved to offer additional services, such as pre-dialysis clinics and peritoneal clinics at times when the appropriate resources are on site including a nephrologist.

4.3 Satellite Accountability

4.3.1 Leadership, Program Development, Implementation, and Coordination of CKD Care

The Satellite is responsible to:

- Assist the Regional Centre in implementing the service area strategy by providing local leadership in the satellite catchment area.
- Develop the satellite system for CKD care in accordance with the regional program.
- Actively participate in the development of new or expanded service proposals.
- Actively participate in the capital planning process for the regional program.
- Provide input through the regional organizational structure on issues related to program resources and service issues at the satellite.
- Collect valid and reliable data, monitor performance, and evaluate outcomes in the satellite service.
- Ensure that the satellite uses the standards, policies, procedures, and protocols developed for the regional program.
- Ensure written agreements for contracted and/or purchased services are in place and performing to the standard set forth in the agreement.

4.3.2 Provision of Quality Patient Care

The Satellite is responsible to:

- Provide safe, coordinated care for chronic CKD patients according to the expertise of nursing and medical staff and the back-up services available on-site at the satellite.
- Ensure access to the continuum of care through the implementation of referral and transfer protocols, and partnership agreements.
- Ensure the provision of evidence based and best practice CKD care using agreed upon protocols.
- Ensure the development of care plans that provide for continuity of care, patient education, and seamless transition across the continuum of care for all patients.
- Ensure monitoring of adequacy of dialysis measures and other quality of care indicators according to regional protocols.
- Ensure the monitoring of other outcome measures that reflect patient status (e.g. nutritional status, blood sugar, blood pressure, weight, etc.) according to regional protocols.
- Ensure the monitoring of mechanisms for utilization management including monitoring of patients waiting for treatment and kidney transplants, according to regional protocols.
- Ensure that mechanisms are in place for staff to review the results of quality improvement activities, to plan improvement actions/processes, and monitor effectiveness of actions.
- Ensure the effective, efficient use of resources through appropriate scheduling for care and treatment.
- Participate in continuous learning opportunities.
- Contribute to the compliance of Regional Centre and ensure their compliance with the Canadian Council of Health Services Accreditation (CCHSA) standards.

5.0 Program Funding

Since April 1, 2003 funding for all new CKD programs flows through the Regional Centre. The Regional Centre will be responsible for the distribution of funds to their Satellites. The distribution of these funds will be recorded using paymaster accounts in the Management Information System (MIS) chart of accounts.

6.0 Program Reporting

Every CKD provider is expected to report to the Ministry their CKD financial and statistical data consistent with MIS Guidelines. Revenues, expenses and statistics must be reported using the matching principle. Ministry directives on CIHI NACRS requirements must also be followed. The CKD activity reported through MIS and NACRS will be reported by the facility providing the CKD service.

Every CKD provider is expected to report the volume of activity related to the funded modalities consistent with the definitions for each funded modality. The definitions for the funded modalities are available from the MOHLTC or can be located on the Joint Policy and Planning Committee (JPPC) website. These same definition of modalities are included in the glossary in appendix 1.

The site reporting expectations are as follows:

Regional Centre/Tertiary Centre

A facility that receives MOHLTC funding for CKD services. This funding may or may not be distributed to other facilities providing the CKD service. Funds that are distributed to satellite will be recorded using paymaster accounts.

The CKD activity reported through MIS and NACRS will be reported by the facility providing the CKD service. CKD activities directly provided by the Regional Centre, either in the Regional Centre itself or in a community facility, is to be reported by the Regional Centre.

Satellite

A facility that receives funding for CKD services from a Regional Centre through MIS paymaster accounts in order to provide CKD services. The CKD activity, expense and NACRS abstract are to be reported by the satellite not by the Regional Centre. The Satellite will forward a copy of their activity and expense report to the Regional Centre.

Community Facility

A community facility is a centre operated by a Regional Centre where the direct patient care is either provided by the Regional Centre staff travelling to the community setting or in a non-hospital setting. The staff are employees of the community facility. The Regional Centre will report financial, statistics and the clinical abstract (NACRS) for the CKD service provided at the community facility through the MIS charts of accounts.

Appendices

Appendix A: Glossary

Fallback Patient

Patient treated in satellites who required the Regional Centre services.

JPPC Funding Modalities and Related Definitions (1997)

Clinics - Follow-Up Visits

Follow-up clinic visits are a clinical assessment of the patient having hemodialysis or peritoneal dialysis done at home, or at a satellite or an independent health facility, which occurs under one of two circumstances:

Patient undergoes a multi-disciplinary team assessment as well as laboratory testing at the Regional Centre,

A multi-disciplinary team from the Regional Centre visits the satellite dialysis units to provide clinical assessment to a patient dialysing in that unit. The clinical assessment would include laboratory testing.

Measured by the number of visits.

Clinics - Nephrology

Outpatient clinic visit dedicated to the treatment of nephrological conditions for patients with creatinine less than 250 µmol/L.

Measured by the number of visits.

Clinics - Pre-dialysis and Treatment Options

Interdisciplinary out-patient clinic dedicated to the assessment, medical management, treatment and support of patients with creatinine over 250 µmol/L. Education provided to families and patients regarding normal/abnormal renal function, renal failure, treatment options, nutrition, medications, and lifestyle and adjustment issues.

Measured by the number of visits.

CRRT - REGIONAL CENTRES ONLY

Continuous Renal Replacement Therapy (CRRT) is performed on acutely ill patients in an Acute Care Unit area such as the Intensive Care. This code includes hemodialysis backup for the ICU staff for starts or restarts, as well as one filter per day.

Measured by the number of treatment days.

Hemoperfused - REGIONAL CENTRES ONLY

This extracorporeal treatment is performed on acutely ill patients in an acute care unit such as intensive care unit and includes the use of a charcoal filter (such as those that are used to manage an overdose). Each treatment includes 1 filter per 4 hours of nursing time.

Measured by the number of treatments.

Home Visits - Nursing & Technician

Home or satellite unit visit of interdisciplinary team member (e.g., nursing, dietician, physiotherapist, etc.) or biomedical technical staff for the purpose of patient/equipment care and support. The time spent for each visit includes travelling time (to and from) and visiting time. Travelling time is dependent on where the home or the satellite is located. Visiting time is dependent on the purpose of the visit. I.e., follow up visit/replacement and/or machine repair.

Measured by the number of hours for each visit.

Insertion - AV Fistula

Surgical creation of an arterial-venous (AV) fistula in a patient with stage 5 CKD to be used for hemodialysis access.

Measured by the number of procedures e.g. one procedure would be on insertion.

Insertion - Central Venous Catheter Temporary

Insertion of a temporary venous line into a patient with acute or chronic failure to be used for hemodialysis treatment.

Measured by the number of procedures e.g. one procedure would be an insertion.

Insertion - Central Venous Catheter Permanent

Insertion of a permanent (i.e.: Perm Cath) catheter  a patient with stage 5 CKD to be used for long term hemodialysis treatment.

Measured by the number of procedures e.g. one procedure would be one insertion.

Insertion - Peritoneal Dialysis Catheter

Inserting a permanent peritoneal catheter in a patient with end stage renal disease to be used for any form of peritoneal dialysis.

Measured by the number of procedures e.g. one procedure would be one insertion.

Insertion - Vascular Graft Insertion

Surgically implanting a graft of synthetic material (between an artery and a vein) into a patient with stage 5 CKD to be used for hemodialysis treatment.

Measured by the number of procedures e.g. one procedure would be one insertion.

Level I - Chronic Hemodialysis - SATELLITES AND REGIONAL CENTRES

Hemodialysis treatment for *stable* chronic CKD patients - self-care, assisted self-care or dependent full care. The interdisciplinary team hours may be variable as they relate to patient acuity. The team hours per treatment will not exceed 2.25 hours.

Measured by the number of treatments, e.g. patient dialyzes between 3-5 hours per treatment.

Level II - Chronic Hemodialysis - REGIONAL CENTRES

Hemodialysis treatment, performed in an acute care dialysis unit located in a hospital, for unstable, chronic and acute CKD patients. The patients are of high acuity, may be unstable during the dialysis

procedure and must be seen by a Nephrologist on site, each visit. The interdisciplinary team hours may be variable as they relate to patient acuity. The hours of care will be 2.26 to 3.25 hours.

Measured by the number of treatments, e.g. patient dialyzes between 3-5 hours per treatment.

Level III - Acute Hemodialysis - REGIONAL CENTRES ONLY

Hemodialysis treatment performed on acutely ill patients in-hospital in an acute care unit outside the dialysis unit (e.g., adult/paediatric intensive care unit, cardiac care unit, burn unit). The interdisciplinary team hours of care will be equal to or greater than 3.26 hours.

Measured by the number of treatments.

Maintenance - CAPD

Continual ambulatory peritoneal dialysis is a type of peritoneal dialysis in which patients receive 4-5 peritoneal dialysis exchanges each day utilizing 2-3 litres of dialysate each exchange. This treatment may be carried out in a patient's home. A night exchange device may be used to enable this patient to do 1 extra peritoneal dialysis exchange during the night.

Measured by the number of annualized patients e.g. patients on this treatment over a year.

Maintenance - CCPD - Adult

In continual cycler peritoneal dialysis (CCPD) - Adult, a peritoneal dialysis patient utilizes a cycling machine to do several peritoneal dialysis exchanges usually throughout the night. Such patients frequently do peritoneal dialysis exchanges during the day as well.

Measured by the number of annualized patients e.g. patients on this treatment over a year.

Maintenance - CCPD - Child

In continual cycler peritoneal dialysis (child) a paediatric peritoneal dialysis patient utilizes a cycling machine to do several peritoneal dialysis exchanges throughout the night. Such patients may also do peritoneal dialysis exchanges during the day.

Measured by the number of annualized patients e.g. patients on this treatment over a year.

Maintenance - Home Hemodialysis

Hemodialysis treatments for the hemodialysis patients, usually performed three times per week in the homes. This is done by the patient or with the help of an unpaid trained assistant such as a family member. In some circumstances a paid trained assistant is required (currently the payer is either a private insurance plan or via the hospital concerned). If the patient is admitted to hospital, then they should not be counted as a home hemodialysis patient.

Measured by the number of annualized patients e.g. patients on this treatment over a year.

Training - Home/Self Care Hemodialysis Treatments

An intensive education period for the hemodialysis patient who subsequently will be able to manage their own treatment in the home/self-care unit. This period, which may include the training, takes a variable number of days (range of 18-24 treatment days), which includes the cost for hemodialysis treatment during the training period.

Measured by the number of days trained.

Training - CAPD

An intensive education session for a peritoneal dialysis patient undertaking to learn to manage personal peritoneal dialysis in the homes. The training may or may not occur in a patient's home. This training takes a variable number of days. Costing includes both training days as well as the Peritoneal Dialysis exchanges done during training. Average training time, including the initial Home Visit typically varies from 4-8 days (average of 5 days).

Measured by the number of days trained.

Training - CCPD

An intensive education session for a peritoneal dialysis patient undertaking to learn to manage personal cyclical peritoneal dialysis in the home. The training may or may not occur in a patient's home. This training takes a variable number of days. Costing includes both training days as well as the peritoneal dialysis exchanges done during the training. Average training time, including the initial home visit typically varies from 4-8 days (average of 5 days).

Measured by the number of days trained.

Peritoneal Equilibrium Test CAPD/CCPD

A procedure involving a 4 hour peritoneal dialysis exchange done in the clinic under supervised conditions with sampling of blood and dialysate on a number of occasions during that 4 hour period. This should be done on all patients during or shortly after initial training and repeated when clinically indicated (e.g., 1 per year).

Measured by the number of tests.

In-hospital Peritoneal Exchanges - REGIONAL CENTRES ONLY

This includes manual peritoneal dialysis (PD) bag changes for patients on CAPD (continuous ambulatory peritoneal dialysis) for acutely ill patients performed in-hospital. This also includes automated exchanges using a cycling device (CCPD) or continuous acute care cycling.

Measured by the number of procedures, e.g. patient dialyzes between 4-5 times (procedures) per day.

Appendix B: Regional Centres, Satellites and Independent Health Facilities

REGION/PROVIDERS	REGIONAL CENTRE	SATELLITE	INDEPENDENT HEALTH FACILITY
Central East Region			
Lakeridge Health Corporation – Oshawa (LHC)	X		
LHC - Simcoe Street (temporary) – Oshawa		X	
LHC - Whitby (Oshawa)		X	
Orillia Soldier's Memorial (OSM)	X		
OSM - Collingwood General and Marine		X	
OSM - Penetanguishene General Hospital		X	
OSM - Royal Victoria Hospital (Barrie)		X	
OSM - Stevenson Memorial Hospital (Alliston)		X	
Peterborough Regional Health Centre (PRHC)	X		
PRHC - Northumberland Health Care Centre		X	
Peterborough, Dialysis Management Clinic			X
York Central Hospital	X		
Central South Region			
Niagara Health System (St. Catherines)	X		
St. Joseph's Healthcare – Hamilton (SJH)	X		
SJH – Stoney Creek Satellite		X (approved)	
SJH - Brantford General Hospital		X	
Bayshores Centre, Stoney Creek			X
Central West Region			
Credit Valley Hospital (CVH)	X		
CVH- Credit Valley Wattline		X	
CVH - Dufferin Caledon Healthcare Corporation		X	
CVH - William Osler Health Centre		X	
Grand River Hospital Corporation (GRHC)	X		
GRHC - Guelph Hospital		X	
Halton Healthcare (HHC)	X		
East Region			
Bayshores Centre – Brockville Clinic			X
Cornwall Dialysis Clinic			X
Kingston General Hospital (KGHC)	X		
KGHC – Belleville Dialysis Clinic		X	
KGHC - Perth and Smiths Falls		X	
KGHC - Quinte Healthcare (Brancroft)		X (approved)	
KGHC - Quinte Healthcare (Picton)		X	
Renfrew Victoria Hospital (RVH)	X		
RVH - St. Francis Memorial Hospital (Barry's Bay)		X	
The Ottawa Hospital (TOH)	X		
TOH - Cornwall General		X	
TOH - Hawkesbury General Hospital		X	
TOH - Sisters of Charity of Ottawa		X	
TOH - Winchester Memorial Hospital		X	
Ottawa Carleton Dialysis Clinic			X

REGION/PROVIDERS	REGIONAL CENTRE	SATELLITE	INDEPENDENT HEALTH FACILITY
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North Region			
Huntsville Memorial – Satellite of Orillia (OSM)		X	
Lake of the Woods District Hospital (Kenora) (Satellite of Winnipeg)			
Lion's Camp Dorset Corporation			X (Summer Camp)
Moose Factory – Satellite of Kingston General Hospital (KGHC)		X (approved)	
North Bay General Hospital (NBGH)	X		
Sudbury Regional Hospital (SRH)	X		
SRH - Manitoulin Health Centre (Little Current)		X	
SRH - Kirkland and District Hospital (Kirkland Lake)		X	
SRH - New Liskeard – Temiskaming		X	
SRH - Sensenbrenner Hospital (Kapuskasung)		X	
SRH - St. Joseph's General Hospital (Elliott Lake)		X	
SRH - West Parry Sound Health Centre		X	
Thunder Bay Regional Hospital (TBRH)	X		
TBRH - Fort Frances		X	
TBRH - Sioux Lookout		X	
Sault Area Hospital (SAH)	X		
Timmins and District Hospital (TDH)	X		
Toronto Region			
Ajax-Pickering, Dialysis Management Clinic			X
Markham, Dialysis Management Clinic			X
Humber River Regional Hospital	X		
St. Joseph's Health Centre - Toronto (SJHC)	X		
SJHC – Community Renal Centre		X	
St. Michael's Hospital (SMH)	X		
Sunnybrook and Women's College	X		
The Scarborough Hospital (TSH)	X		
TSH - Bridgepoint Hospital		X	
TSH - The Scarborough Hospital Satellite		X	
TSH - Toronto East General Hospital		X	
University Health Network (UHN)	X		
UHN - Sheppard Centre (North York)		X	
UHN - Sussex Centre (Mississauga)		X	
UHN - Toronto Rehabilitation Institute		X	
South West Region			
London Health Sciences Centre (LHSC)	X		
LHSC - Alexandra Marine and General Hospital		X	
LHSC - Chatham-Kent Health Alliance		X	
LHSC - Grey Bruce Health Services		X	
LHSC - Hanover and District Hospital		X	
LHSC - Huron Perth Hospitals Partnership		X	
LHSC - Lambton Hospitals Group – Sarnia		X	
LHSC - Southwestern Ontario Regional Self-Care		X	
LHSC - Woodstock General Hospital		X	
Windsor Hotel Dieu Grace Hospital (WHDGH)	X		
WHDGH - Windsor Hotel Dieu Grace Hospital (Satellite)		X	

Updated September 2004

Appendix C: Regional Centres and Geographical Areas Description

To be added

Appendix D: Partnership Agreement

The purpose of a partnership agreement is to outline the service commitments and processes to take place between the different service providers.

Following is a non-inclusive list of components that are to be included into a partnership agreement:

Preamble

Service commitments - need

Principles

Structure and processes to steer its activities

Funding, budgeting and financial management

Decision-making process

Dispute resolution mechanism

Amendment process to the agreement

Term and termination of the agreement

Renewal

Definition and interpretations

7.7: THE STANDING PROVINCIAL CKD ADVISORY COMMITTEE DRAFT TERMS OF REFERENCE

Purpose:

Comprised of service providers and leaders in chronic kidney disease (CKD) care, the Standing Provincial Chronic Kidney Disease Advisory Committee will provide evidence-based advice to further the goal of an accessible, efficient, and effective system of CKD service delivery in Ontario.

Mandate:

The Standing Advisory Committee will:

- Provide advice on the strategic direction of the CKD services in the province.
- Advise on the development of a provincial CKD information system framework that will assist the ministry with planning, implementation, monitoring and evaluation of the CKD services in Ontario.
- Provide evidence-based programmatic and clinical advice, including advising on clinical and program standards.

Membership:

The committee will comprise of representatives from the seven regions across the province, clinicians and administrative representation including:

- Academic and Community Nephrologist(s)
- Tertiary Centres
- Academic Centres
- Hospital Administration providing CKD services
- Alternate Payment Programs Branch, MOHLTC (Independent Health Facilities)
- Ad hoc members as required

The CKD Program Consultant of the Ministry of Health and Long-Term Care, Hospitals Branch will provide support to the Standing Provincial Advisory Committee.

Reporting Relationship:

The Advisory Committee will provide advice to the Deputy Minister of the Ministry of Health and Long-Term Care.

Term:

This is a Standing Committee. This group will meet 4-6 times per year.

The term of the membership appointment is 2 years. Initially half of the members will be appointed for 2 years and the other half will be appointed for 3 years.

Work plan:

The work plan for the Standing Advisory Committee will be approved annually.

7.8: DAILY / NOCTURNAL HEMODIALYSIS COSTING WORK GROUP DRAFT TERMS OF REFERENCE

Purpose:

Building on previous work of the Ministry of Health and Long-Term Care, the Joint Planning and Policy Committee (JPPC), and the Daily/ Nocturnal Hemodialysis Pilot Projects, the Daily/ Nocturnal Hemodialysis Costing Work Group will develop the costing for the delivery of daily (short hours high efficiency) and nocturnal (long hours slow) hemodialysis treatments at home and recommend a funding methodology to reimburse hospitals for the cost of such treatments.

Objectives:

- Identify assumptions and scope for costing the delivery and management of home daily/nocturnal hemodialysis.
- Develop/update costing of home daily/nocturnal hemodialysis while building on strengths and addressing limitations of existing funding rates, costing studies, and using best available data.
- Develop and recommend a new funding methodology for home daily/nocturnal hemodialysis management similar to the funding methodology developed for conventional home hemodialysis management.
- Provide advice on costing and funding rates for new / emerging home daily/nocturnal hemodialysis procedures.

Membership:

Experts in costing and development of funding methodologies and service providers in daily/nocturnal hemodialysis from Nocturnal Regional Dialysis Centres, JPPC, and MOHLTC including representation from the Provincial Chronic Kidney Disease Advisory Committee. Other experts will be invited to participate in work group meetings as required.

Chair:

The Daily/Nocturnal Hemodialysis Costing Work Group will be co-chaired by an external member and a MOHLTC staff.

Reporting Relationship:

The Daily/Nocturnal Hemodialysis Costing Work Group will report and make recommendations to the Director, Hospitals Branch, Acute Services Division of the Ministry of Health and Long-Term Care.

Term:

The Daily/ Nocturnal Hemodialysis Costing Work Group is expected to complete its mandate within 6 months from its starting date.

Meeting Frequency:

The Daily/ Nocturnal Hemodialysis Costing Work Group will meet at least every month or more frequently if required.

Committee Support and Administration:

MOHLTC, Hospitals Branch, CKD Program Consultant will provide support to the work of the Daily/ Nocturnal Hemodialysis Costing Work Group.