BC Renal Agency

An agency of the Provincial Health Services Authority

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Guidelines for Renal Programs Finalized 2004

Updated January 2006

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fraserhealth Interior Health northern health Providence Health Care Vancouver Coastal Health Vancouver Island health authority Provincial Health Services Authority

BC Provincial Renal Agency

Guidelines for Renal Programs

Finalized 2004

(Accepted by BCPRA Executive Committee in February 2005)

A. RATIONALE

A global epidemic of chronic kidney disease (CKD) has created a growing demand for renal services throughout BC. These services include diagnosis, secondary prevention and treatment. Treatment includes life support for end stage kidney diseases (ESKD) with kidney transplantation and dialysis. This document has been compiled to aid Health Authorities and Institutions in the development of new dialysis facilities in accordance with the provincial approach to ensuring equitable and logical distribution of high quality care. Regional projections of dialysis resource needs prepared in 1999 provide detailed illustrations of the planning process. These are identified in the Reading List at the end of this document and can obtained from the Provincial Renal Agency office (please see Appendix II).

B. THE STRUCTURE AND COMPONENTS OF A RENAL PROGRAM

1. HEALTH AUTHORITY RENAL PROGRAM (HARP)

Each health authority operates a renal program for its region - this is known as a Health Authority Renal Program (HARP). The HARP may consist of one or more **Primary Renal Management Center's**. The HARP is responsible for the regional co-ordination of all renal services within the HARP under the administrative leadership of senior Administrator(s), Manager(s) and the clinical leadership of a **Medical Director** who is a trained Nephrologist qualified to practice in BC and Canada. (Please see the Medical Director – Kidney Services – Adult and Pediatric Role descriptions Appendix 1).

Each HARP requires a **Steering Committee** with members representing each Primary Renal Management Center. The Steering Committee plays an important role in the regional co-ordination of services, facilitation of communication within the HARP and as a communication link with the BC Provincial Renal Agency.

2. PRIMARY RENAL MANAGEMENT CENTER

A renal Center is based at an acute care hospital and offers a **full spectrum** of renal services for a specified geographic area within the HARP. The center thus functions as the "home base" for patients referred to the center within that geographic area. There may be several centers operating within, and under the co-ordination of, the HARP, however, given the complex care requirements of renal patients, the establishment of a renal center is restricted to hospital facilities that can provide the necessary resources and for a critical mass of patients (see Section B).

3. FULL SPECTRUM RENAL SERVICES

A Renal Center must be able to provide a full spectrum of renal services to support the delivery of effective secondary preventative care and treatment of renal failure. These services must include the following:

- In-center renal dialysis unit
- Peritoneal dialysis and home based hemodialysis services (Independent Care Services)
- In-patient/acute care Nephrology services
- Chronic kidney disease clinic
- Community based hemodialysis services *may* also be provided but are not essential to the operation of the center.

It should be noted that all of the above named services are interdependent in the matrix of renal care delivery and thus no one component should be established independent of the others. One exception would be Chronic Kidney Disease services, which may be established as an outreach service of an existing center.

In addition, the facility where the center is based must offer emergency, cardiology, ICU, clinical laboratory and pharmacy services.

Interventional radiology and surgical services (for the creation of dialysis access) should be available at a Primary Renal Management Center. When these services are not available on site, they must be available within the HARP. It is imperative that centers lacking on-site access to these services establish clinical protocols, processes, and transparent relationships with facilities that do have those services to ensure seamless access to care within any one HARP. Centers in larger communities should plan to develop of these services on-site within 2-3 years of establishment.

4. HUMAN RESOURCES

The renal patient has complex care needs requiring the coordinated approach of an expert team. The renal multidisciplinary team includes, physicians, nurses, nutritionists, pharmacists, technicians, social workers and clerical staff. These resources are essential to the delivery of quality renal services that maximize patient survival and quality of life. In the case of physicians, nurses and technicians specialized education and training is required.

Nephrologist Recruitment and Coverage

A dedicated renal physician on active medical staff at the facility is an absolute pre-requisite. Dialysis services should be provided by nephrologists certified by the Royal College of Physicians and Surgeons of Canada (or equivalent), Nephrology coverage must be self-supporting, i.e. sufficient to provide full daily coverage and 24/7 on-call support. Dedicated nephrologists must be on site before a new center can become operational.

There is, at present, no official accreditation process for nephrologists working in BC as part of the PRA (i.e. as does exist at the BC Cancer Agency). However, the PRA/PHSA does expect that Health Authorities, when considering the appointment of nephrologists and/or the establishment of new centers, will do so in accordance with the guiding provincial principles of the PRA[1]. The HARP will consult with the existing facilities in their region, the Medical Director of the HARP, and the PRA Executive Director with respect to recruitment processes and expectations.

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[1] *About BCPRA: An Overview Document.* Published summer 2004. Available from BC Provincial renal Agency Office. E-mail: bcpra@bcpra.ubc.ca

In this way, we hope to maintain the excellent clinical care and cohesive community of care providers for patients living with kidney disease.

5. FUNDING

Payment to regions for the delivery of renal services to registered patients is predicated on projected patient activity as reported in the provincial web-based information system, PROMIS. This funding is targeted to specific renal costs; it does not cover all facility operating costs related to renal care.

Sections B and C outline guidelines for the establishment of in-centre and community dialysis units, as well as expectations regarding the accessibility of physician coverage. More detailed information on these guidelines is provided in the attached reading list (please see Appendix II).

C. GUIDLINES FOR IN-CENTRE HEMODIALYSIS UNITS

1. Justification:

In-centre HD units, by definition, provide care for complex patients with multiple comorbidities whose health status is often unstable. For this reason, an in-centre program is inseparable from a full-service renal program (FSRP) that is able to offer optimal care to CKD patients at all stages including an early intervention program for CKD. Therefore, when we consider a proposal for an in-centre HD unit we must in fact treat this as a proposal for a full service renal program, with all the resource needs that would entail.

Planning for a FSRP should be undertaken when the population of CKD patients in a region reaches a critical mass that would (a) permit efficient use of resources and (b) provide sufficient volume of care (approximately 65 - 75 patients) to support a nephrologist. Providing close-to-home access to necessary medical care to some of our populations most needy patients is a worthy goal provided it can be achieved efficiently and effectively.

The in-centre hemodialysis unit, as the most resource-intensive component, should be the major deciding factor. Acceptable staffing efficiency for an in centre HD unit can be achieved with a 6-station unit operating 2 shifts 6/7 days. This would serve 24 HD patients at capacity, and this should be regarded as a threshold number. Based on the most recently available BC Hemodialysis rate per million population of 278 in 1999, this could justify a full service program for a referral population base of approximately 85,000, provided all basic resource requirements can be met for a FSRP

Creation of an in-centre hemodialysis unit requires appropriate planning and development of the physical and human resources required:

- Service needs (case load) projections in regions
- Human resources - recruitment and training
- Space and capital equipment
- Specialized clinical support services - surgery, lab, diagnostics, ICU

2. Resource Requirements:

- **Timely access to inpatient beds**
  Initiation of dialysis requires creation of vascular/Peritoneal Dialysis access. Thus, every new patient requires at least 1-2 days of secured hospital bed time, in addition to secured OR time (see below), to commence dialysis therapy.

  Furthermore, dialysis patients require about 7-14 days of hospitalization/patient/year. These very ill patients require special nursing skills related, for example, to vascular access management, fluid balance and altered drug elimination. It is therefore desirable to have geographically designated beds staffed by nurses and allied health professionals with training and/or experience in renal medicine.

- **Institutional resources**
  - **Laboratory:** Expect increased service volume and STAT requests. Minimum in-house services to include CBC, Na, K, Cl CO2, Urea, Creatinine, Ca, PO4, albumin, protein electrophoresis, parathyroid hormone, urate, Fe, TIBC, Tsat, ferritin, folate, B12, ABG
  - **Pharmacy**
  - **Rehabilitation** and physiotherapy services.
  - **Emergency** department open 24/7
  - **Radiology:** renal biopsy, Ultrasound (with Doppler), fistulagraphy with plasty,
  - **OR access**: Timely access for vascular access and PD tube placement[2]

- **Cardiovascular services**
  CV disease is more prevalent in dialysis patients, which will increase demand for assessment, angiography services as well as CCU beds and OR time. Timely access to cardiology and vascular surgery consult services is essential.

- **Providing hemodialysis to ICU/CCU patients**
  Creation of an in-center hemodialysis unit requires appropriate planning for ICU/CCU patients requiring hemodialysis. The clinical judgment required for the care and management of unstable patients is acquired after considerable training and experience. The knowledge and skill set required of a hemodialysis Registered Nurse (RN) performing hemodialysis on a critically ill patient varies from the knowledge and skill set required of a hemodialysis RN performing hemodialysis on a chronically ill or acutely ill patient. An RN trained to perform hemodialysis on a critically ill patient requires considerable exposure to these types of patients to maintain the required competencies to ensure the delivery of safe patient care.

3. Staff Requirements for a Full Service Renal Program:

Nephrology consult services are required in addition to recruitment and hemodialysis training of staff including nurses, dieticians, renal technicians, and biomedical engineers as detailed below. Guidelines for staffing are provided in the BCPRA documents, reading list (please see Appendix II).

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[2] Interventional Radiology and OR/vascular access services may be provided in another centre that is reasonably accessible to patients provided that local services are developed within 2-3 years of the establishment of the in-centre unit.

- **Nephrology consult service:**

  A dedicated renal physician on active medical staff at the facility is an absolute pre-requisite. Dialysis services should be provided by nephrologists certified by the Royal College of Physicians and Surgeons of Canada (or equivalent), Nephrology coverage must be self-supporting, i.e. sufficient to provide full daily coverage and 24/7 on-call support. Dedicated nephrologists must be on site before a FSRP can become operational.

- **Operational leadership**:
  The leader/manager of the renal program has operational responsibility for the staff and resources in their facility and actively participates in program-related Committees within their region as well as the Provincial Renal Agency (PRA).

- **Nursing:**
  - Hemodialysis: sufficiently trained HD nurses to care for 2 shifts 6 days minimum
  - Peritoneal Dialysis: Trained PD nurse,
  - Chronic Kidney Disease: sufficiently trained Nephrology nurses to inform patients about treatment modalities.
- **Renal technician:** Technician support available on-site or on-call during hours of HD unit operation

- **Biomedical engineering:** Support must be available during HD unit hours of operation

- **Nutritional Support:** Trained renal dietitian,

- **Social Work:** Trained in dealing with complex care chronically ill patients and their families.

- **Pharmacy**: Access to clinical pharmacists for renal patients must be available and should be accomplished through institution based resources.

- **Clerical support:** An acceptable ratio of clerical support for renal programs is dependent on institutional and community structure.

4. Space, equipment and supplies:

- Dedicated treatment area with work stations, dialysis machines, beds, dialysis chairs, needling tables and chairs, oxygen regulators, vacuum regulators, scale, bedside supply carts, etc.
- Tech room – technical equipment, shelving unit, spare parts inventory
- Emergency Medical equipment
- Utility rooms etc.
- Installation of RO system (c/w tank, circulation system, filters, piping)
- Storage room
- Office space
- Patient reception area
- Nursing station
- Nourishment area
- Staff room
- Conference room

More detailed information regarding space, equipment and supply needs will be found in the reading list (please see Appendix II).

D. GUIDELINES FOR COMMUNITY HEMODIALYSIS UNITS

1. Justification

A hospital facility that provides a full service renal program serves as "home base" for those stable patients able to dialyze at home or in a community dialysis unit (CDU). The hospital facility provides the multidisciplinary team services within their region regardless of location under the clinical leadership of a trained nephrologist and administrative leadership of the hospital facility. Patients are referred to a community unit when medically stable.

A CDU may provide a range of dialysis care options including conventional HD, limited care and self-care depending on the resources available[3].

- *Conventional hemodialysis* – Dialysis run provided by the nurse three times a week for four hrs.
- *Self-care limited assistance hemodialysis* – Dialysis in a community or a hospital HD unit performed primarily by the patient, with limited assistance from the nurses required
- *Self-care independent hemodialysis* – Dialysis is run by the patient in a community or hospital HD unit.

Creation of a CDU requires a careful collaborative planning process and should adhere to the following principles:

a. Travel distance is within 1.5 hours of a patient's residence.
b. Sufficient patient volumes (6-8 patients) to sustain staff competence, staffing levels and quality of patient care.
c. Patients selected are suitable candidates: They are medically stable yet unable for medical or social reasons to receive home based care.
d. Space must be able to efficiently accommodate supplies, infection control practices, occupational health practices, water supply, power supply, patients in wheelchairs and patients in chairs.
e. Ability to recruit and retain health care providers including hemodialysis-trained nurses. Availability of nephrologists and vascular surgeons.
f. Predictable transportation patterns. There is a need to consider geography/climate and feasibility of patients traveling to existing HD centres.
g. Local physician willing to attend to patient when required.
h. Facility renovation or expansion will be developed to ensure flexibility for further growth.

2. Resource requirements

- **Timely access to inpatient beds**
  Community dialysis patients may require hospitalization during the course of their therapy. This requires coordination with the regional hospital and defined transfer guidelines.

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[3] Proposal for Innovative Approaches to Management of Hemodialysis January 2003. Available from the BC Provincial Agency Office.

- **Resources**
  - Access to routine chemistry and hematology laboratory resources
  - Access to Emergency department
  - Access to pharmacy services

3. Staff requirements

- **Nephrology consult service**
  Dialysis services should be provided by nephrologists certified by the Royal College of Physicians and Surgeons of Canada (or equivalent); A Nephrologist is available via pager as well as providing on-site visits.

- **Nursing**
  Sufficiently trained HD nurses must be available in the community to sustain the service
  A variety of staff models are in place depending on the size of the CDU:
  - for CDU's over 6 stations – RN's, with Renal Tech or LPN support
  - for CDU's under 6 stations – RN's only

- **Allied health support** including biomedical engineering, nutrition, social work, and pharmacy.

4. Space, equipment and supplies

There are recommended unit/station space standards.

- Space must be available on-site (in-hospital, or freestanding) with a dedicated treatment area with workstations, dialysis machines, dialysis chairs, needling tables and chairs, oxygen regulators, vacuum regulators, scale, supply carts, etc.
- Dedicated treatment area with work stations
- Tech room – technical equipment, shelving unit, spare parts inventory
- Emergency Medical equipment
- Utility rooms etc.
- Installation of RO system (c/w tank, circulation system, filters, piping)
- Storage room
- Office space
- Patient reception area
- Nursing station
- Nourishment area
- Staff room
- Conference room

More detailed information regarding space, equipment and supply needs will be found in the reading list (please see Appendix II)

Appendix I

MEDICAL DIRECTOR – KIDNEY SERVICES
Joint Position

HEALTH AUTHORITY RENAL PROGRAM (HARP)
and
THE BRITISH COLUMBIA PROVINCIAL RENAL AGENCY (BCPRA)

(Accepted by the BCPRA Executive Committee, September, 2005)

ROLE SUMMARY

The Medical Director – Kidney Services (MD-KS) has a unique role with dual accountabilities to the health authority (HA - regional) and to the BCPRA (provincial) bodies responsible for the care of patients with kidney disease. As facilitator and leader within the HA, the MD-KS leads by example to establish effective cross functional teams that promote optimal patient care through all stages of chronic kidney disease.

The MD-KS is an essential link between the Health Authority Renal Program (HARP) and the BCPRA. Through a high level of initiative, excellent organizational skills, and superior leadership qualities the MD-KS promotes and enhances excellent communications and positive working relationships between the BCPRA and the HARP.

PRIMARY WORKING RELATIONSHIPS

The Medical Director – Kidney Services works in close collaboration with the manager/director of the Renal Program(s) and is accountable to the executive sponsor of the Health Authority Renal Program and the executive director of the BCPRA . Additionally the MD-KS, through leadership and guidance, and working jointly with clinical regional and provincial teams, aids in the achievement of cohesive care for individuals diagnosed with chronic kidney disease, within the HA and across the province of British Columbia. The Medical Director – Kidney Services supports the coordination of renal services for a defined geographic area, including the provision of continuity of patient care, adherence with standardized best practices, and alignment of services to match the strategic plan of the Health Authority Renal Program.

RESPONSIBILITIES

- Collaborates with the clinical, administrative and leadership teams to assure the provision of patient care that is safe, effective, caring, timely and appropriate for the needs of the individual;

- Supports, facilitates and participates in the development of quality improvement and quality assurance programs and in the ongoing monitoring of quality in patient care provision;

- Assures Nephrologist representation/and appropriate membership on local and provincial committees as required. As a key member of the HARP Steering Committee and leadership team, consults to assure appropriate representation from

the HA on provincial committees. Participates as required in the selection of renal clinical care providers for committee work within, and between, the HA and the BCPRA and that communication among and between committees is carried through;

- Attendance and participation in the Medical Advisory Committee (MAC) of the BCPRA, the Executive Committee meeting of the BCPRA, and appropriate committees within the HA;

- Works in collaboration with the director and/or manager of the renal program/ program(s) to ensure fair equitable use of the resources which may exist as part of various provincial contracts. Identifies potential overlap between HA and provincial initiatives and fosters collaboration as appropriate;

- Responsible for medical human resources planning and recruitment for the Renal Program. Participates as required in the development of the regional renal human resources plan; is actively involved in developing and implementing the strategic plan for the HARP; works to maximize educational opportunities and facilitates good communication between and among the HARP.

TIME COMMITMENT AND COMPENSATION

The MD-KS is expected to attend two BCPRA Executive Committee meetings per year in addition to the time involved in the coordinating and facilitating activities outlined in the above section. Attendance by the MD-KS, or delegate(s) at two Medical Advisory Committee meetings per year is also expected.

The BCPRA's commitment towards reimbursement of the MD-KS salary will match the HA funding to yearly maximum of $10,000.00. The MD-KS does have the opportunity to apply for sessional funding through BCPRA as appropriate. Any clerical or administrative support will be the responsibility of the HA, and will be negotiated with the MD-KS directly.

Periodic review of this proposed structure and functioning will occur in conjunction with HA and BCPRA.

TERM OF APPOINTMENT

The Medical Director – Kidney Services is appointed for a period of two (2) years with the possibility of extension for a second two (2) year period. Further extension of tenure is possible if mutually agreed to be both appropriate and beneficial, by the Health Authority Renal Program and the Medical Director-Kidney Services.

QUALIFICATIONS

The Medical Director – Kidney Services would be a licensed nephrologist, preferably he/she would be familiar with local practice of region, as well as British Columbia.

SELECTION PROCESS

Given the depth and breadth of this position selection of the appropriate individual is essential to his/her future effectiveness. A process that encourages contribution from team members, senior Health Authority executives, and nephrologists of the HARP is critical.

BC Renal Agency

An agency of the Provincial Health Services Authority

MEDICAL DIRECTOR – KIDNEY SERVICES
PEDIATRIC PROGRAM
Joint Position

HEALTH AUTHORITY RENAL PROGRAM (HARP)
and
THE BRITISH COLUMBIA PROVINCIAL RENAL AGENCY (BCPRA)

ROLE SUMMARY

Pediatric Renal Services, centralized at the British Columbia Children's Hospital, have a unique situation by functioning in both regional and provincial capacities while providing care for a distinct population. An agency of the Provincial Health Services Authority (PHSA), the Pediatric program is also an active participant in the Vancouver Coastal Health Authority/Providence Health Care Renal Program (HARP) and works closely with the British Columbia Provincial Renal Agency (BCPRA). To ensure appropriate, broad representation with these governing bodies the position of Medical Director- Kidney Service: Pediatrics is essential.

The Medical Director – Kidney Services (MD-KS): Paediatrics, has a unique role with accountabilities to the VCH/PHC Health Authority Renal Program and to the BCPRA (provincial) bodies responsible for the care of patients with kidney disease, As facilitator and leader within the HA, the MD-KS:Pediactrics leads by example to establish effective cross functional teams that promote optimal patient care through all stages of chronic kidney disease.

The MD-KS Pediatrics is an essential link between the Health Authority Renal Program (HARP) and the BCPRA. Through a high level of initiative, excellent organizational skills, and superior leadership qualities the MD-KS Pediatrics promotes and enhances excellent communications and positive working relationships between the BCPRA and the HARP.

PRIMARY WORKING RELATIONSHIPS

The Medical Director – Kidney Services:Pediatrics works in close collaboration with the manager/director of the Renal Program(s) and is accountable to the executive sponsor of the Health Authority Renal Program and the executive director of the BCPRA . Additionally the MD-KS:Pediactrics, through leadership and guidance, and working jointly with clinical regional and provincial teams, aids in the achievement of cohesive care for individuals diagnosed with chronic kidney disease, within the HA and across the province of British Columbia. The Medical Director – Kidney Services Pediatrics supports the coordination of renal services for not only a defined geographic area but also for the province of British Columbia as well as parts of the Yukon and North West Territories, including the provision of continuity of patient care, adherence with standardized best practices, and alignment of services to match the strategic plan of the Health Authority Renal Program.

RESPONSIBILITIES

- Collaborates with the clinical, administrative and leadership teams to assure the provision of patient care that is safe, effective, caring, timely and appropriate for the needs of the individual;

- Supports, facilitates and participates in the development of quality improvement and quality assurance programs and in the ongoing monitoring of quality in patient care provision;

- Assures Nephrologist representation/and appropriate membership on local and provincial committees as required. As a key member of the HARP Steering Committee and leadership team, consults to assure appropriate representation from the HA on provincial committees. Participates as required in the selection of renal clinical care providers for committee work within, and between, the HA and the BCPRA and that communication among and between committees is carried through;

- Attendance and participation in the Medical Advisory Committee (MAC) of the BCPRA, the Executive Committee meeting of the BCPRA, and appropriate committees within the HA;

- Works in collaboration with the director and/or manager of the renal program/ program(s) to ensure fair equitable use of the resources which may exist as part of various provincial contracts. Identifies potential overlap between HA and provincial initiatives and fosters collaboration as appropriate;

- Responsible for medical human resources planning and recruitment for the Renal Program. Participates as required in the development of the regional renal human resources plan; is actively involved in developing and implementing the strategic plan for the HARP; works to maximize educational opportunities and facilitates good communication between and among the HARP

TIME COMMITMENT AND COMPENSATION

The MD-KS:Pediatrics is expected to attend two BCPRA Executive Committee meetings per year in addition to the time involved in the coordinating and facilitating activities outlined in the above section. Attendance by the MD-KS:Pediatrics, or delegate(s) at two Medical Advisory Committee meetings per year is also expected.

The BCPRA's commitment towards reimbursement of the MD-KS:Pediatrics salary will match the HA funding to yearly maximum of $10,000.00. The MD-KS:Pediatrics does have the opportunity to apply for sessional funding through BCPRA as appropriate. Any clerical or administrative support will be the responsibility of the HA, and will be negotiated with the MD-KS:Pediatrics directly.

Periodic review of this proposed structure and functioning will occur in conjunction with HA and BCPRA.

TERM OF APPOINTMENT

The Medical Director – Kidney Services: Pediatrics is appointed for a period of two (2) years with the possibility of extension for a second two (2) year period. Further extension of tenure is possible if mutually agreed to be both appropriate and beneficial, by the Health Authority Renal Program and the Medical Director-Kidney Services.

QUALIFICATIONS

The Medical Director – Kidney Services: Pediatrics would be a licensed nephrologist, preferably he/she would be familiar with local practice of region, as well as British Columbia.

SELECTION PROCESS

Given the depth and breadth of this position selection of the appropriate individual is essential to his/her future effectiveness. A process that encourages contribution from team members, senior Health Authority executives, and nephrologists of the HARP is critical.

APPENDIX II

Reading List

The following documents are available on request from the BCPRA office:

The BC Provincial Renal Agency Strategic Plan (2004)

About BCPRA: An Overview Document (2004)

Proposal for Innovative Approaches to Management of Hemodialysis (2003)

B.C. Renal Agency (1999) Provincial Planning Process, Issues in Renal Care, Draft, 1-14.

Cheng, S.M., Kingsbury, L., Estridge, C., & Conly, J. (1999). Optimizing Physical Space Design of Hemodialysis Units to prevent nosocomial infections. Dialysis and Transplantation 28(10): 557-569. retrieved from http:/www.chica.org/Members/dial.html

KPMG Consulting (April, 2001), Chronic Renal Dialysis Program, Draft version1, Northern Renal Region 1-13.

Providence Health Care (2002). St. Paul's Hospital Renal Program Community Dialysis Unit Manual

The RPG Partnership (1999). Regional Renal Program Simon Fraser, 2003 Resource Requirements.

The RPG Partnership (1999). Regional Renal Program Okanagan/Similkameen, 2002/2003 Resource Requirements

The RPG Partnership (1999). Regional Renal Program Vancouver, 2003 Resource Requirements.

APPENDIX III

FOR CURRENT NUMBERS REGARDING STATION AND MACHINE COUNT, PLEASE REFER TO OUR WEBSITE AT: http://www.bcrenalagency.ca/WhoWeAre/KidneyCare/RenalUnits.htm

BC Renal Agency
Station and Machine Count
As of Jan 31, 2004

Facility Code	Facility	I/C*	# of Stations	# of Machines (Including Spares)
90201	Royal Jubilee Hospital	I	30	38
Sub-Total	**Island InCenter**		**30**	**38**
92006	Nanaimo	C	12	14
92007	Port Alberni	C	6	7
92012	Victoria	C	15	16
92016	Duncan	C	5	6
	Cumberland	C	6	8
Sub-Total	**Island Community**		**44**	**51**
	Home Patients		3	3
Total	**Island**		**77**	**92**
90109	Royal Columbian Hospital	I	23	32
90116	Surrey Memorial Hospital	I	18	21
Sub-Total	**Fraser InCenter**		**41**	**53**
92001	Abbotsford	C	9	13
92009	Surrey	C	11	13
	Tri-Cities	C	19	21
Sub-Total	**Fraser Community**		**39**	**47**
	Home Patients		0	0
Total	**Fraser**		**80**	**100**
90801	Trail Regional Hospital	I	7	12
90401	Royal Inland Hospital	I	7	11
90302	Kelowna General Hospital	I	12	13
90303	Penticton Regional Hospital	I	12	12
Sub-Total	**Interior InCenter**		**38**	**48**
92002	Creston	C	4	5
92004	Grand Forks	C	2	3
92005	Cranbrook	C	4	6
	Sparwood	C	4	5
	Invermere	C	2	3
92013	Williams Lake	C	3	4
	Rutland		4	6
92011	Vernon	C	4	6
Sub-Total	**Interior Community**		**31**	**36**
	Home Patients		10	10
Total	**Interior**		**79**	**94**

* I = In-centre, C = Community

APPENDIX III

Facility Code	Facility	I/C*	# of Stations	# of Machines (Including Spares)
Sub-Total	**Northern InCenter**		**11**	**19**
92003	Fort St. John	C	6	9
	Terrace		6	
Sub-Total	**Northern Community**		**12**	**9**
	Home Patients		5	5
Total	**Northern**		**28**	**33**
90101	Vancouver General Hospital	I	30	43
90102	St. Paul's Hospital/PHC	I	43	58
90105	B.C. Children's Hospital	I	5	8
Sub-Total	**Vancouver InCenter**		**78**	**109**
92008	Sechelt	C	4	6
92010	Vancouver (Cambie)	C	15	21
92015	Squamish	C	4	6
	North Shore	C	15	20
	Richmond	C	15	20
	Powell River	C	4	4
Sub-Total	**Vancouver Community**		**57**	**77**
	Nocturnal		12	12
	Home Patients		0	0
Total	**Vancouver**		**147**	**186**
Total BC	**In Center**		**198**	**267**
	Community		**183**	**220**
	All HD		**381**	**487**

* I = In-centre, C = Community