



# **UBC and the BC Provincial Renal Home Dialysis Fellowship Overview of program**

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**a place of mind**  
THE UNIVERSITY OF BRITISH COLUMBIA

Division of Nephrology  
Faculty of Medicine  
Providence Health Care  
1081 Burrard Street, P-6010A  
Vancouver, BC Canada V6Z 1Y6



Division of Nephrology  
Faculty of Medicine  
Gordon and Leslie Diamond Health Care Centre  
5<sup>th</sup> Floor, 2775 Laurel Street  
Vancouver, BC Canada V5Z 1M9

## Overview:

**This 12 month fellowship is offered through collaboration of the BC Renal and UBC Division of Nephrology**

**Rationale:** The practice of nephrology requires general nephrology knowledge and wide exposure to all aspects of renal replacement options yet there is a growing recognition that expertise in home based therapies requires more intensive exposure than may be obtained during a general nephrology fellowship 2 year training period.

**Eligibility:** Individuals who have completed 24 months of training in an accredited Nephrology program or those who have completed 12 months, under special circumstances, with the approval of the Residency program supervisory and the Home Dialysis Fellowship Training Co-Directors. This fellowship program is open to both Canadian and non-Canadian trainees; Canadian trainees will be given preference in the case of a discrepancy of applicants and available training positions.

## Objectives of Home Dialysis Fellowship

- To develop expertise in the delivery of home based therapies (PD and home hemodialysis) through extended exposure to large cohorts of patients, clinical circumstances and provincial/ local administrative activities
- To develop expertise in home dialysis program management and evaluation at the provincial and local level, including contract and vendor management issues
- To gain understanding of provincial and local program development, implementation, and resource allocation, issues in home based therapies
- To gain exposure to adult home dialysis programs, and integration of these into general nephrology care. If desired, exposure to paediatrics home dialysis programs can be arranged.
- To gain understanding of home dialysis vendor contract and issues management
- To gain skills in leading quality improvement initiatives and research projects, with the aim to publish findings
- To understand the workings of provincial programs and accountabilities within a larger provincial program

## Details :

- The fellowship will result in a certificate of completion of training.
- Holiday and conference leave (4 weeks, and 5 working days respectively) should be communicated to the supervisor for incorporation into the scheduling, and to the Chief Nephrology Resident for on call rota.
- The following pages describe key elements of the program, schedules and expectations

## Key elements of the Home Dialysis Fellowship:

### *Coursework/ learning objectives:*

- In depth knowledge of HD machine and dialyzer characteristics, using robust unbiased methodology
  - Compare and contrast HD machines
  - Compare and contrast dialysis membrane characteristics
- Vascular access expertise (assessment and insertion)
  - Evaluation of current literature as regards home therapies
- In depth knowledge of PD techniques and issues related to clearance/ measurement of treatment adequacy
- In depth knowledge of PD cyclers
- Familiarity with and increasing experience in PD tube insertion
- Administrative structure and funding of home therapies ( PD and HD)
- Review of guidelines for HHD and PD clinical practice and program development
- Gain experience in presentation of results formally and informally for the purposes of teaching, administrative meetings and other public forums such as provincial and international conferences
- Gain experience in review of analytic outputs and analytic methods of administrative and patient level data
- Gain experience working clinically and administratively with interdisciplinary teams.
- In depth understanding of the key components of the BC Renal structure and function

### *Clinical exposure (based upon assigned site of training):*

- All HHD clinics and PD clinics
- Involvement with other provincial health authority programs to observe different care approaches and system differences in different programs.
- 2<sup>nd</sup> on call for general nephrology and transplantation (maximum of 1 weekend per month and additional weekday call not to exceed 1 night per month, averaged over the 12 month experience.
- Assignment to the Consult service x 2 months to maintain general nephrology skill set.

### *Educational requirements:*

- Attendance at all teaching rounds re: home therapies
- Attendance all academic rounds of the Division of Nephrology
- Preparation to provide in-services/ teaching rounds for the nursing staff and allied Healthcare providers
- Attendance and contribution at BC Renal Home Hemodialysis and PD committee meetings
- Development and review of core protocols/ review of teaching materials for fellows
- Attendance at BC Kidney Days
- Attendance at BC Consensus meetings
- Attendance at the Annual Home Dialysis Conference.

### ***Project development/ Administrative exposure***

- Working within the Home Therapies Research Group, to develop a project(s)(guideline review/ CQI/ outcome evaluation) to be conducted over the course of the fellowship with completion after the 12-month program if needed; in collaboration with the needs of the provincial home therapies committee strategic goals and workplan.
- Review of provincial program outcomes with provincial directors (HHD and PD) to determine and establish next steps
- Review of existing guidelines and updating as necessary
- Attendance at all provincial and regional PD and HHD committee and vendor business meetings.
- Presentation to UBC Division of Nephrology (via the Province-wide round structure) re: current state of home therapies locally (at least once during the 12 month program)

### ***Logistics***

A schedule of activities and expectations will be developed on a monthly rotational basis to ensure cohesive and well rounded exposures to all aspects of home based therapy. Graded responsibility for all aspects of care will be developed, so that a 'senior registrar/ junior staff' type of position is developed for the program.

The schedule will be circulated to the UBC Division of Nephrology members so as to ensure clarity as to obligations/ needs and expectations

The individual and the program will be evaluated every 2 months, in a formal review to

- 1) Identify progress
- 2) Identify additional learning needs/ wants
- 3) Identify problems or issues with implementation of program

<b>Specific Learning Objectives:</b>
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### **Peritoneal Dialysis: Learning Objectives**

#### **A. Medical Expert**

1. To enhance knowledge base in regards to various PD modalities
2. To understand the techniques of peritoneal dialysis including exposure to the BC Model of Assisted Peritoneal Dialysis Program.
3. To be the local and provincial resource person regarding PD modalities

#### **B. Communicator and Collaborator**

4. To gain clinical experience in working with a multidisciplinary team in the PD program
5. To gain expertise as a physician leader in a multidisciplinary team setting
6. To evaluate and assess patients at all stages of peritoneal dialysis training (from initial assessment to training to chronic management)

### **C. Manager and Health Advocate**

7. To gain experience in dealing with routine PD clinical issues
  - a. Access placement and management
  - b. Infectious complications
  - c. Mechanical complications
  - d. Evaluation of PD Adequacy and prescription modeling
  - e. Nutritional assessment
  - f. Transitions to Hemodialysis, with a focus on home hemodialysis where appropriate
8. To participate in the review, updating and creation of new Policies and Procedures relating to PD
9. To develop experience and understanding of administrative principles needed to manage a Peritoneal Dialysis program through attendance to PD program management meetings at the local, regional and provincial level.
10. To promote the utilization of PD where appropriate, both clinically and in health policy
11. To evaluate strategies for the promotion of PD and develop a process for implementation
12. To evaluate and revise current clinical practice at the local and provincial level to improve delivery of PD based on local and international standards.

### **D. Scholar - resident will develop a plan for (self-improvement) academic activities, and scholarly work**

13. The Home Dialysis trainee will be expected to participate in a clinical research or Quality Improvement project relevant to independent hemodialysis
14. To present to Subspecialty Residents in Nephrology Trainees during Academic Half Day on PD related topics
15. To present at a Regional and Provincial Level on Home Dialysis related topics (ie, review of a topic area; presentation of new protocols; presentation of original research)
16. Attendance at major Home Dialysis Conference (PD University, Home Dialysis Meeting (Annual))
17. Will participate in multidisciplinary team education—ongoing support for home dialysis nurses, dieticians, pharmacists and social workers.

### **E. Professional - carries out duties in a professional manner**

18. Exposure to current guidelines and clinical practice (clinical rounds, journal clubs etc)
19. Involvement at all formal PD clinic activities (ie, PD Outpatient Clinics, New Patient assessments, PD Catheter placement, Laboratory / Interdisciplinary Rounds)

## Home Hemodialysis: Learning Objectives

### **A. Medical Expert**

1. To gain experience with home hemodialysis clinical practice, including expertise in management of novel and intensive hemodialysis modalities
2. To gain experience with a "2-machine model" and to develop a systemic approach for patient/equipment selection.
3. To understand the technical aspects of hemodialysis, water treatment, access care relevant to home therapies.
4. To be the local and provincial resource person for all aspects of independent hemodialysis

### **B. Communicator and Collaborator**

5. To gain clinical experience in working with multidisciplinary team in home hemo unit
6. To gain expertise as a physician leader in a multidisciplinary team setting
7. To evaluate and assess patients at all stages of independent hemodialysis training (from initial assessment to training to chronic management)

### **C. Manager and Health Advocate**

8. To gain experience in dealing with routine home hemodialysis issues
  - a. Access monitoring and management
  - b. Infectious complications
  - c. Routine equipment 'Trouble-shooting'
  - d. Evaluation of Adequacy, particularly with respect to intensive therapies
  - e. Nutritional assessment and management, particularly with respect to intensive therapies
9. To offer an opportunity for the Home Dialysis trainee to participate in the review, updating and creation of new Policies and Procedures relating to independent hemodialysis
10. Regular attendance at Independent Hemodialysis Administrative meetings at the Hospital, Regional and Provincial Level to develop experience and understanding of administrative principles needed to manage a home dialysis program.

### **D. Scholar - resident will develop a plan for Academic activities and scholarly work**

11. The Home Dialysis trainee will be expected to participate in a clinical research or Quality Improvement project relevant to independent hemodialysis
12. To have the occasion to present to Subspecialty Residents in Nephrology Trainees during Academic Half Day on Independent HD related subjects
13. To present at a Regional and Provincial level on Independent HD related topics (ie, review of a topic area; presentation of new protocols; presentation of original research)
14. Attendance a major Home Dialysis Conferences (ie, PD University; Home Dialysis Meeting)

### **E. Professional - carries out duties in a professional manner**

15. Exposure to current guidelines and clinical practice (clinical rounds, journal clubs)
16. Involvement at all formal Independent HD activities (ie, Outpatient follow up clinics; new patient evaluation clinics, telehealth clinics, Vascular Access Clinic attendance; Laboratory / Interdisciplinary Rounds)

### Other Activities:

1. Training on PROMIS (provincial renal registry and clinical information system) and participation as appropriate in PROMIS development work related to home dialysis care
2. Introduction to the BC Renal methodology and analytic team for understanding processes, systems and data interpretation.
3. Monthly evaluation of activities:
  - a. Clinical activities
  - b. Meeting of learning objective milestones
  - c. Review of CQI and/or Clinical Protocol work
4. Q 3 monthly Academic / Research Committee meeting (minimum frequency)
  - d. Home Dialysis Trainees
  - e. Supervising physicians (Copland, Singh, Jamal)
  - f. Statisticians as needed
  - g. Objectives:
    - i. Review of recent literature on Independent HD and PD (Trainee's responsibility)
    - ii. Review of research activities (with statistician support in attendance)