An Overview of an 8-Year-Old Provincially Coordinated Independent Hemodialysis Program in BC

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Introduction: The province of British Columbia has the only coordinated provincial program for independent hemodialysis (IHD) in Canada. Established in 2004, the program has been actively involved in enhancing and fostering excellence in the delivery of IHD throughout BC. Initially focused on home-based IHD, it has now expanded to providing various locations for IHD. The purpose of this analysis is to describe the growth experience of this provincial program over 8 years, and to identify trends and the potential implications for further program growth.

Methods: Observational cohort study of all patients who commenced IHD including training between 2004 and 2011, using data obtained from the provincial centralized patient registry known as Patient Records, Outcome & Management Information System (PROMIS). Outcomes of interest include technique survival, patient survival, and annual program growth.

Results: Between 2004 and 2011, 390 pts received IHD training of which 364 (93%) pts actually started IHD. Figure 1 demonstrates a fast IHD growth in the first 4 years but on a gradual decline in the last 3 years settling at 5% prevalent rate. The IHD technique survival at 1yr is 80% and median survival time is 33 months (Figure 2). Figures 3 and 4 depict the annual in-take rate and attrition rate, respectively; the in-take is declining over time after the peak at 2nd year, while the attrition rate is gradually increasing over time. Transplantation, deceased and medical reasons (e.g. hospitalization, inadequate dialysis, dialysis complications) are the top 3 attrition reasons, with an average annual rates of 4.6%, 4.0% and 3.6%, respectively. The potential barriers for expansion identified are: 1) high turn-over rate on supporting staff like trainers, 2) lack of pt education during pre-dialysis, and 3) lack of respite-care and home support.

Conclusion: Despite provincial funding and support of IHD growth appears to have plateaued in BC. Systematic evaluation of causes and development of strategies to a) look at barriers to the uptake of new patients, and b) look at ways to minimize attrition of existing patients within a provincial framework is important to ensure sustainability of this modality.

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Figure 1: Prevalent Rate of IHD Over Time

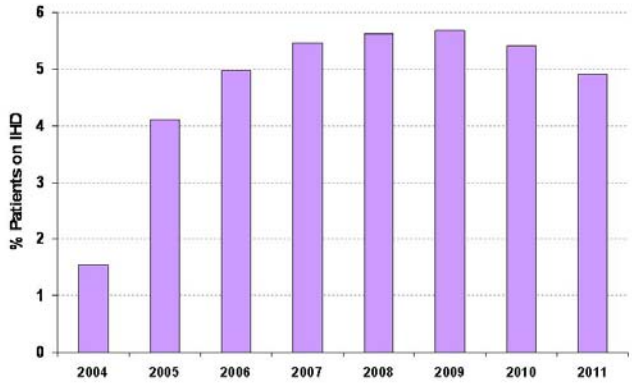

Figure 2: IHD Technique Survival Curve

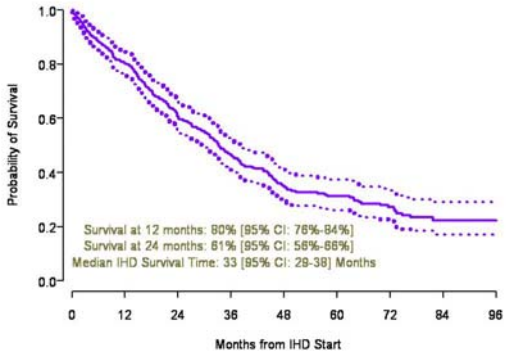

Figure 3: IHD In-Take Rate Over Time

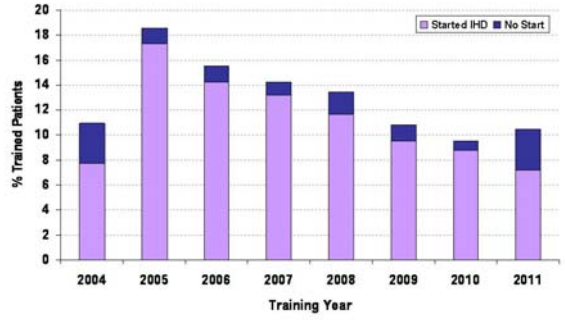

Figure 4: IHD Attrition Reasons by Attrition Year