

## **PERITONEAL DIALYSIS UTILIZATION ACROSS CANADA: CANADIAN KIDNEY KNOWLEDGE TRANSLATION AND GENERATION NETWORK (CANN-NET)**

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**INTRODUCTION:** Peritoneal dialysis (PD) has comparable mortality and is cost effective compared to in-center hemodialysis. The purpose of this study is to determine the use of PD across geographic regions in Canada.

**METHODS:** Data on 35,488 incident dialysis patients (25.1% PD), 63 dialysis facilities and 12 geographic regions from the Canadian Organ Replacement Registry (CORR) between January 2001 and December 2009 were included in the final analysis. Peritoneal dialysis use was defined as PD within 90 days of dialysis initiation. Multilevel models were used to evaluate the variation in dialysis modality by patient-, facility- and geographic-level. Logistic regression was used to determine the odds ratio of PD use by geographic region after adjustment for case mix and facility-characteristics. In a sensitivity analysis, all patients on peritoneal dialysis were examined.

**RESULTS:** PD utilization varied considerably across geographic regions with a low in eastern Ontario (19.8%) to a high in Toronto (36.1%) and declined over time from 28.8% in 2001 to 22.5% in 2010. After adjustment for case-mix and facility-level quality indicators, 87.3, 9.3 and 3.4% of the variability was attributable to patient, facility and geography. Pre-dialysis care and residing further from a dialysis facility were associated with an increase in PD whereas serious illness, Aboriginal status and a history of pulmonary edema were associated with less PD. The case-mix adjusted odds of PD use across Canada are presented in Figure 1. Results were similar in our sensitivity analysis including all PD patients.

**CONCLUSION:** Among case-mix adjusted patients there is considerably variability in PD utilization in Canada. Standardization of criteria for PD initiation and implementation of best practices from high PD use regions may improve PD utilization.