

# Management of Diabetes Patients on Peritoneal Dialysis

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## Background

- Patients on Peritoneal Dialysis (PD) who are living with diabetes, experience glucose variances that are related to the glucose content in the PD dialysate.
- At the Kelowna General Hospital (KGH), the PD clinicians and the diabetes education clinicians are not trained to manage this patient population independently within their respective specialties.

## Objectives

- To implement and evaluate the management of patients living with diabetes on PD, using a patient- family centered approach. The services of the Renal Nurse Practitioner, who is a certified diabetes educator, was utilized.
- To support optimization in the patient's A1C and/or stabilization of patient's blood sugars within a safe range.
- To enhance collaboration and delivery of patient care between physicians, family, patients, and other members of the healthcare team as it relates to the patient's diabetes management.

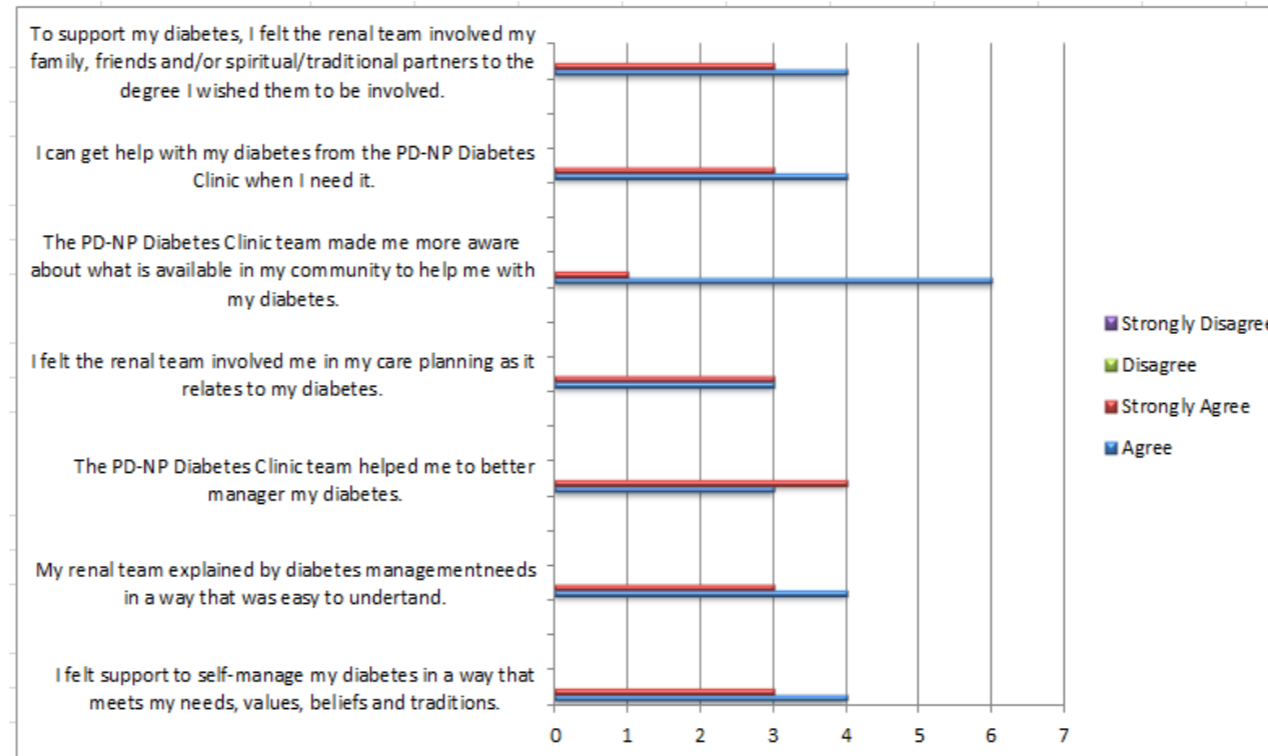
## Methods

**Inclusion:** Diabetic PD patients (Type 1 and Type 2) followed by the KGH PD Clinic. New and existing PD patients were seen during training and routine clinic visits.

**Data Collection:** Multiple evaluation methods were used, including Patient Experience Surveys ( 2 phases), Staff Experience Survey, Nurse Practitioner Encounters, Diabetes Distress Score and Hemoglobin A1C Targets.



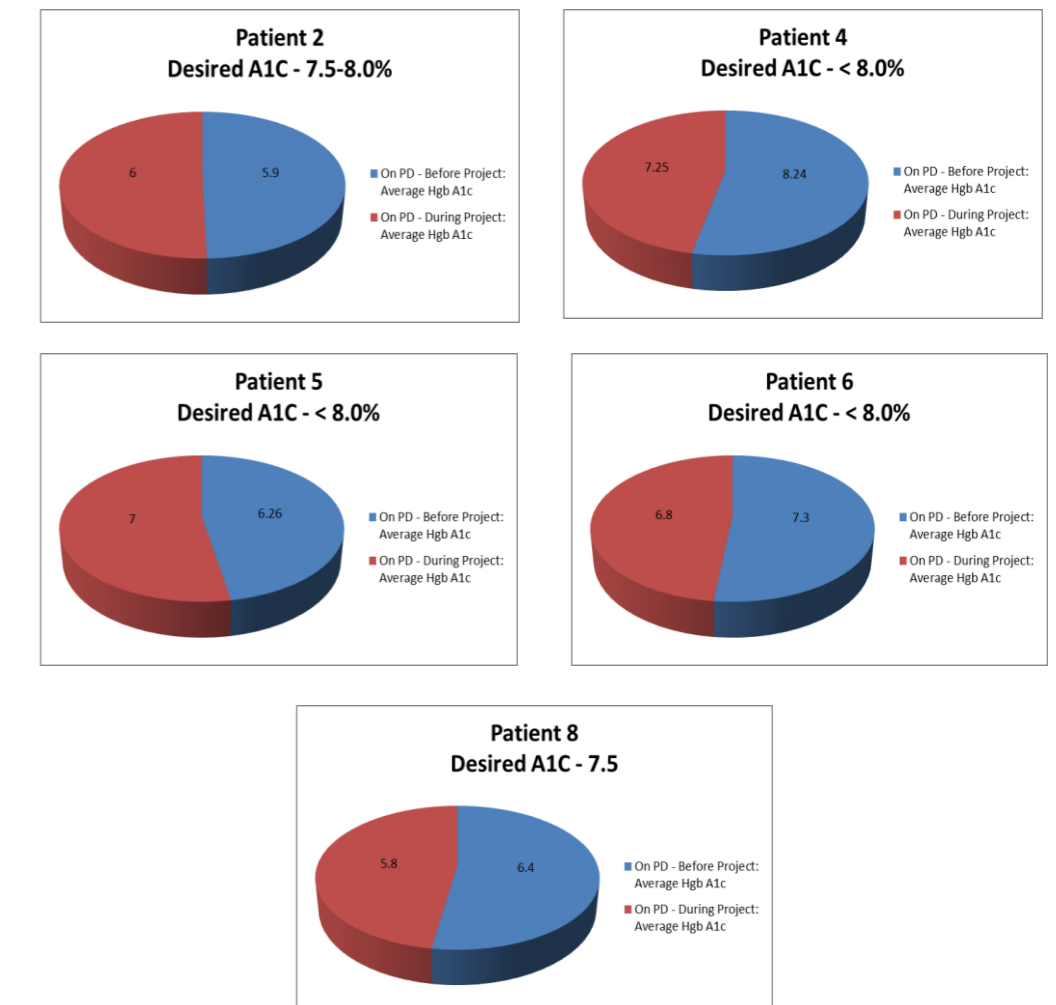
## Results



- Frequent hypoglycemic events and high insulin dosages were noted with patients pre NP diabetes management.
- An 'on target' A1C may not be an accurate predictor of adequate diabetes management due to significant hypoglycemic and hyperglycemic events.
- Specialized body of knowledge from NP for diabetes and PD allowed for targeted patient assessment and education as well as mentorship for PD clinicians.

## Conclusions

- Interviewed patients and staff felt this pilot project has offered benefits. A longer term project is needed to observe quantitative benefits.
- Hypoglycemic events in the PD population appear to be a result of inappropriate insulin dosing in the setting of diabetes burnout and lowered eGFR.
- Patient Education is timely and unique to the patient diabetes and dialysis needs.
- Diabetes management at the PD clinic with the multidisciplinary team is timely and prevents further patient appointments.



## Survey Comments

"...it didn't feel like there was anybody who was taking any care to it, so [...] it was a welcome relief to know that they were considering it and they were doing something about it" (Patient)

"...it's a great resource on the team, it's a great resource for our patients, [...] we who are experts in the renal world may not have that expertise in diabetes so to have those two together is really an invaluable resource for the patient and the rest of the team" (Staff Member)

"So MANY phone calls with adjustment to food, medications, activity, but particularly with adjustment to insulin";

"I had a number of patients that needed huge titration down of insulin which prevented possible hospitalization" (NP Diabetes Educator)