



Fraser South Interim Peritoneal Dialysis Program

Disclosures

- None

Live Polling

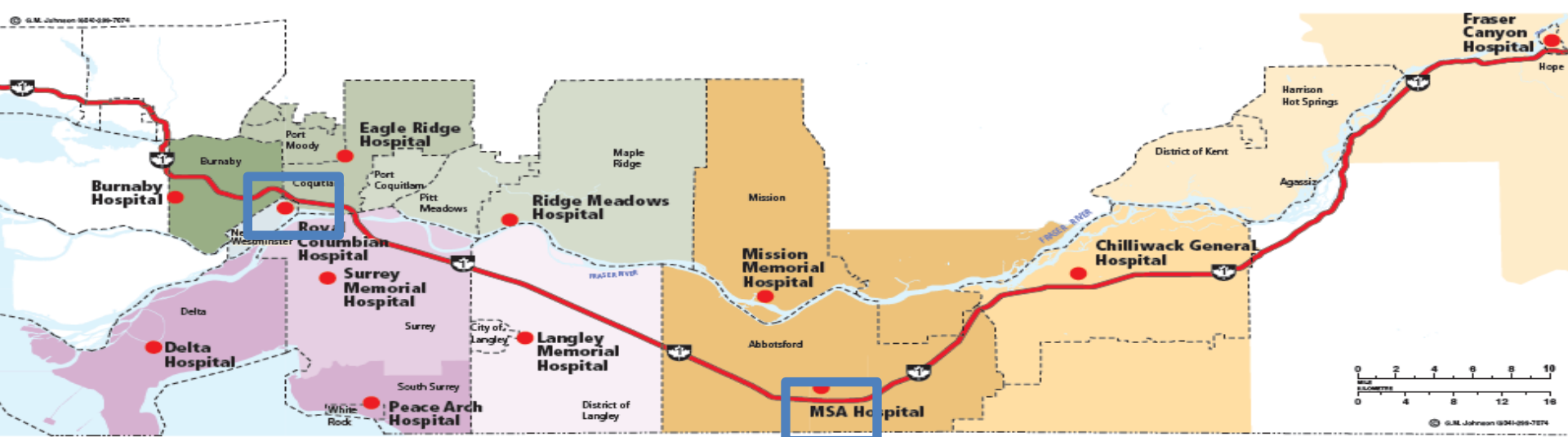
Peritoneal Dialysis (PD) and Hemodialysis (HD) offer comparable clinical outcomes. However, PD has a cost advantage over HD.

How much cheaper approx. is PD compared to HD (dollars per patient per year)?

- A. Under \$20,000
- B. \$20,000 - \$40,000 ←
- C. \$40,000 - \$60,000
- D. \$60,000 - \$80,000
- E. Over \$80,000

Background

- PD “favoured” approach
- However, majority of incident ESRD are started on HD (75%) vs PD (25%)



- **Fraser Health South: 738,107 people (45%)**
- Fraser Health North: 623,357 people (38 %)
- Fraser Health East 288,598 people (17%)

Fraser South PD uptake lowest in FHA

- Percentage of patients choosing PD and start on PD from KCC
 - 46% Fraser South
 - 73% Fraser North and East

Barriers to PD in Fraser South

PD orientation and catheter insertions only at RCH in Fraser North

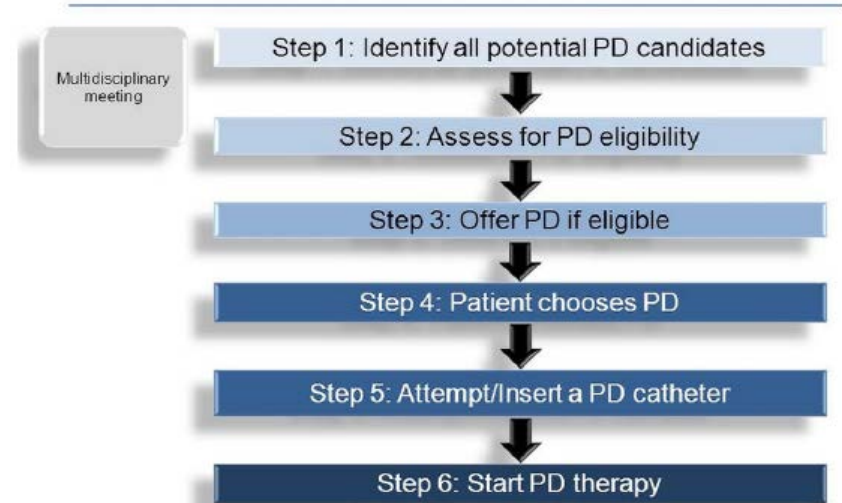
Does this pose a geographical/logistical barrier for Fraser South patients?

An interim Fraser South PD unit opened in Surrey Memorial Hospital on August 30, 2016 with the intent of increasing PD uptake in Fraser South

PD uptake optimization

- Identifying all potential PD candidates from pre-dialysis clinic and prevalent HD patients
- Offering PD to all eligible PD candidates
- Streamlining PD orientation process
- Urgent PD Program
 - Nephrologists committing to insertion of PD catheter on short notice (<48hrs)

The six steps to optimize incident PD

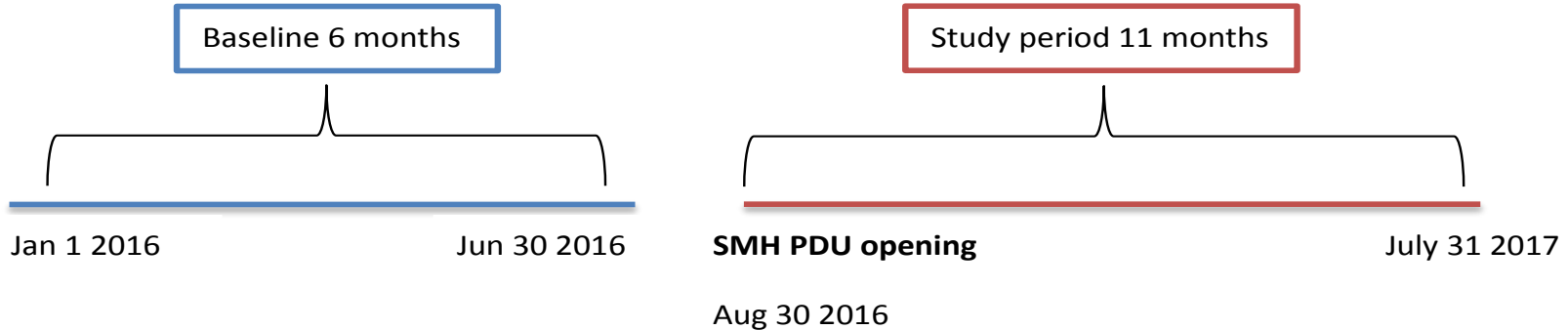


We conducted a QI study to evaluate the interim
SM PDU

- PD incidence rate
- Safety/quality
- Patient satisfaction

Inform decision makers in FHA on whether to invest
in a fully functional SMH PD unit

Methods



- Primary objective was to examine if a Surrey-based PD unit increased PD incidence rate amongst patients from Fraser South communities.
- Secondary outcomes included peritonitis, PD catheter malfunction, and PD technique survival.
- Patient satisfaction surveys were developed using validated survey questions for dialysis patients and distributed.

Results

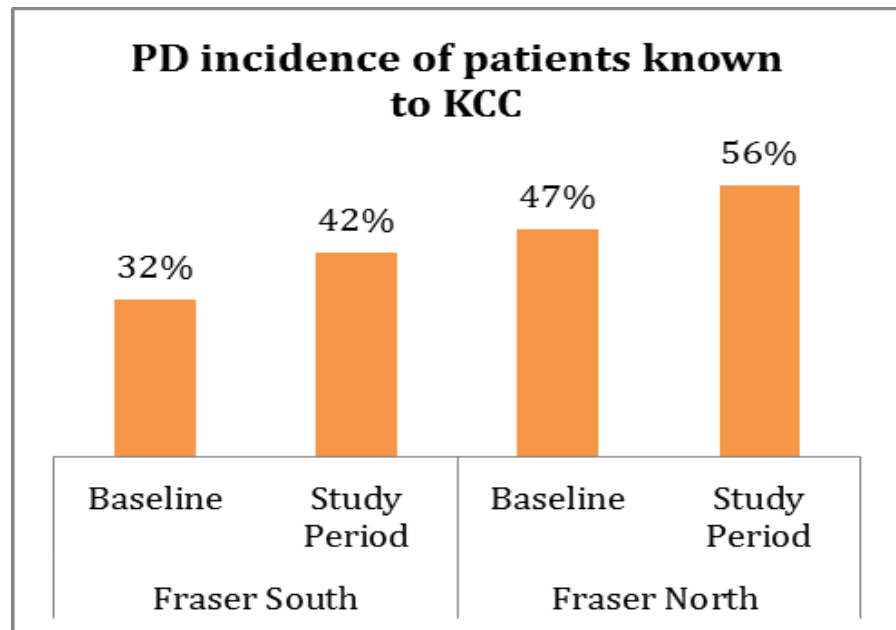
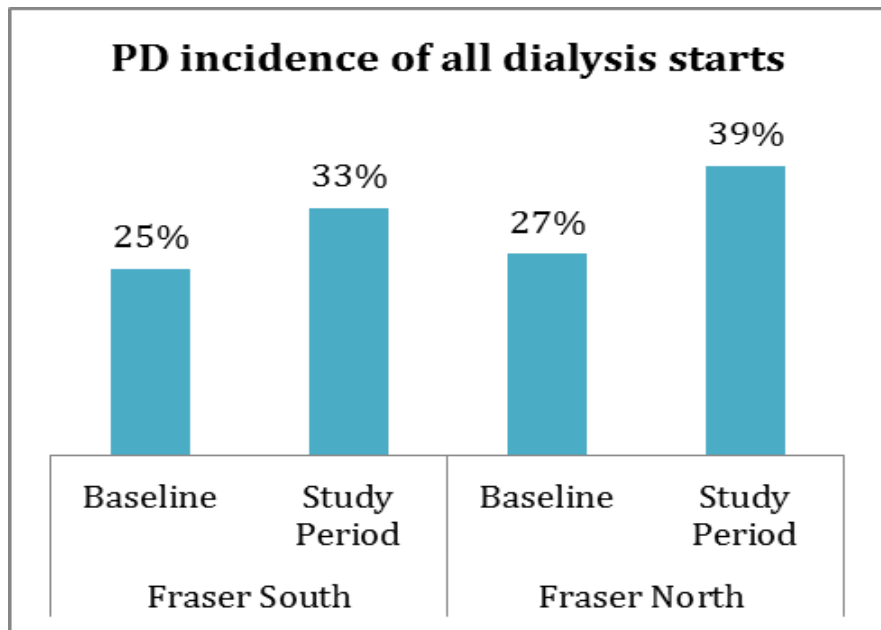
		Baseline (6-mo.)	Study Period (11-mo.)
Fraser South	# of PD catheter insertions	22	50
	Total HD starts	66	101
	HD starts known to KCC	46	69
	# KCC patients who chose PD but started HD	7	11
Fraser North	# of PD catheter insertions	24	71
	Total HD starts	65	112
	HD starts known to KCC	27	56
	# KCC patients who chose PD but started HD	3	15

Demographics

Mean Age: 61

eGFR at PD catheter insertion: 9.6 cc/min per 1.73 m²

Results

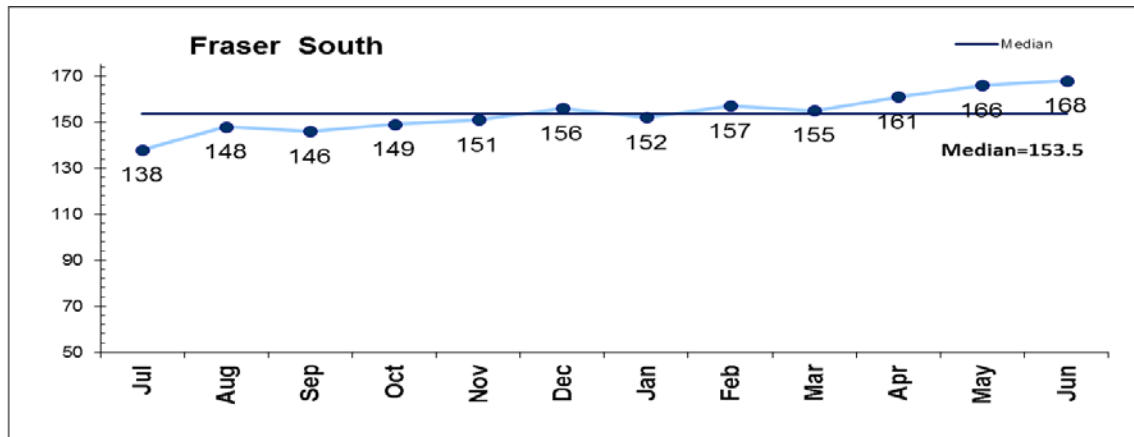
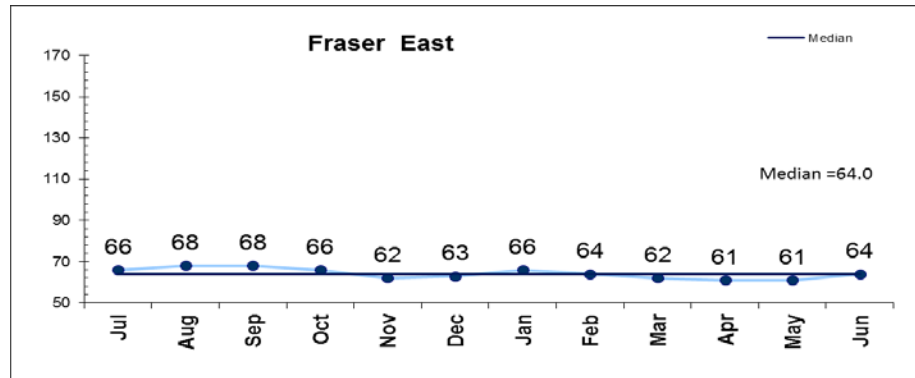
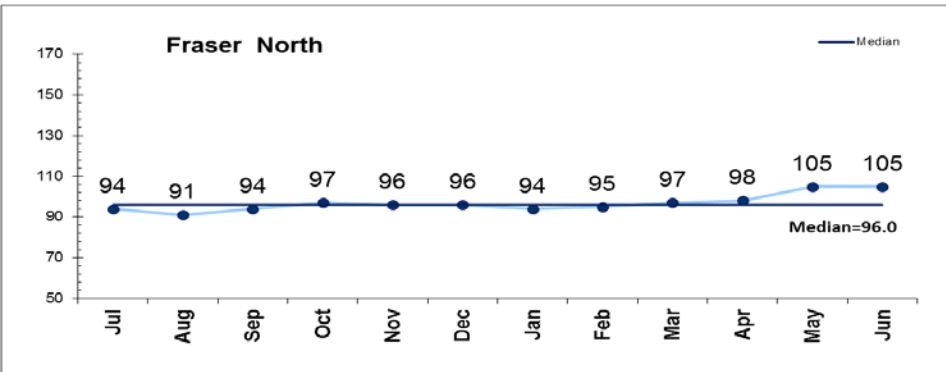


FH PD Patients by Residential Regions

(data point=total Pts at period end)

Source: Draft PD In & Out report (by residential regions)

L. Er, BC Renal Agency



Secondary Objectives	Outcome Measures
Urgent PD starts	<ul style="list-style-type: none"> ● SMH PDU: 17 patients (24%) were urgent PD starts requiring IPD. ● A majority of urgent starts, 14, were known to KCC.
Bedside PD catheter primary malfunction and leaks	<ul style="list-style-type: none"> ● 7 (14%) catheter insertions had primary malfunction. <ul style="list-style-type: none"> ○ 2 were pre-peritoneal insertions. ○ 2 required second attempt and was successful. ○ 3 catheters had inadequate drainage. <ul style="list-style-type: none"> ▪ 2 were successfully manipulated by radiology ▪ 1 is referred to surgical revision. ● 1 patient had a peri-catheter leak managed conservatively ● 1 patient had a pleural leak after training
Peritonitis rate	<ul style="list-style-type: none"> ● 3 peritonitis episodes. ● The peritonitis rate was 0.16 episodes per patient year (6678 PD days at risk and 3 peritonitis episodes).

Successful PD starts

- 6 patients (12%) received a catheter but did not start PD
 - 4 patients the training itself fails because the patient or family member is found to be unable or unwilling to learn the required procedures in a safe manner at training
 - 1 patient refused to have another PD catheter re-insertion attempt and chose HD instead
 - 1 patient received a catheter for palliative purposes but died shortly after

Patient Satisfaction Survey

- 18 out of 43 surveys were returned (43%)
- Patients answered mean score of 4.5 out of 5 for quality dimensions
- “Does having the PD clinic closer to your home matter when you were deciding between doing PD versus HD?”
 - 15 out of 18 (83%) respondents answered YES
- “How important was having a PD unit located in Surrey in your decision to pursue PD?”
 - 14 out of 18 (78%) respondents answered a 4 or 5

So far...

- Early data are encouraging for a 10% increase in PD incidence rates amongst new ESRD patients from KCC
- Patients state they are satisfied with the dialysis care they received and many found it important to have PD services closer to home
- Low peritonitis rate compared to other PD centers
- PD catheter success rate and PD technique survival are comparable to that reported in literature
- Limited resources:
 - Staffing: 2 RNs (1 RN for first 6 months).
 - Space: SMH HD procedure room + family room (2 beds) + hallway in HDU

Recommendations

1. Investing in a fully staffed on-site SMH PDU
2. Timely PD initiation
 - Majority of urgent PD starts (14/17) were from KCC
 - Urgent PD is labour intensive, should be avoided
 - eGFR 10 for PD catheter insertions
 - ? Graduated PD
3. Improve the assessment of patients'/caregivers' ability to perform PD
4. Continuous quality improvement

Acknowledgements

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