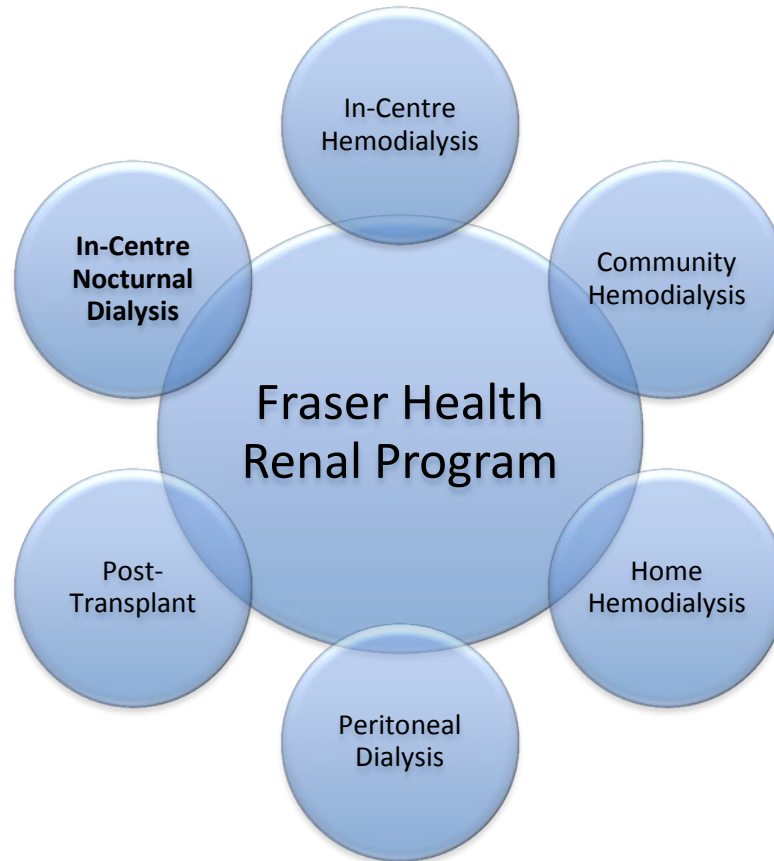


# Fraser Health Nocturnal In-Centre Hemodialysis Program

*Speaker: Dr. Robin Cho*



# Fraser Health Nocturnal HD



# Dialysis Prescription

- 7 hours per run, 3 times a week
- $Q_b$ : 250 mL/min
- $Q_d$ : 300 mL/min
- Dialysate parameters
  - Temp: 37°C
  - Na: 137 mmol/L
  - $\text{HCO}_3$ : 35 mmol/L
  - Ca: 1.5 mmol/L
  - K: Individualized, then K algorithm
- Heparin: Individualized

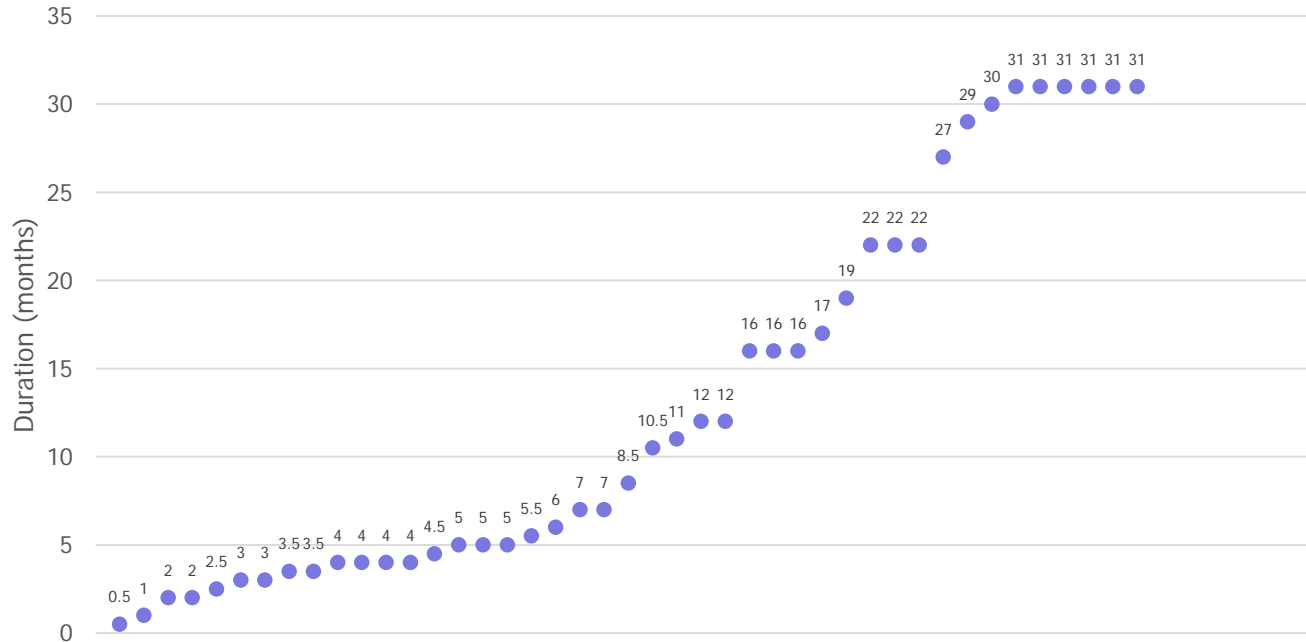
# Patient Numbers

	SMH	RCH	ARH	Total
# of pts currently* on NHD	26	7	10	43
# of pts who have ever been on NHD	53	36	12	101

\* As of February 5, 2016

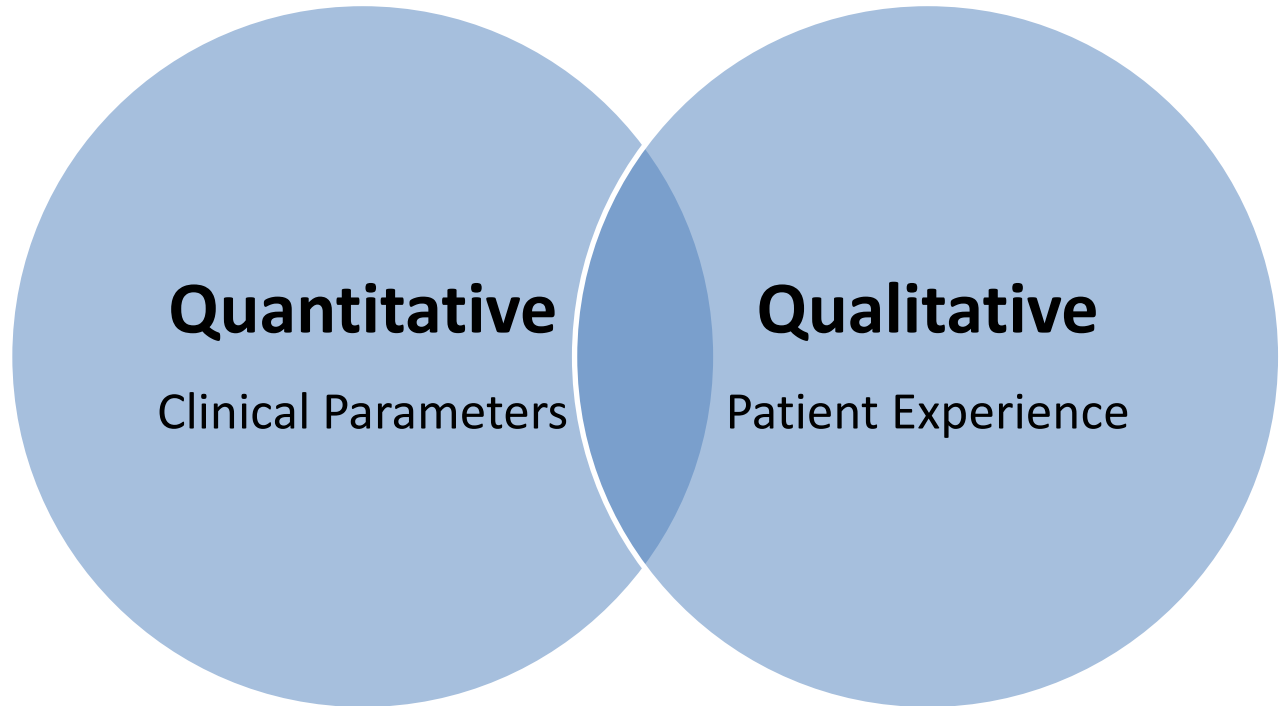
# Active NHD Patients

## Duration on NHD (n=43)



\* As of February 5, 2016

# Evaluation



# Quantitative Analysis

Domain	Variables
Electrolyte balance	K
Dialysis adequacy	URR
Fluid & blood pressure	GW Pre-dialysis SBP/DBP Post-dialysis SBP/DBP # of different BP medications
Anemia	Hb Ferritin Tsat ESA usage
BMD	PO4 PTH Phosphate binder usage Vitamin D analogue usage



	3 months	6 months	12 months
K	↑	↔ (trend ↑)	↔ (trend ↑)
<b>URR</b>	↑	↑	↑
GW	↓	↔ (trend ↓)	↔ (trend ↓)
Pre-dialysis SBP/DBP	↔	↔	↔
Post-dialysis SBP/DBP	↔ (trend ↓)	↔ (trend ↓)	↔ (trend ↓)
# of BP meds	↔	↔	↔
<b>Hb</b>	↑	↑	↔ (trend ↑)
<b># of pts within target Hb</b>	↑	↔	↑
<b>Darbepoetin dose</b>	↔	↓	↔ (trend ↓)
Epoetin dose	↔	↔	↔
<b>Phosphate</b>	↓	↔ (trend ↓)	↔
iPTH	↓	↓	↓
<b>Phosphate binder pill burden</b>	↓	↓	↓

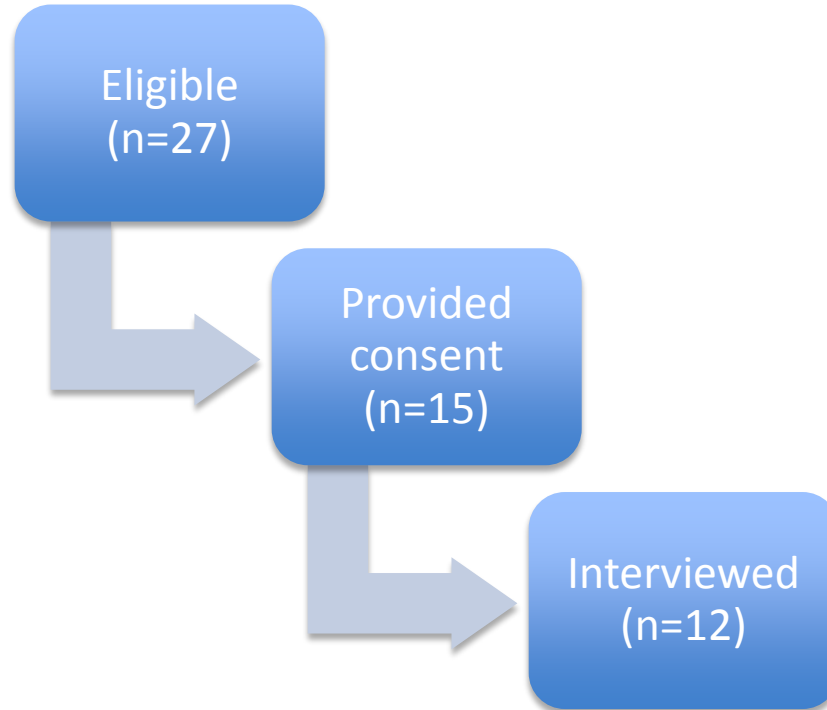
# Patient Experience Interviews



# Methods

- Semi-structured interview guide
- Inclusion: Patients on NHD for  $\geq 3$  months
- Intention to interview up to 20 pts
- Interviews conducted February-May 2016

# Patients



# Patients

Total Number		12
Gender	Male	9
	Female	3
Age (years)		29-81
Dialysis Vintage (years)		1-16

# Discussion Themes

- Life with dialysis
- Nocturnal HD experience
- Quality of life
- Perception of health
- Communication
- Patients' suggestions for improvement
- Anything else the patient wanted to bring up



# Life with Dialysis

- Positive overall
  - Felt better than before starting dialysis
  - Weight, kidney function, lab values, energy & endurance
- 2 pts had not perceived changes in overall health
- 2 pts report weakness/dizziness since starting dialysis

# Nocturnal HD Experience

- 10 out of 12 pts expressed overall satisfaction
- Many describe NHD as “the best dialysis experience” they have had so far
- 2 pts report NHD has not been a positive experience
  - Perceived lack of medical attention
  - Lack of perceived benefits
  - Times & schedules





# Quality of Life

- Lives impacted positively
- “Having the whole day to do things”
- Able to do physically demanding tasks
- Able to eat freely again
- Feeling “normal”
- Feeling “younger”

# Quality of Life

- 2 pts reported no change in QoL
- Negative impacts:
  - Not able to sleep comfortably in hospital
  - Feeling tired the day after NHD
  - Feeling alone in the hospital




# Perception of Health

- Positive for most participants
- General sense of health improvement & well being
  - ↓ cramps
  - Improved BP control
  - ↓ medication
  - ↑ kidney function
  - ↑ strength/endurance
- Other patients report no change in health
- 2 pts report feeling worse vs daytime HD



# Communication

- 11 pts felt it was important to be in contact with dialysis team members
- Not possible to talk to MD, Rxdist, or RD during NHD
- In-person communication with RNs was main avenue of interaction
- Patients report *not* receiving conflicting information about NHD



# Participants' Suggestions

- Have doctors at night
- Extend the program
- Extend treatment hours/allow patients to stay longer in beds
- Give patients a day off to be with family
- Have private rooms
- Implement stricter requirements to be admitted in nocturnal program
- Improve/coordinate with HandiDART service schedules
- Have more nurses



# Summary & Conclusions

- Successful NHD program launch
- Quantitative evaluation suggests NHD equivalent or better in studied parameters
- Perceived positively by patients
- Patients favour NHD vs daytime HD



# Summary & Conclusions

- Absence of physicians at night seems to be one of the main downfalls for patients
- Spending nights at the hospital is challenging and can be difficult for patients, particularly in their early stages



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