

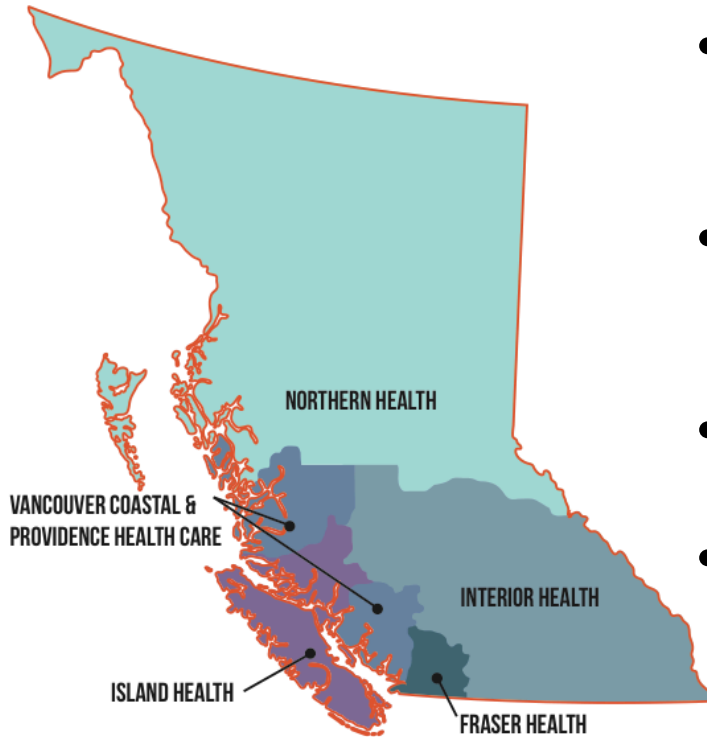
2016

Expansion of the Home Hemodialysis Program: Patient Selection for a 2-Machine Model

Disclosure

I have no financial relationships
or other conflicts of interest
to report.

Home Hemodialysis in B.C.



PROVINCIAL HEALTH SERVICES, BC CHILDREN'S RENAL PROGRAM

- Provincial Program (formerly known as IAMHD)
- BCPRA supports 11 training sites across the 5 health authorities
- Activity based funding model
- Provincial contracts for purchase of machines and supplies



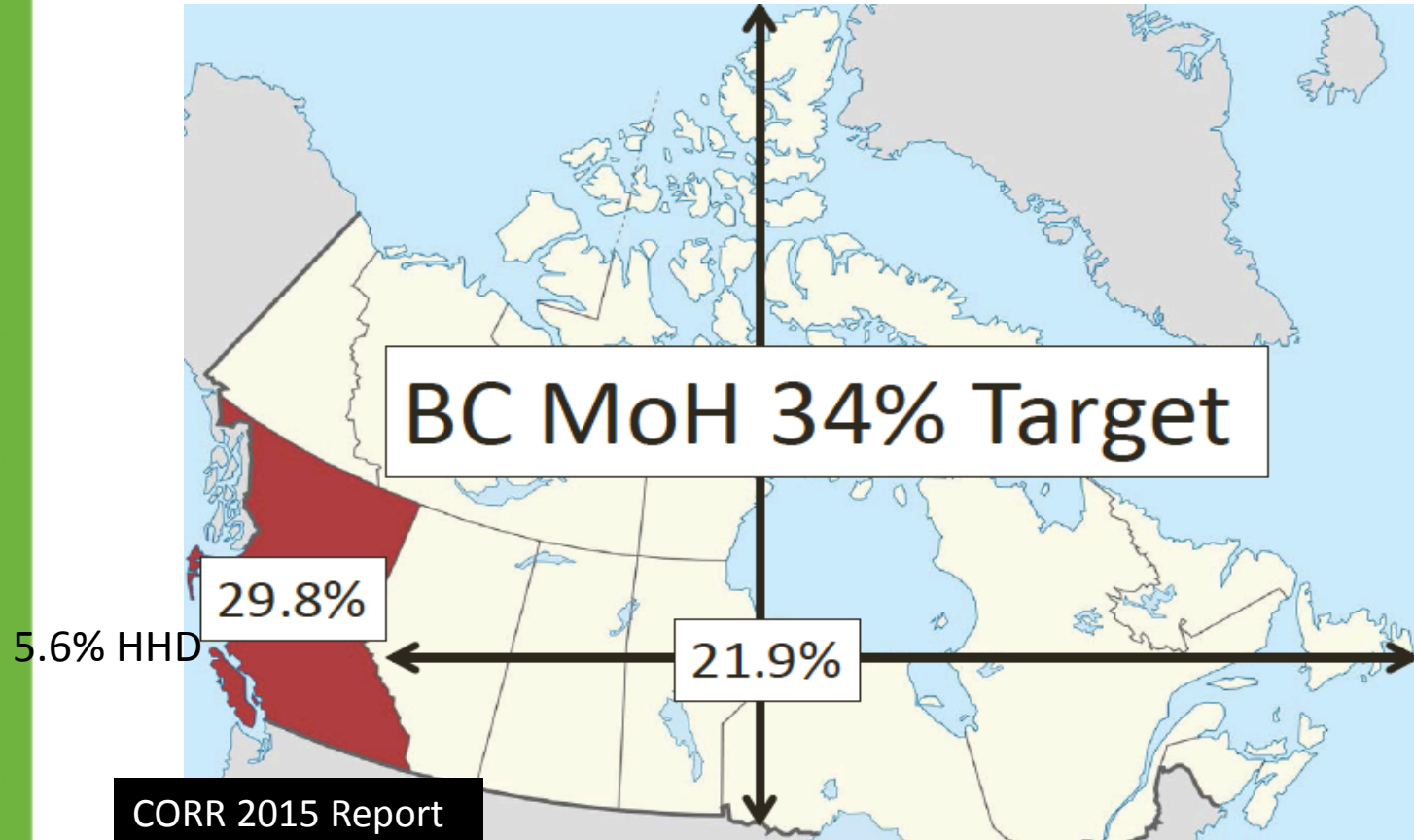


- Since the launch of the BC Home Hemodialysis (HHD) program in 2004, 500+ patients have been trained to manage their HHD treatments at home



- Baxter (formerly known as Gambro) was the initial machine used for HHD in the province

Highest in Canada



In late 2014, a pilot project evaluating the potential benefits of the NxStage™ hemodialysis system.



- Relatively new to the Canadian market
- Designed specifically for home use

Results of Pilot Project

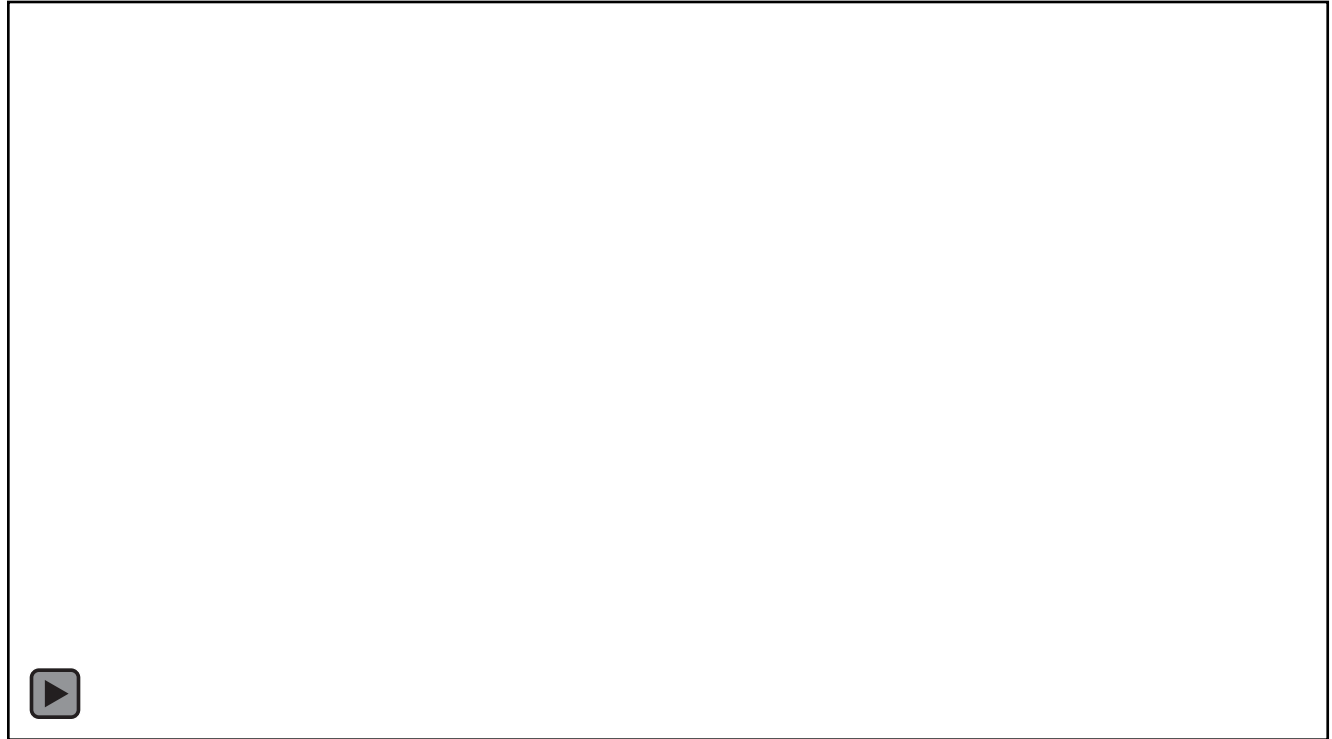
- **RESULTS-** NxStage machine could be used as a second machine option for patients in the the province
- **GOAL-** to reach patients that may have various limitations (physical, home, water etc.)

Two-machine model for HHD

- NB- NxStage is not intended to replace the current Baxter home hemodialysis machine
- **GOAL**-to increase the overall number of dialysis patients on HHD, bringing our HHD numbers to 10% (from the current level of 5.6%) within five years



Build a strong HHD program



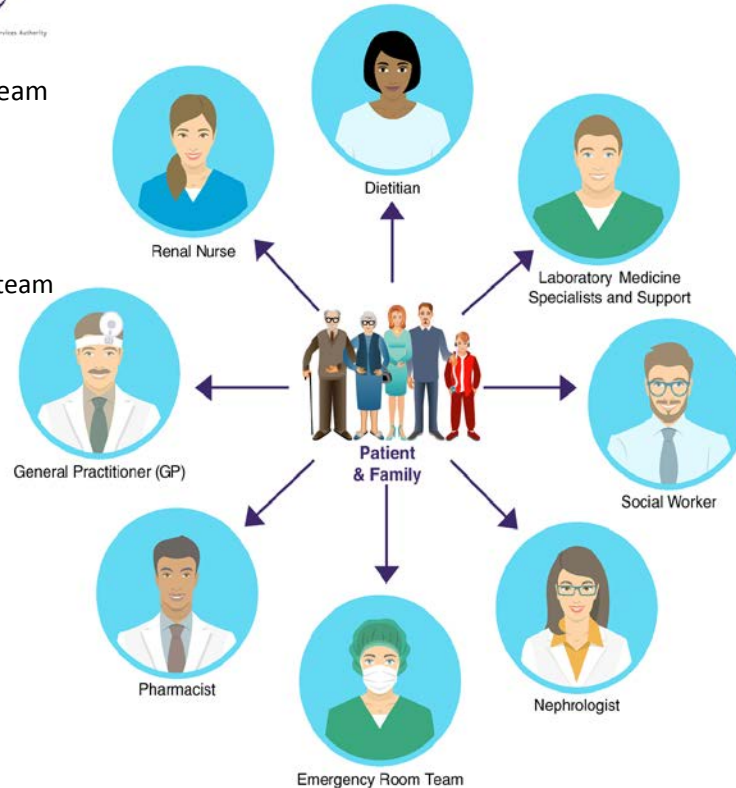
Our HHD team



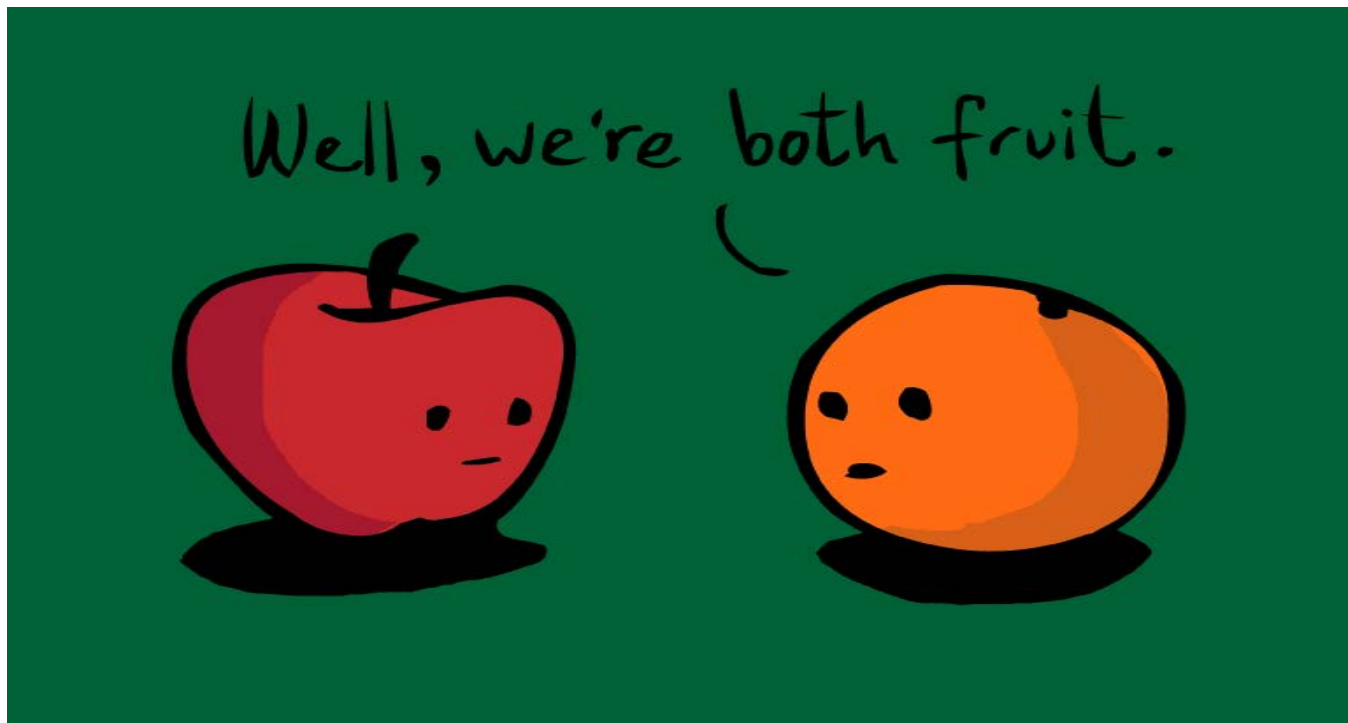
Partnership with team



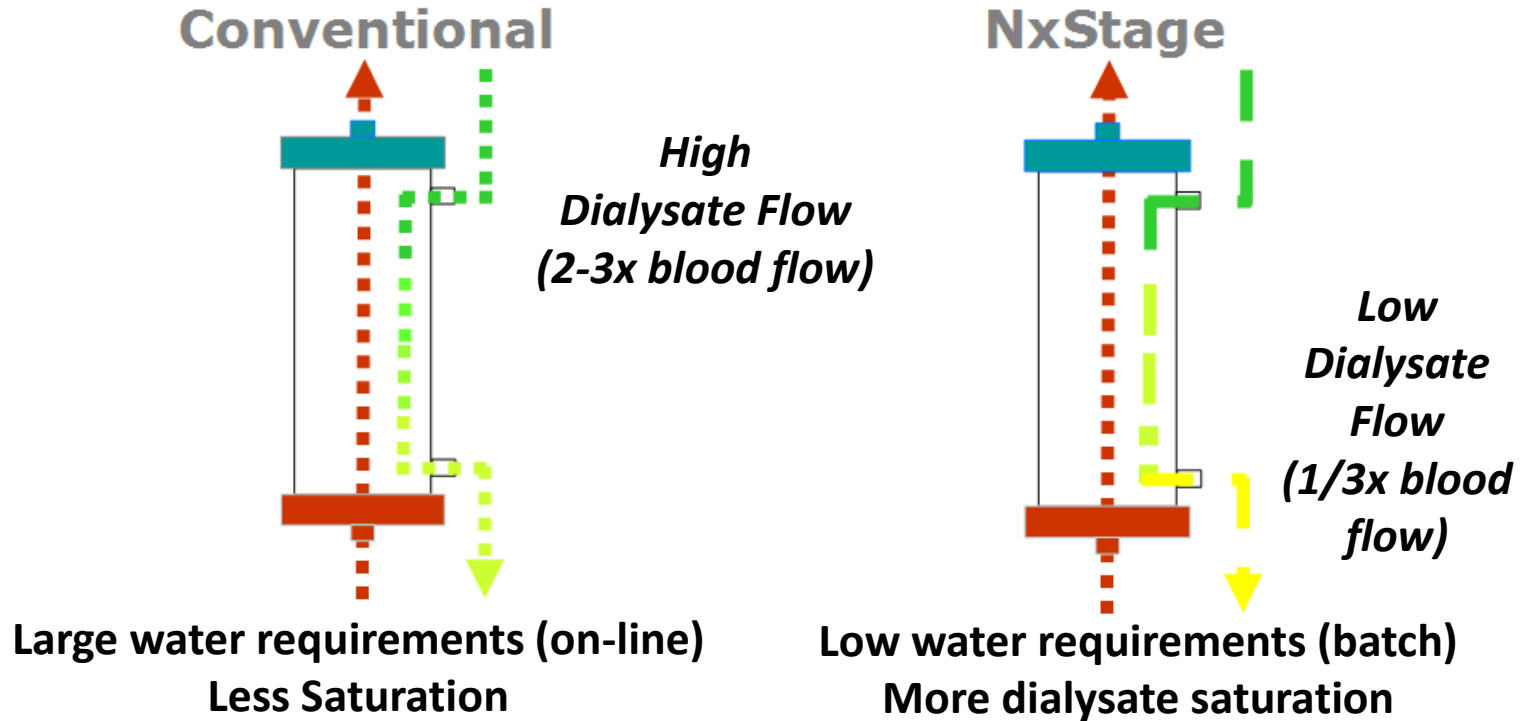
Partnership with team



What's different about the NxStage machine?



Another view of HD Therapy





Similarities to Peritoneal Dialysis

- Lactate based fluids
- Saturation of dialysate (dwell time)
- Dosing (prescribed clearance volume)
- Weekly Kt/V vs Daily
- Machine swap service

Swap Service



Similarities to Hemodialysis

- Blood flow rate dependent
- Monitor blood and fluid circuit pressures
- Any vascular access (graft, fistula, catheter)
- Anticoagulation



Renters- No renovations



- A standard electrical outlet and a simple faucet or under sink connection are all that are required to operate the NxStage System One and PureFlow SL

Low water usage



Uses 30-60L of water per treatment. Great for septic systems

Low water usage



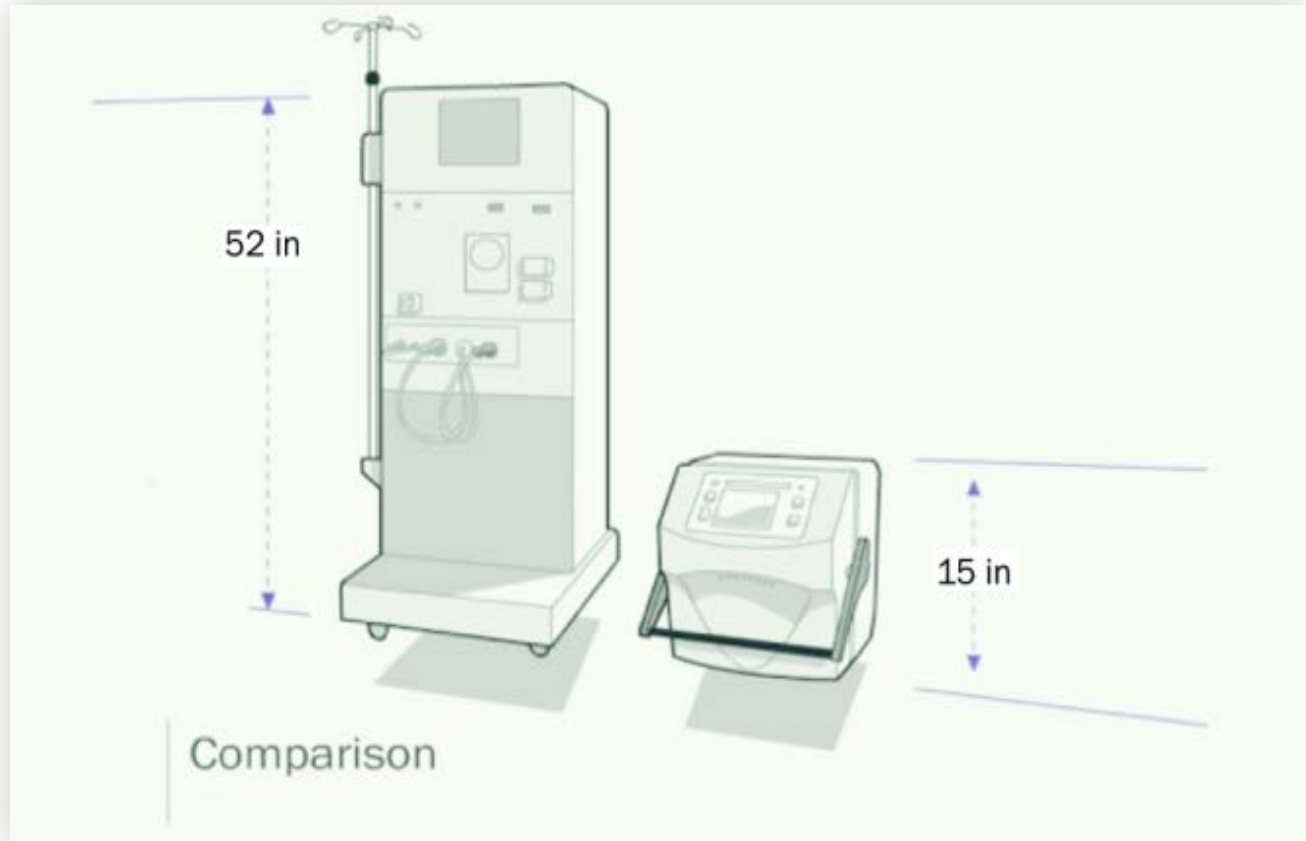
Learning Challenges



- Simple interface using shapes, colours, and diagrams to aid in operation of system
- Colour coded cartridge clamps to match fluid pathways
- Easy-to-use drop-in cartridge allows for easy, wipe-down disinfection after each use



Physical Limitations





Which machine should I use?

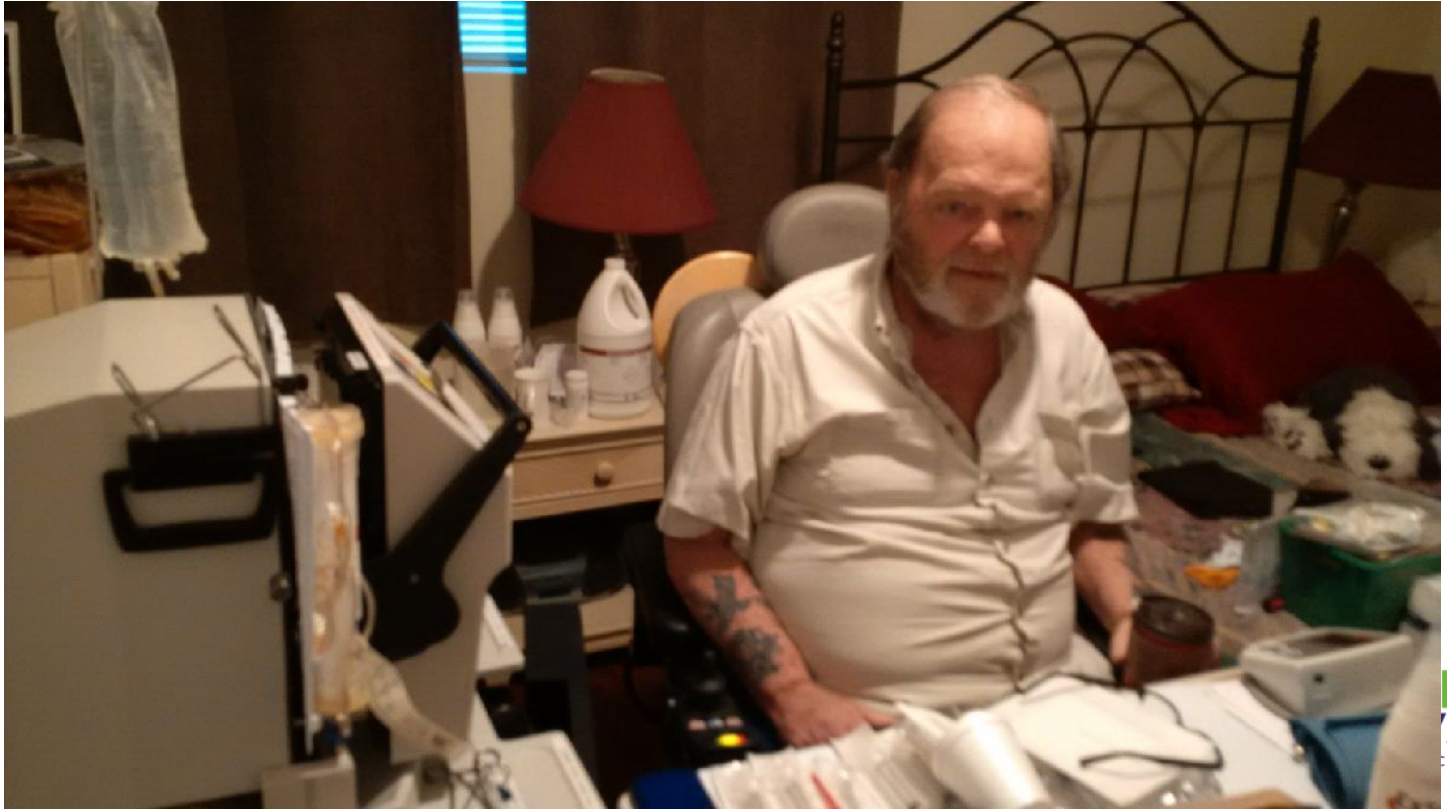
- The HHD team has a decision making tool that will assist programs decide which machine best suits the patient

Patient Selection for a NxStage Machine

- ❌ Physical limitation/lives alone
- ❌ Learning challenge d/t low BP
- ❌ Renter
- ❌ On metered water
- ❌ Intimidated by medical equipment



Patient Selection for a NxStage Machine





Preparing Dialysate





Renter



Metered Water



60L of water for 2
dialysis treatments

Allen and HHD

Initially, Allen was not referred to the HHD program due to physical limitations and hemodynamic instability.

However, since the introduction of the NxStage machine:

- Thriving at home
- Dialyzes 6-7 days a week
- Managing with minimal assistance
- No further hemodynamic instability



Patient selection for a Baxter machine

- ❌ Remote
- ❌ In home service
- ❌ Water hardness
- ❌ 2 days travel to home
(possibly more in winter months)



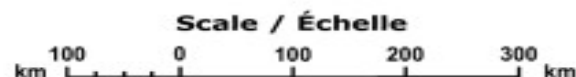
Welcome to Dawson City, Yukon





Beaufort Sea
Mer de Beaufort

ARCTIC OCEAN
Océan Arctique



LEGEND / LÉGENDE

○ Territorial capital /
Capitale territoriale

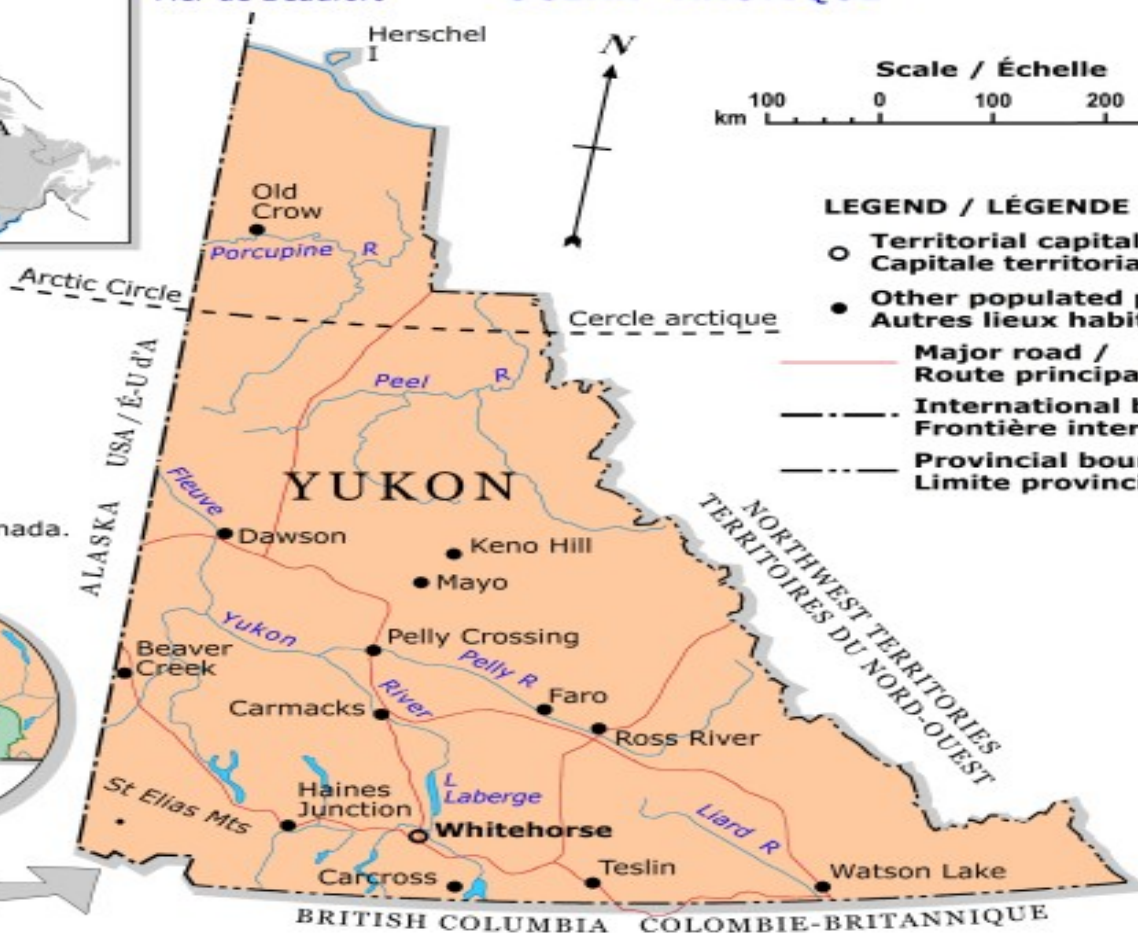
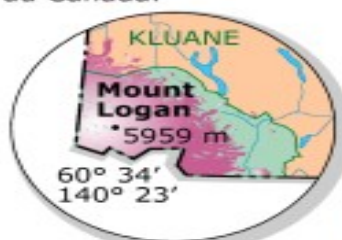
● Other populated places /
Autres lieux habités

— Major road /
Route principale

- - - International boundary /
Frontière internationale

--- Provincial boundary /
Limite provinciale

Highest point in Canada.
Point le plus haut
au Canada.



How cold does it
get in Dawson,
Yukon?

WANTED:

TOES FOR SOURTOE COCKTAIL



"Strange things done..."



Got frostbite? The Downtown Hotel in Dawson City,
Yukon is currently seeking toes for it's
World Famous Sourtoe Cocktail.

Donor will be forever immortalized
in the Sourtoe Hall of Fame.

Contact adam@yukonhotels.com for details.



3000 km between Dawson City and HHD clinic



In Home Service



Need to be prepared for anything



- 
- * 8+ hour drive from Whitehorse
 - * Weather dependent flight once a day (except weekends)

Requires RO and filters



Water hardness is 169mg/L

Wildlife in the North



A Step-by-Step Guide

Disposal of Hemodialysis Waste A STEP-BY-STEP GUIDE



Used dialysis tubing and dialyzers can be thrown out with your household garbage—but only *after* you make it safe for collection.

Follow these steps after every treatment.



1. Disconnect from dialysis. Hold AVF sites or cap catheter lines.



2. Place arterial blood line into one cup of acid (K bath) and attach venous blood line to waste bag.



3. Allow arterial blood line to take up the acid. When all acid has been taken up, keep the pump running and allow air to be sucked into the circuit.



4. When the AIR DETECT alarm sounds the pump will stop. Press priming twice and then restart the pump.



5. Allow lines to completely empty into waste bag (at least 2 minutes) and then stop the blood pump.



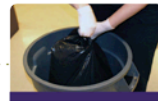
6. Drain the dialysate out of the dialyzer.



7. Drain waste bag into toilet.



8. Put used lines and dialyzer into double-bagged, heavy duty black garbage bags.



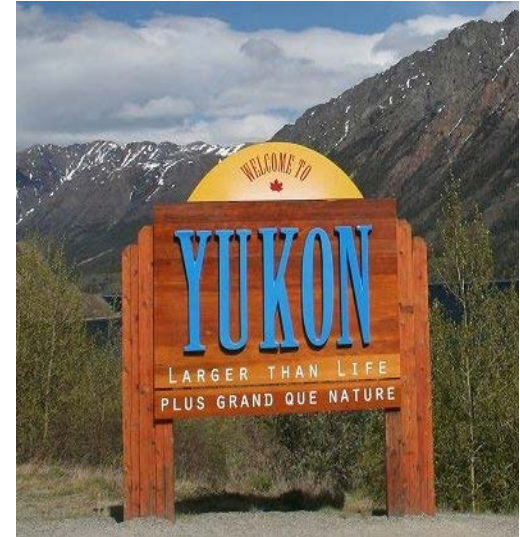
9. Store in an area away from domestic animals or wildlife and dispose with household garbage in a sealable container.



10. It is *never* okay to put needles in the garbage. Always use your sharps container.

Gerry and HHD

- Remote
- Vendor support in the north
- Water system
- Wildlife



Take home message



**Take
home message*

- Machine selection is based on patient needs and circumstances
- **GOAL**-to increase the overall number of dialysis patients on HHD to 10% (from the current level of 5.6%) within five years
- With the right support, almost anyone can do HHD

Acknowledgements

- Allen and Gerry
- PHC HHD Program- Cecilia Chow, Mary Lewis and Emmie Tse
- Vancouver Regional Home Hemodialysis Program
- Sushila Saunders, Dr. Michael Copland and Bill Kane
- BCPRA
- Baxter
- NxStage



Questions?



Reference List

- [Yukon Gold -http://youtu.be/NciLel8wFUQ](http://youtu.be/NciLel8wFUQ)
- Map of Yukon retrieved from <http://globalreach.ca/Yukon%20Territory.htm>
- Sour Toe Cocktail photo retrieved from <http://www.followmefoodie.com/2012/08/follow-me-foodie-to-food-day-canada>
- Map of Western Canada retrieved from <http://www.yukoninfo.com/yukon-southeast-alaska-northern-british-columbia-maps/>
- Team work- https://youtu.be/_PjXlp4MM3g
- How's your day going retrieved from <http://www.quotesgram.com/how-s-your-day-going-quotes/>