

# Areas of Change: Implementing Innovations

## Independent Dialysis

BC Nephrology Days

October 6, 2011

# CLIENTS, PATIENTS, AND COMMUNITY

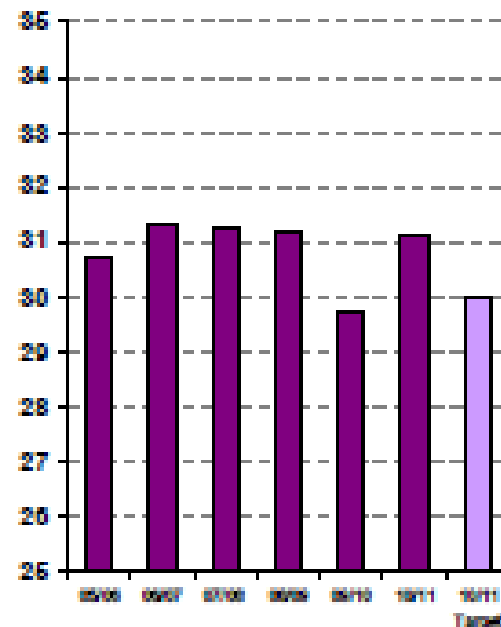
## Wellness

Updated: May 2011

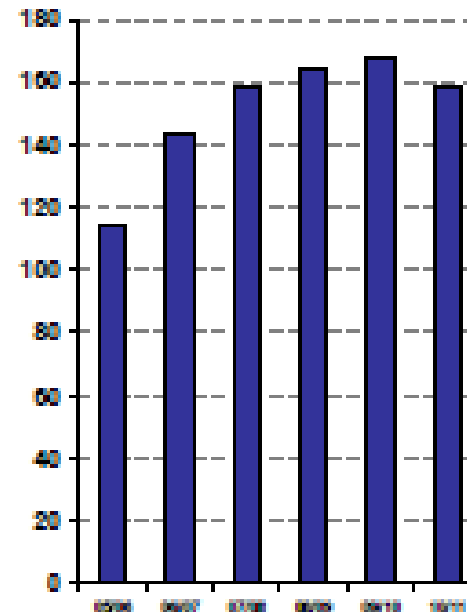
Status	Trend	Target	Actual
●	→	≥ 30%	31.1%

## 2. Percentage of Patients Participating in Independent Dialysis

Percentage of patients on Independent dialysis (PD, home or Independent facility-based HD)



Number of patients participating in home or Independent facility-based HD



# Areas of Change: Implementing Innovations

- Strategies to maximize independent therapies uptake...
- Strategies to minimize independent therapies attrition...
- Increase utilization of facility-based independent dialysis strategies...





Strategies to maximize independent therapies uptake...



# CLIENTS, PATIENTS, AND COMMUNITY

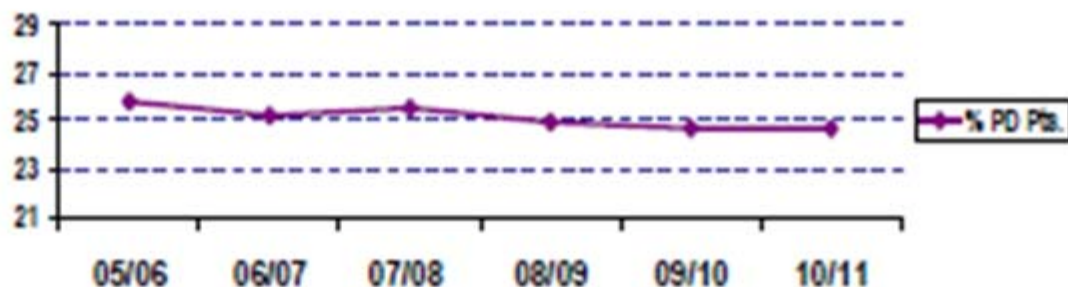
## Wellness

Updated: May 2011

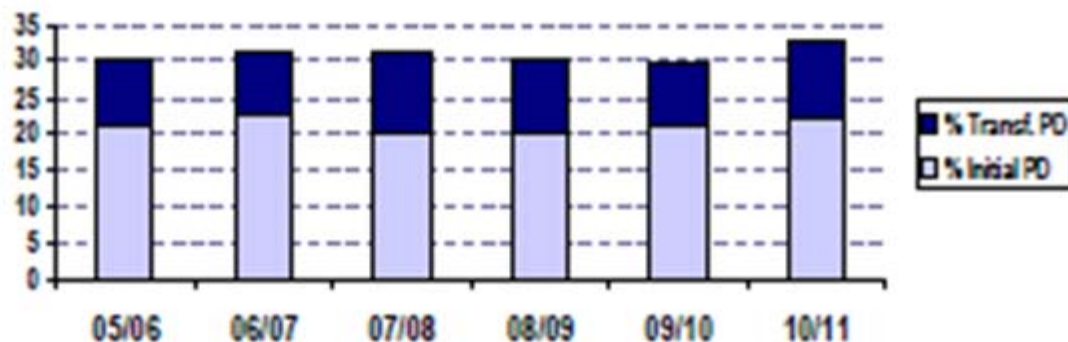
Status	Trend	Target	Actual
●	→	≥ 25%	32.9%

### 3. Peritoneal Dialysis Intake Rate

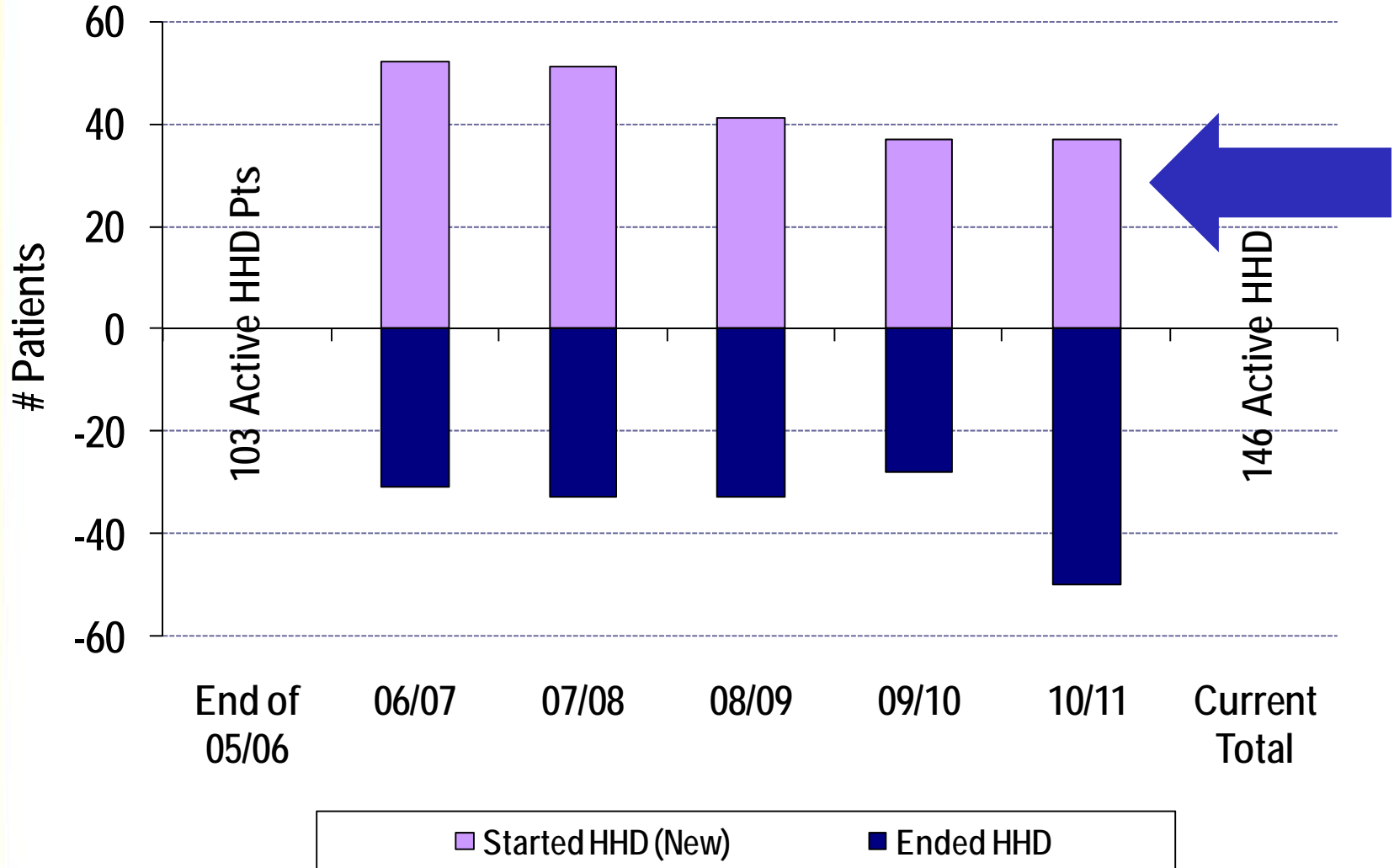
Percentage of Peritoneal Dialysis Patients at Year End



Percentage of Patients who Initiated Peritoneal Dialysis During Year



# Home HD Activity by Fiscal Years



# Method to Assess Treatment Choices for Home Dialysis (MATCH-D)

www.homedialysis.org/match-d

## Suitability Criteria for *Self* Home Hemodialysis: Conventional, Daily, Nocturnal

Strongly Encourage Home HD (HHD)
<input type="checkbox"/> Any patient who <i>wants</i> to do HHD or has no barriers to it
<input type="checkbox"/> Employed full- or part-time
<input type="checkbox"/> Drives a car – skill set is very similar to learning HHD
<input type="checkbox"/> Caregiver for a child, elder, or person with disability
<input type="checkbox"/> Lives far from clinic and/or has unreliable transportation
<input type="checkbox"/> Student – grade school to grad school
<input type="checkbox"/> Needs/wants to travel for work or enjoyment
<input type="checkbox"/> Wants a flexible schedule for any reason
<input type="checkbox"/> Has rejected a transplant
<input type="checkbox"/> Has neuropathy, amyloidosis, LVH, uncontrollable BP†‡
<input type="checkbox"/> Obese/large; conventional HD or PD are not adequate †‡
<input type="checkbox"/> Can't/won't follow in-center HD diet & fluid limits†‡
<input type="checkbox"/> Is pregnant or wants to be †‡
<input type="checkbox"/> Frail/elderly with involved, caring helper who wants HHD*
<input type="checkbox"/> Wants control; unhappy in-center
<input type="checkbox"/> No longer able to do PD

Encourage HHD After Assessing & Eliminating Barriers
<input type="checkbox"/> <b>No employer insurance</b> – not a barrier to nocturnal 3x/week HHD, which Medicare & Medicaid cover
<input type="checkbox"/> <b>Unkempt</b> – provide hygiene education; assess results
<input type="checkbox"/> <b>Has pet(s)/houseplants</b> (carry bacteria) – bar from room at least while cannulating/connecting access
<input type="checkbox"/> <b>Frail or can't walk/stand</b> – assess lifting ability, offer PT*
<input type="checkbox"/> <b>Illiterate</b> – use pictures to train, return demonstrations to verify learning, tape recorders for patient reports
<input type="checkbox"/> <b>Hearing impaired</b> – use light/vibration for alarms
<input type="checkbox"/> <b>Depressed, angry, or disruptive</b> – increased control with HHD may help
<input type="checkbox"/> <b>No helper &amp; clinic requires one</b> – reconsider policy, monitor remotely, use LifeLine device to call for help
<input type="checkbox"/> <b>Rents</b> – check with landlord if home changes needed
<input type="checkbox"/> <b>Can't/won't self-cannulate</b> – use patient mentor, practice arm, local anesthetic cream, desensitization*
<input type="checkbox"/> <b>No running water, poor water quality, low water pressure</b> – assess machine & water treatment options
<input type="checkbox"/> <b>Limited space for supplies</b> – visit home, 2x/mo delivery, consider machine with fewer supply needs
<input type="checkbox"/> <b>Drug or alcohol abuse</b> – consider HHD after rehab
<input type="checkbox"/> <b>Bedridden and/or has tracheostomy/ventilator</b> – assess self-care and helper ability*
<input type="checkbox"/> <b>Rx drugs impair function</b> – consider drug change

May Not Be Able to Do HHD (or Helper Must Do More)
<input type="checkbox"/> Homeless; consider PD if storage is available
<input type="checkbox"/> Can't maintain personal hygiene
<input type="checkbox"/> Home is health hazard, will not correct
<input type="checkbox"/> No or unreliable electricity
<input type="checkbox"/> Brain damage, dementia, or poor short-term memory*
<input type="checkbox"/> No use of either hand*
<input type="checkbox"/> Uncontrolled psychosis or anxiety*
<input type="checkbox"/> Blind or severely visually impaired – consider PD*
<input type="checkbox"/> Uncontrolled seizure disorder*
<input type="checkbox"/> No remaining HD access sites – consider PD
<input type="checkbox"/> Reduced awareness/ability to report bodily symptoms
<input type="checkbox"/> Has living donor; transplant is imminent – consider PD

Check all the boxes that apply.  
Keep a copy of the MATCH-D in patient record.



\* May be able to do with a helper  
† Consider nocturnal HHD  
‡ Consider daily HHD



## Home Based Dialysis Options



### Peritoneal Dialysis

- ✓ Preserves remaining kidney function
- ✓ No fluid restrictions
- ✓ Can dialyze during the day (4x day) with a simple procedure (takes 30 min) OR overnight which allow free days and a flexible schedule
- ✓ Can travel
- ✓ No need to come to a hospital or clinic 3 x week for treatment (no commuting, parking or waiting)
- ✓ It is easy to set up and take down (20 min to set up and 10 min to clean up)
- ✓ One on one training with a nurse (1-2 weeks)
- ✓ Easy to learn
- ✓ 24 hour machine and nursing telephone support
- ✓ Full medical support including: Nephrologists, Nurses, Dieticians, Social Workers, Pharmacists – Clinic visits every 1-3 months
- ✓ Excellent delivery service of dialysis supplies

### Home Hemodialysis



- ✓ Use less medications
- ✓ People feel better with more dialysis
- ✓ Unrestricted diet (when dialyzing >24 hours/ week)
- ✓ No fluid restrictions
- ✓ Can dialyze overnight or on your own schedule (3-6 treatments/week)
- ✓ No need to come to a hospital or clinic 3 x week for treatment (no commuting, parking or waiting)
- ✓ Control of needling using buttonhole techniques (no or little pain)
- ✓ Typical set-up/take down time (up to 1 hour to set up and 30 min to clean up)
- ✓ Can swim or bathe with AVF (Arteriovenous fistula)
- ✓ One on one training with a nurse (3 days a week for 6-8 weeks)
- ✓ 16 hours /day machine and nursing telephone support
- ✓ Full medical support including: Nephrologists, Nurses, Dieticians, Social Workers, Pharmacists – Clinic visits every 1-3 months
- ✓ Excellent delivery service of dialysis supplies

You are not alone with this decision  
please contact: \_\_\_\_\_  
Phone: \_\_\_\_\_  
Email: \_\_\_\_\_

## Home Based Dialysis Options

### Things to consider about Peritoneal Dialysis

- Will need convenient storage space (50 boxes)
- Will need to have clean technique to prevent infections
- Ability to lift supplies (5-12 lbs)
- Some dietary limitations (salt and phosphorus foods)
- Extra garbage
- If a machine breaks down it will be replaced in 24 hours
- Swimming or taking a bath is not advisable
- Some restrictions on travel will need 2 months notice

### Things to consider about Home Hemodialysis

- Will need convenient storage space (10-15 boxes)
- More complicated than Peritoneal dialysis
- Will need to have clean technique to prevent infections
- Ability to lift supplies (5-10 lbs)
- Traveling for long periods (more than a weekend) is challenging
- Some dietary limitations (salt)
- If the machine breaks down it will be repaired in 24 hours
- Extra garbage and recycling
- Some additional costs: Electricity and water bills (20 -50 dollars a month - can write off on taxes)

More information regarding home based dialysis therapies can be found from the BC renal agency at: [www.bcrenalagency.ca](http://www.bcrenalagency.ca)

The Kidney foundation has peer support groups and can be found at: [www.kidney.ca](http://www.kidney.ca)





Strategies to minimize independent therapies attrition...



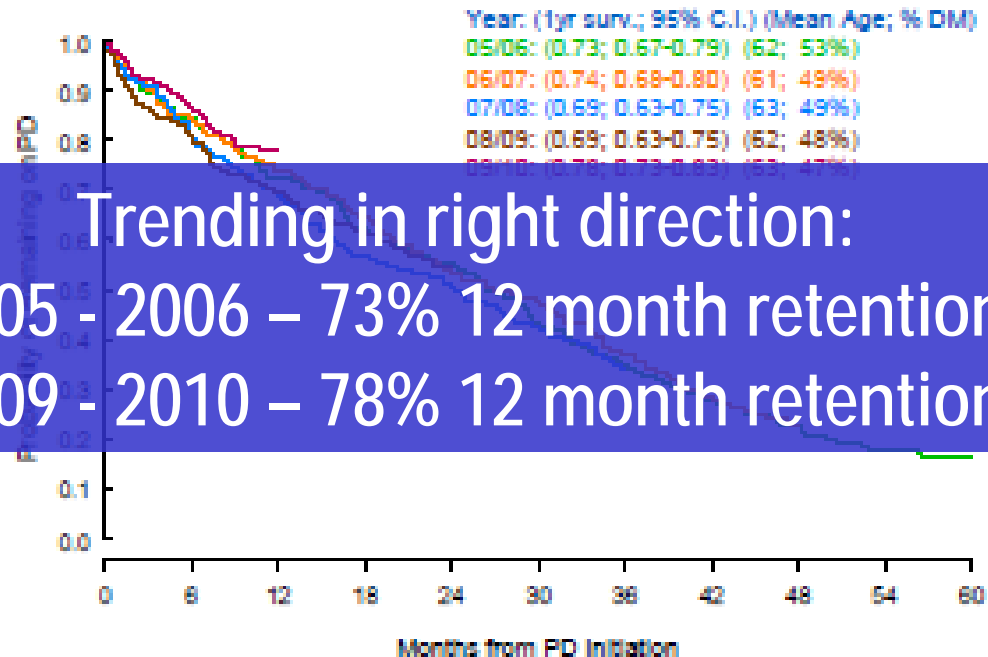
# CLIENTS, PATIENTS, AND COMMUNITY

## Wellness

Updated: May 2011

Status	Trend	Target	Actual
●	→	≤ 30%	22%

### 4. One-Year Peritoneal Dialysis Attrition Rate



Trending in right direction:

2005 - 2006 – 73% 12 month retention

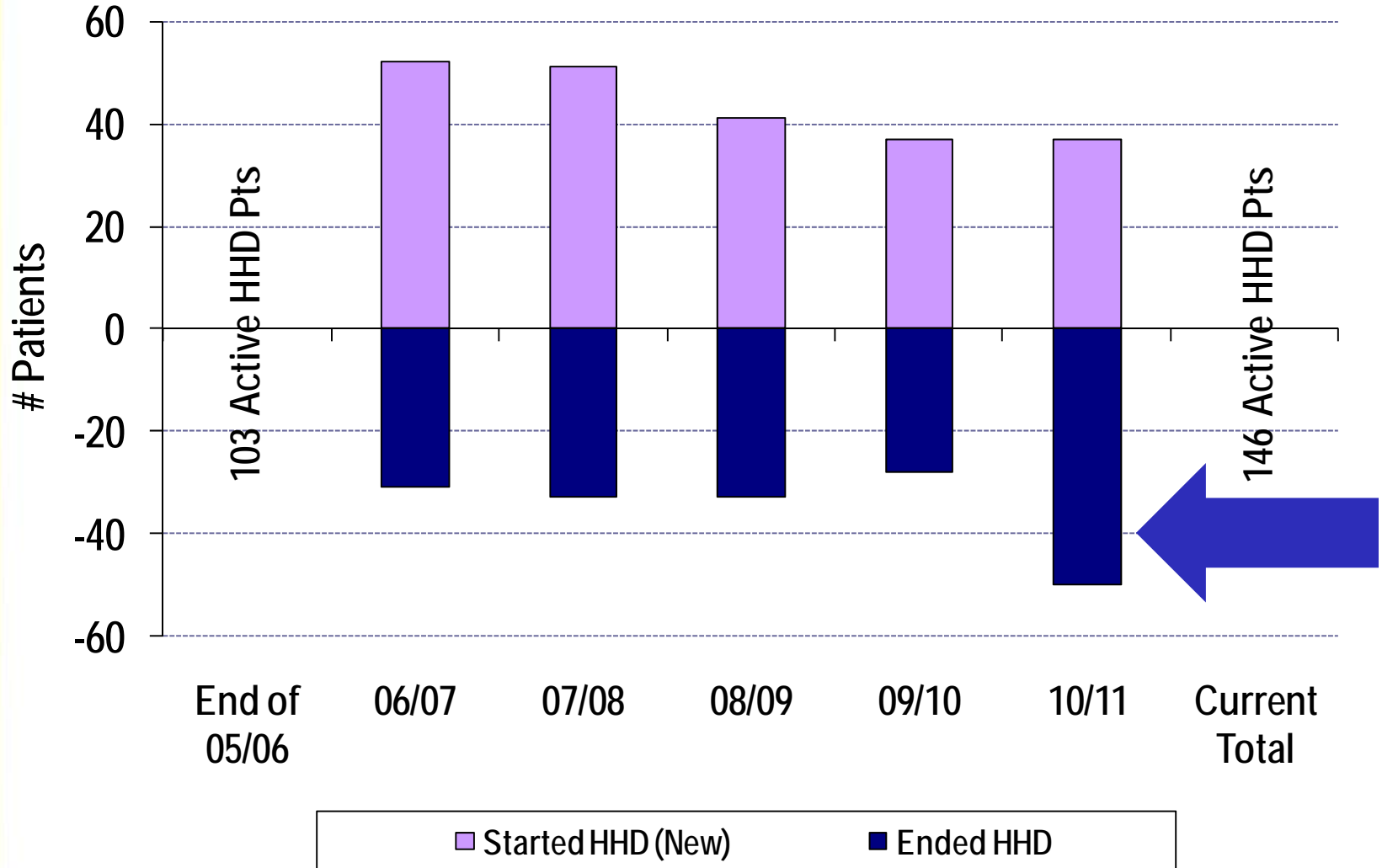
2009 - 2010 – 78% 12 month retention

Test for adjusted HR\* for Year of PD Initiation: Chi-sq=5.1462, p=0.2727

\*Adjusted for age, gender, diabetes, PD as initial or transferred modality, HA at PD initiation

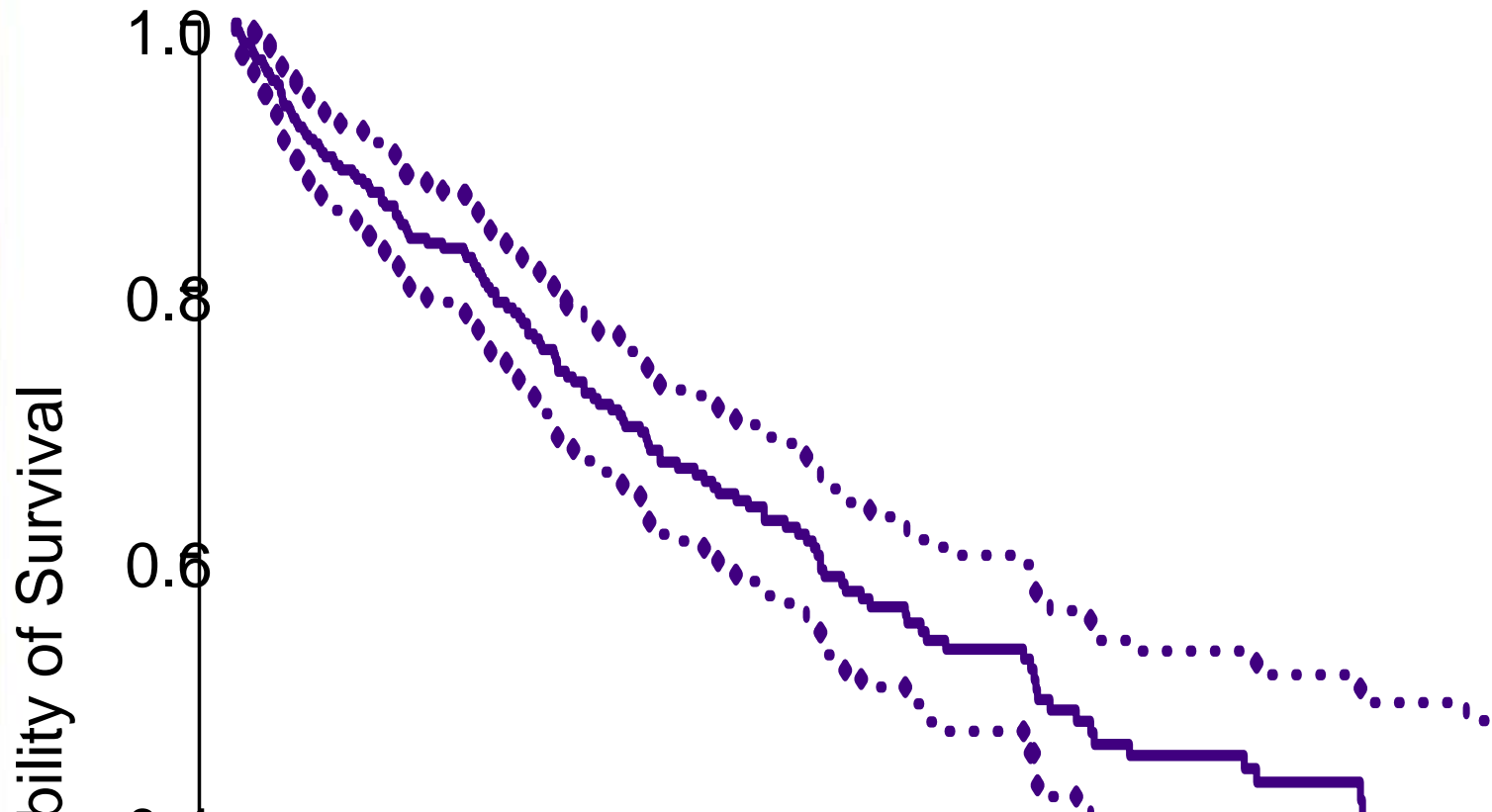


# Home HD Activity by Fiscal Years

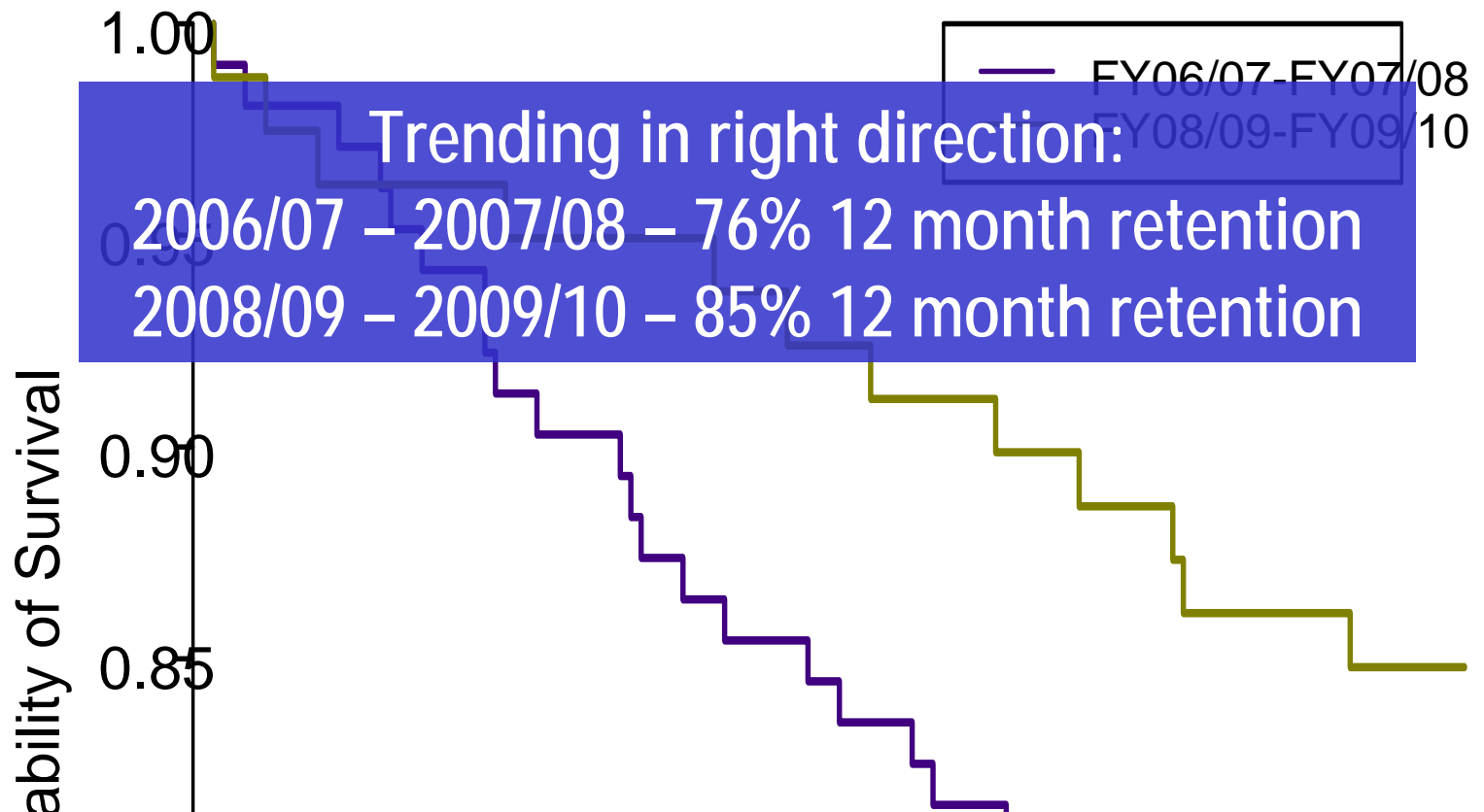


# Home HD Survival

(censored for transplantation)



# 1-Year Home HD Survival by Cohort Year (all termination reasons)



# HHD End Reasons

	Current Stat [# Patients (%)]	Apr 2010 Stat [# Patients (%)]	↑ Since Last Report
<b>Total</b>	<b>196</b>	<b>158</b>	<b>38 (24%)</b>
Transplantation	58 (30%)	47 (30%)	+11
Deceased	35 (18%)	31 (19%)	+4
Complication -> Death	12 (6%)	9 (6%)	+3
Dialysis Withdrawal	3 (1%)	3 (2%)	0
Medical Reasons	47 (24%)	37 (23%)	+10
Family/Patient's Request	13 (7%)	10 (6%)	+3
Geographical Reasons	13 (7%)	11 (7%)	+2
Moved Out of Province	4 (2%)	4 (3%)	0
Recovered Function	2 (1%)	2 (1%)	0
Other Reasons: no support, hygiene problems, unspecified, etc	9 (4%)	4 (3%)	+5



# Potentially Modifiable HHD End Reasons

Medical Reasons	47 (24%)
Family/Patient's Request	13 (7%)
Geographical Reasons	13 (7%)
Moved Out of Province	4 (2%)
Recovered Function	2 (1%)
Other Reasons: no support, hygiene problems, unspecified, etc	9 (4%)



# Possible options upcoming...

- We are exploring ways to stabilize the human resource pool to enhance training and longitudinal care
  - Would require additional and novel funding
  - This is currently under review
  - Goals would be to meet needs of patients to support independence via:
    - in-home respite provision
    - In-home training
    - In-home treatment assistance







Increase utilization of facility-based independent dialysis strategies...



# Several options currently available

- NHA: Independent HD Unit
- IHA: Penticton Involved Care Unit
- VCH: VGH Independent NHD Program  
SPH Incentre NHD Program
  
- All regions – some degree of greater patient autonomy (assistance in machine setup, self-cannulation, alarm response assistance)



# The Future...

- Ministry of Health has set target of Independent Therapies at 32%
  - Current status: PD + Independent HD = 31.1% (June 2011)
- To increase this will require:
  - Ongoing commitment to maximizing independent uptake
  - Minimization of modality attrition



# The Future...

**Why Not Independence?**

Age < 65

Non-diabetic

No identified cardiac disease



never  
never  
never  
give  
up

(winston churchill)

