## PVAST: POWER IN TEAMWORK



**Presentation by:** 

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BC Nephrology Days October 2, 2008



## Agenda

- 1. What is PVAST?
- 2. Incidence and Prevalence Rates in BC: How Do We Compare?
- 3. Raising the Bar: Facilitators and Barriers
- 4. Raised Bar: 90% Fistula Rate
- 5. Bringing it Together: A Call to Action



### What is **PVAST**?

- Provincial Vascular Access Services Team (PVAST)
- Provincial, inter-HA, multidisciplinary approach to improvements in VA
  - Better data
  - Standardized guidelines
  - Improved delivery of care
- Initiatives provincial but tailored to local needs and implemented locally



# **PVAST Accomplishments**

- Developed incidence, prevalence, and infection rate reports (available in PROMIS by HA & centre)
- Developed multiple VA related guidelines and tools (on BCPRA website)
- Completed paper entitled Best Practices in VA Care
- Developed patient teaching pamphlets (care of graft, fistula, and catheter; emergency measures for bleeding fistula/graft)
- Completed *Guiding Principles for VA Referral and Transfer* Processes)
- Presentations on PVAST related work at BCNDs (2007 and 2008), CANNT (Oct 2007), and IHA Education Days (Oct 2007)



## PVAST 2008/09 Workplan

- Work with HAs to establish QIP structures identified in *Best Practices in VA Care: VA Clinic*
- Organize province-wide ID VA workshop/rounds to discuss new innovations and difficult cases
- Organize a one-day interactive (case study based) VA workshop for staff RNs
- Develop strategies to reduce catheter use
- Implement Matching Cannulators to Vascular Accesses in 3 pilot centres (SPH, VGH, Penticton)
- Develop opportunities for VA surgeons and radiologists to share/upgrade their skills through CME credited clinical fellowships
- Conduct research on the success of fistula creation in elderly patients



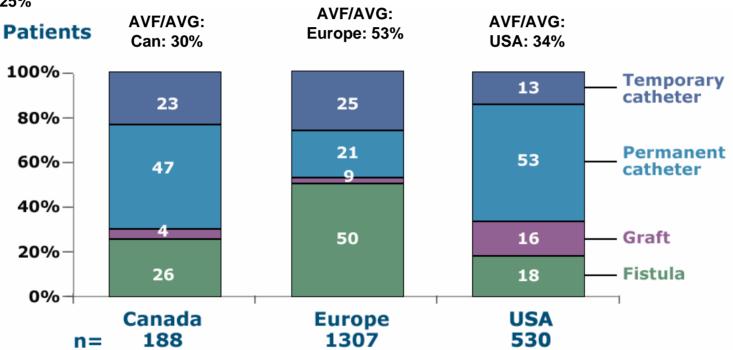
### **Fistula/Graft Targets**

	Incidence Rate	Prevalence Rate
CSN (2006)		60%
K-DOQI	50%	65%
PVAST	50%	80%



#### Incidence Rates (1<sup>st</sup> Use): Canada vs Europe vs US

AVF/AVG: BC: 25%

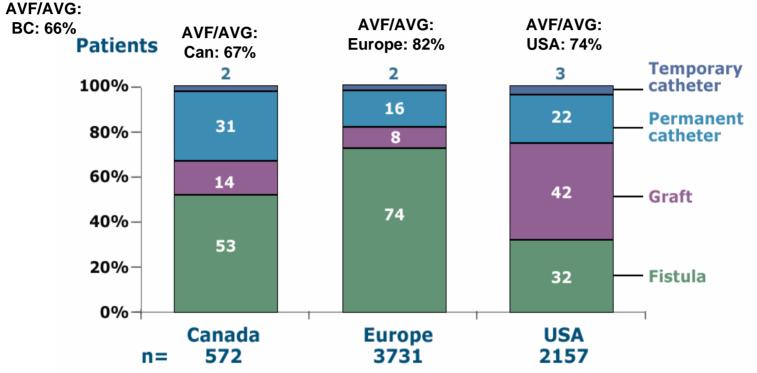


Incident patients entering DOPPS within 5 days of first-ever chronic dialysis; n = # of patients



DOPPS Data: Mendelssohn DC, et al. Nephrol Dial Transplant 2006;21:721-8.

## Prevalence Rates (Current Use): Canada vs Europe vs US



Per response from medical questionnaire cross section, 2002-2003; n=# of patients; weighted to account for facility sampling fraction



DOPPS Data: Mendelssohn DC, et al. Nephrol Dial Transplant 2006;21:721-8.

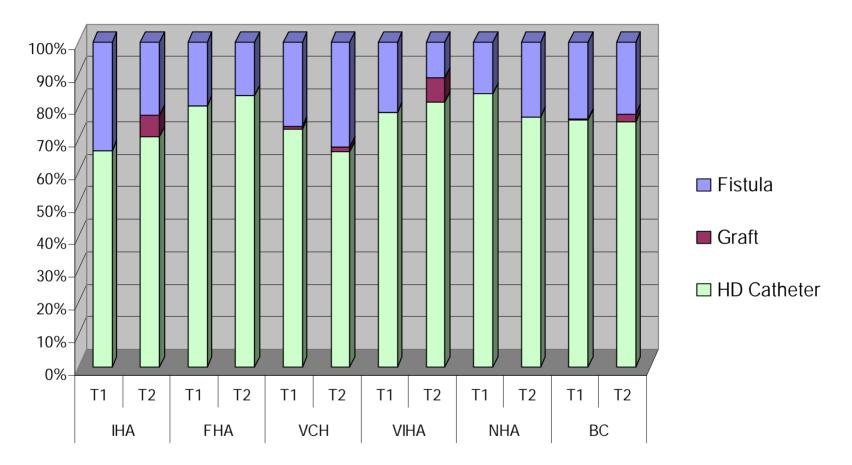
## BC Incidence & Prevalence Rates

Rates	Fistula/Graft	Catheter
Incidence (1 <sup>st</sup> use)	25%	75%
Target	<b>≥50%</b>	<50%
Prevalence (current use)	58%+8% with fistula/graft + catheter	34%
Target	<mark>≥80%</mark>	<20%



Incidence rate: Oct 24/07 – Mar 31/08 Prevalence rate: Mar 31/08

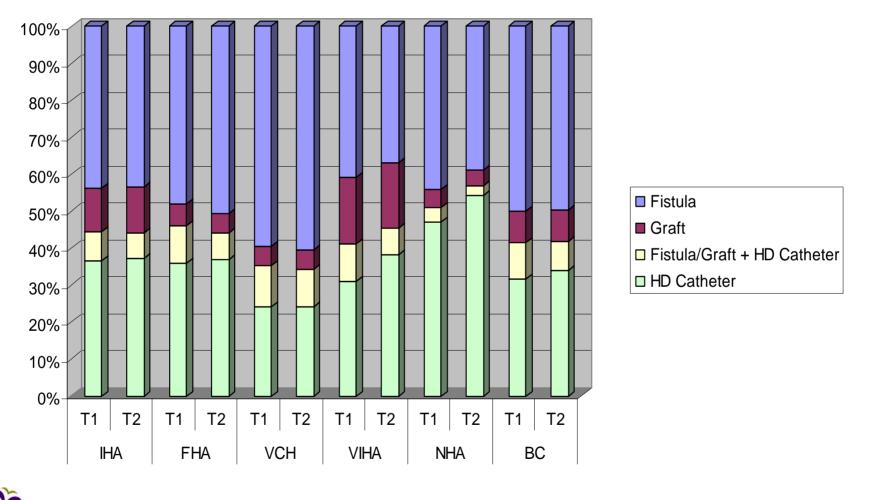
### Incidence Rates (1<sup>st</sup> Use) by HA



T1=Apr 1/07–Oct 23/07; T2=Oct 24/07–Mar 31/08



#### **Prevalence Rates (Current Use) by HA**



T1=Sept 30/07; T2=Mar 31/08

BCRenalAgency An agency of the Provincial Health Services Authority

#### **Reasons for Use of Catheters by HA**

	IHA	FHA	VCH	VIHA	NHA	BC
Acute Pt	8%	10%	2%	8%	0%	7%
Awaiting Tx	0%	1%	1%	2%	0%	1%
PD pt, temp HD	4%	4%	2%	0%	14%	3%
Last site	8%	2%	3%	8%	0%	4%
Late/no referral	0%	3%	1%	0%	0%	1%
Awaiting placement						
1st access	17%	49%	38%	37%	14%	40%
2nd access	4%	18%	14%	14%	14%	15%
Awaiting maturation						
1st access	21%	4%	6%	14%	14%	8%
2nd access	0%	0%	8%	4%	0%	3%
CD/PVD/poor vessels	0%	3%	9%	0%	0%	4%
Other	38%	7%	16%	12%	43%	14%



## Raised Bar: 90% Fistula Rate

#### **Presentation by Dr Vo Nguyen**



# **Raising the Bar: Facilitators**

QI	P Structure	IHA	FHA	VCH/VGH	РНС	VIHA	NHA
1	Access to VA Clinic(s) within HA	٠	•	•	٠	•	•
2	Access to VA Nurse(s) within HA (FTE depends upon # & complexity of patients & geography)	•	٠	•	٠	● & ● Cons'n & Monitoring	٠
3	Renal Medical Director	•	•	•	•	•	•
4	Nephrologist(s) designated by the renal medical director as having a lead role to move VA-related practices forward.	•	•	•	•	•	•
5	Regular VA rounds within HA to review patients with complex access issues and to develop "access" care plans.	•	•	•	•		٠
6	Forum/committee to regularly review system-related VA issues and make improvements	•	٠	•	•	•	•
7	"Protected" OR and radiology time for VA.	● & ● DI & OR	• OR	Out of jurisdiction	٠	•	•
8	Formalized mechanisms to work with CKD clinics to proactively identify patients and initiate education early.	•	٠	•	•	•	•
9	Database which allows comparisons between centres/HAs and longitudinally for each centre.	•	٠	•	•	•	•



Completed in August 2008 as self-report from VA Nurse & Manager (1 per HA)

# **Raising the Bar: Barriers**

	Number of Catheters						% of Catheters where Reason Given					
НА	IHA	FHA	VCH	VIHA	NHA	BC	IHA	FHA	VCH	VIHA	NHA	BC
Acute pt requiring short term												
dialysis	2	12	2	4		20	8%	10%	2%	8%	0%	7%
Awaiting live donor transplant,												
extended wait anticipated		1	1	1		3	0%	1%	1%	2%	0%	1%
Last site, unable to do PD	2	2	3	4		11	8%	2%	3%	8%	0%	4%
Late Referral			1			1	0%	0%	1%	0%	0%	0%
New pt awaiting maturation of												
AVF/AVG	5	5	6	7	1	24	21%	4%	6%	14%	14%	8%
New pt awaiting placement of												
AVF/AVG	4	58	40	18	1	121	17%	49%	38%	37%	14%	40%
No Referral		3				3	0%	3%	0%	0%	0%	1%
Other, specify	9	8	17	6	3	43	38%	7%	16%	12%	43%	14%
PD pt requiring a short-term												
course of HD	1	5	2		1	9	4%	4%	2%	0%	14%	3%
Pt with failed AVF/AVG,												
awaiting maturation of												
AVF/AVG			8	2		10	0%	0%	8%	4%	0%	3%
Pt with failed AVF/AVG,												
awaiting placement of												
AVF/AVG	1	21	15	7	1	45	4%	18%	14%	14%	14%	15%
Risk of high cardiac output												
failure			2			2	0%	0%	2%	0%	0%	1%
Severe PVD /poor vessels		4	7			11	0%	3%	7%	0%	0%	4%
Total, Reason Given	24	119	104	49	7	303	100%	100%	100%	100%	100%	100%
No Reason Given	85	97	120	88	54	444						
Total, All Catheters	109	216	224	137	61	747						
% Reason Given	22%	55%	46%	36%	11%	41%						



Source: PROMIS, May 2008

Reason for catheter identified for 303/747 patients (41%)

# Group Discussion of Major Barriers

### A. System Barriers

ie. patient not identified early enough, lack of surgeons, lack of OR time

**B. Patient** (what should the denominator be?)

ie. last access, refusal, awaiting transplant, inadequate vessels

### C. Provider

ie. reluctant to refer before HD start, etc.



## Bringing it All Together in BC: A Call to Action!

- A lot of work has been put in to improving Vascular Access in BC – Thank you!
- However, catheter rates remain high
- Where do we go from here? Priority areas for the next year



Questions? Interested in participating in PVAST? If so, we are interested in you!

http://www.bcrenalagency.ca/default.htm

