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## Welcome to ...









# Meet the Contestants Team Hemo

Hemo In Centre
Hemo Self Care
Hemo Home
Hemo Nocturnal
Hemo CCC





# Meet the Contestants Team PD

PD CAPD
PD NIPD
PD CCPD
PD HomePlus
PD Nursing Home





# Challenges for Our Contestants

- \* Frequency
- \* Ouch factor
- \* Environment
- \* Cost
- \* Ease
- \* Who gets in the club?
- \* Efficiency
- \* Impact on Life



## **Teamo Hemo**

Hi Tech Rocks!!





## Hemo In Centre

\* 3x/week 4 hrs/treatment, inflexible schedule



\* Needles



Overcrowded Units, fast paced



\* Costly



\* High Tech, requiring RN's



\* Most people able medically or socially



\* 18-20% GFR



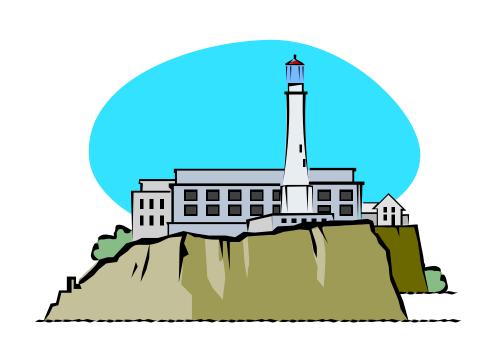
Intrusive in Lives, travel to Unit



Impacts Quality and Quantity of Life!!











4881 Yonge Street

Sussex Centre Self Care Dialysis

## Hemo Self Care

\* 3x/week, 4 hr, slight flex in schedule



\* Needles



\* Nice environment



Less costly than In Centre



\* Still travel to unit



\* Learning curve, English, capable



\* 18-20% GFR



\* Intrusive



\* Less impact than In Centre, no data re survivorship





## Hemo Home

\* 3x/week, 4 hr



\* Needles



\* Home environment



Less costly than In Centre

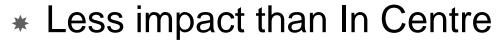


\* Learning curve, capable

\* 18-20% GFR



\* Intrusive, but less than In Centre







## Hemo Nocturnal

\* 5x/week, 8 hr



Needles



\* Home environment



\* Less costly than In Centre





\* Learning curve, capable, English, Cantonese



\* Probably ~GFR 30



\* Intrusive, but less than In Centre



\* Higher QoL than In Centre, likely higher survival





### Hemo CCC

\* 3x/week 4 hrs/treatment, inflexible schedule



\* Needles



\* Small unit



\* Costly



\* Less Travel



\* Less Burdensome than In Ctr



\* Intrusive in Lives



Generally shorter survival





Team P.D.

Pretty Durn Good
Treatment!!



## PD CAPD

\* 4x/day, continual



\* No Needles



\* Home environment



\* Less costly than In Centre





\* Learning curve, capable -medically, socially

\* 20% GFR, preservation



\* Intrusive



\* Less impact than In Centre, slight survival advantage over In Centre (CORR, CIHI, 2005)



## PD NIPD

- \* Nightly APD
- \* No Needles
- \* Home environment
- \* Less costly than In Centre
- Minimal travel for clinics
- \* Learning curve, capable -medically, socially
- \* 18% GFR, preservation
- \* Less Intrusive
- \* Less impact than In Centre, slight survival advantage over In Centre (CORR, CIHI, 2005)

## PD CCPD

Nightly APD + Daytime exchange



\* No Needles



\* Home environment



Less costly than In Centre



Minimal travel for clinics



\* Learning curve, capable -medically, socially





\* More Intrusive than NIPD

\* Less impact than In Centre, slight survival advantage over In Centre (CORR, CIHI, 2005)

## PD HomePlus

Nightly APD with assistance



- \* No Needles
- \* Home environment



\* Likely as costly as In Centre





- \* 20% GFR, preservation
- \* Minimally Intrusive
- \* Less impact than In Centre, no data re survival



## PD Nursing Home

\* APD or CAPD with assistance



\* No Needles

\* Institutional environment



Less costly than In Centre, more than home

No travel for clinics



\* No Learning curve, medically able



\* 20% GFR, preservation



Minimally Intrusive



\* Less impact than In Centre, no data re survival







# The REAL Modality Reality Show

Vast majority of dialysis patients in Canada on Hemodialysis

16,056 HD vs 3,684 PD (CORR, CIHI, 2005)

No data regarding where modality takes place.

#### Prevalence of Renal-Replacement Therapies (per million population)

| Country       | RRT  | TX  | PD  | Facility HD | Home HD (% HD) |
|---------------|------|-----|-----|-------------|----------------|
| Australia     | 685  | 299 | 92  | 255         | 39.0 (13.2)    |
| Canada        | 927  | 384 | 109 | 427         | 7.2 (1.7)      |
| Finland       | 658  | 390 | 58  | 202         | 8.8 (4.2)      |
| Netherlands   | 678  | 359 | 90  | 222         | 6.2 (2.7)      |
| New Zealand   | 715  | 291 | 192 | 174         | 58.4 (25.2)    |
| Scotland      | 726  | 336 | 79  | 283         | 8.7 (3.0)      |
| United States | 1554 | 441 | 89  | 1021        | 4.6 (0.4)      |





Table 9 Unadjusted Three-Month, One-, Three- and Five-Year Survival in Dialysis Patients, Canada, 1996 to 2000, With Follow-up Until 2005

|              | Survival<br>Time | 1996  | 1997  | 1998  | 1999  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  |
|--------------|------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| All Dialysis | N                | 3,457 | 3,856 | 4,132 | 4,420 | 4,619 | 4,871 | 4,904 | 4,994 | 5,051 | 5,012 |
|              | 3 Months         | 94.2  | 94.1  | 94.3  | 94.2  | 94.1  | 93.9  | 93.8  | 94.5  | 94.7  | 94.7  |
|              | 1 Year           | 82.4  | 82.8  | 82.5  | 81.9  | 82.3  | 81.9  | 82.3  | 83.4  | 83.5  |       |
|              | 3 Years          | 57.2  | 57.9  | 58.1  | 56.4  | 58.6  | 57.2  | 58.1  | 60.1  |       |       |
|              | 5 Years          | 37.1  | 38.8  | 39.6  | 37.7  | 40.5  | 39.5  |       |       |       |       |
|              | N                | 2,509 | 2,991 | 3,214 | 3,450 | 3,660 | 3,906 | 4,001 | 4,117 | 4,080 | 4,043 |
| HD           | 3 Months         | 93.3  | 93.2  | 93.4  | 93.1  | 93.0  | 93.1  | 93.0  | 93.7  | 93.7  | 93.7  |
|              | 1 Year           | 80.3  | 81.5  | 80.7  | 80.1  | 80.3  | 80.1  | 80.4  | 81.6  | 81.7  |       |
|              | 3 Years          | 56.2  | 56.6  | 56.8  | 55.3  | 56.7  | 55.5  | 56.2  | 57.7  |       |       |
|              | 5 Years          | 36.0  | 37.6  | 38.4  | 36.3  | 38.7  | 37.7  |       |       |       |       |
| PD           | N                | 948   | 865   | 918   | 970   | 959   | 965   | 903   | 877   | 971   | 969   |
|              | 3 Months         | 96.8  | 97.1  | 97.5  | 98.0  | 98.1  | 97.3  | 97.4  | 98.3  | 98.5  | 98.6  |
|              | 1 Year           | 88.3  | 87.2  | 88.6  | 88.1  | 90.0  | 89.3  | 90.7  | 91.7  | 90.9  |       |
|              | 3 Years          | 59.6  | 62.3  | 62.8  | 60.0  | 66.1  | 64.3  | 66.4  | 71.3  |       |       |
|              | 5 Years          | 40.1  | 42.8  | 43.7  | 42.8  | 47.7  |       |       |       |       |       |

#### Note:

 Patients are censored at the time of their first kidney transplant or when it is determined that they are lost to follow-up.

(CORR, CIHI, 2005)





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|              | 3 Years          | 59.6  | 62.3  | 62.8  | 60.0  | 66.1  | 64.3  | 66.4  | 71.3  |       |       |
|              | 5 Years          | 40.1  | 42.8  | 43.7  | 42.8  | 47.7  |       |       |       |       |       |

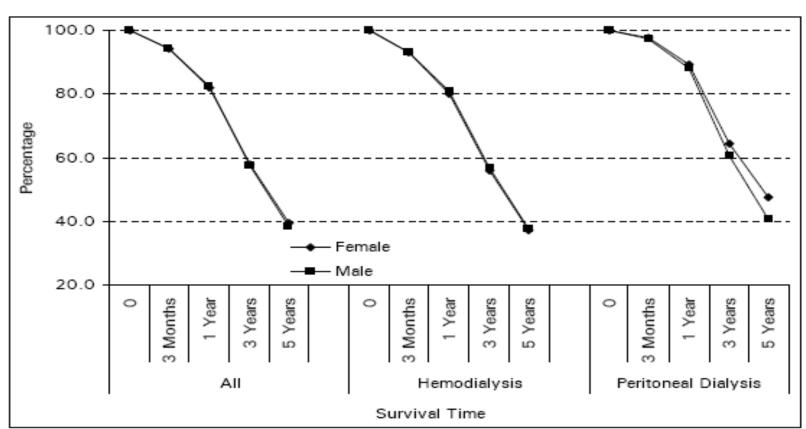
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(CORR, CIHI, 2005)



Figure 8 Unadjusted Three-Month and One-, Three- and Five-Year Survival in Dialysis Patients, by Treatment Type and Sex, Canada, 1996 to 2000 (Followed to 2005)



(CORR, CIHI, 2005)







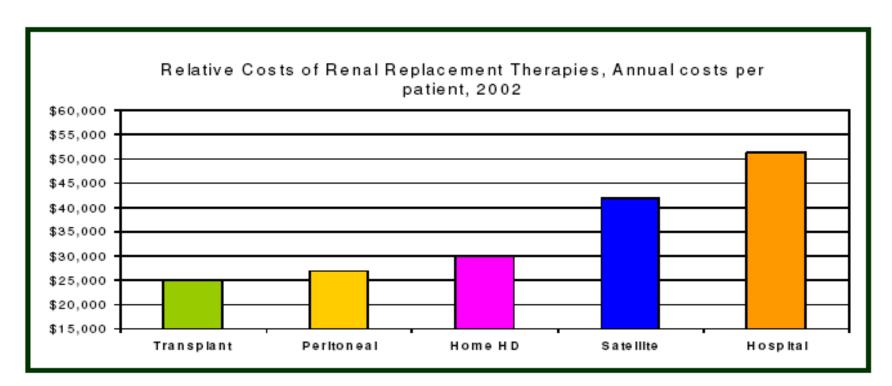


Impact of CKD and Dialysis

- Impact on Individual
  - Chronic illness and treatment
  - Decreased life expectancy
- Impact on Health Care System
  - In centre HD \$50,000
  - Home HD \$30,000
  - Home PD \$28,000
- Impact on Society
  - Workforce
  - Disability
  - Rise in CKD annually



#### COSTS OF RENAL REPLACEMENT THERAPIES



Sources: Lee et al, 2002; McFarlane et al, 2002

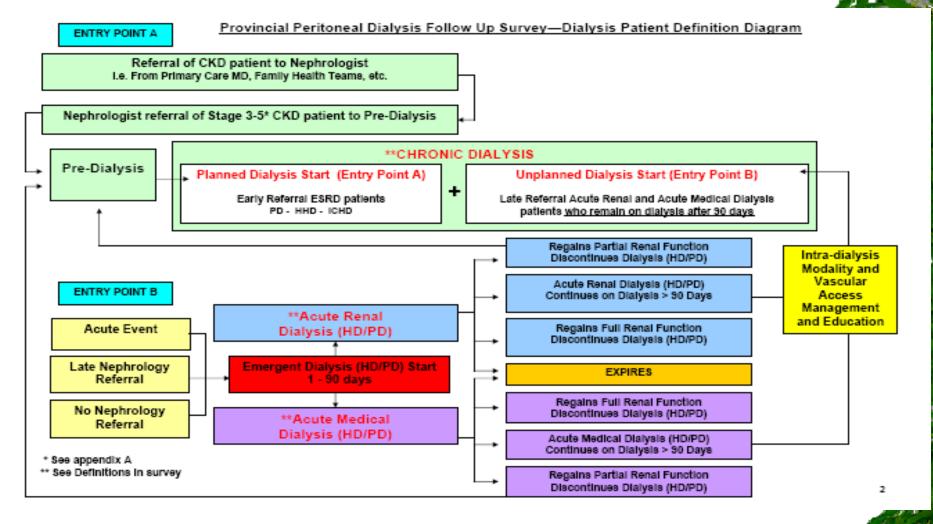
## MOHLTC Provincial PD Joint Initiative



The goal of the Provincial Peritoneal Dialysis (PD) Initiative is to increase the use of PD in Ontario from the present 17% to 30% by 2010 and to promote a standardized, consistent, and integrated delivery of PD services throughout Ontario.

The intention of this initiative is not to merely promote PD as the only home dialysis option, but more importantly to develop a process that makes improvements within the nephrology community in partnerships with community stakeholders to support and encourage all home dialysis modalities.

# MOHLTC Provincial Initiative



# "Entry Point A" Pre Dialysis

- \* Stage 3-5 CKD
- \* Referral from Nephrologist
  - Primary Care MD
  - Primary Health Team



## Pre Dialysis CKD management clinics

- Credit Valley
- Halton Region
- Humber
- Lakeridge
- Royal Victoria
- Scarborough
- Soldiers

- St. Joseph's
- St. Michael's
- Sunnybrook
- Toronto EastGeneral
- Toronto General
- William Osler
- York Central



### Renal Management Clinic

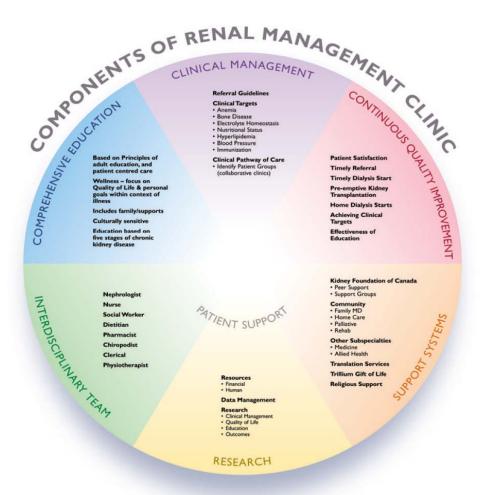
#### **Vision Statement**

o be internationally recognized as a centre of excellence in the management of individuals with chronic kidney disease.

#### Mission

he Renal Management Clinic is an interdisciplinary team dedicated to promoting the optimum health of individuals with chronic kidney disease through expert clinical management,

education and emotional support along the continuum of the disease process. This is achieved through early identification, ongoing monitoring, evaluation and research.





## Vital components of Clinic

- Maintaining Wellness at Home
  - Education for self care
  - Medications
  - Monitoring
- Options for RRT
  - Education
  - Preparation
  - Ideally planned dialysis start

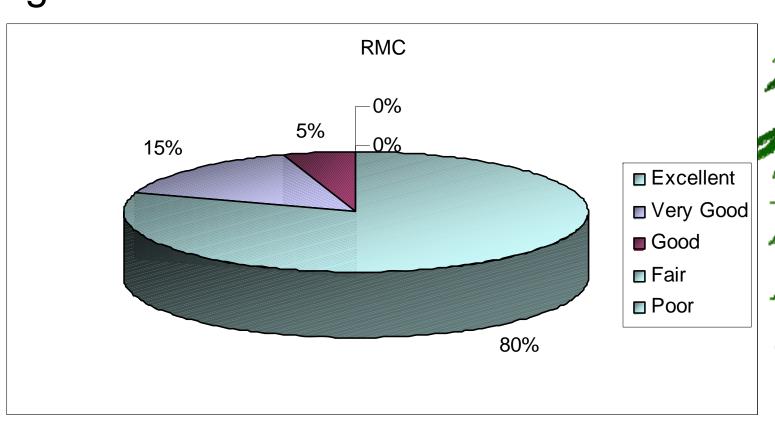


## Advantages of Clinic

- Multi-disciplinary focus with patient at the centre
- Longitudinal co-management
- \* Trusting relationships
- \* Increased length of time to dialysis start

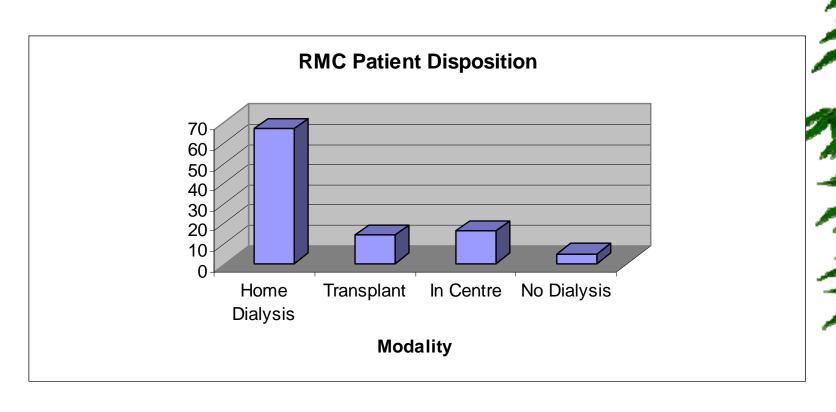
### Results of RMC

High Patient Satisfaction



#### Results of RMC

High Selection of Home Dialysis Modality



### "Entry Point B" Emergent Dialysis

- \* Acute Event
- \* Late Referral to Nephrologist
- \* No Referral to Nephrologist
- \* No Preparation



#### UHN

\* 50% started dialysis acutely "crash starts"

\* 87% of UHN emergent starts stayed on In Centre HD at TGH.

- Overcrowding in pt waiting for spots
- Backup into ER, other resources
- Unable to transfer to peripheral units
- Underutilization of Home programs

# In patient Referrals for Dialysis

- \* ICU, CCU, Neuro ICU TG, TW
- \* High risk OBS Mt Sinai
- \* Oncology PMH
- \* GIM, Rheum, Urology, Cardiology
- \* Transplant liver, lung, heart, kidney



#### In Patient Education

- Dedicated practitioner (cAPN) to address emergent dialysis starts
- Provide education regarding dialysis options
- Provide support and logistics to attain modality choice
- Supportive of Home Dialysis

#### Assessment

- \* Medical Issues
  - Course in hospital
  - Abdominal Surgeries
  - Ostomies
  - Vasculopathies
- \* Abilities, Disabilities



#### Assessment

- \* Social situation
  - Housing
  - Employment
  - Responsibilities
  - Distance to hospital
  - Family / assistance available



#### Assessment

- \* Values
  - Independence
  - Dependence
  - Travel
  - Family
  - Work
  - Cottage
  - Significant Events
- Goal Setting



#### Education

- \* Basics of renal function
- \* Impact of renal failure
- \* Forms of RRT
  - -HD
  - -PD
  - -Tx
  - No dialysis



#### Education

LIVING WITH KIDNEY DISEASE

- Vary media
  - KFC manual
    - \* Manual
    - \* CD-ROM
    - \* Video / DVD
    - \* Book on Tape
  - Baxter DVD Choices/Enjoying Life
  - Calgary DVD Modality Choice for RRT
  - BC Renal Agency DVD's multilingual

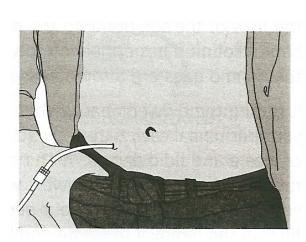




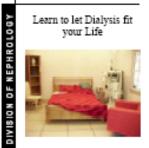
#### **Pamphlets**

- \* When Kidneys Fail
- \* Peritoneal Dialysis: Is it the best Choice for me?
- \* KFC pamphlets
- \* Nocturnal Hemodialysis











#### Education

- \* Perspectives
- Adequacy of each modality
- Advantages / Challenges
- \* Impact of chronic illness
- \* Tour of HD, home unit, PDU
- \* Offer Peer support
- \* Introduction to "Our World"



### Logistics

- \* Plan and refer for PD catheter
- Plan and refer for AV access
- Assess and plan for Discharge/rehab/Al
  - Rehab with dialysis
  - ALC with HD
  - ALC with PD
  - HomePlus CCPD
- \* Referral to other centre as appropriate

#### Results

- 233 patients and families seen
- Education and follow up
- \* 119 remained on chronic dialysis at UHM
  - (+6 to CCC)
- Others transferred, died, recovered, left AMA or referred to RMC

#### Results

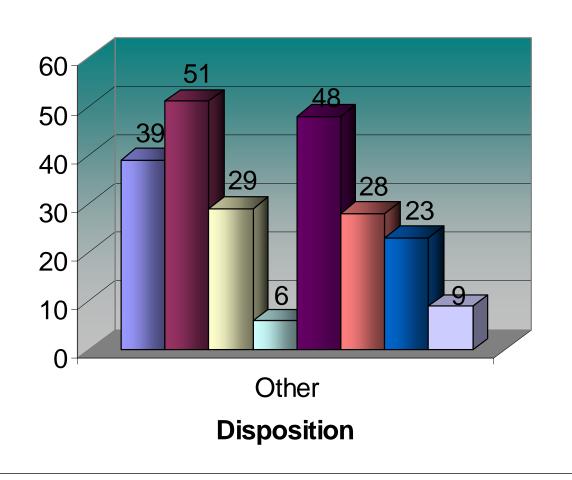
\* 33% (39/119) chose In Centre HD

\* 43% (51) chose PD

\* 24% (29) chose Home Nocturnal HD



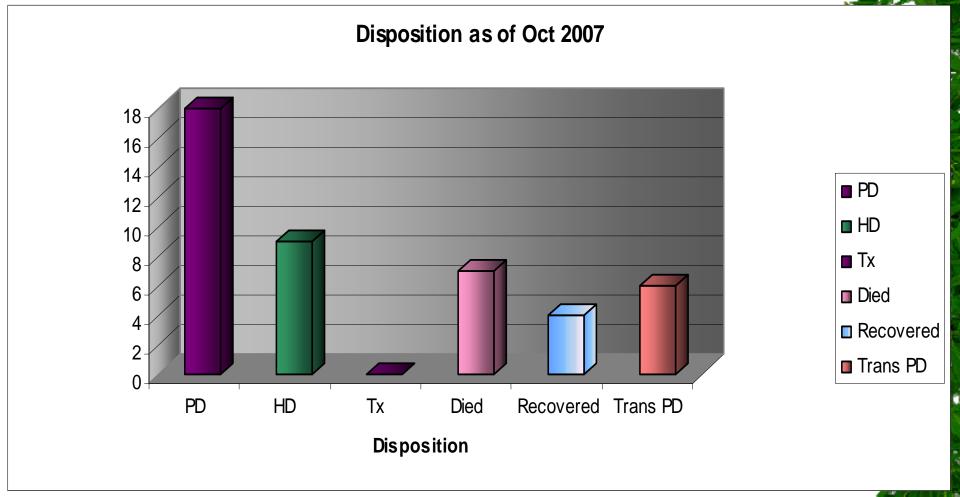
#### Nephro cAPN Mar 05-Oct 07



- In Centre Hemo
- Peritoneal
- Nocturnal HD
- CCC (Chronic Care)
- Transfer
- Recovered
- Died
- Other- AMA or to RMC

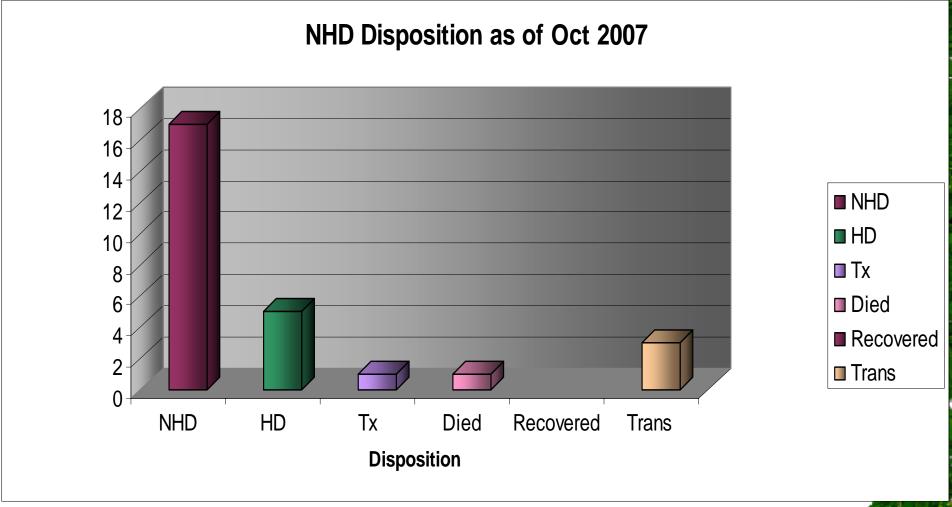


## Where they are now...PD





## Where they are now...NHD





# Modality Choice for All Patients

- \* Informed Choice
  - Education
  - Peer Support
- \* Values
- \* Lifestyle



#### Shifting from



Based Philosophy...



#### To a



"Make it Right !!"
Home Based Philosophy



# The Island is called HOME



