Enrolled Nurses going where few have gone before!

Southern DHB Home Dialysis Support Programme

Blair Donkin RN BN
Associate Charge Nurse Manager
Dialysis Unit

Southern District Health Board
Enrolled Nurses going where few have gone before!

Southern DHB Home Dialysis Support Programme

Acknowledgements:
CDHB / Nurse Maude / Maree McDonald / Ron Craft P&F (SDHB) / Gary Hume CNM Renal Services / Janine Cochrane Service Manager / Nursing Staff Dialysis Unit

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Southern District Health Board
Southern DHB EN Home Dialysis Support Programme

- $1^0$ home training CAPD / HD
  - Remote hospital nurse led clinics in
  - Home visiting programme

- Acute haemodialysis

- Acute plasma exchange - renal, neurological, oncology haematology

- 5.6 RN FTE / no advanced roles (PreDx; Access etc)
Southern DHB EN Home Dialysis Support Programme

• Renal Service regional to the lower south island of New Zealand
• Catchment 62, 356 km / 5000km coastline – Otago / Southland
• Population of over 304,268
Southern DHB EN Home Dialysis Support Programme

• 100 patients on dialysis (40/60 split PD / HD)
  Approx 80 pre Dx pts.

• HD
  – 8 training
  – 3 IC / 4 respite
  – 48 at home (5 assisted / 2 EN prog)
  – 9 HD stations – capacity / facility issues
Healthy Adult Community

Increased risk – 1:3

Dialysis or Transplant 1:1400

Australia or NZ

Otago – Southland population of (304,268) 14-16% (42,600 – 48,682) have CKD. GRF < 60ml/min

CKD – 1:7-9
### Table 11. Definition of Chronic Kidney Disease

<table>
<thead>
<tr>
<th>Criteria</th>
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</table>
| 1. **Kidney damage for ≥3 months**, as defined by structural or functional abnormalities of the kidney, with or without decreased GFR, manifest by *either*:
  - Pathological abnormalities; or
  - Markers of kidney damage, including abnormalities in the composition of the blood or urine, or abnormalities in imaging tests |
| 2. **GFR <60 mL/min/1.73 m²** for ≥3 months, with or without kidney damage |

Methods to estimate GFR are discussed in Guideline 4. Markers of kidney damage are discussed in Guidelines 5–6.
Southern DHB EN Home Dialysis Support Programme

- Increasing age / pt. numbers (need dx / multiple co-morbidities)
- Direct challenge home dialysis philosophy
- Formal external review of the renal service
  - Recommendation community needs package designed / implemented
  - Christchurch Nurse Maude Model
Southern DHB EN Home Dialysis Support Programme

Two tier response (unique NZ) variation on CHCH model:

1. Support workers – unique to DUD (ext. contract) / Criteria – 5 pts = 32 Tx / FN

2. EN programme – 1.4 EN FTE [DU staff]
   a. Provide Dx / Criteria – up to 3 pts = 14 of 18 HD Tx / FN in community

3. Impact!
Southern DHB EN Home Dialysis Support Programme

• EN Scope of Practice changed May 2010
  – EN’s make broader contribution to health services; give greater support RN’s

• RN model of Care – case load

• Direction / Delegation RN
  – deliver nursing care / health education
  – activities of daily living / observe changes
  – contribute to assessments, care planning, implementation / evaluation of care for consumers
Southern DHB EN Home Dialysis Support Programme

- Training / Orientation 10-12 /52 (contrast with SW training 4/52)

- Package contents:

- 9 modules work +

  - Medication / Water quality
  - Dx commencement
  - Machine competencies
  - Access Fistula / CVC
  - Administration of LA
  - Pt asst
  - Fluid management
  - Discontinuation of Dx
  - AFV / AVG cannulation
  - 7 skills audits

7 skills audits
Southern DHB EN Home Dialysis Support Programme

• Ongoing Training
  – Renal work book
  – IV drug calc
  – IV Compet. Level 1
  – Standing orders
    • IV Saline / SC LA
    • Heparin / IV Iron

CKD / MBD / HD / H2O Quality / Renal Medication
# Current Dialysis Prescription (Otago)

## Form Creation Date:

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<thead>
<tr>
<th>Diagnosis and Co-morbid conditions</th>
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<td>Diabetes <strong>T</strong> N - race type</td>
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<tr>
<td>Allergy status</td>
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## Treatment Days

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## Machine

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## Products

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## Online

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## Medication

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Southern DHB EN Home Dialysis Support Programme

EN Support Documentation
Folder
Pt Dx Rx’s    SO’s      Heparin dosing
Saline administration  Administration of SC LA
AVF / AVG cannulation  Accessing CVC
Flushing Heparin locking CVC  Q-syte change CVC
- Power on
- Disinfect
- Test machine
- Circuit
- Prime
- Recirculate
- Prep commencement
- Assess patient – ? variation to Dx Rx - d/w RN
- Vascular access
- Commence treatment
- Assess response – ? variation d/w RN
- Terminate treatment early + on time
- Haemostasis
- Post assessment – d/w RN variation

Fresenius 4008B
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- Water quality testing – bleach / chloramamines
- Rinse
- Disinfect
Southern DHB EN Home Dialysis Support Programme

• Benefits
  – Patient Outcomes
  – Adequacy: freq / time / scheduling
  – QoL
    • IC mortality
  – Cost to taxpayer
    • $750 – 1200 (visitor) / IC > $60k vs. HM < $30k
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Stories

• 20 + IHC ♂
  – FSGS / ↑ BP
  – Mother works to support family
  – Prev been on Dx
  – Transplant living unrelated 7/2008
  – Failed – FSGS 6/2012 (< 4 full yrs)
  – Hates Dx / DU / Change
  – Progress
Stories

• 51 ♀
  – Genetic disorder → ESRD / Blind
  – Hypertension
  – Blind partner
  – Commenced HD late 2013
  – Successfully Dx Hm
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Stories

• Another ♀ 59
  – Hx GN / obesity
  – Gradual decline ability
  – CNS complications of Dx
    • CVA like presentation
    • Rehab
  – Distinct issues prob. solv. / Trouble shooting
  – ?? Candidate EN Hm. Dx. prog
• EN Hm Dx Prog
  • Explorative
  • Offers Dx patients new take on life
  • SDHB EN’s boldly going where none have gone before
Southern DHB EN Home Dialysis Support Programme

• What of future?
  – Prog expansion
  – CAPD / APD
  – RN flexibility

• Summary
  – Patient impact
  – Service impact
  – Economic impact
  – Professional opp’y EN’s!