



Dialysis outcomes in those aged ≥ 65 years: A longitudinal study in New Zealand (DOS65+)

Ageing Well National Science Challenge 2015 Colloquium

14 August, Te Papa

Sarah Derrett

Dialysis outcomes in those aged ≥ 65 years: A longitudinal study in New Zealand (DOS65+)

- Prof Rob Walker
- A/Prof Sarah Derrett
- Dr Mark Marshall
- Dr John Schollum
- Dr Andrew Henderson
- A/Prof Sheila Williams
- Bronwen McNoe
- Dr Ari Samaranayaka
- Dr Emma Wyeth
- Nephrology teams at participating hospitals



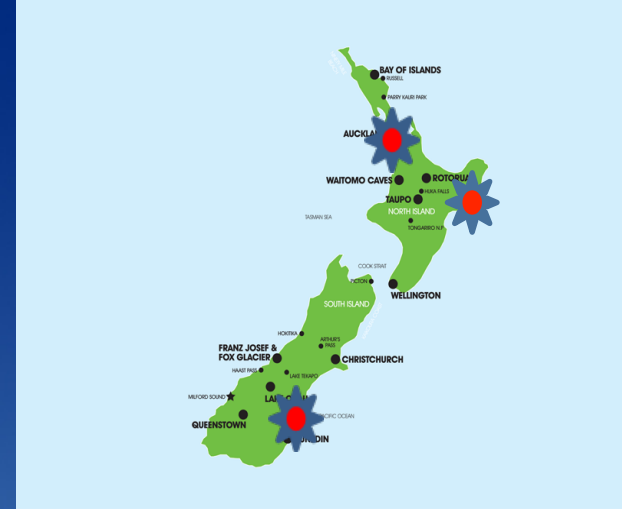
Overall Aim of DOS65+

- Obtain sufficient HRQoL data to inform clinicians' and patients' decision-making with respect to dialysis in New Zealand



Walker, R, Derrett S, Campbell J, Marshall MR, Henderson A, Schollum J, Williams S, McNoe, B. (2013) Dialysis outcomes in those aged ≥ 65 years. *BMC Nephrology*; 14:175; <http://www.biomedcentral.com/1471-2369/14/175>.

Methods



- Accelerated longitudinal design (all prevalent and newly incident patients)
 - Three dialysis centres
 - All dialysis patients aged ≥ 65 years
 - Newly incident patients aged ≥ 65 years added to cohort for duration of study (3 years)



YEAR 1

YEAR 2

YEAR 3



Incident patients
Prevalent patients

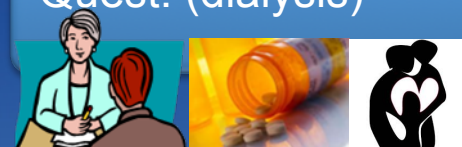
Quest. 1 & clinical data



Quest. 2 & clinical data



Quest 3., clinical data & family
Quest. (dialysis)



Incident patients

Quest. 1 & clinical data



Quest 2., clinical data &
family Quest. (dialysis)



Incident patients

Quest. 1, clinical data &
family Quest. (dialysis)



So how are we doing today? (n=150): Provisional findings

- “Compared to one year ago, how would you rate your health in general now?”
 - Much better than one year ago
 - Somewhat better now than one year ago
 - About the same as one year ago
 - Somewhat worse now
 - Much worse
 - Or died before 12 month interview (n=23)
-
- | | | |
|--|---|-------------------------------|
| – Much better than one year ago | } | Same or better
(n=97, 65%) |
| – Somewhat better now than one year ago | | |
| – About the same as one year ago | | |
| – Somewhat worse now | } | Worse
(n=53, 35%) |
| – Much worse | | |
| – Or died before 12 month interview (n=23) | | |

N.B. <u>Not</u> : Age, Sex, BMI, 4 EQ-5D dimensions, years on dialysis		Relative risk of 'worse' health at 12-months		
		RR	95%CI	P-value
Ethnicity	European/Other ethnicities	Ref		
	Māori	0.75	0.45-1.25	
	Pacific	0.52	0.44-0.61	0.00
Social relationships	Satisfied	Ref		
	Not satisfied	1.63	1.47-1.80	0.00
Comorbidity	0-2 comorbidity categories	Ref		
	3-6 comorbidity categories	1.42	1.02-1.96	0.04
EQ-5D Anxiety or Depression	No problems	Ref		
	Any problems	1.70	1.31-2.22	0.00
Health in general	Ex/VG/Good	Ref		
	Fair/Poor	1.92	1.14-3.23	0.01
Dialysis type	Haemodialysis (Clinic)	Ref		
	Haemodialysis (Home)	0.57	0.43-0.75	
	Peritoneal (Home)	0.78	0.72-0.85	0.00
Cause of ESKD	Glomerulonephritis	Ref		
	Hypertensive/Vascular	2.52	1.36-4.65	
	Polycystic kidney	1.58	1.03-2.44	
	Diabetes	1.25	0.57-2.74	
	Other	1.44	0.69-2.97	0.00
Kidney symptom score	<70 (fewer symptoms)	Ref		
	≥70	1.29	1.14-1.49	0.00

Social relationships, general health, ethnicity & dialysing at home appear to be key



Demographic

Age, sex, ethnicity, living arrangements, adequacy of household income

Social

Overall rating of social relationships, degree of family involvement, sense of community

General health, disability & functioning

BMI, overall self-rated health, five EQ-5D questions (mobility, self-care, usual activities, pain or discomfort, anxiety or depression), cognitive function, disability

Dialysis & ESKD

Dialysing 'at home' or 'in clinic', years on dialysis, peritoneal or haemodialysis, ESKD symptom bother (muscle soreness, chest pain, cramps, itchy skin, dry skin, SoB, faintness, appetite, drained, numbness, nausea, access/catheter site) and ESKD symptom summed score

Health services

Satisfaction with services and professionals, hospitalization, procedure codes

Clinical data

Comorbidities (cardio, cerebro, peripheral, lung, diabetes, cancer & other categories), cause of ESKD, anthropometric, medications, dialysis therapies, laboratory results

The future & DOS65+



- We welcome interested collaborators
- Need Masters and PhD students
- Interest in this project internationally

YEAR 1

YEAR 2

YEAR 3



Incident patients
Prevalent patients

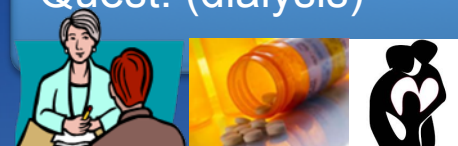
Quest. 1 & clinical data



Quest. 2 & clinical data



Quest 3., clinical data & family
Quest. (dialysis)



Incident patients

Quest. 1 & clinical data



Quest 2., clinical data &
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Incident patients

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