

A randomised controlled trial of OPTIONS for the older patients with advanced kidney disease

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Background

- Research indicates no established process to facilitate treatment decision making for older patients^{1,2}
- Shared decision making may achieve rational use of dialysis and potentially reduce futile treatment
- Decision support interventions help individuals make complex decisions³

1. Fortnum, D., Grennan, K., & Ludlow, M. (2015a). Dialysis Consumer Perspectives Survey Two: Complete data set report

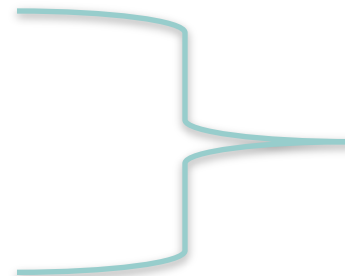
2. Song, M.-K. et al(2013). Patient perspectives on informed decision-making surrounding dialysis initiation. *NDT* 28(11)

3. Campbell, N., Murray, E., Darbyshire, J., Emery, J., Farmer, A., Griffiths, F., . . . Kinmonth, A. (2007). Designing and evaluating complex interventions to improve health care. *BMJ*, 334.

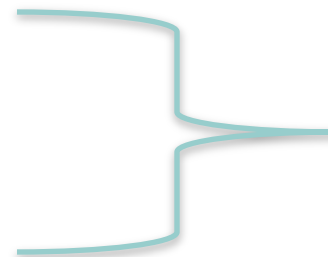
Literature Review

Cochrane Systematic Review³

- Improve knowledge
- Lower decision conflict
- Active in decision making
- Improve understanding of risks and benefits



High quality evidence



Moderate quality evidence

Aim

- To determine the effectiveness of a decision support intervention (OPTIONS) to assist older patients with making a choice between dialysis or non-dialysis.

Patient criteria

Inclusion Criteria

- ≥ 70 years of age
- ≤ 20 mL/min/1.73m²
- Chronic kidney disease

Exclusion Criteria

- Non English speaking
- Medically incompetent to make health care decisions
- Eligible for transplantation
- Already made a treatment decision

Study Outcomes

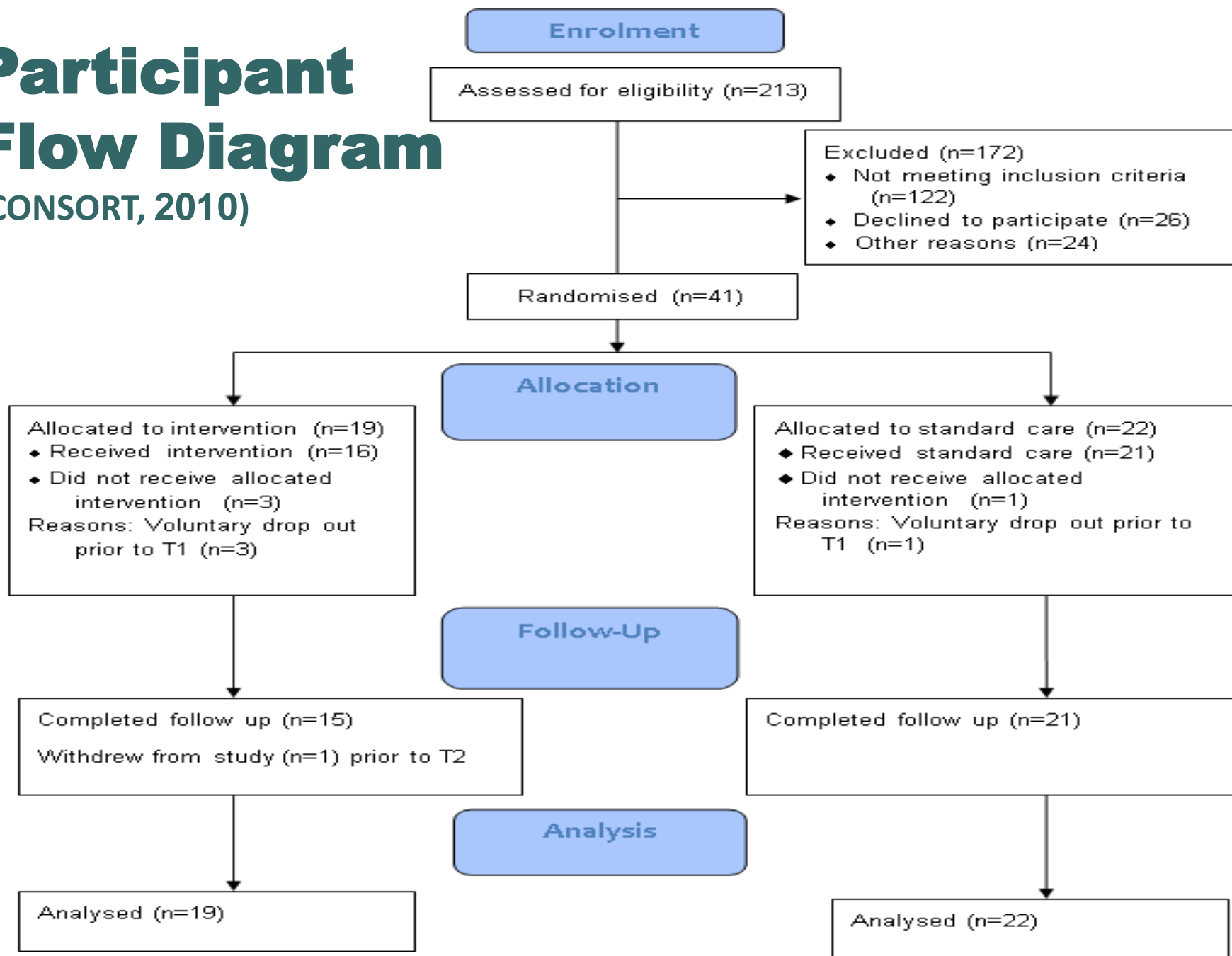
- **Decision Conflict Score⁵** (T1) and (T2)
(Sub- scores – Uncertainty, Informed, Values Clarity, Feeling Supported)
- **Decision Regret Scale⁶** (T1) and (T2)

5. O'Connor, A. M. (2010). User Manual - Decisional Conflict Scale (10 item question format).

6. O'Connor, A. M. (2003). User Manual - Decision Regret Scale.

Participant Flow Diagram

(CONSORT, 2010)



Results – Demographic and clinical profile

Baseline characteristics	Standard care (n=22)	OPTIONS (n=19)	P value
Gender (Male; %)	50.00	63.2	0.40
Age (years)	78.55	77.21	0.45
AKPS	79.90	83.68	0.27
BMI (kg/m ²)	28.77	29.67	0.60
eGFR (mL/min/m ²)	15.95	15.52	0.65
CKD Stage (%)			
Stage 4	34.10	22.00	0.30
Stage 5	19.50	24.40	

Results – Decision Conflict (T1)

Outcome	Standard Care N=21	Options N=16	Mean Difference between groups	p-value
Decision Conflict (total)	15.95 ±23.00	20.31 ±17.36	4.36	0.53
Uncertainty (sub score)	21.43 ±30.91	43.75 ±34.76	22.32	0.047
Informed (sub score)	19.05 ±33.03	15.63 ±21.49	-3.42	0.72
Values Clarity (sub score)	23.81 ±29.02	18.75 ±23.27	-5.06	0.57
Feeling supported (sub score)	7.14 ±12.44	12.50 ±15.51	5.36	0.25

Results – Decision Regret

Parameter	Estimate	95% Confidence Interval	Sig.
Intercept 0=Intervention	36.87 0.73	14.64 – 59.11 -2.39 – 3.85	0.002 0.64
Gender 0=Male	0.48	-2.63 – 3.59	0.76
Age	0.09	-0.18 – 0.37	0.50
Time Point One	1.49	-0.18 – 0.37	0.50

Conclusion

- **Significant difference in uncertainty at T1**
- **Decision regret not a sensitive measure at the time of decision**
- **Limitations**
 - Small sample size



Literature Review

Decision Support Interventions (CKD)

- Spanish study: significantly less decisional changes⁴
- UK study: higher scores for usefulness of written information⁵
- Aust study: improved knowledge levels significantly⁶

Limited evidence, no RCTs

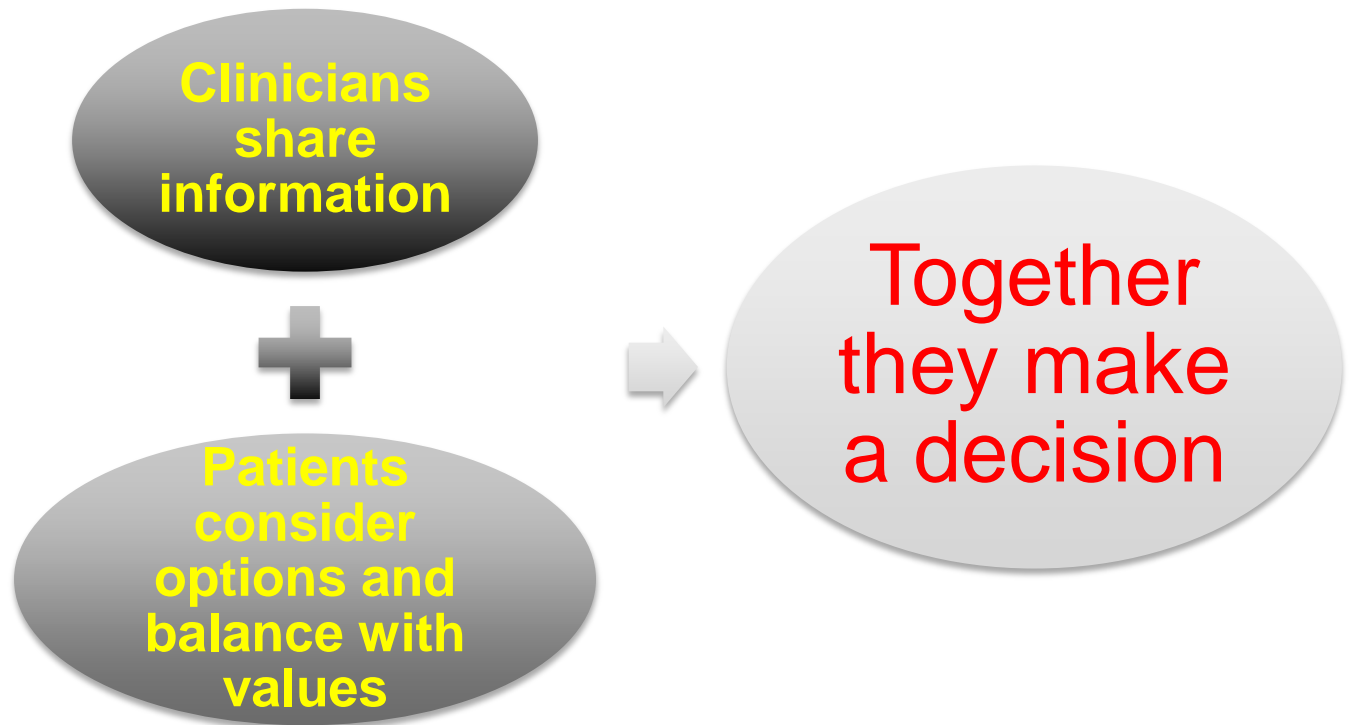
4. Prieto-Velasco, M., Quiros, P., & Remon, C. (2015). The Concordance between Patients' Renal Replacement Therapy Choice and Definitive Modality: Is It a Utopia? *PLOS ONE*, *10*(10)

5. Winterbottom, A. E. et al (2015). Patient Acceptability of the Yorkshire Dialysis Decision Aid (Yodda) Booklet: A Prospective Non- Randomized Comparison Study across 6 Predialysis Services. *Perit Dial Int*

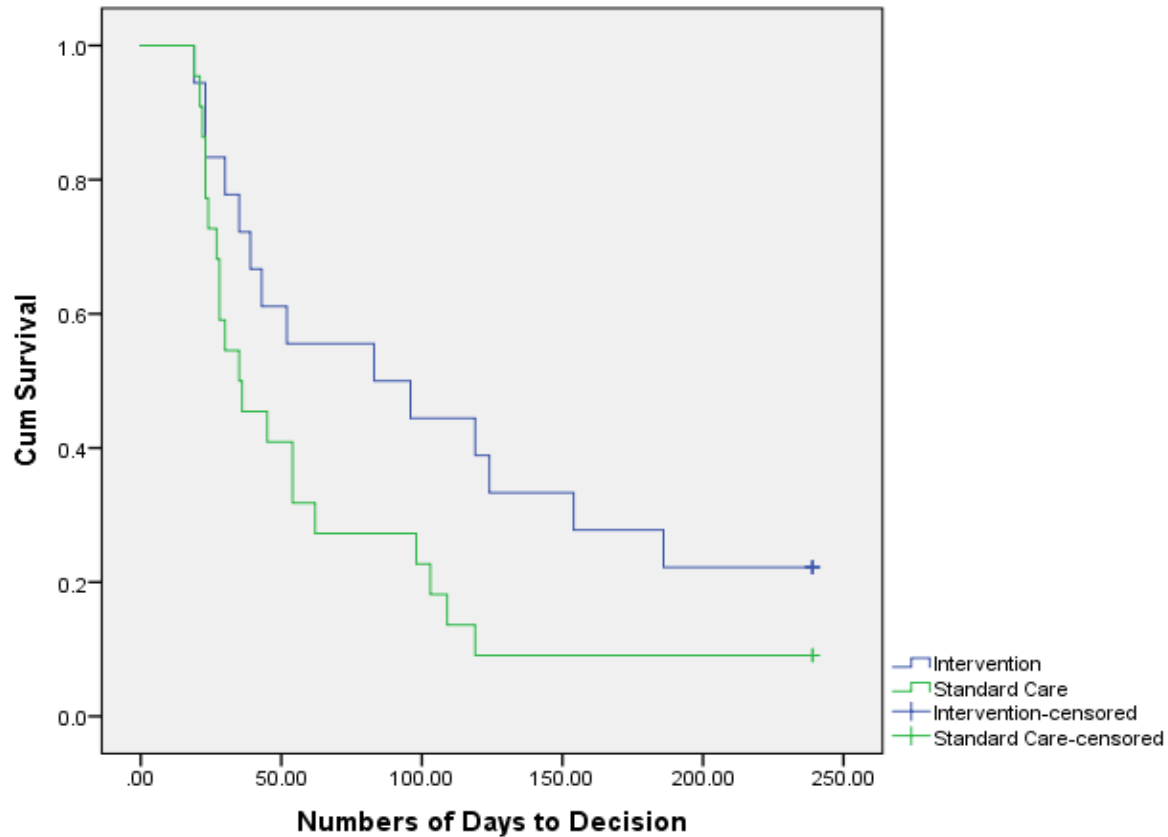
6. Fortnum, D., Grennan, K., & Smolonogov, T. (2015b). End-stage kidney disease patient evaluation of the Australian 'My Kidneys, My Choice' decision aid. *Clinical Kidney Journal*, *8*(4), 469-475

Background

Shared
Decision
Making



Results – Time to decision



Note: Log rank=0.08