

# Comparison of baseline characteristics of participants in the OUTLOOK study with older patients in the Australia and New Zealand Dialysis and Transplant Registry

Amanda N Siriwardana<sup>1, 2, 3</sup>, Nicholas A Gray<sup>4, 5</sup>, Sarah Roxburgh<sup>1, 3</sup>, Vasi Naganathan<sup>1, 6</sup>, Josephine M Clayton<sup>1, 7</sup>, Celine Foote<sup>8</sup>, Martin Gallagher<sup>2, 9, 10</sup>, on behalf of the Elderly Advanced CKD Program Investigators

<sup>1</sup> Sydney Medical School, Faculty of Medicine and Health, University of Sydney, Sydney, Australia  
<sup>2</sup> The George Institute for Global Health, University of NSW, Sydney, Australia  
<sup>3</sup> Department of Renal Medicine, Royal North Shore Hospital, Sydney, Australia  
<sup>4</sup> Department of Renal Medicine, Sunshine Coast University Hospital, Birtinya, Australia  
<sup>5</sup> School of Health and Behavioural Science, University of Sunshine Coast, Sippy Downs, Australia

<sup>6</sup> Department of Geriatric Medicine, Concord Repatriation General Hospital, Sydney, Australia  
<sup>7</sup> The Palliative Centre, Hammond Care, Greenwich Hospital, Sydney, Australia  
<sup>8</sup> Department of Renal Medicine, Concord Repatriation General Hospital, Sydney, Australia  
<sup>9</sup> Department of Renal Medicine, Liverpool Hospital, Sydney, Australia  
<sup>10</sup> Faculty of Medicine, University of New South Wales, Sydney Australia

Abstract No: WCN25-AB-1482

Email contact: ASiriwardana@georgeinstitute.org.au

## Background

- For older patients with kidney failure, deciding between treatment pathways of kidney replacement therapy (KRT) and conservative kidney management (CKM) is challenging. **There is limited high quality outcome data to guide these decisions.**
- The OUTcomes Of Older patients with Kidney failure (**OUTLOOK**) study is an ongoing prospective observational cohort study enrolling Australian patients  $\geq 75$  years with kidney failure (eGFR  $\leq 15$  mL/min/1.73m<sup>2</sup>) across 8 Australian sites.
- Patients in OUTLOOK are in the decision-making phase, or have recently decided between KRT or CKM.
- The Australia and New Zealand Dialysis and Transplant Registry (**ANZDATA**) is a registry that collects data on all dialysis patients receiving long-term maintenance treatment and all kidney transplant recipients across approximately 100 Australian and New Zealand renal units. Data on CKM patients is not collected in this registry.

## Aim

This analysis sought to:

- Compare baseline characteristics of the OUTLOOK population with incident KRT patients aged  $\geq 75$  years in ANZDATA.

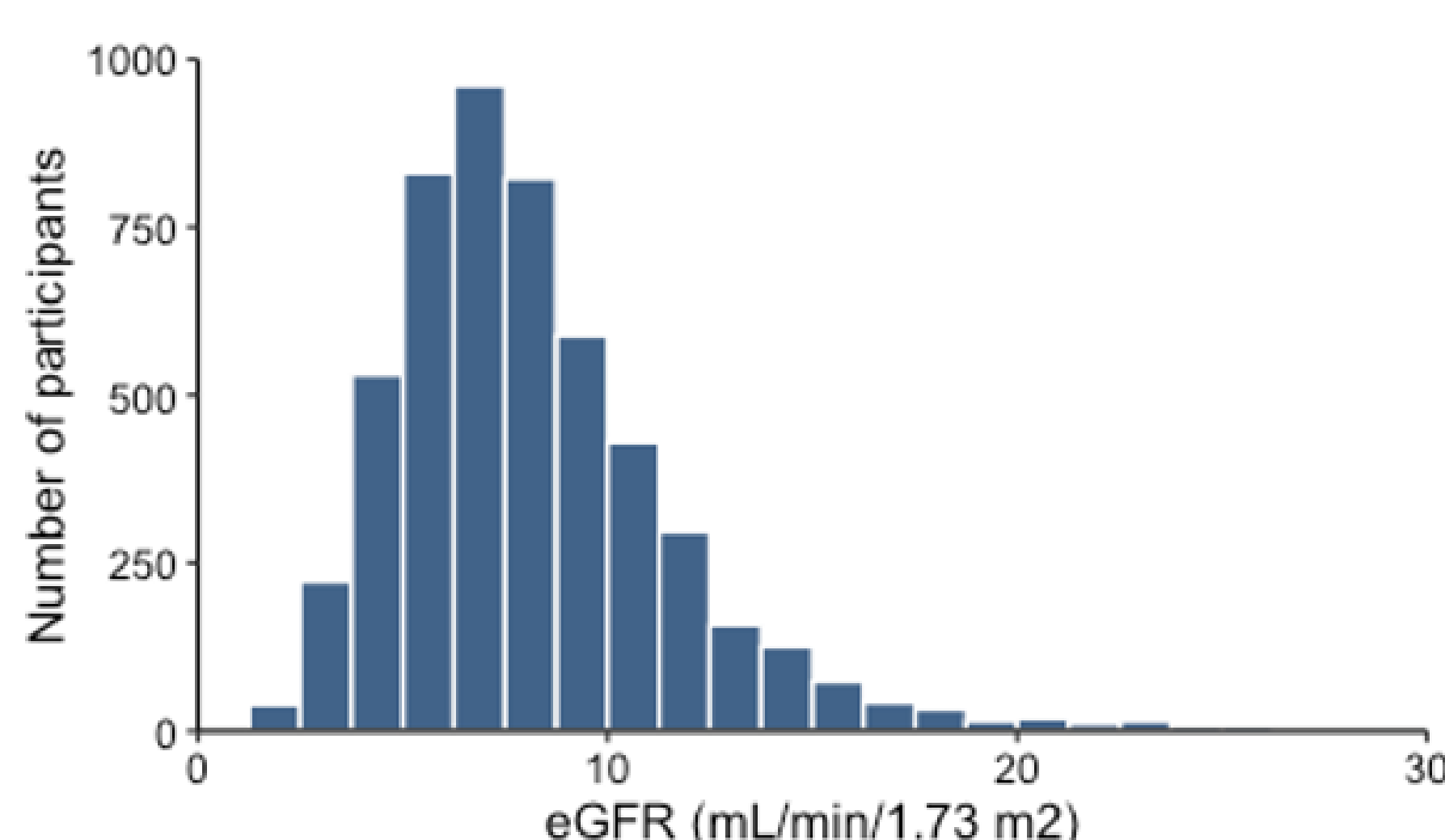
## Methodology

- Inclusion criteria for the cohorts in this analysis were:

OUTLOOK cohort	ANZDATA Registry cohort
Enrolled in OUTLOOK between 1 July 2015 to 27 July 2024	Commenced KRT between 1 January 2015 and 31 December 2022 and entered onto the ANZDATA Registry
Age $\geq 75$ years at study entry	Age $\geq 75$ years at commencement of KRT
Not receiving dialysis at the time of initial screening	Patient expected to require long-term maintenance KRT
Patient expected to survive at least 3 months beyond enrolment	

- Characteristics of the cohorts were compared using descriptive statistics.
- Differences between groups were quantified with standardised difference scores (d), calculated as differences in means or proportions divided by standard error.
- Differences of 0.2, 0.5 and 0.8 represent small, medium and large effect sizes, respectively.

(A)



(B)

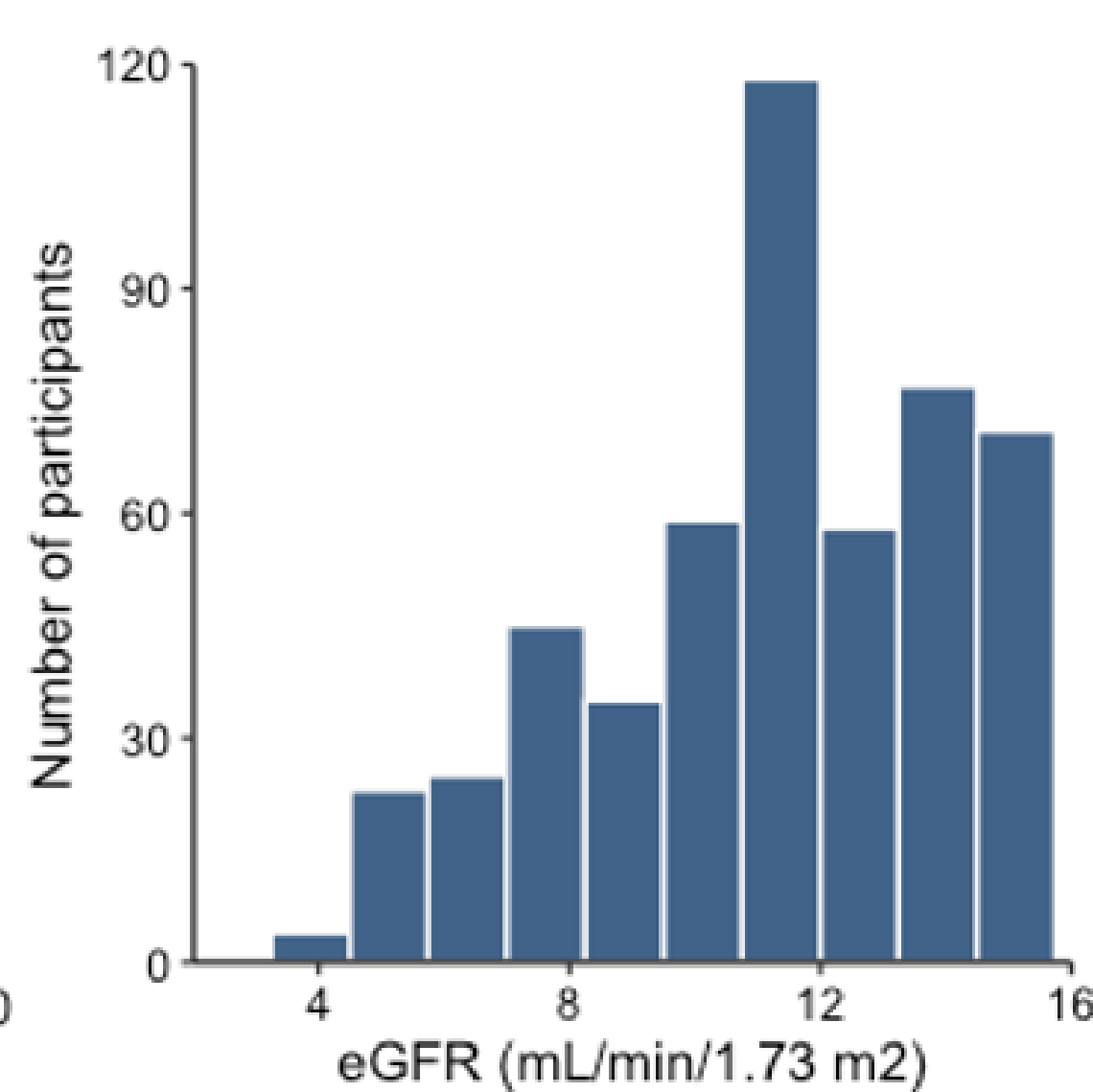


Table 1. Baseline characteristics OUTLOOK participants compared with ANZDATA cohort.

Characteristic	ANZDATA (N = 5339)	OUTLOOK (N = 529)	Standardised difference	P value
Age in years, mean (SD)	79.4 (3.7)	83.0 (5.2)	0.81	<0.001
Female	1635 (30.6%)	228 (43.1%)	0.26	<0.001
Ethnicity			0.32	<0.001
White or European	4133 (77.4%)	378 (71.5%)		
Asian or Pacific	687 (12.9%)	117 (22.1%)		
Other	372 (7.0%)	27 (5.1%)		
Unknown	147 (2.8%)	7 (1.3%)		
Diabetes	2685 (50.3%)	254 (48.0%)	-0.05	0.32
Pathway at entry <sup>a</sup>			-	-
Haemodialysis	4093 (76.7%)	35 (6.6%)		
Peritoneal dialysis	1236 (23.2%)	36 (6.8%)		
Dialysis type undecided	-	8 (1.5%)		
Kidney transplant	10 (0.2%)	0		
CKM	-	346 (65.4%)		
Undecided	-	104 (19.7%)		
Blood results at entry <sup>b</sup>				
Creatinine ( $\mu$ mol/L), mean (SD)	561 (209)	383 (117)	-1.05	<0.001
eGFR (mL/min/1.73m <sup>2</sup> ), mean (SD)	8.3 (4.3)	11.3 (2.9)	0.83	<0.001

<sup>a</sup> Pathway refers to planned treatment pathway for OUTLOOK, and actual KRT treatment pathway at entry for ANZDATA Registry cohort.

<sup>b</sup> Blood results were within 3 months of entry into study for OUTLOOK, and at KRT commencement for ANZDATA cohort.

## Results

- At the time of this analysis, **529 patients were enrolled into OUTLOOK** across 8 Australian sites. Of these:
  - 14.9% nominated dialysis as their chosen kidney failure treatment pathway,**
  - 65.4% opted for a CKM pathway, and**
  - 19.7% were undecided.**
- In the comparison cohort, **5339 incident patients aged  $\geq 75$  years commenced KRT and were entered onto ANZDATA.** Of these:
  - 99.8% commenced dialysis,**
  - 0.2% (10 patients) received a kidney transplant at KRT entry.**
  - A further 12 patients who commenced dialysis went on to **receive a kidney transplant in the analysis period (0.2%).**
- Compared with ANZDATA patients, OUTLOOK participants were (Table 1):
  - Older (Figure 1)**
  - Higher female representation**
  - Similar rates of diabetes**
  - Higher eGFR at entry (Figure 2)**
- Additional characteristics known to be associated with clinical outcomes were collected for the OUTLOOK cohort, including functional status, frailty and detailed comorbidity data (Table 2).

Figure 2. eGFR at entry into (A) ANZDATA and (B) the OUTLOOK study.

## Conclusions

- Compared with the  $\geq 75$  years incident KRT population from ANZDATA, **OUTLOOK captures an older, comorbid, predominantly community-dwelling cohort, with a high proportion of CKM as the chosen pathway of kidney failure management.**
- OUTLOOK will provide valuable prospective outcome data for an older Australian kidney failure cohort not otherwise well captured in national registries.

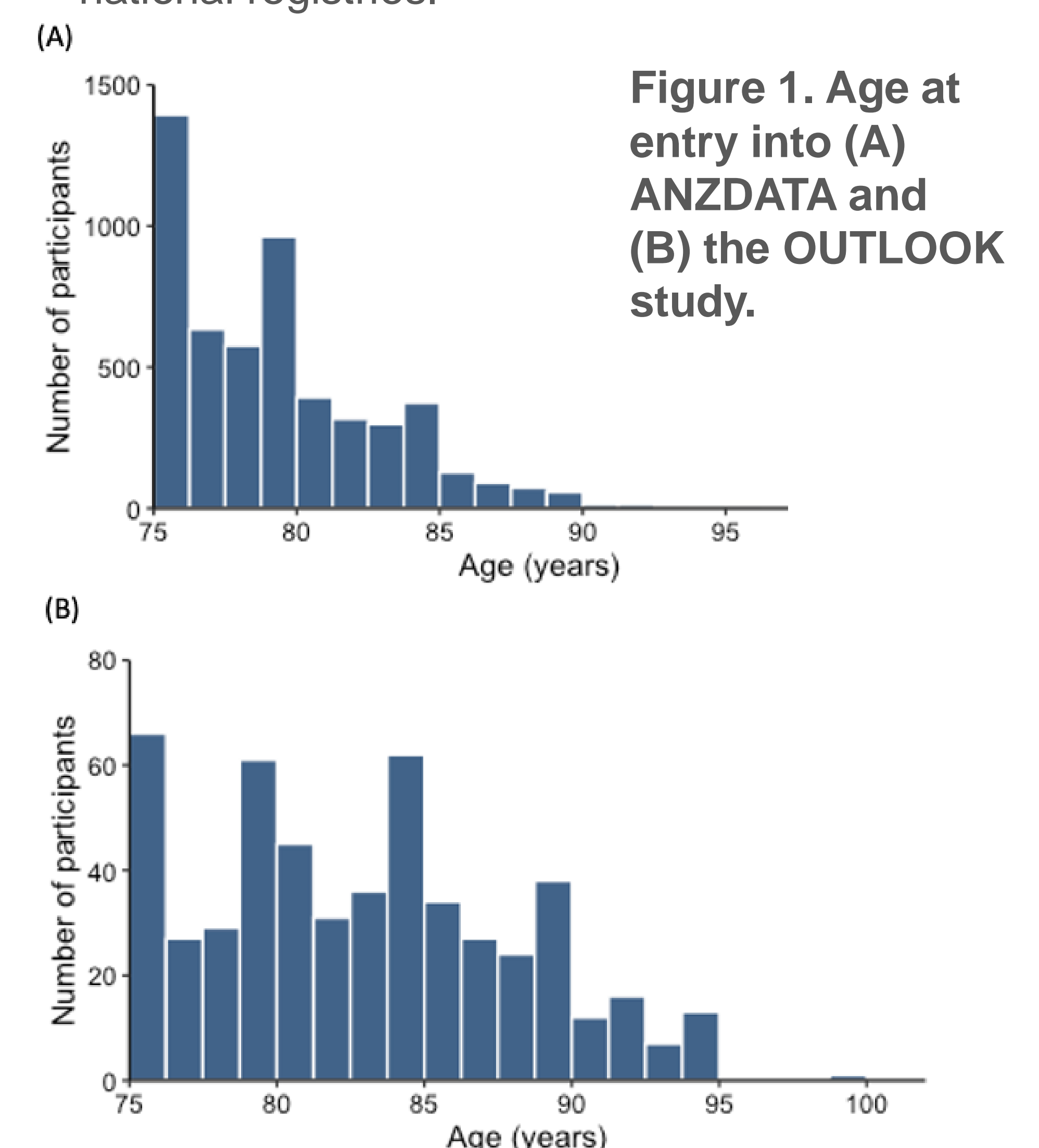


Figure 1. Age at entry into (A) ANZDATA and (B) the OUTLOOK study.

Table 2. Additional sociodemographic and care characteristics collected for OUTLOOK cohort.

Characteristic	OUTLOOK (N = 529)
Residential situation	
Community-dwelling	472 (89.2%)
Retirement village/hostel/nursing home	52 (9.8%)
Unknown	5 (0.9%)
Mobility status	
Independent	296 (56.0%)
Mobility aid	215 (40.6%)
Unknown	18 (3.4%)
Functionally independent (defined by Karnofsky performance score)	298 (56.3%)
Frail (defined by Clinical Frailty Scale)	251 (47.4%)
Mean modified Charlson comorbidity index (SD)	8.1 (1.9)
Verbal or written advance care plan	148 (28.0%)
Clinician response of 'no' to surprise question	315 (59.5%)