

SECTION J ANTHROPOMETRIC MEASURES OF HAEMODIALYSIS PATIENTS

Patients' measured height and weight were recorded in the May 2014 census, all prevalent home and hospital HD patients were included.

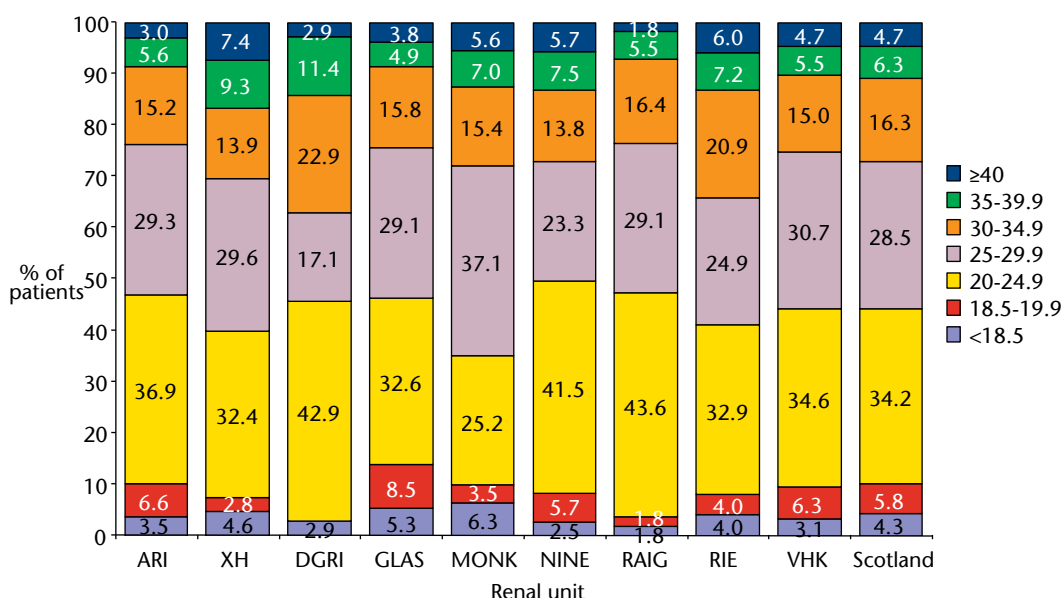
Height and weight measurements were available for 1655 (89.3%) of the 1853 prevalent HD patients. Body mass index (BMI) can be calculated using height and weight in adult patients. Patients aged under 18 (9 patients) and those with one or more limb amputations (91 patients) are excluded from the analyses.

BMI was available for 1562 (89.1%) of 1753 adult patients with no limb amputation.

The data collection form and methods are available on the SRR website:

<http://www.srr.scot.nhs.uk/Projects/Main.html#census>

J1 Distribution of BMI (kg/m²) by renal unit May 2014



The WHO suggest that BMI <18.5 kg/m² is underweight in the normal population, that BMI ≥ 25 kg/m² is overweight and ≥ 30 kg/m² denotes obesity.

A BMI of <20kg/m² is suggested as an audit measure by Renal Association clinical guidelines as a measure of under nutrition.

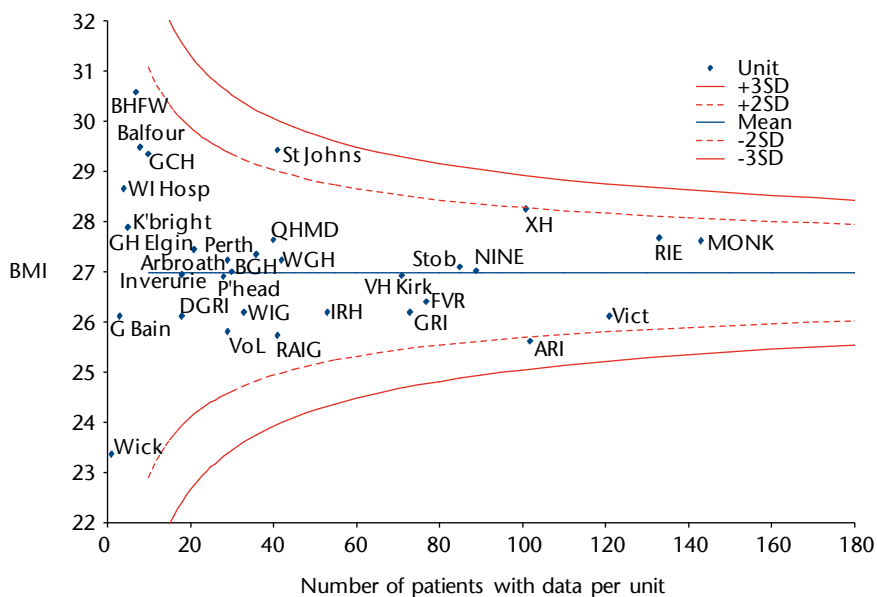
The Renal Association guideline regarding evaluation and selection for potential renal transplant states that patients with BMI >30 kg/m² present technical difficulties, and those with BMI >40 kg/m² are less likely to benefit from transplantation.

The Scottish Health Survey reports a rising trend in obesity and in 2010, 65% of adults were overweight (BMI >25) with 28% of them in the obese category (BMI >30).

<http://www.scotland.gov.uk/Topics/Statistics/Browse/Health/scottish-health-survey>

In the Scottish haemodialysis population in May 2014 55.8% of patients were overweight with 27.3% in the obese category.

J2 Distribution of mean BMI (kg/m²) by dialysis unit May 2014



The mean BMI of HD patients in Scotland was 27 kg/m² (overweight).

J3 Median BMI (kg/m²) of patients in each primary renal diagnosis group May 2014

Diagnosis group	Number of patients	Median BMI	IQR
Glomerulonephritis	290	26.6	22.6 - 30.7
Interstitial	387	25.1	22.3 - 28.8
Multisystem	293	24.3	21.7 - 28.3
Diabetes	308	28.7	24.6 - 34.1
Unknown	275	25.8	22.4 - 29.6

There are significant differences in BMI between PRD groups (p<0.001 Kruskal-Wallis).

J4 Median BMI (kg/m²) by census year 2009-2014

Year	HD census records*	Exclusions due to amputation	Missing BMI		Median BMI	IQR**
			n	%		
2009	1840	/	219	11.9	25.9	22.5 - 29.9
2010	1863	/	217	11.6	25.6	22.4 - 30.2
2011	1874	/	166	8.9	25.7	22.4 - 30.1
2012	1782	85	138	7.7	25.7	22.4 - 29.9
2013	1793	86	234	13	25.8	22.6 - 29.8
2014	1753	91	191	10.9	25.9	22.5 - 30.4

* Adult patients only. Data regarding lower limb amputation has been collected since 2012, and patients reported to have one or more amputation are excluded from the analysis for 2012-2014.

** IQR Inter quartile range.

J5 Distribution of BMI (kg/m²) by year 2009-2014

