

SECTION K ANAEMIA

 This section's data are available on-line in Tableau format which enables interaction with the data: <http://www.srr.scot.nhs.uk/publications/Dashboards/Census-May-2017.html>.

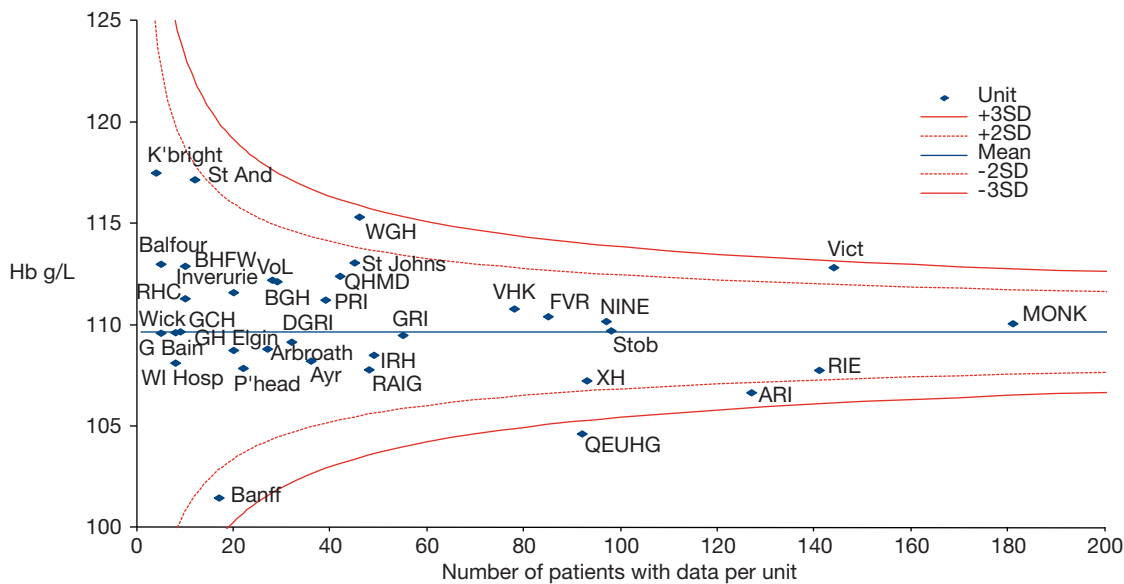
The anaemia audit was performed in May 2017; all patients in Scotland receiving hospital or home haemodialysis on 01 May 2017 were included in the audit. Results were excluded for patients who had received a recent blood transfusion. There were 1904 results from 1954 patients (97.4%).

Haemoglobin concentration (Hb) was measured in a pre-dialysis blood sample after the first short interdialytic gap of the audit week, or as soon as possible thereafter. Auditing after the short (2 day) gap is done in order to minimise the potential effect of dilution due to fluid overload.

The UK Renal Association (UKRA) guideline from November 2010 and updated in 2017 recommends a target Hb of 100-120g/L for patients with chronic kidney disease, but only for those patients receiving Erythropoiesis Stimulating Agents (ESA) therapy.

We have reported the mean achieved Hb value by satellite dialysis unit where data are available and also the percentage of patients, by parent unit, achieving the UKRA standard.

K1 Mean Hb of Hospital HD patients in each dialysis unit May 2017



Patients with Hb >120g/L and confirmed as not receiving ESA therapy (97 patients) are excluded from the funnel plot. All units lie within 3 standard deviations of the population mean (109.6g/L) with the exception of QEUEHG which falls more than 3SD below the mean.

K2 Number of HD patients, median Hb and achievement of audit standards by renal unit May 2017											
	ARI	XH	DGRI	GLAS	MONK	NINE	RAIG	RHC*	RIE	VHK	Scotland
Number of patients	240	144	54	609	187	181	89	10	299	141	1954
Missing data or transfused	7	2	2	12	2	6	3	0	9	7	50
% patients with Hb data	97	99	96	98	99	97	97	100	97	95	97
Median Hb all patients**	108	110	113	111	112	113	111	110	114	113	111
% patients with Hb 100-120 g/L***	59.2	51.2	71.4	48.8	61.9	69.8	75.8	50.0	50.5	59.3	56.1
% patients with Hb >120 g/L***	16.4	20.2	14.3	26.8	21.6	17.1	10.6	30.0	28.0	25.4	22.7
Upper quartile***	116	119	118	121	118	119	116	121	121	121	120
Median Hb g/L***	107	110	110	110	111	112	109	110	113	113	111
Lower quartile***	100	98	105	100	102	105	103	103	102	105	101
Range g/L***	65 - 141	74 - 136	78 - 138	64 - 158	66 - 147	72 - 142	82 - 137	65 - 156	46 - 151	83 - 140	46 - 158

* The standards set for adults are not applicable to children.

** All patients with results except those with recent blood transfusion (n=1904)

*** UKRA standard. Hb 100-120 g/L on ESA therapy. Patients were excluded if there were no data, they had recently received a blood transfusion or were not receiving ESA therapy on the census date (n=1619).

Of the 1904 patients with Hb values, 1511 (79.4%) had Hb \geq 100g/L.

230 patients were confirmed as not receiving ESA therapy and had not recently received a blood transfusion. Of the 222 with data, 24 (10.8%) had Hb <100g/L, 101 (45.5%) had Hb 100 - 120g/L and 97 (43.7%) had Hb >120g/L.

Data on ESA treatment (including patients confirmed as not receiving ESA) were available for 1882 (96.3%) patients. Using this information we were able to calculate the proportion of patients achieving the UKRA standard (Hb 100-120g/L) receiving ESA therapy on the census date. Of the 1619 patients confirmed as receiving ESA treatment and who had data and had not recently been transfused, 909 (56.1%) achieved the UKRA standard. Hb was <100g/L in 343 (21.2%) of patients, Hb was >120g/L in 367 (22.7%) and 190 (11.7%) had Hb >125g/L.

There is variation in practice across Scotland for ESA prescription when patients are diagnosed with malignancy; some units stop therapy whereas other take a more individualised approach. We have not taken this into account in our analyses.