

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>.

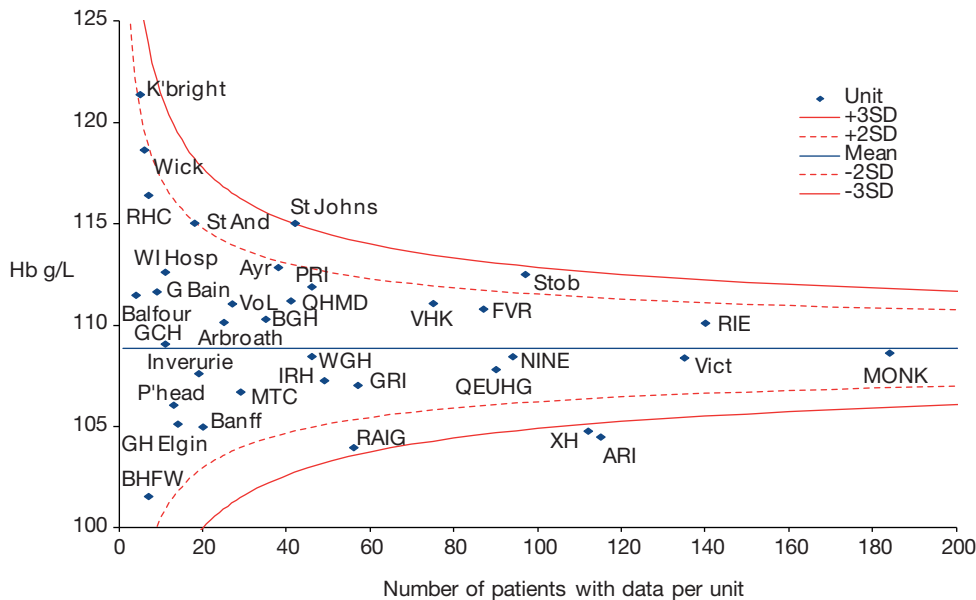
The anaemia audit was performed in May 2018; all patients in Scotland receiving hospital or home haemodialysis on 01 May 2018 were included in the audit. Results were excluded for patients who had received a recent blood transfusion (17 patients). There were 1901 results from 1950 patients (97.5%).

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 2018



Patients with Hb >120g/L and confirmed as not receiving ESA therapy (90 patients) are excluded from the funnel plot. All units lie within 3 standard deviations of the population mean (108.9 g/L) with the exception of XH and ARI which fall more than 3SD below the mean.

K2 Number of HD patients, median Hb and achievement of audit standards by renal unit May 2018											
	ARI	XH	DGRI	GLAS	MONK	NINE	RAIG	RHC*	RIE	VHK	Scotland
Number of patients	222	166	53	594	195	181	90	10	298	141	1950
Missing data or transfused	4	3	3	13	6	7	2	0	8	3	49
% patients with Hb data	98	98	94	98	97	96	98	100	97	98	97
Missing ESA Data	7	4	2	16	5	6	4	1	7	12	64
% on ESA Therapy	89	90	79	87	92	80	77	80	81	84	85
Missing Iron data	7	4	2	16	5	6	4	1	9	12	66
% on iv iron	85	85	60	72	68	60	76	50	71	62	72
Median Hb all patients**	107	108	111	110	110	113	109	123	113	114	110
% patients with Hb 100-120 g/L***	57.2	60.1	58.5	55.8	68.8	61.6	69.1	12.5	59.4	63.2	59.7
% patients with Hb >120 g/L***	10.3	16.2	14.6	19.2	13.6	18.8	5.9	50.0	20.8	24.8	17.3
Upper quartile***	114	116	117	118	115	119	114	125	120	119	118
Median Hb g/L***	106	108	110	109	110	111	108	112	112	114	110
Lower quartile***	97	100	99	100	104	102	100	96	103	107	101
Range g/L***	73 - 138	54 - 136	78 - 139	74 - 157	61 - 138	81 - 147	60 - 135	89 - 161	53 - 151	72 - 137	53 - 161

* The UKRA standards apply to patients 2 years and older.

** All patients with results except those with recent blood transfusion (n=1901).

*** 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=1586).

Of the 1901 patients with Hb values, 1479 (77.8%) had Hb \geq 100g/L.

209 patients were confirmed as not receiving ESA therapy and had not recently received a blood transfusion. Of the 204 with data, 24 (11.8%) had Hb <100g/L, 90 (44.1%) had Hb 100 - 120g/L and 90 (44.1%) had Hb >120g/L.

Data on ESA treatment (including patients confirmed as not receiving ESA) were available for 1831 (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 1586 patients confirmed as receiving ESA treatment and who had data and had not recently been transfused, 947 (59.7%) achieved the UKRA standard. Hb was <100g/L in 365 (23.0%) of patients, Hb was >120g/L in 274 (17.3%) and 133 (8.4%) had Hb >125g/L.

Both the ESA and iron data are based on what the patients were receiving on the census date. If someone has either of these medicines stopped just before the census (or started just after) we will not have captured this.

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.