

NHSBT Board – November 2018

Performance Discussion
Period 07 (October) 2018

• BLOOD

- Collections in October (and November) back to August levels (plus)
- Together with low demand / WIP pull through – stocks now at green
- Risk reduced going into Xmas / Winter
- Concern re impact of nurse breaks on collections on Q4

• ODT

- MAT is flat (donors) and declining (transplants)
- Seasonal increases to come but comparatives are challenging
- Gap to TOT2020 targets – stable for donors, increasing re transplants
- Finances getting tighter (Hub costs, NORS capacity.....timing)
- Risk re Opt Out accountabilities and funding (in England)

• DTS

- Ongoing growth in activity and income
- Adverse trend in cord blood issues continues

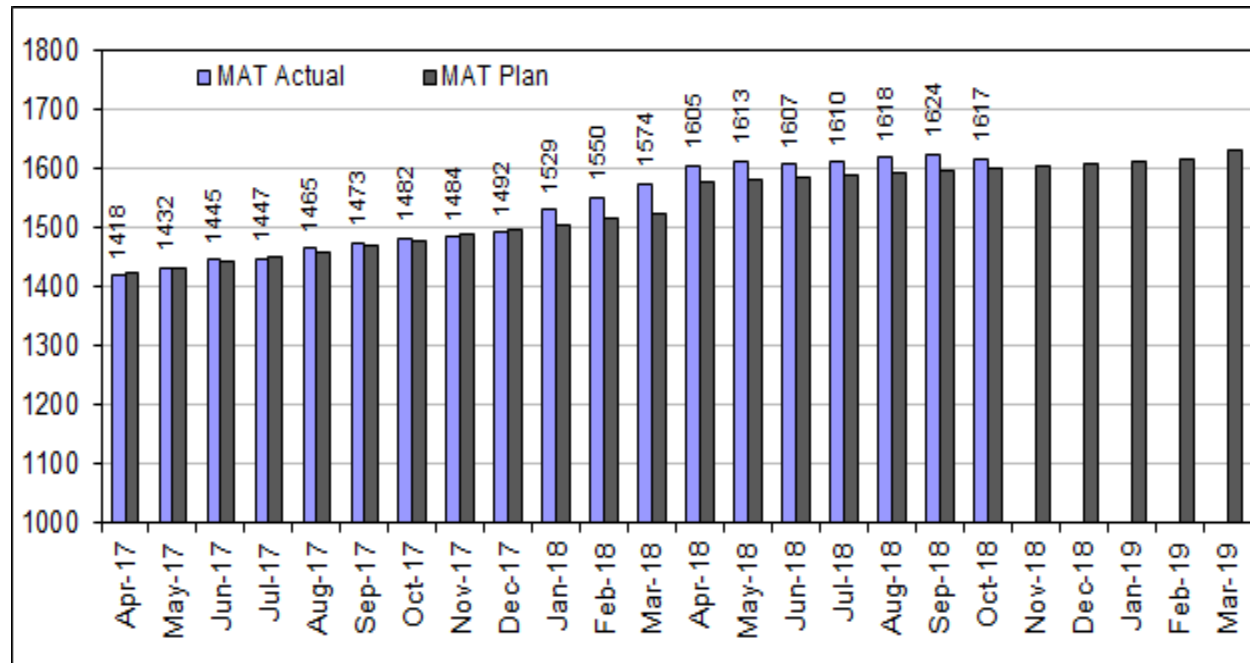
Flat trend in the number of deceased donors

5% below TOT2020 target but 5% higher than last year to date

Risk of falling behind if winter months are below last years strong comparatives

45. MAT number of Deceased Organ Donors

YTD Performance	Annual Target	YTD Target	YTD Actual	YTD RAG	YTD RAG Trend
Number of Deceased Organ Donors	1,632	952	900	R	Worse



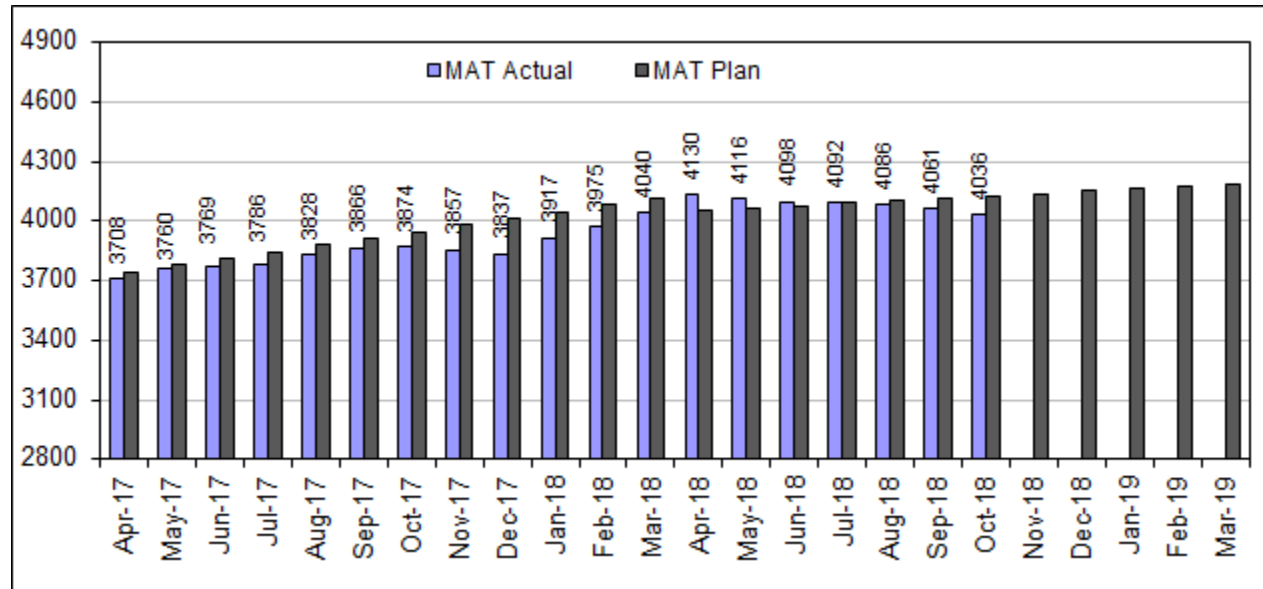
Declining trend in deceased transplants

Despite 5% more donors, transplants now marginally below last year

High risk that deceased transplants in 2018/19 will be lower than 2017/18

46. MAT number of Deceased Donor Organ Transplants

YTD Performance	Annual Target	YTD Target	YTD Actual	RAG	YTD RAG Trend
Number of Deceased Donor Transplants	4,548	2,653	2,220	R	-



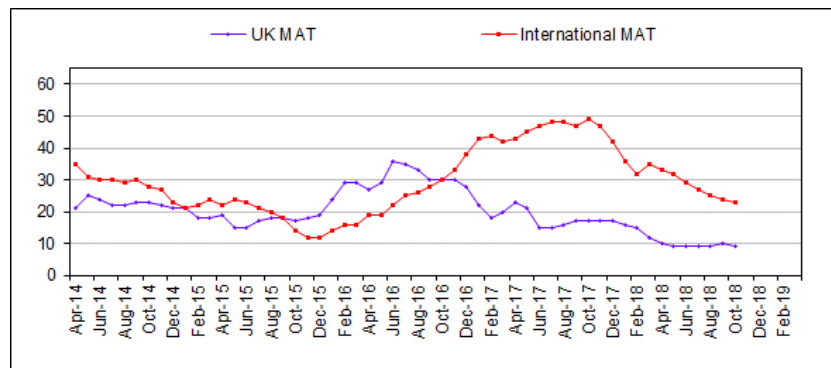
Good year to date performance in DTS also

....but cord blood trends continue to be adverse

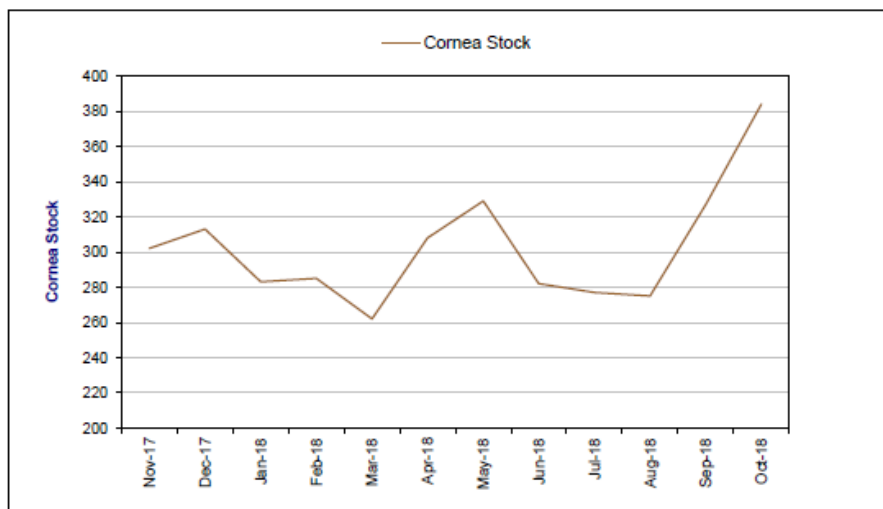
Income by SBU YTD Oct 2018	2018/19 Budget	2018/19 Income	2018/19 Variance	2017/18 Actual	Growth
TES	8.0	8.6	0.5	7.5	14%
TAS	5.9	6.5	0.6	5.4	19%
H&I	8.0	8.1	0.0	8.0	1%
RCI	9.4	9.8	0.4	9.1	8%
IBGRL & DD	0.9	1.1	0.3	0.7	64%
CMT	6.0	5.7	-0.3	5.6	2%
CBC	1.3	1.5	0.2	0.7	116%
SCDT	5.7	5.7	0.0	6.2	-7%
Customer Services	0.1	0.1	0.0	0.1	-29%
Total (£m's)	45.3	47.0	1.8	43.3	9%

42. Issue of cord blood units : UK and International - MATs

YTD Performance	Annual Target	YTD Target	YTD Actual	RAG	YTD RAG Trend
Number of Cord Units Issued (total)	63	35	24	R	-

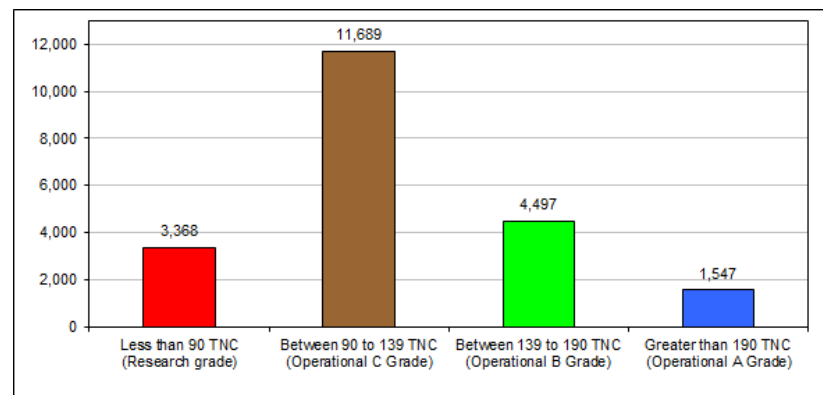


43. Suitable Cornea Donations - Cornea stocks



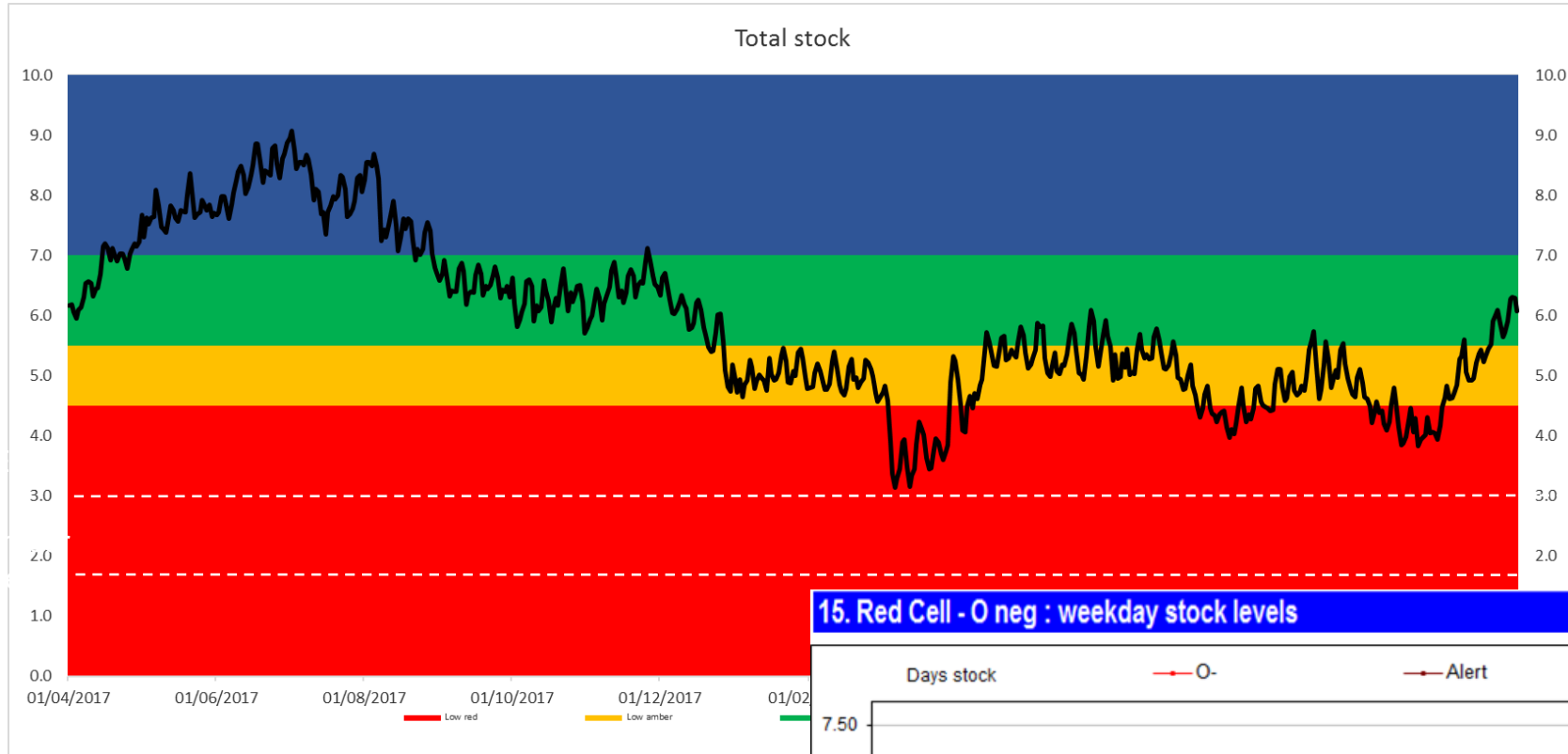
44. NHSBT CBB stock (active units - cell dose post process TNC)

YTD Performance	Annual Target	YTD Target	YTD Actual	RAG	YTD RAG Trend
Clinical Bank Size (A, B and C)	19,510	18,147	17,718	R	-

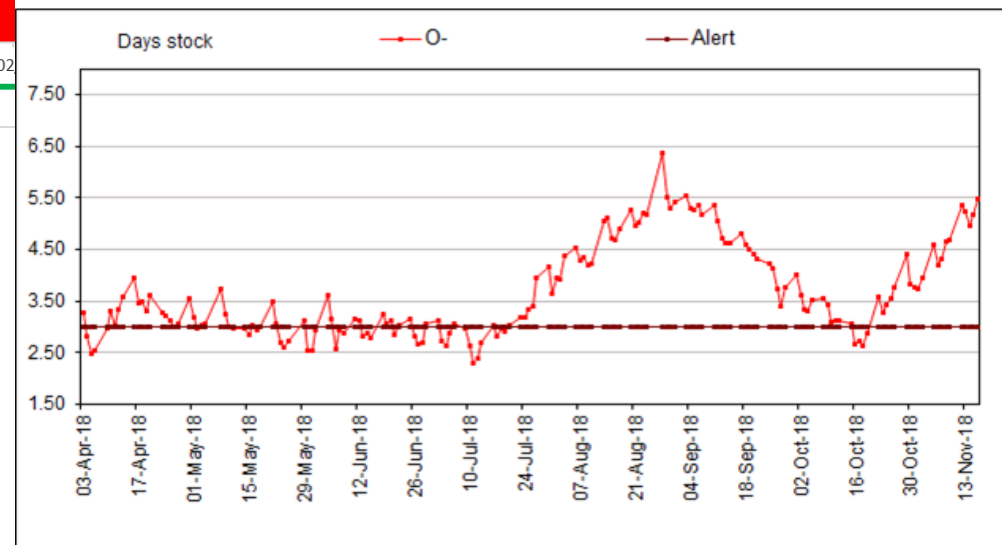


Red Cells - stock now back at green status

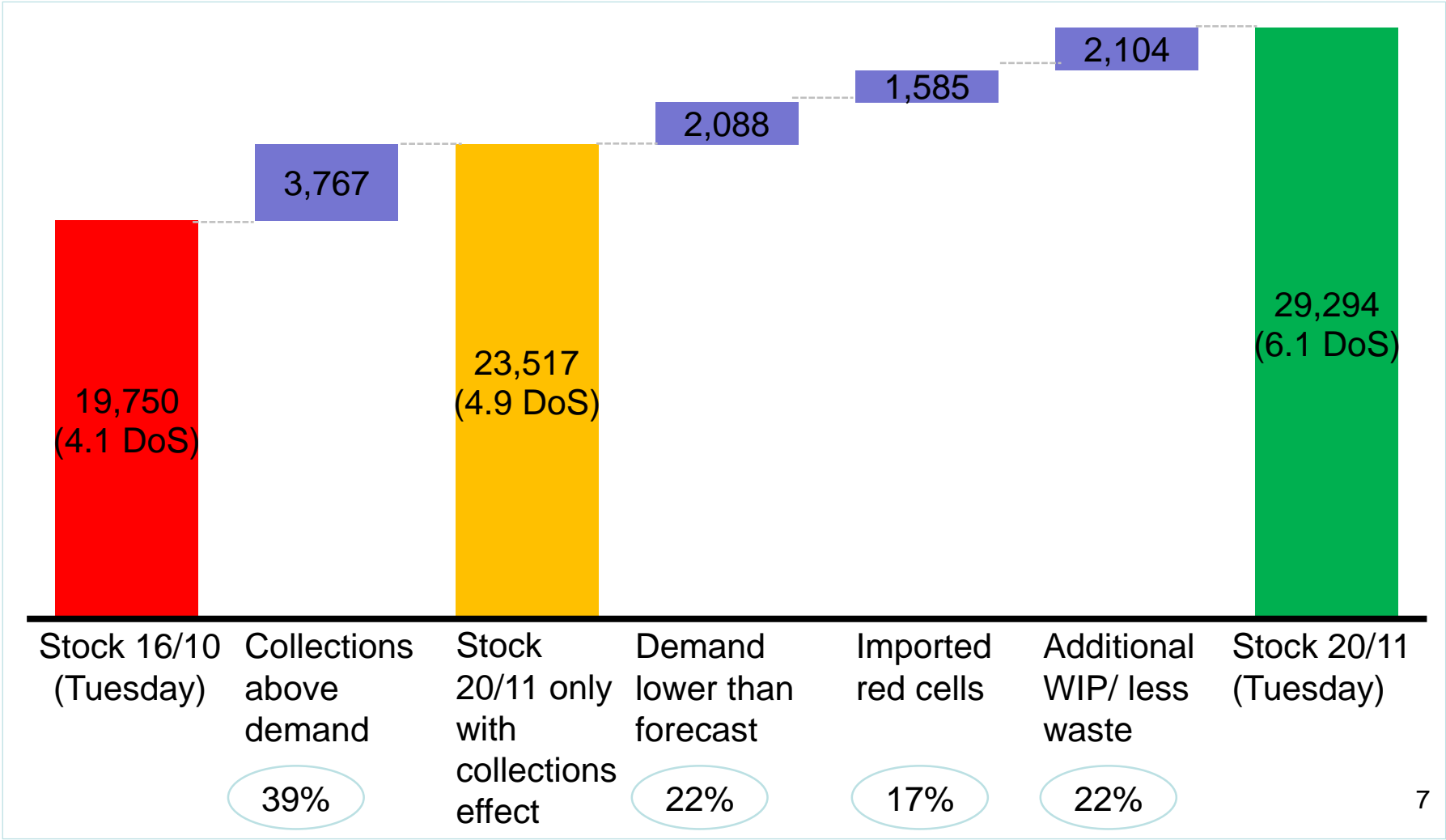
In total and all groups



15. Red Cell - O neg : weekday stock levels



Stock increased by 9,500 units (2 days) in the last 5 weeks



▪ Team effort: higher collections, imports from Wales, WIP management

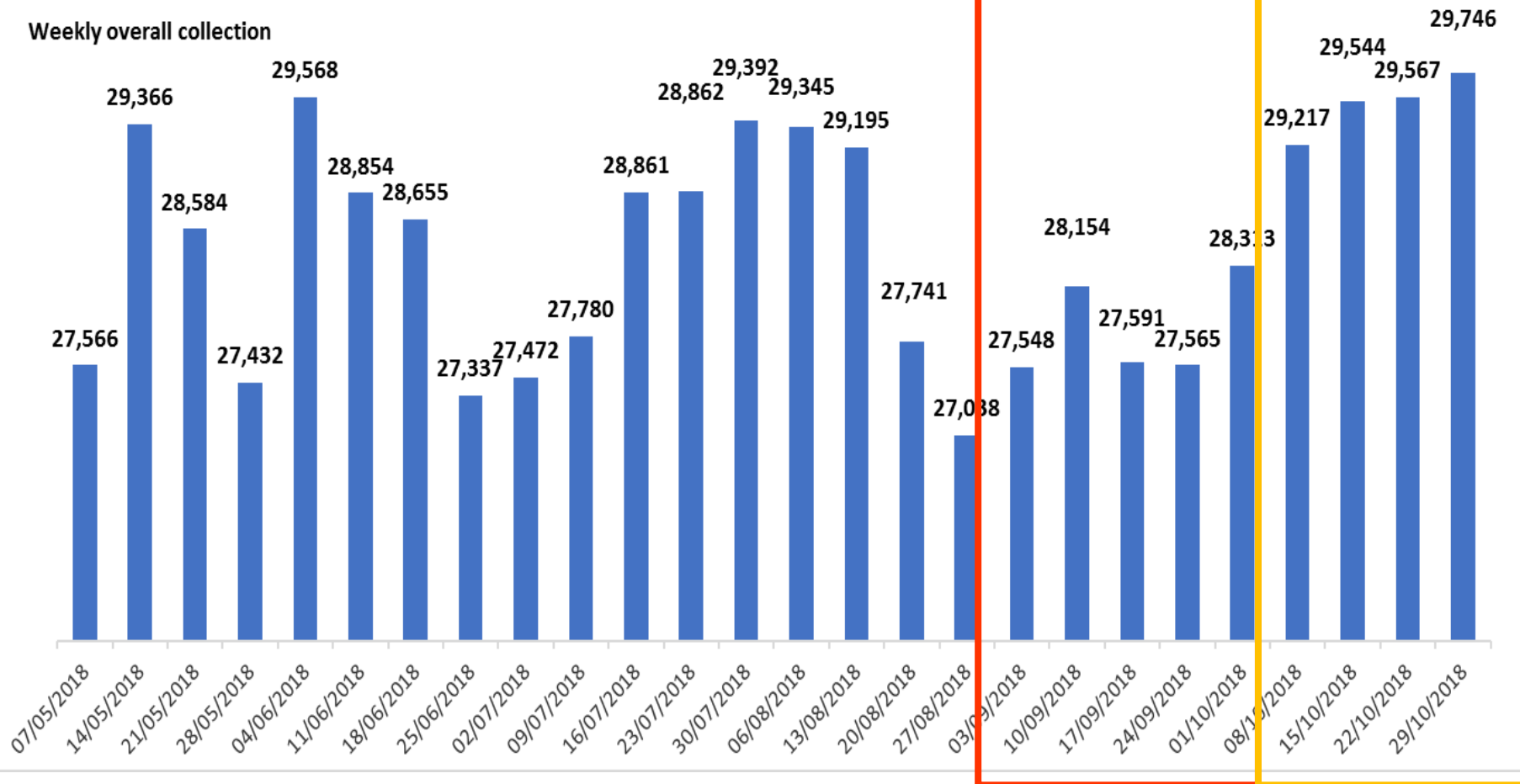
Weekly collections back to >29,000 units

Needs to be sustained at this level through to Xmas

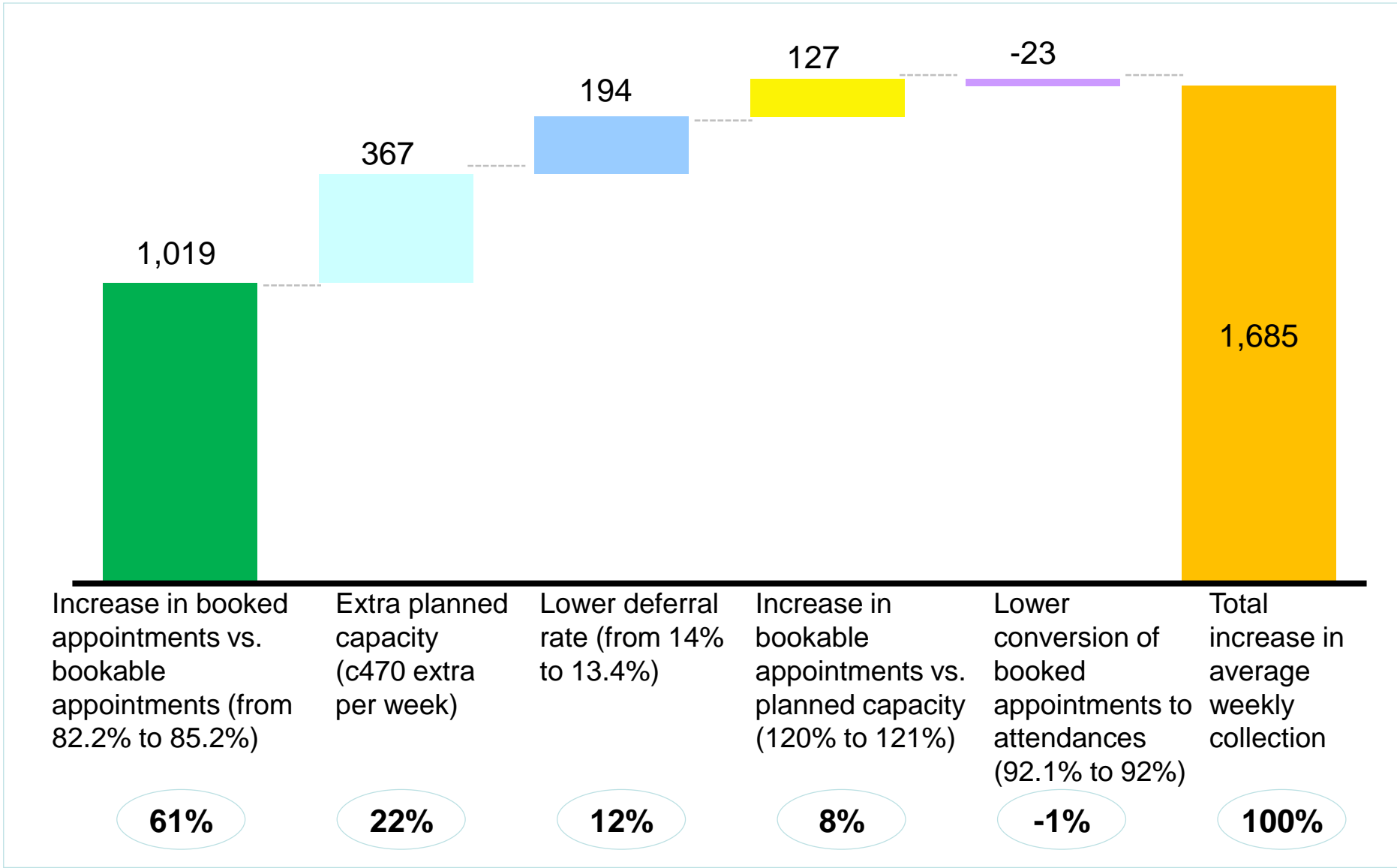
27,834

29,519

Weekly overall collection



Drivers behind the improved weekly collections



Stock forecast - next 10 days (26/11/2018)

Based on demand at forecast and collections on booked appointments

	Variance (forecast v revised BP)								
	A-	A+	B-	B+	O-	O+	AB-	AB+	Total
26/11/2018	-26	-60	30	187	207	-207	-6	-8	117
03/12/2018	47	-54	27	112	111	-325	91	-18	-8
10/12/2018	34	-472	-28	-132	-287	-825	62	-64	-1,710

- Appointments imply collection to plan this and next week
- Large shortfall w/c 10 December (mainly O+ and A+)
- WEDC risk xmas week

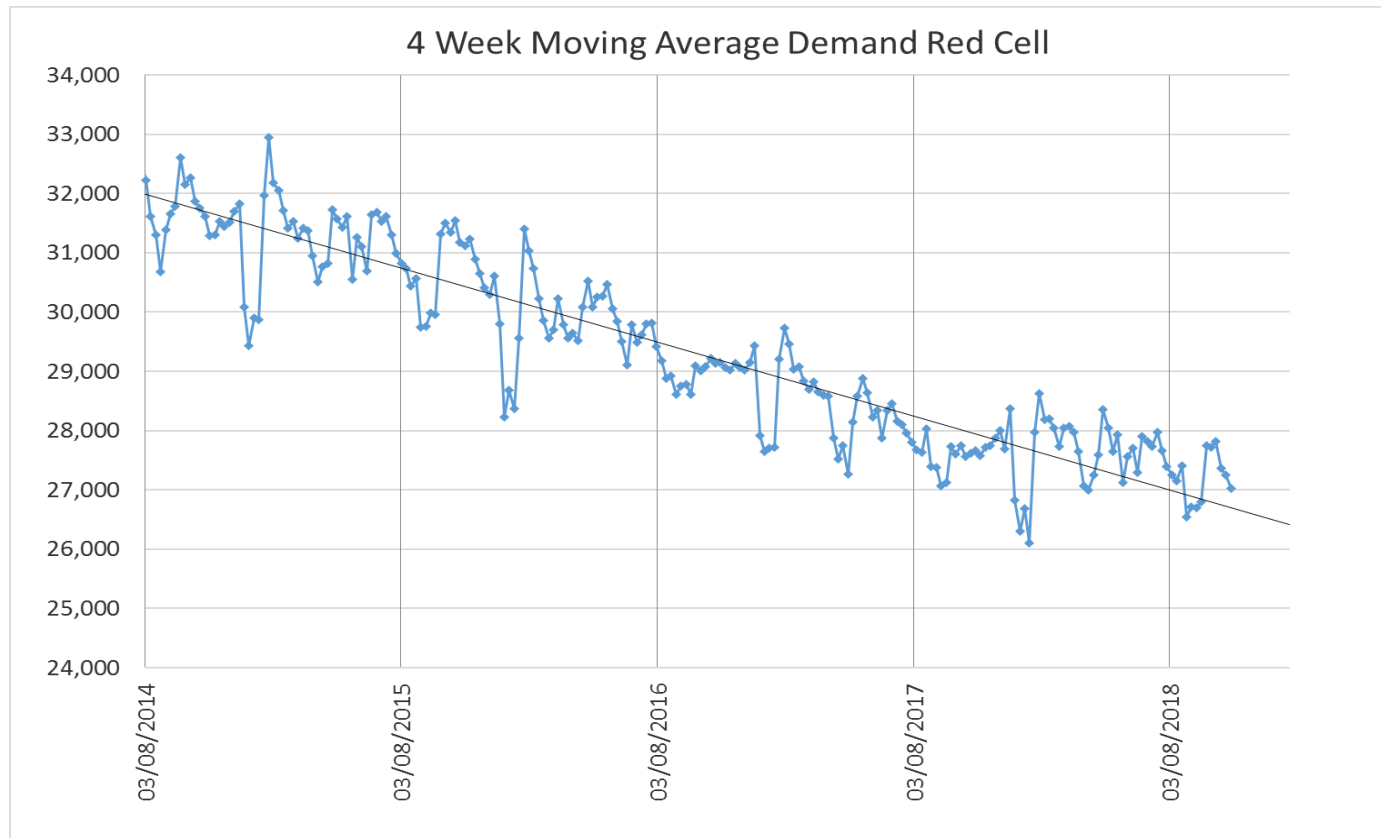
Date	A-	A+	B-	B+	O-	O+	AB-	AB+	Total
26/11/2018	9.8	6.4	7.4	8.7	6.9	5.9	5.2	7.0	6.8
27/11/2018	9.9	6.4	7.5	8.8	7.0	6.0	5.4	7.1	6.8
28/11/2018	9.2	5.8	7.0	8.3	6.5	5.4	4.7	6.5	6.3
29/11/2018	9.3	5.9	7.0	8.2	6.6	5.5	4.7	6.5	6.3
30/11/2018	9.2	5.9	7.1	8.3	6.7	5.6	4.6	6.4	6.4
01/12/2018	9.3	6.1	7.2	8.4	6.9	5.8	4.9	6.5	6.5
02/12/2018	9.6	6.4	7.6	8.7	7.3	6.1	5.1	6.8	6.9
03/12/2018	9.8	6.5	7.6	8.9	7.5	6.2	5.2	6.9	7.0
04/12/2018	9.9	6.5	7.7	8.8	7.7	6.2	5.0	7.0	7.1
05/12/2018	9.2	5.9	7.2	8.3	7.1	5.6	4.5	6.4	6.5

- Except AB neg and O pos all groups expected to be in the green or blue band
- If demand +5% - O pos will be amber and AB neg could fall into the red mid week.

- **Collection levels above 29,000 need to be maintained**
- **Introduction of nurse breaks**
 - 500 appointments/week will be lost in December
 - Increases to 900/week in January
 - Concern re ability to collect to plan Jan to March
- **Exacerbated by anticipated demand increase**
- **Further roll out of capillary HemoCue in Q4 unlikely**
- **Further planning / analysis needed**

Demand update – 2018/19

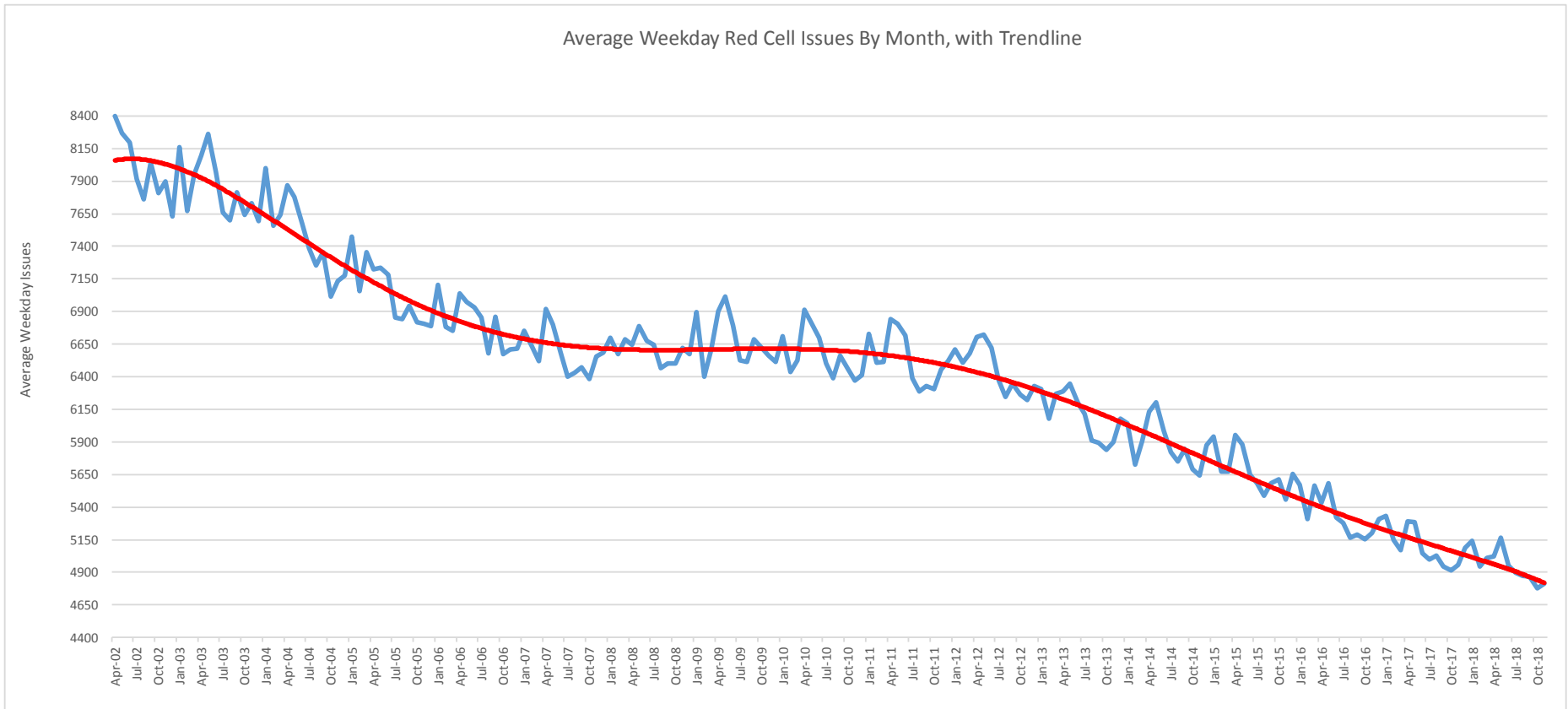
4 week moving average stable at 27-28k



- Current demand forecast for 2018-19 is 1,407k.
- Collection targets currently based on 1,390k (Feb 2018) – uplift in Q4 needed
- Risk - long term forecast suggests 1,414k

Long term trend

Also implies a flattening trend.....subject to latest data points



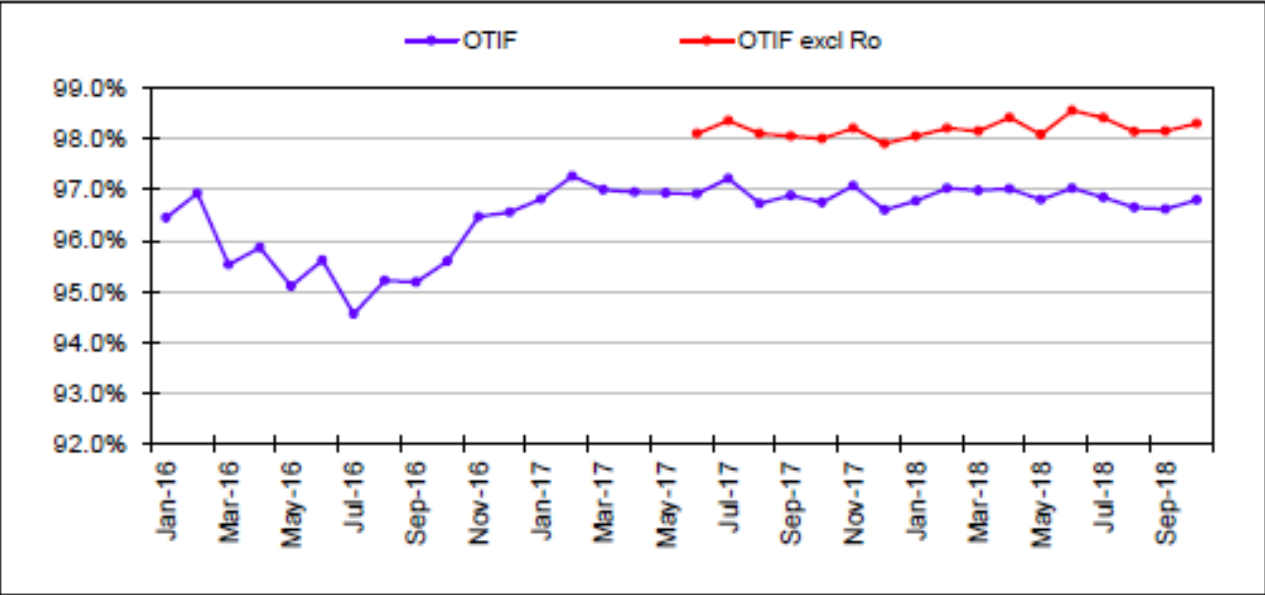
Updated Long term demand forecast – Red Cells

- Proposing to increase the long term red cells forecast (+12k in 2019-20)
- Demand decline to continue but a lower pace (ca 3.0% p.a.)
- Based on historical demand + adjustment or Ro demand and changes to population.

A. Long Term Statistical Forecast adjusted with population and Ro new assumption							
Financial year	Previous Forecast (May-18)	Central Forecast (in K)	50% prediction - low	50% prediction - high	Year on Year	% change from 2017/18	RBC / 1000 population
2017/18 (actual)	-	1,440.2	-	-	-	-	25.89
2018/19	1,407.3	1,414.0	1,383.5	1,444.4	-1.8%	-1.8%	25.25
2019/20	1,359.1	1,371.7	1,292.8	1,450.6	-3.0%	-4.8%	24.34
2020/21	1,315.1	1,328.9	1,226.8	1,431.0	-3.1%	-7.7%	23.44
2021/22	1,265.4	1,280.3	1,157.1	1,403.4	-3.7%	-11.1%	22.45
2022/23	1,223.8	1,238.8	1,095.6	1,382.0	-3.2%	-14.0%	21.60

3. Percentage of Products Issued OTIF (excluding Ro 'in full' fails)

YTD Performance	Annual Target	YTD Target	YTD Actual	YTD RAG	YTD RAG Trend
% On Time In Full delivery	98.00%	98.00%	98.29%	G	Better

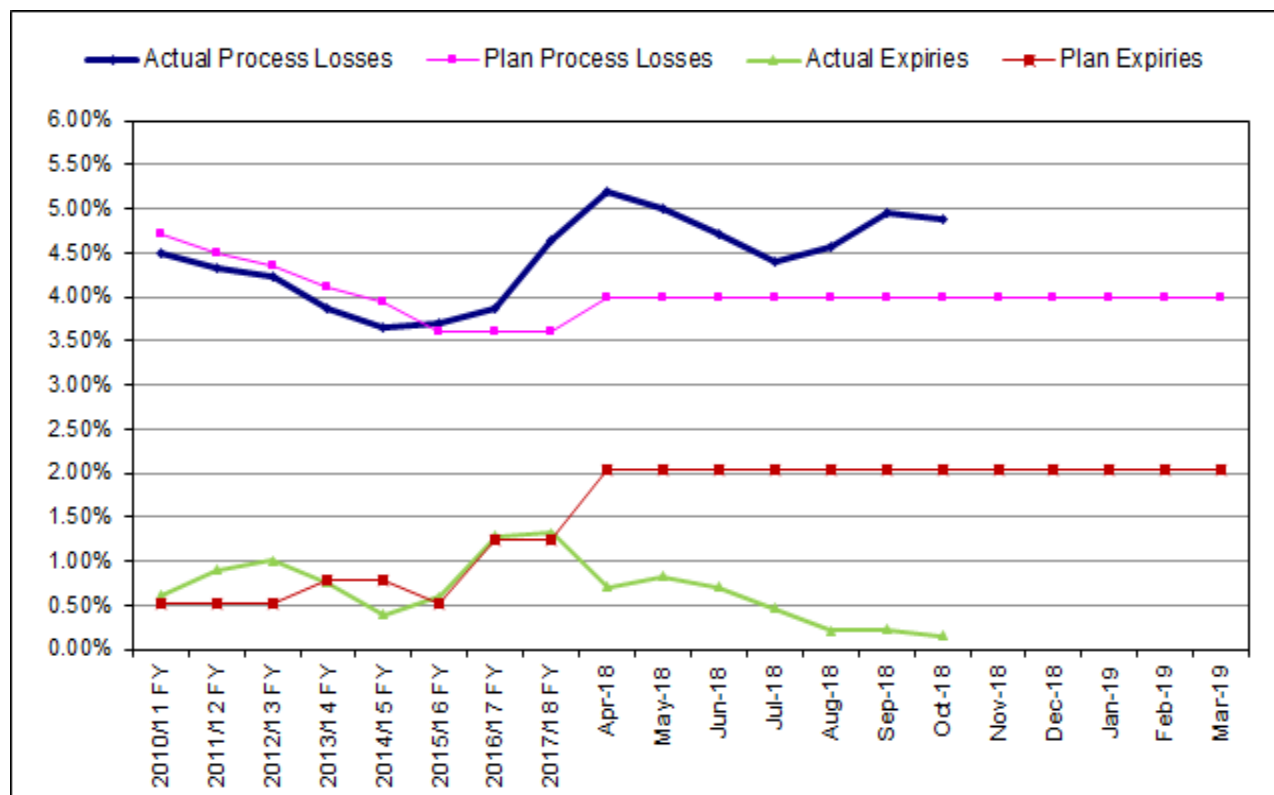


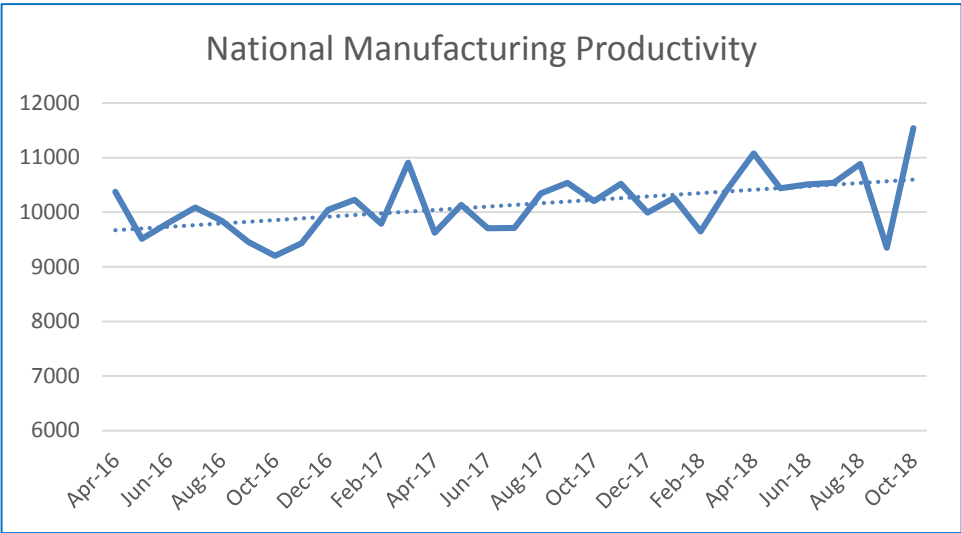
Record performance in red cell expiries.....

NB intention to restate and report waste differently

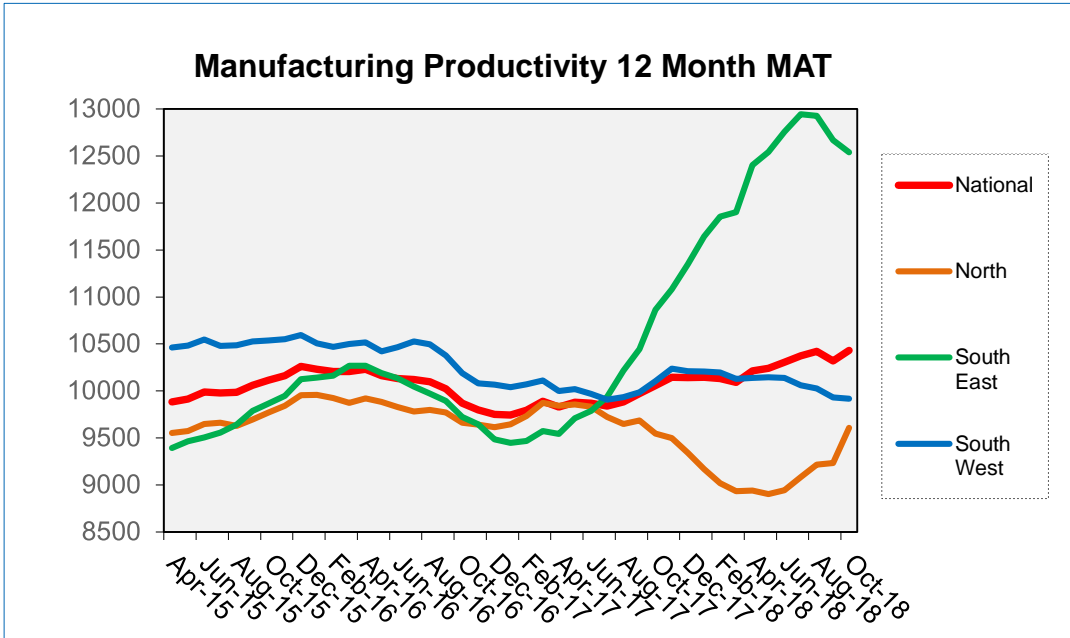
31. Percentage of Donations NOT Converted to Validated Red Cells and Expiries

YTD Performance	Annual Target	YTD Target	YTD Actual	RAG	YTD RAG Trend
Red Cell Process losses as % of Whole Blood Donations	4.00%	4.00%	4.81%	R	-
Red Cell Expiries as % of Issuable Red Cells	2.03%	2.03%	0.47%	G	-



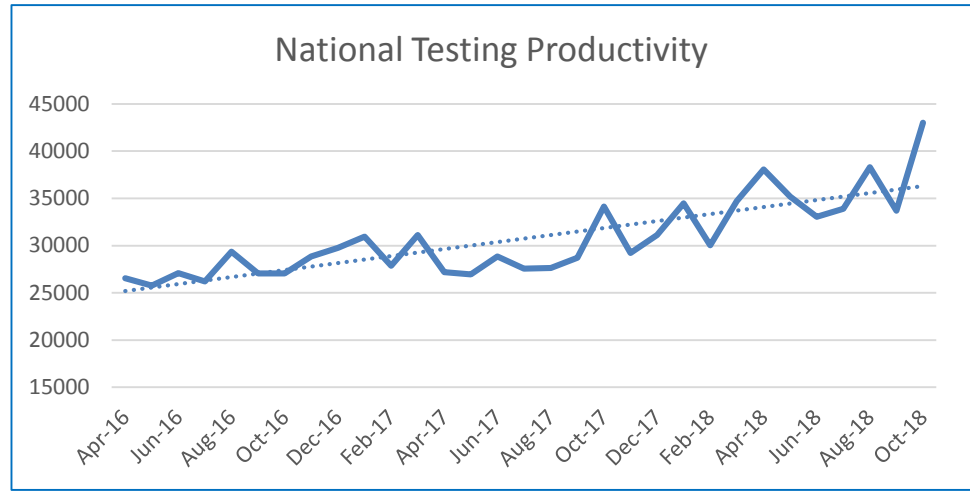


- National Productivity **11,542!** up **24%** (prev. 9,348)
- Volumes up **11.1%**
- WTE down **10%**
- SW. 10,607 SE. 11,985 North **12,305**
- **National Record! North Record!**

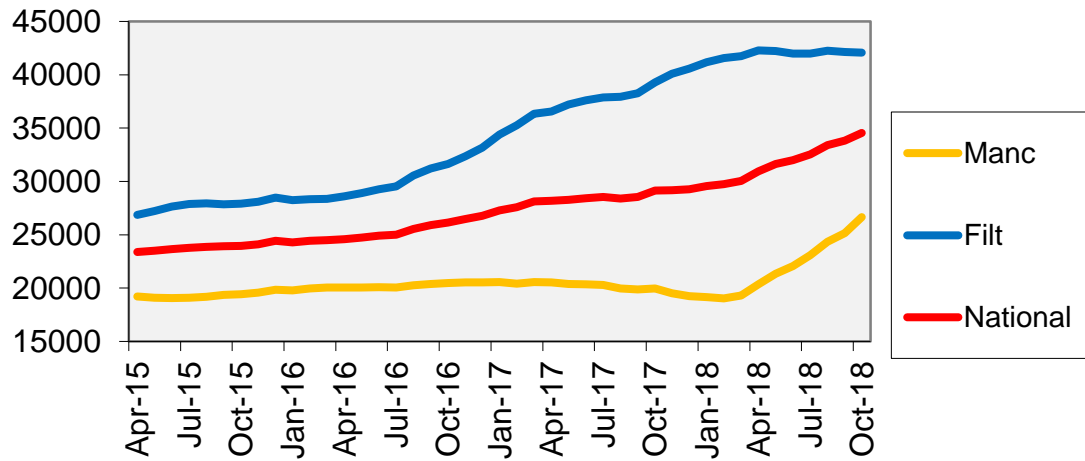


- **National Trend** has risen by **3.7%** last 12 months
- Now **1.6%** above previous peak (Dec 15)

- National Productivity **43,003!** (Last month 33,290) up **27.6%**
- Volume up **17.8%**
- WTE down **7.7%**
- **1.7% ↑** above target YTD
- **National Record! North Record!**
- Fil. 45,223, Man **39,264!**



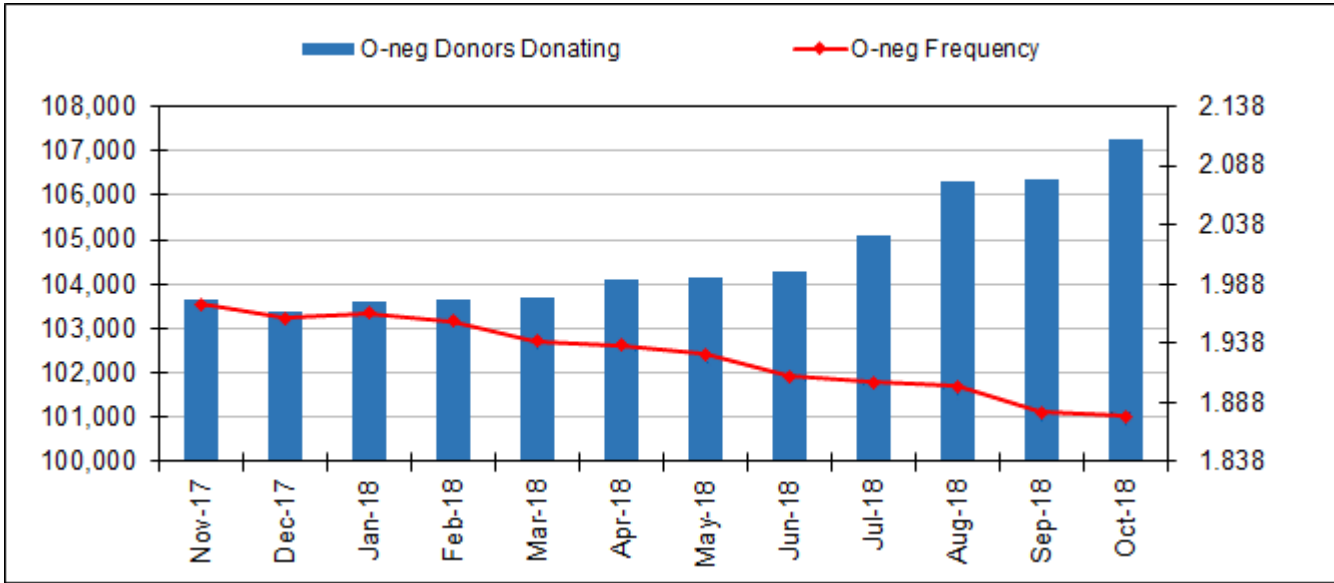
Testing Productivity MAT



- Testing Productivity MAT has improved by **19%** in 12 Months
- SW up **7%**
- North up **33%**

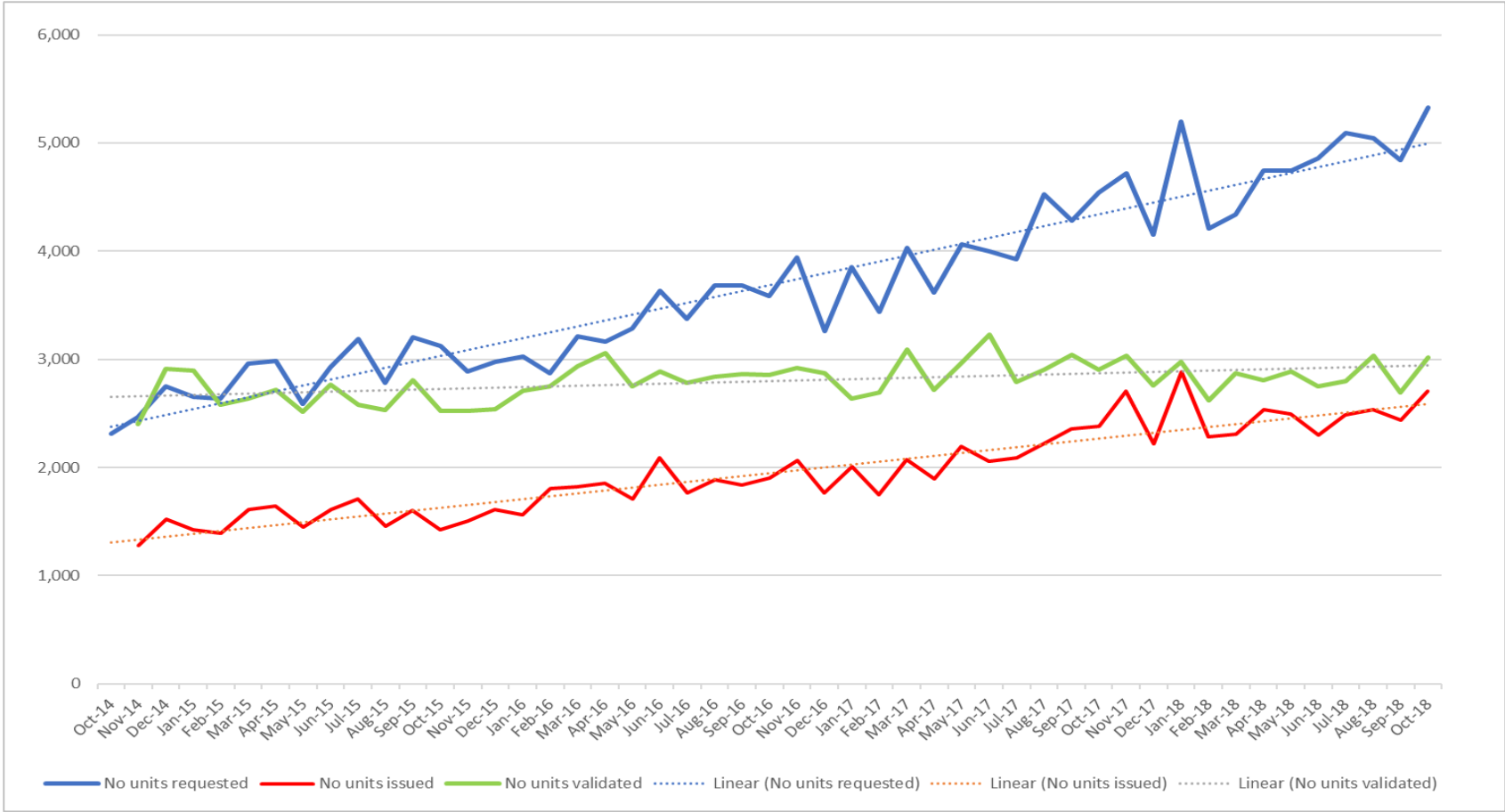
18. O Neg: Donorbase and Frequency of Donation

YTD Performance	Annual Target	YTD Target	YTD Actual	YTD RAG	YTD RAG Trend
Number of active O neg donors donating over the last 12 months	110,500	110,500	107,283	R	-
Frequency of donation (O neg donors)	1.879	1.879	1.876	G	Better



- Aiming for 111,000 active donors end March 2019
- 118,000 by end 2019/20

Ro Requested, Issued and Validated



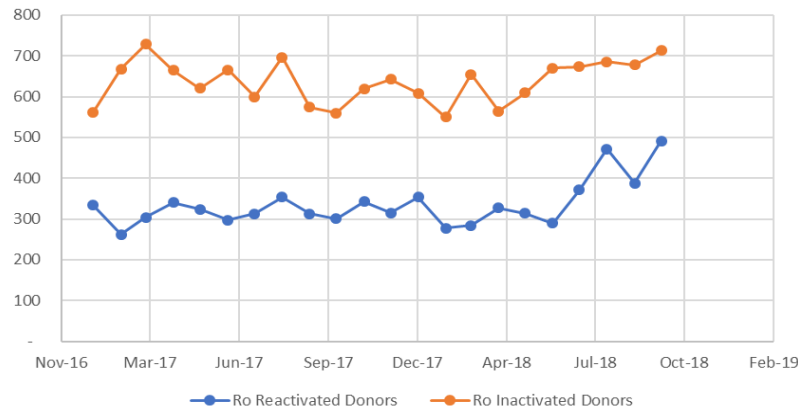
Collection adherence	Oct 18
Ro collections, % of phased target	99.4%
Ro collections, % to meet demand	56.1%
% of units issues vs. validated	89.6%

- In October, Ro collections were close to the phased collection targets
- The number of validated products increased to 3k
- % of units issued vs. validated c90% very close to 90% target

Less so for R₀ Kell negative – to date

But revised focus expected to results (albeit over 3 years)

Ro-neg Inactivation and Reactivation



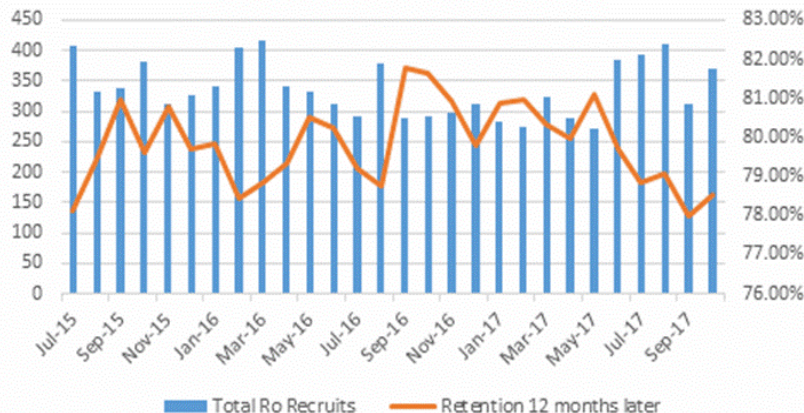
Significant increase in reactivation since the roll out of the NCC Account Management Team - to continue throughout 2019/20.

But a decline in retention due to:

Spike in a new black donor recruitment in previous year and subsequent drop out after the first donation

The significant number of Panel closures following consolidation. In 2019/20 this problem reduces with few panel closures this year.

Ro recruitment and retention



- **18,131 R₀ Kell neg donors in 2017/18**
- **19,700 projected end 2018/19**
- **Target 24,000 end 2019/20**

- Increased Ro donor base to come from white donor retention / reactivation
- Three year plan / focused marketing activity
- Black donation – strategy for longer term strategic build of the donor base

Estimated budget 2019/20

Driven by +164 WTEs in Blood Donation

	WTEs Budget	WTEs Sep 2018	WTEs 2019 est	2017/18 Actual	2018/19 Budget	2018/19 LV	2019/20 Estimated
Stock movement - Blood Components				(1,288)		709	
Stock movement - Tissues				(85)		(211)	
ODT: Operational Spend	416	408	416	(60,097)	(60,295)	(59,978)	(61,260)
ODT: Change Programme	7	17	7	(4,829)	(5,701)	(5,811)	(5,800)
Blood Supply: Manufacturing, Testing & Issue	711	741	740	(68,140)	(65,745)	(66,855)	(68,069)
Blood Supply: Blood Donation	1,375	1,375	1,539	(72,103)	(70,465)	(73,265)	(79,231)
Blood Supply: Logistics	336	343	299	(21,010)	(20,049)	(20,849)	(20,423)
DTS: Operational Spend	849	841	849	(62,224)	(64,692)	(66,162)	(65,926)
DTS: Change Programme	1	1	1		(963)	(348)	(963)
Quality	83	81	86	(5,006)	(4,873)	(4,894)	(5,282)
Chief Executive and Board	3	4	3	(627)	(623)	(629)	(701)
Communications	65	70	69	(7,409)	(6,593)	(6,871)	(6,910)
Estates & Facilities	76	76	76	(39,592)	(38,903)	(39,480)	(40,129)
Finance	88	90	89	(5,581)	(5,266)	(5,354)	(5,482)
Business Transformation Services	25	22	25	(1,391)	(1,557)	(1,397)	(1,530)
People	114	115	117	(7,204)	(7,213)	(7,135)	(7,639)
Information Communication Technology	180	168	192	(23,714)	(24,805)	(25,302)	(27,469)
Clinical Directorate	172	162	172	(13,779)	(13,914)	(14,319)	(14,087)
Research & Development	34	43	34	(5,127)	(4,214)	(4,214)	(4,408)
Change Programme (Blood & Corporate)	8	32	8	(24,196)	(20,263)	(12,580)	(15,184)
Miscellaneous and Capital Charges				(1,745)	(2,546)	(2,196)	(2,100)
Total	4,542	4,587	4,721	(425,145)	(418,680)	(417,141)	(432,592)
Surplus / (Deficit)				(10,197)	(577)	6,628	(7,387)

Underlying Blood I&E deteriorating / offset by lower TP spend

Despite price increases.....position is manageable but drains cash

2018/19 - Forecast £m	NHSBT	Blood / Group	DTS	ODT
Underlying I&E	26	19	1	6
Transformation Projects	-19	-13	-	-6
Full I&E	7	6	1	0



2019/20 - Estimated £m	NHSBT	Blood / Group	DTS	ODT
Underlying I&E	15	7	2	6
Transformation Projects	-22	-15	-1	-6
Full I&E	-7	-8	1	0

5 Year Plan – Working Scenario (indicative)

	2019/20	2020/21	2021/22	2022/23	2023/24
I&E (£m) - underlying	£8m	£4m	£4m	£4m	£8m
Transformation Projects	-£15m	-£9m	-£7m	-£3m	-£3m
I&E (£m) – Total	-£7m	-£5m	-£3m	£1m	£5m
Closing Cash Reserve	£27m	£15m	£11m	£12m	£17m

% Price Increase	+3.5%*	+3.5%*	4.0%*	4.0%	3.5%
Red Cell Price	£133/unit	£138/unit	£146/unit	£154/unit	£160/unit

*price increase of 3.5% pa in each of 2019/20, 2020/21 and 2021/22 indicated to NCG

- Assumes the full impact of the 3 year pay deal will be recovered through prices in 2020/21
- Price rise of 2% in 2020/21 plus 1.5% for pay award (as in 2019/20)
- A further 4%pa price rise from 2021/22 onwards
- Pulse replacement / alternatives not funded
- Infrastructure programme – profile and cost unknown
- Difficult NCG to come (CSM “dividend” lost)

Large increase in ODT baseline costs in 2019/20

NORS capacity increase unplanned

Operating surplus (ie capacity for transformation) reduced in 2019/20, moving to deficit in 2021/22 onwards

Deceased donor assumption	1,618	1,618	1,628	1,668	1,710	1,753	1,797
---------------------------	-------	-------	-------	-------	-------	-------	-------

£m	18/19 Budget	18/19 Fcast	19/20 Est	20/21 Est	21/22 Est	22/23 Est	23/23 Est
DH England	61.9	61.9	61.9	61.9	61.9	61.9	61.9
England Pay Award	0.2	0.2	0.7	1.2	1.2	1.2	1.2
NHS App		0.5	0.2	0.1	0.1	0.1	0.1
Other UK Governments	11.7	11.7	11.7	11.7	11.7	11.7	11.7
Other	0.1	0.1	0.1	0.1	0.1	0.1	0.1
TOTAL INCOME	73.9	74.4	74.6	75.0	75.0	75.0	75.0

Recurring operational costs	-66.1	-65.0	-67.7	-72.2	-73.6	-75.0	-76.4
Uplift re 26 wte requestors			-1.3				
Uplift re NORS capacity			-1.7				
Donor recognition	-2.1	-2.1	2.0	-2.0	-2.0	-2.0	-2.0
Other no-recurring ops cost		-0.8					
OPERATING SURPLUS	5.7	6.5	1.9	0.8	-0.6	-2.0	-3.4

Large increase in ODT baseline costs in 2019/20

Deficit in 2019/20 then persistently from 2021/22

	18/19 Budget	18/19 Fcast	19/20 Est	20/21 Est	21/22 Est	22/23 Est	23/23 Est
Operating surplus	5.7	6.5	1.9	0.8	-0.6	-2.0	-3.4
Transformation Projects							
ODT Hub	-2.3	-2.7	-1.7				
Release train	-0.6	-0.6	-0.2				
ODT Hub – recurrent costs	-0.5	-0.5	-0.5	-0.5	-0.5	-0.50	-0.5
Replacement iPad	-0.3	-0.3			-0.3		
NRP trial funding	-0.1	-0.3					
Donor path enhancement	-0.6		-0.6				
NHS App		-0.5	-0.2	-0.1	-0.1	-0.1	-0.1
Behaviour change	-1.2	-1.2					
SURPLUS / (DEFICIT)	0.0	0.4	-1.2	0.2	-1.4	-2.5	-3.9

Projects that would require business case / additional funding

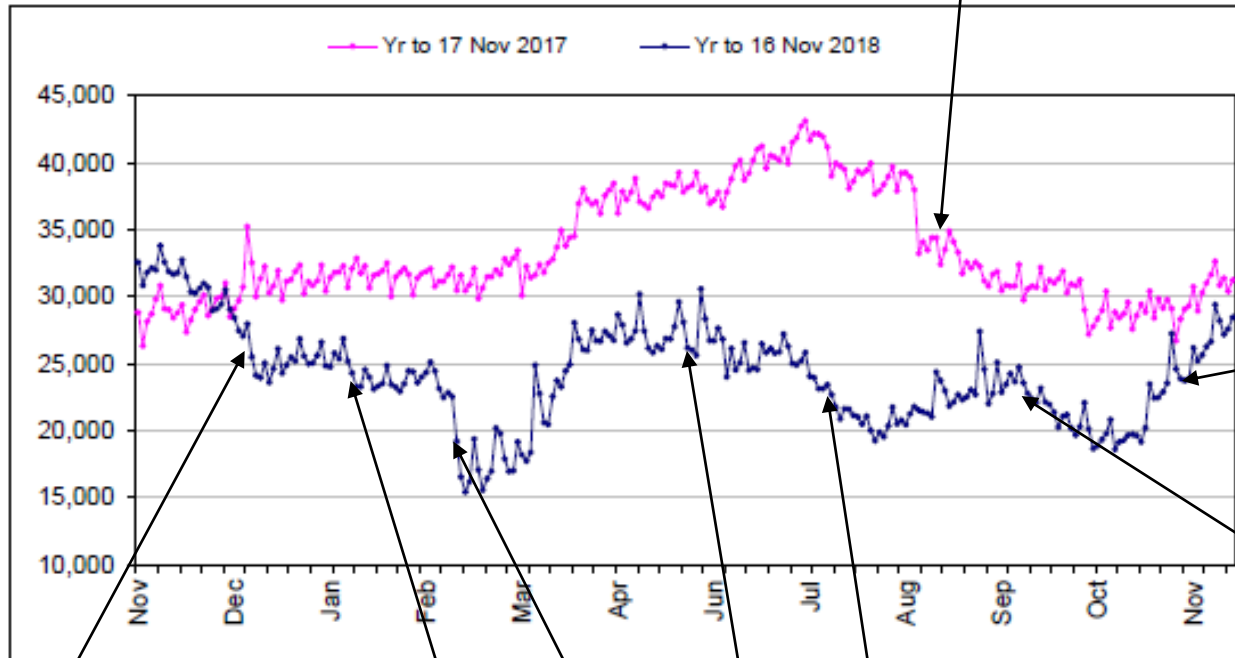
- ODT Hub 2 (completion to business case and any new functionality)
- Donor characterisation
- NRP / DCD Hearts
- Scouts

Excludes funding / outcomes expected from Opt Out in England

Additional / Back Up

Stocks very healthy at 40k in August 2017
- under collection in September

13. Red Cell - Blood Stocks (Units)



Strong improvement in October and though November

Improved in August but fell again in September (deferrals, NDAs, + cancellations)

Fall in July with further increase in Hb deferrals (hot weather)

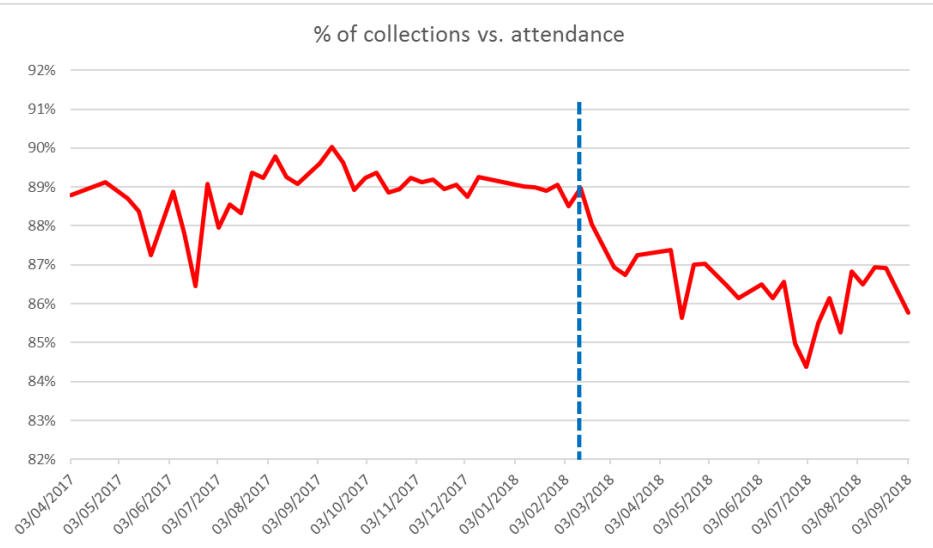
Recovery but stalled through impact of Hb testing and high % new donors

Unable to build stock - ?

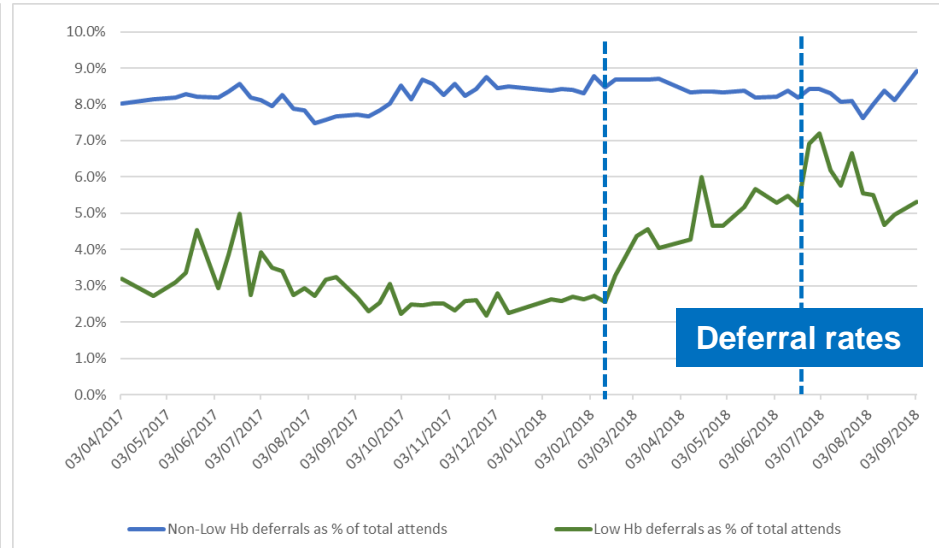
"Beast from the East"

Under collection in December – stocks fell to 25k, vulnerable to bad weather

Collection performance deteriorated mid February



Correlates with intro of changed Hb testingfurther jump during July hot weather



New donor attends increased in December – peak coincides with / adds to Hb impact

