



20 December 2016

To: All Directors of Finance, Transfusion Laboratory Managers and Consultant Haematologists with responsibility for Transfusion in Trusts served by NHS Blood and Transplant

Cc: Chair of Programmes of Care, relevant Clinical Reference Groups

Dear Colleague

PRICES FOR BLOOD COMPONENTS AND SPECIALIST SERVICES FROM NHS BLOOD AND TRANSPLANT (NHSBT) FOR 2017/18

The National Commissioning Group for Blood (NCG) has now completed its consideration of NHSBT's pricing and service proposals for the financial years 2016/17 and 2017/18. This communication summarises the NCG discussions, outlines the proposed refund for 2016/17 and the adjustments to NHSBT's prices from 1 April 2017. It should be shared with financial accountants and planning teams supporting hospital directorates or divisions which use the Specialist Services from NHSBT outlined in Section 6 of this letter, in addition to hospital transfusion teams.

The **headline figures** for 2017/18 are:

- **The price of red blood cells will increase on 1 April 2017 by £4.46 per unit (from £120 to £124.46 per unit).**
- **The unit price of blood in 2017/18 includes the cost of universal hepatitis E virus (HEV) screening of all components** (and represents £2.11 of the increase above). NHSBT is working towards the introduction of universal screening after April 2017.
- Despite this, the **overall cost in use** of the blood products provided by NHSBT to the NHS **will reduce by around 1.8%**
- The premium previously charged for HEV negative units ordered by hospitals during 2016/17 will be withdrawn once universal screening is introduced. A further update on this timeline will be provided to hospitals in March. Should implementation be later than April, NHSBT will revert to a premium charge in the intervening period.
- **The cost of universal HEV screening to the NHS in 2017/18 will be no greater than the cost of screened blood components supplied to selected patient groups during 2016/17.**

1. Performance 2016/17

- 1.1 The 2016/17 red cell price (£120.00) includes a red cell demand reduction reserve (DRR) based on 2% of expected demand. The current red cell demand forecast is 1.507m. This is 20,000 units below the level on which NCG prices were agreed, but still 11,000 units above the DRR (1.496m). As a result, there will be an over recovery of fixed costs (£1.1m) for the volume above the DRR.
- 1.2 In 2016/17, platelet demand is expected to be 0.267m units, which is 8,000 units below the volume that was agreed at the November 2015 NCG meeting (0.275m). This implies an under recovery of fixed costs of £-1.1m.
- 1.3 In relation to plasma derived components, NHSBT's latest forecast position is 0.363m, equal to the level agreed at the last NCG meeting for inclusion in 2016/17 prices (0.363m). The individual product mix drives a small over recovery of fixed costs (£0.1m).
- 1.4 In addition, product issues of NHSBT's added value (add-val) and granulocyte products are forecast to be £0.6m better than forecast.
- 1.5 In 2015, SaBTO recommended that HEV-negative blood components should be provided for organ and stem cell transplant recipients. NHSBT implemented the change in early 2016. For blood components that were HEV negative as part of their standard manufacture (i.e. neonatal and paediatric packs), the costs were included in the price. For those units which are specifically ordered as HEV negative for adult solid organ or stem cell transplant recipients, an added value charge of £17.18 per unit was applied.
- 1.6 Demand for these components now appears to have stabilised, albeit at a significantly higher level than was originally anticipated (282k vs 63k) and at this level NHSBT is anticipating that in-year, there would be an over recovery of fixed costs of £2.4m, which will also be returned to hospitals as part of the overall rebate.
- 1.7 As a result of the above, **NHSBT will be issuing a net refund of around £3.1m during 2016/17.**

2. Blood Component Demand 2017/18

- 2.1 Demand for red cells has declined steadily over the last 5 years, driven by a combination of medical advances such as laparoscopic surgery, pharmacological developments and educational initiatives such as "Patient Blood Management" (PBM) programmes by Trusts and NHSBT which encourages the safe and appropriate use of blood. Publications in medical journals have also demonstrated that patients can have a better outcome when less blood is used. Despite an increase in the population over 60 years old (i.e. the age group which uses most blood), blood usage continues to decline, with issues at approximately 28 units per thousand population (ptp) during 2015/16 (vs 34 pmp in 2011). It is anticipated that blood use will reduce further this year.
- 2.2 Since the end of 2011/12, NHSBT has seen an 18% reduction in the demand for red cells. In the same period, the NHS expenditure on blood (and hence

NHSBT's income) has reduced from £300m in 2011/12 to a forecast of £261m in 2016/17. In parallel, the unit price of red cells has reduced from £125 to £120 despite increasing levels of safety and availability.

- 2.3 Long term demand forecasting for red cells is proving challenging with, for example, the recent NHS “reset” being seen as a contributory factor to this ongoing uncertainty. NHSBT's latest figures are suggesting a demand forecast for 2017/18 of 1.461m units. This is a further 4.3% lower than the plan agreed for this year with the NCG (1.527m units) and 3.1% lower than the forecast of 1.507m units for 2016/17.
- 2.4 Demand for platelets is also declining for the first time in many years, driven by factors such as ongoing NHS-wide efforts to reduce inappropriate use including the transfusion of two packs when one is sufficient and the use of platelet-sparing drugs. The platelet demand forecast for 2017/18 is 0.256m units compared with a plan of 0.275m agreed with the NCG for the current year.

Table 1 Blood Component Planning Volumes

Description	NCG Plan 2016/17	Expected Demand 2016/17	NCG Plan 2017/18	+ / (-) NCG Plan to Plan
Red Cells	1.527m	1.507	1.461m	(0.066m)
Platelets	0.275m	0.264	0.256m	(0.020m)
Plasma Components	0.363m	0.363	0.349m	(0.014m)

- 2.5 NHSBT has implemented substantial cost reduction programmes (approximately £80m since 2011/12) and has an ongoing cost improvement plan of c£16m in 2016/17. The cost reductions have included the consolidation of manufacturing and testing facilities and a reduction in blood collection capacity leading to substantial decreases in headcount. However, NHSBT currently has a need for significant investment to replace an aging IT infrastructure and to replace the critical operational application underpinning the blood supply chain. The ongoing provision of critical products and services is highly dependent on its successful replacement. The overall cost of this change is estimated to be in the range of £30m-£40m over 5 years.
- 2.6 The plan for 2017/18 has generated an implied cost improvement target of c£15m, which combines cost pressures (those costs over which NHSBT has no control, e.g. staff grade increment increases; apprenticeship levy; capital charge adjustments etc.), inflation (prospective pay award 1% and Treasury GDP Deflator 1.8%) and also the lost contribution to NHSBT's costs from the demand reductions described above (£10.0m). Prices for 2017/18 have been set on the basis of planned cost improvements which will address c£10.0m of the overall target with the balance being made up from a price increase for red cells to NHS and private hospitals (£3.4m) and platelets (£1.6m).

Table 2 Movement in blood component and specialist service (SpS) income

Category	Blood £ms	SpS £ms	Total £ms
Opening position (closing NCG position 2015/16)	265.3	56.2	321.5
2017/18 Product and Service Demand Impact	-3.1	1.8	1.7
2017/18 Cost Reduction Programme	-10.0	-0.2	-10.2
2017/18 Cost Pressures and Developments	4.9	0.4	2.3
2017/18 Inflation funding increase (Pay 1%; Non-pay 1.8%)	3.5	1.1	4.6
Total Impact	-4.7	3.1	-1.6
2017/18 Revised Position	260.6	59.3	319.8
Percentage increase/decrease	-1.8%	5.5%	-0.5%

2.7 The cost improvement plan of £10.0m (3.8%) will be delivered through the following actions:

- Demand reduction and productivity improvements of £3.5m
- Operational and support function efficiencies of £4.7m
- Estate Management and Optimisation £1.2m
- Procurement £0.4m.

3. Pricing: Red Cells

3.1 The proposed cost improvement plan for 2017/18 (c£10.0m) has been extensively reviewed and represents a balanced approach in the context of the significant organisational challenges facing NHSBT next year, in particular the ongoing level of demand decline and the investments required to replace their core systems.

3.2 Therefore the NCG has agreed that the **price of red blood cells for 2017/18 should increase by £4.46 per unit, i.e. an increase from £120 to £124.46 per unit**. A proportion of this increase (around £2.35) relates to the blood demand, system investment and cost pressure factors described above. The price of blood also includes the cost of introducing universal HEV screening of all components, as recommended by SaBTO (£2.11 per unit). The NCG were mindful of the difficult financial status of many NHS hospitals and it should be noted that despite this increase **the cost in use of the products provided by NHSBT to the NHS (i.e. the NHS expenditure on blood) will nevertheless reduce by around 1.8% next year**.

3.3 Although NHSBT is seeing a declining demand in aggregate terms for both red cells and platelets, at a group level, demand for O D negative red cells and A D negative platelets has remained high and, in the case of platelets, is growing as a percentage of overall demand. Demand for O D negative red cells is currently 12% of total demand compared with the donor population of 7-8%, while demand for group A D negative platelets has grown by 15% in the last year. At a hospital level, there appears to be evidence of differing ordering practice, both here and across a number of blood components.

3.4 In response, NHSBT is continuing to work closely with hospitals to influence the usage of the rarer blood groups through the PBM initiatives. Whilst this is, of course, the right thing to do for patients it is continuing to create a significant supply chain challenge in order to maintain supply at requested levels. Were this level of demand to persist, NHSBT would then need to again

reconsider the adoption of a revised pricing approach, most likely in the form of differentially pricing these “universal units” to further encourage appropriate use.

- 3.5 The current offering for the supply of AB red cells, where hospitals are provided with a credit, when the unit is not transfused, essentially “sale or return”, was discussed with colleagues at the initial NCG meeting this year. Although this costs NHSBT between £0.5m-£1.0m per annum, it was agreed that the practice remains effective as a lever for encouraging appropriate use and will continue to be retained in 2017/18.

4. Pricing: Platelets

- 4.1 There are a number of hospitals which only order platelets collected by apheresis/Component Donation (CD). Clinical guidance indicates that apheresis and pooled platelets are functionally equivalent and should be used interchangeably, with the caveat that those recipients born on or after 1st January 1996 should, when available, receive apheresis platelets.
- 4.2 NHSBT will therefore introduce individual prices for platelets produced by apheresis and for platelets produced by pooling in 2017/18 to reflect the differential cost of manufacture.
- 4.3 It is proposed that the price of **apheresis-derived platelets will increase and be set at £219.30** compared with a **reduced price of £178.19 for a pooled unit**.

5. Pricing: Fresh Frozen Plasma (FFP)

- 5.1 Demand for NHSBT’s fresh frozen plasma for patients requiring lower-vCJD risk components continues to decline as a result of hospitals converting to an alternative, commercially-supplied pharmaceutical component. For example, demand for methylene-blue treated FFP (MBFFP) for 2017/18 is forecast to be 4,159 units, representing an 8% decline over this year’s forecast and a 13% decline over 2015/16.
- 5.2 NHSBT imports lower-vCJD risk plasma from Austria and has incurred significant costs as a result of hospitals not complying with the contractual notice period when opting to convert to an alternative commercially-supplied product.
- 5.3 Given NHSBT’s rapidly-declining market share for MBFFP, NHSBT consulted on a potential withdrawal from the market for this product. Hospitals opposed the complete withdrawal of MBFFP and NHSBT will therefore maintain supply of this component in the short-term but will examine the feasibility of long-term supply.
- 5.4 The unit costs of securing plasma supplies from Austria are increasing and for this reason the price of **MBFFP will increase from £178.04 to £183.53** in 2017/18.

6. Diagnostic and Therapeutic Services Pricing

- 6.1 **Prices will be held flat for all specialist service business units in 2017/18, with the exception being Red Cell Reference services, which will increase by £1m (9%) next year.** The additional income will be recovered through an increase to the fixed cost recharge element (a charge made to each hospital to secure the ongoing provision of a national reference service). This service is currently in deficit and will move the service to a balanced income and expenditure position next year. The charge per reference referral from hospitals will remain flat.
- 6.2 In line with NHSBT's strategic aim of continuous growth, Diagnostic and Therapeutic Services (DTS) will see an increase of £2.2m in additional sales activity during 2017/18 of which Tissue and Eye Services will contribute £1.2m. In overall terms, DTS income will rise by £3.1m (5.5%) and generate an improved contribution of £1.9m in 2017/18.

7. Changes to NHSBT Transport and Self-Collection Arrangements

- 7.1 Hospitals are requesting that NHSBT develops its logistics services to reflect changing working patterns, e.g. weekend working. The increasing trend for the self-collection of blood by hospitals is significantly impacting NHSBT's ability to manage the supply chain in an efficient manner and has markedly reduced NHSBT's income from "ad hoc" delivery charges, which since 2011/12 has now resulted in a reduction to service income of c£0.8m per annum.
- 7.2 NHSBT is therefore progressing with a revision to its existing logistics model in 2017/18 which will result in a **fixed charge of £11 per order when prepared for self-collection by hospitals from NHSBT blood centres.** This charge reflects the costs of preparing the order for collection and it is estimated that this could potentially drive cost recovery of c£0.7m, depending on hospitals' future ordering behaviour.
- 7.3 Ad-hoc and blue-light/emergency deliveries are currently charged at £52.15 per order, regardless of distance from the supplying blood centre and will remain unchanged for 2017-18. The future provision and pricing of this service remains under review.

8. Potential Future Blood Safety Interventions

- 8.1 In relation to blood safety issues, around 55% of platelets are issued as irradiated (treated with radiation to prevent Transfusion-Associated Graft-versus Host Disease), with the cost of providing this type of unit currently recovered through an added-value charge per unit requested. NHSBT will now consider whether there is merit in moving production toward irradiating all platelets. Were this to be considered beneficial, a proposal would be developed and discussed with the NCG in 2017, prior to any implementation.
- 8.2 NHSBT are assessing the safety, efficacy and cost effectiveness of alternative methods for producing pooled platelets, but this is unlikely to affect commissioning for 2017-18.

8.3 Pathogen inactivation systems for all blood components are regularly reviewed but, at present, implementation of any such methodology is not anticipated for the next financial year.

8.4 Further detail will be considered at future NCG meetings as appropriate.

9. Impact statements

9.1 As in previous years, NHSBT has produced a set of statements capturing the impact of pricing changes. These will be available electronically alongside the updated price lists to all Trusts. They will be issued in January 2017 to assist with financial planning for 2017/18.

If you have any queries regarding the information contained within this letter, please do not hesitate to contact:

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Yours faithfully

A handwritten signature in black ink, appearing to read 'J Mean', with a long horizontal flourish extending to the right.

JEREMY MEAN
Deputy Director, Population Health Directorate
Global and Public Health Group

Appendix 1 – National Prices: Impact of Cost Pressures, Developments and Cost Reduction Programmes for 2017/18

	Baseline National Price 2016/17	Product Demand & Cost Reduction Plan				Cost Pressures		Pre-Inflation National Price 2017/18	Price Movement Pre Inflation	Inflation Funding GDP Deflator	National Price 2017/18	Price Movement Post Inflation
		Income Impact Product Demand	Fixed cost Adjustment Product Demand	DRR Adjustment	CIP / Price Differential	Increments Apprentice Levy Capital Charges	HEV Testing & Plasma Import Cost					
Red Cell Components												
Standard Red Cells Other Groups	120.00		4.71	-0.09	-4.76	0.83	2.11	122.80	2.80	1.66	124.46	4.46
Standard Red Cell O Rh D negative	120.00		4.71	-0.09	-4.76	0.83	2.11	122.80	2.80	1.66	124.46	4.46
Neonatal Red Cells	51.68		0.79	-0.02	-1.19	0.36		51.62	-0.06	0.71	52.33	0.65
Frozen Red Cells, Thawed & Washed	792.53		4.71	-0.09	-7.11	5.50		795.54	3.01	10.95	806.49	13.96
Red Cells for Exchange Transfusion	199.00		4.71	-0.09	-7.11	1.38		197.89	-1.11	2.75	200.64	1.64
Large Volume Neonates & Infants	158.80		4.71	-0.09	-7.11	1.10		157.41	-1.39	2.19	159.60	0.80
Red Cells for Intra-Uterine Transfusion	182.26		4.71	-0.09	-7.11	1.27		181.04	-1.22	2.52	183.56	1.30
Red Cell Added Value Services												
Premium for CMV -ve Red Cells	8.80					0.06		8.86	0.06	0.12	8.98	0.18
Premium for Irradiated Red Cells	8.78					0.06		8.84	0.06	0.12	8.96	0.18
Premium for Cell Washing	121.75					0.85		122.60	0.85	1.68	124.28	2.53
Premium HLA selected red cells	126.98					0.88		127.86	0.88	1.75	129.61	2.63
Premium HPA selected red cells	126.98					0.88		127.86	0.88	1.75	129.61	2.63
Platelet Components												
Platelets (1.0 ATD) Pooled	193.15		11.83		-30.80	1.34		175.52	-17.63	2.67	178.19	-14.96
Platelets (1.0 ATD) CD	193.15		11.83		10.31	1.34		216.63	23.48	2.67	219.30	26.15
Platelets (1.0 ATD) Rh A neg Pooled	193.15		11.83		-30.80	1.34		175.52	-17.63	2.67	178.19	-14.96
Platelets (1.0 ATD) Rh A neg CD	193.15		11.83		10.31	1.34		216.63	23.48	2.67	219.30	26.15
Neonatal Platelets	90.16		2.96		-3.96	0.63		89.79	-0.37	1.25	91.04	0.88
Platelets for Intra-Uterine Transfusion	317.93		11.83		-15.84	2.21		316.13	-1.80	4.39	320.52	2.59
Platelet Added Value Services												
Premium for CMV -ve Platelets	8.80					0.06		8.86	0.06	0.12	8.98	0.18
Premium for Irradiated Platelets	8.78					0.06		8.84	0.06	0.12	8.96	0.18
Premium for Cell Washing	33.37					0.23		33.60	0.23	0.46	34.06	0.69
Premium for HLA Selected Platelets	239.90		0.00			1.67		241.57	1.67	3.31	244.88	4.98
Premium for HPA Selected Platelets	239.90		0.00			1.67		241.57	1.67	3.31	244.88	4.98
Plasma Components												
Clinical FFP (UK sourced)	28.46		2.51		-3.10	0.20		28.07	-0.39	0.39	28.46	0.00
Paediatric MBFFP (non-UK Sourced)	178.03		0.00		-1.24	1.24	5.50	183.53	5.50	0.00	183.53	5.50
Neonatal MBFFP (non-UK Sourced)	50.02		0.00		-0.35	0.35	1.38	51.40	1.38	0.00	51.40	1.38
Cryoprecipitate												
Cryoprecipitate (UK Sourced)	31.63		0.00		-0.44	0.00		31.19	-0.44	0.44	31.63	0.00
Pooled cryoprecipitate (UK Sourced)	177.57		-2.05		-1.65	1.23		175.10	-2.47	2.45	177.55	-0.02
MB Cryoprecipitate-Neonatal (non-UK Sourced)	187.50		0.00		-1.31	1.30	5.50	192.99	5.49	0.00	192.99	5.49
MB Cryoprecipitate-Pooled (non-UK Sourced)	1080.48		0.00		-7.53	7.50	33.00	1113.45	32.97	0.00	1113.45	32.97
Other Components and Services												
Optimised Pooled Granulocyte	1104.65					7.67		1112.32	7.67	15.26	1127.58	22.93
Buffy Coats	82.05					0.57		82.62	0.57	1.13	83.75	1.70
Premium for HEV neg	17.18		-17.18			0.00		0.00	-17.18	0.00	0.00	-17.18
Total (€m's) [price x volume issued]	265.3	-13.1	10.1	-0.1	-10.0	1.8	3.2	257.0	-8.2	3.5	260.6	-4.7
		(A)	(B)	(C)								
TOTAL	Closing position NCG Process 2016/17	Total Impact Product Demand Movements A + B + C		-3.1	-10.0		4.9		-8.2	3.5		-4.7
		Income Decrease / % Decrease		-1.2%	-3.8%		1.9%		-3.1%	1.3%		-1.8%

Appendix 2 – Specialist Services Summary Impact Statement 2017/18

Service	NCG Baseline 2016/17 (£m's)	Cost Pressures	Cost Reduction Prog.	Price adj. Fixed Cost over recovery for Growth	Pre-Inflation Sub-Total	Inflation Funding Increase	Post Inflation Sub Total Income	Percentage Price Increase / (decrease)	Growth post NCG 2016-17	Price Adj.	Volume Movement	Total Income 2017/18
TAS	7.0	0.0	0.0	-0.1	6.9	0.1	7.0	0%	-0.5	-	0.3	6.8
RCI Reagents	1.5	0.0	0.0	0.0	1.5	0.0	1.5	0%	0.0	-	0.0	1.6
RCI Reference	11.9	0.1	0.0	-0.1	11.8	0.1	11.9	0%	0.0	1.0	0.2	13.2
H&I	13.6	0.1	-0.1	-0.2	13.4	0.2	13.6	0%	0.0	-	0.2	13.8
SCI - CMT (excl CBC)	9.0	0.1	0.0	-0.2	9.0	0.1	9.0	0%	0.7	-	0.3	10.0
TES	13.1	0.1	0.0	-0.7	12.5	0.6	13.1	0%	-0.3	-	1.2	14.0
Total	56.2	0.4	-0.2	-1.3	55.1	1.1	56.2	-	-0.1	1.0	2.2	59.3