

TCR9  
NBA1  
NBAS

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#### NATIONAL BLOOD AUTHORITY

1. PS(H) expressed interest in seeing some figures which illustrate the variable performance among the Regional Transfusion Centres.
2. Annex A shows the cost related charges made by the RTCs for whole blood and the main components supplied to hospitals. There are marked differences but to some extent these could be due to differences in costing systems and in the demography and size of the locality served and not a reflection of efficiency levels in the RTCs themselves. A range of indicators, including costs, would provide a better picture of RTC performance.
3. The Directorate of the National Blood Transfusion Service (NBTS) have provided additional indicators listed in Annex B. These are based only on data supplied by RTCs which seems reliable and consequently the individual indicators reflect data from a varying number of RTCs and not always the same ones. Nevertheless the indicators show that performance is variable and that the NBA will need to get behind the figures to determine the causes and how to make improvements.
4. This <sup>exercise</sup> highlights a major problem with the existing arrangements; the Directorate cannot compel RTC's to adhere to national costing and management information systems and some RTC's are reluctant to provide them with any data.
5. PS(H) may also be interested in the enclosed extract (annex c) from an Ernst and Young report commissioned by the Directorate in 1991 to consider the need for a central body in the NBTs. This particular extract concerns the scope for efficiency improvements.

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# REGIONAL PRICES AS AT 4th JULY 1991

REGION	WHOLE BLOOD £'s	SAG-M RED CELLS £'s	CONC. RED CELLS £'s	PLATELETS £'s	RED CELL PRICE £'s	COSTING METHODOLOGY
YORKSHIRE	44.44			23.10	28.72	NOT KNOWN
TRENT	35.30	31.36	16.12	17.53	27.47 †	NATIONAL
E. ANGLIA *	35.00	32.39	32.39	15.75	32.39	NATIONAL
N.W. THAMES	45.12		26.43	20.40	26.43	OWN VERSION
N.E. THAMES				19.52	26.68 †	ESTIMATE
S. THAMES *				24.16	33.19 †	SEMI-NATIONAL
OXFORD	33.49	22.05	19.60	16.61	21.55 E	ESTIMATE
S. WESTERN	38.10	26.50	16.75	17.40	25.02 E	NATIONAL
W. MIDLANDS	36.00	23.50	23.50	18.00	23.50	NATIONAL
MERSEY *				21.57	26.21 †	NATIONAL
MANCHESTER	34.95			26.32	27.10	OWN VERSION
LANCASTER }						
WALES *				20.93	27.74 †	NATIONAL

\* Not including HCV test costs

† Single price for all red cell products including whole blood.

E Estimated

N.B. All prices include a capital element

## Annex B

### Performance Measures for RTCs

#### 1. The proportion of donations issued as whole blood

Ideally this could be as low as 5% if the maximum plasma and platelets were extracted. In fact the range is between 2% for the best RTC and 25% for the worst.

#### 2. Donations collected per million population

There is no real reason why all RTCs should not achieve the same levels. In fact the units collected by RTCs represent donations from between 6.5% and 8.5% of the population.

#### 3. The proportion of donations which are unsatisfactory and cannot to be used.

If donor counselling, interviewing and processing were perfect this should be 0%. In fact the range is 1.5% in the best RTC to 7% in the worst.

#### 4. The proportion of good red cells which are not used

Ideally this should be close to 0% if stock rotation is good and supply meets demand. In fact the range is 1.5% in the best RTC to 11% in the worst.

the negotiations were carried out by local RTC management) Service Level Agreements with a substantial number of Regional service providers. Where RTCs did not wish - or were not able - to take advantage of Regional providers (the South London Centre is an example of where this might occur) national BTS management will need to assist in the establishment - or integration - of local systems within the new management framework.

Overall, the set-up costs of this option seem likely to be large in terms of managerial time and effort throughout the BTS.

#### "Contracting Authority"

Under this Option the level of dislocation seems likely to be very much lower than under "Direct Management".

All RTCs have agreed contracts with their Regional purchasers for the current year and have forged the links necessary to establish future needs. Under this Option the needs establishment process will continue to be carried out at local level so there will be little change to assimilate. However, the National Body will need to establish mechanisms with RTCs and purchasing bodies for the submission of needs statements and the agreement of contracts. In addition, work will be required in order to establish sensible arrangements for invoicing users of RTC products and recording performance against contract.

Overall it is expected that this Option will require a level of set-up expenditure which falls about half way between the costs associated with "Direct Management" and those associated with "No Change".

### Quantifiable Benefits

#### The Scope for Efficiency Improvements

5.9 Substantial opportunities appear to exist within the BTS to achieve improved cost effectiveness through the promotion of particular mechanisms for collecting or processing blood and products and by improved focussing of blood collection in areas or Regions in which it is cheapest or most efficient to do so.

5.10 The extent of the opportunities for improvement can be assessed from the following three tables which are based on information available from the BTS. Table 3 sets out the differences in prices and the ranges of costs involved in the sale and production of five key BTS products. It also records the current volumes of production.

5.11 In considering the implications of the following tables, it is very important to take the following into account:

- The information base within the BTS from which the data has been drawn is weak. The National Directorate can be confident about the volume and price information provided; however, the costing information is based on returns from those few Centres whose costs are known. Thus, whilst the cost differences shown between Centres for particular products are an accurate reflection of the fact that very wide ranges of costs exist in practice, we cannot be confident that there are not other Centres whose costs are either higher or lower than those shown as maxima and minima.



• The apparent potential for savings cannot be regarded as necessarily entirely achievable in practice. Because, for example, of the current high level of demand for the BTS's products, it is likely that, for some time into the future at least, it will continue to be necessary to collect from the more expensive sources of supply (eg from donors located at a considerable distance from the nearest Transfusion Centre - requiring collection teams to make costly overnight stops in order to obtain their donations).

**Table 3 : Costs & Prices of BTS Products**

BTS Products	Total Production	Price	Highest Prod'n Cost	Lowest Prod'n Cost	Average Prod'n Cost
Recovered Plasma	420,000kg	£36/kg	n/k	n/k	n/k
Apheresed Plasma	80,000kg	£60/kg	£89/kg	£65/kg	n/k
Special Plasmas	10,000kg	£80/kg	n/k	n/k	n/k
SAG(M) Red Cells	1.80m units	n/a	£33/unit	£24/unit	£27/unit
Whole Blood	0.54m units	n/a	£42/unit	£33/unit	£36/unit

5.12 From this it can be seen that the costs of Apheresed plasma range from £89/kg to £65/kg between RTCs; those of SAG(M) Red Cells from £24/unit to £33/unit; and those of whole blood from £42/unit to £33/unit. The implications of this in cost terms is shown in Table 4.

**Table 4 : Implications of Cost Differentials on BTS Costs**

BTS Products	Cost of Production at Highest Cost	Cost of Production at Average Cost	Cost of Production at Lowest Cost
Apheresed Plasma	£7.21m	n/a	£5.16m
SAG(M) Red Cells	£59.40m	£48.60m	£43.20m
Whole Blood	£22.68m	£19.44m	£17.82m

5.13 As mentioned above, it would be dangerous to extrapolate directly from the above tables to identify immediately achievable savings; however, it has been made clear to us that several - of the cheaper - RTCs have the capacity to produce significantly more product but have not done so since the local demand does not require it. Overall, it seems safe to conclude that the scope exists to make savings in this area alone which would more than cover the administrative costs of a National Blood Authority.

5.14 As can be seen from Table 3, the differential in the price paid by BPL for apheresed plasma as against recovered plasma is considerable (£24/kg); also from Table 3 it can be seen that some 540,000 units of Whole Blood are still being produced by the

BTS. Whole Blood represents blood from which plasma has not been recovered; this 540,000 units therefore represent a currently untapped source of recovered plasma. Table 5 sets out the implications to BPL of a proportion of that source being used to replace the apheresed plasma BPL currently purchases annually from the BTS.

**Table 5 : Effect of Price Differentials**

Effect on BPL Costs of :	BPL Annual Savings
All of Current Apheresed Prod'n - achieved instead through Recovered Plasma	£1,920,000
50% of Current Apheresed Prod'n achieved instead through Recovered Plasma	£960,000
25% of Current Apheresed Prod'n achieved instead through Recovered Plasma	£480,000
None of Current Apheresed Prod'n achieved instead through Recovered Plasma	0

5.15 The extent to which these cost-efficiency savings are achievable will of course depend on demand and individual user requirements. However it is clear that they will not be achieved without some external stimulus. In order to judge between the three Options under consideration it is therefore necessary to consider the extent to which they will provide that stimulus.

"No Change"

With current levels of central influence over RTCs it is unlikely that any of the above savings will be achieved. The BTS information base - already weak - will be unlikely to improve and as each RTC focusses increasingly on its intra-Regional users, the scope to identify and act upon opportunities to improve the cost mix in the BTS's products will, if anything, reduce.

"Direct Management"

Under this option the ability of central management to obtain and act upon cost and product mix information will be greatly enhanced and considerable scope should exist to take advantage of some of the opportunities outlined above.

"Contracting Authority"

So long as the Contracting Authority made it part of its contract with the RTCs to provide comparable cost information prepared on consistent bases, it should be very well placed to identify, and through its award of contracts to RTCs, act upon the opportunities for improved cost-effectiveness outlined above.

**Conclusions & Recommendations**

5.16 We base our conclusions on the assessments made in this Section and the last under three headings;

- Qualitative Benefits of the Options
- Quantified Assessed Costs of the Options