

D.S. 364/74

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To  
Regional Administrators

H/H7/15

24 December 1974

IN CONFIDENCE

Dear Sir

BLOOD PRODUCTS PRODUCTION

1. The National Blood Transfusion Service is currently unable to meet the demands of clinicians for certain preparations of human blood. There is an immediate need to provide more AHS concentrate (equivalent to about 275,000 blood donations annually). AHS concentrate is now the preferred therapeutic agent for the treatment of haemophilia and considerable benefit could be brought to these patients if adequate supplies could be made available for their treatment. There is also an increasing demand for albumin fractions, mainly plasma protein fraction (PPF) which is replacing dried plasma and plasma substitutes. Over the next few years the need for PPF may rise to 200,000 bottles per annum.
2. At present part of the demand for these blood products is being met by expensive imported material which is now marketed in this country, and as the demand increases commercial firms may consider it worth their while to establish panels of paid donors in this country in order to obtain their supplies of human blood. Such a development would constitute a most serious threat to the voluntary donor system upon which the NHTS is founded. The Department therefore regards it as of the greatest importance, quite apart from the question of cost, that the NHS should become self-sufficient as soon as practicable in the production of PPF and other blood products (the cost of purchasing AHS and PPF from commercial firms on the scale envisaged in paragraph 1 would be around £6 million a year).
3. The current output from the Blood Products Laboratory, Elstree (BPL) is limited by the amount of plasma supplied by Regional Transfusion Centres (RTCs). This amount in turn depends upon (a) the number of blood donations collected and the extent to which clinicians are prepared to use blood in the form of concentrated red cells, and (b) the facilities available at RTCs for separating the whole blood into concentrated red cells and plasma. At present less than 10% of blood donations in England and Wales are used in the form of concentrated red cells compared with 30-40% in Scotland. If this percentage could be raised to 40% in England and Wales it would be possible for the NHS to meet the demand for AHS concentrate and to increase the production of PPF from the current figure of 78,000 bottles to 136,000 bottles a year. To reach the medium term target of 200,000 bottles of PPF per annum mentioned in paragraph 1 would also require an increase of 400,000 blood donations from the present figure of 1.6 million per annum. It is intended that production of blood products in Great Britain should be co-ordinated and that some of the increased output of

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plasma produced in RTCs in England and Wales should, by arrangement with the Scottish Home and Health Department, be processed at the Plasma Fractionation Centre, Liberton, Edinburgh.

4. To achieve a 40% use of concentrated red cells will require the full co-operation of clinicians. Clearly no steps can be taken towards this objective unless parallel action is taken to ensure that RTCs have sufficient facilities to separate more plasma from whole blood and thus to meet the increased usage of concentrated red cells. For this purpose the cost of providing the necessary facilities such as additional equipment and staff might be up to £0.5 million in England and Wales, part of it recurring (the cost of collecting 400,000 additional donations annually might be of the order to a further £1.0 to 1.5 million). The extent to which the capacity of RTCs to produce plasma can be increased will vary from Centre to Centre.

5. It would clearly be considerably cheaper to produce these blood products within the NHS than to buy them from commercial sources.

6. If the normal procedure for the financing of health services were to be followed, Authorities would need to agree, collectively, to accord blood transfusion priority for additional resources over a period of several years, within a co-ordinated programme of expansion. However, additional expenditure is bound to be somewhat disproportionate as between Regions if realistic targets are adopted with the aim of making NHS production sufficient to meet clinical needs. It has therefore been decided that since the Department would in any case have to co-ordinate a programme for the increased production of blood products earmarked finance of up to £.5 million should exceptionally be provided for this purpose. The Department proposes to invite estimates of requirements in RTCs for the increased production of plasma, with the primary aim of making the NHS self-sufficient in AHG concentrate in 2 to 3 years.

7. Additional copies of this letter are enclosed for the Regional Medical Officer, the Regional Treasurer and the Regional Transfusion Director.

Yours faithfully

B O B Gidden