To the
ROYAL COMMISSION
on the
NATIONAL HEALTH SERVICE

EVIDENCE
from the
SCOTTISH NATIONAL BLOOD TRANSFUSION SERVICE

January 1977.
INTRODUCTION: THE SCOTTISH NATIONAL BLOOD TRANSFUSION SERVICE

This section describes briefly the Scottish National Blood Transfusion Service as background to the evidence submitted.

1. The SNBTS comprises five Regional Blood Transfusion Services, a Protein Fractionation Centre, and a National Headquarters.

2. The regional services operate from Regional Transfusion Centres in Inverness, Aberdeen, Dundee, Edinburgh and Glasgow/Law. They serve areas which correspond approximately with those of the former Regional Hospital Boards; three are located within teaching hospitals of which they form an integral part. Each service has a regional director who is a whole-time NHS consultant, and there are other consultant staff in the larger regions.

3. The Protein Fractionation Centre is sited in Edinburgh, and is under the control of a scientific director. It serves the whole of Scotland, and at some future date may serve part of England. Its principal function is the fractionation of human blood plasma supplied by the regional services and the return of finished blood products to them.

4. The National Headquarters is also based in Edinburgh. Its staff comprises the National Medical Director and the National Administrator, with a small supporting staff, who are responsible for the co-ordination of work within the SNBTS, the presentation of Estimates to the Management Committee, liaison with the Scottish Home and Health Department, and the National Blood Transfusion Service in England and Wales, and the study of developments and their implications for the future, and other matters.

5. The functions of the SNBTS may be divided into two broad categories: those concerned with the supply of blood and blood products to the NHS, most of which are carried out by all the regional services; and those more directly concerned with the care of patients, which vary, both quantitatively and in range, from one region to another, depending on the site of the RTC, the availability of staff, local demand, and financial resources. Without listing in detail who does what, the following are carried out by all or some of the regional services, in conjunction with the PFC:

   (a) Donor recruitment and the organisation of blood-collecting sessions.

   (b) Medical selection of blood donors and the collection of blood, either as single donations, or by plasmapheresis.

   (c) Collection of blood from selected donors for the preparation of blood-grouping anti-sera; and the immunisation of animals to provide other laboratory reagents.
(d) Immunisation of volunteers for the production of anti-D immunoglobulin.
(e) Tests on each donation to determine its blood groups, and tests for transmissible disease.
(f) Compatibility testing of donations for transfusion to individual patients.
(g) Antenatal and neonatal blood group serology in relation to the prevention and treatment of haemolytic disease of the newborn.
(h) Blood group serological reference services, including the investigation of cross-matching problems and transfusion reactions.
(i) Leucocyte and platelet typing; compatibility testing for organ transplantation.
(j) Separation of blood into its cellular elements; and the fractionation of plasma to produce a wide range of therapeutic substances (below).
(k) Clinical blood transfusion, including the management of haemostatic defects, the use of cell separators, and advice on the use of blood and blood products.
(l) Research and development, and participation in training programmes for postgraduates, undergraduates, medical laboratory technicians, and nurses.

6. The products prepared for transfusion include:

Whole blood
Concentrated red cells:
  fresh
  frozen
Platelets
Plasma:
  dried
  fresh dried
  fresh frozen
Albumin solution
Stable plasma protein solution
Normal immunoglobulin
Specific immunoglobulins:
- anti-D
- anti-tetanus
- anti-vaccinia
- anti-hepatitis B
- anti-varicella/zoster
- anti-rubella

Coagulation factors:
- fibrinogen
- factor VIII – as cryoprecipitate (frozen)
- as 'intermediate factor' (dried)
- factors II, IX, X
- factors II, VII, IX, X.

7. The following are some SNBTS statistics for the year ended 31 March 1976:

- Staff employed expressed as whole time equivalents: 731
- Revenue expenditure: £3 447 436
- Blood donor attendances: 289 927
- Blood donations collected: 262 502
- Donations per 1 000 total population: 50
- Donations of blood cross-matched for patients: 126 289
- Samples tested in relation to the prevention and treatment of haemolytic disease of the newborn: 87 402
- Samples tested in relation to tissue typing: 36 527
- Samples tested for hepatitis B: 369 414

8. Until 1st April 1974 the SNBTS was administered by the Scottish National Blood Transfusion Association, a voluntary body which drew virtually all its funds from the Scottish Home and Health Department. Since that date it has formed one of the divisions of the Common Services Agency for the Scottish Health Service.

9. In common with colleagues elsewhere in the NHS, the staff of SNBTS have experienced with dismay the trend towards centralised administration and decision making, a trend which runs counter to the spirit of NHS reorganisation.

10. The CSA was established in the words of SHHD circular HSR(72)C2 of 3 November 1972 to provide both the Scottish Home and Health Department and the health boards with a variety of services which can be provided most efficiently by a single agency. With two exceptions the services concerned had been established for many years and were therefore absorbed into CSA as going concerns. The exceptions were the service now known as the Building Division, formed at 1 April 1974 from the architects' and engineers' departments of the five Scottish regional hospital boards, and the Supplies Division which incorporates former SHHD and RHB departments.

11. Circular HSR(72)C2 contained also the following paragraph which illustrates the conceptual confusion between a federation and a unitary organisation which has resulted in so much misunderstanding, conflict and duplication of effort between the Management Committee and the CSA Divisions:

'The CSA will be operating a range of disparate services and this fact will determine its basic organisation. The main responsibility for the day to day running of each service within the allocated expenditure and in accordance with broad policies will fall to the chief officer or director of that division of the CSA; and he will in most cases be directly responsible to the Management Committee or to any sub-committee which may be set up for the particular service. It is unlikely that the Management Committee as such will normally have to concern itself with the detailed running of any of the services provided by its operational divisions or that it could attempt to do so over a wide range of services. It will, nevertheless, be responsible for determining the staffing structure of each division, for ensuring that each division is organised to provide an efficient service and for co-ordinating the various services as may be appropriate. It will provide and control all the internal supporting services necessary for each of the Agency's divisions, ie personnel, accommodation and finance, since the Agency will be a single organisation for financial purposes and will be the employer of all staff required to carry out the functions allocated to it.'

12. The difficulty of reconciling the concept of federal status for CSA divisions with the establishment of a single management committee has led both the Management Committee and SHHD to a 'solution' which is to treat CSA as if it were a health board. It is however different in that it does not share a health board's authority, within national policy, to develop one service at the expense of another in pursuit of an overall objective to provide health care for the population of a geographical area. Nor does it have in respect of many of its divisions either the professional advisory machinery available to a health board or an executive group of senior officers responsible to it for the management of its affairs.
According to circular HSR(72)C2 the directors of divisions are directly accountable to the Management Committee but it would appear that a solution to the dilemma of having 13 or more directors each accountable to the committee has been sought in the interpretation of the role of Secretary and Treasurer to the Agency. To quote a letter addressed by the Secretary on 21 February 1975 to the National Medical Director of SNBTS and copied to all divisions, 'the affairs of the Agency are managed through its chief administrative officer, the secretary and its chief finance officer and adviser, the Treasurer'.

13. The results of the above have in the case of SNBTS included the following:

(a) Detailed management by a committee lacking the knowledge necessary to manage a clinical service and with no professional advice available to its members.

(b) Introduction of standardised administrative systems unsuited to the services on which they were imposed.

(c) Delay in taking decisions on staffing levels and finance.

(d) Failure to implement the decision that Divisions were in general to be responsible directly to the Management Committee and not, as has happened, through a CSA headquarters organisation.

(e) Lack of consultation or dialogue with Directors of Divisions on matters affecting them.

(f) Concentration by CSA central services, such as personnel and finance, on control to the exclusion of their advisory and educative roles.

14. The SNBTS has in the past enjoyed a number of advantages leading to efficient and economic administration, which it has attempted (against Management Committee opposition) to preserve during a period in which the NHS in general has fallen victim to over-centralisation and to increasing over-administration. These advantages could (if they are allowed to) provide a firm basis for the future; they include:

(a) A high level of delegation of authority to the operational level - the BTS Regions and the Protein Fractionation Centre.

(b) Regular meetings of BTS Directors able to take effective decisions and implement them.

(c) Easy and rapid communication both between Centres and with BTS Headquarters.

(d) A high sense of common purpose amongst staff together with a pride in the service.

(e) Financial control through a system by which those who commit resources (i.e. Directors) are budget-holders subject to cash limits.
15. Members of the Royal Commission are asked to study the nature of the services presently within the CSA and to consider the form of management best suited to each. It is submitted that this was not sufficiently studied before 1 April 1974.
RESOURCES OF THE NHS: THE VOLUNTARY BLOOD DONOR

16. A fact so obvious that it is often overlooked by clinicians and NHS management is that human blood and its constituents cannot be manufactured but must be obtained from members of the general public. The significance and consequences of this fact do not appear to receive the sympathy of management in the reorganised health service.

17. The benefits of a voluntary donor system, in terms of purity of blood and reliability of the donor, were recognised in resolution No. WHA 28.72 passed at the 28th World Health Assembly in 1975 which fully endorsed the principle of voluntary donation and urged the governments of all nations to adopt the highest standards in providing a safe blood service to their citizens, formulating those standards on the concept of non-remunerated donors.

18. It is strongly felt in this service that the Central Departments in England and Scotland should be asked to pronounce publicly their support for voluntary blood donation and to consider its implications for the management and finance of the blood transfusion service. SNBTS feels that the indispensibility of blood donors should be recognised by their being given an opportunity to participate once more in the management of the service as was the case before NHS reorganisation. Equally, the Central Departments should be taking active steps to counter the threat to voluntary blood donation posed by those multi-national pharmaceutical companies who are marketing in Scotland products, made from the blood of paid donors, which the blood transfusion service also manufactures from voluntary blood donations. This can be done by acknowledging the value of SNBTS products and investing in the service.
RESOURCES OF THE NHS: MANPOWER

19. **Staff morale.** It is believed in this service that there has been a lowering of morale in recent years. This must be attributed in part to the national financial climate but is no doubt due partly also to the increasing size both of the NHS itself and of the basic administrative units within it. This makes it increasingly difficult for a worker to identify with, and feel an important part of, a service to the community. Senior medical staff especially experience lowered morale on account of their financial standing under national pay policy and more particularly through the increase in administration since NHS reorganisation. This is manifest both in the increased number of administrators seen to be associated with the hospital section of the NHS and in those administrative procedures which it has been seen fit to introduce and which do not seem to contribute to higher productivity. A suggested remedy is for health boards and the CSA to undertake a management audit of their activities with a view to ceasing those activities which cost more than they save or are unproductive and/or duplicate work undertaken elsewhere.

20. **Whitley Council conditions of service.** It is the experience of BTS, which is an enterprise relying heavily on teamwork, that the Whitley Council method of settling pay and conditions of service is inflexible and inconducive to the introduction of new methods, techniques or products. This is evident both in hospital and in the blood transfusion service when changes in technique require staff not previously employed and for each of whom it is necessary to obtain a personal variation from the Central Department, which variation has to be renewed on each occasion that the post is refilled. The need for greater flexibility in the acceptance of academic qualifications was recognised by Sir Solly Zuckerman; more recently, Lord McCarthy has recommended more flexibility in national Whitley Council to allow for more interpretation and adaptation at NHS Regional level or below. It is to be hoped that the Central Departments will take heed of Lord McCarthy's proposals and members of the Royal Commission are asked to support them.

---

1 Hospital Scientific and Technical Service, HMSO 1968.
21. **The Royal Commission is asked to consider whether the NHS is making full use of the facilities which it has for the manufacture of consumables for its own use, for instance laboratory reagents, which it could prepare at a cost substantially lower than the prices paid for commercially-produced reagents.** As an example, SNBTS regularly produces for its own use and for limited distribution to NHS hospitals in Scotland reagents to an annual value of over £166,000. The experimental Scottish Antibody Production Unit, a collaborative effort between Glasgow University, Greater Glasgow Health Board and CSA, produced in 1975, its first year of operation, several years' supply of a number of reagents, the annual cost of the commercial equivalents being approximately £142,000. This stock of several years' supply was produced at a total cost of £18,180 including £5,900 non-recurring expenditure on animal housing. The benefit to SNBTS is the ability to manufacture reagents using the expertise and experience of staff and the equipment and premises already required for the main purpose of the organisation, namely blood transfusion in all its aspects. The resulting products are often more satisfactory as to potency and specificity than the commercial equivalent.