COLLECTION OF FRESH FROZEN PLASMA IN THE NORTHERN REGION

CONTENTS

ABBREVIATIONS

NBPL	National Blood Products Laboratory
CMV	Cytomegalo Virus
FVIII	Factor VIII
FFP	Fresh Frozen Plasma
IU	International Units

SUMMARY & RECOMMENDATIONS

1 There is an inescapable requirement to increase the level of plasma collection in the Northern Region, towards an established target of 28,000 kg per annum.

2 As a first phase it is proposed to seek to increase plasma collection from 13,000 kg to over 21,000 kg per annum by maximising the use of the existing Plasmapheresis suite at the Blood Transfusion Centre and by increasing plasma collections from whole blood donations.

3 It is anticipated that this will cost a gross £520,000 per annum. However, there would be a consequential marked reduction in the need to buy commercial products and over a two to three year period resources would be released in Districts and redirected to the Blood Transfusion Service by the Regional Health Authority to cover all these costs.

4 It is recommended that a revenue reserve of £200,000 be set aside for the remainder of this year and for 1989/90 to fund on a topping up basis an increase in plasma collection to around 21,500 kg per annum. Detailed proposals are set out in paragraphs 28 to 34. The position would then be reviewed to consider whether any further action or resources are required in 1990/91.

5 Officers are continuing to work on a second complementary phase, which it is anticipated will also need to be progressed within the next two years. A new facility will be required to bridge the gap in plasma collection from 21,500 kg to 28,000 kg per annum. A further report will be made in due course.

BACKGROUND AND PROGRESS TO DATE

6 This report is concerned with the plasma procurement programme in the Northern Region. In the late 1970s, the demand in the Region for FVIII increased rapidly, exceeding the available supply from the Regional Transfusion Service. At that time, a decision was made to purchase commercial FVIII, rather than invest in plasma procurement through the RTC. This in turn meant that Albumin also had to be purchased from commercial sources. By 1986/87, FVIII demand and costs had risen to such an extent that over £1 million was being spent annually on FVIII alone.

7 In 1980 the Department drew up national targets for regions to reach self sufficiency in the collection of blood plasma. The target set for the Northern Region, based on 8.82 tonnes of fresh frozen plasma per million population, is 28,000 kg per annum. This target was based on the expected use of FVIII and Albumin and the known efficiency of extraction of the products from source plasma. Early indications are that the department's target will remain at this level and the revised Regional Strategic Plan (1986) is consistent with this.

8 Standard blood plasma provides a number of blood products, the two main bulk products being Factor VIII and Albumin. FVIII is a clotting agent, particularly used in the treatment of haemophiliacs. Albumin, previously known as Plasma Protein Fraction (PPF) is used to deal with emergency blood loss to make up blood volume. It is often used in large quantities in A & E departments and burns units. There are other products, particularly Intravenous Immunoglobulin and to a lesser extent Anti-CMV Immunoglobulin, which are now being used in increasing quantities. Intravenous Immunoglobulin is used in the treatment of a condition causing platelet deficiency (see Glossary) and Anti-CMV Immunoglobulin is used to protect transplant patients from infection with the Cytomegalo Virus (also see Glossary). These commercial purchases are expensive and costs could reduce when these products could be issued by the NBPL within the next two to three years.

9 In 1984 the RTC was collecting about 7,000 kg of plasma annually. In 1986 a decision was taken to increase plasma production by issuing products containing less plasma, releasing plasma for despatch to BPL. Some recurring revenue funding was provided to cover additional blood bag costs and to pay for additional processing required in the evenings. This has resulted in an annual increase in plasma collection to 13,000 kg.

10 A new National Blood Products Laboratory (NBPL) has just been completed at Elstree at a cost of £56 million and is now producing small amounts of product. Full production is expected this year. The full capacity of the plant was designed to meet the total demand for FVIII and Albumin for England and Wales. All blood plasma collected is processed by the NBPL at no charge to the regions.

11 The UK, not least the Northern Region, has relied heavily on purchase from other countries, in particular the USA. Recent changes in production methods brought about by legal cases concerned with cross-infection have dramatically reduced the yield rate of products, principally FVIII, in the USA. This is already causing higher prices and a strong probability that there will soon be no significant excess product to sell to other countries. The change has been to introduce heat treatment in the process, reducing yields by over 50%. It is principally for this reason that the NBPL has sought early full production to achieve national self sufficiency. One region has let their purchasing contract lapse and is now having difficulty purchasing FVIII. The pharmacy at the Royal Victoria Infirmary, Newcastle is also having difficulty in obtaining normal commercial supplies of FVIII.

12 The NBPL estimate that if they reach full production levels this year and plasma collection by regional transfusion centres remains static, they will be able to maintain full production until August 1990 by utilising the current plasma stockpile. After that date, full production will be entirely dependant on new fresh plasma supplies from Regions. This makes the introduction of a plasma collection programme to meet the targets a matter of urgency.

13 To reach the regional target it will be necessary to make a major capital investment in new physical facilities and options are currently under consideration. However, as a first step it is possible to significantly increase plasma collection before major capital investment is required. This report, while setting the scene for a second-phase aim of achieving full self sufficiency, is principally concerned with establishing an interim programme or first phase to increase as soon as possible the level of plasma collection for processing by the NBPL.

14 In determining a Short Term Programme for 1988/89 the RHA has already responded with some non-recurring resources to a depletion in Donor Panel strength which is threatening existing product levels. This money is being used to help in the recruitment of new donors. Responding to the need to increase plasma production will put further strain on the Donor Panels and further recruitment initiatives will be needed.

15 The main reason for seeking self sufficiency is to guarantee a proper product level to meet clinical needs. However, the cost of commercially purchased products is already higher than at least the first phase incremental costs of increasing collection so there is also a financial incentive.

ASSESSMENT OF NEED

16 The yield of FVIII has fallen since the original target was published due to heat treatment which was introduced for HIV inactivation. This fall in FVIII yield is balanced in this Region by the fall in demand for FVIII; usage has fallen by around 0.9 million units per annum, mainly because of cross-infection. A continued fall in FVIII demand due to previous cross-infection is anticipated.

17 The yield of Albumin from the source plasma has not changed recently as all Albumin products have been heat treated since the late 1970s. No virus transmission has been demonstrated in these Albumin products. Therefore, whilst overall demand is now expected to be lower than previously thought, this is closely balanced by a reduction in yield of FVIII which the NBPL has now recognised in its production programme.

18 Demands for FVIII, based on recent usage, would suggest an annual need for approximately 5 million units; this is expected to reduce slightly. The yield rate of FVIII is around 160 units per kg of plasma - requiring the total 28,000 kg target. The use of Albumin is somewhere between 300 and 400 thousand grams annually, and much of this (approximately half until recently) is provided from the NBPL. The yield rate of Albumin is about 22 grams per kg of plasma, requiring total plasma collection of between 14,000 and 17,000 kg. Led by the demand for FVIII, the strategic target is likely to remain in the order of 28,000 kg of collected fresh frozen plasma per annum for the foreseeable future.

19 This Region is the largest per capita purchaser of FVIII. FVIII prices were fairly stable at 16p/unit but recent price rises have occurred; current costs are in the order of 18p per unit. The following examples show what the total equivalent commercial costs of FVIII would be at various prices;

16p/unit	=	£ 896,000
18p/unit	=	£1,008,000
20p/unit	=	£1,180,000

20 These are total commercial equivalent costs, but at the moment at least some of the FVIII is being supplied from Elstree; the exact amount varies but it is in the order of 10% of the total used. The current annual cost of FVIII purchased by the RVI based on commercial purchases made in April/May/June 1988 is a little less than £1 million.

21 There are two risks in continuing to use commercial supplies. Costs will probably continue to rise. A second risk, of greater concern, is that supplies may not be available at even high prices, leading

Region. The NBPL estimates full production will not be possible after mid 1990 unless all Regions reach their plasma supply targets. Until then the NBPL will rely on production based on the current stockpiles it holds.

22 The NBPL is proposing to make products available to regions according to how much plasma each has stockpiled rather than the current rate of collection. This change in policy would have a markedly adverse effect on the supply of blood products to this Region and reduces the incentive for regions below target to reach self sufficiency. It is considered that part of the NBPL's role should be to manage production differentials to seek to meet clinical needs. Such decisions should take account of local needs rather than only apply an arbitrary formula; the NBPL's suggested policy line should therefore be resisted. Nevertheless, it is important to seek to raise our collection level quickly in order to ensure that our overall level of products returned does not diminish to a point where we could not afford, or we could not secure, alternative commercial supplies. It is for this reason that an early interim phase of development is being considered to seek to raise the level of collection above the current 13,000 kg per annum.

23 The overall need to achieve full self sufficiency is also urgent and, on the NBPL's estimates, should be achieved by mid 1990. A further report will be made on an appropriate second phase of development, subject to Members decisions regarding this report.

POSSIBLE METHODS OF PROCUREMENT & PROCESSING

24 The limitations of commercial supplies were described in the introduction. In the opinion of Officers it is too risky and too costly to continue to rely on commercially purchased products; the Northern Region should secure an alternative means of procurement as soon as possible. The choice therefore lies between collecting plasma ourselves for processing by the NBPL or reaching an agreement with another region(s) to collect it on our behalf. The latter choice might in theory offer one method of moving efficiently towards our target. Several other Regions are close to their original self sufficiency targets but, due to other circumstances, have had to revise their targets upwards as demand for FVIII rises in their Regions. One region, for instance, is experiencing some difficulty in increasing plasma production beyond their original target. It is therefore unlikely that there will be plasma supplies or finished products available from other Regions for us to purchase if we fail to meet our target. In fact this course is specifically excluded in the Department's current guidelines, wherein each region should be self sufficient by 1990. The choice therefore concerns not <u>if</u> but rather <u>how</u> we should achieve self sufficiency.

25 It would in theory, be possible to send our plasma to another centre, say the Scottish BPL. The NBPL at Elstree is the only fractionating plant in England and it is revenue funded by DHSS with top-sliced resources. There is no additional charge to the RHA for storage, handling or processing. Provided that the planned production capacity can be maintained there is no benefit to be found in looking elsewhere, and it is doubtful whether there is currently sufficient spare storage and processing capacity anyway.

26 There are two principal methods of collecting plasma, by whole blood collection and by plasmapheresis. These two methods have very different characteristics. In plasmapheresis a donor attends for about an hour; the donor bleeds into a machine which separates cells from the plasma. The cells (red cells, white cells and platelets) are returned to the donor and only the separated plasma is collected. The donor initially gives about 1000mls of blood and receives back about 500mls containing the cells. This leaves 500mls of plasma ready to be frozen and despatched to the BPL for processing. The body makes up the donated plasma within a few days. Donors donating whole blood take about three weeks to make up the donated red cells and the Iron in the blood may take two or three months to replenish fully.

TABLE 1: CHARACTERISTICS OF WHOLE BLOOD DONATION AND PLASMAPHERESIS

Characteristic	Whole Blood Collection	Plasmapheresis
YIELD:		
Yield per donation	Worse	Better
Frequency of donation	Worse	Better
No. of Donors Required	Worse	Better
RISKS:		
Risk of reducing normal donor panel strength for non-plasma donations	Worse	Better
Risk of not reaching plasma collection target	Worse	Better
COSTS:		
Costs of Donor Recruitment	Higher Cost	Lower Cost
Capital costs - buildings, equipment etc.	Lower Cost	Higher Cost
Revenue costs - staff, consumables etc.	Lower Cost	Higher Cost

Note : Not all of these characteristics are independent of each other. For example, the lower yield and higher recruitment needed for whole blood collection are reflected in costs; there is some double counting in this table. Nevertheless, it demonstrates that the choice between the approaches is not a simple one.

27 The following proposals for increasing blood plasma collection include a combination of whole blood donation and plasmapheresis. This is because while whole blood collection is relatively cheap it is not possible for it to provide sufficient plasma to reach our target:

- The level of recruitment needed would be very high and difficult (if not impossible) to achieve. The overall strength of the

donor panel would require an unprecedented proportion of the population (5.9%) to be active donors. This region is currently at 3.87%, and its previous best high was 4.79%. The highest level of donors is in North West Thames; in 1985 they attained 5.59%. However, the densely populated nature of that region makes proportionately higher donor panel strengths possible. The highest level outside London, in 1985, was 4.94% The sparsely populated rural areas of this region make recruitment and donor sessions expensive outside the main urban areas.

- Using whole blood collection exclusively could be time-consuming. Reaching our target would depend on how long it takes to recruit and supplement the Donor Panel numbers. Plasmapheresis, gaining a higher and more frequent yield per donor, would enable collection to increase more quickly.

- Plasmapheresis has a further advantage of only removing the plasma that is needed. While good use is made of currently collected cells and platelets there would come a point where possibly significant quantities would be under-utilised. It would be difficult to justify moving to our plasma collection target using only whole blood collection because of this potential wastage. Nevertheless, some significant increase in whole blood collection is considered to be practicable well before such a point would be reached.

MOVING TOWARDS THE TARGET

28 The panel of donors has fallen from a peak of 148,500 in 1982 to a current level of 120,000. There is now an annual loss of donors (c 12,000) which still exceeds recruitment. Recruitment runs at about 11,000 new donors bled per annum and, as mentioned, further regional non-recurring resources (£16,500) are being invested to improve this position. To collect a further 15,000 kg of plasma to reach the full target by existing methods (whole blood collection) would require the recruitment of a further 60-70,000 new donors. This would not be a one-off recruitment as there is a high loss-rate for new donors; 21% only donate once. This has been demonstrated in a study of "Resigned Donors" undertaken by the Blood Transfusion Centre (April 1988). Given present difficulties in maintaining existing panel strengths it is unlikely that this number of new donors could be recruited and the number then maintained at that high level.

29 The alternative is plasmapheresis. This enables relatively small numbers of donors to donate frequently. About 6-7,000 can donate 15,000 kg of plasma annually. As each donor can donate plasma several times a year the yield per donor can be ten times that of a donor giving whole blood - the 'conventional' donation.

30 The approach suggested below is to seek to maximise plasma collection from whole blood, because it is the least expensive method, and to meet the balance using plasmapheresis. In doing so we have identified three distinct steps which relate to both speed and cost, the first being the quickest and least expensive. These are:

- Maximise utilisation of existing staff and facilities (costs of consumables only).
- Maximise utilisation of existing facilities (staff and consumables costs).
- Develop enhanced facilities to enable full plasma collection to be undertaken (requiring capital and revenue investment).

31 This interim report covers the first two of these three steps. Details of how costs and income have been calculated are given at Appendix 2.. Our 1st Phase proposals are to:

1 Extend plasma collection through whole blood donations, utilising existing staff and equipment, but carrying a gross cost of consumables and donor recruitment of £172,000. It is expected that, dependent on donor panel strength, this would yield a further 2,800 kg per annum of fresh frozen plasma.

2 Maximise plasmapheresis within the existing plasmapheresis suite within existing BTS staffing levels at the Transfusion Centre.

Costs, relating to consumables, are expected to be a total of £121,000 (gross), yielding about 2,400 kg of fresh frozen plasma.

3 Maximise the use of the existing plasmapheresis suite, with further staff as well as consumables. Gross cost is expected to be £225,000, yielding about 3,400 kg of fresh frozen plasma.

FUNDING IMPLICATIONS

32 If implemented, these proposals would not incur full or recurring costs at these gross levels either now or in the future. There are a number of influencing factors:

1 Each would be implemented over time, since they all depend to varying extent on new recruitment. There would not be any full year effects until 1989/90.

2 Recruitment needs and costs may vary. The only costing information, based on a BTS survey in Battle Hill in 1985, indicates a cost of £6.35 per new donor. It is not clear, given a larger recruitment drive coupled with the campaign already funded which is seeking to reverse the downward trend in donor panel strength, whether lower unit recruitment costs might be achievable. Also, while 21% of new donors are lost within the first year, the rate of 'wastage' reduces over time and, on past experience, flattens out at between 10 - 12% per annum.

3 District Health Authorities will benefit from actual savings against products they will no longer need to purchase and also from implied savings of not facing major price increases. In principle, therefore, it is considered reasonable to recoup the real level of savings that will be achieved against current prices.

33 Taking account of these factors, it is considered that only non-recurring funding would be required.

34 The value of higher levels of plasma collection depends on the rate of return of products from the NBPL. The financial assessment in Appendix 2 includes modelling assumptions about this product return rate to calculate expected cash value to the region. This takes into account factors such as differential stock-pile levels between regions, storage and processing times, and expected collection levels. This has been used to assess the period over which non-recurring resources are likely to be needed.

Overall, our assessment is as shown in Table 2.

TABLE 2: Resource Flows for suggested combined Phase I (Proposals 1,2&3)

	YEAR				
	1988/89	1989/90	1990/91	1991/91	RECURRING POSITION
ADDITIONAL PLASMA COLLECTED (kg)	3,360	7,160	8,080	8,560	8,560
COSTS (£000s)	202	432	489	518	518
SAVINGS* (£000s)	0	355	535	581	581
NET COST (£000s)	202	77	-46	-63	-63

* Savings are estimated on the basis of current commercial prices.

35 The risks attached to this overall assessment are firstly that the rate of return of products from the NBPL to this region could vary, secondly that actual costs could vary and thirdly that the Donor Panel recruitment needed to achieve planned collection levels might not be achieved.

36 The NBPL is currently considering how to apportion processed plasma products to regions and wish to take into account how much plasma has been collected in the past in regions, how much each region has stockpiled and current collection levels. As discussed earlier, the NBPL should also take full account of other differential factors- in particular geographic dispersion and recruitment costs. Dependent on how much weight is given to each factor our 'product value' could vary significantly. Provided that the level of plasma collection is raised, then it is in the interests of the Northern Region to ensure that proper account is taken of current collection rates. If this were not the case then as commercial supplies reduce, differential return rates to regions could leave this region with insufficient products to meet clinical needs.

37 The cost estimates for consumables and staff are considered to be reasonably accurate and are acceptable for budget setting purposes. However, there remains significant doubt over the timing of cash releases in Districts which the RHA could claw-back to cover BTS costs and the recruitment costs of strengthening donor panels.

38 If it takes longer than expected to recruit new donors then two things would happen; costs would be less but so would product value. However, product value would be likely to fall further behind the initial investment.

39 In view of these potential risks in accurately assessing the non-recurring investment costs it is suggested that the RHA could consider setting aside a reserve of £200,000 for two years which could be held by the Director of Resources and used to top up the BTS to the extent required. Management targets would, of course, reflect a clear intention of achieving the collection rates set out in the proposals.

40 An assessment of expected cash savings to be taken out of Districts would be made by the RHA in advance of each new financial year. In advance of 1990/91, a review could be undertaken to determine how successful this approach had proved and to assess whether any further financial support would be needed.

41 It must be recognised that there are two areas of risk; firstly concerning the pace at which recruitment to donor panels can be achieved and secondly concerning the manner in which the NBPL will allocate products to regions. Until these factors become clear it is not possible to be sure that this bridging support will be all that is required and it is primarily because of these risks that a review in advance of 1990/91 is considered appropriate.

PRIORITY OF DEVELOPMENT

42 During the latter half of 1987/88 the RHA had to reappraise its short term financial expectations in the light of increasing pressures in Districts in seeking to maintain existing services. For 1988/89 a general principle has been adopted that all developments are being frozen unless they are inescapable. For example, the RHA has withheld this year's priority services revenue funding (except for inescapable commitments) which would otherwise have been distributed to Districts. There have been some commitments which have had to be met and the RHA currently holds a revenue reserve of £3.3 million.

43 If the funding for plasma collection is increased then the RHA will be reducing the current resources available to respond to other pressures. Officers consider that the implications of not moving towards the plasma collection target would be unacceptable; there would be no guarantee that plasma products would continue to be available in anything approaching adequate quantities. Therefore, action to move towards plasma self sufficiency is considered inescapable and should be implemented as soon as possible.

SUMMARY OF PROPOSED PACKAGE (PHASE I)

44 PLASMA COLLECTION

In line with proposals as set out above, to increase plasma collection from whole blood donations and to maximise use of the existing Plasmapheresis Suite in order to increase total plasma collection from 13,000 kg to 21,500 kg per annum.

45 TIMING

The targeted plasma collection level should be achieved within three years.

46 RESOURCES

A reserve of £200,000 held by the Director of Resources for each of two years and to be used to top up the Regional Blood Transfusion Service to meet needs against this package.

47 FUNDING APPROACH

As a first call services and resources will be secured from existing BTS budgets. The extra resource will only be used to meet any net deficits.

48 CASH SAVINGS

Regional Officers will report to the RHA in advance of each financial year concerning potential revenue savings in Districts accruing from this programme, and potentially available for transfer.

49 REVIEW

Following the implementation of this programme the position will be reviewed to consider the progress made, the costs (including the level of products being returned by the NBPL), and any further need for action in 1990/91 and beyond.

THE NEXT STEPS

50 If the Authority approves the suggested Phase I development of plasma procurement then Officers will seek to clarify the position regarding the NBPL's intentions for product return rates between regions and, stemming partly from this, the level of cash savings expected year by year in Districts related to the plasma products.

51 Work will proceed to evaluate options and to determine a firm scheme to further increase plasma procurement from 21,500 kg to 28,000 kg per annum.

APPENDIX 1

GLOSSARY OF TERMS

Albumin	One of the proteins in blood. It has a major influence on blood volume and one effect of deficit is to cause oedema (fluid in the tissues). The Albumin can be purified and supplied as a solution ready for use. This is usually referred to as plasma. It is used in emergencies before blood is ready and for patients with serious burns amongst many other uses.
NBPL	National Blood Products Laboratory. The processing plant now operated by a Special Health Authority - the Central Blood Laboratories Authority. The new Laboratory is situated at Elstree adjacent to the old plant. All plasma from Transfusion Centres in England and Wales is processed here.
CMV	Cytomegalo Virus. A virus, common in the population. It usually causes a mild flu-like illness. About 50% of the population show evidence of previous infection with the virus. Any patient whose immune system is not working properly (patients with AIDS, patients having transplants Kidney, Bone Marrow, Heart or Lung and premature babies as well as a few, very rare cases of congenital immune deficiency) can get a severe infection which can cause pneumonia as well as infection in many organs. Infection can be fatal under these circumstances.
Donor Panel	The donor panel consists of the records of all blood donors active or believed to be active. Currently 120,000 donors are on this active panel. The term 'Donor Panel' is also used to refer to the Department that recruits, maintains the records of and calls to sessions these donors.
Factor VIII (FVIII)	One of a series of 'factors' or proteins in the blood that are essential to the clotting process. Factor VIII is the factor most commonly deficient in people with a major tendency to bleed abnormally. Other factor deficiencies occur. Haemophiliacs, or more correctly those with Haemophilia A have a FVIII deficiency. Factor IX is deficient in those with Haemophilia B.

Fresh Frozen Plasma	Plasma collected from blood can be frozen down shortly after collection. The term Fresh Frozen Plasma usually refers to frozen plasma which is not processed any further and is despatched to Hospitals in the region whilst still frozen. It is thawed immediately before use.
IU's	International Units - the factor VIII in the blood or in vials of the purified product is measured in arbitrary international units. There is an international standardisation of the unit and it can be used to compare for instance, yields of FVIII between companies in different countries.
Intravenous Immunoglobulin	A group of proteins in the blood which contain the antibodies. Immunoglobulin will contain the antibodies against infections that have occurred and antibodies against a wide variety of foreign substances. Intravenous Immunoglobulin has in the last few years been found to significantly improve patients with a disease called ITP, a disease which results in bleeding, mainly seen under the skin and in the mouth, but which can occur in vital organs, especially the Brain. The mechanism of action of Immunoglobulin is not known but large doses can be used to get patients through particularly difficult problems such as childbirth and operations. It is sometimes used in treating congenital immune deficiencies although the cheaper Intramuscular preparation is used where possible.

APPENDIX 2

PLASMA PROCUREMENT PROGRAMME - FINANCIAL ASSESSMENT

1 Increasing plasma supply using traditional donor sessions (Proposal 1):

		£
Cost per New Donation	Consumables/non-staff	5.95
	Recruitment (Yr1)	6.35
		12.30
Overall cost for 14,000 Donations (including recruitment)		172,200
Additional Plasma collected, assuming 250 ml per donation (1 litre is approximately 1.1 Kg)		2,800 kg

If this increase occurred over 3 years then the effect would be:

TABLE A: INCREASING PLASMA BY TRADITIONAL DONATION

Year	Additional Donations	Cost £000	Additional Plasma(kg)	Approximate Value (£000)
1988/89	17%	29.3	476	34.5
1989/90	33%	56.8	924	66.9
1990/91	33%	56.8	924	66.9
1991/92	17%	29.3	476	34.5
TOTAL		172.2	2,800	202.8

2 Increasing plasma supply using existing plasmapheresis centre - no additional staff (Proposal 2):

		£
Cost per new donation	Consumables/non staff	23.85
Given estimated 4,800 additional donations,		
1070 new donors needed - Recruitment (Yr1)		6,795
Total consumables cost		114,480
Overall cost for 4,800 donations		121,275
Additional plasma collected, assuming 500 ml per donation		2,400 kg

If this increase occurred over 2 years then the effect would be:

TABLE B: INCREASING PLASMA BY PLASMAPHERESIS - NO ADDITIONAL STAFF

Year	Cost £000	Additional Plasma(kg)	Approximate Value (£000s)
1988/89	60.6	1,200	87.0
1989/90	60.6	1,200	87.0
TOTAL	121.2	2,400	174.0

3 Increasing plasma supply using plasmapheresis with additional staff:

		£
Marginal cost per new donation		23.85
Fixed costs:		
for 1490 new donors - recruitment (Yr1)		9,460
Staff - Co-ordinator	30,000	
Medical Sessions (2/week)	3,263	
Donor Attendants (2 WTE)	11,878	
Staff Nurse (0.32 WTE)	2,923	
Overtime	6,816	54,880
Total fixed costs		63,340
Marginal costs of 6,720 additional donations		160,272
TOTAL COST		224,612
Additional plasma:		3,360 kg

If this increase occurred over two years then the effect would be:

CHAPTER 9 : FORWARD LOOK TO 1989/90

1 National Planning Guidelines and Resource Assumptions for 1989/90 were received in July which indicate additional "growth" for the Region within the range 1% to 1.2% for 1989/90. The RHA approach to the development of Short Term Programmes has been discussed with the Director of Planning and Information Technology on the NHS Management Board and a paper was approved at the July meeting of the RHA as the basis for discussion with Districts towards the development of District specific packages of action.

2 In looking ahead to 1989/90 the RHA recognised some potentially significant financial uncertainties in the current year, relating in particular to the cost of the non Pay Review Body Awards, the actual cost of the nurses clinical grading structure and pressure on existing services in some Districts. Whilst these uncertainties undoubtedly make it difficult to finalise the planning and resource framework for 1989/90 at this stage, the RHA felt it was important to make a start in developing guidelines. The approach includes discussion with Districts in the autumn, based in particular upon seven key priority objectives and themes against which to formulate District specific objectives and targets for action. These are as follows:

1 a to make financial provision for any further in-year pressures in 1989/90;

b to avoid inappropriate reductions in services;

c to make realistic financial provision for growth in acute service workloads based on current trends.

2 To maximise in every District the resources available for use in 1989/90 through cash releasing cost improvement measures, income generation and land sales.

3 To improve the utilisation of acute service facilities and the performance of acute services (including obstetric services) and to set appropriate targets for improvement in every District.

4 To identify specific action to continue the drive on Health Promotion and Disease Prevention, and the development of agreed screening programmes.

5 To take action to reduce waiting times and waiting lists in every District in agreed specialties including the setting of maximum waiting times.

6 To recommence an appropriate programme of developments in every District in line with the existing Strategic Plan.

7 To identify other high priority areas for possible action in 1989/90 to ensure services are at a generally acceptable standard.

3 The capacity of each District for action on the agreed objectives will be examined with the specific packages being reported back for consideration by the RHA. The discussion with Districts will also reflect any key issues that are relevant from the National Planning guidance contained in HC(88)43.

ADDITIONAL NARRATIVE TO NORTHERN REGIONS IPS.

RECD 11/10/88

CHAPTER 8:

SHORT TERM PROGRAMME AND RESOURCE ALLOCATION FOR REGIONALLY MANAGED SERVICES 1988/89

SECTION 1: SUMMARY

Detailed budgets for Regionally Managed Services usually reflect the decisions made previously by the RHA in the context of the Short Term Programme. In view of the general financial situation it seemed appropriate to defer consideration of a Programme for 1988/89 until the RHA had confirmed the overall Revised Financial Framework and approach for the year, which was finalised in February.

This section incorporates both the Short Term Programme and budget setting for Regionally Managed Services, prepared in line with the agreed approach, with the identification of inescapable commitments as a first charge against the available resources for 1988/89 and the freezing of proposed developments until the mid-year review.

The paper is presented as follows:

Section 2: Review of 1987/88 Programme

Section 3: Service Plans and Proposed Deployment of Resources 1988/89

Section 4: Funding of the Plans

The recommendations were considered by the Regional Health Authority at its meeting in April where approval was given to:

a The approach taken with regard to service plans and base budgets;

b The base budget for Regionally Managed Services for 1988/89 in the total of £59,591,400;

c The inclusion of a 1% vacancy factor in the base budgets;

d The maintenance of the pay and prices reserve;

e The earmarking of available non-recurring funds, after the funding of inescapable commitments, as a cushion to help meet in-year pressures.

In addition a separate report on collection of Fresh Frozen Plasma in the Northern Region, approved at the July RHA, is attached.

SECTION 2: REVIEW OF 1987/88 PROGRAMME

2.1 BLOOD TRANSFUSION SERVICE

The approved 1987/88 programme for the Blood Transfusion Service has broadly been achieved. Provision of platelet concentrates is now entirely carried out using the newer five-day packs and this has substantially improved the platelet yields. The planned increase in testing for antibody to the Cytomegalovirus (CMV) has taken place and has resulted in the considerable improvement in the supply of CMV negative blood units, which is helping to meet the additional demands for neonatal transfusions and the support of heart transplant patients. Local collection of hyperimmune plasma containing anti-D by means of plasmapheresis has increased resulting in a decline in our reliance upon other Regions.

2.2 REGIONAL MEDICAL PHYSICS SERVICE

Developments have taken place in the Technical Aids and Radiotherapy Physics Services at the Newcastle General Hospital unit, the Radioisotopes Service at both the Durham and Royal Victoria Infirmary units, and the Bioengineering and Clinical Instrumentation services at the Cumbria unit. In addition, the more recently established units in Cleveland and Cumbria are now providing full services for radiotherapy while the gamma cameras in the units at Freeman Hospital, Durham, Sunderland and the North Tees sub-unit have been operating at capacity for a couple of years. All units are developing specialised equipment in response to local needs for patient care and the Department's expertise in computing and physiological measurements are being used to full advantage.

2.3 NORTHUMBRIA AMBULANCE SERVICE

The restructured service is now fully established and the benefits of the two tier system, the extended training of ambulance staff and the closer liaison with user districts are being reflected in an improved and more efficient service. The new headquarters and training complex was commissioned in December 1986 and all management functions have now been transferred from Blenheim Street. A computerised system for the handling of transport requests has been introduced. In spite of initial difficulties with the computer based journey planning and scheduling system, it is now being used with reasonable success, albeit with manual back-up. A new ambulance station at Bellingham was opened in May 1987 and further stations at Wideopen and Rothbury were completed in January 1988.

2.4 HEADQUARTERS AND OTHER REGIONAL SERVICES

In line with the approved programme for 1987/88 there has been continued development of the new management arrangements, including the filling of all posts within Property, Estate and Design and Planning Divisions; the strengthening of the Public Relations function; and the appointment of the RHA's first Health Promotion Officer. In addition, the O&M/Work Study function has been reorganised with some devolution to Districts. A scheme at RHA HQ to provide accommodation for Computer, Information and Management

Services personnel was completed in October 1987. In addition to enabling the centralisation of these services, the accommodation thus released permitted the Training Section to be transferred into the HQ building from Clifton Road together with a reorganisation of office space to help meet the needs of the newly restructured Divisions.

2.5 COST IMPROVEMENT PROGRAMMES

The original Cost Improvement Programme for Regionally Managed Services identified an ambitious level of savings to be achieved totalling £505,200 (2.3%). It is now anticipated that savings of the order of £254,400 (1.1%) will be achieved, which although well below the planned level is still above the level of 0.3% identified within the RHA's Strategic Plan. There were two main reasons for this. Firstly, difficulties have continued to be experienced in identifying major cost improvement proposals for implementation within HQ services. Secondly, as was identified in the 1987/88 Short Term Programme, the programme of cost improvements identified for the Northumbria Ambulance Service was very ambitious and relied heavily upon savings arising from the retirement of staff on protected salaries. In the event, the anticipated level of retirements did not materialise as fast as envisaged with the resulting reduction in the level of cost improvement savings achieved.

2.6 MANPOWER

The approved Short Term Programme for 1987/88 anticipated a net increase of 20 staff. These posts, together with the filling of posts vacant at 1 April 1987 were expected to produce a total staff in post at 31 March 1988 as follows:

Service	In post 1.4.87	STP Estimates 31.3.88	Current Estimate 31.3.88
Blood Transfusion	217	217	215
Regional Medical Physics	162	168	170
Northumbria Ambulance	650	647	642
RHA HQ (excl Snr Medical)	774	791	790
	1,803	1,823	1,817

There are, therefore, no major differences between the original and current estimates of staff in post at 31 March 1988.

SECTION 3: SERVICE PLANS AND PROPOSED DEPLOYMENT OF RESOURCES 1988/89

The following plans for 1988/89 set out the RHA's aims for individual functions against the background of the freeze on developments and the commencement of the next Strategic Planning Round and are felt to be achievable within the resources currently available.

3.1 BLOOD TRANSFUSION SERVICE

The primary service of the Transfusion Centre is the provision of all blood and blood products for the Northern Region. Part of this provision is made in conjunction with the Processing Plant at the Blood Products Laboratory at Elstree. Other services provided by the Centre include ante-natal blood testing, a full tissue typing service underpinning the Regional Transplant Programmes and a referral/reference facility for blood grouping and cross-matching problems arising across the Region.

Transfusion product requirements continue to change with clinical practice and the identification of new factors such as AIDS. The demand for red blood cells has fallen continually since 1984 by some 20,000 donations, in total, with an estimated requirement for 1988/89 of 105,000 units. On the other hand, demand for platelet concentrates and fresh frozen plasma has steadily risen since 1984 with an anticipated requirement for 20,000 platelet concentrates and 17,500 units of fresh frozen plasma in 1988/89.

Unfortunately, the number of donors has fallen steadily from a peak of 148,000 in 1982 to just over 120,000 in 1987/88 - consequently, as the range of products increases and the number of units falls, a higher percentage of blood collected is processed locally, leaving less to be processed at Elstree. Currently, 13,000 kilogrammes of plasma are despatched to Elstree for reprocessing, an increase over 1986/87 levels but still considerably short of the nationally determined target of 28,000 kilogrammes, required to be achieved by 1990. Whilst significant progress towards target is now a major priority, the RHA expressed concern as to the basis for determining the original targets and in particular the proposals for re-allocating blood products between Regions.

Further donor recruitment staff are considered essential for a temporary period of time. The appointment of a publicity clerk plus publicity and printing materials for a two year period, at a cost of £16,200 is seen as an extremely high priority to be met from available non-recurring funds.

A scheme to further increase plasma production by 1,800 kilogrammes, which would entail the employment of additional staff to fully utilse existing plasmapheresis facilities at a cost of £97,000 in 1988/89 and a further £56,700 in 1989/90, is affected by the freeze on developments and will be re-examined as part of the mid-year review.

3.2 NORTHUMBRIA AMBULANCE SERVICE

1988/89 will be a year of consolidation. Further ambulance stations will become operational during 1988/89, at Hexham and Berwick, with additional revenue costs of £19,900. The introduction of the new regional telecommunications system linking the four ambulance services within the Region will move into the next stage and a sum of £115,000 has been earmarked in 1988/89 for the rental of further sites for the installation of telecommunication masts.

As a direct result of more effective use of resources over the past five years the vehicle cost per mile has been held fairly constant at £1.84 and it is hoped that it will be reduced, following rationalisation of vehicle fleet maintenance under the responsibility of the Regional Ambulance Officer. Part of the non-emergency service is about to be tested against the private sector to ensure value for money within the service.

The total number of patients transported by the NAS is expected to increase to around 820,000 in 1988/89 and it is anticipated that the Metropolitan standard activation and response times will again be bettered as in 1986/87 and 1987/88.

3.3 REGIONAL MEDICAL PHYSICS SERVICE

The Regional Medical Physics Service continues to face increasing demands for its wide-ranging contributions to patient care locally and for ensuring compliance with new legislation on Ionising Radiations. The Director's proposals, all subject to the freeze, seek implementation of the Strategic Plan in consolidating the partially established Units and Sub-Units outside the Regional Centre in response to the needs of consultants and their patients.

Saturation is being approached in radioisotope examinations (22,000 per year) and in Radiotherapy Physics. Medical Physics expertise in developing new clinical instrumentation, physiological measurements, computing and in exploiting lasers and ultra-violet radiation is increasingly demanded region-wide while the caseload of the Technical Appliances for the Handicapped Service generates a growing waiting list.

The unit at Newcastle General Hospital is suffering from long-standing problems of overcrowding and a scheme to provide permanent additional accommodation on the site is being prepared for renewed consideration for inclusion in the Regional Capital Programme. Similarly, a need has long been identified to provide improved accommodation at the RVI unit and alternative facilities are being examined.

3.4 HEADQUARTERS AND OTHER REGIONAL SERVICES

3.4.1 CLINICAL POLICY DIVISION

During 1988/89 the Division will continue to review progress in implementation of existing policies and strengthen the monitoring process in relation to clinical services. New policies for the development of health care in a number of priority areas, including specific client groups and sub-regional services will be formulated and other policy areas for priority attention will be identified in relation to the Strategic Planning process and national initiatives.

Another key area of activity will be to review services for children who may have been abused. This review comes in the aftermath of the Child Sexual Abuse crisis in Cleveland and the subsequent Judicial Inquiry. It was a matter which dominated the affairs of national media, the RHA and its senior officers for several months. The review will follow the publication of the Inquiry report and will necessitate the introduction of a service development strategy,

examination of particular items for the three Cleveland Health Districts and the information requirements about child abuse, particularly child sexual abuse.

The issue of waiting lists and times will again be at the forefront of the Division's activity. This will involve: ensuring the implementation of the 1988/89 Regional and National initiatives including the deployment of about £2 million special allocation; monitoring District schemes; ensuring the establishment of waiting list policies in each District; examining the information requirement of fresh priorities; conducting a further Regional waiting list census; and establishing and disseminating matters of good practice in relation to waiting lists and times.

It is intended also that the Division will conduct an examination of a number of policy areas which require fresh conceptual thinking and do not necessarily concern patient services. Examples of these are: the frontier of high technology medicine; the feasibility and appropriateness of alternative care models; and the measurement of outcome in clinical areas.

Plans will be formulated in relation to the promotion of health and prevention of disease following approval to a report by the RHA at its meeting in March. These will include health promotion campaigns, initiatives in high risk communities and the review of the organisation and delivery of health education programmes.

A further major area of activity will be next steps in implementing two national priority initiatives: the pre-symptomatic breast cancer screening programme and the medical staffing package 'Hospital Medical Staffing Achieving a Balance - Plan for Action'. Both are multifaceted programmes and will require a relatively large investment of senior management time in terms of analytical work, organisational and problem solving issues, coordination, monitoring and evaluation and are region-wide issues.

The formulation of policy, organisation of services and action in relation to the prevention, control and treatment of HIV infection and AIDS in the Region will continue to be a major part of the Division's work programme for 1988/89 when a number of new initiatives will be planned.

3.4.2 MANAGEMENT SERVICES DIVISION

1988/89 will see the continuing implementation throughout the Region of computerised systems, notably the Patient Administration and Interactive Resource Information Systems. Planning and, hopefully, implementation of a computer communications network for the RHA will proceed in the next few months.

The Division has the responsibility for developing a Regional Information Strategy and this will form a major element within the next Strategic Plan. The Körner minimum data sets will be extended to the community and paramedical staff during 1988/89.

The Management Support Services Department will develop its management consultancy role, building on the already substantial number of assignments from Districts.

The Public Relations Service will consolidate its pro-active public relations stance and 1988/89 will see the production of the first annual report and video about the role of the RHA.

A new telephone system will be commissioned during 1988/89 and the reallocation of office space will be completed.

The objectives and proposed budgets for the Northumbria Ambulance and Blood Transfusion Services, both of which come within the managerial span of Management Services Division, are separately described in earlier sections.

3.4.3 NURSING DIVISION

Assistance will be given to Districts to develop nurse manpower planning models to meet increasing service need through the use of the supply model, appropriate demand models and improved monitoring and control systems. In addition, an adequate supply of specialist nurses will be ensured through the development of specialist training courses. Appropriate courses will also be developed to convert second level nurses to first level to improve first level staff availability and further work on appropriate skill mix in varying nursing situations will be carried out.

Training courses will also be developed for first level nurses to help meet their changing role and, together with Districts, training schemes will be prepared for YTS students and support workers.

In conjunction with the Educational Advisory Group work will be carried out to assist the implementation of Project 2000.

Plans will continue to be developed for District based services to meet the health care needs of people with a mental handicap and training programmes will be developed to prepare staff working in the community with specific reference to shared training.

3.4.4 PERSONNEL DIVISION

The freeze on development will particularly affect this recently established Division which will continue to operate within the existing funded establishment. However, a number of strategic objectives are expected to be achieved during 1988/89.

Implementation of the Integrated Personnel System will be completed within all Authorities and this information base will enable production of more coherent manpower plans. Manpower supply and demand models will be developed for all staff, building on those already in being.

During 1988/89 the Regional Training Centre will be commissioned which will help to deliver the training plan for the Region. Identification of training needs throughout the Region, across all disciplines, will be undertaken and a mechanism for prioritising requirements will be established.

The role of the RHA's personnel staff will increase in the recruitment and selection of disciplines in short supply.

Further involvement in the implementation of the Achieving a Balance report and JPAC, and the major input required into management and staff development, may require a further significant increase in resources.

3.4.5 PLANNING DIVISION

In view of the financial framework for 1988/89 Planning Division's resources will remain at their present level. Within this constraint, key priorities for 1988/89 will be:

Strategic Review
Planning for acute services
Configuration of hospital services
Mental Illness - Development of services
Review of maternity facilities and resources
Selected Clinical Activities Review
Review of capital allocation policy
Capital Developments - Review of standards
Development of performance monitoring systems

In addition to these key aspects of change, a significant proportion of the RHA's planning resources will be directed at maintenance of a wide range of service and capital planning activities including major appraisal work and implementation of the Capital Programme and formulation of the Short Term Programme for 1989/90. A further priority will be the continued development of planning information systems and analytical techniques which may require non-recurring resource in 1988/89. The development of planning skills within the Region as a whole remains a major priority.

Implementation of many of the RHA's major Strategic Programmes (such as mental handicap, mental illness and the elderly) is presently being carried within existing resources. The introduction of designated programme managers for some of these could significantly strengthen the RHA's implementation role in these major investment programmes and this will be reviewed again during 1988/89.

There continues to be increasing emphasis on the need for effective monitoring of District Performance. Present resources limit the depth of monitoring activity, but continued development of our techniques will remain a priority in 1988.

3.4.6 PROPERTY, ESTATE AND DESIGN DIVISION

In conjunction with Districts, estate performance will be reviewed across the Region including the refinement, coordination and part computerisation of the estate data base. Estate investment programmes and control plans will be produced for the majority of the estate concerned with long-term service provision. This is an integral and essential part of the overall planning function described under the preceding paragraph but addressing the estate resource component in particular. Professional surveying services for land and property transactions will be available realising an anticipated income of some £6 million in 1988/89.

Consultant design services valued at £1.5 million will be provided together with specialist professional support services such as the calibration of electronic medical equipment for Districts and radio telephone communication systems for the Ambulance Service. Design services will be subject to fee competition, in line with the RHA's decision at its meeting in July 1987, following consideration of the report on the implementation of Health Circular (85)26: Operation of the Property and Works Functions.

The Division will continue to discharge its responsibility for management of the regionally managed estate including that of the Blood Transfusion, Northumbria Ambulance, and Regional Medical Physics Services.

Professional works services will be provided for the realisation of the Regional capital works programme valued at £31.5 million in 1988/89 together with further schemes in various stages of planning totalling £35 million.

3.4.7 RESOURCES DIVISION

Within the constraint of its existing establishment the Division will continue to provide financial services for all other Divisions of the Authority including the development of a more responsive system of budgetary control to meet the needs of budget holders using the recently introduced Interactive Resource Information System (IRIS). Accounts will also be produced in the format required to meet Körner financial statements.

Financial pressures during 1987/88 emphasised the need for comprehensive information on the financial situation in District Health Authorities to be readily available on a uniform basis. A revised system for monthly monitoring of District expenditure is being developed, including integration with the financial information required for quarterly monitoring of District short term programmes, which should produce the information required both by the RHA and the DHSS and reduce the number of 'ad hoc' enquires made on Districts.

A major review of the Regional allocation policy will commence as part of the Strategic Planning process, which will include the future use of RAWP and the investigation of other resource allocation mechanisms.

Continued support will be provided to Newcastle Health Authority for the development and implementation of Resource Management Systems in both the acute and community services, the lead role in the implementation of the latter service being undertaken by Regional officers.

In collaboration with District Health Authorities the Regional Supplies Department will review purchasing and storage arrangements commencing with the development of centralised contracting arrangements. A Regional Drug Store is also being developed in conjunction with the Regional Pharmaceutical Officer, with anticipated net savings of some £250,000 on drug purchases on a region-wide basis when the store becomes fully operational in 1989/90.

3.5 THE MID-YEAR REVIEW

The RHA acknowledged that the inescapable commitments in Regionally Managed Services from the 1987/88 programme effectively took up all the available funds provided for in the Regional Planning Guidelines. In addition the general freeze on developments in the Region has affected Regionally Managed Services pending the mid-year review. Appendix 3.1 identifies the effect of the freeze, in particular on any further development within the Regional Medical Physics Service for improving radiataion protection, and movement towards the achievement of self-sufficiency targets for plasma procurement.

Further consideration will be given to all the developments identified, together with any further requirements arising in the meantime, at the time of the mid-year review. However, the funding identified for Regionally Managed Services for 1988/89 is in line with that proposed in the Regional Strategic Plan and is fully required to meet existing budgetary commitments. It is unlikely, therefore, that further funds of this magnitude will be available for deployment as part of the mid-year review.

3.6 SUMMARY OF PROPOSED DEPLOYMENT OF RESOURCES

The proposed revenue budgets for 1988/89, within which these service plans will be carried out, total £59,591,400.

Much of the work of the Regional Headquarters is multi-disciplinary in nature and is carried out by task teams and whilst the Divisional budgetary analysis identified in Appendix 4.2 provides a firm basis for budgetary control, a more informative presentation is set out in Appendix 3.2. Here, the budget for Regionally Managed Services has been reapportioned, on the basis of the anticipated workload in 1988/89, by means of a functional analysis.

This analysis further divides the functions into three main headings of Patient Related Service, the RHA's Policy and Strategic Role, and Support Services. From this analysis it will be seen that the majority of the RHA's budget (88.4%) is spent on the provision of direct patient related services including the funding of consultants and senior registrars throughout the Region (with the exception of Newcastle).

The RHA's major policy and strategic roles, of clinical policy setting; planning for the implementation of these policies, including the identification of resource strategies; and performance monitoring and control, together with the major staff training input throughout the Region, account for a further 5.7%.

The remaining 5.8% represents the provision of support services which in certain instances, such as information systems and supplies, provide services for both the RHA and DHAs. The RHA also holds the budgets for the Community Health Councils.

It is difficult to make comparison with other RHAs due to the differing accounting methods employed for Regionally Managed Services. In some Regions, for example, services such as information technology are recharged to Districts whilst others such as Blood Transfusion and Medical Physics are reallocated at the year end. A functional analysis of the kind set out in Appendix 3.2 is not available from any other Region. However, with expenditure on the RHA's major strategic roles less than 0.5% of the total resources available to the Region (increasing to less than 1% with the inclusion of Support Services), and with the latest available information on management costs and administrative and clerical staff levels both showing the Northern Region at the lower end of the spectrum, the Northern RHA compares very favourably with other Regions.

NORTHERN REGIONAL HEALTH AUTHORITY

DEVELOPMENT PROPOSALS 1988/89

BLOOD TRANSFUSION SERVICE

The major and extremely important area to be hit will be the requirement to move towards self sufficiency in plasma production due to the inability to utilise both existing facilities to the full and to appoint a donor organiser to increase donations by over 20,000 over the next three years.

REGIONAL MEDICAL PHYSICS

The developments planned for 1988/89 covered a number of key areas such as the introduction of measures necessary for radiation protection of patients, staff and the general public in response to statutory instruments and guidance notes; ensuring proper quality assurance for the breast cancer screening programme to reduce to a minimum the risk of radiation induced cancers; responding to the increasing demand and worsening waiting lists for technical aids for the handicapped; and meeting the increasing demand for expert advice on use of scientific computing across the Region.

CLINICAL POLICY DIVISION

A number of relatively small initiatives to improve the Division's method of working and the quality of its output through the provision of clerical support to senior officers, graphic design input into reports and a staff pharmacist at the Regional Drug Information Unit to improve value for money in the use of drugs and meet the demand of the growing enquiry workload.

MANAGEMENT SERVICES DIVISION

The appointment of a further two posts within the publicity section would continue the improvement within the public relations department and enable the provision of a consultancy service to Districts.

Increased staffing within the Management Services Section to enable further extension of the consultancy service to Districts and the setting up of a Value for Money team to meet the demands for identification of further cost savings.

NURSING DIVISION

The need for a further post of Regional Nurse to support the RNO to meet the ever increasing demands on nurse manpower, mental handicap, nurse education and nursing standards issues. Without such a post the ability of the Division to provide major input to the Strategic planning round will be seriously threatened.

PERSONNEL

Without completion of the structure within this newly created Division serious doubts are expressed over its ability to progress the medical staffing issues arising from Achieving a Balance and JPAC. The introduction of management and staff development into the RHA will be seriously curtailed.

PROPERTY, ESTATE AND DESIGN DIVISION

The major development affected will be the Division's ability to implement the report by the VFMM on Transportation in the Northern Regional Health Authority which anticipated the identification of possible long term savings in the use of transport throughout the Region. The appointment of a works officer at the BTS would reprovide a service previously provided by Newcastle Health Authority.

PLANNING DIVISION

The strengthening and improved effectiveness of the Region's performance monitoring role and further improvements in the RHA's liaison with DHAs will not be possible during 1988/89 without further staff resources.

RESOURCES DIVISION

The ability to recruit the necessary calibre of staff is currently a nationally recognised problem and the appointment of a Regional Finance Training Adviser is seen as a vital requirement in improving this situation. The appointment of a further auditor would comply with the DHSS report on the need for improved audit services within the NHS.

NORTHERN REGIONAL HEALTH AUTHORITY Appendix 3.2

REGIONALLY MANAGED SERVICES BUDGET 1988/89

FUNCTION	£	£	
PATIENT RELATED SERVICES:			
Blood Transfusion	3,820,720		
Northumbria Ambulance	9,051,890		
Regional Medical Physics	2,953,220		
Senior Medical Staff	36,481,160		
Pharmaceutical and Drug Information Services	243,920		
Joint AIDS Support	114,500		
	---	52,665,410	88.4%
POLICY AND STRATEGIC ROLE:			
Clinical Policy Setting	156,690		
Service Planning	590,100		
Nursing Policy/Advice	14,230		
Manpower Information/Strategy	237,010		
Performance Monitoring	298,660		
Training	2,122,700		
	---	3,419,390	5.7%
SUPPORT SERVICES:			
Information Systems	294,530		
Information Technology	225,280		
Financial Services	332,400		
Supplies-Procurement	272,560		
Employment Services	148,520		
Management Development	69,460		
Public Relations	52,830		
H.Q.Services	1,176,750		
Management Services	367,780		
	---	2,940,110	4.9%
COMMUNITY HEALTH COUNCILS		566,490	0.9%

TOTAL REVENUE BUDGETS ALLOCATED		59,591,400	100%
IN-HOUSE DESIGN SERVICE AND MANAGEMENT AND CONTROL OF CAPITAL PROJECTS		2,203,000	

		61,794,400	
		========	

SECTION 4: PROPOSED FUNDING OF SERVICE PLANS

4.1 BASE BUDGETS 1988/89

The starting point for the production of the 1988/89 budget was the 1987/88 base budget uplifted to take account of the 1987/88 pay shortfall of 1.25%. This resulted in salaries and wages budgets being increased by £186,300. In addition, a major exercise has been undertaken to ascertain the full costs of the RHA's approved establishment taking into account such items as increments and regradings. This exercise revealed the need to increase the 1987/88 salaries budgets by £246,480 in order to fully fund the approved establishment.

Non-staff budgets have been reprovided at 1987/88 levels resulting in a total Base Budget requirement for 1988/89 of £59,327,830.

4.2 INESCAPABLE RECURRING COMMITMENTS

Following submission of their development proposals for 1988/89 and the decision of the RHA on 1988/89 as a holding year, service managers were requested to identify minimum inescapable commitments only for inclusion within budgets. Following detailed discussions, commitments totalling £164,000 were identified and included within proposed budgets. The major inescapable commitment identified was a sum of £55,000 for the consolidation of the funding of the Personnel Division, previously approved as part of the 1987/88 Short Term Programme but funded from non-recurring resources in 1987/88. In addition sums of £45,000 for stationery and telephone costs, and £30,000 for interview and removal expenses, have been provided for budgets which have been under pressure for some time.

Commitments totalling £363,700 were also identified in the February Allocations Report to the RHA to meet the recurring cost of the Senior Medical Staff budget approved for part year funding in the 1987/88 Short Term Programme.

4.3 COST IMPROVEMENT PROPOSALS

As part of the STP exercise service managers were asked to identify proposals for cash cost improvement savings for 1988/89. Proposals totalling £102,600 (0.4%) have been identified and these are detailed on Appendix 4.1 and have been reflected in the proposed budgets.

4.4 TOTAL BUDGET REQUIREMENT

The total budget requirement for 1988/89 as identified in Appendix 4.2 and arising from the above is, therefore, £59,752,930.

4.5 RECURRING REVENUE ALLOCATION 1988/89

The report on Resource Allocations 1988/89 approved by the RHA in February identified a basic cash allocation for Regionally Managed Services of £62,100,700. Of this sum, £2,674,800 represents the reserve required for pay and price increases during 1988/89 in line with the 4.5% cash uplift provided in the Region's allocation. Compared to the current level of inflation, 4.5% (£357,800) may prove adequate to meet price increases in 1988/89, but the 4.5% (£2.317 million) provision for pay awards must, as in previous

years, be subject to question. Even if Pay Review Body Awards for 1988/89 were to be funded in full a shortfall in funding of 1% for non-review body staff would require additional funds of £172,000. It is not felt prudent to utilise any of these reserves in setting the starting budget and it is recommended, therefore, that the reserve for pay and prices be held to be released during the year in response to in-year pressures.

In addition to this allocation, £36,000 is available from RCCS and a further £129,500 for centrally funded initiatives such as the Joint Aids Centre.

The sum available to fund the proposed budgets, after allowing for the pay and prices reserve, is, therefore, £59,591,400 resulting in a shortfall of £161,530 against the total budget requirement.

4.6 VACANCY FACTOR

It may be possible to meet this recurring shortfall from non-recurring funds; however, it is suggested that the use of a vacancy factor within the salaries and wages budgets would be preferable. Implementation of a 1% vacancy factor, which is felt to be achievable, would produce the required sum enabling the production of a balanced budget. Firm budgetary control will be essential during 1988/89 and specific guidelines will be issued to all budget holders. Appendix 4.2 identifies how the vacancy factor will be applied with the resultant effect on budgets resulting in the proposed budget of £59,591,400.

4.7 NON-RECURRING FUNDS

Whilst the exact amount of non-recurring funds available for 1988/89 resulting from the carryover of underspending in 1987/88 is not as yet known, indications are that it could be of the order of £300,000. Inescapable commitments of £223,000 have already been identified by service managers, and are listed in Appendix 4.3. These include the need to meet the costs arising from the premature retirement of RHA staff which fall to be met by the RHA, and are estimated to cost £90,000 in 1988/89. It is recommended that the balance remaining be held as a cushion for the RHA towards in-year pressures.

APPENDIX 4.1

NORTHERN REGIONAL HEALTH AUTHORITY

COST IMPROVEMENT PROGRAMME 1988/89

DETAILS	£'000	£'000
BLOOD TRANSFUSION CENTRE:		
Reduction of blood pack wastage	7.0	
Rationalise session staffing;		
save - 4 junior MLSO posts	23.9	
- Subsistence	6.7	
- Overtime	13.3	
Transport costs - fuel economy	1.4	52.3
REGIONAL HEADQUARTERS:		
Administration - new telephone exchange	20.0	
All - Car leasing scheme	5.0	
Clinical Policy - Pharmacy quality control	2.4	
- Pharmacology Unit	.3	
PED - Energy conservation RHA HQ	20.0	
* - Energy conservation Ambulance stations	2.6	50.3
TOTAL		102.6

* This saving is dependent on approval of non-recurring expenditure of £8,000.

APPENDIX 4.2

NORTHERN REGIONAL HEALTH AUTHORITY

REGIONALLY MANAGED SERVICES - REVENUE BUDGETS 1988/89

Service/Division	Required Budget	Proposed Vacancy Factor	Proposed Budget	
	£	£	£	WTE
Regional Blood Transfusion	3,534,370	20,200	3,514,170	235.86
Northumbria Ambulance	8,134,150	74,570	8,059,580	627.28
Regional Medical Physics	2,890,630	24,030	2,866,600	187.54
Senior Medical	36,214,490		36,214,490	902.93
Regional Administration				
Chairman/RGM	102,940		102,940	4.00
Clinical Policy	1,256,720	2,940	1,253,780	57.17
Management Services	2,005,030	8,540	1,996,490	118.78
Nursing	124,460		124,460	6.00
Planning	340,060	4,720	335,340	19.40
Personnel	1,228,790	9,170	1,219,620	106.54
Property and Estates	1,719,550	5,430	1,714,120	62.60
Resources	922,090	9,170	912,920	60.41
Paramedical Training Schools	710,400		710,400	1.00
Community Health Councils	569,250	2,760	566,490	34.24
TOTAL	59,752,930	161,530	59,591,400	2,423.75

APPENDIX 4.3

NORTHERN REGIONAL HEALTH AUTHORITY

NON-RECURRING COMMITMENTS 1988/89

	£
Blood Transfusion Service - Publicity clerk and printing to increase Donor Panel	16,200
Premature Retirement - Payments to RHA Staff	90,000
Research Committee - Agreed carryforward of 1987/88 underspend	40,000
RHA HQ - Temporary staff upgrading due to additional workload arising from implementation of new switchboard	5,000
RNO - Temporary staffing	2,000
Public Relations - Reprovision of non-staff budget approved in 1987/88	52,000
CHCs - Quality Assurance Project/Election Expenses	9,700
Clinical Policy - Perinatal Mortality Study	800
PED - Revenue Saving Energy Conservation Measures	8,000
	223,700

NORTHERN

1. Dr R J Moore
2. Mr R Wilson - RL3E
Room 163 Richmond House

From: M H Arthur
HS1A
Date: 9th September 1988

cc: NHSP
CARP
FA3
HAP4A
HS2B

INTEGRATED PLANNING STATEMENT: NORTHERN RHA 1988

Thank you for sight of the IPS re Blood Transfusion Service.

By 1990 all Regions should be achieving plasma collection at a rate of 8.82 tonnes of fresh frozen plasma per million of the Regional Transfusion Centres (RTCs) catchment population.

Northern Region should be asked for details of plasma collection in 1987/88 and their plan for 1988/89.

GRO-C

for M H ARTHUR
A403
AFH
Ext GRO-C

HG/8166/1