Wednesday, 13 January 2021

(10.00 am)

SIR BRIAN LANGSTAFF: So this morning, Ms Richards, we have the presentation in respect of Manchester?

MS RICHARDS: That's right, sir.

SIR BRIAN LANGSTAFF: Yes. Let me just say a word or two to those who may be watching online. I was right to put the figures above 100 yesterday and I imagine it may be something very similar today. There is, of course, no live witness today. There is the remote presentation. Ms Richards.

Presentation on Manchester Royal Infirmary Haemophilia Centre by MS RICHARDS

MS RICHARDS: Sir, yes. Today's presentation focuses on the Manchester Royal Infirmary's haemophilia centre. It was a reference centre and one of the largest reference centres in the United Kingdom in the 1970s and 1980s. We've obviously heard from Professor Hay about Manchester from 1994 onwards, so the documents we're going to look at focus on periods prior to that.

We have prepared a written note which Core Participants have had access to which sets out what we've gleaned from documents that have been supplied to the Inquiry. Inevitably, the documents I'm going to refer to today are a selection from a much larger

number of documents. Inevitably also, the picture is an incomplete one. We do not have a statement from anyone who was in a position of responsibility at Manchester in the 1970s and 1980s, in terms of being a consultant or director. The earliest we have is a statement from Dr Guy Lucas who arrived in 1989 and became Haemophilia Centre Director for a short period of time prior to Professor Hay's appointment.

So it's an incomplete picture from which you, sir, will have to, in due course, draw inferences and you will no doubt be assisted in filling in the gaps from consideration of the fairly substantial number of witness statements from patients or patient relatives that the Inquiry has received.

Manchester Royal Infirmary was part of a bigger regional haemophilia service in the northwest of England, which included, in terms of the regional centres, Manchester Children's Hospital, the Lancaster Haemophilia Centre, and also Blackburn Royal Infirmary. Lancaster is sometimes described in the documents as a sub-centre, Blackburn Royal Infirmary as an associate centre of the Manchester centre. We will be looking further at the Children's Hospital, the Lancaster centre and the Blackburn centre in March, when we try and address all of the haemophilia

centres whose policies and practices haven't otherwise been explored through either through oral evidence or an earlier presentation.

In terms of directors, we know that Dr Israels was the director during the 1960s and then Dr Delamore took over. We don't know very much about Dr Irvine Delamore's early career. Documents suggest he worked in Edinburgh, then he went to Blackburn Royal Infirmary. By 1971 he had moved to Manchester Royal Infirmary and he took over from Dr Israels and remained director until 1989.

His co-director for a significant period of time was Dr Richard Wensley. We see Dr Wensley attending a UKHCDO meeting in 1971, at that stage on behalf of Bristol. He joined Manchester in 1974 and we can see a somewhat unusual arrangement in that he worked both as a consultant haematologist as part of the haemophilia centre and as part of the Northwest Blood Transfusion Service, and he had a particular interest in and expertise in the production of cryoprecipitate, which we'll come back to at a later stage.

We can look at one document which casts a little further light on the position in relation to Manchester. Soumik, it's NHBT0096549, please. If we

go to the second page, first of all, we can see there's a letter from Dr Gunson, who was the regional transfusion director in Manchester for the Blood Transfusion Service, February 1986, and he refers in that letter to providing a short statement about the regional haemophilia service and to comment on Dr Wensley's role.

If we go to the next document, please, we can see if we look at the first half of the page some background information about the arrangements in Manchester. It says:

"The Regional Haemophilia Service is responsible for the treatment of adults suffering from haemophilia and is based at the Manchester Royal Infirmary, with a sub-centre at Lancaster. There are co-directors of the service -- Dr Delamore (Consultant Haematologist with Central Manchester District) and Dr Wensley (Consultant Haematologist Central Manchester District, 5 sessions and Regional Transfusion Centre, 6 sessions). Dr D Lee ..."

Who is not Dr Richard Lee who we heard about yesterday, who was based in the West Country by this time, but Dr D Lee:

"... is the consultant-in-charge of the Lancaster Transfusion Centre manages the sub-centre in

Lancaster. Children suffering from haemophilia are treated by Drs D Evans and R Stevens at the Manchester Children's Hospital, although this also forms part of the Regional Service.

"The Haemophilia Centre at Manchester Royal Infirmary is also designated as one of the six National Reference Centres."

Then there's a description of prior to 1975 the principal method of treatment for haemophilia being the use of cryoprecipitate, which was prepared from human plasma at the Regional Transfusion Centre. Then a reference to Factor VIII concentrate now being used in increasing quantities.

There's then a discussion about self-sufficiency and shortages, which we'll come back to but if we go a little further down the page, just below the paragraphs numbered 1 and 2, we can see the arrangements in Manchester, little different from elsewhere. It says this:

"In the middle 1970s when Factor VIII concentrate was first purchased in this region, my predecessor arranged with Dr Lane that these purchases should be undertaken through the BTS [Blood Transfusion Service] budget. Whilst the quantities used were small and finance was more readily available

than it is now, there were few problems with this arrangement."

Then he talks about there now being significant different problems and asks for a change in the arrangement. So, as we will see, purchases of commercial concentrate, as well as the procurement of Elstree BPL concentrate in Manchester, were all done through the Blood Transfusion Service.

If we go to the next page, we can see a little more information about Dr Wensley's dual role, which again is a somewhat unusual feature:

"Dr Wensley was appointed as a Consultant Haematologist to the Regional Transfusion Centre (7 sessions) and the Manchester Area Health Authority (Teaching) (4 sessions) in March 1974. His job was to treat patients with haemophilia at the Manchester Royal Infirmary and to be responsible for the production of cryoprecipitate, which was at that time the product of choice for the treatment of these patients. He worked very hard and devised a semi-automated method for producing high quality cryoprecipitate [again, come on to that later] from which the patients in the region derived considerable benefit.

"However, since 1980, there has been a decline

in the use of cryoprecipitate in favour of the Factor VIII concentrate and consequently the need in the Regional Transfusion Centre for someone with his specialised knowledge has also decreased."

Then it goes on to explain how his sessions had been adjusted because of an increasing clinical commitment, so with more sessions being devoted to the haemophilia centre work than the regional transfusion centre work.

It's not entirely clear the precise date on which Dr Wensley became the co-director of the haemophilia centre with Dr Delamore but we know that he did. Upon Dr Delamore's retirement in March 1989, Dr Wensley became the sole director. Dr Lucas then took over from Dr Wensley as acting director in 1992 until September 1994 with the arrival of Professor Hay.

Now, in terms of physical facilities and staffing at the Manchester Royal Infirmary's haemophilia centre, those appear to have been pretty limited in the 1970s, and there are various references in documentation to Dr Delamore seeking financial assistance and grants from the Haemophilia Society to assist with things such as the purchase of a deep freeze.

If we look at one document by way of example it's HSOC0016116_029. We can see this is a record of a meeting of the council of The Haemophilia Society, 17 March 1973, and Dr Delamore is recorded as being one of those present. If we go on, please, to page 4, Soumik, bottom half of the page, we can see under the heading "Application for grants from Research Fund":

"Dr Delamore spoke about his application outlined in the memorandum to council members. He said that no major developments had taken place in Manchester for about 20 years. In order to improve facilities and expand the work of the Centre, including a possible clinic for Home Treatment, a new system of records was required and the present staff could not cope with all this extra work. A request has been made to the Hospital Management Committee but this is slowly passing through the various committees and will take a long time. Mr Tanner said he thought the Society should help now to prevent delay in Dr Delamore's plans and that the grant could be considered as a 'bridging operation' and would help to make the case for the Health Service to take over."

A grant for one year to cover the cost of secretarial assistance to allow record-keeping and the possible clinic for home treatment was agreed by the

Haemophilia Society, extended for another year and then in 1975 we know from other materials that the Regional Health Authority took over funding.

If we look next, please, at PRSE0000421 we can get a further insight into the staffing facilities at Manchester in 1978. So this is documentation relating to a seminar, organised, it would appear, by The Haemophilia Society in 1978. If we go, please, Soumik, to the third page, we can see on the right-hand side, second paragraph, the speakers being introduced:

"Dr Delamore is the Director of the Haemophilia Centre at the Manchester Royal Infirmary. The centre is a main Reference Centre and therefore acts in a supervisory and advisory capacity and has links with Centres in the surrounding area."

Then there's reference to other speakers. We're told also that Dr Delamore's department deals with the whole field of haematology and its many specialisms. Then if we look on the right-hand side we can see the text of what was being said by Dr Delamore.

You may be interested to note, sir, in the second paragraph, reference there to cerebral head bleeds, which is something that's been picked up by

other witnesses, and he says there:

"Fortunately ... they are rare, although it is one of the major causes of death."

Then if we could have the bottom half of the page please, Soumik, we have an explanation here from Dr Delamore about the organisation of haemophilia centres, which may be of assistance more widely as well as in understanding the position in Manchester:

"Dr Delamore described how in 1968 Haemophilia Centres were reorganised into Associate, Diagnostic and Reference Centres. Before this, Oxford, Sheffield and Manchester were three Special Treatment Centres. In 1974 it was decided to make changes in the arrangements of Centres. Centres should exist first of all to provide a service to carry out all the necessary investigations including the identification of the specific coagulation factors concerned, monitor coagulation factors and the effect of treatment, and investigate the relatives of patients with haemophilia and relative diseases. The second function is to provide a clinical service which includes provision of medical treatment at any time of the day or night and at short notice for patients with haemophilia. Thirdly, provision of an advisory service for patients and their parents who might be concerned about

dentistry education, and employment, and so on and provide a counselling service through the Social Services Department. Advice is offered also to GPs or anybody else who might be concerned with the management of haemophilia. Records of medical patients to whom haemophilia cards have been issued are made at the Haemophilia Centre and include all the necessary personal details of patients."

Then there's reference here to the associate centres:

"The new category allows for Associate Centres who have been designated as suitable Haemophilia Centres for the provision of an emergency service for patients but are linked to Diagnostic Centres so that together all the necessary facilities are provided."

We are hearing tomorrow, sir, from a witness who was at an associate centre, so this may be some useful background:

"The Special Treatment Centres were changed to Reference Centres and were expanded to seven in number. These are ..."

If we go over the page:

"... St Thomas' and the Royal Free Hospital in London, Churchill Hospital Oxford, The Royal Infirmaries of Sheffield and Manchester, The Royal

Victoria Infirmary in Newcastle, and the University Hospital of Wales at Cardiff. There are two main Centres in Scotland; one in Edinburgh and one in Glasgow. The advantage of the more numerous Associate Centres is that patients do not have to travel so far to get treatment."

Then you'll see there a diagram seeking to explain the relationships.

"There are 44 Haemophilia Centres in England and 58 Associate Centres. Associate Centres in particular, are growing all the time. The Reference Centres are expected to have special skills and provide every facility that the patient with haemophilia might need, for example, a 24-hour telephone advisory service for both the patient and Haemophilia Centre or Associate Centres in the region, a special consultancy service for surgery, orthopaedic surgery, dental care, paediatric and social care, and to keep medical records and statistics. Together with a wide range of ancillary services, they must advise and organise such things as home therapy, prophylactic therapy where necessary, and to provide a reference laboratory service. Dr Delamore outlined how they are expected to ensure close co-operation between all working sectors in their particular region, and

co-ordinate the availability of the necessary outpatient therapy material. One great problem is the shortage of Factor VIII replacement therapy with which to treat patients.

"... Dr Delamore stressed how very important the link must be with the blood transfusion service. In Manchester, there is in fact a joint consultant between blood transfusion and haematology."

That's Dr Wensley.

"Although he spends nearly all his time in the haematology department on haemophilia, he has a special responsibility to see that replacement materials are present and supplied in regular quantities and takes a special interest in the blood transfusion service. Dr Delamore suggested that the key organisation in solving the shortage of treatment products must be the Blood Transfusion Service."

Then he goes on to talk about genetic counselling and other matters.

SIR BRIAN LANGSTAFF: That description of the way in which Dr Wensley spends his time doesn't fit.

MS RICHARDS: It doesn't.

SIR BRIAN LANGSTAFF: Because at this stage he was doing seven sessions on blood transfusion and four on his clinical commitments.

MS RICHARDS: Yes, you are absolutely right, sir. It doesn't quite fit. We can't, I think, shed any more precise light on that other than we do see from other documents that he certainly maintains that dual responsibility for a number of years.

SIR BRIAN LANGSTAFF: Well, the whole rationale for him asking to have five instead of four sessions for his clinical commitments was that he felt that he could not otherwise spend the five.

MS RICHARDS: Yes.

SIR BRIAN LANGSTAFF: Which again indicates that Dr Delamore was seeing rather more of Dr Wensley's services than they deserved.

MS RICHARDS: Possibly, sir, yes.

In terms of the physical layout of the Manchester Royal Infirmary's facilities, there's little by way of description from the 70s and 80, and again it may be, sir, that you will derive greater assistance from the statements of patients who attended than from any of the documents.

We do see, and I won't go to the document in relation to this, but we see in 1990 discussions about the upgrading of treatment facilities, with six rooms to be made available for a haemophilia-dedicated treatment facility, and there's reference to works due

to be completed in 1991.

You'll recall Professor Hay's oral evidence; he described the facilities when he arrived in 1994 as being a small haemophilia centre attached to laboratories, which included a storeroom, an office, two consulting rooms and a waiting area, and there were, by the time Professor Hay arrived, a nurse counsellor, two other haemophilia nurse specialists and a clinical assistant.

So that's by way of introduction to the arrangements at Manchester. The next topic I propose to address deals with the arrangements for the supply and distribution of products and issues relating to shortages. Unsurprisingly, given what we've seen in relation to other centres across the country, Manchester also records difficulties in obtaining adequate supplies of blood products really from the late 60s, through the 70s and well into the 1980s.

There are a number of national meetings attended for example by Dr Israels that look at the national picture in relation to the need for self-sufficiency, insufficient supplies and so on, which we've looked at a number of those already. In terms of Manchester's particular position, we can pick up the picture by looking at a letter from March 1969

from Dr Israels.

That's DHSC0100025_092.

If we could just zoom in on that. It's not the best of copies.

It is dated 12 March 1969. It is from Dr Israels to Dr Maycock at the Lister Institute, Elstree, what became BPL, and Dr Israels is writing to Dr Maycock in Maycock's "capacity as Adviser to the Department of Health and as Chairman of the Blood Transfusion Directors' Group".

He refers to their having had considerable trouble in getting sufficient anti-haemophilic material to deal with a difficult case, a surgical case, and he refers to having received some material from the Lister Institute but that giving out and having to get material from Edinburgh, and he says this:

"This, of course, was not sufficient. In the ordinary way we would supplement this by cryoprecipitate obtained from the Blood Transfusion Service. But the Manchester Blood Transfusion Service is quite unique and being unable to supply cryoprecipitate on any scale ..."

This is as at 1969, the position changes in later years.

"... because the Regional Board have still not provided the facilities for regular preparation of this material. So we have had to prepare it ourselves in our own laboratory and so far we have prepared 108 packs, equivalent to about 200 ml [of] plasma each.

"Dr Stratton, [who was the then director of the Regional Transfusion Centre] has mobilised his resources to a certain extent ..."

If we go on to the next page, again we zoom in, he says:

"I am writing to you now because it is clear that this sort of emergency arrangement must be replaced by more permanent arrangements. We are, after all, the second largest Haemophilia Centre in the country and it is surely quite wrong that we should be served by a Blood Transfusion Service which is not fully equipped. Of course, this situation has been appreciated for a long time and I drew Dr Stratton's attention and the Regional Board's attention to this matter at the time when it was agreed to form major haemophilia centres. Originally it was agreed that by September 1968 the Manchester Regional Transfusion Service would be re-equipped and staffed so as to be able to provide us with a proper supply of cryoprecipitate. It is now March 1969 and

as you will see from the arrangements we have had to make they are still hardly in a position even to cope with emergency treatment."

Then he goes on to say in the next paragraph:

"... I am writing to ask you if in the interim, while the Manchester RBTS gets properly organised, it would be possible for you to arrange for the Manchester Service to draw on other Services for a supply of cryoprecipitate."

The response to that is at DHSC0100025_101. We can see Dr Maycock's response 16 April 1969. He says:

"I have now had an opportunity to discuss, in the Department, the proposal in your letter that the major Haemophilia Centre at Manchester should be able to obtain the necessary supplies of cryoprecipitate from other regions, until such time as RTC Manchester can undertake this task."

Then in the next paragraph:

"The development of facilities for preparing cryoprecipitate in RTCs has been uneven and some centres are no more advanced than RTC Manchester. This arises mainly from two factors, the financial priority accorded by the [Regional Health Boards] and the regional assessment of the urgency and magnitude of the haemophilia problem.

"It is true to say that no region is yet in a position to prepare as much cryoprecipitate as it needs.

"Under the circumstances it is most unlikely that arrangements could be made for Manchester to be supplied from other regions in the way you suggest, although I am sure other regions will, if they can, help in an emergency."

That's the picture we get as at the end of the 1960s. It's clear from a range of materials that throughout the 1970s obtaining sufficient supplies continued to be a problem. There's a general discussion of that in the Haemophilia Centre Directors, the UKHCDO meeting of April 5 April 1971, at which Dr Delamore represented Dr Israels. I don't propose to go to that.

But then there is hope expressed in 1973 that -- with the appointment of Dr Wensley, who had particular interest in and expertise, it was said, in producing cryoprecipitate -- the position would improve. There are Haemophilia Society records which suggest that as at 1973 more cryoprecipitate was now being produced.

However, we can see issues of supply continuing to dominate discussions and, if we go to CBLA0000454,

we can see how, as at 1976, the arrangements were being made for the supply of Elstree concentrate. This is a letter from Dr Maycock to Dr Delamore, and it says this:

"The *ad hoc* Expert Committee on the Treatment of Haemophilia and the Regional Transfusion Directors Meeting agreed earlier this year that concentrate prepared at BPL should be distributed in proportion to the number of haemophiliacs known to have been treated.

"The latest figures of patients treated are those for 1974 prepared by Dr ... Biggs from the information submitted by Haemophilia Centre Directors ..."

Then if we go to the next paragraph:

"The amount of concentrate being prepared at BPL is about 50 per cent of the expected maximum production of 50,000 bottles, each containing about 250 in Factor VIII. It is expected that production should reach about 70-80 per cent of target by the end of 1976 and 100 per cent by autumn 1977, assuming that the necessary plasma is received and that no unexpected difficulties occur."

Then he sets out the quantities of concentrate to be allocated to Manchester and to Liverpool. And

so what we can see here, it's said that these are based upon the number of haemophiliacs undergoing treatment. Of course we have seen elsewhere how this moved to the pro rata system, responding to the amount of plasma provided. But as at this date the amount distributed to Manchester is going to be 240 bottles monthly and to Liverpool 50 bottles.

It's then said if there needs to be any adjustments within the overall total available. We can see by correspondence in the following year, by the middle of 1977 --

SIR BRIAN LANGSTAFF: Just pausing there, you may be coming to this, but one of the difficulties of a system like this might be said to be that it is calculating supply not on the basis of what is needed but on the basis of what was used in the previous year, and what we have seen repeatedly from other centres has been the effects of one or two individuals who suffered particular bleeds whose demands meant that they used up a lot of whatever concentrate or other replacement therapy they were using.

So one would have expected that if the system was going to work properly it would need some sort of reserve or flexible bank from which to draw.

MS RICHARDS: Yes. We can see there being particular

problems in this regard in relation to Manchester from some of the later documents.

SIR BRIAN LANGSTAFF: Was there any such -- have we come across any evidence of any such flexibility in the system?

MS RICHARDS: In terms of contemporaneous documentation, very little. I will show you Dr Gunson's statement, prepared in the 1980s, after the event, as it were, for the purposes of litigation, in which she addresses some of these matters. But there are various communications in which concern is expressed about available supplies being pegged to a particular year when the need was significantly in excess of that.

SIR BRIAN LANGSTAFF: Yes.

MS RICHARDS: So we do know that this initial figure of 240 was -- the allocation was increased to 400 a month by June of 1977. Again, there are no single documents which really set out a whole picture. It's very much a question of looking at individual documents and trying to join the dots.

Sticking with 1976, there was a meeting in October of 1976 at CBLA0000473. We can see that this was a meeting that was intended to consider issues of supply and demand:

"Exploratory Meeting of Blood Transfusion

Directors and Haemophilia Reference Centre Directors ... in Sheffield ... 22nd October 1976 ..."

We can see it's a meeting that had been called by Professor Blackburn -- well -- or he was going to address that. For the agenda sets out the need for at least 40 million units of freeze-dried Factor VIII to treat the population.

"Is this estimate correct?

"... 4. Can the plasma needed to provide this amount of Factor VIII be supplied by the Transfusion Service?

"If not, what steps should be taken to provide the plasma needed to supply Factor VIII?

"a) Can a case be made to the Regional Health Authorities to increase financial support to the Regional Transfusion Centres to enable them to supply more plasma for fractionation?

"b) Should the Regional Health Authorities be encouraged to increase the purchase of commercial Factor VIII so that plasma now used to make cryoprecipitate could be sent for fractionation?

"5. If the plasma supply is increased do we have the ability in terms of laboratory space, staff and equipment to prepare 40 [million] units of Factor VIII and all of the other valuable plasma

fractions in the [UK]?"

Then item 6 on the agenda:

"Methods of distributing preparations containing Factor VIII."

The minutes then appear on the next page. They are not actually a very useful guide to understanding what, if any, decisions were made at the meeting because they are actually a record of various contributions to the meeting rather than anything else. So you may wish in due course, sir, to read the whole document. For present purposes, I'm just going to look at what's said about Manchester, which is comparatively little.

If we go to the last page of this document, we can see Dr Wensley saying:

"In Manchester all Factor VIII containing materials are distributed by the Transfusion Centre, including the commercial material."

So that's a reference to the arrangement I referred to earlier whereby the transfusion centre effectively supplied both NHS cryoprecipitate, other materials and commercial.

Then there's the somewhat curious intervention by Dr Prentice:

"Objection. Manchester money comes from the

Region and not from the District."

Quite what that's a reference to is unclear.

So it would appear that this meeting was a means for people to express concerns rather than solve problems and at the end we see the meeting closed at 1.00 pm, no further meeting was arranged.

There is then a local, as in to the northern region, meeting in 1979 that we have a record of. That's at DHSC0002195_037. So we can see this is described as "Meeting of the Northern Regional Group of Directors, 20 September 1979, "Representatives from Leeds, Sheffield, Manchester and Liverpool were present". It's said:

"It was not possible to arrive at a consensus agreement with respect to the recommendations on page 5 of this document."

We don't have that, so we don't know what that refers to, but then this is a note that sets out various areas of discussion. Just, again, picking up matters of particular relevance to Manchester, paragraph 2, it's said:

"With respect to pro rata supply there was dissension by representatives from Manchester and Liverpool where the demand for cryoprecipitate was still great and indeed in the view of Dr Wensley was

advantageous for the treatment of certain patients."

Somewhat tantalisingly, we don't learn from this, or I'm afraid from anything else we've yet unearthed, what particular categories of patients Dr Wensley, who was clearly from what we've seen an enthusiast for cryoprecipitate, but what particular categories he thought it was advantageous for, but we can see, at least, that as at the autumn of 1979 in Liverpool and Manchester cryoprecipitate was still very much in use.

We see Dr Wagstaff, so that's from the Regional Transfusion Service, "confirmed that this was also a view being held by certain Haematologists in the Sheffield Region". There's then reference to particular issue in relation to Manchester and it says this:

"... a large number of single donations of fresh frozen plasma were used in the Manchester Region for replacement therapy following intensive plasmapheresis. Also because of acidification the plasma following platelet separation was unsuitable for Factor VIII production. Thus although the Manchester Region separate plasma from 40 per cent of their intake within 18 hours only a proportion of this was available for fractionation."

Then there's a reference to the position in Leeds and Sheffield, and then a reference to anomalies with respect to regional practices. So it said:

"... it was felt that if certain anomalies with respect to Regional practices could be resolved, pro rata supply was indeed a logical development although it was conceded that if fresh plasma could be separated more economically in certain Regions then it would be advantageous for this Region to concentrate on that task."

Then we see Manchester in paragraph 3:

"Manchester and Liverpool considered that their demand and intended reduction of cryoprecipitate and other factors would not allow them to double the quantity of fresh plasma sent for fractionation."

If we go over the page, a hope is expressed that:

"... a dialogue could be set up with the Supra Regional Haemophilia Directors to determine realistic levels of Factor VIII production.

"One region (Manchester) recommended central purchasing of Factor VIII from commercial sources within each Region."

So we can see there the issue of pro rata supply being the basis for supply being discussed as

at September 1979 but, again, this records various views being expressed rather than giving a clear picture of what, if any, decisions were taken.

It may be instructive, therefore, to look at Dr Gunson's statement. That is at NHBT0020196_001. Now, of course, this was a statement prepared retrospectively for the purposes of litigation, not a contemporaneous document, and so you will wish to accord it such weight as you consider appropriate, sir. You will see, insofar as Manchester is concerned, that Dr Gunson sets out that from April 1980 to 30 April 1988 he was Director of the Northwest Regional Blood Transfusion Service and based in Manchester, and he gives a little insight into the arrangements in Manchester. So he says this:

"As Regional Director [so he had previously been at Oxford for five years], I was responsible for the provision of the Blood Transfusion Services to the District Hospitals in the Oxford and Northwest regions. In both Oxford and in Manchester there was a Regional Haemophilia Service. While haemophiliacs are treated in hospitals, their management is under the auspices of the Regional Haemophilia Services. Another function in Manchester, but not in Oxford, was the purchase of commercial materials within the RTC

budget for the treatment of haemophilia patients. It was my responsibility, in conjunction with the Directors of the Haemophilia Service, to negotiate the provision of the commercial Factor VIII concentrates to supplement supplies from within the NHS. The Regional Team of Officers who subsequently became the Regional Management Team, allocated a specific budget for this purpose to the Blood Transfusion Service, which was finally approved by the RHA [Regional Health Authority]. From this, we purchased supplies to fulfil the diverging gap between NHS supplies and demand."

He then makes the comment:

"In general, the Regional Health Authority allocated sufficient finance, and I am not aware of under treatment for the lack of Factor VIII supplies, although some non-urgent surgical procedures were deferred."

There are documents which suggest a different picture to that:

"Demand certainly increased over this period. However, the Northwest region, in general, used less Factor VIII per patient per year than other regions."

Again, there are some documents that suggest that's right. He then talks about the arrangements

for negotiating with companies. From 1982 to 1983 for contracts over £100,000 tenders had to be sought and he describes then the tendering process. Then, at bottom of the page, he says:

"A meeting was held with Dr Wensley and Dr Lee [that's from Manchester and Lancaster respectively] after the tenders were in and before the final order was placed. The ordering process occurred approximately once a year, normally February/March. However, in the last five years, because of increased usage, it was necessary to supplement supplies of commercial Factor VIII in December/January."

So they were running out by the end of the calendar year and having to purchase more commercial product.

"Dr Wensley was very much involved in the purchase of Factor VIII and was the person responsible for the distribution of both commercial and NHS products from the RTC. Dr Lee, then Consultant-in-Charge at the Lancaster Centre, managed the supplies of Factor VIII allocated to that Centre and Dr D Evans those supplied to the Manchester Children's Hospital."

If we then go over to the next page please, Soumik, the bottom of the next page, the references to

paragraph numbers, sir, are references to paragraphs of the Statement of Claim in the HIV haemophiliac litigation, so what follows are Dr Gunson's comments from his perspective. But if we pick it up at the very bottom of this page:

"I used to hold regular meetings with the physicians who treated the haemophilia patients concerning supplies -- how much, preferred products, et cetera. These meetings were *ad hoc* about twice a year from 1980/81 onwards. They continued until I resigned as Director of the Northwest Regional Transfusion Service in 1988. Some were attended by the Officers of the RHA, the RMO and the AGM Personnel ..."

Sir, we've not identified minutes or other records of those meetings at least thus far.

Then, in relation to Manchester, if we go on -- sorry, Soumik, let me just check what page it is. If you go on another seven pages, please -- back one page, sorry. Yes, if we pick it up at the bottom of the page, he says:

"Within the Northwest Region, we worked on a year to year basis with the local knowledge of consultants in the Regional Haemophilia Service. This was based on the number of corrective surgical

operations needed in the following year, together with the numbers of patients able to pursue a home treatment regime, with an added percentage added for emergencies. Home treatment involves extra supplies of Factor VIII in that a haemophiliac would inject Factor VIII at the commencement of a bleed without waiting to see if the bleed was serious enough for him to attend hospital for treatment."

If we go on to the next page please, Soumik, and we look at the last paragraph, Dr Gunson says this:

"Although the use of cryoprecipitate declined nationally between 1975 and 1985, the usage in the northwest region remained high as a result of the policies adopted by the Regional Haemophilia Service. Cryoprecipitate competed with plasma sent for fractionation so that the latter targets were not achieved. However, Factor VIII from cryoprecipitates was used to treat haemophilia patients and this supplemented the supplies of NHS and commercial Factor VIII concentrates."

Then he says that details of the production of cryo and plasma are available at the RTC and at the Lancaster centre. Then in the next paragraph:

"Between 1982 and 1984, the Northwest Regional

Health Authority financed the alterations to the former ICL computer factory to provide a new Regional Transfusion Centre. Coincidentally, they responded to my arguments to increase the plasma supply with additional financial allocations for this purpose. In 1985/86, funding was provided for a plasmapheresis centre at Plymouth Grove and somewhat earlier, a similar, but smaller, plasmapheresis centre was established in Lancaster. In general, the production of plasma was divided in proportions of two-thirds from Manchester and one-third from Lancaster."

The majority of the rest of the document deals with more general matters and will obviously need to be read in full but -- rather than matters specific to arrangements in the northwest.

The perhaps somewhat rosy picture presented by Dr Gunson in that statement is not always borne out by contemporaneous documents, and so if we look at NHBT0089585 we can see here a letter dated 18 August 1982. It's jointly from Dr Delamore and Dr Gunson to Dr Lane, Regional Medical Officer, Northwest Regional Health Authority, and we can see it's concerning Factor VIII supplies in the northwest region:

"We're writing to request a supplementary grant

level."

Then further details are then given, I won't read them all out but the figures stand for themselves. Then if we go over the page, it said this:

"Until recently it was anticipated that this level would be maintained in 1982/83 with 1.5 to 1.6 million units coming from the BTS plasma fractionated by the BPL and an allowance of £100,000 (a reduction of £60,000 from the previous year) for the purchase of commercial Factor VIII ...

"However, certain unavoidable factors have operated to our disadvantage, both with respect to the number of units of Factor VIII which will be received and the clinical problems encountered so far in the current year."

Then they set out a number of problems, I won't read them all out, but I will just refer to each of them in turn briefly. First was industrial action, which led to loss of blood collection sessions for a period of time.

(2) was significant increase in the use of other blood products in 1982 compared with 1981, which was said would make it more difficult to obtain the plasma targets for fractionation at the BTS, and there

of £38,500 to enable us to maintain our treatment for patients suffering from haemophilia in this region. A combination of factors has brought a situation in which the money available in the current financial year for the purchase of Factor VIII concentrates is insufficient for us to maintain both an adequate level of therapy for those patients already on home treatment and to enable us to expand our home treatment programme, although we already lag behind other regions in this respect.

"As you will be aware, the Factor VIII concentrate supplies for the region come from two sources:

"(a) The Blood Products Laboratory, from plasma supplied by the North Western Region Blood Transfusion Service.

"(b) Purchase of commercial concentrates from an allocation within the Blood Transfusion Service budget.

"Based on the 1980 to 1981 statistics, the RHA increased the revenue of the BTS to provide more plasma for fractionation. With respect to Factor VIII concentrates, it was anticipated that within two years the supply from BPL would equate with the total quantity of Factor VIII obtained at the 1980/81

was going to be a reduced amount available for Factor VIII.

(3) refers to building works at BPL and an inability for BPL to fully process the plasma sent to them.

(4) a sharp increase in Factor VIII to cover emergency surgery and details are there provided.

Then over the page, (5) is about the use of Factor VIII therapy as maintenance therapy for patients with inhibitors which was a treatment policy pursued by Dr Wensley.

So the letter says:

"It can be seen therefore, that it has been possible to identify an additional expenditure of £38,500 for Factor VIII during the current year and this must be regarded as a minimum figure ...

"It is only the serious nature of the situation that has led us to write requesting a further grant and we would be grateful if you could give this matter your urgent and sympathetic attention ..."

The response from Dr Lane at the North West Regional Health Authority is at NHBT0089586, dated 1 September 1982 and it said, in the second paragraph:

"The general answer to your question is that at this point in the year and in this year in particular

it is quite impossible for the RHA to find additional money for any expansion or improvement of any service whatsoever. I know this will be disappointing particularly as the answer might have been different had you been able to foresee the need for expansion at the beginning of the year when resource allocations for regional specialty developments were made. However, that time is now passed and I think it would be very unwise to assume that in the next two years any improvement for regional specialties will be possible."

Then he says:

"Having said that in general the Authority's policy must be to maintain all services at their existing level since our resources are not being actually cut but only failing to grow."

Then the letter goes on to say:

"... [it is] quite wrong that the actions of clinicians should place you as supplier in reducing a service for haemophilia in order to improve a service for meeting platelet deficiencies ... We must ask you to maintain all blood supplies not only overall but detailed subdivision at the levels pertaining at the beginning of the year. This needs to be made clear to clinicians who use whole blood,

those who use platelets and those who are using products for the treatment of haemophilia. The general rule must be supplies held at last year's levels, it being for clinicians to determine which cases should receive priority. In general, however, clinicians must not 'use up' the whole ration for the year at an early stage so that nothing is left for really serious cases towards the end of the year. I should be glad if you could arrange for some kind of monthly rationing process allowing reasonable flexibility for the irregular presentation of difficult cases."

Then he says:

"I don't believe that it is right to expect you to be the arbiter of life and death in terms of blood supplies ..."

Issues of supply and insufficiency of supply continued to be raised in the first half of the 1980s and so if we look, for example, at NHBT0089582, we can see, for example, there was a meeting on 15 February 1983 to consider Factor VIII supplies in northwest region, attended by Dr Delamore and Dr Wensley from Manchester, Dr Gunson and then we have Dr Lee from Lancaster, Dr Stevens from the Children's Hospital. Reference is made in paragraph 1 to

aspirations from the plasmapheresis centre in Lancaster, which was due to begin operations in 1983/84. Paragraph 2:

"Dr Delamore commented that the current levels of Factor VIII (concentrate and cryo) being pegged at the 1980/81 level was insufficient to meet, demand, but it was agreed that no action should be taken ... until it was known whether the Specialty Bid was to be approved or not."

That's presumably a bid for extra funding. Then there is an agreement in relation to cryoprecipitate supplies in paragraph 4 and an agreement to maintain the monthly production rate of cryoprecipitate at 1,500 per month:

"... Manchester Royal Infirmary would endeavour to economise in its use so that as at 1 April they would have some stock in hand."

Then we see the bottom of the page, from 1 April 1983 cryo production at Roby Street, which was Manchester, would be at the rate of 16,000 per year or 1,330 per month, of which 1,000 would be allocated to the Manchester Royal Infirmary:

"(b) If the Specialty Bid is approved and when the additional material is available for expansion of home treatment, cryo production at Roby Street would

be reduced to 10,000 units per year, of which 500 units per month would be allocated to the Manchester Royal Infirmary."

Then over the page, you'll see at paragraph 5 the supply for 1984/85 was dependent on the plasmapheresis centre in Lancaster, as yet something of an unknown quality.

Then, sir, this is February 1983, you will see there:

"The problem of AIDS was discussed. It was agreed that no specific action should be taken at present, but the situation should be carefully monitored and a reappraisal of policy may be necessary if changes in treatment regimes have to be made."

I will come back to that but we've identified no documents that suggest that there were any changes in treatment policy in response to the risk of AIDS.

There are various other references in the course of 1983 to problems of funding and shortages and shortfalls. We can see that, perhaps, if we look at a letter from Dr Gunson, NHBT0096599_015. It's a letter dated 26 October 1983 to the senior assistant treasurer at the Northwest Regional Health Authority. As I say, it's from Dr Gunson. I won't read the letter in full but it is a letter which merits reading

in full. It's about Factor VIII supplies and you will see in the first paragraph Dr Gunson says:

"... I decided to review the situation with respect to Factor VIII supplies from April 1980 in order that you might obtain a more complete picture of the problem.

"The year 1980/81 is significant, because in March 1981 I presented a paper to the RHA giving details of the scheme to increase the supplies of Factor VIII and albumin products and demonstrated how these could be self-financing by 1983/84 from the savings made on purchase of commercial Factor VIII concentrates."

Then he refers to figures actually of units actually received in 1980 to 1981:

"Our expansion plans did not come to fruition until later in 1981/82 ..."

He refers all of the increase in Factor VIII was used at the Manchester Royal Infirmary:

"1982/83 was a difficult year, as you will recall, and I was allowed an additional £25,000 to purchase Factor VIII and this resulted in the total quantity received being comparable with 1981/82, although there was increased usage, particularly at Pendlebury."

That's the Children's Hospital.

"During 1983/84 there is a significant increase in the Factor VIII supplies from BPL, as we have expected, and during the year we should receive 2 [million] units."

Then there is a reference to a grant made to purchase Factor VIII. That's presumably commercial Factor VIII:

"Thus the total expected for 1983/84 will be 3.62 [million] units which is approaching the quantity available for the previous two years."

If we go over the page, he then sets out how the units have been used at the Manchester Royal Infirmary since 1 April 83, and we can see there home therapy, out-patients, elective surgery and emergencies, and the figures there.

"The emergencies have been particularly heavy during this period, since four patients have been admitted with intracranial haemorrhage and have taken up large quantities of Factor VIII. It will be seen also that there has been increased use at Pendlebury ... and that at Lancaster, the usage for six months almost equals the whole of that issued for 1982/83. Most of this increase is accounted for by one patient who fractured his femur and has received

over 100,000 units of Factor VIII."

Then there is a calculation of expected usage for the balance of the year set out. If we go to the next page, Dr Gunson says this:

"It will be seen that the two quantities almost balance but no allowance has been made for:

"(1) Elective surgery at the [Manchester Royal Infirmary] ..."

And he refers to the waiting list for corrective orthopaedic surgery building up.

"(2) Emergencies."

And he says it's to be expected that some emergencies will arise during the latter half of the year. There are two problems associated with the supply of Factor VIII:

"(1) A shortfall of material for use in the current year."

And:

"(2) A long-term problem with respect to provision of Factor VIII concentrate in 1984/85 and successive years.

"Both of these have a common factor, which is the failure to open the Plasmapheresis Centre in Lancaster."

You will have seen from the earlier documents

expectations were pinned upon the opening of that, that it would improve the situation in terms of supply but that didn't happen.

He then sets out various options to correct matters:

"(1) Reduce home therapy. This region has the lowest ratio for home therapy in the UK. At the Manchester Royal Infirmary, only 30 per cent of patients are receiving home therapy; the national average is 50 per cent and the target is 70 per cent.

"(2) Prepare increasing quantities of cryoprecipitate at the RTC. This is a frozen product which has a high yield of Factor VIII can be used to treat patients but is difficult to use for home therapy. By preparing this product we would reduce the amount of plasma sent to BPL and consequently the quantity of Factor VIII concentrate received in return.

"Before turning to either of these options, with their serious disadvantages, I would be grateful if you would consider the following proposals ..."

The first proposal is essentially to ask for more money, to use to purchase commercial Factor VIII, using the allocation which the health authority would have expended on the unopened plasmapheresis centre in

Lancaster, and he says:

"This Factor VIII will be retaining at the RTC as an emergency reserve and I will try and obtain the agreement of my clinical colleagues to use it only for emergency purposes and for those elective surgical procedures that can no longer be postponed."

Then (2):

"Hold early discussions with respect to the policy for Factor VIII supplies for the future, since I can confidently predict that at current rates of usage we will not be self-sufficient in Factor VIII in 1983/84. Also, there is good evidence that even with current usage the patients in this region are not faring as well as those in some other regions."

Sir, we will look at such data as we have about usage but what we see is essentially the now familiar pattern of commercial concentrates being purchased to make up shortfalls because of insufficient supplies of NHS factor in Manchester, as in other parts of the country.

SIR BRIAN LANGSTAFF: When he talks about self-sufficiency on the page which is currently on screen, what constituency does he have in mind? The whole of the country? He's not in that capacity, is he?

MS RICHARDS: Not at that stage. Later he might have been

able to answer or the whole country --

SIR BRIAN LANGSTAFF: So the "we will not be self-sufficient", it could be a comment on the national situation; it's more likely, perhaps, to be a comment on the regional situation, is it?

MS RICHARDS: I think read in the context of the letter and the reference to current rates of usage, which he's there talking about the northwest region. I think it reads more likely to be a reference to the region rather than the national picture.

SIR BRIAN LANGSTAFF: So again, at the risk of interpreting something to mean what it doesn't, it would look as if self-sufficiency being measured by the ability to (a) produce enough plasma to send off to BPL, to get back NHS concentrate, plus using enough plasma at the local RTC to produce cryoprecipitate to be used locally.

Is that a fair reading?

MS RICHARDS: I think so, yes, sir. Yes.

SIR BRIAN LANGSTAFF: Probably the most likely.

MS RICHARDS: Indeed.

Sir, we've set out in our written note, by reference to the second half of the 1980s, continuing difficulties in relation to supply and shortages and decision-making. I will come on in due course to such

arrangements as were made and when they were made in relation to the move to heat-treated products in the context of the response to the AIDS crisis, but I'm not proposing to take you, sir, at this stage, and more, indeed, those listening, to the materials relating to the second half of the 80s.

We have set them out in some detail in our note. But they are less critical for the issues which you have to consider, sir, than the position in the 70s and in the first half of the 1980s. But I invite you to note, and you will see it set out, there were continuing difficulties.

And those are recorded not just in minutes of meetings but also they seem to be difficulties that are known to pharmaceutical companies. There are particular concerns expressed by The Haemophilia Society about supplies in the northwest region and the like.

You may want to note, sir, one reference, which is to a letter from Dr Wensley in 1990. The reference is NHBT0018289.

I don't need to put it up on screen, Soumik.

But he there essentially sets out a concern that the region had been underfunded for years, and that his patients were receiving less therapy than at

other major UK haemophilia centres. But it is not clear from that letter whether he has in mind the years as in decades or the years immediately preceding the writing of his letter in 1990.

There are also documents that we have referred to in the written note which show that cryoprecipitate was still being used as a treatment fairly regularly at least until 1990. There's reference to, however, the use having plummeted to a low level by 1994.

Sir, I am going to move from issues of supply and the arrangements for purchase to looking at what information we have about the products that were as a matter of fact used. Again, it's a very piecemeal picture we have from the documents. We don't have, for example, the kind of document that we saw in relation to Cardiff where there appears to have been a contemporaneous treatment policy, although of course it raised in turn the question of whether that treatment policy was actually being applied, but we don't have anything of that kind in relation to Manchester and we don't, as I've said, have any statements or litigation reports authored by Dr Delamore or Dr Wensley that would help fill in the gaps. We have some returns to UKHCDO but only for the period with which we are really concerned, for the

years 1976 and 1983, and then also we have a return for 1986. So that provides us with some indication but not, unfortunately, a complete picture of product usage and, in particular, it doesn't tell us what categories of patients particular products were used for or what the reasons were for preferring particular treatments or particular products over others.

I'll just pick up the picture with a reference to cryoprecipitate however as at 1970. First I'm going to take from an article in the Manchester Evening News. It's a somewhat bleak article in its tone and may reflect social policies of the time. HSOC0006206.

It's a January 1970 article for the Manchester Evening News.

If we could just see the whole of the text on the bottom half of the page, please, Soumik. Thank you.

So much of it is an article painting haemophilia in a very bleak way, but the purpose for referring to it is what it says about cryoprecipitate. So if we look, first of all, at the bottom of the second column, talking about children born with haemophilia:

"In the past their future was bleak. Physical

injuries led to serious internal bruising and bleeding, and ultimately severe crippling of the joints developed. Surgical operations frequently had fatal results.

"But today ..."

So this is as at 1970.

"... with modern methods of treatment and patient assessment, much of which has been pioneered over the past 20 years at the Manchester Royal Infirmary, haemophiliacs are for the most part able to lead a near-normal, albeit hazardous, life.

"Their great salvation comes in small plastic bags containing what is known as the cryoprecipitate -- the anti-haemophilic serum (an extract from the fluid non-cellular part of the blood) which is given to them intravenously and which enables their blood to clot."

Then the very bottom column on the right-hand side -- sorry, the right-hand column, bottom of the column, says:

"Haemophilia can now be contained. People rarely die from the disease and are not often crippled by it. Nonetheless it is seriously disabling ..."

Then there's again a reference to the context of termination of pregnancies.

The reason for referring to this, sir, is, in the context of Manchester, it is identifying cryoprecipitate rather than, as we've later seen, concentrates as being that which transforms the treatment of haemophilia and, as already indicated with Dr Wensley's work, we see cryoprecipitate regarded as a significant part of the treatment of haemophilia, certainly throughout the 1970s.

SIR BRIAN LANGSTAFF: It would fit with the life expectancy documentation that we've seen earlier which showed that the very substantial increase in the expectation of life for all haemophiliacs came after the development of cryoprecipitate.

MS RICHARDS: Yes. Yes, and we've heard a lot of evidence, much of it no doubt understandable, about the advantages of concentrate. It's perhaps important not to lose sight of the fact that cryoprecipitate was seen as a very major advance in treatment indeed and carried with it, as we can see from this, many perceived advantages.

SIR BRIAN LANGSTAFF: Yes.

MS RICHARDS: We can see Dr Delamore's preference for treatments from a questionnaire he completed for Dr Maycock in December of 1972. That's at CBLA0000121. So the questionnaire is headed

"Factor VIII Concentrate for the treatment of Haemophilia":

"Factor VIII concentrate is supplied as a freeze-dried preparation in bottles containing from 400 to 600 units. At present the supply is insufficient for all needs."

And then various questions and answers:

"How many patients with haemophilia do you treat regularly? 200."

You can see Manchester was a very large centre.

"Would you prefer to use for the treatment of your patients ..."

And then you'll see the answer given by Dr Delamore is "Some cryoprecipitate and some freeze-dried concentrate". So neither one nor the other to the exclusion of each other but a combination of both.

Then question 5 asks:

"How many single donations of cryoprecipitate and bottles of concentrate do you need annually for your present treatment policy?"

And 11,000 cryoprecipitate, 250 concentrate. Then there's a request for how much -- "estimate you would need annually", which is also filled in by Dr Delamore. So that's his preference as of 1972.

There's an accompanying letter from him at CBLA0000104 from Dr Delamore to Dr Maycock, saying he's completed the enclosed questionnaire:

"We prefer, in this department, to administer cryoprecipitate since it makes up intoa smaller volume. If, however, freeze-dried concentrate were in some way altered so that it could be dissolved more easily and in a smaller volume, we would probably choose that preparation in preference to cryoprecipitate.

"The answer to question 6 ..."

Where he'd given estimates of what was required:

"... is based on our present usage of cryoprecipitate and freeze-dried concentrate, but if freeze-dried concentrate were to become more readily available, it may be that these figures would be reversed.

"I do of course appreciate that the freeze-dried preparations are much more suitable for home treatment which we now hope to institute in selected cases."

We can see, for example, from correspondence between Dr Delamore and Dr Aronstam at Treloars, in which Dr Delamore recorded treatment given to Treloars

students during the holidays when they were back in the Manchester region, regular treatment with cryoprecipitate, and we have correspondence in the years 1973 and 1974 to that effect.

We see again from the contemporaneous documents reference to the Royal Infirmary using Hemofil by 1975. But really the first -- a bigger picture that we get about treatment and product usage is from the 1976 annual return.

So if we could go please, Soumik, to HCDO0000080_003.

We can see it's completed by AM Burn, said to be chief technician, and sent off to Ms Spooner at Oxford.

If we go to the next page, we've got there the figures for treatment of carriers of haemophilia, two, treated with a mixture of cryoprecipitate and Factor VIII concentrate.

The next page provides us with information about the treatment of patients with von Willebrand's disease in 1976, eight patients treated exclusively there with cryoprecipitate.

Then if we go to the next page we see the bulk of the treatment. So the total number of haemophilic patients treated during the year, 139, and then we

have three with Factor VIII antibodies, 14 haemophilia B patients treated during the year, and one with Factor IX antibodies.

Then we can see the figures used: so in terms of cryoprecipitate, and I'll take the figure from units of activity, 850,560; NHS Factor VIII concentrate, 450,295; and then we can see commercial concentrates being used, a small amount, in relative terms, of Profilate, 1,520; a larger amount, although still small in relative terms, of Hemofil, 40,680, and then a more significant amount of Kryobulin, 325,087.

We also see porcine Factor VIII being used and -- sorry, Factor IX concentrate being used and then FEIBA, 564,420 units of activity.

SIR BRIAN LANGSTAFF: In terms of Factor VIII, it looks then as though, at this stage, there was marginally more concentrate being used than cryoprecipitate.

MS RICHARDS: Yes. We put the figures in a table and I think it gives us 36.8 per cent cryoprecipitate, 35.4 per cent Factor VIII. We then, to make up the 100 per cent, we've got FEIBA and porcine included, but yes.

SIR BRIAN LANGSTAFF: That doesn't sound quite right, does it?

MS RICHARDS: I'll check the figures later, sir.

SIR BRIAN LANGSTAFF: Just --

MS RICHARDS: 850,560 units of cryoprecipitate --

SIR BRIAN LANGSTAFF: Then if you add up the others --

MS RICHARDS: Yes, 817,582 units of Factor VIII concentrate. So slightly more cryo than Factor VIII.

SIR BRIAN LANGSTAFF: Yes. So this is probably about the point at which you might expect in the following years there would be a bit more concentrate used than cryo.

MS RICHARDS: Yes. Unfortunately, the next available return we have, which I will come on to in a few minutes, is for 1983 and we certainly see a change.

In terms of home treatment, you'll have seen some references to a desire to start a home treatment programme in the first half of the 1970s. The documentation in relation to the introduction of home treatment is pretty limited. We've got individual patient statements which perhaps is going to be the best source in that regard. We've got a patient, for example, describing beginning home treatment in 1974.

There is one meeting which, before we break, it might be worth looking at HCDO0000400 please, Soumik. This is a Reference Centre Directors' meeting of 27 January 1978. We can see that from Manchester Dr Delamore is there. If we go please, Soumik, to page 8, there's a discussion on home treatment. So

the heading for item 9 of the minutes is:

"Use of cryoprecipitate or commercial Factor VIII for home treatment. Dr Dormandy had several patients on home treatment with cryoprecipitate and she wished to know if the Reference Centre Directors thought that such patients should now be treated with commercial freeze-dried concentrate."

Then it says:

"Dr Delamore also had a similar problem and was seeking guidance."

That might tend to suggest that home treatment with cryoprecipitate, for some patients at least, was a feature at Manchester in the 1970s. The recommendation of the meeting is in fact that all patients on home treatment should have freeze-dried concentrate.

Again, we have various exchanges of correspondence in relation to individual patients between Manchester and Treloars which show that in the latter part of the 1970s there's a mix of treatments being used, sometimes cryoprecipitate, sometimes Kryobulin, sometimes other commercial concentrates, sometimes NHS concentrate. There's no particular pattern discernible in relation to individual patients

that would suggest that at Manchester a single concentrate policy or batch dedication policy was introduced. The available evidence from individual patients and their records at UKHCDO suggest to the contrary, that patients would often be treated with different products at different times over the years.

Sir, is that a convenient time to break? There's a little more to say about this.

SIR BRIAN LANGSTAFF: Yes. So 11.50.

MS RICHARDS: Thank you.

(11.20 am)

(A short break)

(11.52 am)

SIR BRIAN LANGSTAFF: Yes.

MS RICHARDS: Sir, still on the topic of product usage, some communications with and notes produced by Speywood from 1978 provides some further illumination.

If we start with IPSN0000388_013 -- IPSN0000338_013. We can see this is a letter written from Mr Williams of Speywood to Dr Delamore, September 1978. They have obviously had a meeting. He says:

"I enjoyed our meeting and look forward to keeping in touch with you ... I will send you a sample of our new product ...

"We have a new batch of the current Speywood animal product going through at the moment ... I will send spend details, plus a sample, for testing ..."

He refers to case notes on a French case, not quite clear what that's concerned with, and then he says he'll be seeing Dr Wensley "to talk about Koate in the hope that we can be restored to your list of suppliers".

So it would appear that Manchester had previously purchased Koate and then had ceased to do so and this was an attempt to persuade Dr Wensley and Dr Delamore to start using Koate again.

The records of the meeting themselves provide some further information. So if we start with IPSN0000338_014, this is Mr Williams' note of his meeting with Dr Delamore on 6 September 1978. It says:

"Dr Wensley ... does all the Factor VIII buying, so this was very much a courtesy call.

"The centre has used Armour material for the past year and is reluctant to change. They have just been notified of the price increase ... but even so, Delamore indicated that change was unlikely. I think if the incentive is made large enough this situation could be changed and I will be meeting with Wensley.

Delamore stated cash for Factor VIII commercial purchase is tightly controlled ...

"Commercial concentrates are only used for home treatment."

So if that's a correct record, at this point in time, 1978, the home treatment programme was one that used commercial concentrates only. Then there's a discussion about animal products.

Down towards the bottom of the page there's a discussion about von Willebrand's:

"[Dr Delamore] felt a von Willebrand factor would be of considerable theoretical interest ... Cryo is used successfully at present, without problems."

So it would appear, unsurprisingly, cryoprecipitate appears to be the treatment of choice for von Willebrand's patients at that time.

Then if we go to IPSN0000338_011, we have the note of Mr Williams' meeting later that year with Dr Wensley on 22 November 1978:

"Wensley is very interested in porcine, although his last clinical usage was a frightening experience. He believes FEIBA to be safer and possibly more effective, than our current product."

Then "Human":

"Our work on PE human was of great interest.

In his view, a hepatitis free product would be of enormous value.

"He buys commercial concentrate purely on price and thinks the quality differences between manufacturers are insignificant. He stated that Lister material now compares well with commercial and is gradually changing his home treatment patients to this from Kryobulin and Hemofil. Commercial will then be used only in operations."

Pausing there, it would appear there's an intention on the part of Dr Wensley to shift the home treatment programme from a commercial-based programme to an NHS-based programme:

"He will ask us to quote next time round, but currently has big stocks of Armour.

"A Regional contract of the style we are now discussing, is of no interest, since he already buys for all the Centres in his region. He has recently been ordering in 250,000 unit lots and paying upfront, calling off as required."

Then over the page, there's a discussion about protein fractions containing immunoglobulins.

If we then look at NHBT0089538, this is a letter dated 28 October 1981. It's from Dr Wensley to Dr Smith at BPL, and if we look at the text of the

letter we can see from the second paragraph he says:

"In this region almost all Elstree Factor VIII concentrate is used for home treatment of haemophiliacs ..."

So it would appear that by 1981, that which had been alluded to in the Speywood visit, the intention of changing from commercial to Elstree product for home treatment, had been implemented if what's said in this letter is correct, at least at that point in time.

If we then look at TREL0000248_104, we can see here it's a letter from Dr Evans, at the Manchester Children's Hospital, to Dr Aronstam at Treloars, and it's really the first paragraph which tells us a little about what's being done in the Royal Infirmary:

"Dr Wensley tells me that they've used 500 units of several brands of commercial concentrate intravenously, daily, to desensitise their patients."

Then there's a suggestion in the next paragraph that that may not be ethical in relation to paediatric patients.

Now, it would appear likely from what's said in the first paragraph and from other materials that we're talking there about patients with inhibitors.

That's the reference to desensitisation. It's not clear from that whether what's been recorded as Dr Wensley's practice is using several brands of commercial concentrate for an individual patient, so that a patient receives several different brands, or whether, across the cohort of patients to whom this practice applies, various different brands are used. Again, we certainly don't seem to see here anything of the only use one commercial product or batch dedication that we've seen from some other centre directors.

We then, in terms of documentation about product usage, come to the 1983 annual return to UKHCDO. If we start with HCDO0000170_010, I'll explain why some figures appear to be crossed out in a moment. We can see this is the annual return for 1983 for Manchester Royal Infirmary, director Dr Delamore. Total number of haemophilia A patients treated during the year 140, carriers of haemophilia A 7, von Willebrand's disease patients 24.

Then we can see the figures for cryoprecipitate, 470,600 used at hospital for haemophilia A patients, no record there of any being used for home treatment. 13,860 for carriers. Then, in relation to von Willebrand's patients,

cryoprecipitate is there recorded as used both in hospital and for home treatment, the figures given 74,760 and 27,300 respectively.

If we skip over the crossed out figures for a moment and we see the next figure that's not crossed out is the reference to Kryobulin, the Immuno Factor VIII, and we can see a small amount there being used for both hospital and home treatment. The reason why figures have been crossed out is, I anticipate, explained by a letter at HCDO0000170_004. This is a letter to Ms Spooner at Oxford from AM Burn, the Chief MLSO at the Royal Infirmary, and he's recording here alterations to the haemophilia returns for 1983. So the inference may be that these are the correct and up-to-date figures and that may be why we have seen the crossed out figures on the other document.

We have NHS concentrate, hospital usage 283,844, home treatment usage 1,021,945. Then we see Alpha Profilate, hospital usage 492,808, home treatment 127,249. Hyland Hemofil 707,867 hospital, 560,786 home treatment. Porcine Factor VIII 52,910. Factor IX 25,100, and Autoplex. Then Factor IX, this is then for the treatment of haemophilia B, 540,185.

We can see here substantial quantities of NHS product but also still substantial quantities of

commercial products being used, and the home treatment programme is neither exclusively commercial or exclusively Elstree by now. In 1983 we can see those receiving home treatment -- there's a mix of products being used for home treatment.

There's then one further document from November 1984 which provides some insight into Dr Wensley's approach to the treatment of patients with inhibitors. It is at IPSN0000036_012. This is "Current Approaches to the Treatment of Inhibitor Patients in the UK", third paragraph on that first page says:

"The intention of this report is to summarise the national trends in the treatment of haemophiliacs with inhibitors and then to address more specifically the current views and approaches of the directors of the major haemophilia centres to the treatment of their patients, with particular emphasis on their attitudes towards Hyate:C."

It is dated 2 November 1984.

We've looked at this document for what it says about individual directors on a number of occasions and I'm going to show you in a moment what it says about Manchester. It may be instructive at some point to consider it as a whole, because what it shows is

an absence of a consistent approach at least across the major haemophilia centres to the treatment of inhibitors and a very varied approach regionally.

If we go to the third page, we can see the position in relation to Manchester, if we go down to the bottom half, thank you. So:

"MRI have 16 inhibitor patients of whom 14 are normally treated with either human Factor VIII or human Factor VIII and plasma exchange."

Then further details given about the use of plasma exchange.

"In other circumstances an immune tolerance ragmen is favoured whereby on presentation with a bleed the patient is given a minimum of 20,000 units of Factor VIII over the first five days ... and then 250 units given every other day, until the inhibitor is suppressed. Manchester claim to have reduced the inhibitor titre in 13 out of 14 of the patients using this regimen."

Then there's a reference to two patients treated in an Autoplex trial and Hyate having been sent to Manchester for antibody assays.

Then if we look at the comments:

"MRI has a fairly idiosyncratic approach to the treatment of inhibitors. They consider the use of

activated, or non-activated Factor IX 'almost unethical' in view of its low degree of efficacy. They have no fundamental objections to using porcine Factor VIII but don't feel that they are likely to have the need to use it very often. They are, however, very interested in using it in 'virgin' non-inhibitor patients, but see costs being the main drawback in this area."

Pausing there, sir, two points to note about this document. The first is the point just made in the report, that Manchester expressed an interest in using porcine Factor VIII for virgin non-inhibitor patients. If we go back to the previous page, and look at the second half of the page again, one can see what appears to be set out here in 1984 -- indeed, this a report dated the end of 1984 -- so at a point in time at which the risk of AIDS may be thought to have been fairly well known to centre directors, a strategy which could perhaps be characterised as somewhat a high-risk strategy of giving inhibitor patients large amounts of Factor VIII, is here recorded.

That brings us then to early 1985 and introduction of heat-treated products. Again, we may need to look at a handful of documents to try to get

a sense of the timing of the introduction of heat-treated products. If we start with BAYP0000024_070, we can see this is a Cutter report, 5 February 1985, so it's an internal memo, and it's said:

"The activity seen in December '84 with regard to AIDS and Factor VIII concentrate has slowed down during January.

"All centres in this region have converted from non-heat-treated commercial material to heat-treated commercial Factor VIII concentrate. Opinion seems to be divided, however, on the use of non-heat-treated NHS material.

"The following centres are continuing to use non-heat-treated NHS material ..."

You will see a number of centres there set out but in the northwest region for present purposes Manchester, and then Liverpool, Lancaster and Blackburn.

So as at February 1985 this would suggest that non-heat-treated Elstree product still being used in Manchester.

If we go over the page and just see, bottom half of the page, some insight into Dr Wensley's thinking at this time. In the heading, "Development

in major target accounts":

"1. The Manchester connection.

"Hopes of obtaining the Manchester contract during 1985 were dashed after learning that Dr Wensley had managed to raise finance for his research.

"Dr Wensley has simply switched from Profilate to Profilate [heat-treated] ...

"Dr Wensley appears to believe in the wet heat treatment process. However, he is reserving judgment until results of liver function studies on patients using Alpha HT are known.

"Nevertheless, from further communication, he has told me that all being equal i.e. price and HTLV-III, non A, non B reduced risk, he will award the contract to Cutter. Tenders regarding this contract should be expected in late February or early March 85.

"Dr Wensley has asked me if he could visit Cutter USA plants while in the States for the San Diego meeting in July. This request was passed on to Mr Pete Dehart who welcomed the idea and offered every help."

So that's what we see being said there about Manchester.

If we then go to NHBT0094577, what we've got here are a number of letters regarding the

possibly contaminated concentrates, I would be obliged if you would reply to the following points.

"1. Is this matter being given the urgent consideration and priority necessary to safeguard the lives of Haemophiliacs in the North West?

"2. Why is Manchester Royal Infirmary the only Supra-Regional Centre in the UK not using heat-treated concentrates?"

In 3 there's a reference to a meeting between The Haemophilia Society and Lord Glenarthur about funding.

Over the page, just for the sake of completeness, it says:

"Applications were made prior to Christmas for monies to be made immediately available for the purchase of heat treated concentrates; why has a decision not yet been reached, and how long is the Hospital to wait before they can expect an answer."

If we then go, Soumik, to the third page there's a letter of the same date, 10 March 1985, from Mr Watters of The Haemophilia Society to Dr Gunson, saying:

"We are more than a little alarmed to learn that, alone of all the Supra-Regional Haemophilia Centres, Manchester is without heat-treated Factor

introduction of heat-treated products in the Manchester area.

Soumik, could we go, first of all, because these are out of chronological order, to page 4.

We can see here a letter from The Haemophilia Society. It's from the chair of the North West group of The Haemophilia Society to the chair of the North West Regional Health Authority:

"Dear Sir John,

"I write to you on a matter which is causing grave concern to all Haemophiliacs and their families in the North West area.

"As you are no doubt aware, supplies of heat-treated concentrates have not yet been introduced for treatment of the patients at Manchester Royal Infirmary."

So as at 10 January that is said to be the position as a matter of fact.

"To be informed by the Hospital that this product, which is believed to be AIDS free, will be made available some time in 1985 is, quite frankly, not good enough.

"Given the fact that Haemophiliacs are putting their lives at risk either by refusing essential treatment for bleeding episodes, or, by the use of

VIII (or IX) for the treatment of patients with haemophilia. We take a most serious view of this and would be grateful if you could advise us of the reasons for the non-availability of such products in Manchester."

He says he has written in the same terms to the health authority and copied it to Dr Wensley and Dr Delamore.

Now if we then go to page 2 of this, we have Dr Gunson's response to Mr Watters, and he says this:

"I can inform you that the decision to use heat-treated Factor VIII concentrate from commercial sources had been taken prior to my receipt of your letter. I can assure you that this matter was given careful consideration and that the serious nature of the problems which face patients suffering from haemophilia was not underestimated during discussions which have taken place between the Chairman and Chief Officers of the Regional Health Authority and myself. Allocation of the necessary finance has allowed the withdrawal of all untreated commercial Factor VIII and its replacement with heat-treated material and this process has now commenced. As you are aware, heat-treated Factor VIII concentrate from NHS plasma will not be available in any quantities until April,

1985, and my colleague, Dr Wensley and I are urgently considering means by which the use of untreated NHS Factor VIII can be restricted without placing any patients at risk."

Then he goes on to talk about the aspirations for heat treatment, discouraging high-risk donors and longer term hopes for a screening test.

So it would appear from Dr Gunson's response that as at 15 January 1985, the decision has been taken that heat-treated products will be used, the finance has been allocated. What's less clear is whether, as at this date, which is a month on, over a month on, from the Reference Centre Directors' meeting of 10 December 1984, whether the actual process is substantially underway or not or whether in the intervening weeks patients have continued to be using unheated products for their home or hospital treatment.

An inference may well be -- perhaps the most likely inference -- that patients have continued in the intervening weeks to be using unheated products.

If we can, on the same issue, go to a document that I am very grateful for having been provided to the Inquiry by Core Participants. It's COLL0000003.

These are the minutes of a special haemophilia

meeting on AIDS held at the Manchester Royal Infirmary on Sunday 3 February. And it's 1985; it is not dated but it is clear from the context of the letter.

We can see that the meeting's chaired by Dr Delamore. Speakers are Mrs Guy, chair of the North West branch of The Haemophilia Society, and Professor Longson, Professor of Virology, University of Manchester. And then there's a panel present: Dr Evans from the Children's Hospital, Professor Longson, the virologist, Dr Wensley and Dr Williamson, an immunologist consultant at the Preston Royal Infirmary.

What one can see from this, this is, as it were, a meeting to which patients were invited to attend, and we can see the context of it from the first paragraph:

"The meeting was declared open by the [chair], Dr IW Delamore, who then introduced Mrs Guy ... as first speaker. [She] said she had received many telephone calls from haemophiliacs needing reassurance and so she had asked the Haemophilia Department at MRI to arrange a meeting as soon as possible."

So it would appear that the trigger for the meeting is a request from The Haemophilia Society representative rather than from the Haemophilia

Centre.

"She made reference to the last Haemophilia Reference Centre Directors' meeting where it had been decided to use heat-treated Factor VIII on all haemophilia A patients as soon as possible ..."

That's must be the 10 December Elstree meeting.

"She said how pleased she was that the number of patients who had attended the meeting."

There's then a lecture of viruses and antibodies to viruses from Professor Longson and then Dr Delamore is recorded as thanking Professor Longson and then introducing the panel "who directly answered questions from the audience as follows".

I won't go through all of them, sir -- you will no doubt want to read the document in full -- but just a couple of them, the first of which is relevant to the issue we were just exploring:

"Q. Will all the haemophilia A patients go on to heat-treated Factor VIII?"

Dr Wensley's answer:

"As home-treatment patients come in for more Factor VIII supplies they will be changed onto heat-treated clotting factor or be given more of the same batch that they have been using. They will not however, be treated by a new non heat-treated batch of

Factor VIII."

Again, sir, that answer would appear to suggest, and we're now at 3 February, that there has been no immediate request for -- or attempt at recall of the unheated product that patients had, and that products are going to be replaced as and when patients' supplies for home treatment run out and they come in, and then they'll given, even then, not necessarily heat-treated clotting factor, they may be given heat-treated clotting factor or more of the same batch, and that's presumably dependent on supplies.

If we just then go over the page we can see there's a question as to whether heat-treated Factor IX is available, and Dr Wensley says:

"... not available from the NHS [at the moment] ... [but] being ... explored ... hoped ... [it] will become available by the summer of 1985."

Then there are various discussions about heat treatment, about the symptoms of AIDS, about risks to family members.

If we go to the third page, and we zoom in on the top half of the page, we look at the third set of questions and answers:

"[Question]: Should we assume that we have got the HTLV-III virus and inform the dentist?

"[Answer]: All patients will shortly be tested for the HTLV-III antibody but until the results of those tests are available, it is best to assume that you might [I think the word 'be' is omitted] positive and to inform your dentist."

So I will come on in due course to the question of testing but it would appear that as at 3 February certainly not all patients had been tested, and an inference from this answer may be that the process of testing had not yet commenced.

In terms of the introduction of heat-treated products, I'm not going to go to the following set of documents I described, but I will just let you know what they are, sir.

Dr Gunson addresses the issue in his HIV litigation statement, but again, as I say, that's, as it were, several years later after the event.

There is correspondence or memos in 1988, I think in the context of responding to potential legal claims, where Dr Lee and others provide a basic chronology of decision-making in relation to heat-treated product. But that's all about the process of getting approval for funding rather than the actual practical mechanics of when heat-treated products and how heat-treated products were

introduced.

There is, however, one later document that it may be worth looking at.

Soumik, it's NHBT0096599_012.

This is a later document. It's a memo from Dr Wensley to Dr Lee dated 18 December 1988. But it provides details of what supplies were received in the first half of 1985:

"No heat-treated Factor VIII was received before January 1985. The deliveries of heat-treated Factor VIII to NBTS Manchester, are as shown below."

So just looking to start with in the right-hand column, "Commercial", we can see that all the new product received by way of commercial product in the first six months of 1985 was heat-treated. It looks like it was all Profilate, from that.

In terms of NHS product, we can see that in both January and March of 1985, non-heat-treated supplies were received, 135,000 units of non-heat-treated (NHT) in January, 27,000 of non-heat-treated material in March of 1985 and presumably, given what we know about shortages, those are products that were used for the treatment of patients.

SIR BRIAN LANGSTAFF: Do we have any information about

whether this heat-treated product was 8Y, which seems unlikely in February '85, or was there the retro heat-treated product which the NHS were producing as an interim?

MS RICHARDS: I don't think we have any information specific to Manchester but it would seem, from other material that we've seen, unlikely to be 8Y, which I don't think was anticipated to be available until April of 1985.

SIR BRIAN LANGSTAFF: There was some, I think -- there's some uncertainty, I think, we may see in later evidence, about when the first batch was produced. It certainly wasn't on general distribution but there was some produced I think in December of '84, if one takes on one view anyway, as expressed in the records. So it's possible but it seems unlikely.

MS RICHARDS: It seems unlikely and obviously some at least, as we can see from this, was not heat-treated at all.

SIR BRIAN LANGSTAFF: Yes.

MS RICHARDS: If we go to BAYP0000024_149, we can see this is an internal Cutter memo dated 29 March 1985 and, actually, I think we've looked at this already but if we look at the -- no, it's slightly later on from the one we previously looked at. If we look at the bottom

of the first page, we can see the reference to Manchester:

"The signs are indicating that the Manchester area will possibly start using Factor IX heat-treated commercial material in April/May."

So those with haemophilia B would still have been, I think on any view, being treated, if they were being treated, with non-heat-treated material at this point in time. Then:

"Regular NHS Factor VIII is being used."

The reference to "regular" appears to be a reference to non-heat-treated Factor VIII.

Then not of direct relevance to the question of the introduction of heat-treated product but possibly of some interest, BAYP0000024_230. This is a later Cutter memo, 20 May 1985, just the first paragraph. It refers to a Profilate HT trial and results presented by Dr Savidge:

"The results provide evidence to support Alpha's claim that Profilate HT is free from non-A, non-B hepatitis. Dr Savidge's results also support those of Dr Kernoff and Dr Wensley. Both have previously claimed the safety of Profilate HT in terms of non-A, non-B hepatitis."

So drawing attention to that simply from what

it tells us about Dr Wensley and his approach to non-A, non-B hepatitis in 1985.

We do have the 1986 annual return to UKHCDO. I think there's no reason for thinking that the products used at that time were anything other than heat-treated. I don't go to it but I will give you the reference, sir. It's HCDO0000347_011, and what it shows that in the course of 1986, 85 per cent or thereabouts of Factor VIII use by MRI was commercial, mostly Koate and Hemofil, and cryoprecipitate by 1986 was a very minor part of the materials that were being used for haemophilia A patients.

Then, just finally on the question of porcine Factor VIII, if we go to IPSN0000057_066, what we've got here -- and if we have the first half of the page, thank you -- is an abstract of a paper apparently delivered at the World Federation of Haemophilia meeting in 1986 by Burn, Cottrell, Maugham, Wensley, Delamore, Manchester Royal Infirmary, on the use of porcine Factor VIII to treat haemophilia A patients without inhibitors. It records that:

"High purity porcine Factor VIII (Hyate C) was used to cover essential surgery in four patients who had received little or no previous blood products, with the intention of avoiding any exposure to the

AIDS-related virus and the hepatitis viruses. The patients had no inhibitors to human or porcine Factor VIII:C. Good levels of Factor VIII:C activity were maintained during and for about seven days following surgery, when progressive resistance was noted in all patients."

Then there's further details there provided.

"We conclude that porcine Factor VIII:C is a useful alternative to human Factor VIII:C concentrate in mild haemophilia A patients who are requiring essential surgery."

So a further insight into at least some aspect of Manchester's treatment policies in response to the risks of infection.

Sir, I'm going to move -- sorry, before I move to the next topic -- we can take that down, thank you -- just with some general observations about product usage and treatment policy. We can see from the documents that I've shown, broadly speaking, as a matter of fact, what products were being used at the Manchester Royal Infirmary to treat the patients with bleeding disorders in the late 1970s and the first half of the 1980s. We can see very substantial quantities of Factor VIII concentrate being used, we see the usage of cryoprecipitate. What we don't get

a sense of, unfortunately, from the documents is what the particular approach was, other than in relation to the document we've just looked at, to treating different categories of patients. It may be fair to infer that patients with severe haemophilia A on home treatment were clearly being treated by 1983 with exclusively Factor VIII concentrates, both commercial and NHS concentrates. I think it is fairly, probably also, easy to infer that a reason for the substantial uses of commercial concentrates was the absence of sufficient quantities of NHS concentrates.

What the particular policies, if any, were towards the treatment of patients with mild or moderate haemophilia, or previously untreated or minimally treated patients, isn't something that one can pull together from the material that we've seen. So it is unfortunately, at best, an incomplete picture in that respect.

Moving then to the question of knowledge of hepatitis, we can see through the very fact that Manchester was one of the major reference centres and, therefore, its directors from the very beginning attended Reference Centre Director meetings, that the clinicians in Manchester were aware of work being undertaken in relation to hepatitis and hepatitis in

blood products from an early stage, and simply by way of example of that we look at OXUH0000831_001. This is a meeting from October 1968 of the MRC Cryoprecipitate Working Party, and a member of the working party was Dr Israels the then director at Manchester. We can see from bottom of the page that one of the issues there being discussed was the survey of incidence of jaundice in haemophilia, and over the page there is a more detailed discussion about how that survey would be undertaken.

We can take that down, thank you.

Without going through all the minutes that we've looked at on a number of occasions of both Reference Centre Director meetings and Haemophilia Centre Director meetings, we have seen from the minutes that Dr Delamore and/or Dr Wensley were regular attenders at these meetings, one or other, sometimes both, was usually there, and thus they can be taken to be aware of the information about both hepatitis B and non-A, non-B hepatitis, and chronic liver disease that was discussed during those meetings.

You will recall yesterday, sir, Dr Bevan's evidence of being particularly impressed as a junior doctor as to what Dr Craske had said at a meeting in

November 1979. There are various earlier meetings in which reports from the Hepatitis Working Party is shared with Reference Centre Directors, particularly throughout the second half of the 1970s.

We can see also, if we look at DHSC0002173_048 -- whilst we are getting that we will be able to see from this document that, as Reference Centre Directors, Dr Delamore and/or Dr Wensley in due course were privy to the reports and studies that were being undertaken. So this, by way of example, is a written report that was prepared for a Haemophilia Centre Directors meeting in April 1971, attended by Dr Delamore, and it's a study of haemophilia A and Christmas disease patients, and we can see -- I won't go through the detail of it, but the first page -- reference to a study of the instance of transfusion hepatitis and inhibitors, "two most alarming complications of treatment".

Halfway down the page:

"Transfusion hepatitis is thought to be a virus infection transmitted to the recipient by the donor plasma. There is every reason to suppose that the virus is contained in the various protein fractions used to treat haemophilia and Christmas disease ..."

Then the next paragraph:

"The danger of infection can be calculated and will be related to the number of donors used to make the material used for treatment or the number of 'donor exposures'. If large pools of plasma are used to make therapeutic concentrated the theoretical danger of infection will be increased."

Then there's a rather more detailed discussion. If we go on to page 9, we can see, bottom of the page:

"The clinical value of free and early treatment of haemophilic patients in the saving of life and prevention of crippling is now well established. This treatment is known to carry two main hazards:

"(1) The transmission of infective hepatitis."

We won't deal with antibodies. If we just go further down the page, please, Soumik, there's a suggestion of patients being very resistant to clinical hepatitis:

"Hepatitis transmission must be related to the number of 'donor exposures' of the patients. This number will increase with the use of dried concentrates made from large pools of donors."

Then it goes on to talk about the advantages of concentrate treatment, and the view expressed at the end of that first paragraph:

"We feel the increased risk of clinical illness

is not so great as to overbalance the advantages of the use of concentrates."

SIR BRIAN LANGSTAFF: The sentence perhaps deserves highlighting, three lines down:

"The problem in recommending an increased manufacture of these lies in the possible increase in hepatitis and antibodies."

MS RICHARDS: Yes.

SIR BRIAN LANGSTAFF: So the link there appears to be, theoretically at any rate, between the size of the pool --

MS RICHARDS: Precisely.

SIR BRIAN LANGSTAFF: -- and the risk of hepatitis.

MS RICHARDS: Yes, exactly so. Actually, if we look at the very bottom of that same page:

"The incidence of jaundice in treated patients must increase with the number of donor exposures and the number of donor exposures must increase using concentrates derived from large pools. However, the greater reliability, ease of administration, and economy of manufacture are in favour of concentrated materials."

Then there is an aspiration that a method will be found to remove Australian antigen from concentrated materials.

So that's as early as 1971. If we then --

SIR BRIAN LANGSTAFF: Do you read in the last two sentences there a call, or at least a view which may be the same, that something ought to be done about inactivating the virus?

MS RICHARDS: In the last sentence, yes, absolutely.

SIR BRIAN LANGSTAFF: This is in 1970 ...

MS RICHARDS: 1971.

SIR BRIAN LANGSTAFF: Thank you. So this is at a stage when the NHS or the Lister Factor VIII is on-stream, although it's generally not the product of use; generally, cryoprecipitate is.

MS RICHARDS: Yes.

SIR BRIAN LANGSTAFF: It's before any commercial concentrate made from even larger pools is licensed.

MS RICHARDS: Yes, that's a little later on.

SIR BRIAN LANGSTAFF: That comes in 1973, I think --

MS RICHARDS: Yes.

SIR BRIAN LANGSTAFF: -- but first used in 1972. Yes, thank you.

MS RICHARDS: If we then look at OXUH0000499_002, we can see a letter dated 9 March 1977. This is from Dr Delamore to Dr Rizza at Oxford, and he's obviously been asked to return a list of suggested topics for study by working parties. He says:

"I have ticked the three that I personally feel are most worthy of study and have numbered them according to priority."

If we go over the next page, we can see that his number 1 priority for study by working parties of the haemophilia centre directors is the incidence of hepatitis in haemophilia.

If we go back to a document that we looked at this morning, earlier this morning, and look at part of it we didn't previously go to, it's PRSE0000421, please, Soumik. This is the 1978 seminar that we looked at for information about how Manchester reference centre operated. If we go to page 5, left-hand side, the second paragraph, this is still part of Dr Delamore's talk:

"Hepatitis is carried in blood products and Dr Delamore noted that very high percentage of patients being treated for haemophilia and Christmas disease are proving after all to be infected by one type of hepatitis or another."

This is 1978, so non-A, non-B hepatitis is known to be a distinct type of hepatitis from hepatitis B:

"A great deal more work in assessing the severity of hepatitis needs to be undertaken, possibly

to develop an immunisation against hepatitis or in developing ways of making blood products safer. Reference Centre Directors meet together two or three times a year to discuss these problems and reassess working parties ..."

Then it goes on to talk about the development of antibodies. So, again, one can see Dr Delamore clearly aware of and, it may be thought, concerned about infection with hepatitis, and the phrase, "a great deal more work in assessing the severity of hepatitis needs to be undertaken", might be said to reveal a view that it certainly could be serious. He's not dismissing it as something benign or harmless.

I'm not, sir, going to go to some of the papers that we looked at on multiple occasions: Professor Preston's 1978 paper, Dr Craske's 1979 working party reports. It can fairly be assumed that Dr Wensley and Dr Delamore, as Reference Centre Directors regularly attending these meetings, would have been aware of publications and discussions such as that.

If we go then to HCDO0000410, this is the Reference Centre Directors' meeting from 6 September 1982. We've looked at it on multiple

occasions for its early reference to AIDS, but if we go to page 10, this is in the context of a discussion of the work of the Hepatitis Working Party, we can see there Dr Wensley is recorded as saying:

"... it was important to point out that hepatitis B had not entirely disappeared; there had been two new cases of hepatitis B in Manchester during the current year."

Then, still in 1982, if we go to CBLA0001616, we can see here, under the heading "Current topics in Haemophilia", this is the programme for a scientific symposium to be held in Manchester on 14 September 1982, to be chaired by Professor Bloom.

If we go to session II, so if we go a little further down the page, "Hepatitis and Haemophilia", to be chaired by Professor Longson. And then three talks: The spectrum of Liver Disease in Haemophiliacs, from Dr Stevens; Non-A, Non-B Hepatitis, Professor Zuckerman; then The removal of Viral Contaminants from Coagulation Factor Concentrates by Dr Snape from BPL.

We have the text of Dr Stevens' paper -- well, of the whole symposium -- at DHSC0002221_003. We can see there:

"Department of Clinical Haematology, University

of Manchester.

"Current Topics in Haemophilia.

"Proceedings of the Symposium held in Manchester, UK, on September 14th, 1982.

"Edited by Dr Wensley."

If we go to the next page we'll see this was sponsored by Armour:

"We wish to thank Armour Pharmaceuticals for making a generous financial contribution towards the cost of the symposium and this publication."

If we go on two pages, this is just noteworthy for the foreword by Professor Bloom. He says this:

"These are exciting times in the haemophilia world."

Then he refers to:

"The Haemophilia Centre Directors of the UK meet annually to discuss relevant problems."

And then he talks about the 1980 symposium. We looked at that with Professor Lowe you, will recall, sir.

So Manchester was following similar lines.

"In addition to reviewing current knowledge all coagulation the Manchester Symposium concentrated on the hepatitis problem and the pathogenesis and treatment of inhibitors both of which constitute major

problem areas for the haemophiliac. These are timely presentations because hope has been engendered by the development of hepatitis-reduced concentrates and for the induction of immune tolerance to Factor VIII for these therapeutic modalities still need very careful assessment."

Then if we go to the last paragraph:

"The organisers of the Symposium are to be congratulated [et cetera, et cetera] ... much remains to be learned the knowledge imparted in this Symposium sets us on a course that will at least alleviate, if not yet cure the depressive component of our psychiatric syndrome."

That's a reference to the first paragraph of this form which talks about those who care for haemophiliacs experiencing both highs and lows effectively, and then this:

"Unfortunately, true to form, new hazards are appearing on the horizon including the acquired immune deficiency syndrome. The impact of these will no doubt feature in our next Symposium."

So that's Professor Bloom's observations.

If we then go to -- try page 40, Soumik. Two pages further on, thank you. Oh no, one page back, my apologies.

So, this is the text of the paper delivered by Dr Stevens, which eventually translates to the publication that we've seen referred to before in 1983, entitled "Liver Disease in Haemophiliacs: An Overstated Problem?", and you will recall Professor Hay then talked about the response to that in his 1985 publication.

But instructive to see here what Dr Stevens was saying:

"As a result of relatively recent developments in plasma collection and fractionation, many haemophiliacs now receive potent, easily re-constituted convenient blood products which have resulted in an improved lifestyle for the severe haemophiliac. But at what price?

"Over the past decade clinicians have become increasingly aware of clinical, sub-clinical and laboratory abnormalities in multi-transfused haemophiliacs suggestive of hepatocellular damage, and there is increasing evidence that such damage is the result of viral infection, particularly non-A, non-B hepatitis."

Then he says:

"The problems associated with liver dysfunction in the haemophiliac can be considered under the

following headings.

"1. Clinical stigmata of liver disease in haemophiliacs.

"2. Abnormal liver function tests ...

"3. Liver histology ...

"4. Therapeutic approach to liver dysfunction in haemophiliacs."

If we go down the bottom of the page, there's a discussion under this heading about jaundice.

Bottom of the page:

"... Non-A, non-B hepatitis is becoming increasingly implicated, although the majority of cases are non-icteric."

If we go over the page, just a bit further down, thank you. So, picking it up in the paragraph:

"Direct questioning will not infrequently reveal symptoms compatible with a viral hepatitis like illness but such symptoms are not usually volunteered by haemophiliacs and the suggestion that they may possibly have some degree of liver dysfunction usually comes as a surprise to the patient."

So, as it were, a problem of under-reporting:

"Although most clinicians have seen or have heard about isolated haemophiliacs with severe liver disease associated with other clinical features, such

cases are very infrequent, and in general terms the symptoms and signs of significant liver disease are found relatively infrequently in haemophiliacs."

So not found but he's saying there "relatively infrequently":

"I am glad to say that the number of deaths due to liver disease so far reported in the UK remains very small."

There's then a discussion about abnormal liver function tests.

If we go over two pages, please, Soumik. We can see under the heading "Liver histology and Haemophiliacs", he refers to:

"... various haemophilia centres undertaking programmes of routine liver biopsy. The rationale for such an invasive procedure in patients who were in the main asymptomatic and have a haemostatic defect was primarily the differentiation of chronic persistent hepatitis from chronic active hepatitis and cirrhosis which may benefit from specific treatment, and which may also place a new prognosis on the life expectancy of the haemophiliac.

"The following table reviews some of the initial results."

If we go to the top of the next page, there's

a review of various reports of liver biopsies and you'll see the first six cases, number with chronic active hepatitis/cirrhosis 3, so 50 per cent; the second, again an American study, 13 cases, five with chronic active hepatitis/cirrhosis, so 38 per cent; Mannucci (Milan), number of cases 11, number of chronic active hepatitis/cirrhosis 6, so 55 per cent; and then we have Professor Preston's Sheffield work; and then a reference to work by Professor Schimpf in Heidelberg, 32 cases, 10 with chronic active hepatitis/cirrhosis, 31 per cent.

It goes on to say:

"It can be seen that early reports suggested that up to 50 per cent of multi-transfused haemophiliacs have significant histological liver disease, either with chronic active hepatitis or cirrhosis, although histological interpretation may account for some variation in these exact figures."

He then refers to the Heidelberg survey, reporting the results of repeated liver biopsies and saying in those cases there proved to be no significant deterioration.

"We in Manchester have recently successfully carried out liver biopsies on twelve haemophiliacs, all of whom were multi-transfused and had persistently

abnormal transaminase levels."

Then you will see there, of those twelve, one had chronic active hepatitis and cirrhosis, and four showing signs of very mild chronic active hepatitis, and then others, one with chronic lobular, one with chronic persistent hepatitis.

"In our survey [he says] ... only one patient had chronic active hepatitis and cirrhosis, although four other cases were considered to have very mild chronic active hepatitis."

If we then go over to the next page, we can see, if we just zoom in on the top half of the page, it says:

"On the basis of this Manchester trial and the results of this recent world-wide collaborative study, I would like to suggest the following conclusions ..."

The first is that:

"... long-term use of small donor pool products ... may carry as much risk of transmitting non A, non B hepatitis as that of large donor pool concentrates."

So I leave that to one side because we are really concerned here of the seriousness of non-A, non-B, and then:

"ii) ... the frequency with which

therapeutically useful information is obtained from liver histology in haemophiliacs is limited and may not justify the risk of this procedure."

So a significant part of Dr Stevens' message is: we don't get enough useful information to justify biopsies in haemophiliacs.

He then goes on under the heading "Therapeutic approach to liver disease in haemophiliacs" to say this:

"At this time we do not know how much of a problem liver disease represents itself in haemophilia. We do know that despite the exclusion of hepatitis B to a large degree, the dangers of viral disease transmission, presumably non-A, non-B, associated with intensive transfusion are far from over, and that even small donor pool cryoprecipitate may not be exempt from this problem. Although as yet, mortality and the advances clinical sequelae of liver disease in haemophiliacs are thankfully rare, the potential risks remain, and all multi-transfused haemophiliacs must be followed closely for any clinical or laboratory evidence of hepatic deterioration."

Then he goes on to suggest that it's debatable as to whether that should include liver biopsy.

Next page, last paragraph:

"The prospect of a new 'clean' replacement product either of human origin or from genetic engineering leave hope for the future but at the present time it appears that the clinical risks associated with replacement therapy may be overstated and are certainly outweighed by the need to treat the haemophiliac by the rapid replacement of his deficient clotting factor."

Sir, one question that you may wish to consider in due course is whether that suggestion that the clinical risks may be overstated and that leads then to the title of the published article, of which I think Dr Wensley was a co-author, is actually consistent with the text of what's set out in the body of the paper and the findings from other biopsy studies.

SIR BRIAN LANGSTAFF: Well, it's -- if taken out of context at any rate, it's difficult to understand how that fits with something in the region of 50 per cent of people who've been treated for ten years in an infection which, the assumption of the paper is, it is associated with the replacement therapy, can be described as overstated, unless one knows what particular statements he's referring to.

MS RICHARDS: Quite.
SIR BRIAN LANGSTAFF: But if it's possibly a slow process, possibly ten years since -- one of the interesting things that goes through my mind as you were speaking is the earlier report showing that the cohorts of those treated by cryoprecipitate in 1971, presumably for a few years because cryoprecipitate wouldn't have been available until '65/66, showed no particular evidence of an incidence of hepatitis over and above that of the usual population.

Here, it's assumed that there certainly is an association, and so we start off with the basis that having concentrate can cause, and does cause, a hepatitis and the hepatitis in 50 per cent of the cases where there's been a biopsy (query, why the case is selected for study) are chronic active hepatitis as is understood at the time.
MS RICHARDS: Yes.
SIR BRIAN LANGSTAFF: And, in a few cases, cirrhosis. Yes, taken out of context, this is not an easy paragraph to understand.
MS RICHARDS: It's not and, of course, it then translates into the publication which we see at PRSE0002564. We just zoom in on the top half of the page:

"Liver disease in haemophiliacs: an overstated

problem?" co-authored by Dr Stevens, who was Manchester Children's Hospital, but then we will see a number of other names there, including Dr Wensley and Dr Delamore of the Haemophilia Centre at the Royal Infirmary. We've looked at the text of this previously. It's broadly consistent with the underlying paper that we've just looked at that was presented at the symposium.
SIR BRIAN LANGSTAFF: Yes.
MS RICHARDS: Sir, I'm just going to move on to the question of knowledge of HIV. I note the time. Shall we pick that up at 2.00?
SIR BRIAN LANGSTAFF: Yes, let's do that.
(12.58 pm)

(Luncheon Adjournment)

(2.01 pm)
SIR BRIAN LANGSTAFF: Yes.
MS RICHARDS: Sir, turning to knowledge of risk of AIDS, there is little contemporaneous documentation, I think probably no contemporaneous documentation, to tell us about Dr Delamore's and Dr Wensley actual own views of the risks of AIDS transmission in the years prior to 1985, but we know that they attended key meetings. So they attended the Reference Centre Director meetings, Dr Wensley was present at 6 September 1982 Reference

Centre Director meeting. He was present at the 14 February 1983 Reference Centre Director meeting when Dr Craske made a much more detailed presentation of the information he had gathered, and we've looked at versions of Dr Craske's reports. Dr Wensley attended 24 January 1983 meeting with Immuno at the London airport hotel. So he can be taken to have been aware of the reports from MMWR, the reports of the San Francisco baby and the other transfusion cases by that time, if not earlier.

In terms of local meetings, there's very little, as in local to the Manchester region, from 1983 or 1984. We looked this morning at the February 1983 meeting, which was regarding supplies and shortages and distribution arrangements, where there was a passing reference, you will recall at the end of the meeting, to AIDS and no specific action to be taken at present.

There's no evidence to show any particular change in treatment policy in response to the risk of AIDS thereafter, until we get to heat treatment in 1985, other than that reference in the abstract that we looked at before lunch to the use of Hyate:C for surgery in individual cases.

We know Dr Delamore attended the special

Reference Centre Directors' meeting in May 1983, which resulted in the June 1983 letter sent out to Haemophilia Centre Directors. He also attended the October 1983 Haemophilia Centre Directors' meeting, that's the one in which Dr Chisholm made her suggestion about the reversion to cryoprecipitate. There's no record of him expressing any particular views at those meetings, and Dr Delamore and Dr Gunson attended the 10 December 1984 Elstree Reference Centre Directors' meeting.

So there's no doubt that between them, Dr Wensley and Dr Delamore were involved at the highest level of UKHCDO Reference Centre consideration and decision-making in the course of 1982 through to 1984.

There is a letter at BAYP0000027_074 from November 1983, from a Cutter representative. The date is 23 November. It's addressed to Dr Wensley. It's from a sales manager, and he refers to a meeting:

"... I am writing to confirm the pricing details we discussed and to provide further information on the various Koate batches. I also enclose a copy of the May edition of ECHO magazine which was devoted entirely to AIDS. You will see that it contains a complete list of all the Plasma Donor

Centres from which our plasma is sourced and you will note that there are no centres in San Francisco or New York."

So there in November 1983 is a pharmaceutical representative, it would seem, trying to persuade Dr Wensley that in terms of the risk of transmission of AIDS, the Koate should be regarded as being safe.

We do have in Dr Gunson's litigation statement, Dr Gunson's own account of his developing knowledge of AIDS and, of course, he worked closely with Dr Wensley at the Regional Transfusion Centre. If we go back to his statement, it's NHBT0020196_001. It's -- forgive me for a moment, Soumik. Try page 18. That's it.

So you'll see the way in which Dr Gunson puts it at various points of his commentary on the plaintiff's Statement of Claim in the litigation. So here he says:

"During 1982 it was not, in my view, proven conclusively that Factor VIII concentrates were the cause of AIDS contracted by haemophiliacs."

Then he quotes a later presentation by Dr Peter Jones. So the terminology there "proven conclusively" obviously raises the question of whether that was the right question to ask.

Just further down from that paragraph, he says:

"The first case of transfusion-associated AIDS was reported in 1983 in an infant transfused in December 1982 and this will be referred to later in the statement."

So that is the San Francisco baby case.

SIR BRIAN LANGSTAFF: Just if you go back a moment to -- that's it -- the reference there to what Peter Jones had to say refers to the MMWR, which is written by the Center for Disease Control, reporting the infections in three men with haemophilia. It says:

"... the possibility of a viral aetiology was thought less likely than an immune response to the constant barrage of extraneous denatured protein involved in treatment."

That's not actually, is it -- or have I got this wrong -- what the MMWR actually said?

MS RICHARDS: No. I'd read that as him saying that's what Dr Jones was saying.

SIR BRIAN LANGSTAFF: But it appears to be a quote which attributes it, or could be read as attributing it, to the Center for Disease Control, because they seem to be, my understanding, quite clear that they thought it was more likely to be viral?

MS RICHARDS: Yes.

SIR BRIAN LANGSTAFF: Yes.

MS RICHARDS: We'll check what we have from Dr Jones in terms of what Dr Jones was saying and where this quote is taken from before we do the presentation on Newcastle and Dr Jones in a couple of weeks' time, sir.

SIR BRIAN LANGSTAFF: Please.

MS RICHARDS: If we go to the next page, Soumik, the second half of the page, again we see the language of proof:

"During 1982, the correlation between the transfusion of blood and blood products was not proven, nor was it known at that time that a virus caused AIDS, although investigations were being undertaken in this regard."

Then he says this:

"The first proven case of transfusion-transmitted AIDS was reported in 1983 in an infant given a transfusion of blood and blood products in December 1982."

SIR BRIAN LANGSTAFF: It was actually reported on 10 December 1982.

MS RICHARDS: It was in the MMWR.

SIR BRIAN LANGSTAFF: But not until -- 1983 is obviously a reference, I think, to The Lancet --

MS RICHARDS: Yes, in April of 1983. But of course it was

discussed at a sequence of meetings in early 1983. I can't recall without checking whether Dr Gunson was present at those but, certainly, either Dr Wensley or Dr Delamore was, including Dr Wensley at the Immuno meeting on 24 January.

Then he refers to the leaflet, the regional transfusion director leaflet. Now, of course, we've looked at that at earlier stages of the Inquiry hearings. That's the leaflet prepared in the middle of 1983, which would advise donors, in answer to the question about the transmission of AIDS, in terms of the association does blood cause AIDS, blood transfusion caused AIDS, or is it transmitted by blood, almost certainly yes was the answer in that leaflet in the middle of 1983. Given Dr Wensley's close involvement with the Regional Blood Transfusion Service, it may be that you may wish to infer that he would have known about the production of that leaflet and its contents.

SIR BRIAN LANGSTAFF: I know this may not be part of your presentation at the moment, but Dr Gunson was concerned with the blood service, so too, for most of his time, certainly at that stage, was Dr Wensley. One would have thought that the Blood Transfusion Service in the UK would have kept a very close eye and

contact with other organisations in significant countries abroad, such as the United States and the American Association of Blood Banks, for instance.

If that's right, then there was a source of knowledge, or at least a view, opinion there because I think it was in December 1982 that the American Association of Blood Banks was actually advising its members that it was most likely to be a virus.

MS RICHARDS: Yes, I'd have to check the dates, sir --

SIR BRIAN LANGSTAFF: I have a note of this. It's a note which comes from the Krever report. It may be a secondary source but he reported that the Chair of the American Association of Blood Banks Committee on transfusion-transmitted diseases wrote to its members emphasising the threat of AIDS in the blood supply and he wrote:

"My current best guess is that we are dealing with an infectious agent able to be spread by blood and blood products and individuals who receive large quantities of factor concentrate are at an increased risk."

So if that was a view expressed in a blood transfusion organisation, not a voluntary donor in the same sense as the UK position, but one might have thought it would have crossed the Atlantic.

"... reading scientific literature, by attending meetings, by talking to experts and being a member also of the DHSS Expert Advisory Group on AIDS [although, of course, that wasn't set up until later]. We had staff meetings within the RTC. I held seminars and teaching sessions for the scientific and other non-medical staff, particularly those working on the blood collection teams ..."

Then he says this:

"I first suspected the link between haemophiliacs and AIDS during 1982 [we'll just go down the page], when there were instances of haemophiliacs contracting immune deficiency. However, it was not known at that time that AIDS was caused by a virus and when this was established, it was thought initially that the AIDS virus was not so virulent in haemophiliacs and only 1 per cent of those who had HIV seroconverted would develop AIDS. This, of course, has now been found to be entirely wrong. There were times, until the proof that AIDS was a viral infection and that it could be transmitted by blood products [go to the next page], that I doubted the link with haemophiliacs; other colleagues also had these doubts."

He doesn't identify who those colleagues are:

MS RICHARDS: Yes. We'll be looking, obviously, in more detail at the role of the blood services and what was and wasn't known and what was and wasn't done at hearings later in the course of this year.

SIR BRIAN LANGSTAFF: Yes.

MS RICHARDS: Soumik, could we go, I think it's eight pages further on. That's it, bottom half of the page. So this is Dr Gunson continued. He says:

"I first became aware of the emergence of HIV/AIDS from the information in the scientific literature from the USA.

"The first reports were of the finding of Kaposi's sarcoma in homosexuals. No-one knew what the implications were at that time for the BTS. As the reports began to accumulate, it was clear that the immune deficiency related to this disease was a major problem. The medical staff in the RTC discussed each new development as any department would discuss such major developments in another field. In 1983 [he doesn't say when in 1983, but in 1983], as soon as we knew that this virus was transmissible by blood products, we were aware that the disease would have a major impact on the work of the Blood Transfusion Service."

Then he says he kept himself informed by:

"Before the emergence of its cause by a transmissible virus, other theories were put forward for the origin of AIDS in homosexuals, eg pep pills, nitrates, et cetera. Until proof was available that [so that word again] that blood transfusion could be a cause of AIDS, it was difficult to take specific action within the BTS. From that time, I held no doubts concerning the significance of blood transfusion in relation to AIDS and acted accordingly.

"Any literature which I published on this subject has been on the testing of blood donations and safety of the blood supply.

"I am sure I was aware of the articles in the Lancet on 15, 22 and 29 January 1983, since I made a point of keeping up to date with the literature on this subject."

That's what we have from Dr Gunson on his knowledge and we know, of course, that there were regular communications and interactions between him and Dr Wensley, given that they were both working within the same Regional Transfusion Service and, indeed, were both jointly involved in arrangements for the obtaining of and then the distribution of and use of blood products.

Other than that, as I say, the question of what

was known as a matter of fact and believed by Dr Wensley and Dr Delamore is going to be a matter of inference for you, sir, from the available material in both the literature and the various meetings which they both attended.

SIR BRIAN LANGSTAFF: Yes. Does Dr Gunson at any stage in that document, where he talks quite a bit about the knowledge that it was -- that is, a virus was the cause of AIDS, did he ever talk about the risk that it might be?

MS RICHARDS: No. Well, he talks about suspecting the link.

SIR BRIAN LANGSTAFF: Yes.

MS RICHARDS: But then elsewhere his language is couched in terms of what was known, in other words, known that things were as a matter of fact and what was proven. So the language that we see, for example, used by Dr Spence Galbraith in his May 1983 communication to the Department of Health, where he's talking about "likelihood" and "may" and then the need to act essentially on a precautionary basis, we don't see an echo of that here, no.

SIR BRIAN LANGSTAFF: What's made me ask that is by reference in particular to the views expressed by Dr Bevan yesterday, where he was critical, from his

perspective, of a view that looked for certainty and proof.

MS RICHARDS: Yes.

If we then look at NHBT0096599_043, and we go to the second page, we can see these are minutes of the North Western Supra-Regional haemophilia Meeting held on 7 May 1985 at the Regional Transfusion Centre in Manchester. We can see attendance, amongst others, from Dr Delamore, Dr Wensley, Dr Stevens. We've got Dr McVerry, for example, from Liverpool, we've got Dr Gunson, Dr Craske, Dr Lee from Lancaster, and so on.

You'll note, if we just go further down the page, please, Soumik, where it says "Minutes of last meeting":

"The last meeting had been held in 1980 and minutes for this were not available."

So it would appearing that on a North Western Supra-Regional basis there had been no equivalent meeting for five years, notwithstanding, of course, all that was happening in that intervening five-year period.

There is a discussion -- if we look at the second page, under the heading "AIDS cases", there's a discussion there. Dr Craske reports from the

Atlanta meeting, talks about three groups of HTLV-III positive patients, and then asks to be informed if anyone falls into those categories or to notify Oxford, and counselling of patients is then discussed.

Also around the time of mid-1985 if we go to SHTM0000711, if we just zoom a little closer to that, so this is The Daily Telegraph, 31 July 1985, "AIDS alert as 400 get suspect blood":

"Four hundred haemophiliacs in North-West England are to be screened for AIDS after fears they could have contracted the disease by being given contaminated blood imported from America."

I will come on to the timing of the testing of the patients at the haemophilia centre in a few minutes:

"A North-West Regional Health Authority spokesman said that the tests have been ordered as a precaution. But Dr Richard Wensley, Director of Haemophilia at Manchester Royal Infirmary, believes that on statistical evidence two people may have contracted the disease."

The basis for that view being expressed by Dr Wensley, if this is an accurate newspaper report of his belief, is unclear, either from this or from any other contemporaneous material.

SIR BRIAN LANGSTAFF: The date of that, you say, is 31 July '85?

MS RICHARDS: Yes. So it's -- it may not be an accurate report, of course, but it's not clear what the basis for it is or what the reference to the statistical evidence.

SIR BRIAN LANGSTAFF: And why it was current at that date.

MS RICHARDS: Yes. Well, the issue was triggered by, I think, the arrival of the test kits. If we actually, sorry, just go back to the document we were looking at previously, NHBT0096599_043 -- NHBT0096599_043 -- and if we go to the second page, so this is the 7 May minutes from '85 we were looking at a moment ago, the North West Supra-Regional Haemophilia meeting.

If we go to the third page, there was one paragraph I skated over. So, under the heading "AIDS cases", it's the last paragraph of that section:

"As one of the 6 Reference centres to have a kit for testing for HTLV-III antibody, tests in Manchester should be available by mid-June."

So it appears that there were going to be tests available actually to the haemophilia centre rather than necessarily having to send things off to Dr Tedder or elsewhere. It's not quite clear why --

you'll see in a few minutes, when we get to the question of testing, the precise time-frame over which tests were undertaken on the patients most likely to be at risk remains unclear. But it may be that this is what triggers the newspaper article which is referring to tests having been ordered.

SIR BRIAN LANGSTAFF: It's particularly surprising because at this stage the big debate, I had thought, was about the testing -- the screening of blood supply for the presence of the virus and, at this stage, you showed us earlier in your presentation, in respect of Cardiff, how Professor Bloom was writing in mid-83 to say -- mid-85, I mean, to encourage the authorities to get a move on.

MS RICHARDS: Yes. It's puzzling because these minutes don't -- they don't seem to be referring to the availability of test kits for the Regional Transfusion Centres. They are talking about the availability of test kits for the reference centres, for the testing of haemophilia patients, and perhaps the intention is because -- this is pure speculation, I should add -- Manchester obviously was a very large haemophilia centre, to enable testing of everybody or testing on a repeat and ongoing basis, initial tests having perhaps already been undertaken. But it's not clear

and it is slightly puzzling.

SIR BRIAN LANGSTAFF: Unless, I suppose, there was some system of checking to make sure that the heat-treated product actually worked.

MS RICHARDS: That's possible.

SIR BRIAN LANGSTAFF: But we have no other sign of that, have we?

MS RICHARDS: No. There is a reference somewhere in the documents, and in the documents relating to Manchester, to an -- where patients had tested negative, to undertake repeat testing.

SIR BRIAN LANGSTAFF: Yes.

MS RICHARDS: So it may be that these were tests that were intended to be utilised for that purpose or for the purpose of offering tests to relatives, partners and spouses. But it's not clear and the position is muddied rather than clarified by the report in the newspaper of what Dr Wensley is said to believe.

SIR BRIAN LANGSTAFF: And also by the fact that the report is very nearly three months after the meeting.

MS RICHARDS: Yes.

SIR BRIAN LANGSTAFF: But -- anyway.

MS RICHARDS: The only thing we have really authored by Dr Wensley directly is a slightly later letter, from 1987, which is at MACK0000589.

He's writing to a firm of solicitors in Edinburgh on 15 July 1987 about a haemophiliac client who had contracted AIDS allegedly as a result of treatment at Edinburgh Royal Infirmary, and he says this:

"Perhaps I can reply in general terms about the current situation with regards to the AIDS virus and the haemophiliac ..."

Then he sets out general background:

"... (AIDS) was first described ... in 1981 ... in US haemophiliacs in 1982; cases appearing in UK haemophiliacs since 1983."

Then he identifies the high-risk groups. Then he says this:

"In the UK, in 1983, in an attempt to reduce the risks to recipients of blood and blood products, donors whowere in the above categories were requested to stop donating their blood."

So that's the leaflet from mid-1983 produced by the Transfusion Service.

"It had been realised that blood products ..."

So it "had been realised", past tense:

"... that blood products such as Factor VIII freeze-dried concentrates probably carried more risk of containing the suspected infectious agent

(especially if they were imported from the USA) than single donation products such as cryoprecipitate or frozen plasma. However, the latter products are more appropriate for the mildly affected haemophiliac and are, in general, unsuitable for self-administration by the severely affected haemophiliac."

It may be that -- couched as it is in those terms, it may suggest that Dr Wensley had not reverted to cryoprecipitate for severely infected haemophiliacs, although that's a matter of inference rather than what's set out in terms.

Then he goes on to talk about the further investigations that might be required in relation to the individual patient, but that's -- it would appear that he's saying there that it had been realised in 1983 or by 1983 that blood products probably carried more risk than single donor products.

SIR BRIAN LANGSTAFF: Yes.

MS RICHARDS: There's then a document -- just excuse me a moment while I find the reference. WITN4715002. Go to the second page.

This is on a slightly different topic but it may assist in when you consider what response could or should have been made to the AIDS crisis.

So this is Dr Wensley writing in June of 1988,

and if -- he's talking about a problem in which the world supply of Factor VIII has "dried up", so there's a shortage of Factor VIII.

If we go further down the page, please, Soumik, he says this:

"How will we, in the North West, weather the crisis?"

Then he talks about the hope that in the North West they will be self-sufficient, and then he says this:

"We hope that we will have enough freeze-dried Factor VIII available to continue home treatment in 1988 for all patients who treat themselves, but a temporary reversion to cryoprecipitate use for certain home treatment patients has to be considered a possibility. A handful of non-emergency operations may have to be postponed and carried over to 1989."

So you'll see, sir, that in 1988, in response to a worldwide shortage of Factor VIII, Dr Wensley's contemplating a temporary reversion to cryoprecipitate for home treatment and the deferral of non-emergency operations. That may give rise to the question that, if that's a step that can be taken in response to shortage in 1988, are those steps that could have been taken in response to a real risk of infection in the

earlier part of the 1980s?

We should say we've seen no positive evidence at least, and no evidence from patients or their families who provided statements to the Inquiry, that there were offers to revert to cryoprecipitate in the first part of the 1980s in response to AIDS or the developing risk of AIDS.

In terms of what information was or was not provided to patients about the risks of hepatitis and/or HIV/AIDS, the thrust of the evidence which the Inquiry has received in both written and oral form from patients and their families is to the effect that they were not informed of risks of infection before being treated. We've given a handful of examples in the written note but you, sir, are, I know, reading and considering each and every statement that the Inquiry receives.

There is -- if we look at NHBT0016480, this is "Regional Transfusion Directors' Meeting" of January of 1976 and, insofar as Manchester is concerned, I think it's Dr Stratton who was the regional transfusion director at that time rather than Dr Gunson, who was still at Oxford, and Dr Stratton was in attendance.

If we go to page 7, please, Soumik.

It's just interesting to note it said, under the heading, "Provision of plasma", bottom part of the page:

"The situation in certain RTCs was ..."

Then if we go to Manchester:

"Fewer requests received for 'Hemofil' since 'World in Action' TV programme."

It's the very last line of the page. It's one of very few contemporaneous references in any of the minutes or other documents that we've seen to the World in Action programme. Whether that's fewer requests from patients, who are concerned and worried having seen it, or it represents views of clinicians is unclear. It's being reported to this meeting by the regional transfusion director.

There is -- if we move forward a number of years to December of 1984, there is one document which suggests information being provided to patients or to a patient about the risk of hepatitis. That's at WITN3543002. Go to the second page.

You can see the left-hand side of the letter is slightly cut off so we don't get the complete sense of it but it's 27 December 1984, and it's from the haemophilia centre in Manchester to a patient:

"You are probably aware that treatment of your

Haemophilia A Carrier state ... should you require surgery or meet with an accident, can carry a risk of giving you jaundice (technical name hepatitis). Several different viruses can cause this complication of treatment but hepatitis B and hepatitis non-A, non-B are the main types in haemophiliacs.

"Hepatitis group of diseases usually takes the form of a short or [I don't know what that word was going to be] long-lasting, unpleasant, but very seldom fatal, episode ..."

So that's the acute stage.

"These symptoms usually pass off completely in a few weeks ... and normal health is regained."

Then it says:

"One important feature of hepatitis is that in a proportion of cases it ..."

Probably the word "can" is missing --

SIR BRIAN LANGSTAFF: Or "may".

MS RICHARDS: -- or "may".

"... go on to a chronic disease of the liver which may lead to symptoms in ..."

And perhaps the word that is missing is "later". And then there's a reference to eradication of hepatitis B and to immunisation with the hepatitis B vaccine.

Whether that was sent more generally or whether this was a one-off, we don't know but we haven't, currently at least, found any trace of any earlier equivalent letter identifying the risk of chronic disease of the liver of as a result of treatment. We've certainly found no written material until we get to 1985 and the letter we're about to turn to warning of the risks of AIDS.

So the letter that we have from 1985, from Dr Wensley, is at PMOS0000083, so this is a letter dated 4 January 1985, and the circulation is "All Adult Haemophiliacs". So it looks like it's a standard letter that was being sent to all patients at the centre:

"You will probably have learnt from television, radio and the newspapers, or from the Haemophilia Society, that cases of ... (AIDS) have occurred in Britain and that two haemophiliacs have died of the disease. In view of the anxiety that these reports can cause, may we bring some facts to your attention.

"Knowledge of the cause of AIDS has advanced rapidly. It is due to a virus called HTLV-III ... Recently it has been shown that many haemophiliacs have been exposed to the virus as a result of receiving large donor pool clotting concentrates. If

the virus behaves in the same way in haemophiliacs as in homosexuals or drug addicts, it is expected that most haemophiliacs exposed to the virus will remain well and will eventually become immune to it, a few may develop an illness with fever and gland swellings which will go away as they become immune, and a very few may develop AIDS. Until the right tests are available, it is probably best to assume that you could be carrying the HTLV-III virus."

Then there is a paragraph on the sexual transmission, and then if we go down the page, it said, rather over-optimistically this:

"The longer term outlook for haemophiliacs as far as AIDS is concerned is encouraging. The virus is quite sensitive to heat and plans are in hand to introduce heat-treated clotting factors in the near future in the North-West region."

There was then an aspiration for there to be an HTLV-III vaccine and synthetic factor concentrates. Then it said:

"If you ... have any queries ... do not hesitate to Mrs Redding or either of us requesting a further discussion."

The reference to "either of us", I anticipate, is to Dr Delamore or Dr Wensley whose names are given

at the top of the page and it's a letter from Dr Wensley.

So that's the first document that we found which is a document sent to patients dealing with the risks of AIDS and, of course, it's January 1985.

Then if we look at NHBT0085185_001, this is a further communication from Dr Wensley to a patient. This appears to be to one specific patient who has written to the Regional Health Authority, rather than a general letter for all patients. It says:

"... I have been asked to reply to a letter that you sent to the North West Regional Health Authority on 17 January 1985."

Then he says this, and the date of the letter is 6 March 1985:

"It is true that Haemophilia A patients in this Region will only receive Heat-Treated Factor VIII concentrates from this time onwards."

It's not entirely clear whether "this time" is 17 January or the "this time" is 6 March:

"In replying to your second question, you can be sure that the Heat-Treated Factor VIII that you will be issued with for your home treatment will be free of the risk of conveying the HTLV-III (AIDS associated) virus."

SIR BRIAN LANGSTAFF: Just in answer to your wondering whether it related to 17 January or 6 March, unless I'm persuaded otherwise, I think the natural inference is from 6 March, and the reason for that is that the second paragraph is expressed in the future tense --

MS RICHARDS: Yes.

SIR BRIAN LANGSTAFF: -- "will only receive ... from this time onwards", not have only received from the 17 January. This is, after all, six weeks or so later.

MS RICHARDS: I agree, sir. It is the natural inference from the language used.

SIR BRIAN LANGSTAFF: So, unless there is some other reason to think that this is an early draft which is simply being rolled at again casually, something of that sort, that's how I will read it.

MS RICHARDS: If we look at the third paragraph, you can see an assurance being given that the heat-treated Factor VIII that you will be issued with will be free of the risk of conveying HTLV-III virus but, of course, we know that in both January and March of 1985 the centre took delivery of non-heat-treated NHS factor, though it may be that wasn't being given out for home treatment, but, nonetheless, it was presumably received with the intention of being used,

whether in hospital or at home. So there may be a question as to whether that was an assurance that could actually be given.

SIR BRIAN LANGSTAFF: Well, it also assumes that the none of the commercial heat-treated factor concentrate will carry even a small risk --

MS RICHARDS: Yes, it does.

SIR BRIAN LANGSTAFF: -- of carrying AIDS, something, which at least in the case of one manufacturer, prove illusory.

MS RICHARDS: Yes, sir, that is absolutely right. It is expressed in categorical terms: "will be free of the risk".

Then if we look then, and we're still in early 1985, at a letter from Dr Wensley to the Department of Health, DHSC0003830_020, we can see it's dated 1 February 1985 and Dr Wensley is saying this:

"As a haemophilia Director with a large haemophilia practice at Manchester Royal Infirmary, I would like clarification of the measures required for dealing with the blood samples of patients with haemophilia.

"My two questions, specifically are ..."

It's the first that's of relevance for our purposes:

"In the absence of results of anti-HTLV-III tests being available, should I assume that each of my haemophiliacs comes into the categories described ... [and it's referring there to a particular piece of guidance] 'patients in whom AIDS or PGL is suspected or has been diagnosed'?"

So that would suggest, and again it's consistent with other material, I think, that we've seen, that as of this point in time we don't know for certain whether some tests have been carried out but certainly it would suggest that the majority of patients in Manchester Royal Infirmary had not yet been tested for HTLV-III, which is obviously somewhat later than we've seen for some of the other centres.

The department's response is to say to assume that potential infectivity.

In terms then of trying to pin down when HTLV-III testing was undertaken, there are a couple of letters to individual patients. The first in time that we've identified so far is WITN3543003. Go to the second page. Again, unfortunately, the left-hand side of the letter's cut off. It's dated 22 May 1983 but it appears to be making an offer of AIDS virus antibody testing to all patients with bleeding disorders who have been treated with plasma, and then

there's words missing, and the concentrated clotting factor since 1980, and there's a recommendation that the patient call the Haematology Department to make an appointment.

There's a letter from September 1985 which is at DHSC --

SIR BRIAN LANGSTAFF: I think, just for the transcript, you said that was dated 22 May 1983, it is 1985.

MS RICHARDS: I'm sorry, yes, it is 1985. Then if we go to DHSC0013118, this is a letter dated 2 September 1985:

"We are now able to offer AIDS virus antibody testing (anti-HTLV-III) to all patients with bleeding disorders who have been treated with plasma, cryoprecipitate or concentrated clotting factor since 1980."

So this appears to be the full text but a later letter:

"I would strongly recommend that we test your blood and suggest you call at the Clinical Haematology department any day Monday to Friday between 9 am and 4.30 pm or by arrangement on a Saturday morning."

That certainly shows that as late as September 1985 testing still appears to have been being offered for the first time to some patients. It

may be that testing had already been undertaken for some of the patients earlier in the year but we've not been able to get to the bottom of that.

We have been sent, and I'm grateful for it, extracts from, for example, UKHCDO records relating to various patients at Manchester, which provide some earlier dates for samples, but whether that shows, for example, testing at the beginning of 1985, or whether it shows testing on stored samples later on is unclear. There's certainly at least one reference to a first positive date from much earlier on in the 1980s, which would suggest that some testing on stored samples was undertaken. But it's not possible to be clear about that at this stage, nor do we know whether there was any form of pre-test counselling or whether there was testing undertaken without knowledge and consent. This obviously is an invitation to some patients to come and be tested with their knowledge but there is at least some evidence that the Inquiry has received from individuals who say that they were tested without their knowledge. So the picture is a mixed and somewhat confusing one at present.

SIR BRIAN LANGSTAFF: Who was the addressee of the letter, this letter, as far as we know? I'm not asking you to say anything about what is confidential on the copy

but, in general terms, in terms of category, because I can understand perhaps why it may be that those who suffered from serious haemophilia A and attended regularly or were on home treatment and came in every one or two months to get a fresh supply, why they might have been tested, and if this letter had been intended to go to everyone there might have been others who may have had factor concentrate or plasma or cryoprecipitate at some stage in the previous five years. So it may be that this is designed to hoover up the less seriously affected.

MS RICHARDS: It may well be, sir.

I have a version of this document which shows me the name but I don't know, without undertaking further research, what category of patient that person was.

SIR BRIAN LANGSTAFF: If it is a round robin letter there will be other examples.

MS RICHARDS: Yes.

SIR BRIAN LANGSTAFF: But, again, it's a pity that we don't have anybody here to give the explanation or any document that provides it.

MS RICHARDS: Yes, unfortunately we don't.

In terms of patients being given their results, again the evidence shows a mixed picture.

So if we go to WITN2117003, we can see this is a letter dated 1 July 1985. If we just see the whole letter. Just go slightly down. It's from Dr Wensley.

"This patient with haemophilia A who gives his own treatment ..."

So presumably on home treatment.

"... was reviewed recently in the clinic and he was given the result of his anti-HTLV-III antibody test, which was positive. This means that he is probably carrying the AIDS virus and has perhaps only a 1 or 2 per cent chance of contracting the disease himself. I hope shortly to arrange a meeting between the general practitioners who, like yourself, have an HTLV-III antibody positive patient and members of the department who treat haemophilia in the fairly near future."

So that's a test result for someone on home treatment who's most likely to be, one would have thought, somebody with more severe haemophilia -- can't rule out there are other categories but that seems to be the likeliest -- and being given their result only in the middle of 1985, and at what looks like it might have been a regular appointment rather than any kind of specially arranged appointment. Although, again, that's perhaps a matter of inference

rather than anything else.

We have examples of documents of patients being informed of negative HTLV-III results by letter rather than in person, and the Inquiry has received evidence from individuals saying that they were informed of a positive result by letter and without a direct follow-up consultation. So, again, the picture is a mixed one.

In terms of testing for hepatitis C, Dr Lucas, who has provided a statement to the Inquiry, says he doesn't have any specific recollection in relation to hepatitis C testing at the Royal Infirmary but believes it may have started in 1992 and that a staff grade doctor would communicate the results to and counsel patients.

You will recall yesterday's evidence from Dr Bevan that he regarded it as the responsibility of the consultant to undertake the exercise of informing both HTLV-III and hepatitis results to the patient.

Professor Hay's evidence to the Inquiry, and of course he was saying that for the most part this was something he thought had been undertaken before he arrived at Manchester, he said he thought hepatitis C testing in Manchester began in 1991, and that much of it was conducted in 1992.

Again, we have a few examples of letters that provide a little by way of dates, but your best evidence, sir, may well be, again, the evidence of individual patient witnesses or their family members.

If we look at WITN3289010, and we go to the next page, we can see that this is a letter, June 1983, and if we just zoom in on the passage relating to the hepatitis C result, this is a letter to a GP:

"Your patient is hepatitis C positive by a second generation test ... probably a chronic carrier of hepatitis C. There is a slight risk of [transmission] ... increased risk of long-term liver disease such as chronic active hepatitis, cirrhosis or hepatoma ..."

So we've got there evidence, clearly, that testing was still being undertaken in relation to hepatitis C in the middle of 1993 and you will recall, no doubt, from some of the oral evidence and the statements you have read that a number of individuals have given evidence to the Inquiry that they were tested for hepatitis C without their knowledge and only informed of the position afterwards.

We don't have either, I'm afraid, a perfect picture or a complete picture of how many patients

were infected with HIV as a result of their treatment at Manchester Royal Infirmary.

If we go to MRCO0000388_188, we see this is "Review of main UK cohorts of HIV seropositive cases by NHS region/district and main clinical centres", undertaken by Dr Philippa Easterbrook in July 1987. And if we go to page -- I don't have numbered pages. Try page 17. Yes, that's it.

So:

"[North] Western Region.

"District ... [North] Manchester ..."

If you look, sir, at the HIV positive, which is the third column in the table along, and then go down to where it says "Haemophilia Centre", you've got "?100[positive]/180/200".

Professor Hay's evidence was that his understanding was that 83 Manchester patients were infected with HIV, of whom 10 were under the age of 18, and that 186 were exposed to hepatitis C at some time.

So perhaps unsurprisingly, given that this was a very large clinic, a very large number of patients infected with both HIV and hepatitis C.

In terms of the treatment of patients with HIV, again, sir, your best evidence is likely to be the

accounts of the patients who were themselves infected as to how they were subsequently treated and what medications and other treatments they received.

If we go to BPLL0002215 and go to the second page, this is the programme for a course that was held in January of 1988 at Manchester. We don't unfortunately have any detail about the contents of the course but we can see that information was being provided as to the present UK situation. That's said to be by Dr Peter Jones. There's said to have been a presentation by Dr Gunson, "How safe are blood and blood products?" Dr Pinching, on "New approaches to therapy", and then, under the chairmanship of Professor Bloom, in the afternoon, a session on counselling the patient, their sexual partner, the child and his parents by, respectively, Dr Kernoff, Dr Morgan and Dr Evans (Dr Evans was the Manchester Children's Hospital), and a discussion of "Insurance" and "Psychosocial and psychiatric implications of HIV infection" by Dr Catalan, who I think was based in Oxford.

Then if we go to the next page, we can see reference there to the AIDS treatment centre as a topic, and then a closing session entitled, "An uncertain future?" It's unfortunate, perhaps, that we

don't have more detail as to what actually was being said in particular about psychosocial and psychiatric implications.

We've seen some evidence of the treatment of HIV positive patients being shared between the Manchester centre and other regional centres. There are, for example, interactions between Dr Newsome at Blackburn and Dr Wensley in relation to an HIV positive patient, and their symptoms and their treatment. The extent to which there was specialist treatment rather than haematologists acting, as Dr Bevan put it in his statement, as *ad hoc* HIV specialists is unclear from the documentation, and we certainly see when Dr Lucas took over, in 1992 and 1993, he is writing in relation to obtaining funding for HIV drugs and talking in brief terms about the treatment policy with respect to AZT in a way which suggests that was certainly something in which the haematologists had substantial involvement.

In relation to the treatment and care of patients with hepatitis. From December '94 onwards, we've got the evidence of Professor Hay, which I won't repeat, and of course we have the evidence of the multiple patients treated or diagnosed with hepatitis C at Manchester.

There is -- I think perhaps we'll go to the letter.

If we go to an October 1990 letter -- just give me a moment while I get the reference. WITN1577008. Go to the next page. We'll see there -- again, this is in relation to an individual patient. This October 1990. It is a letter from Dr Wensley, although the signature for some reason appears at the top rather than the bottom of the letter. It refers to a referral to Dr Warnes in connection with the chronic liver problem and the possible of participating in a study of interferon that Dr Warnes was carrying out, and there is a detailed letter -- I won't take you to it -- setting out the outcome of the referral. So it would appear there is hepatology involvement to some extent at least.

If we -- sorry, Dr Lucas' statement to the Inquiry was to the effect that patients with hepatitis C who showed a deterioration in liver function or developed features of chronic liver disease would be referred to a hepatologist.

It does appear that there may have been funding issues in relation to the treatment of haemophiliacs with hepatitis C in the Manchester area. So if we go to DHSC0002545_070, we have a letter from Dr Lucas to

the Chief Medical Officer of the North West Regional Health Authority in September 93:

"Chronic Hepatitis C Infection in Haemophiliacs.

"I thought I should write to you to flag out a health issue which relates to the past treatment of Haemophilia. This is a potential litigation issue and (almost inevitably) the treatment involved is expensive.

"As a result of treatment with non-heat-treated blood products prior to 1985, many Haemophiliacs developed clinical jaundice or deranged liver function tests, not associated with serological evidence of hepatitis A or ... B ('non-A, non-B hepatitis'). Recent technological advances have identified a new virus, hepatitis C, for which serological screening tests are available. We have been screening our Haemophilia population and I can give you a break-down of our results so far."

You can see there set out 113 out of 162 of hepatitis C positive patients, and then it sets out the number who have deranged liver function tests, at the number who are also HIV positive is 48 as at that stage.

If we go over the page, he says this:

"To summarise the problem, therefore, approximately 70 per cent of Haemophiliacs are hepatitis C positive C antibody positive, as a result of hepatitis C infection transmitted by blood products before 1985."

Then he refers to a third having deranged liver function and he mentions one patient having received a liver transplant and two others both HIV positive dying of liver failure.

"There is genuine uncertainty about the natural history of hepatitis C infection and its best management."

Talks about long-term studies.

"... the probability of developing clinical liver failure among those who survive for 15 years after hepatitis C infection is about 20 per cent. The experience of colleagues (and my own experience) suggests that this risk is considerably higher where there is concomitant HIV infection.

"There is considerable uncertainty about the best management of patients with hepatitis C infection."

And then he talks about an editorial advocating interferon and then says this:

"This editorial, however, makes it clear that

the long-term benefits of such treatment with Alpha interferon remains unproven."

He refers to biopsies prior to treatment with interferon and the costs associated with that.

And then at the bottom of the page says that:

"From discrete sounding out of The Haemophilia Society, I think it is very likely that they will start to campaign in the relatively near future for compensation for hepatitis C infection and also for its active treatment."

Over the page he says:

"In view of this, I feel that it is vital that the problem is actively managed. I would find it extremely valuable if a Regional Policy or consensus statement could be formulated, enabling me, for example, to approach purchasers for the not-inconsiderable costs."

Then in his statement Dr Lucas said the purpose of this letter was to make clear his feeling that there was a need for a national or at least regional policy for the management of hepatitis C infection caused by the use of infected blood products. He doesn't recall receiving a response to this, and then he ceased to be acting director the following year.

SIR BRIAN LANGSTAFF: Just going back to the first page,

if we may. And the second page, please. Thank you.

The third paragraph there:

"Long-term studies appear to suggest that the probability of developing clinical liver failure among those who survive for 15 years ... is about 20 per cent."

So this is talking about a chronic hepatitis which after 15 years creates a 1 in 5 risk of clinical liver failure, which is very similar statistically, I think, to our own figures that our own expert group advised us was the case in hepatitis C infection, which would suggest that after 40 years there's 60 per cent.

MS RICHARDS: Yes.

SIR BRIAN LANGSTAFF: It's the same -- if it's pretty much a straight progression after the first few years then you've got that sort of rate. What is interesting to me is that this is being said in September 1993.

MS RICHARDS: Yes.

SIR BRIAN LANGSTAFF: So anyone being advised about their infection in Manchester might have expected to be given to understand that if they'd passed the six-month period and were infected, so far as could be told, and tested positive, that there was this serious growing problem.

MS RICHARDS: Yes.
SIR BRIAN LANGSTAFF: Yes.
MS RICHARDS: Yes, and you will wish no doubt to consider the evidence both in the form of written statements from individual patients, and from their records, as to the extent to which that was information and advice that was provided to them. More generally, on a national stage, you've heard lots of evidence of patients being told it wasn't very much to worry about.
SIR BRIAN LANGSTAFF: That's why I draw attention to the particular date.
MS RICHARDS: Yes.
SIR BRIAN LANGSTAFF: Yes.
MS RICHARDS: We also see, if we look at WITN0010007 and go to the third page of that, this is a letter, November 1993, from Dr Lucas and I'm just picking it up in the last five lines, he talks about what Dr Lucas' policy is:

"... my current policy is to observe, checking liver function once or twice a year, and to consider a referral for some form of treatment such as Interferon therapy if there should be significant signs of deterioration."

Then he says, in my relation to the individual

patient:

"I would like to see him again in six months' time."

So that is Dr Lucas's contemporaneous statement of his policy.

Then, sir, moving to a slightly separate topic, the issue of what was recorded on death certificates. There are a couple of documents on the issue of inquests. If we go to HCDO0000441, please. So this is a meeting of UK Regional Haemophilia Centre Directors Committee, September 1991, and we can see that Dr Wensley was present. If we go to page 7, please, Soumik, and we go to the bottom of the page, there's an early discussion about what should be written on the death certificate, and then at the bottom of the page:

"Dr Hay said that there had been some problems with the bereaved relatives who were keen that HIV should not be mentioned on the death certificate, even though the death was HIV-related and he would appreciate guidance about this. Dr Wensley said that the Manchester Coroner wished to know if a death was HIV-related. He was strict on this point and as a consequence all of the Manchester cases had autopsies. The press was usually at the inquest and

it was reported in the local papers."

So that's September 1991, and there's a brief reference to the same issue the following year, HCDO0000443. I will just look at the date, first of all. So 10 February 1992, the same committee meeting. If we go to page 6, and we zoom in on "AIDS in Haemophiliacs", halfway down that paragraph:

"Dr Mayne asked if an agreed formula of working for death certificates should be considered. Dr Lucas said he would welcome the agreed policy; the Coroner always wanted an inquest in the Manchester area."

Sir, I draw attention to that because we are seeing, as indeed we see from this, a variable practice across the country. By way of example, here in Newcastle it's said HIV [was] never put on the certificate but they made sure the coroner knew about it.

Then, as I mentioned, this morning, Dr Wensley was known to have a particular interest in cryoprecipitate, and if we just look at -- we don't need to look at the document but, by way of example, in 1976 he was asked to join a working party to look at the quality of cryoprecipitate prepared at Regional Transfusion Centres, and he participated in that and various reports were produced by that working party.

If we go to one such report at CBLA0000880, if we go to the second page, we see "Report of a Working Party of the Regional Transfusion Directors Committee", and the members of that include Dr Gunson and Dr Wensley. Then if we go two pages further on, and we look at the first paragraph on the page:

"Despite the increasing use of lyophilised Factor VIII concentrates for the treatment of haemophilia A, Factor VIII in cryoprecipitates prepared from single units of donor plasma still remains an important therapeutic substance."

So that's the view being expressed by that committee as at the end of 1978.

There is then, if we look at HSOC0010549 -- we have looked at this once before, but this is minutes of Haemophilia Centre Directors meeting, November 1978, and if we go to page 13, I think -- yes, there's a discussion about the production of cryoprecipitate and in the second paragraph we see Professor Stewart saying:

"... a lot of cryoprecipitate still was used in the UK and Directors would prefer to use the concentrates rather than the cryoprecipitate. He wondered what the relevant cost was ...

"Dr Wensley said that it should be possible to

make cryoprecipitate averaging 125 units per pack. There were technical problems in making the concentrates and he would suggest that the Department should wait at the moment before embarking on a policy of turning over entirely to concentrates."

Then if we go over to the next page, second paragraph, I think we looked at this with Professor Tuddenham. Professor Tuddenham talked about the cost of cryoprecipitate being not dissimilar to the cost of commercial concentrate and Dr Wensley here, on the other hand, estimating that the cost of making cryoprecipitate was about one-third of the cost of making concentrates.

Then his contribution to that meeting may reflect the fact that he was closely involved in the Regional Transfusion Centre's actual manufacture of cryoprecipitate, and he's described by Dr Gunson in a document we looked at earlier, I won't go back to it, as "having devised a semi-automated method for producing high-quality cryoprecipitate on which the patients in the region derived considerable benefit".

This appears to be a product developed as between Dr Wensley and a commercial organisation called the Factor-Eightor. If we go to SBTS0000310_159, this is a letter from a company

Pritchard Laboratory Refrigeration, specialist in ultra-low temperature refrigeration, September 1980, "Increased Yields of Factor VIII". It's addressed to Dr Cash at SNBTS:

"We take great pleasure introducing the PLR Factor-Eightor a unique British product developed in cooperation with Dr Wensley at the Manchester Blood Transfusion Centre.

"The Factor Eightor will significantly increase the yield of Factor VIII as cryoprecipitate from human plasma, at the same time eliminating the hazardous and costly methods of production at present in use."

That's the sales pitch for it but we have Dr Wensley's description at a 1981 symposium. NHBT0027395_008.

So we can see the date there, 26 September 1981, a symposium on "Aspects of Blood Component Production in the Regional Transfusion Centre". Then if we go to the next page, you can see it's said:

"The following information has kindly been given to us by Dr Wensley from the Biotest Fifth Symposium [in] Edinburgh ..."

Then we have an account of his paper, so halfway down the page it says this:

"The use of cryoprecipitate in the treatment of Haemophilia A ... is declining in England and Wales in favour of lyophilised Factor VIII concentrate. However, cryoprecipitate is the first stage raw material from which lyophilised Factor VIII is eventually prepared. Improvements in cryoprecipitate Factor VIII yield discovered during small-scale manufacture can sometimes be incorporated in practice into the large scale manufacturing process.

"Cryoprecipitate is simple and economical to produce. What is it being used for at present?"

Then there's a table with indications for cryo: von Willebrand's, mild haemophilia, haemophilia carriers, congenital afibrinogenaemia, et cetera, et cetera, then "Source for Freeze-drying":

"Freeze dried cryoprecipitate is presently being produced at the Glasgow and Dublin Blood Transfusion Centres.

"What conditions are necessary to obtain the best yield of Factor VIII clotting activity in cryoprecipitate?"

Then a number of variables are listed on the next page.

Then he says underneath that list:

"In Manchester we find that the demand for

cryoprecipitate is decreasing as more haemophiliacs are converted from hospital out-patient cryoprecipitate Factor VIII therapy and join our home treatment programme. This employs lyophilised Factor VIII concentrate for which the demand continues to rise and there is a reciprocal decline in cryoprecipitate usage.

Then he talks about cryoprecipitate yields in Manchester cryoprecipitate. Then he goes over the page and says, top of the page:

"Cryoprecipitate production employs four essential stages plasma separation, plasma freezing, thawing of the plasmas and final centrifugation to harvest the cryoprecipitate. We have automated the two middle stages of freezing and thawing of the plasma and have devised an automatic freeze-thaw cabinet, the Factor Eightor."

Then he describes that and then in the fourth paragraph on this page, if we go down a little further:

"In conclusion cryoprecipitate can be produced simply and cost effectively and in its freeze-dried form should be suitable for self-administration in home treatment programmes. The yield of cryoprecipitate Factor VIII from a given amount of

starting plasma is about twice that of lyophilised intermediate Factor VIII concentrate. I believe that countries which are planning for complete self-sufficiency in Factor VIII supplies should consider the advantages of employing cryoprecipitate manufactured by the automated system described above."

What happened to the Factor Eightor we've not yet got to the bottom of. In terms, more generally of the use of cryoprecipitate and, in particular, Dr Wensley's views as to the benefit of cryoprecipitate and the ability to produce cryoprecipitate simply and economically, you may find his observations instructive.

Sir, we have included in our note some reference to Dr Wensley's involvement in decision-making, in relation to the blood services and screening tests but, bearing in mind that we're going to be exploring that in significantly greater detail when we look at the blood services later this year, in hearings yet to be scheduled, I'm not proposing to deal with that now.

We then come, as the penultimate topic -- I note the time, sir, but there's actually only a short amount further to do, so, with your indulgence, I will complete it rather than take

a break.

Again, we've set out in our note -- under the heading "Research" we've set at information gleaned from documentation in relation to Dr Wensley's involvement and the involvement of patients in a number of trials and research studies.

I'm not going to go through most of it. It may however be instructive to look at one document, CBLA0001801. This is a letter, 3 February 1984, from Dr Delamore to Dr Gunson, "Trial of NHS heat-treated Factor VIII concentrate". So we've heard evidence, obviously, from Dr Winter about his use of heat-treated Factor VIII concentrate in advance of 1985. We know that that was undertaken at St Thomas' and we have seen evidence for example in relation to Sheffield about involvement in trials. We can see this is a trial of an NHS heat-treated Factor VIII concentrate. There's clearly been some discussion between Dr Delamore and Dr Gunson. It says:

"... I have contacted the Haemophilia Reference Centre Directors at Sheffield, Liverpool and Newcastle and I have heard from Liverpool and Newcastle indicating that they would be happy to participate in such a trial. I have also heard from Dr Preston at Sheffield saying that in principle he would be very

happy to take part but he has already agreed to take part in a study with Armour and he is not sure he will have sufficient case material ...

"In order to conduct this study properly and have proper co-ordination ... we should have some further medical help ..." et cetera, and he encloses a suggested protocol, which isn't ultimately a protocol that's used.

We've identified in our notes further communication and correspondence about this trial and there are further iterations of a draft protocol for the study. It's not entirely clear, however, on the basis of what we've seen so far the extent to which Manchester patients participated in the study and, if they did, the extent to which that was on a fully informed basis. There is also some evidence to suggest that a trial of heat-treated Koate was contemplated. So there's a draft protocol, for example, in late 1984 provided by Dr Wensley to his local Ethics Committee. So there's clearly some knowledge of heat treatment and heat-treated product in advance of its introduction in 1985.

The final topic is in relation to pharmaceutical companies and interrelations with pharmaceutical companies. We've looked at some

interactions between Speywood and Cutter, in particular, and Dr Wensley and Dr Delamore already. If we go to BAYP0000025_062, we can see this is a letter from Dr Wensley to Cutter dated 2 November 1984. This picks up on the issue of a possible trial of heat-treated Koate but also shows the broader interactions that Dr Wensley had with pharmaceutical representatives:

"Thank you for your recent visit at which we agreed I would put the provisional protocol for the trial of heat-treated Koate [HT] to the Central District Ethical Committee for their approval. This is now underway. We also discussed my October 4 letter to you in which I outlined proposals for our future experimental work on Factor VIII stability and level in heparinised plasma and invited Cutter to give us financial support as our local research fund grant has not been renewed."

Then he clarifies some points in the letter:

"While I asked if financial support for two years might be possible, I would be more than happy to receive support for one year, possibly with an option on Cutter's part to review it for a second year depending upon the results. The direction of our future work has not been settled but it could

certainly be further slanted towards problems of mutual relevance."

Then there is a subsequent meeting between the Cutter representative and Dr Wensley and then, if we go to BAYP0000024_086, we can see there reference to a meeting taking place and then a telephone conversation having taken place regarding:

"... the provision of maximum support to work on heparin and Factor VIII yield. The outcome of the conversation was that Mr Ted Betham has agreed to the loan of the instrument and free software for 20 procedures and not 20 weeks."

So there's an offer of loan of equipment sought by Dr Wensley to assist with his research.

We've already seen, I think, documentation showing Armour sponsorship of that north-west supra-regional haemophilia meeting. In one of the earlier Cutter documents we've looked at, there's Dr Wensley asking to visit Cutter whilst in the States whilst in the country for a meeting, and there are arrangements or suggestions of arrangements to arrange the hotel and "look after you during your stay". We can see a different type of benefit in another Cutter report at BAYP0000008_189. We can see this is May 1986. If you go to the third page, under the

heading "Bayer Philharmonic Orchestra" those attending at Manchester, Dr and Mrs Wensley, Dr and Mrs Evans, Sister Alex Shaw apparently attending a concert organised by or -- sorry, tickets provided by, it would seem, Cutter. So those are some of the interactions between pharmaceutical companies and clinicians at the Manchester Royal Infirmary that we've identified.

Sir, if you just give me a moment because we have been sent, during the course of the afternoon, by a CP a document for our attention. I'm just going to read it, if that's okay. *(Pause)*

Yes, I'm grateful. I'm not going to refer to the individual document or seek to put it up on screen because it's not undergone a redaction process, but I think I can refer to the broad trust of it and I'm pretty sure we've seen similar documents in individual evidence.

This is a letter, a standard form letter, from the Royal Manchester Children's Hospital from May of 1985 which refers to having sent blood samples away for testing, and it would indicate that by the end of May 1985 those tests have come back. We'll obviously look further at this when we look at the Manchester Children's Hospital but it may be thought surprising

if testing facilities were available to the Children's Hospital that weren't available to the Manchester Royal Infirmary.

Sir, that, for present purposes, is the material I was proposing to show you and those listening in relation to Manchester. Clearly there remain a lot of gaps. It may be that some of those are filled by the discovery of further documents but it is, I think, more likely that there are going to be matters of inference for you, sir, and gaps that may be filled by a thorough consideration of the evidence of individual patients and their families.

SIR BRIAN LANGSTAFF: And just underscoring what you picked up from the helpful contribution from a Core Participant, what we've been dealing with has been Manchester in the sense of the Manchester Royal Infirmary, although I appreciate that much of your presentation has also dealt with the north-west in general terms because that's where Manchester is.

MS RICHARDS: Yes, absolutely. We are still to look at the Children's Hospital and the other centres within the north-west region. In particular, there was material that refers to the centres under Dr Lee and Dr Newsome and we'll be looking at those in some detail at least when we do our presentation on all

other haemophilia centres that haven't hitherto been covered.

SIR BRIAN LANGSTAFF: Yes. So Manchester Royal Infirmary, that's as far as we go for now anyway.

MS RICHARDS: Yes.

SIR BRIAN LANGSTAFF: Tomorrow?

MS RICHARDS: Tomorrow we have evidence from Dr Shirley.

SIR BRIAN LANGSTAFF: Yes, and we start at 10.00?

MS RICHARDS: Yes.

SIR BRIAN LANGSTAFF: So 10.00 tomorrow and that's when we meet again.

(3.32 pm)

(**Adjourned until 10.00 am the following day)**

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