

The effects were disastrous and a major contributory factor in Bristol's poor outcomes (see C.C.R. review generally. An example of this was the case of Joseph Good (discussed on Day 78), who died following surgery for Fallot's tetralogy with left pulmonary artery originating from the descending aorta via the ductus arteriosus. He developed a tamponade which was not diagnosed until it was too late to intervene successfully. At page 147, Dr. Silove explained that a tamponade could be diagnosed if an echo was done soon after surgery to see if there is good ventricular function as well as a high CVP. If that is the case, surgery will be indicated and may follow directly. In the present case, that was not done. Again, it illustrated the lack of communication - especially between the surgeons and cardiologists (page 137, lines 6 to 13).

Comment:- Joseph Good contrary to the suggestion is not a good example. [REDACTED] the pathologist did not give cardiac tamponade as a cause of death and Dr. Jordan does not consider it fits with the facts. [REDACTED]. The echos provide no direct or indirect evidence of tamponade. Dr. Silove's comments were hypothetical and in any event are not correctly summarised by the BHCAG.

Another example was discussed on Day 77 with Dr. Martin. A child (Ben Elliott) had died after a number of post-operative complications. The first echocardiogram was done 48 hours after the operation and a week then elapsed before surgery. Dr. Martin conceded (page 187) that the delays were too long. Again, the B.H.C.A.G submits that this slow and disorganised care was characteristic of the kinds of failures which meant that Bristol had very poor results.

Comment:- it is believed that this should be a reference to Ben Fitzgerald (and not Ben Elliott yet another inaccuracy which has characterised the whole submission). Dr. Martin did not concede that the delays were too long. He stated that normally the echo would be done the next day but that there could be reasons why it would not. In this case he explained [see pages 185 and 186 - copy enclosed] that the parents did not want further surgery and that discussions of their wishes may have caused delays in proceeding further. It is simply not true to say that this case characterises or is typical of anything and the reference to it suggests that the BHCAG actually have no examples of "slow and disorganised" care and should withdraw their allegation.

It is not correct to make a sweeping generalisation that Bristol had very poor results. For a small number of procedures it appears with the benefit of considerable hindsight and retrospective analysis to which other similar units results of the period have not been subjected Bristol had some poor results - although there has also been evidence that Bristol operated on patients that other centres would have declared inoperable and sent home to die.

It is apparent that no good hospital now will run an ITU department without a clear chain of

command and prompt and effective input from cardiologists at all times. This was the clear view of the experts that the B.H.C.A.G spoke to and the evidence heard by the Inquiry. For instance, on Day 78, page 147, it was stressed that in Birmingham, cardiologists are always on hand to assist with post-operative ITU care.

Comment:- with the end of the split site and the new children's hospital about to open this is now the position in Bristol.

[3] Conclusions

The submission on behalf of BHCAG is riddled with inaccuracy, carelessness and misreporting and misquoting. This is unfortunate in a document disseminated in the public sphere via the Internet and hence the cardiologists (and we understand others) have felt the need to provide detailed correction and comment.

It is highly regrettable that more care was not taken with the accuracy of references to evidence before the document was disseminated given it is a potentially damaging document in personal and professional terms for a number of clinicians. Key evidence was ignored such that the document is so partisan as to not be in any way a helpful submission.

More troubling was the fact that the authors did not hesitate (although choosing indirect or double negative language e.g. "not wholly frank" or "denial not credible") to question the bona fides and honesty of witnesses such as Drs. Jordan, Joffe and Martin who came to give evidence to assist the Inquiry and spent much time and effort and money in preparing submissions on the many issues and making representations. To impugn their integrity in such a manner (never having had the point put to them when they gave evidence - and note there was no application made by BHCAG to cross-examine any of them) is unfortunate, unjustified and unfair.

Damage has already been done by the dissemination of such a document effectively accusing all 3 of lying and including loose, emotive and inflammatory language. Hence some of the language used in response in this submission.

Given the document is in the public domain the cardiologists invite the Inquiry to comment on whether on a proper analysis the criticisms made of the BHCAG are in part at least well-founded and to comment specifically on integrity of witnesses as they appeared to the Inquiry.

[4] Response to BHCAG oral submissions made 9 February 2000

- Evidence not available to support sweeping comment of avoidable deaths and permanent disability.
- Statistical evidence based on CCNR cannot make good a case when cases not selected at random but with reference to age and outcome and when review process did not ask for or use great knowledge of treating clinicians as to what actually happened. In addition problem of differences in interpretation by different doctors (as seen by fact of contested clinical negligence cases).
- Validity of other statistical analyses limited by fact other centres and units did not have results analysed in this way and no basis for cross-checking case mix and policy as to when a patient is deemed inoperable or not accepted. Registers not operation dependent or broken down by unit.
- No basis at all - yet alone any right to claim confidence - that between 50 and 100 patients died who ought not to have died. Without a detailed examination of each case by reference to standard of care and causation (taking into account explanations of treating doctors and all other evidence) such a statement cannot and should not be made (and is dangerous). Too many parents have been led to believe that their children died unnecessarily and have suffered as a result of such belief when the evidence is not available and their belief has been generated by loose comment and ill-informed media coverage and use of statistics and anecdotal evidence. Most of these children had very serious heart problems and all who underwent surgery faced surgery which would never be described as routine and always carried risk. This point has largely been overlooked in the BHCAG approach (and by the media).
- Cardiologists were not quite frankly saying the hill caused them not to be as involved as they should - they were saying that their commitments and not being on site meant they didn't in passing in the corridor or in the same unit learn what was happening or have a chance of informal input that comes with physical proximity. It was not lack of effort on their part. No recognition has been given at all by BHCAG to the substantial other commitments cardiologists had.
- Not the practice of the time to give national risks of surgery (nor necessarily even the case now).
- Not closed medical world - what is now being sought will cause children who

have some small chance not to be operated upon at all (for fear of messing up the figures) and for doctors to now practise defensively and not in the best interests of their patients.

[5] Comments on other sections of BHCAG submissions

Referrals: no evidence of misleading information provided to referring clinicians and no complaint by them of this. No evidence that they sought to avoid referrals to Bristol. Plymouth referred to Southampton because of shortness of waiting lists and Dr. Jordan gave evidence that he encouraged that.

Informed consent: need to consider standards of time. Parents recollections not necessarily reliable given events since and distressing circumstances of learning child has serious heart condition. Treat with caution.

Postoperative care: no evidence of a refusal by a cardiologist to attend or assist if contacted.

- 9 A. Yes.
 10 Q. What was the basis for your choosing them?
 11 A. A variety of reasons, including a personal connection
 12 between someone who had trained, let us say, at the
 13 Brompton, knew the surgeon and knew he did an operation
 14 particularly well; the overall perception that
 15 cardiologists, as a group, would have of a particular
 16 unit's performance on another condition. The
 17 relationship between one surgeon and another, because
 18 these cases would be referred either by the
 19 cardiologists or after our joint meetings, by a cardiac
 20 surgeon, with whoever he or she, in this case he, was
 21 referring that patient to.
 22 So it is a variety of reasons, but I think, as you
 23 will see at that time, it was mostly Great Ormond
 24 Street, sometimes the Brompton, but later on
 25 Birmingham.

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- 1 Q. Dr Jordan, in his evidence to us, in describing the
 2 1980s, when he was asked about Bristol and the
 3 performance of Bristol, gently, I think, indicated in
 4 reply that Bristol was not the very best of cardiac
 5 centres.
 6 Would you have said the same had you been asked,
 7 let us say, by a referring paediatrician in those years?
 8 A. Yes.
 9 Q. Did you in fact do so?
 10 A. Yes, if asked, I would have done so, certainly.
 11 Q. A very difficult question, perhaps: had you, yourself,
 12 had a child requiring, let us suppose an AVSD correction
 13 in 1988, where do you think you would have referred that
 14 child?
 15 A. I think that is a question that is hypothetical --
 16 Q. It is.
 17 A. I simply am unable to answer that. I have had a child
 18 with a congenital anomaly, since you asked the question,
 19 that could have been fatal. It was not cardiac. So
 20 I have been there myself. Fortunately, my son is very
 21 well today.
 22 Q. May I ask where, if the anomaly was corrected, where was
 23 it corrected?
 24 A. This was in Cape Town, corrected by Professor Jannie
 25 Louw who soon after became the doyen of general

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- 1 paediatric cardiac surgery in South Africa.
 2 Q. Again, because it may give us a reflection of what you
 3 felt at the time, had that situation arisen in England,
 4 after you had come to England, rather than asking you
 5 where you would have sent your son, would you, do you
 6 think, have referred your child to Bristol?
 7 A. Again, I am unable to answer that. It was not
 8 a congenital heart defect. Our relationship with
 9 Professor Louw was one of tutor/student mentor. We were
 10 trained in Cape Town and we knew him, and there was just
 11 no question about whom we would have gone to.
 12 Q. In July 1989 -- can we have WIT 74/1083 -- we have the
 13 interim report of the Working Party on neonatal and
 14 infant supra-regional cardiac surgical units in England
 15 and Wales. This is a report to the Supra Regional
 16 Services Advisory Group. Did you ever see it?
 17 A. Can we scroll down a bit more? I am not sure I have.
 18 Q. What you might remember, and I will take you straight to
 19 it, is WIT 74/1090, the table at the back. The original
 20 writing at the top is "Figures for 1988 by centre
 21 (alphabetical)". The rest of the writing is added later
 22 by someone's hand?
 23 A. Yes. I have not seen this before.
 24 Q. You have not?
 25 A. No.

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- 1 Q. It is, as it happens, the second column from the right
2 in each of these particular classes. The first is open
3 under 1 year and the next is open over 1 year. Perhaps
4 we can just take a long view of the sheet. That is
5 Bristol and the other bars are those other centres which
6 were designated at the time.
- 7 A. Yes. I am sorry, I really do not know what is being
8 represented, whether it is operations or --
- 9 Q. These are numbers of operations.
- 10 A. Yes. Under 1?
- 11 Q. The top is under 1, the second is over 1, and then
12 closed operations at the bottom.
- 13 A. Yes, I beg your pardon, you said Bristol was second from
14 the right. I was looking under Newcastle.
- 15 Q. Second from the left. (Highlighted on screen).
- 16 A. Yes.
- 17 Q. If we bear in mind the top figure, the 29, and just go
18 to WIT 74/1092, turn it sideways, these represent point
19 estimates of mortality in 1988 and confidence intervals
20 around them demonstrated by the bars.
- 21 It shows, limited to 1988, the relative
22 performance in terms of mortality of the different
23 units. For that year, we have seen the figure 37.5 per
24 cent?
- 25 A. Yes.

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- 1 Q. And we can see the second from the left, as it happens,
2 is again Bristol.
- 3 A. Yes.
- 4 Q. It appears to represent that the better units tend to be
5 those doing a larger number?
- 6 A. Yes.
- 7 Q. And that was not surprising, I suspect, or would not be
8 surprising?
- 9 A. Yes, that is correct.
- 10 Q. You did not see this at the time.
- 11 A. No.
- 12 Q. Did you have any idea at the time how other individual
13 units were actually performing?
- 14 A. No, not at all.
- 15 Q. If you had seen information such as that in order to put
16 the information you got each year from the annual report
17 into some sort of context, you would have been able to
18 compare Bristol year by year, depending on what the
19 other years looked like with the performance of other
20 units?
- 21 A. Yes.
- 22 Q. If that showed that Bristol as a unit was consistently
23 either the worst or one of the worst, what reaction do
24 you think you would have had to that?
- 25 A. I would have been very disappointed, naturally, but

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- 1 I would need to see this on a year by year basis before
2 making a confirmed response. But of course, it would be
3 one of disappointment, but again, it would be a case of,
4 as you pointed out, fewer turnover of patients, and
5 again, as I have mentioned, we would have reviewed this
6 looking at the particulars of the cases in detail, as
7 indeed we did.
- 8 Q. Let me give you a hypothesis. If this pattern, or
9 something rather like it, were repeated over most years,
10 to what reason do you think would you ascribe the
11 relative low performance of Bristol? For what
12 particular reasons?
- 13 A. I do not think I can add to those we have discussed. We
14 talked about the split site, et cetera.
- 15 Q. So the split site; the absence of a dedicated paediatric
16 cardiac surgeon?

16 cardiac cases, and make recommendations about
17 management, if necessary.

18 In addition, we, or certainly I, tried I think on
19 two occasions to establish a regular routine ward round
20 at the BRI, twice or three times a week, and discussed
21 this with Mr Wisheart at the time, and the intention was
22 there, on both sides, but with all our other demands and
23 the variation between timetables of surgeons and
24 paediatricians, et cetera, it was just not possible to
25 organise. So I simply mention that as part of the

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1 intention, but apart from that, the paediatric
2 cardiologists did visit on a fairly regular basis.

3 Q. When did you make those attempts?

4 A. It must have been in the mid-1980s to late 1980s.

5 Q. You made them because you thought no doubt that it would
6 be desirable that you should have?

7 A. Yes.

8 Q. And hence your regret, expressed to us some 10 minutes
9 or so ago, that because of circumstances, as you
10 described, you were not able to?

11 A. Yes.

12 Q. To what extent was it the physical separation of the two
13 buildings, one being up the hill, one down the hill,
14 that made it difficult for you? You mentioned that
15 Dr Jordan had an office down at the BRI which meant that
16 he did go to the BRI?

17 A. Yes, for a time. That stopped in the late 1980s,
18 I think.

19 Q. You did not have such an office?

20 A. Well, I did initially, when we first started --

21 Q. But thereafter not?

22 A. No.

23 Q. Was it the physical separation that made a difficulty?

24 A. Yes, the physical separation was real, although of
25 course not insurmountable. The distance between the two

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1 hospitals was really quite small: 150, 200 metres,
2 maybe. But the hill, when you were walking up it, felt
3 as if it was almost half a mile, rather than 200
4 metres. It was extremely steep, so it was difficult
5 coming back up; it was easy going down. This may sound
6 trite, but it does make a difference, and it also makes
7 a difference in terms of the ordinary communication that
8 exists in a unit where consultants and various doctors
9 can meet with each other and bump into each other in
10 a corridor, and so on, which facilitates overall
11 management.

12 Q. Can I change tack a little? You were involved in the
13 discussions, I think, that led to the designation of
14 Bristol as a centre for neonatal and infant cardiac
15 surgery?

16 A. Yes.

17 Q. We have seen on the screen which is still there,
18 a snapshot in 1988 of the mortality figures which
19 suggests that throughput and success in terms of
20 relatively good outcomes tend to go together in the
21 under 1 open-heart operations. You did not find that
22 surprising as a concept?

23 A. No.

24 Q. Can we look at DOH 4/28? Turn it sideways. This is
25 surgery performed under 1 year of age, divided as you

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1 can see into open, palliative and definitive types of
2 surgery. This is Bristol. For open-heart surgery one
3 looks at the figures from 1980 through to 1985. It
4 scrapes into double figures at the end of that period.
5 It is just on the double figure mark in 1981 and 1982.

6 A. Yes.

18 suggesting, but I do accept that it is not entirely
19 reliable.

20 I also agree with him that the oxygen saturations
21 would not have got any better over a period of seven or
22 eight months from the time of the catheter -- seven
23 months from the time of the catheter to the operation,
24 and one would expect him to get worse if anything.

25 But we do not actually have any direct

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1 measurements of the oxygen saturations that I have been
2 able to see during that intervening period.

3 The haemoglobin level was if I recall around 18.6,
4 which is high and does confirm that the patient was
5 cyanosed and blue and compensating by producing more red
6 blood cells.

7 Overall the patient was obviously very blue, as
8 Dr Martin has said, and I think his anxiety about
9 leaving the patient for a long period of time from the
10 time of the cardiac catheter is justified. I mean
11 I think ideally this patient should have had an
12 operation very soon after the cardiac catheter if he was
13 going to have an operation at all.

14 Q. In terms of what one can divine from the notes about
15 whether the condition was progressing so as to make an
16 operation urgent when it had been left for some seven or
17 eight months hitherto, what do you say about that?

18 DR SILOVE: I think the operation was urgent in May when the
19 cardiac catheter was done. It was probably gradually
20 becoming slightly more urgent all the time because the
21 patient was growing. I do not know that there is a huge
22 difference between a matter of weeks but certainly
23 months can make a big difference.

24 Q. Mr Deverall, having looked at the records, how do you
25 see this child having changed between May and January?

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1 MR DEVERALL: I would agree with Dr Silove. There was a
2 strong indication to intervene very soon after the
3 cardiac catheter procedure and, for whatever reason,
4 once a delay had taken place that clinical indication
5 was still there but there is nothing that I could see in
6 the notes that said from Day 1 to Day 2 there had been
7 sudden -- a dramatic change changing an urgent operation
8 into an emergency operation.

9 Q. I do not know if you want to comment on either of those
10 views?

11 A. No, that basically concurs with my assessment at the
12 time. I think we felt when we first saw him that he was
13 relatively urgent. That is why I had the view that he
14 would be likely to be operated on within three or four
15 months and when I saw him in the outpatient clinic in
16 November and he still was waiting, I was concerned about
17 waiting.

18 Q. You agree, however, do you, that there was so far as one
19 could tell no significant immediate deterioration in
20 Joshua Loveday's condition from one day to the next so
21 as to change an operation which was needed pretty soon
22 to one which was an emergency?

23 A. I think we have discussed that. I think we would have
24 expected to see a progressive decline and I think the
25 issue is really what you gain by waiting and what

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1 potential risk you subject that child to.

2 If you are coming on to the question of how long
3 do you wait. Following the meeting of the 11th, it was
4 my feeling at that stage that a delay of a few weeks
5 would be acceptable, along the lines of what Dr Silove
6 said, particularly if there was a clinical indication
7 for it. So for instance if he had been seen by the
8 junior staff and felt to have an intercurrent infection

- 2 Q. You thought that he looked suitable for an arterial
3 switch operation with closure of the VSD?
4 A. He was discussed at our joint meeting and I, amongst
5 others, felt that that was the correct course of
6 treatment.
7 Q. That would be in May 1994, and so before the letter
8 which was written in June from the anaesthetists talking
9 about a need to look at the arterial switch programme,
10 about which you did not know until December.
11 Who listed Joshua Loveday for operation?
12 A. The control of admissions was totally under the control
13 of the surgeons, for the open-heart surgery, so
14 Mr Dhasmana would have been making those arrangements.
15 Q. So it follows that Mr Dhasmana must have put Joshua
16 Loveday's name down upon the operating list some time in
17 November?
18 A. My understanding is that after the discussion note,
19 which was I think in -- when we sat down as a group to
20 discuss his care, which was in June, he subsequently saw
21 him in the outpatient clinic and I believe he would have
22 been put on the waiting list for operation at that
23 stage.

24 The actual putting on the printed operating list
25 that was sent out to all the departments and the actual

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- 1 scheduling of the operation would have been done by
2 Mr Dhasmana for a January operation, I presume, some
3 time in December.
4 Q. We have been told elsewhere, I think, in November, so
5 the chronology thus far is catheterisation May,
6 discussion June, waiting list, and comes up in November
7 or December -- November I suggest -- for operation in
8 January.

9 Is there anything remarkable about that
10 time-scale --

- 11 A. In what way do you mean?
12 Q. -- for the condition that he suffered from? It was
13 a classic Taussig-Bing syndrome, was it not?
14 A. Certainly. I think when we originally discussed him
15 I gained the impression from our discussions that we
16 would be offering him surgery within three or four
17 months, I think I put in my original note, or one note
18 I penned.

19 As it was, when Mr Dhasmana saw him in the
20 outpatient clinic I think he said four to six months,
21 I think perhaps with an expectation that it would be
22 four rather than six, but perhaps you will have to ask
23 him that.

24 I saw him in the Outpatients Clinic in November
25 and was concerned about the fact that he had been

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1 waiting longer than I had anticipated, and was concerned
2 that any prolonged wait would subject him to additional
3 risk.

4 I think I spoke to Mr Dhasmana, as I have already
5 said, at some stage -- I am not sure exactly when --
6 after that outpatient visit towards the end of
7 November. That prompted his comments.

- 8 Q. Forgive me, I think when you saw him on 21st November
9 1994 -- the reason I quote these dates to you without
10 showing you the records is that you have recently,
11 I think, had an opportunity to see and go through the
12 records. By all means, if you want to see a particular
13 record, stop me and ask me and we will go to it and have
14 a look at it. Otherwise, it may be quicker to do it the
15 way I am doing it.

16 On 21st November 1994 when you saw him in the
17 Joint Cardiology Clinic in Gloucester, there was no
18 obvious change, was there, in his condition from the way

19 in which he presented in May?
 20 A. My recollection, and certainly having looked previously
 21 at my note of that occasion, was that he was "moderately
 22 cyanosed" is my description, i.e. he was quite blue and
 23 that did not surprise me because he was blue when I had
 24 undertaken his catheter study. It was very difficult to
 25 assess whether that was getting worse. Knowing his

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1 anatomy and the likely progression, I would expect him
 2 to become progressively more cyanosed, progressively
 3 bluer, given time. Would it help if I explain the
 4 mechanism of that?

5 Q. Certainly.

6 A. He had a band on his pulmonary artery to restrict flow
 7 of blood to his lungs. When a child grows, that band
 8 becomes relatively tighter as time goes on. The effect
 9 of that, in a child with his condition, is for him to
 10 become progressively bluer as time goes on.

11 The reason I was concerned about him when
 12 I catheterised him initially, and certainly
 13 subsequently, was that when I did his catheter study,
 14 I think from memory his aortic saturation was very low,
 15 at that stage 61 per cent, and he had quite a high blood
 16 count, polycythemia. In view of that, I felt there was
 17 some degree of clinical urgency to his case and that is
 18 what we expressed, what I expressed and as a group we
 19 expressed, at the group meeting.

20 We know that with his anatomy, as he grows, that
 21 band is going to become tighter, he is going to become
 22 bluer and the risks of waiting become -- it is not
 23 a cut-off, but there is a risk to waiting for
 24 a prolonged period in that setting, both with regard to
 25 low oxygen levels, which in themselves can have

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1 a deleterious effect on heart function in the long term,
 2 but also you start to run the risks of what are termed
 3 thrombo-embolic problems, if you like strokes, related
 4 to the high blood count and the low oxygen levels.

5 You also run the risk of stimulating muscular
 6 hypertrophy, that is muscular thickening of the heart,
 7 which in itself can cause problems around the
 8 peri-operative period when it comes to surgery. I know
 9 this was a factor that was fairly prominent in our minds
 10 at that time, that particular factor about the muscular
 11 hypertrophy, in view of a case that Mr Dhasmana had
 12 between when we discussed him and later when I saw him
 13 in November -- again, I am not going to refer to the
 14 case because I am not sure whether I should.

15 Q. Do not mention the name of that case.

16 A. I felt, based on that experience, there were dangers in
 17 waiting, so when I saw him in November, I was concerned
 18 that he had been waiting longer than I had anticipated
 19 and I was concerned about him running into problems from
 20 that.

21 He was quite restricted physically. I think he
 22 was just sitting at that stage, developmentally he was
 23 behind, which again probably reflects, to a certain
 24 degree, his cardiac status at the time and
 25 a cardiac problem of that severity would hold back his

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1 development.

2 Having looked at that note, I think I was
 3 concerned about him becoming progressively less well if
 4 we waited; there was a danger of that.

5 Q. The only way of telling with any accuracy whether
 6 a child has become more cyanosed is to measure the
 7 oxygen saturations, is it not?

8 A. That gives you a moment in time. I am not sure in my
 9 outpatient clinic in Gloucester, whether -- I do not

- 20 Q. What Mrs Hill has told us is that when she saw
21 Mr Dhasmana for a discussion following the catheter he
22 indicated to her that Jessica was inoperable, there was
23 nothing that he could do for her?
24 A. I think that is another illustration of the way he
25 approaches patients, to make no bones about the fact

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- 1 that they are very high risk. It is not my approach,
2 but here are two cases in which he has taken the same
3 line on both.
4 Q. In fact she recollects him saying during the
5 conversation, and I appreciate you would not be at that
6 conversation --
7 A. No.
8 Q. -- that he was surprised they did not realise how
9 serious Jessica's condition was and commented something
10 like: "We surgeons" or "the surgeons always get the
11 worst job", that is telling a parent that their child's
12 condition is really very serious when they had not
13 expected anything of the sort to be told to them?
14 A. I think we have certainly a tough job ourselves in
15 conveying risks, but I accept what he says, that the
16 surgeons are probably in a worst position.
17 Q. He, it is said, gave the risks for the operation as
18 50/50, that subsequently when you went through with
19 Mrs Hill the operation, you quoted risks -- that 7 out
20 of 8 [7 or 8 out of 10] cases may be successful --
21 A. Yes.
22 Q. -- which again is a difference of approach. Both of
23 course indicate a serious risk, but they put it very
24 differently; is that a question of optimism and
25 pessimism?

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- 1 A. I think by now you have had enough exposure to
2 Mr Dhasmana and myself to make that decision.
3 THE CHAIRMAN: Dr Joffe, I do not think the point
4 Mr Langstaff is pursuing is that there are differences
5 between you per se, so much as when the parent is
6 greeted with information there is a system which allows
7 mixed communication or different messages to be given.
8 That is what I think is being addressed, it is not that
9 you were different from him, but that that creates

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- 10 a situation where the parent is (if you will) confused?
11 A. Yes, I accept that. I do not know the way out of that
12 other than that perhaps the cardiologist and the cardiac
13 surgeon should be together when they discuss the
14 immediate preoperative session, that might possibly help
15 to give a more appropriate commonality in the response.
16 MR LANGSTAFF: One of the difficulties --
17 MRS MACLEAN: Just to make sure that I am absolutely clear:
18 I understand that the cardiologist will be the first
19 person to talk with the parent who must then be in
20 a very distressed state and clearly it is a time for as
21 much reassurance as possible and a lot of avenues are
22 open. Then the child is seen by the surgeon. What I am
23 not absolutely clear about is at what point that
24 cardiologist and surgeon make their joint plan of
25 action, have their joint meeting; is it between the

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- 1 interview between parent and cardiologist and parent and
2 surgeon, or do cardiologist and surgeon meet after both
3 doctors have seen the child?
4 A. To answer from the end: no, they do not see or meet
5 together after the surgeon has seen the child; that is
6 usually the final stage, pre-op.
7 The joint meeting takes place at a time when all
8 the information has been gathered and, depending on the

15 courses on it, and certainly he, over preceding years,
 16 had been very helpful in undertaking echo assessments at
 17 the Royal Infirmary. But he is not available all the
 18 time, and I think his colleagues varied in their
 19 expertise in the congenital heart area. I think they
 20 are all well practised in adult practice, but perhaps
 21 have less exposure to paediatric practice.

22 So I presume that is what he is referring to in
 23 his latter comment there.

24 Q. Do you agree with the five aspects he identifies as
 25 being areas of need?

0050

1 A. I would not agree with 1, that there would necessarily
 2 have been the need, at the Royal Infirmary, for
 3 post-operative TOE or transthoracic echo. Those
 4 patients would have been evaluated at the Children's
 5 Hospital prior to coming in for surgery.

6 There certainly is a need to look
 7 trans-thoracically, post-operatively in some patients,
 8 so I would agree with 2, that there is a need for that
 9 in paediatric patients, in the setup as it was then.

10 Ditto, I suppose, for trans-oesophageal studies.
 11 I think we had, by that stage, a paediatric
 12 trans-oesophageal echo probe that was available, that we
 13 could use on Ward 5, but that had not been present for
 14 long.

15 I would agree that predischarge studies are
 16 desirable, and certainly intraoperative
 17 trans-oesophageal echo can be helpful in some cases.
 18 I think opinions vary on that. It is quite commonly
 19 used in adult practice and paediatric practice.
 20 Intraoperative assessment depends to a large part on the
 21 wishes of the surgeon.

22 Q. Would it depend upon the availability of the
 23 cardiologist to interpret the echo?

24 A. It would be dependent on having either a cardiologist or
 25 radiologist to be available to undertake those studies,

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1 yes.

2 Q. So it was, for reasons such as you explained,
 3 particularly difficult for the cardiologist to get into
 4 the theatre?

5 A. Yes, it was difficult but we always did our best to try

<http://www.bristol-inquiry.org.uk/Transcripts/day%2077.htm>

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6 and attend. We always attended when asked.

7 In adult practice it is slightly different in that
 8 the anaesthetists have taken on the role of doing these
 9 studies in the theatre.

10 Q. Can we scroll down to the bottom of the page, just to
 11 see what the equipment is? We can see there the
 12 equipment, "Mobile unit based in Ward 5, has not been
 13 upgraded recently, since 1990", so I think the
 14 implication is that it was getting a bit old?

15 A. Yes. I have to say, I had not appreciated it was
 16 present. I thought it was later that it was purchased,
 17 that mobile unit, but certainly it was a relatively
 18 basic unit, as he says, of a low specification which
 19 certainly had not been upgraded recently. So that is
 20 correct. It was not an ideal machine, but it gave you
 21 some images.

22 Q. Let me just bring Dr Silove in on this. Dr Silove, we
 23 have seen Dr Wilde's wish list here. Is what he wants
 24 reasonable? Does it reflect good practice, best
 25 practice, beyond what you would expect, or what?

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1 DR SILOVE: I think that every one of the points that he
 2 made is a very valid point. I think it really reads as
 3 an excellent document in terms of the needs and the

1 is closing it in such a way that you connect the blood
2 which will be in the left ventricle to the aorta. So it
3 is not so much putting a patch on the VSD, it is in
4 effect creating an intraventricular outlet tunnel, so
5 that blood from the left ventricle flows to the anterior
6 aorta. Way, way back at the very first cardiac
7 catheterisation on 24/1/86, if I might paraphrase it, to
8 save going back, Dr Wilde says the aorta has been
9 transposed on to the right ventricle "and is clearly
10 some distance", so in other words, you have to create
11 a tunnel.

12 Although there are, in the literature, one or two
13 descriptions of the successful correction of double
14 outlet right ventricle with a common atrial ventricular
15 valve, the rarity of those descriptions makes mention
16 that the mortality of other attempts must be extremely
17 high.

18 MR LANGSTAFF: What is described in the operation note
19 further on down, various options were then considered,
20 is a surgeon who is faced with a problem, he realises it
21 might suggest that it is not easy to remedy the problem
22 he is now in, having started in the way that he has, and
23 he takes the course, does he, of putting in a further
24 shunt?

25 MR DEVERALL: Yes. It clearly is a most unfortunate

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1 situation, and having been in it myself, I have great
2 sympathy for the feelings that go through your mind when
3 you are faced with knowing that you cannot correct
4 a situation and wanting desperately to end up with
5 a live child. It is not easy to think on your feet
6 under those pressures on bypass and under considerable
7 stress, and under optimal circumstances, it is nice
8 under those circumstances to be able to ask your
9 paediatric cardiologist, your fellow surgical
10 consultant, your anaesthetist, to stand back, if
11 necessary, in my experience, to actually leave the
12 operating room and cool down and decide what to do.

13 The steps, to my mind, speaking personally, and
14 I think Dr Silove agrees with me which in fact were
15 taken, were the wrong steps, and I can only assume that
16 they were steps taken without being able to do that
17 process of analysing the situation to the best of their
18 ability.

19 MR LANGSTAFF: There would have been difficulties, am
20 I right, in contacting you as the cardiologist, because
21 of the split site and because of your duties elsewhere?

22 DR JORDAN: The general answer to that question is
23 "difficult, but by no means impossible". I did on
24 occasions get called down to theatre, provided I was not
25 in the middle of something like a cardiac catheter, that

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1 I could drop. I could get down there and get changed
2 and into theatre probably in about 10 minutes, something
3 like that, but I am afraid with the passage of time,
4 I have no idea where I was or what my movements were on
5 that particular day.

6 But can I just say that I think it would have been
7 particularly important -- I am very interested in what
8 Mr Deverall says, because the note that I made was that
9 if you look at the last cardiac catheter and the
10 calculations that Dr Martin made on pulmonary blood flow
11 and systemic flow, these are perhaps things that go
12 through a cardiologist's mind rather more than
13 a surgeon's mind --

14 MR DEVERALL: I do not think the surgeon should not go
15 through the same thought processes you are about to
16 describe.

17 DR JORDAN: Basically, to get to the point, he calculated

- 11 Q. In the catheter examination there is no evidence on
12 paper of the pulmonary artery pressure having been
13 measured, is there?
14 A. No, I believe that is correct.
15 Q. One does have a left atrial pressure?
16 A. Yes.
17 Q. The pulmonary artery pressure could not, could it, be
18 lower than the left atrial pressure?
19 A. That is correct.
20 Q. If one looks at the examination that was conducted, can
21 you tell us why it was that there was not a measurement
22 at the catheterisation of the pulmonary artery pressure?
23 A. Yes. Firstly I would emphasise what I have said before,
24 that is that the so-called commandments were falling off
25 as the operation became more successful and I do not

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1 know if it was at that time or just before or just
2 after, but the issue of pulmonary pressure became less
3 critical and pressures at a higher level than mean
4 pressures of 15 were acceptable.

5 Secondly, this patient, as you have said, had
6 extreme pulmonary stenosis which evolved to pulmonary
7 atresia, a total blockage of the outlet to the lungs,
8 and under circumstances like that it would be very, very
9 uncommon indeed for the pulmonary artery pressure to be
10 high unless there was a previous palliative shunt
11 operation which either was connected directly to the
12 aorta, in other words with a window placed between the
13 two, a procedure that has been called "Waterston" by
14 some, and under those circumstances the pressure from
15 the aorta becomes transferred, so to say, to the
16 pressure in the pulmonary artery and the pulmonary
17 artery pressure is usually elevated.

18 There is another type of shunt called a Potts
19 shunt, which is a connection between the descending
20 aorta and the pulmonary artery and, likewise, that is
21 usually a direct communication between the two great
22 arteries and that also results in a high pressure in the
23 pulmonary artery.

24 But if you put a shunt in that has a length to it
25 and a relatively small circumference or diameter, then

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1 that imposes a restriction to flow from the aorta into
2 the pulmonary artery and therefore usually, and in the
3 vast majority, I would say, of patients the pulmonary
4 artery pressure would be low even without measuring it.

5 Thirdly, in this patient because of the particular
6 diagnosis of pulmonary atresia the only access into the
7 pulmonary artery is to put a catheter through the shunt
8 into the pulmonary artery and at that time, 1984, there
9 was still a feeling that that was not a very sensible
10 thing to do because of the possibility of trauma to the
11 shunt itself, the tubal connection made out of plastic
12 material called Goretex, and therefore in some centres
13 indeed it was frowned upon, in other centres there was
14 greater confidence and it was actually done.

15 I am not quite sure of my own response at that
16 time in this case, looking back some 15 years, but
17 either it was caution on my part given the presence of
18 pulmonary atresia and knowing that the PA pressure was
19 likely to be low or it may have been a technical
20 difficulty in traversing the Goretex shunt in order to
21 get into the pulmonary artery, I cannot recollect, it is
22 not stated in the actual report.

23 Q. You mean you may have tried but failed?

24 A. Yes.

25 Q. Dr Houston, how important would you say, in the light of

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1 what Dr Joffe has said, would it be in a case such as

2 this to have a pulmonary artery pressure, if one could
3 get one? That is the first question.

4 Secondly, if you would like to comment on what
5 Dr Joffe has said about the difficulties in obtaining
6 such a pressure?

7 DR HOUSTON: Firstly, I think it would be essential that the
8 pressure was measured before one went ahead with
9 a Fontan. I accept that in some situations,
10 particularly in those days -- we now have different
11 wires and different catheters which I think make it
12 easier -- it was not always possible to get the
13 pressure, though I think having said that if you could
14 not measure it, it may be correct that the surgeon would
15 measure it at the time of operation before proceeding
16 with the operation.

17 I think the pressure certainly has to be measured,
18 if not by the cardiologist, then by the surgeon.

19 MR LANGSTAFF: Can I stop you there? I caught you
20 nodding there, I do not know if you meant to. The point
21 was about the timing really of the taking of the
22 pressure; if the cardiologist cannot do it for one
23 reason or another must the surgeon in effect do it.

24 DR JOFFE: It would, if possible, be advisable for the
25 surgeon to do so.

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1 I would go back to the point that in 1984 there
2 would have been, in my view, certainly a body of opinion
3 that would have been reluctant to go through a shunt.

4 Secondly, I think it must be very rare indeed that
5 I have measured the pulmonary artery pressure in
6 a patient with pulmonary atresia without those types of
7 shunts that I was talking about, where the pressure was
8 not of the order of 15, 18 millimetres of mercury.

9 DR HOUSTON: I do not dispute that, the pressure is -- it
10 is unlikely to be high, but I think it is correct that
11 it should be measured.

12 MR LANGSTAFF: Because it might be high?

13 DR HOUSTON: Yes. I think the risks involved are to some
14 extent related to the pressure. If the pressure is at
15 the high level, the risk perhaps is a little greater
16 than that if it is lower. I am not sure if I could give
17 an absolute reference for that, but there is a general
18 feeling that that would be the case.

19 MR LANGSTAFF: Obviously for some reason those advising or
20 talking about the Fontan's procedure and devising the
21 ten commandments had thought one should draw a line, an
22 upper limit at 15 rather than anything higher.

23 DR HOUSTON: Everyone would not necessarily accept that
24 15 is the figure. I trained in Toronto in the late
25 1970s, 1979 and 19 was the figure that was taken then.

0114

1 My surgeon was trained in Toronto too and that is the
2 figure we tended to take.

3 MR LANGSTAFF: Dr Houston, you might like to comment on what
4 Dr Joffe was saying earlier about the level having risen
5 over the years, the commandments dropping away with
6 time?

7 DR HOUSTON: I do not know if I could speak specifically
8 about changes with time, but I would accept a higher
9 level than 15 would have been accepted in the mid-1980s.

10 DR JOFFE: There were other commandments, if I might enlarge
11 on that, such as the need for sinus rhythm and, in other
12 words, not to proceed if a patient was in atrial
13 fibrillation because of the concept at that time, that
14 when you were using, or believing you were using a right
15 atrium to be the driving pump for forward pressure into
16 the pulmonary artery, that was a commandment that was
17 dropped even when the original Fontan, direct right
18 atrium to pulmonary artery connection was in vogue.

24 do you agree with what Dr Silove says or not?

25 DR MARTIN: Yes, I agree in part. I think what one has to

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1 realise when you are looking at the records is it may
2 not tell the whole story, there may well be other things
3 going on that you are not aware of. They do not always
4 get put down into the written record. It was a long
5 time ago, but I do have some memories that might perhaps
6 clarify things.

7 Again to put it in context, as you have already
8 heard this baby was extremely sick pre-operatively with
9 very severe necrotising enterocolitis, had bowel
10 perforation, was desperately sick. That had been
11 treated and had improved but still was not completely
12 under control.

13 Immediately following surgery my memory of it was
14 that Mr Dhasmana was very pessimistic that he managed to
15 achieve a satisfactory result. The child was extremely
16 sick after the procedure and I am fairly certain we did
17 discuss whether it was appropriate to go in and do
18 further surgery at that early stage, but I think it was
19 felt that the child's clinical condition perhaps would
20 not tolerate it.

21 I believe also during this time period there was
22 some discussion with the parents about the
23 appropriateness of doing further treatment in what was
24 quite a severe abnormality.

25 I cannot remember the conversations in detail but

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1 I know at some stage his mother expressed a view that we
2 should not be going on to do any further surgery, did
3 not want to go through further surgery. Whether that
4 was at that stage or slightly later on, I cannot be
5 sure, I am not sure about the timing but I know that was
6 a factor that might have influenced the timing and
7 scheduling of any investigations.

8 As it was, when I did the echocardiogram, was it
9 two days after the operation?

10 Q. The 16th, yes, page 148. Let us have that on the
11 screen.

12 A. I felt it was unlikely that the shunt was working and
13 I think further discussions occurred after that as to
14 whether it was appropriate to reinvestigate by cardiac
15 catheter and with a view to going on to further
16 surgery. Those discussions would have involved parents,
17 would have involved Mr Dhasmana and maybe others on the
18 Intensive Care Unit.

19 Q. It needs to be pointed out I think that the catheter was
20 conducted on 21st March.

21 A. Yes.

22 Q. That revealed, as we know, a blocked shunt with no
23 filling of the right pulmonary artery and the small left
24 pulmonary artery supplied by what was described as
25 a tortuous duct.

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1 So we have an operation on the 14th and
2 catheterisation a week later on the 21st.

3 Do you want to say anything further in response to
4 the history as Dr Martin has given us?

5 DR SILOVE: I take the point that he is making and the baby
6 had been very sick and, as it turned out, the baby
7 became even more sick after the second operation. But
8 I am sorry that I did not pick up anything in the
9 medical records if there was anything. I looked fairly
10 carefully but there was not anything to give me a clue
11 as to what suggestions were taking place with the
12 parents and so on.

13 Also there was no very clear evidence in the
14 medical records that the baby's bowel had become