Nicholson v Health and Social Services Committee

Jurisdiction:	Jersey
Judge:	M.J. Beloff, Sir John Nutting, D.A.J. Vaughan
Judgment Date:	22 November 2004
Neutral Citation:	[2004] JCA 203
Reported In:	[2004] JCA 203
Court:	Court of Appeal
Date:	22 November 2004

vLex Document Id: VLEX-793778341

Link: https://justis.vlex.com/vid/nicholson-v-health-and-793778341

Text

[2004] JCA 203

COURT OF APPEAL

Before:

The Hon. M.J. Beloff **Q.C., President**; Sir John Nutting, **Q.C.; and** D.A.J. Vaughan, **Esq., C.B.E., Q.C.**

Between
Tyrone Nicholson (by his curator, Carol Elizabeth Canavan [née Griffith])
Appellant
and
Health and Social Services Committee
Respondent

Advocate N.M. Santos Costa **for the Appellant**.

Advocate D.M. Cadin **for the Respondent**.

Authorities

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MacKenzie and Cooke: What is a reasonable time from decision-to-delivery by caesarean section? Evidence from 415 deliveries (BJOG: May 2002: Vol. 109: pp 498–504.

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Thomas, Paranjothy and James: National cross sectional survey to determine whether the decision-to-deliver interval is critical in emergency caesarean section (BMJ: 15th March, 2004: Abridged version: BMJ: Vol 328: 20th March 2004: pp 665–9).

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Appeal by the Appellant against the Judgment of the Royal Court of 4th June, 2004, dismissing the Appellant's Order of Justice.

THE PRESIDENT:

Introduction

1 This is an appeal from the Order made by the Samedi Division of the Royal Court on the 4th June, 2004 whereby the Order of Justice of Tyrone Nicholson ("the Appellant") claiming damages for negligence was dismissed. This judgment is a judgment of the court to which all members have made an individual contribution.

2 The Appellant is a young man now 26 years old. On Tuesday 16th August 1977 he sustained serious brain-damage and consequential life-long impairment of many of his faculties at the time of his birth at what was then the Maternity Hospital in St. Helier ("the Maternity Hospital").

3 The Appellant's claim, brought on his behalf by his Curator, is against the Health and Social Services Committee of the States of Jersey ("the Respondent"). The Respondent was, at the material time, responsible for the administration of the Maternity Hospital.

4 Since the appeal, like the trial, is concerned only with the issue of liability we take the summary of the tragic context of his birth from the judgment of the Royal Court.

> ***"The precise clinical nature of the condition from which the Appellant suffers may be described, generically, as cerebral palsy.*** It manifests itself in both physical and mental disabilities. He is only mobile with the aid of a wheel chair or by crawling on hands and knees and has major communication difficulties and significant learning problems. He is, so far as many activities are concerned, largely dependent on others: for much of his life this has, in practice, meant his mother, Mrs Angela Nicholson with whom he lives. Despite all this, with what must have been her remarkable support, patience and encouragement, the Appellant has in recent years found part-time employment in both the St. Helier library and the hospital, has learned to sail and is a gold-medallist of the Duke of Edinburgh's Award Scheme.
>
> ***It is common ground that on a balance of probabilities, everything points to the Appellant having sustained hypoxic ischemic damage to the basal ganglia of the brain and parts of the cerebral hemispheric structures as a result of a period of profound asphyxia of 25 minutes or less at the end of his mother's labour.*** It is also common ground that the cause of that asphyxia was, in all probability, the prolapse and subsequent compression of the umbilical cord of the unborn foetus."

5 The Royal Court noted that it is also common ground that, on the balance of probabilities, the unborn foetus had begun to sustain irreparable brain-damage by, at latest, 4.20 pm. The 'causation' experts are agreed too that had the Appellant been born after 4.20 pm but before 4.27 $^{1}/_{2}$ pm (i.e. the mid point between 4.20 pm and his actual birth at 4.35 pm) he would still have suffered some brain-damage, though not to the same extent as in fact occurred.

6 The issue of liability focuses on the speed with which it should have been possible to arrange and carry out a delivery by emergency caesarean section at the Maternity Hospital on the afternoon in question. When she was admitted Mrs Nicholson would have been classified as a low risk patient. At 3.40 pm or thereabouts, however, in the course of Mrs Nicholson's labour, the diagnosis of a prolapsed cord was made.

7 A description of a prolapsed cord is to be found in the report of Dr Philip Myerscough FRCSE, FRCPE, FRCOG, former Consultant Obstetrician and Gynaecologist at the Royal Infirmary Edinburgh, one of the Appellant's obstetric experts, where he describes that it:

> *"occurs when after the membranes have been ruptured, a loop of the umbilical cord slips down between the head and the encircling soft tissues of the birth canal.* Normally the presenting head fits snugly like a ball valve providing no space for the prolapse to occur".

It is a relatively rare condition. Its incidence is variously measured in the medical literature as between 1 in 300 (T. Lewis and G. Chamberlain: Obstetrics (1990) p.214) and 1 in 1,500 (Munro Kerr: Operative Obstetrics (8 th E'dn) 1971 p.237), the difference no doubt depending on the precise characteristics under consideration. Between 1984 and 1992 in the John Radcliffe Hospital 1 in 421 total births followed a cord prolapse (Murphy and MacKenzie: BJOG October 1995 Vol 102, p.826). It has for a very long time been recognised as an

"acute emergency, where the likelihood of unharmed survival to the infant depends crucially upon very speedy action to effect delivery … by crash caesarean" (Dr Myerscough's Report).

8 In the present case following the discovery of the prolapsed cord, arrangements appear to have been made for a caesarean section to be carried out at 5.00 pm by Mr St. John Birt, the surgeon from the Jersey Main Hospital. That plan, however, was overtaken by events when Mrs. Nicholson's labour progressed more quickly than expected. Dr Don Georgelin, a GP with obstetric experience who happened to be in the Maternity Hospital at that time visiting one of his patients, was called on by the mid-wives to assist and successfully carried out a forceps-assisted delivery at or about 4.35 pm.

9 For the claim to succeed entirely the Appellant has to show that (i) there was a breach of duty on the part of the Respondent directly or vicariously in connection the arrangements made for delivery, and (ii) had there been no such breach, he would have been born before

4.20 pm. For the claim to succeed partially the Appellant would have, in lieu of (ii), to show that, but for the breach he should have been born by 4.27 $^{1}/_{2}$ pm.

10 In a sentence then, the question in this appeal is: how much shorter than the period of some 55 minutes [i.e. 3.40–4.35 pm] would delivery by caesarean have been, if reasonable care had been taken, and, more particularly should it have been effected within no more than 40 minutes (i.e. 3.40–4.20 pm) or 47 $^{1}/_{2}$ minutes i.e. to 4.27 $^{1}/_{2}$ pm?

11 The case advanced for the Appellant by Mr Santos Costa, is that, on the basis of accepted professional standards, a properly urgent response to a cord prolapse situation should and would have resulted in him being delivered by caesarean section within 30 minutes — the so-called decision to delivery interval ("DDI") — in other words by 4.10 pm, or at latest by 4.20 pm.

12 The Appellant contended more particularly that:

(i) The hospital was under an obligation to carry out the operation as soon as possible in the light of the gravity of the emergency.

(ii) The outer limit of the permissible DDI was 30 minutes — a time vouched for by his two experts, (Dr Myerscough (see above) and Professor R.W. Taylor MD, FRCOG, Professor Emeritus, Department of Obstetrics and Gynaecology, St Thomas' Hospital, London).

(iii) The inability of GP led units on the mainland relied on by the Respondent experts to achieve such a target in 1977 (or indeed thereafter) was not to the point since (a) only one was identified as having an operating theatre of its own (b) all others were at a greater distance from the nearest General Hospital which might provide back up surgical services than was the Jersey Maternity Hospital from the Jersey General Hospital.

(iv) The Jersey Maternity Hospital had, even given the need to call on a surgeon and anaesthetist from elsewhere, adequate provision to deal with such an emergency.

(v) If and so far as a failure to reach such target might be excused by adventitious circumstances e.g. a contemporaneous surgical commitment of Mr Birt or unexpectedly adverse traffic conditions, the Respondent had failed to adduce any evidence to support such an excuse.

(vi) In particular the need to cross-match blood could not in extremis excuse delay, given the availability of standard blood supply at the Maternity Hospital.

13 The case advanced for the Respondent by Mr Cadin is that, judged by the standards and limitations inherent in the system in 1977, no criticism can properly be made of the interval

of time that elapsed in practice between diagnosis of the prolapsed cord and delivery of the infant Plaintiff, however tragic the consequences.

14 The Respondent contended in particular that

(i) while the hospital was under an obligation to carry out the operation as soon as possible in the light of the gravity of the emergency, the degree of risk to which delay might expose the unborn foetus was less well known in 1977 than today and account had also to be taken of the interests of the mother.

(ii) the outer limit of 30 minutes had no support in the contemporary medical literature and developed thereafter as an audit benchmark or aspiration rather than an essential element in an appropriate standard.

(iii) such a target of 30 minutes was not achieved by many hospitals, especially, but not exclusively, GP led units on the mainland in 1977 or even today.

(iv) while the Jersey Maternity Hospital had, even with the need to call on a surgeon and anaesthetist from elsewhere, adequate provision to deal with such an emergency, its capacity to deal with something which was, at the time of the mother's admission, unforeseeable was necessarily affected by those very circumstances.

(v) while, because of the lapse of time, the Respondent could not explain exactly why on the day in question a caesarean could not be performed within 30 minutes, and indeed was scheduled for 75–80 minutes after decision, the evidence of the local practitioners was the effect that a timescale of that order was necessary to assemble a team and make appropriate arrangements, and the reasonableness of so doing in such a time was supported by the Respondent's experts (Mr Ian MacKenzie, FRCOG, DSc (Oxon), Reader in Obstetrics and Gynaecology, University of Oxford and Hon. Consultant in Obstetrics and Gynaecology, Oxford Radcliffe Hospital NHS Trust; and Professor Peter Dunn FRCP, FRCOG, FRCPCH, Emeritus Professor of Perinatal Medicine and Child Health, University of Bristol).

(vi) in particular the need to cross-match blood of itself provided an acceptable explanation.

The Judgment of the Royal Court

15 The Royal Court dismissed the claim. They held

"81. The Appellant (we have substituted "Appellant" for "Plaintiff" and "Respondent" for "Defendant" for clarity) ***having been delivered vaginally at 4.30 pm (or perhaps 4.35 pm) the effective question as regards liability becomes whether delivery within that time-frame of 50 to 55 minutes from 3.40 pm (depending on how one reads the hospital notes as to the time of birth) is to be regarded as falling short of a proper standard of care. Even that question defines only half the ambit of***

the relevant inquiry, given the causation experts' agreement that the Appellant would have had to have been born by 4.20 pm to escape all damage and 4.27 pm to have escaped a substantial portion of it.

82. On this point, we find that the case for saying that there was a lack of proper care and management of mother and child has not been made out.

83. A time of 50 to 55 minutes from the moment when the midwife first diagnosed the existence of a cord prolapse at 3.40 pm or thereabouts to the Appellant's delivery by Dr Georgelin is, on any view, within the time range that Mr MacKenzie and Professor Dunn would regard as unexceptionable in 1977 at the Jersey Maternity Hospital. And applying the principles established in *Bolam v Friern Hospital Management Committee* (1957) 1 WLR 582 ***("Bolam") &*** *Bolitho v City and Hackney Health Authority* (1988) AC 23 ***("Bolitho"), it is impossible to say that the views expressed by Mr MacKenzie and Professor Dunn on behalf of the Respondent represent anything other than those of a responsible body of medical opinion. Nor, for the following reasons, can it reasonably be said that those views are in any way illogical or irrational in the sense referred to by Lord Browne-Wilkinson in Bolitho:–***

> ***(i) Both are well-qualified to speak to the subject in hand.***
>
> ***(ii) Their personal recollection that a 30-minute decision-to-delivery interval was not widely recognised and applied in 1977 is consistent with the absence of any reference to it in published literature before 1985 or thereabouts.***
>
> ***(iii) Once the 30-minute standard is recognised for what it is — a pragmatic audit standard representing an ideal to be aimed at — and that circumstances may vary from one unit to another, it follows that what appears on the face of things to be a shortfall in performance may be perfectly explicable and justifiable in the light of the resources and other circumstances of the unit in question.***
>
> ***(iv) It follows that every case must be judged on its own facts and that, in every case, it must be a question of fact and degree as to how far the rule-of-thumb benchmark can safely be used as an indicator of inadequate clinical provision and what is or is not reasonably feasible in the circumstances.***
>
> ***(v) If at the moment when the emergency occurs the patient is in one place and the surgeon and anaesthetist are elsewhere, common sense says that, with the best will in the world, the decision-to-delivery interval is likely to be longer than it would be if everyone and everything were on the one site.***
>
> ***(vi) It is unreasonable to assume that clinical procedures will necessarily happen quite as speedily in a small unit such as Jersey was in 1977 as they would — or might do — in a big teaching hospital.*** For example, Dr.

Myerscough and Professor Taylor thought that 10 minutes or so would have been sufficient for an anaesthetist to have prepared and administered the necessary anaesthetic to a mother. Dr Sayers' evidence, however, was that he would have needed a minimum of 20 minutes: but there was no suggestion that that was in any way dilatory or unprofessional.

(vii) The persons best qualified to speak to the time involved in assembling the necessary team and completing the required caesarean section in 1977 were those who were engaged in practice at the Jersey Maternity Hospital at that time. And the actual decision-to-delivery interval of 55 minutes in the present case, or possibly 50 minutes depending on when exactly the Plaintiff was delivered is broadly in line with their experience of what was reasonably achievable in 1977.

(viii) There is no basis on which the evidence of Mr Birt, Dr Fullerton and Dr William , (Obstetricians holding part time appointments at the Maternity Hospital) ***could properly be disregarded, notwithstanding that the evidence of the former two was given by affidavit and was not tested in cross-examination.*** There was no real challenge to it and no evidence to counter it. To reject such evidence of what was or was not reasonably achievable 26 years ago in favour of a minute-by-minute computation of our own (whether of 40 minutes, 45 minutes or any other figure) as the precise yardstick by which obstetric performance in Jersey in 1977 ought to be judged would be quite wrong. No witness other than Mrs Nicholson herself claims to have any clear recollection of what actually happened on the day in question. There was nothing of substance to suggest that on that particular day it would have been possible to ***have mounted a caesarean section any more quickly than normal.*** And there is no proper basis, as far as we can see, on which one could logically and reasonably arrive at one specific time rather than another.

(ix) To reject such evidence and insist that the Appellant should have been delivered more quickly than actually happened would also appear to us to fly in the face of the difficulties that even some of the most prestigious, highly resourced obstetric institutions evidently still experience today in meeting a 30 minute target and the research to which we have referred above into the results actually attained in such units.

84. However much one might wish to be able to reach a different result, the unavoidable conclusion in our judgment is that there is no way in which it can fairly be said that the Appellant's very considerable misfortune is the result of any failure on the part of anyone or anything involved in or connected with the management of his birth on that day in August 1977. There is, in short, no likelihood that he could in fact have been delivered by caesarean section any earlier than he was in fact born by forceps delivery and no fair basis for saying that he should have been born any earlier, let alone any case for saying that he could and should have been delivered before irremediable brain damage set in at about 4.20 pm or at any other time which would have saved him from at least some measure of the disabilities that he sustained. For these reasons the claim

fails."

The issues in the Appeal

16 The grounds of the appeal in the Notice of Appeal dated 2nd July 2004 asserted that the Royal Court

(i) Wrongly applied the standard of care appropriate to GP led units on the mainland (which did not generally have facilities for caesarean sections, and where women elected to have babies), to the Maternity Hospital in Jersey which was the sole provider of obstetric services.

(ii) Failed to attach sufficient weight to the seriousness of a cord prolapse with compression, which should have led to the Appellant being delivered by caesarean section without delay as recognised in the Appellant's expert evidence and the literature.

(iii) Wrongly placed too much weight on the development of the standard of the 30-minute decision-to-delivery interval, which was only illustrative of the appropriate test in 1977, and too little on the generally accepted principle that the Appellant should have been delivered by emergency caesarean section as speedily as possible.

(iv) Wrongly failed to give weight to the distinction between "crash caesareans", or the type of acute obstetric emergencies that came within this category, and other emergency caesareans recognised in both oral evidence and the literature.

(v) Failed to give any or any sufficient weight to the following facts

(a) the operating theatre was ready and available at the Maternity Hospital; there were midwives and nursing staff present to assist in the operation; blood samples had been taken and sent to the laboratory at the General Hospital for cross-matching;

(b) Dr. Williams, the GP/Obstetrician, had been alerted to contact the surgeon and the anaesthetist, the midwives had contacted the paediatrician, who was later present at the actual delivery, and incubated the Appellant.

(c) the Maternity Hospital was in a position to carry out the section on arrival of the surgeon and the anaesthetist.

(vi) Ignored the unchallenged fact that to plan the caesarean for 5 pm dictated the course of action that then followed, namely that no attempt was made to deliver the Appellant as speedily as possible.

(vii) Declined to make any findings as to when the caesarean section should have taken place other than to accept the largely untested assertion that it was not possible for the caesarean to have taken place in under variously 50 minutes, 1 hour or 1 $^{1}/_{2}$

hours.

(viii) Wrongly gave weight to Mr Birt and Dr Fullerton's statements, which were admitted without them being required to give oral evidence.

(ix) Wrongly rejected Dr Sayers' oral evidence that in 1977 they would not have waited for the cross-matching of blood, or indeed notification that the blood was cross-matched, before starting the operation.

(x) Wrongly excluded the evidence of Mrs Tranter, Matron of the Maternity Hospital, as to the practice and procedures adopted for carrying out emergency caesarean sections in 1977.

(xi) Wrongly allowed the evidence of Dr. Williams, Dr. Fullerton, and Mr. Birt to set the standard themselves of what a reasonably competent obstetric unit on Jersey should have achieved in an emergency caesarean section at the relevant time.

(xii) Failed to give sufficient weight to the relative experience of the experts, in particular the experience of Dr. Myerscough and Professor Taylor.

(xiii) Wrongly formed the view that Professor Taylor on behalf of the Plaintiff had “softened” his criticism of the failure to deliver the Plaintiff within 30 minutes under cross-examination.

(xiv) Failed to subject Mr McKenzie and Professor Dunn's evidence to proper critical analysis, in Mr McKenzie's case the lack of objectivity in his evidence, and in Professor Dunn's case his absence of relevant obstetric experience as a paediatrician.

17 While we pay tribute to the way in which the parties' respective cases were presented to us both in writing and orally, the resolution of this appeal has been complicated by a number of factors.

(i) In the leading case of *Bull v Devon Area Health Authority* (1993) 5 Med LR 17 (“Bull”) a number of important questions were raised by the Court of Appeal as to the relevant principles of law and their application in a comparable situation, but left unanswered as inessential to the disposal of that case but insofar as Bull did provide guidance, little attention was paid to it before us, and still less before the Royal Court. (It was mentioned only obliquely in paragraph 89 of the Royal Court's judgment; and no reference at all was made to the other leading case of *Robertson v Nottingham Health Authority* (1997) 8 Med LRI (discussed 1997 5 Med L Rev 342 and Jackson and Powell: Professional Negligence (5th Ed'n) para 12–156–12–157) also concerning an infant who suffered brain damage through a delayed DDI.

(ii) Neither party in the Royal Court sought to reopen those questions, and structured their argument and evidence on relatively confined premises.

(iii) The effluxion of time since the events under scrutiny meant that no lay witness

was (understandably) able to explain the basis upon which the decision to operate at 5 pm was taken, and whether this merely represented par for the course or was the product of factors specific to the day in question.

(iv) Two witnesses Mr Birt and Dr Fullerton, because of their age, were by agreement not called — although their statements were admitted in evidence — thereby ensuring that no questions were put to them, although they might, even at the date of trial, have been able to explain matters which were of concern to this court.

(v) Other witnesses who were called, in particular Dr Williams, were not challenged on matters which now appear controversial, or asked questions which now appear pertinent.

(vi) The adventitious circumstance of the necessity of a vaginal delivery prior to the time scheduled for the Caesarean meant that the Court had artificially to focus on whether the actual delivery (which was generated by circumstances beyond the Respondent's control) rather than whether the scheduled DDI was outside an acceptable timeframe.

(vii) Whether the Respondent's response to the emergency was timely or not fell to be measured in minutes, not hours: and in circumstances where the ideal medical response (i.e. an immediate) one was agreed on all sides to be impossible.

The lay evidence

18 The evidence of the witnesses of fact was well summarised by the Royal Court in its full and careful judgment; and we borrow heavily from it.

19 In 1977, unlike today, the Maternity Hospital was not on the same site as the General Hospital: the two were on opposite sides of St. Helier, about a mile apart. The Obstetric Department was moved to the same site as the General Hospital in 1987. Mr Birt, in his statement referred to discussions about the Department's future having been current in 1977. The Maternity Hospital was a non-consultant GP unit under the day-to-day direction and management, part-time, of Dr Donald Fullerton and Dr Anthony Williams. It relied for the provision of specialist medical and surgical staff and pathology services on the resources of the General Hospital. In particular, it had no dedicated obstetric surgeon of its own on site but had to call, as and when required, on the services of one of the surgeons at the General Hospital, usually Mr. St. John Birt. Nor did it have a resident anaesthetist: he too, usually Dr Donald Sayers, had to be summoned from outside (in his case from his GP surgery or elsewhere). The Maternity Hospital was, in essence, as we see it, the maternity wing of the General Hospital, albeit not physically located adjacent to it. Mr Santos Costa stressed that " *Unlike women whose confinement took place in GP units on the mainland, women in Jersey had no choice as to where their babies were born*."

20 In 1977 the number of births per annum at the Maternity Hospital was of the order of 800. According to the Report of the Medical Officer for Health for the year 1976, over 99% of

births in the island took place there. There was evidence that, on average, there would have been three of four deliveries by elective (planned) caesarean section per month and, perhaps, one emergency caesarean section per month. There is no specific evidence that the hospital had to deal previously with the emergency created by the prolapsed cord although Dr Williams thought it " *highly unlikely*" that there were " *many*" [sic].

21 The actual course and timing of events during this critical period of 55 minutes or so, 26 years ago, is incapable of being established with anything approaching certainty. The Royal Court, who had the advantage of seeing and hearing Mrs Nicholson noted that her recollection was affected not only by medication but also by the passing of time [paragraph 23]. The provenance and purpose of two sets of hospital notes purporting to record events during the critical period between 3.40 and 4.35 pm is obscure: they also lack detail.

22 The reconstruction of events recorded by these two sets of notes was found by the Royal Court to be as follows:

> (i) Mrs Nicholson, having been examined by Dr Williams earlier in the day, was admitted to the hospital at or about 3.00 pm on 16th August 1977 with a view to her labour being induced the following day.
>
> (ii) Thereafter, before 3.35 pm but otherwise at times unspecified: the heart rate of the foetus was recorded as 124 beats per minute ('FHHR 124' in the Nursing Record, which is within the range of normality); the midwife conducted a vaginal examination which revealed that the cervix was 4 to 5 centimetres dilated and the fore waters were bulging; and the foetal heart rate was again noted as normal ('FHHR' without more in both sets of notes).
>
> (iii) At or about 3.35 pm the fore waters were ruptured, 'Meconium stained liquor' was observed, and what was thought possibly to be a hand was felt by the side of the Plaintiff's heat ('? Hand felt by side of head': see the Delivery Record).
>
> (iv) At or about 3.40 pm a 'Loop of cord' was felt and, more or less simultaneously or shortly thereafter, the foetal heart rate was observed to have fallen to 80 beats per minute (both sets of notes).
>
> (v) Mrs Nicholson was then moved into the 'Knee to chest position'. The entry in the notes reading 'Knee to chest position' is a reference to a standard practice in cases of cord prolapse, in which the mother is turned onto her knees with her pelvis elevated and her chest flat, as far as possible, on the table and the mid-wife exerts pressure by hand, via the vagina, on the head of the foetus: the purpose being to relieve the pressure of the descending foetus on the cervix and reduce constriction of the umbilical cord.
>
> (vi) Dr Williams was 'informed' or 'notified' (the notes use different words). We add that there is no documentary evidence of the nature or detail of the information which he was given. He was not asked about this in cross-examination.

(vii) ‘Arrangements [were] made for emergency caesarean section at 5 pm’ (per the Delivery Record); ‘Arrangements for c.s. [were] made’ (per the Nursing Report).

(viii) The paediatrician was notified.

(ix) A sample of Mrs Nicholson's blood was taken ‘for emergency X matching’ (the Delivery Notes)/ ‘for X matching’ (the Nursing Report).

(x) Oxygen was given to Mrs Nicholson.

(xi) A FHHR of 80 was again noted.

(xii) The cervix was noted to be soft and dilating quickly.

(xiii) At 4.30 pm the cervix was noted to be ‘Fully dilated’.

(xiv) At or about 4.30 pm, or perhaps 4.35 pm, ‘Neville Barnes forceps [were] applied to facilitate delivery of a live male infant; and at or about 4.35 pm, or perhaps 4.40 pm the ‘Placenta & membranes [were] delivered complete by C.C.T. [controlled cord traction]’.

23 The two sets of notes differ as to the timing of the precise moment of birth. In both all times appear to be recorded to the nearest five-minutes on the clock, but before us little, if any, emphasis was placed on precise timings by either party. Mr Santos Costa was content to proceed on the basis that the time lag between diagnosis and delivery was 55 minutes. He argued as we have noted, that the DDI, should have been no longer than 30 minutes and it certainly should not have been 80 minutes as envisaged in the time apparently fixed for Mr Birt to operate.

24 Only two witnesses of facts to the events of 16th August 1977 were called on behalf of the Appellant: Mrs Nicholson and Dr Sayers. On behalf of the Respondent's, we repeat, evidence was given in person by Dr Georgelin and Dr Williams, and in the form of affidavits by Mr Birt and Dr Fullerton.

25 Dr Georgelin had little recollection of the occasion of the Plaintiff's delivery independent of what he was able to read in the hospital notes and in a brief entry in his own diary reading ‘Forceps delivery on clinic patient Mrs Nicholson for prolapsed cord’. It appears that he happened to be visiting a patient of his own at the time and agreed in the circumstances to help out on a voluntary basis. He did not remember having assisted the delivery by digital dilatation of the cervix. Since no criticism is made of his conduct of the delivery, his evidence does not seem to us in any event to be relevant.

26 The evidence of Mr Powderhill, a retired police officer concerning the time required to travel between the General Hospital and the Maternity Hospital was based in part on personal observation and experience of St. Helier traffic conditions over the years and in part on a review of various records and publications of potential relevance. On 5th February

2004 he signed a statement on behalf of the Appellant, and on 17th February 2004 swore an affidavit on behalf of the Respondents revising to some extent his earlier conclusions. The nub of his evidence, however, was that in 1977 it would have taken approximately 15 minutes on foot at a brisk walk and 20 minutes by car, door to door, to get from the General Hospital to the Maternity Hospital. This does not appear to be in issue.

27 Mr Birt's evidence was given solely by way of an affidavit sworn by him on 23rd June 2003 together with an exhibited letter dated 5th May 1996. It appears to have been proposed by the Respondent and accepted by the Appellant that, as a result of infirmity and absence of any recollection of the occasion in question, there was little point in requiring him to appear in person. Mr Birt was at the time of the hearing at the Royal Court in his 88th year. His career at the Jersey General Hospital spanned a period of thirty years from 1951 to his retirement in 1981. His position in 1977 and at retirement was that of Consultant General Surgeon. In his affidavit he confirmed that he had *'absolutely no recollection of the occasion'*, his earlier comments in his letter of 5th May 1996 having been based entirely on the hospital notes to which reference has already been made. He added: ' *I seem merely to have been alerted to the need to perform a caesarean at 5.00 pm and then, presumably, stood down when this was no longer necessary'*.

28 Mr Birt's 5th May 1996 letter appeared to have been prompted by a letter from lawyers for the Appellant (which was not itself in evidence) containing an allegation that he was booked for a caesarean section but *'for some reason did not turn up'*. His response in that letter to this charge was as follows:

> *'The reason for my not turning up is clear.* I was not due until 5 pm, by which time the baby had been born. I would normally have got there about 10 minutes before at 4.50 pm. I obviously was notified that my services were not required.
>
> *I have checked with Evening Post [sic] and the 16th August 1977 was a Tuesday and I would have been at the Hospital all day — doing rounds in the morning and out-patients in the afternoon.*
>
> *The situation at the Maternity Hospital in 1977 was very different from today when the whole of the obstetric department is situated in the General Hospital.*
>
> *An emergency caesarean operation at the Maternity Hospital took much longer to organise.* As there were no Resident Staff it was necessary to make contact and arrange a suitable time with (1) Surgeon, (2) Anaesthetist, (3) Paediatrician, (4) Organise the theatre and at times send for additional theatre staff, (5) Blood for cross matching had to be taken, transported across town, cross matched and then transported back to the Maternity Hospital.
>
> *Mrs Nicholson's vaginal delivery was carried [out] efficiently and without delay.* It would have been necessary for an earlier caesarean delivery to have been arranged and stated in under 50 minutes. In view of the arrangements above that had to be made it was seldom, if ever, possible to do this at the Maternity Hospital [sic]'

In 1977 discussions were already taking place about the future of the Obstetric Department, one of the main reasons for its removal to the General Hospital was the availability there of resident medical obstetric staff, laboratory, x-ray and paediatric facilities. But nearly 20 years ago the situation at the Maternity Hospital is quite different.' (our emphasis)

29 Dr Fullerton, like Mr Birt and for similar reasons, did not give evidence in person but by way of an affidavit sworn on 27th February 2004 which exhibited a statement dated 26th February 2003 and a set of notes compiled by him in or about September 1996. In 1977 he was one of two GP Obstetricians (the other being Dr Williams) holding part-time appointments at the Maternity Hospital while continuing, at the same time to practise as a General Practitioner. In 1980 he left General Practice to become a Consultant Obstetrician at the General Hospital where he remained until his retirement in 1990. He was elected a Fellow of the Royal College of Obstetricians and Gynaecologists in 1989. The substance of his evidence is to be found in the following passages from his September 1996 notes:

'It will be seen that 55 minutes elapsed between the discovery of a prolapsed cord and delivery of the baby.

At first sight this may appear to be an undue delay, but the special circumstances of the Maternity Hospital must be understood.

Firstly there were no resident medical staff in 1977, the obstetric input being by two part time G.P. specialists. A large percentage of the patients were looked after by their own G.P.'s. Deliveries by caesarean section were undertaken solely by Mr St. J. Birt and other members of the surgical consultant staff at the General Hospital.

Secondly the geographical separation of the Jersey Maternity Hospital and the Jersey General Hospital created its own difficulties and delays. The paediatricians for example had to make their way across the town which in heavy traffic could easily take twenty minutes. Likewise blood taken for emergency cross matching had to make the journey there and back again. Due to the above problems I don't recall any urgent caesarean sections taking place in under one hour.' (our emphasis)

30 We consider that, having agreed to the evidence of Mr Birt and Dr Fullerton being adduced in this way, the Appellant cannot now complain that the Royal Court placed undue weight on it. Mr Santos Costa made a forensic choice not to submit either to cross-examination. The two witnesses gave unchallenged and uncontradicted evidence on the general practice in relation to caesarean sections at the Jersey Maternity Hospital at the relevant time, and the Royal Court was entitled to rely on it. [Judgment para 68, 70 and 83 (vii) (viii).]

31 Dr Sayers gave evidence in person. He is now retired from practice but at the time in question combined General Practice from his consulting rooms in Midvale Road, St Helier

with part-time appointments as an anaesthetist at the General Hospital, at the Maternity Hospital and at certain nursing homes and dental practices in the Island. He had been a Fellow of the Faculty of Anaesthetists of the Royal College of Surgeons since 1954. In the case of the Maternity Hospital he was in charge of anaesthetics and was the person on whom the hospital would first call when an anaesthetist was required. He produced an appointments diary maintained by him for 1977 in which the page for Tuesday 16th August had been roughly ruled off horizontally into three sections representing the morning, the afternoon and the evening, and in which the morning section contained some nine or ten entries, the afternoon just two entries, and the evening three entries including one that appeared to read '5 15 Caesr'. His normal routine was to reserve the morning for anaesthetic appointments at one or other of the nursing homes or dental practices and for visiting patients, and to see patients at his consulting rooms in the afternoon between 2.00 pm and 3. 30 or 4.00 pm before returning home. The fact that his appointments diary for 16th August 1977 shows only two entries in the afternoon did not necessarily reflect the number of patients seen as it was common in those days for people to call at his surgery without prior appointment. He had no recollection whatever of the occasion with which the Royal Court was concerned and could offer no explanation for the time of 5.15 pm against the reference to a caesarean section, which was inconsistent with the hospital notes that arrangements had been made for 5 pm. He was confident that at the material time he would have been contactable either at his consulting rooms or at his home.

32 As to timing, Dr. Sayers estimated that both his consulting rooms and his home were of the order of half a mile to a mile from the Maternity Hospital and that it would have taken about 5 minutes by car to get there assuming there were no traffic problems; that it would have taken a minimum of 20 minutes, in an emergency, from the point of walking through the hospital door to having a patient fully anaesthetised and ready for the surgeon's incision; and that in a dire emergency it would have taken Mr. Birt ' *probably 5 minutes*' to complete the operation and deliver the child. Beyond this, he was not asked and offered no view on the evidence of Mr Birt, Dr. Fullerton and Dr. Williams concerning their experience as to the total time it generally took to organise a caesarean section 1977. And in cross-examination by Mr. Cadin, he appeared to accept that he was in no position to offer any evidence as to what time might have elapsed in any given case between diagnosis of the need for a caesarean section and his receiving a telephone call.

33 Dr Williams (now The Revd Dr. Williams) gave evidence in person, though in part by reference to a written statement made in March 1977. He was a member of the Royal College of Surgeons, a Licentiate of the Royal College of Physicians, a Diplomate of the Royal College of Obstetricians and Gynaecologists. His first call of the day, when on duty, would normally have been to the Maternity Hospital, after which he would carry on with his general practice activities. He too could not remember anything about Mrs. Nicholson's labour and the Appellant's birth. Although his name was one of four appearing in the relevant entry in the formal Births Register (together with those of Dr. Georgelin, Mrs. Tranter and Sister Gregory), he was in no doubt that it would have been he, not Dr. Georgelin, who would have performed the delivery if he had been there, and he could only assume that he had arrived very shortly after the birth and had been mentioned in the register because Mrs. Nicholson was his patient at the Maternity Hospital.

34 The normal procedure in the event of an emergency caesarean section, Dr. Williams explained, would have been either for the mid-wife to telephone him and for him to make the necessary arrangements or, on occasion, for the mid-wife to telephone the surgeon and anaesthetist direct. Mobile telephones did not exist then and as far as he could recall the obstetric doctors did not have ‘bleepers’. The typical chain of communication would have involved

> (i) a call from the labour ward to Dr. Williams's surgery (where, as far as Dr. Williams could remember, there was in those days only one outside line and perhaps four or five practitioners);
>
> (ii) a call by Dr. Williams to the General Hospital switchboard, whose responsibility it would have been to know Mr. Birt's whereabouts and those of the duty anaesthetist;
>
> (iii) once connected to Mr. Birt (who, it seems, was likely to have been conducting his out-patient clinic on Tuesday 16th August 1977), Dr. Williams would have agreed the necessary arrangements, the time being set by the surgeon;
>
> (iv) Dr. Williams would then telephone the anaesthetist and inform him of the situation; and
>
> (v) finally the mid-wife would have been notified of the result of these discussions. In the meantime the staff at the Maternity Hospital would be moving the patient to the anaesthetics room, taking a blood-sample for cross-matching at the pathology department in the General Hospital, and making the necessary preparations in the operating theatre.

35 It was Dr. Williams's evidence that in 1977, depending on the time of day, it would normally have taken:

> *‘at least one hour from deciding to carry out a caesarean section to the time of the operation….*longer if there were any problems, for example traffic delays' (as he put it in his written statement): a total time of one hour and twenty minutes from recognition of an emergency to delivery was ‘not unusual at the Maternity Hospital in 1977’; ‘Well, in those days, if we could get a Caesar going in under an hour, in about an hour, that would have been good going’

(as he put it in examination-in-chief by Mr. Cadin, explaining that he was speaking of the time from when he was informed of the need for a caesarean section to be performed); ‘ *I can't remember any occasion when it was done in less than an hour*’ (in answer to Mr. Santos Costa, in cross-examination); ‘ *But that was the way the system was and the system didn't allow any change in the system, as I have described it to you at that time*’ (in answer to the Court). A diagnosis-to-delivery time of 50 minutes or thereabouts, would, in his view, have been ‘ *a very good time… a top-class time*’ in 1977. The determining factor in this sort of timescale was, he said, getting the surgeon and the anaesthetist together.

36 In cross-examination, Mr. Santos Costa suggested to Dr. Williams that his experience of and comments on such timings might be based largely on the performance of emergency caesarean sections for conditions less dramatically urgent than a cord prolapse. But while Dr. Williams agreed that cord prolapses were uncommon, he would not accept any such gradation of speed of response. The material passage was quoted in the Judgment of the Royal Court (paragraph 34) and for convenience we repeat it:

> ***'Q. But none of those [the occasions of emergency caesarean sections of which Dr. Williams spoke] were cord prolapses, were they? A. I can't remember. It is highly unlikely there were many cord prolapses.***
>
> ***Q. So a cord prolapse, by definition, would be different from any ordinary emergency caesarean section that you recall? A. Well, an emergency is an emergency.***
>
> ***Q. But this, as you put it yourself, is the very highest emergency. A. It is an urgent situation.***
>
> ***Q. And it is fair to say, isn't it, Dr. Williams, that logic dictates that the more urgent the situation, the quicker it is done?*** A. If that is possible.'

The Royal Court notes that apart from this exchange, Dr. Williams was not challenged as to his recollection of what was normally feasible in 1977. Nor was it suggested to him in cross-examination, that he had failed, or might have failed, in some way to make appropriate arrangements for a caesarean section to take place at the earliest possible opportunity.

37 In short, Dr Williams and the other local practitioners presented evidence that in general terms, though not in terms specific to the Appellant's case, explained the lapse in time between the discovery of the cord prolapse, the decision to expedite delivery by means of an instrumental assisted delivery and the actual delivery by reference to such factors as the need to assemble a team, the distance between the General Hospital and the Maternity Hospital, and the requirements of cross-matched blood. There is however no explanation of why 5 pm was fixed for the caesarean: and no reconciliation of the 5 pm and 5.15 pm timings. There is also an apparent inconsistency between the evidence of Mr Birt and Mr Williams as to whose responsibility it was to determine the scheduling of an operation. We are inclined to conclude that it must have been joint enterprise, Dr Williams saying when he wished Mr Birt to come, Mr Birt saying when he could come.

38 Before the Royal Court a late application (it was coincidental with a successful application to allow Dr Sayers to be called to deal with a [wrong] suggestion by the Respondents that he might have been out of the island on the day in question) was made to call Mrs Tranter, the then matron of the hospital, on behalf of the Appellant to deal with the maternity hospital procedures and systems at the material time (she had no recollection of the day in question). On 29th March 2004 this application was rejected by the Commissioner for reasons subsequently given in a Judgment of 9th August 2004. We do not consider that we

should interfere with his exercise of discretion in a matter which concerned the proper management of the hearing. The potential relevance of her evidence must always have been apparent for, as stated above (paragraph 33) she appears in the Birth Report as being present at the birth and even though Dr Williams still had to take the stand, the Respondent would necessarily have been prejudiced by the introduction of a new point which had it been made earlier, it might have had a better opportunity to rebut.

The Expert Evidence

39 The Royal Court also helpfully summarised the expert evidence. Again we borrow heavily on their summary. At the outset the Royal Court noted that all experts were in one capacity or another in active practice in 1977, and that there was a considerable amount of ground on which there was no issue between them.

(i) In Mrs Nicholson's case there was nothing, at the time of admission, in her previous medical history or in the earlier stages of her pregnancy to give reason to think that she was pre-disposed to any complication. This was her second pregnancy: her first child had been born without difficulty.

(ii) Prolapse of the umbilical cord has always been and remains a serious obstetric complication, but mercifully a rare condition. Coupled with serious foetal distress, of which meconium-staining of the amniotic liquor or reduced heart-rate (bradycardia) are the most common signs, a prolapsed cord is potentially fatal to the infant and represents a major emergency. A foetal heart-rate of 80, as observed in the present case, is indicative of serious bradycardia.

(iii) With varying but immaterial degrees of emphasis, diagnosis of such a condition could be rated on a scale of one to ten as either at or near the top end of the scale in terms of seriousness as measured by the threat to the life of the foetus. Dr Williams and Dr Sayers said much the same: indeed, no witness suggested anything else.

(iv) The first thing to be done — as was indeed done in this instance in such circumstance is to get the mother into the knee-to-chest position and for the midwife to do her best to relieve pressure on the cord as described earlier with her gloved hand. How far such ‘first-aid measures’ — as they were referred to — are effective in any case may vary; but Professor Taylor was of the view that in the present case the pattern of brain damage was such that it was likely that the procedure had been successful in allowing the foetal heart rate to some extent at least to rise again.

(v) In almost all such cases delivery by caesarean section as quickly as possible is called for. During the 1950's and early 1960's delivery by caesarean section began to gain significant currency with improvements in medicine and surgery. Thus the 1971, 8th Ed'n, of Munro Kerr's Operative Obstetrics, (of which Dr Myerscough was a joint editor) observed:

“There is no complication in obstetric practice which yields such

> ***disappointing results in respect to treatment as does prolapse of the cord — and none which gives less promise of improvement.*** Meticulous antenatal care has in great part removed the menace of the graver toxaemias; caesarean section has solved most of the problems of complicated and difficult labour; the sulphonamides and penicillin have robbed infection of its terrors. ….” (p.237)

but spoke of ‘ ***The much freer use of caesarean section in recent years’*** having greatly reduced the risk to the foetus (p.240). A little later it continued as follows:

> ***‘I have left till last the consideration of caesarean section — the treatment best suited for the difficult cases discussed in the previous section (cervix not fully dilated), and one which I have employed successfully on a number of occasions.*** Needless to say, caesarean section should not be looked on as the easy way out of every difficulty with prolapse of the cord. But with modern technique and use of antibiotics the safety of caesarean section — and hence its scope — has greatly increased, and it is unreasonable to withhold this method of delivery if thereby a living child can be obtained with little risk to the mother’.
>
> ***I therefore recommend caesarean section in this group of cases if the foetus is mature or nearly mature and is alive; I would regard it as imperative if any of the following conditions are present: (1) much cord has prolapsed.*** …” (p.243–4)

(vi) The contemporary published literature, while emphasising the urgency of the situation, did not talk in terms of any **particular** time within which the operation ought to be carried out. Myles: A Textbook for Midwives, (6th Ed'n.) 1968 said:

> ***‘Caesarean section is performed as soon as the diagnosis is made and the foetus is alive’,***

Combined Textbook of Obstetrics and Gynaecology for Students and Practitioners, edited by Sir Dugald Baird 1969, said:

> ***“Presentation And Prolapse Of The Cord***
>
> ***Diagnosis — As the child's life is immediately endangered by prolapse of the cord, early diagnosis is of very great importance.*** (p.486)
>
> ***Management — If the child is thought to be alive, its best interests are served by immediately delivery”.*** (p.488).

The 1971 edition of Munro Kerr, dealing with prolapse where the cervix is only slightly dilated (as in the present case at 3.40 pm) spoke of the need for a caesarean section to be performed:

> ***“without delay’ (p.243) “when the pulsations (of the cord) became***

slow and especially if they come feeble and irregular, the child must be extracted quickly if it is to be saved" (p.240).

Walker MacGillivray and MacNaughton. Combined Textbook of Obstetrics and Gynaecology, (9th Ed 1976) also spoke of 'immediate delivery'. Later in Obstetrics by Ten Teachers edited by TLT Lewis ("Lewis") and GVP Chamberlain 1990, it was said:

"If the foetus is alive the treatment is immediate delivery" (p.389).

As much emphasis was placed on early diagnosis as on swift delivery but great emphasis was placed on both.

No articles in learned journals dealing with the subject earlier than the 1980's appear to have been found.

(vii) In 1986, almost 9 years later than the events in question, the Canadian Consensus Conference Report entitled Indications for caesarean Section: Final Statement of the Panel of the National Consensus Conference on Aspects of Caesarean Birth CMAJ Vol. 134, June 15, 1986 made the first prominent reference to a specific 30 minute standard. The relevant passage in that report reads as follows:

'The panel recognised that rupture of the lower uterine segment may occasionally be catastrophic for the woman and her infant, although this event occurs much less frequently than other acute obstetric emergencies. Therefore, hospitals providing obstetric care should ensure the availability of blood, operating room, neonatal resuscitation, and nursing, anaesthetic and surgical personnel so that a caesarean section can be started within approximately 30 minutes for any woman in labour, including a woman undergoing a trial of labour. The panel also recognised that in a country as vast as Canada there are small hospitals without such resources, especially in remote areas. Nevertheless, by selecting and transferring women with high-risk pregnancies for management in other appropriate facilities, these small hospitals continue to be provided valuable obstetric services to women in their communities. Such hospitality cannot be expected to electively manage breach delivery or trial of labour.'

40 As the Royal Court record in para. 47 of their Judgment, there were four main areas of divergence between the two sets of 'liability' experts:

(i) as to the extent to which the 30-minute standard referred to in the Canadian Consensus Report 1986 did or did not reflect pre-existing practice that would have been current in 1977;

(ii) as to whether that standard was soundly based and practicable;

(iii) as to the validity of comparisons between the situation in Jersey and GP-led units in England in 1977; and

(iv) as to how the performance of the Maternity Hospital in Jersey should be judged.

41 As to (i) the Royal Courts properly and fairly noted that the paper concerned appropriate treatment for breach presentation for women who had a previous caesarean section, and for dystocia, and not with cord prolapse at all. Its utility was therefore limited.

42 The Royal Court, considered various learned papers at paragraph 50 of their Judgment, all of which were written many years after the events in question.

(i) Murphy and MacKenzie. The mortality and morbidity associated with the umbilical cord prolapse. BJOG Oct. 1995, Vol. 102, pp. 826–830, which was a study of the connection between cord prolapse and mortality and morbidity based on a review of 132 babies born after the identification of cord prolapse at the John Radcliffe Hospital between January 1984 and December 1992, it showed that while the great majority of the 94 cases in which delivery had been by caesarean section had been accomplished in 30 minutes or less in 3 cases the DDI was between 31 and 60 minutes and in 6 cases in excess of 60 minutes. (Table 2, CS = caesarean section (p828)).

(ii) An editorial by David James, Professor of Fetomaternal Medicine, Queen's Medical Centre, Nottingham in the 2nd June 2001 edition of BMJ, headed caesarean section for foetal distress — The 30 minute yardstick is in danger of becoming a rod for our backs, which stated in terms:

> ***"There is no evidence, however, that 30 minutes is a critical threshold in intrapartum hypoxia.*** For most cases delivery after 30 minutes is not associated with adverse foetal outcome, yet for a few cases delivery has to be achieved much faster to avoid disability or death. In practice emergency caesarean section for foetal distress should be undertaken as quickly as possible and ideally within 30 minutes — but we shouldn't consider it poor care if it takes a few minutes longer."(emphasis added)

(iii) A paper by Derek Tufnell, Consultant at the Bradford NHS Trust Maternity Unit, and others entitled Interval between decision and delivery by caesarean section — are current standards achievable? in the same issue of the BMJ at pp. 1330–1333 which reported the results of a series of four 'audit cycles' conducted at the hospital from 1993 onwards. The fourth and last of these cycles started in May 1997 and involved a continuous audit of decision-to-delivery interval for all non-elective caesarean sections. Results were regularly posted in the delivery suite and discussed at departmental meetings, and new registrars were made aware of the programme and the need to aim for a 30 minute decision-to-delivery interval.

Subsequently all emergency caesarean sections were retrospectively assessed as to

the need for delivery within 30 minutes ("urgent" cases): these included cases of cord prolapse. Of 721 cases so classified as urgent, only 66% had been delivered within the target of 30 minutes and 88% within 40 minutes. 4% took more than 50 minutes. All 15 cases of cord prolapse were, however, delivered within 30 minutes. Adopting a different classification of urgency (the so-called 'Lucas' classification), produced DDI figures for all cases of cord prolapse, foetal bradycardia and failed instrumental delivery of 86% within 30 minutes and 97% within 40 minutes. Commenting on these and other results, the paper said:

> ***'The audit shows that even with an emphasis on the need to deliver babies promptly in situations where there is concern about foetal wellbeing or maternal wellbeing, the standard as laid down nationally cannot be met in a considerable minority of cases.'*** (p.1332)

And finally:

> ***'Throughout the time of our audits we have reduced delays but this has not been at a statistically significant level in practical terms, only delays are much less common.*** We still deliver only two out of three babies in the recommended time and 9 out of 10 within 40 minutes. These figures should be ***borne in mind when criticisms are made where "excess delay" leads to a compromised infant'.***

(iv) A paper by MacKenzie and Cooke of John Radcliffe Hospital entitled What is a reasonable time from decision-to-delivery by caesarean section? Evidence from 415 deliveries (BJOG May, 2002: Vol 10: p.498–504) examined all caesarean sections performed at the John Radcliffe Hospital in Oxford during 1996, classified according to four degrees of urgency:

> ***'Emergency: decision made in labour for evolving foetal distress, failing labour or maternal reasons'.***
>
> ***'Crash: decision made if impending foetal death or serious maternal compromise anticipated (e.g. cord prolapse, abruption, or uterine rupture)'.***
>
> ***'Urgent: decision made during the 24 hours before delivery because of deteriorating foetal or maternal health before the onset of labour'.***
>
> ***'Pre-empted: decision made more than 24 hours before delivery the onset of spontaneous labour or membrane rupture'.***

In discussing the results of this survey the paper said:

> ***"In 1989 the median time from decision-to-delivery interval was 34 minutes and in 1996 it was 39 minutes, including the 'crash' sections with the emergency cases as in 1989 the median time was 35 minutes.*** It is thus clear that, even including all emergency sections, we still succeeded in delivering fewer than 50% within the 30 minute standard

> for such cases. In contrast, caesarean sections in labour when foetal distress was not suspected, resulted in a mean time for decision-to-delivery of 71.1 minutes and a median time of 59.5 minutes". (p.502)

(v) A paper by Helmy and others entitled The decision-to-delivery interval for emergency caesarean section: is 30 minutes a realistic target? (BJOG May, 2002, Vol. 109, pp.505–508 ("Helmy") based on an audit of all 'emergency' caesarean sections at Gravesend and North Kent Hospital over five successive periods (for which no date is given), which concluded that a

> ***"universal standard of 100% in 30 minutes is unrealistic (p.505)***

adding

> ***"In our opinion a standard of 40 minutes for the decision-to-delivery interval is more realistic."*** (p.508)

(vi) A paper by Thomas, Paranjothy and James (the author of the BMJ Paper referred to earlier) entitled National cross sectional survey to determine whether the decision-to-delivery interval is critical in emergency caesarean section, first published on line — during the course of the trial before the Royal Court — under a BMJ reference on 15th March 2004, and subsequently in an abridged version in BMJ Vo. 328, 20th March 2004, p. 665–668 which looked at 99% of all singleton births in England and Wales between 1st May and 31st July 2000 as reported in The National Sentinel Caesarean Section Audit Report RCOG Pres, 2001 (which was not itself in evidence). Its primary purpose was to examine the relationship between delivery times and mother and baby 'outcomes', and its principal conclusion that a decision-to-delivery interval of 75 minutes was more significant in that context than the conventional 30 minute target which it considered not to be an absolute threshold for influencing baby outcome.

Its arguable significance, however, lay in its analysis of decision-to-delivery intervals actually achieved in practice. The study breaks down deliveries, in terms of perceived 'urgency', into four groups. The highest of these, Grade 1, is defined as immediate threat to the life of the woman or foetus' and includes, among others, **cases of cord prolapse** and also those of 'presumed foetal compromise' (a term which covered, among other conditions, those involving an 'abnormal cardiotacogram'). According to the results given in Table 1 of the paper, for Grade 1 caesarean sections, the percentage of cases in which a decision-to-delivery interval of 30 minutes or less was achieved was little more than 46% in the 31–45 minute bracket just below 23%; and in the 45–60 minute bracket 10.7%. In 11% of the cases the decision-to-delivery interval was in excess of 75 minutes. The authors say,

> ***'Outcomes do not change for decision to delivery intervals of up to 75 minutes.*** For all emergency caesareans, however, delays in delivery or more than 75 minutes are associated with poorer maternal mothers and baby outcomes — this effect is greater when maternal or foetal compromise is suspected — that is grade 1 or grade 2 urgency. … Even

though our data suggest that 75 minutes rather than 30 minutes is the clinically significant threshold, adopting 75 minutes could lead to complacency. In our opinion, the ***30 minutes [DDI] should remain as the benchmark for service provision for caesarean sections of grade 1 and grade 2 urgency".***

43 The Royal Court noted, in terms reflected in the Respondent's submissions, at paragraph 51.

> ***"(i) There is a body of empirical evidence indicating a real gap between the conventional 30-minute standard for decision-to-delivery interval in cases of emergency caesarean section and what happens in practice in many cases — even 20 or more years on from the events with which the Court was concerned and even, sometimes, in major consultant-led hospitals.***
>
> ***(ii) There is a significant body of professional opinion which, while not entirely rejecting it, has found it necessary to question, re-formulate or refine that standard.***
>
> ***(iii) That the absence in the biographies of these various papers of any references to relevant publications much earlier than 1990 (with the exception of one 1988 paper), seems to confirm that the '30-minute standard' as such is not to be found in the professional literature of the 1970s.***
>
> ***(iv) That this conventional standard is based on a largely unspoken premise that the patient and all the necessary facilities and staff are readily available under one roof.*** None of the papers considered what might reasonably be expected where this assumption does not hold good".

44 While we do not suggest that this summary is of itself incorrect, it was argued to be insufficient. We would observe, in terms reflected in the Mr Santos Costa's submissions, that

> (i) the Court is concerned with the "ought", not the "is", even if the "is" inevitably informs the "ought".
>
> (ii) the standard, however formulated, was only an audit benchmark. In his evidence concerning the emergence of the formalised 30-minute DDI, Professor Taylor explained that, in the United Kingdom, it was born in part of pressure from within the National Health Service to establish audit standards by which performance could be measured, in part from a desire within the medical profession to establish a reasonable standard by reference to which the conduct of practitioners might be defended. In Helmy it was stated:
>
> > ***"There is generally agreed recommendation that emergency caesarean sections should be achieved within 30 minutes of the***

> ***decision to operate.*** However, this does not appear to be an evidence — based rule. The Confidential Enquiries of Stillbirths and Deaths in Infancy in the UK recommend that all hospital trusts will be required to audit this standard. Our first survey showed that in the majority of emergency caesarean sections the decision-to-delivery interval was more than 30 minutes. This arbitrary 30 minute limit is not based on specific studies, but has the approval of respected authorities, including medico-legal bodies" (p.508)).

(iii) moreover the medical literature did suggest that the time target was "as soon as possible". 30 minutes did not represent a plimsoll line in the sense that speedier performance was automatically careful, less speedy automatically careless.

(iv) while all the facilities in this instance were not under one roof, they were not separated by a very great distance.

45 Mr Santos Costa also properly noted:

(i) Only one of Mr Mackenzie's studies drew the distinction between "emergency" and "crash caesareans", the latter situation he defined as "impending foetal death or serious maternal compromise anticipated (e.g. cord prolapse, abruption, uterine rupture)". This showed that "crash caesareans" were performed at a median time of 24 minutes, a mean time of 27.4 minutes. (MacKenzie BJOG: (May 2002) Vol 109 p.498, 499).

(ii) In another study, Mr MacKenzie's tables (Murphy & McKenzie BJOG (October 1995) Vol. 102 p.826) demonstrated that where there had been cord prolapse 15 sections took place within 10 minutes, 49 within 11–20, 21 within 21–30, 3 within 31–60 minutes, and 6 over 60 minutes. The evidence is not available as to why such a small number of those sections took longer than 30 minutes. Mr Santos Costa submitted that it was open to the court to infer that some may have occurred because mothers had to be brought into the hospital from the outlying units Mr MacKenzie described in his evidence; Mr Cadin relied on the fact that even in John Radcliffe Hospital, a significant number did exceed the 30 minutes standard. While acknowledging the need for adequate facilities, the body of the report stated

> ***"There is, however, an acknowledged urgency about the cord prolapse which demands delivery as soon as possible"*** . *(Murphy & McKenzie: BJOG Octobers 1995 Vol.* 102: p826,

(iii) (As the Royal Court recorded) Mr Tuffnell's study (Tuffnell et al BMJ Vol. 322 (June 2001) 133). showed that in all cases 15 cases of cord prolapse in their study the infants were delivered in less than 30 minutes.

(iv) Mr Dunphy's study demonstrated that when foetal distress is diagnosed delay in performing section is harmful to the baby e.g. delay from 10 minutes to 35 minutes doubles the relative risk of omission to a special care baby unit for neonatal asphyxia.

(Dunphy JOG (1991) page 243; pp 82–85)

46 The validity of comparisons between Jersey and GP-led units in England in 1997. Mr Cadin submitted that the position at the Maternity Hospital in Jersey at the material time was comparable with that of many of the smaller, non-consultant maternity units in England in the 1970's where the patient and the operating staff and facilities were not all in the same place: Mr MacKenzie and Professor Dunn supported that contention.

47 Dr Myerscough, however, regarded any such comparison as unsound partly because the Jersey Maternity Hospital was, in his words, a facility 'of last resort' in the sense that there was no other obstetric facility on the Island and partly because he regarded the standard of care offered by many such units as 'unacceptable'. Professor Taylor agreed with Dr Myerscough on the basis that most such units were much further away from their 'base' hospital than the Jersey Maternity Hospital was from the General Hospital.

48 The Royal Court said expressly:

> ***"To attempt to make comparisons between Jersey and any specific unit or units on the mainland is an exercise of uncertain value: circumstances plainly varied from place to place and we do not now begin to have sufficient information about units in England, many of which have long since been closed, to allow informed comparisons to be made with the Jersey Maternity Hospital.*** As a matter of generality, however, it is undoubtedly the case that there were, in the 1970's, substantial numbers of small maternity units throughout England in which, if a mother was in need of delivery by emergency caesarean section, either she would have to be transferred to the nearest hospital with facilities for such an operation or a surgeon and anaesthetist — ***and perhaps others — would have to go to her.*** Professor Dunn, in particular, spoke with authority and in some detail of the position in the South-West Region of the United Kingdom in the 1970's and 1980's. [para 54].

49 Dr Myerscough adhered through his evidence that the relevant standard applicable to the Jersey Maternity Hospital in 1977 was the 30 minute one. He accepted that the published literature current in 1977 probably did not include references to any such specific time, but interpreted the reference in the contemporary textbooks of the need for a caesarean section to be performed ' *immediately*' or ' *as quickly as possible*' and meaning in practice between 20 and 30 minutes and within 30 minutes at most. He did not specifically address the extent to which the particular circumstances of the Jersey Maternity Hospital might reasonably justify some extension of that period. He regarded the plan to carry out a caesarean section at 5.00 pm as " *absurd and wholly unjustifiable*", concluding in his original report (by way of inference) that Mr Birt ' *was not ready to attend before 5.00 pm'* and expressing the view that, if Mr Birt was properly detained on some other duty that he could not leave, then a suitable deputy should have been available to take his place. " *It was not adequate and proper provision by the Health Authority if the obstetric service was wholly dependent on the uncertain availability of the single surgeon"*.

50 Professor Taylor was equally critical of the planned caesarean section for 5.00 pm.

> *"The plan to operate at 17.00 was unacceptable for a Unit undertaking the care of women who might require an emergency abdominal delivery."*

His report concluded:

> *"Whether the fault was one of inadequate provision, of inadequate organisation or a consequence of Mr Birt being otherwise engaged or not immediately contactable seems to me to be irrelevant".*

In his evidence Professor Taylor said:

> *"We didn't simply say "We have to do it in 30 minutes", you said "We have got to do it as quickly as you can" and "quickly as you can" meant just that.* You didn't wait to get blood cross-matched, for example … So literally you did it as quickly as you could and we knew 30 minutes was the outside time."

adding a unit which offered

> *"full care and caesarean section in an emergency in labour will be able to do it, or should the provision to do it within 30 minutes.* That was the standard with which we worked prior to 1988".

In cross examination, however, he accepted that a time of 35 minutes would "not be unreasonable" and that circumstances could exist which would explain and justify a longer time still, though he would be looking for an explanation of why this should be so " *40 minutes … it could be a perfectly reasonable justification*". He acknowledged that it was not possible for staff every unit with a dedicated team of obstetric surgeon and anaesthetist and that if the designated ones were unavoidably otherwise engaged in duties that they could not leave, such as another caesarean section, then

> *'you would be in trouble because your back-up almost certainly does not include a second team who can come and respond in the same way' …*
>
> *'That is a resource matter and it cannot always be answered'.*

At one point in his evidence he appeared to suggest that if the anaesthetist whose job it was to respond in the event of a 'crash' caesarean section being required was already engaged in giving an anaesthetic that he could not leave, that would be ' *wholly inadequate provision*' but he balanced this with the observation *'Equally, you come back to this.* How much spare provision do you have to make? You could have a reasonably spare provision and it could be occupied.'

51 In the course of cross-examination by Mr Cadin, Professor Taylor was taken through an exercise considering the length of time that it might take, step by step, between diagnosis of a prolapsed cord and delivery of the baby, 15 minutes general preparation, 10 minutes

preparation for the surgeon and anaesthetist, a minute arranging the drape, 5 minutes incision to delivery plus variables for communication, transport. He accepted that the various hypothetical times at each state might not be unreasonable. But confronted, as he was on this basis, with a total *interval* of 54 minutes, he could only say that that was ' *a long time*' and that he would need to go back and examine each of the constitute elements in order to see what happened. Whether any particular element, as proposed by Mr Cadin, was appropriate or inappropriate would depend on the circumstances: for example, he said, ' *… if the telephone line is engaged, there is nothing that anyone can do about it*'. And when it was put to him that this figure of 54 minutes substantially corresponded with the evidence of those best placed to know how quickly it was possible to mount an emergency caesarean section in Jersey in 1977 — Mr Birt, Dr Fullerton and Dr Williams — his response was: ' *Then I come back to the point that it was not an adequate facility and you would need to examine the steps that we have said are necessary and see where they fell down*.'

52 In his evidence concerning the emergence of the formalised 30-minute decision-to-delivery interval, Professor Taylor explained that, the specific 30 minute standard having been established, it was then used to try to get units that could not meet that standard closed: which is precisely what happened progressively in the 1980's and 1990's in the United Kingdom, it being recognised that for mothers to give birth in many of the smaller GP-led units entailed an element of risk that was increasingly coming to be seen as undesirable and, in that sense, ' *unacceptable*'.

53 Dr Myerscough's evidence was that it would be wrong to argue that the mere fact that such units existed in the United Kingdom automatically made them satisfactory. When it was put to him in cross examination by Mr Cadin, that even today there are some community midwifery units that provide *intrapartum* care without the benefit of a resident obstetrician or anaesthetist on site and that reaction times in such units were, of necessity, going to be markedly slower than in centres of excellence such as the John Ratcliffe Hospital in Oxford, his answer was

> *'They are slower than the proper standards that should obtain in any properly staffed maternity unit and that is why I deem them unsatisfactory*'.

54 Professor Dunn had, as the Royal Court put it, a life-time's experience of working in the National Health Service with particular reference to, and responsibility for, trying to improve facilities and other resources and establishing formalised standards, the latter being a movement that only got under way in the 1970's: He said in evidence:

> *'We've always been struggling with poor facilities, poor staffing and nothing has ever really been ideal — or very little.* When I went to Bristol in 1963 — to give you an example — the British Maternity Hospital, which was the consultant unit for Bristol Health District ….. a consultant teaching hospital of the University of Bristol, had no anaesthetist, no resident paediatrician, and the obstetric registrar was only there during the day and on a call at night. So, this was a consultant until with totally inadequate services. This was recognised, and the planning for

> a new hospital was started at that time, but the new hospital did not open until 1975 — fourteen years later. That gives you an idea of the delay. People recognised that things weren't adequate, but it took time to collect the money, do the planning, and then the building. The point which may be made was that this hospital was not all that dissimilar at night time to the situation in Jersey in 1977'.

But as with Bristol, the planning of this move had been going on for some years previously: Professor Dunn declined to equate ' *not ideal*' with ' *inadequate and inappropriate*'. He said the Jersey Obstetric Service was " *not ideal but was in the process of evolution as funds became available*".

55 Professor Dunn also spoke of a survey of the South West Region conducted under his direction in the late 1970's; of the existence at that time of some twenty-six GP units separated by distances of between one and fifty-seven miles from their consultant referral unit; of the ' *obstetric flying squads*' that served the more remote units; of delays measured in terms of hours rather than minutes in getting a mother to consultant facilities; of the inevitable ' *trade-off of balance*' — as he put it — between the advantages of small maternity units and the risk of the occasional emergency that required more resources than such units could immediately offer; of the paucity of auditing, and — as far as he could recall — any reference in the course of the survey mentioned above to a 30-minute decision-to-delivery standard; of the gradual phasing out of GP units, which he explained twice — a matter which the Royal Court did not allude to — was their incapability of dealing with emergencies such as a prolapsed cord.

56 Both Dr Myerscough and Professor Taylor acknowledged that the figure of 30 minutes as the target-standard was the result of largely pragmatic considerations: a reasonable estimate of how long it could take to make the necessary preparations, and in particular how long it could take to get the surgeon and the anaesthetist to the theatre to the theatre and ready to operate. These, rather than any specific clinical considerations in relation to the baby, were and are the determining factors.

Both Mr MacKenzie and Professor Dunn thought that to take a 30-minute decision-to-delivery interval as the relevant standard in the present case was unrealistic. Mr MacKenzie, spoke with the benefit of his own experience of, and research into, the extent to which a 30 minute target was and was not met in all cases at the John Radcliffe Hospital in Oxford, as recorded in the studies referred to above. They did not accept that specific, quantified standard was one that was current in 1977. The only relevant standard was to carry out the operation as quickly as possible.

> *'I must say, that [a 30-minute decision-to-delivery interval] was not my recollection of obstetric practice during the 1970s, and I must remind the court that that is when I was a registrar and a senior registrar'.* (Mr MacKenzie)

> *'All I can say is that I do not remember anybody in the '70s or 60s' talking in terms of absolute timings.* It was understood if you had a prolapse of the cord

that you got round to delivering the baby either vaginally or by caesarean section as soon as possible'. (Professor Dunn).

57 On the basis of their understanding of the circumstances of the Jersey Maternity Hospital in 1977, their general experience, and the evidence of those engaged in practice there at that time (Mr Birt, Dr Fullerton and Dr Williams) the Respondents' experts considered that it could well have taken anywhere in the range of an hour plus or minus 30 minutes to mount and complete the necessary caesarean section, depending on the circumstances; though in the course of his evidence in cross-examination, Mr MacKenzie modified this interval to between an hour and an hour and a half allowing for notification that cross-matching of the mother's blood had been completed.

58 Although both Mr MacKenzie and Professor Dunn had some appreciation of the circumstances that existed in Jersey in 1977, they had no personal knowledge of many of the factors that would have had a bearing on the speed with which things could be done, let alone the particular circumstances obtaining on the 16th August 1977. However they had no reason to doubt the evidence of those who were engaged in obstetric practice at the Maternity Hospital at that time. On this basis, both Mr MacKenzie and Professor Dunn were clear that there was no reason to conclude that the Appellant could or should reasonably have been delivered any more swiftly than was in fact the case. Nor were they prepared to criticise the planning of the intended caesarean section for 5.00 pm. Both, moreover, emphasised that their views were based on more than just a passive acceptance of what Mr Birt, Dr Fullerton and Dr Williams said. Having worked in maternity units all his professional life (albeit mainly as a paediatrician, rather than a surgeon). Professor Dunn said that he had

> *"a fairly shrewd idea of how long it takes in these circumstances' and would have been surprised if it could be done in much under an hour; on the basis of his general experience, he would have said that 'an hour would be good thing, and what I would expect'; such delay was part of the 'trade-off' between the advantages of small GP-led units and the risks inevitably entailed in any geographical divorce of a maternity unit from the consultancy services required in an emergency".*

59 One particular factor that may have had a bearing on the decision-to-delivery time generally experienced in Jersey in 1977 is that of the cross-matching of blood from the mother (with a view to having supplies of blood in the operating theatre if necessary). Mr Birt, Dr Fullerton and Dr Williams all referred in their written evidence to this as one of several things that, between them, governed the speed with which an emergency caesarean section could be carried out in 1977 and the hospital notes for the day in question confirm that cross-matching was planned and that blood had been taken. The full procedure involved taking a sample of the mother's blood, sending it across town for the pathology department at the General Hospital to test and cross-match reserve supplies and then despatching two units of blood of the same group back to the Maternity Hospital, a process that could take up to an hour. Dr Sayers, by contrast, said his recollection was that

in an emergency such as the one under consideration here, one would not have waited for cross-matching to take place, but would have relied on the fact that there was always a pint of group O-rhesus negative in the fridge at the Maternity Hospital (that group tending to be universally acceptable) and the use of a saline infusion if necessary. In cross-examination, however, he accepted that whether or not to wait for blood to be cross-matched would have been a matter for judgment for the surgeon and the anaesthetist together, though more so for the latter than the former in his view. Dr Williams, maintained that his recollection was that a caesarean section would not have started without the team at least knowing that a supply of cross matched blood was on the way. In his view the decision whether or not to wait would have been the surgeon's or possibly a joint one with the anaesthetist as Dr Sayers had suggested.

60 Dr Myerscough and Professor Taylor both regarded it as unthinkable that one would delay the operation in circumstance such as the present while blood was cross-matched (assuming immediate availability of emergency supplies of O-rhesus negative blood and a saline drip). But Mr MacKenzie was clear that, while practice was different today, in the 1970's no caesarean section would have been started at the John Ratcliffe hospital without at least confirmation that a supply of cross-matched blood was on the way to the theatre, even though it might not have actually arrived; that in 1976 as high a proportion as 22% of women undergoing a caesarean section at the Radcliffe required a blood transfusion; that whether or not to proceed without such cross-matching having been confirmed would be the decision of the surgeon; and that if it had been Mr Birt's practice in 1977 to wait for such cross-matching, that would have been entirely proper. Professor Dunn was likewise of the opinion that to have waited would have been a proper precaution though he agreed in cross-examination that he would defer to those more directly involved in the surgical procedure.

61 At the joint meeting of experts, all agreed that where an urgent caesarean section is indicated either intravenous fluids alternative to blood e.g. saline or plasma could be administered, or even universal donor blood (Group O Rhesus negative), and the section started while full cross matched blood is awaited. There was, however, no agreement recorded that it was unreasonable to wait for cross-matched blood.

In Lewis the balance of risk to mother and foetus is summarised thus:

> ***"Presentation or prolapse of the cord does not itself increase a risk to the mother, except for any measures which have to be applied to treat the causal complications such as malpresentations or contracted pelvis.*** Descent of the cord often calls for speedy delivery by forceps or caesarean section, and these procedures increase the maternal risk to some extent.
>
> ***The prognosis for the foetus is poor; stillbirth or neonatal death occurs in about 20 per cent of cases.*** It is said that the foetal prognosis is worst when the head presents, as it is more likely to compress the cord than the breech or shoulder. The outlook for the foetus has been improved by the more frequent use of caesarean section in circumstances in which the cervix is fully dilated".

(p.215)).

The Law

62 We consider that the following legal principles are applicable:

(i) The burden is on the Appellant to prove his case on the balance of probabilities that there was a breach of the duty of care which was admittedly owed to him by the Respondents. The considerable delay in the inception of proceedings — the claim did not come before the Royal Court until more than a quarter of a century after the matter complained of — does not affect the target at which the Appellant must aim although it may affect his capacity to reach it, and the Appellant is not time barred. The reasons for the delay are not in evidence before us; but we were told by Mr Santos Costa, on instructions, that Mrs Nicholson did not appreciate for some time either that the nature of the Appellant's condition or the Committee's potential responsibility for it. Further she was distracted by other personal matters. However be that as it may, no qualification, still less reversal of the usual rules as to burden or standard of proof is required. In *Bull*, where there was equivalent delay, Lord Justice Slade said [at p.126]

> ***"Our law allows persons under a disability such as Stuart (the Appellant in Bull) to bring a claim such as this at any time during their lives; indeed, their right of action will survive for three years after their death.*** Whoever else may be to blame for the delay, Stuart is not. The problems facing the parties and the court as a result of the delay in the present case are far from unique. They have arisen and will arise in many other cases where there is no applicable time bar. In Mr Mawrey's (Counsel for the Appellant in *Bull*) ***submission, the delay does not affect the facts which have to be proved nor the manner of proof.*** It merely means that both sides will or may be in a position to prove fewer facts. To this extent it may well prejudice both the plaintiff and the defendant. However, Mr Mawrey submitted, the court should draw the same inferences from those facts which have been proved as it would draw if the claim had been promptly made. Likewise, if the facts which have been proved would give rise to a presumption in favour of the plaintiff under the principle of res ipsa loquitur, the court should not decline to apply that principle merely because the claim has been brought after many years.
>
> ***.....***
>
> ***This issue of delay has caused me some concern.*** The hardship to the Authority in having to meet a claim of this nature in 1987 which obliged them to explain and (if the judge was right) to justify their routines and practices of 17 years ago is obvious and requires little elaboration. Nevertheless, I can see no answer to Mr Mawrey's submissions on these

> matters of principle. If, as it does, the law allows Stuart, who is himself without fault, to bring this claim after this long lapse of time, his case cannot in my judgment be treated as prejudiced by the delay, save only in so far as the lapse of time may render more difficult the task of proving, on the available evidence and on the balance of probabilities, those facts in respect of which the onus falls on the plaintiff at the trial."

Lord Justice Mustill, although especially critical of the delay, came to the same conclusion:

> ***"In such a situation, is it permissible for the court to "aim-off" for the delay, with any confidence of doing justice?*** I cannot see how, in principle or in practice, such an approach can be justified". [p138, 139].

(ii) While it is common ground that the legal burden is on the Appellant to establish his case on the balance of probabilities, in certain circumstances the evidential burden may shift. There is comprehensive exegesis of the relevant jurisprudence in the judgment of Brooke LJ in *Ratcliff v Plymouth & Torbay Health Authority; Exeter & North Devon Health Authority* [1998] Lloyds Medical Law Report p162 at pp. 172–3. But especially in a case where the basic facts — an interval of 55 minutes between decision and actual delivery — do not *per se* give rise to an inference of negligence, in the same way as — to deploy Brooke LJ's example — where a surgeon cuts off a left foot instead of a right, we find particularly helpful the concurring judgment of Lord Justice Hobhouse at p.176–7:

> ***"Medical negligence cases often involve factual questions of complexity and difficulty and require the evaluation of highly technical and conflicting expert evidence but the trial procedure is essentially the same as in other cases.*** Indeed, the judge will normally have the advantage of expert evidence on both sides and an appropriate level of factual evidence both documentary and oral. Medical negligence cases are unlikely to give rise to the stark problems encountered in road traffic accident cases where there may be a total dearth of evidence or where one or other side may choose, no doubt for tactical reasons, not to present evidence. In my judgment the leading ***cases already give sufficient guidance to litigators and judges about the proper approach to the drawing of inferences and if I were to say anything further it would be confined to suggesting that the expression res ipsa loquitur should be dropped from the litigator's vocabulary and replaced by the phrase a prima facie case.*** Res ipsa loquitur is not a principle of law; it does not relate to or raise any presumption. It is merely a guide to help to identify when a prima facie case is being made out. Where expert and factual evidence has been called on both sides at a trial its usefulness will normally have long since been exhausted".

In *Bull* only Slade LJ had recourse to res ipsa loquitur (p.131) and Mustill LJ expressly rejected reliance on it.

(iii) An inability to guarantee a successful outcome is not of itself proof of negligence. The duty is of reasonable care to avoid damage not to guarantee that it will not occur. Slade LJ noted in *Bull* (p.130):

> ***"Now it is obvious that a system such as that which was operated at the hospital in 1970 could not and would not guarantee the attendance of a registrar or consultant within 20 minutes of the birth of a first twin or a multiple birth such as this".***

but declined, not least because the claim was not advanced on that basis, to find negligence proved on that ground alone.) As Slade LJ further said in *Bull* (adopting Counsel's submissions at p.126)

> ***"The duty of a hospital is to provide a woman admitted in labour with a reasonable standard of skilled obstetric and paediatric care in order to ensure as far as reasonably practicable, the safe delivery of the baby or babies, and the health of the mother and off-spring thereafter."***

And added, more particularly,

> ***"The standard of staffing facilities and equipment which could reasonably be expected of a hospital such as the Exeter City Hospital in 1970 in the performance of the duty of care owed to mothers and babies under its charge must be ascertained according to the professional standard at the time recorded in the light of the available expert evidence."***. (ditto)

As he observed

> ***"Mr Mawrey frankly told us that, while he would have liked to argue that the staffing arrangements at the hospital at the material time were inadequate in terms of obstetric cover and that the system was inadequate on this account, if no other, this particular argument was not open to him in the light of the expert evidence as to the standards prevailing in 1970."*** (p.130)

In *Walker v Northumberland County Council* [1995] 1 All ER 737 Mr Justice Colman reviewed all the main authorities and said:

> ***"It is reasonably clear from the authorities that once a duty of care has been established the standard of care required for the performance of that duty must be measured against the yardstick of reasonable conduct on the part of a person in the position of that person who owes the duty.*** The law does not impose upon him the duty of an insurer against all injury or damage caused by him, however unlikely or unexpected and whatever the practical difficulties of guarding against it. It calls for no more than a reasonable response, what is reasonable being measured by the nature of the neighbourhood relationship, the magnitude

> of the risk of injury which was reasonably foreseeable, the seriousness of the consequence for the person to whom the duty is owed of the risk eventuating, and the cost and the practicality of preventing the risk".

(Applied in *Boateng v London Borough of Camden* [2001] PIQR. 143)

(iv) Accordingly, the relevant standard of care by which any alleged breach of duty is to be judged at the Jersey Maternity Hospital is that of the reasonably competent GP-led obstetric unit in 1977 with facilities for emergency caesareans to be performed by a consultant general surgeon from a district general hospital situated in the same town. [Cf e.g. "By reasonable regime of care we mean a regime of a standard that can reasonably be expected of a hospital of the size and type in question". (*Robertson v Nottingham Health Authority* (1997) 8 Med LR 1 per Brooke LJ at p.13). The extent to which this contextual approach to the standard of care is here significant is further explored in paragraphs 70–72 below.

(v) In an area such as obstetrics a unit is not ordinarily to be regarded as guilty of negligence if it acts in accordance with practice accepted as proper by a reasonable, responsible body of medical opinion merely because there is another body of professional opinion which would take a different view: this is the classical test formulated by McNair J. In *Bolam v. Friern Hospital Management Committee* [1957] 1 WLR 582 at 586–7. As Lord Scarman emphasised in *Maynard v. West Midlands Regional Health Authority* [1984] 1 WLR 634, 639:

> ***'….. I have to say that a judge's 'preference' for one body of distinguished professional opinion to another also professionally distinguished is not sufficient to establish negligence in a practitioner whose actions have received the seal of approval of those whose opinions, truthfully expressed, honestly held, were not preferred. For in the realm of diagnosis and treatment negligence is not established by preferring one respectable body of professional opinion to another.'***

(vi) The Bolam principle certainly applies where the unit's liability is vicarious, and in our view, logically does where its liability is primary (*AB v Thames and Glossop Hospital Authority* (1997) 8 Med LR 91: Jackson and Powell: Professional Negligence (5th Ed'n) paragraph 12–58 p.838, *Robertson v Nottingham HA* (1997) 8 Med LR 1 cf: Kennedy & Grubb: Medical Law (2nd Ed'n) p.300).

(vii) However, where the defence to a charge of negligence entails reliance on a body of professional opinion, the court must be satisfied that such opinion has a logical basis and has reached a defensible conclusion on the matter in question: *Bolitho v. City and Hackney Health Authority* [1988] AC 232.

(viii) There are limits on the powers of the Court of Appeal to overturn a trial judge on points of fact, in particular because of the advantages that said judge enjoyed in assessment, not only of lay but of expert witnesses whom he (unlike the Appellate Court) hears and sees, *vide* *Joyce v Yeomans* (1981) 1 WLR 549 at p.556 per

Brandon LJ and *Eckersley v Binnie* (1988) 18 Con LR 1 (per Russell LJ at p.55–56: per Bingham LJ at p.77–78) but nonetheless an Appellate Court cannot abdicate its assigned role. The advantages enjoyed by the trial judge particularly when, as in Jersey, sitting with Jurats are great indeed, but they do not absolve the Court of Appeal from weighing, considering and comparing the evidence in the light of his findings, a task made longer but easier by possession of a verbatim transcript usually (as here) denied to the trial judge.

63 A case against the Respondent could in theory be put in one of four main ways. First that the Respondent had devoted insufficient resources for the Maternity Hospital, with the consequence that there were insufficient staff to cope with an emergency such as occurred at the time of the Appellant's imminent birth. Secondly that the Respondent had made sufficient resources available but that the general system for their deployment was inadequate to cope with such an emergency without any particular individual being at fault. (See per Slade LJ in *Bull* at p. 132) (See the distinction drawn between the second and third possibilities in *Bull v Devon Area HA* per Slade LJ ditto. Likewise Dillon LJ at p.134): in that case the Court of Appeal found that the facts pointed to either of the two without differentiating between them. Thirdly that though staff were sufficient and the general system adequate in the particular circumstances the Respondent's system failed. Fourthly that one or more members of staff had in their implementation of the system (including performance of their particular roles) fallen short of appropriate standards, for which lapse the Respondent would be vicariously liable.

64 It is not suggested on the Appellant's behalf that (i) there was anything about the events prior to 3.40 pm which should have suggested that the birth would be other than normal (ii) the mid-wife's diagnosis was anything other than promptly and correctly made, (iii) the nursing treatment of Mrs. Nicholson during her labour was anything other than exemplary, (iv) Dr. Georgelin's forceps delivery of the Appellant was performed in anything other than a swift and skilful manner, (v) Mr. Birt personally might have failed to respond with a degree of urgency appropriate to the circumstances, (vi) Dr. Donald Sayers, the anaesthetist, had been guilty of any professional shortcoming.

65 Of the four alternatives postulated in paragraph 64 above Mr Santos Costa eschewed the first, second and (as noted) the fourth. He relied on the third. As he put it in his written contentions:

> *'Our case is that the system in operation at the Maternity Hospital failed to respond sufficiently fast to the acute obstetric emergency that Mrs Nicholson suffered.'*

(See also the Royal Court Judgment para 65). In short it should have done so: it could have done so: but it did not do so.

66 The Appellant's approach, which mirrored that reluctantly followed by Counsel for the Appellant in Bull, relieves us of the need to decide the difficult question of whether the

inadequate provision of medical services may be excused on the basis that the authority which administered it lacked the resources to provide what was clinically required at the hospital. (See the discussion in Kennedy and Grubb: Medical Law (3rd Ed'n) p.332–339, and " Corporate Governance and Clinical Freedom in Primary Care — Hippocratic or Management Logic" Christopher Newdick, Professional Negligence, Vol 16 No.1 pp 39–46).

67 Nonetheless the judgment of Lord Justice Mustill in *Bull* (p.140–2 ff) arguably supplied support for the full frontal attack in appropriate circumstances on a service provider, especially in the field of health care, where life, the prime legal value recognised in law, is at risk, and the cause of death or injury (as the case may be) can be directly attributed to insufficiency of resources or staff (see the discussion in Jackson and Powell: op. cit. paragraphs 12.159–161) He made, amongst others, the following observations:

> ***"The problems which face the plaintiff and the court on this aspect of the dispute spring from two contradictions in the evidence of the expert witnesses.***
>
> ***The first involves a contrast between the opinion of the experts as to the desirability of a prompt delivery of the second twin, and their opinions as to the acceptability of the system in operation at the Devon and Exeter, placed in the context of what similar hospitals were able to achieve in the early 1970s.***
>
> ***This being so, it might have seemed that the plaintiff had an unanswerable case against the hospital.*** It was however, very properly recognised by Mr Mawrey that he could not put the case in this way, since his experts would not say that there was anything wrong with the system. They would not accept that standards compared unfavourably with those which existed at the time in other split-site hospitals in the provinces. As one of them put it, the system was "par for the course", and it seems to have been assumed by the experts that if this was so, the patient would have nothing to complain about.
>
> ***Whatever the apparent appeal of this opinion to practical common sense, I find its implications to be rather disturbing.*** Is there not a contradiction in asserting at the same time that the system put the foetus at risk and that it was good enough?
>
> ***The first was that the presence of immediate cover would have been an "ideal" solution, appropriate to a "centre of excellence" rather than an ordinary hospital such as the Devon and Exeter.*** I confess to reservations about this. I see nothing ideal about a system which would have given the mother and child the protection against emergencies when it was needed
>
> ***The second suggested answer was on these lines; that hospitals such as the Devon and Exeter were in the dilemma of having to supply a maternity service, and yet not disposing of sufficient manpower to provide immediate cover, the more so since the small number of consultants and***

registrars h ad to deal with three different sites. They could not be expected to do more than their best, allocating their limited resources as favourably as possible.

Again, I have some reservations about this contention, which are not allayed by the submission that hospital medicine is a public service. So it is, but there are other public services in respect of which it is not necessarily an answer to allegations of unsafety that there were insufficient resources to enable the administrators to do everything which they would like to do. I do not for a moment suggest that public medicine is precisely analogous to other public services, but there is perhaps a danger in assuming that it is completely sui generis, and that it is necessarily a complete answer to say that even if the system in any hospital was unsatisfactory, it was no more unsatisfactory than those in force elsewhere.

It is however unnecessary to go further into these matters, which raise important issues of social policy, which the courts may one day have to address. In the present case, the state of the evidence precluded any fundamental objection to the system. No case on these lines was advanced to, or considered by, the trial judge. I mention the problem only because it underlies the apparent contradiction in the expert evidence, which caused me difficulty in finding the right starting point for a decision on this particular allegation of negligence."

68 It is obvious too that, lurking beneath the surface of the submissions and evidence in this case, is the issue of resources. Virtually every witness and the Royal Court itself, (see Judgment paragraph 83 (iii)) touched on the issue of availability of resources as feature not only explaining but excusing a DDI which was other than immediate, with the exception of Dr Myerscough who accepted it as an explanation, but not an excuse. (Professor Taylor, as appears from the passages cited, in paragraph 50 above was equivocal)). It requires no expert to confirm that were the Jersey Maternity Hospital to have been physically and not only institutionally the maternity wing of the General Hospital (i.e. on the same site), or were there to have been constant cover for Mr Birt or Dr Sayers, swifter DDI times would have been achieved generally and, doubtless in the present case. And while we were not invited to embark upon the treacherous terrain of evaluating whether the very maintenance of service without those features constituted a breach of duty of care, we nonetheless had to grapple with the extent to which resources were an excuse recognised by the law of tort.

69 It is indeed conventional in the law of negligence to have regard to an equation which measures the likelihood and seriousness of a risk against the costs of its reduction or elimination (see paragraph 50 supra). In *Boateng v London Borough of Camden* [2001] PIQR, the case of *Bull* was cited in support of the proposition that insufficient resources are no answer to an allegation of unsafety (whether it does support that precise proposition is moot). Mr Justice Nelson accepted:

"that there cannot be a complete answer but, on the facts of this case

there is evidence before me of the cost to the local authority of eliminating the danger which materialised here, and I consider it appropriate to weigh that evidence in the scales when assessing the extent of the duty of care and whether it has been breached. Such information provides no general guidance as to the weight which is to be given to such evidence." p.143

70 In Bull there was also consideration of an obviously related issue namely whether a sliding scale of care applied to different hospitals, with greater obligations being imposed on major metropolitan centres of excellence than on small provincial units. Two members of the Court of Appeal specifically addressed the point and obviously considered that such a proposition, if ever applicable, was not so, when the matter revolved not around the provision of specialist services (e.g. refined brain surgery or transplant surgery) but about conventional obstetrics.

71 Dillon LJ said:

"We have had a certain amount of discussion in the course of the argument as to whether the law should impose, or a patient should have the right to expect, the same standard of care and treatment from a local district hospital such as the defendant's hospital in the present case as from a "centre of excellence" major teaching hospital in London or Oxbridge or a large modern hospital in a large city. Obviously there are highly specialised medical services which a district hospital does not have the equipment to provide and does not hold itself out as ready to provide. But this case is not about highly specialised services like that. The Exeter City Hospital provides a maternity service for expectant mothers, and any hospital which provides such a service ought to be able to cope with the not particularly out of the way case of a healthy young mother in somewhat premature labour with twins". [0.136–137]

...

And Mustill LJ said:

"This was not a question of highly specialist techniques or advanced new instrumentation, which it would be unrealistic to expect in provincial hospitals. It was just a question of getting the right people together in the right place at the right time.

.....

The onus of proving negligence is on the plaintiff. But the plaintiff does not, in my judgement, have to adduce positive evidence to disprove any theoretical explanation, however unlikely, that might be devised to explain what happened in a way which would absolve the defendants of fault, eg that the switchboard did indeed contact Dr Golding promptly and he did indeed set out at once to come to the hospital, but owing to a cause wholly outside his control, such as a

multiple collision between other vehicles, there was such heavy traffic congestion, now entirely forgotten, that it took him over 45 minutes to make the journey of a mere mile or so to the hospital.

In my judgment, the plaintiff has succeeded in proving, by the ordinary civil standards of proof, that the failure to provide for Mrs Bull the prompt attendance she needed was attributable to the negligence and essentially unsatisfactory system for calling the registrar". [p.140].

72 We accept that in the context of the law of negligence the reasonable should not be confused with the ideal: but we would equally assert that what was reasonable to achieve should not be confused with what was actually achieved. Otherwise standards would be subject to an ineluctable process of dumbing down. In particular we would be concerned to use the examples of GP led units on the mainland in the 1970s as setting a benchmark for the standard of care when it was agreed that they were phased out precisely because they would not cope with the occasional need for crash caesareans. (See in particular Professor Dunn's report).

73 We would make two further points at this juncture.

The first is that, whereas if a risk is remote, the results if it materialises are relatively slight and the expense of eliminating it considerable (*Bolton v Stone*) [1951] AC 850, such considerations could not justify taking no steps, for example, to cater in an obstetric service for the occasional, even if rare, occurrence of a prolapsed cord.

Nor indeed did Mr Cadin so contend. The Respondent accepted that while prolapsed cords might be rare occurrences, they were not unforeseeable, and the Respondent was obliged, in providing obstetric services, to have a system which catered for the exceptional as well as the normal.

The second is that, while it is necessary to avoid hindsight and to apply (see Slade LJ in *Bull* p.130, Dillon LJ p,137) the standards contemporary to the act or omission complained of, not contemporary to the trial, it does not seem that the diminution in the DDI since the 1970s had had anything to do with increased medical knowledge or surgical knowledge. Despite Mr Cadin's submissions, this is not a case where in 1977 (as distinct from 1997 or 2004) the medical profession were ignorant of the degree of risk to the unborn child from a prolapsed cord even if outcomes from delays of more than 30 minutes and even up to 75 minutes, as some recent research may suggest, were not consistently poor. (See e.g. para 42 (iv) above) Then, as now, it was recognised that, in case of a prolapsed cord, the shortest possible DDI should usually be aimed for. Then, as now, it was recognised that in such a case, while the precise timescale within which damage, or even death might result, absent speedy delivery was unpredictable, there was always a real and an increasing risk of such outcome in such a situation. What has changed between 1977 and 2004 is an increase in resources and a phasing out of obstetric units which cannot offer a comprehensive service — to use Professor Dunn's phrase " *a process of evolution as funds become available*".

Analysis

74 Returning to the facts, as we find them to be, the following matters seem to us to be important.

(i) All witnesses, lay and expert, regarded a prolapsed cord as extremely serious emergency. Dr Myerscough placed the significance of a cord prolapse on a scale of 1 to 10 at 9 or 10 to the child; Professor Taylor placed it at 9 or 10; Mr MacKenzie at 8; and Professor Dunn at 9. Dr Sayers placed it at 10 with which Dr Williams agreed. Likewise the Royal Court said

> ***'Prolapse of the umbilical cord has always been and remains a serious obstetric complication.***
>
> ***"Coupled with a serious foetal distress, of which meconium-staining of the amniotic liquor or reduced heart-rate (bradycardia) are the most common signs, a prolapsed cord is potentially fatal to the infant and represents a major emergency.*** A foetal heart-rate of 80, as observed in the present case, is indicative of serious bradycardia.'" (paragraph 39).

(ii) All witnesses, lay and experts, essentially agreed, accordingly, the delivery by caesarean should be undertaken as soon as possible.

(iii) The reason for this was that the risk to the unborn child of brain damage or even death increases as time elapses.

(iv) In cases of other emergency caesareans the risk to the unborn child or mother might be less, and the urgency diminished.

75 As to the experts, we accept the validity of the point made by Mr Santos Costa that the Respondent's experts started from the wrong point. As recorded by the Royal Court in paragraph 52 of their Judgment, Mr MacKenzie and Professor Dunn set the acceptable standard by reference to smaller non-consultant (i.e. GP led) units in England in the 1970s. However, the type of GP units (with 1 exception) relied upon in evidence by Mr MacKenzie and Professor Dunn did not have the facilities necessary for carrying out emergency caesarean sections at all. Mr Mackenzie referred to a GP unit at Chipping Norton Hospital situated some 12 miles from Banbury and 20 miles from Oxford, which did not have an operating theatre.

76 Professor Dunn referred to 26 GP units in the South West Region, where 10 were situated adjacent or close to district general hospitals without operating theatres, and of the remaining 16 only Tiverton had an operating theatre. The latter unit had a local capable of performing emergency caesareans. The others did not. Moreover, Professor Dunn in his report twice referred to the phasing out of some units precisely because they could not deal

with emergencies such as a prolapsed cord.

77 On the Appellant's side, Dr Myerscough gave evidence that following the diagnosis of a prolapsed cord, emergency caesarean section should have taken place as soon as practicable and that in the circumstances of this case this meant within 30 minutes, was vulnerable to the charge that he discounted entirely availability of resources as a mitigating factor. His evidence would have supported the analysis which Lord Justice Mustill provisionally proposed in Bull but from the Appellant's perspective he went too far. As for Professor Taylor, we have already noted (paragraphs 50 & 51 above) his retreat from an unqualified position equivalent to that adhered to throughout by Dr Myerscough.

78 We conclude that neither pair of experts gave evidence which compelled a conclusion on the issue in this appeal one way or the other. All agreed that urgency was required: they disagreed on what urgency meant; and there were identifiable flaws in the reasoning which each deployed as we have already set out. But given that all experts identified the Appellant's situation as constituting an emergency, we find disquietening the fact, that with the solitary exception of Dr Sayers — no witness of fact on behalf of the Respondents was prepared even now to suggest that a target time for the operation of 5 pm was too tardy. (5 pm (i.e. 80 minutes) was outside even the ordinary target set by those at the hospital " *seldom, if ever, possible in those days for a caesarean section to be arranged and started in under 50 minutes* (Mr Birt)"; that he could not recall any urgent caesarean sections taking place ' *in under an hour*' (Dr. Fullerton): depending on the time of day, it normally took ' *at least one hour*' from deciding to carry out a Caesarea section to the time of operation — longer if there were any problems such as traffic delays (Dr. Williams)). The conclusion might be (reluctant though we would be to reach it) that the doctors did not then (or even now), despite their apparent acceptance of the urgency of the response required to a prolapsed cord to avoid the risk of brain damage to the unborn child, appreciate what that involved.

79 We would have expected in such a situation that all necessary personnel would have abandoned whatever else they were doing (insofar as they could do so) and rushed to the Maternity Hospital, arriving as and when they could, and insofar as possible to commence their particular tasks. None of this would require any "booking", still less a "booking" which built delay into the whole exercise.

80 There are a number of possible explanations for the delay beyond what would appear to have been the outer limits of a properly urgent response. One, to which we have already alluded, is that Dr Williams and Mr Birt were aware that they were confronted with a prolapsed cord but were unaware of the need for an urgent response. (This is, however, not consistent with Dr Williams' oral evidence). Another is that there was a breakdown of communication. Dr Williams may not have been told by the nurses attending Mrs Nicholson that the emergency was a prolapsed cord (as distinct from some other lesser emergency); or he may have misheard or misunderstood. It is no less possible that a similar breakdown of communication occurred between Dr Williams and Mr Birt.

81 Then (in theory) the participants in the caesarean i.e. Mr Birt or Dr Sayers might not have been contacted by Dr Williams, but this is inconsistent with the fact that they were contacted (see the Notes). Alternatively they could have been contactable, but had other engagements (eg: involvement in another subsisting operation) which meant that they could not make themselves available for a caesarean until 5 pm. Again there is no basis at all in their evidence to suggest this theory: indeed the evidence contradicts it.

82 On the issue of cross-matching of blood, in our view the Royal Court paid insufficient attention to Dr Sayers' evidence that in an acute obstetric emergency at the Maternity Hospital they would not have waited for cross-matched blood, or notification from the hospital that the blood had been cross-matched before starting the caesarean section. We further rely on the experts' joint statement already mentioned that, in an obstetric emergency, it was not necessary for the surgeon to wait until the cross matching of blood had been undertaken before starting the section. In the event of necessity of transfusion, alternative use of plasma, or in extremis universal donor blood, could have been used. (Transcript Bundle 10 Divider 9 Page 63).

83 Albeit that Mr Birt in his letter outlined the cross matching of blood as one of the factors influencing the start of the section, he fell substantially short of stating that he would not have started the section in a case of a cord prolapse until the blood had arrived. It was not put to Dr Sayers that Mr Birt routinely or otherwise insisted that cross matching of blood should have taken place before he began an emergency caesarean section. Indeed, if he had waited until 5 pm, the Appellant would certainly have been dead. Professor Taylor described him as " *still-born*" on birth at 4.35 pm.

84 If it was the case, as Mr MacKenzie asserted that blood would not have been ready in under 1 hour, then postponing the start of the section until the blood was available, or about to become available, would run contrary to the whole concept of " *immediate delivery*" or " *without delay*", and indeed, the results in his own literature.

85 For these reasons had the section only taken place at 5 pm (i.e.) at DDI of 80 minutes, we would have been inclined to find the Respondent negligent either because the system was inherently defective or because it failed inexcusably on this particular occasion. We put on one side the question whether the first conclusion would have been open to us in the light of the way in which the case was advanced. This was not a case where the delay was as prolonged as in *Bull* (where the baby was delivered 40 minutes later than it should have been) and where at any rate Slade LJ felt able to say " *res ipsa loquitur*". But even if 30 minutes might be a counsel of perfection not practicality, 80 minutes in 1977 would have been outside what, viewing the evidence in a robust way, constitutes an acceptable standard. It was certainly not " *as soon as possible, and, according to contemporary literature was a delay which would be impossible to justify*". Because of the split site and associated problems, to adopt Lord Justice Slade's statement in *Bull*:

"the risks of failing to provide attendances for the patient's foreseeable

requirements was so great that the system could only rank as an acceptable system if it was operated with supreme efficiency."

In this case, as in *Bull*, we detect insufficient signs of efficiency and urgency in the 5 pm scheduling.

86 We would rely further *mutatis mutandis* upon what Dillon LJ said in *Bull*:

> ***"It is argued for the defendants that delays and difficulties of communication are implicit in any system where the same staff are required to service different departments in different buildings on a split site, or in separate hospitals, and that such delays and difficulties must therefore be accepted by patients.*** However these arguments, which really come down to saying that the defendants should be entitled to the benefit of any delays that are inherent in their system, can only be valid if the phrase " as soon as reasonably practicable" is to be construed without regard to the urgency of the patient's requirements; in my judgment, as already indicated, it is not." (p.138).

87 However we do not need to express a concluded view on that point. Since it is not sufficient for the Appellant to show that the operation should have taken place before 5 pm or even 4.35 pm when he was born without the caesarean. The Appellant would have to show that the operation could and should have taken place before 4.20 pm or at least before 4.27 $^{1}/_{2}$ pm exercising all possible speed, and any delay beyond that point was proof of negligence.

88 Here we have to remind ourselves again of the fact that it is for the Appellant to prove his case: that he places no reliance on the fact of a split site: or the absence of specialist surgeon or anaesthetist in situ at the maternity hospital: or even on the system for summoning those professionals from outside. He places the weight of his case on the fact that the system inherently sound, nonetheless as operated on the day in question, failed to perform.

89 The Appellant's submission was that

> (i) Following the discovery of the prolapsed cord (at 3.40 pm) it should only have taken 2 or 3 minutes for the midwives to telephone Dr Williams in his surgery, if he was not already present at the Maternity Hospital, and only 2 or 3 minutes for him to contact Mr Birt by telephone in the outpatients clinic and Dr Sayers at his surgery or at home.
>
> (ii) Mr Birt's evidence, confirmed by his operating lists, was that he was not operating on 16th August 1977, and that he would have been carrying out ward rounds in the morning and outpatient clinics at the General Hospital in the afternoon. The

switchboard should have known where he was in the afternoon. A telephone call from Dr Williams to Mr Birt in a matter of seconds should have alerted him to the necessity to make his way to the Maternity Hospital to carry out the section as soon as possible. In a dire emergency it should have taken Mr Birt no more than 15 minutes to arrive at the Maternity Hospital, and no more than 10 minutes to change and scrub up before the section.

(iii) The evidence of Dr Sayers, GP/Anaesthetist who provided anaesthetic services to the Maternity Hospital was that he would have been either at his surgery or home in the afternoon on 16th August 1977. It would have taken him 5 minutes to travel by car to the Maternity Hospital, and 20 minutes to prepare Mrs Nicholson for the operation. The only proper inference that could be drawn from the evidence was that Dr Sayers, if requested, would have been available to administer anaesthesia for delivery at 1550, ready to start operation at 1610. There was no basis for rejecting his evidence.

(iv) The operation itself to deliver in the hands of an experienced surgeon like Mr Birt should not have taken more than 5 minutes.

(v) It follows that in the acute obstetric emergency that arose in this case the time that should have elapsed between decision and delivery was within 30 minutes, or thereabouts, and certainly within the 40 or 47 $^{1}/_{2}$ minutes which would have been required to avoid damage to the baby.

90 One only has to recite this sequence to appreciate that it only needed something short of the best in all possible worlds to occur for that timetable to slip, and the time of maximum danger (4.20 pm–4.27 $^{1}/_{2}$ pm) to come and go.

91 Mr Cadin did indeed (see above paragraph 51) put a scenario to Professor Taylor which would justify the 54 minute period between decision to operate and (in the event vaginal) delivery, each of item of which he accepted would in itself be reasonable, the position was inevitably *a fortiori* to explain a delay of 40 to 47 $^{1}/_{2}$ minutes. While Lord Justice Dillon said in *Bull* the Appellant:

> ***"does not have to adduce positive evidence to disprove every theoretical explanation, however unlikely, that might be devised to explain what happened in a way which would absolve the Respondent's of fault" (p138).***

the scenario squares with the admittedly sparse evidence available and is in no way intrinsically unlikely.

92 In *Bull* Mustill LJ said (p.141)

> ***The other contradiction also relates to the adequacy of the system for providing cover.*** This arises from the finding by the learned judge, amply supported by the evidence, that the system should have been such that the

second twin should be delivered as soon as practicable after the first: and in any event within twenty minutes. I take this to be subject to the implied qualification — “in the absence of contingencies which could not reasonably be foreseen and forestalled”; for the duty of care in tort could not involve an absolute obligation to see that the second twin was delivered within twenty minutes, come what may. The puzzle is that the system which the obstetricians regarded as satisfactory must, even if adequately set in motion, have on occasion failed to deliver the desired performance. If one adds together the time for the delivery team to set everything in order after the birth of the first twin; the time for the switchboard to ring around the places where the registrar might be (his home, or one of the two other hospital sites); the time to find that he did not respond (because he was in transit, or engaged at one of the other sites); the time to start ringing the consultant; the time to find him and for him to come in from wherever he might be on second call, these times taken together, without culpability at any stage, might have well exceeded the permitted allowance of twenty minutes.

I do not see any ready escape from this dilemma, and none was offered to the trial judge. If the history had been that the consultant had come in at 7.55 pm, an emergency having previously happened, I would have found it impossible to hold on the evidence that any negligence was made out, if damage had occurred which would have been averted if he had been present ten minutes earlier. It must, however, be that the obstetricians who gave evidence were not thinking in those terms. Their evidence makes no sense unless they regard twenty minutes as a target figure at which the system was to aim. In other words, the system should have been set up so as to produce a registrar or consultant on the spot within twenty minutes as a target figure at which the system was to aim. In other words, the system should have been set up so as to produce a registrar or consultant on the spot within twenty minutes, subject to some unforeseeable contingency. In the present case, however, there was an interval of about an hour during which the mother and child were at risk, with nobody present who could do anything if an emergency were to develop. The trend of the evidence seems to me manifestly that that interval was much too long. Either there was a failure in the operation of the system, or it was too sensitive to hitches which fell short of the kind of major breakdown against which no system could be invulnerable.”

93 We adopt essentially the same approach. We repeat that had we been concerned with a 80 minutes DDI, we might have held that negligence was made out, no explanation having been volunteered as to why on the day in question it was so substantial. However even if scheduling the operation for 5 pm was indicative of negligence, it was not causative of the Appellant's injuries, and we are concerned with whether a delay in less than 40 or 47 $^{1}/_{2}$ minutes was necessary to acquit the Respondent of negligence. Given that

We find that the Appellant has failed in his attempt to prove the Respondent negligent.

(i) the starting point of 30 minutes is itself imprecise.

(ii) even two decades later 30 minutes was not achieved in better resourced and better integrated hospitals than the Jersey Maternity Hospital, and that the medical profession were by no means all loyal to the proposition that 30 minutes = good; 30 minutes plus = bad. Professor Taylor, for example, accepting 35 minutes.

(iii) a time of 50–55 minutes from the moment from the diagnosis at 3.40 pm to the time of actual delivery is, on any view, within the range that Mr MacKenzie and Professor Dunn would regard an unexceptionable at the Jersey Maternity Hospital and consistent with a respectable body of medical opinion as evidenced by the periodical literature (see paragraph 52 above).

(iv) the persons in the best position to speak as to the time required to assemble the necessary team in 1977 were those in practice in Jersey at the material time who gave evidence that such an operation at that time could not be achieved within 40 or 47 $^{1}/_{2}$ minutes from diagnosis.

(v) the difference between what was on the strictest view the maximum DDI and what would have been a DDI which would have averted all or some of the damage sustained by the Appellant was so small.

94 We therefore dismiss the appeal.