IN THE SUPREME COURT OF BERMUDA

CIVIL JURISDICTION

2010: No. 55

CARLOS MEDEIROS **Plaintiff**

-v-

ISLAND CONSTRUCTION SERVICES CO. LTD. **1st Defendant**

-and-

ANTWONE LEROY SIMONS **2nd Defendant**

-and-

THE BERMUDA HOSPITALS BOARD
3rd Defendant/3rd Party

-and-

DR STEVEN DORE
4th Defendant/1st 4th Party

-and-

AND DR. MATTHEW ARNOLD
5th Defendant/2nd 4th Party

JUDGMENT
(in Court)[1]

Medical negligence-whether medical treatment exacerbated initial injuries sustained in road traffic accident which were admittedly caused by insured driver's negligence

[1] The present Judgment was circulated to counsel without a hearing to hand down judgment in order to save costs.

Date of trial: February 21-24, 27; August 21-22, 2017; November 14-15

Date of Judgment: December 6, 2017

Mr. Craig Rothwell, Cox Hallett Wilkinson Ltd., for the Plaintiff
Mr. Jeffrey Elkinson and Mr. Scott Pearman, Conyers Dill & Pearman Ltd., for the 1st and 2nd Defendants (D1-2)
Mr. Allan Doughty and Ms Gretchen Tucker, Beesmont Law Limited, for the 3rd Defendant/3rd Party ("BHB")
Mr. Paul Harshaw, Canterbury Law Ltd., for the 4th and 5th Defendants/4th Parties

Introductory

1. By an Amended Generally Endorsed Writ of Summons issued on February 17, 2010, the Plaintiff claimed damages for the negligence of D1-2 in relation to a collision on or about March 10, 2006 between a vehicle owned by D1 and driven by D2 and a truck which was propelled into the vehicle being driven by the Plaintiff, thereby causing him personal injuries. Alternatively, the Plaintiff claimed additional damages for the negligence of BHB, the 4th and 5th Defendant ("D4" and "D5") during and after a hernia repair operation on December 10, 2008. The special damages claim alone was for some $3.2 million.

2. D1 and D2 having admitted liability, the Plaintiff relied upon the claim advanced by D1 and D2 against BHB and D4 and D5 based on the premise that the negligence of the Hospital and the doctors who treated the Plaintiff after the hernia repair surgery carried out on December 10, 2008 caused or contributed to the damage the Plaintiff complains of in the present proceedings. D1 and D2 had initially joined BHB as a third party, and BHB in turn joined D4 and D5 as Fourth and Fifth parties.

3. Due in large part to difficulties in scheduling participation of the various medical experts, the trial took place in three phases and some experts gave their evidence before D4 and D5 gave their crucial factual evidence. The three phases were as follows:

    (1) **February, 2017**: the case of D1 and D2 opened and closed with oral evidence being given by surgical expert Mr Collin (February 21-23). BHB opened its case and called his surgical expert Mr Meleagros (February 23). D4 opened his case and called surgical expert Mr Peter McDonald (February 24). D5 opened his case and called his anaesthesia expert Professor Aitkenhead (February 24). D4 and D5 each gave their oral evidence and closed their cases (February 27);

    (2) **August, 2017**: BHB continued its case by calling its former resident Dr Krow-Rodney (August 21) and concluding the evidence of Mr Meleagros (August 21-22). On August 22, 2007 I granted leave for Dr Winters to submit an amended report and for responsive expert evidence to filed, if necessary;

(3) **November, 2017**: BHB called its last expert witness, Dr Winters, and closed its case (November 14, 2017) and closing submissions were made (November 14, 2017)[2].

4. By the end of the trial, it was clear that the following main issues required determination:

(1) whether the Plaintiff and/or D1-D2 had proved that D4 and/or D5 were negligent in treating the Plaintiff by failing to ensure that the Plaintiff had corrective surgery without undue delay when complications ensued following hernia repair surgery carried out by D4 on December 10, 2008;

(2) if yes, whether the Plaintiff and/or D1-D2 had proved that the relevant breach of duty caused or materially caused new damage or exacerbated the injuries the Plaintiff sustained in the road accident which gave rise to the hernia repair surgery carried out on December 10, 2010; and/or

(3) whether the Plaintiff and/or D1-D2 had proved that BHB had breached its non-delegable duty of care in respect of the Plaintiff's post-operative care and either caused new damage or exacerbated the Plaintiff's pre-existing injuries.

5. Issues (2) and (3) effectively merged into one issue as no or no coherent case was advanced against BHB independently of the alleged negligence of D4 and D5. This was despite the fact that I ruled on the trial of a preliminary issue that BHB did owe a non-delegable duty of care[3].

The Plaintiff's case against D1-2

6. The Plaintiffs case against D1-2 was set out in paragraphs 1-8 of his Amended Statement of Claim. These paragraphs were admitted by D1-2 in paragraph 1 of their Amended Defence. The Plaintiff's injuries were particularised in paragraph 9 of the Amended Statement of Claim. The injuries included multiple fractures in each leg, a ruptured spleen and a ventral hernia. He was in skeletal traction for 8 weeks and underwent an emergency splenectomy. On December 10, 2008 the Plaintiff underwent hernia repair surgery. Complications thereafter required him to be transported by air ambulance to Massachusetts General Hospital.

7. The Amended Defence of D1-2 responded to this aspect of the claim as follows:

[2] The summary set out below of the oral evidence heard in February and August is based on an outline of those portions of the present Judgment drafted in March and September, respectively, shortly after the relevant evidence was received.
[3] *Medeiros-v-Island Construction Company* [2014] Bda LR 3.

"*3. If the Plaintiff did suffer the pain, injury, loss and damage to the extent set out in paragraph 9 of the Statement of Claim (which is denied) then the Defendants say that the said pain, injury, loss and damage was suffered and/or contributed to by reason of the negligence of a Third Party, the Bermuda Hospitals Board, its servants or agents.*"

8. The trial accordingly focussed on the liability of the medical Defendants in relation to the medical treatment the Plaintiff received after the road traffic accident occurred. The Plaintiff had hernia repair surgery on December 10, 2008. The result of a second surgery on December 11, 2008 was to undo that repair. The central controversy was whether the medical response to post-operative complications after the December 10 operation was negligent and either exacerbated the injuries the Plaintiff suffered in the road traffic accident or, alternatively, broke the chain of causation between D1-2's negligence and his post-December 10, 2008 injuries altogether.

The Plaintiff's case against the medical Defendants

9. The Plaintiff's case against the medical Defendants was pleaded as follows in the Amended Statement of Claim:

"*11. If the First and Second Defendant are not wholly liable for damages as above, the Plaintiff claims his personal injuries, loss and damages were caused by the First and Second Defendants and caused and/or exacerbated by the negligent treatment and care of the Plaintiff by one or more of the Third Defendant (which includes its servants or agents), Fourth Defendant and Fifth Defendant during and after his hernia repair operation on or about 10th December 2008.*"

10. It was in particular alleged that:

- D4 negligently delayed emergency follow-up treatment from 1.50 pm on December 11, 2008 and "*failed to diagnose and/or properly respond to the Plaintiff's symptoms of massive blood loss and/or abdominal compartment syndrome*";

- D5 failed from 5.35pm on the same day "*to diagnose the Plaintiff as suffering from abdominal compartment syndrome or take steps to have the patient admitted to the operating theatre to undergo emergency surgery*";

- BHB breached a "*direct non-delegable duty of care to ensure that reasonable care was at all times taken in relation to the medical, nursing and other care with which the Plaintiff was provided by or on behalf of the Third Defendant…The Third Defendant was negligent in failing to return the Plaintiff to the operating theatre before midnight on the 10th of December 2008 for the evacuation of blood already lost and for the arrest of further*

haemorrhage…was negligent in failing to operate on the Plaintiff to arrest further bleeding until very late evening of the 11th December 2008…"

11. The BHB Defence to the Amended Statement of Claim:

    - averred that D4 was hired by the Plaintiff and that no duty was assumed to the Plaintiff by BHB;
    - averred that BHB's employees acted solely under the instructions of D4-5;
    - averred that D4-5 acted appropriately in any event.

D1-2's Third Party Notice

12. D1-2 served an Amended Third Party Notice on BHB which broadly corresponded to the Plaintiff's claim against BHB. BHB's Re-Amended Defence as Third Party alleged that BHB acted appropriately in the support it furnished to D4 and D5 (the First and Second Fourth Parties, for these purposes). Accordingly, despite the fact that the central thesis advanced by the only expert called by D1 and D2 was that that D4 and D5 failed to promptly diagnose post-operative internal bleeding, there was an alternative pleaded case as well. It was complained that the doctors failed to promptly diagnose abdominal compartment syndrome as well.

BHB's Re-Re-Amended Fourth Party Notice

13. BHB alleged as against D4-5 as First and Second Fourth Parties that:

    - at all material times its servants and/or agents met the requisite standard of care in relation to the Plaintiff; and
    - D4-5 were granted hospital privileges on express terms that they would afford BHB absolute immunity for any potential liabilities.

D4-5's Defence

14. D4-5 admitted the facts recorded in BHB's records relating to the Plaintiff's condition during the period he was under their care. The following significant averments were however made:

    - it was denied that the Plaintiff displayed "*determinative signs of ACS*" before 8.00pm on December 11, 2008 when he entered respiratory distress;

- D4 denied recalling being told by Dr Krow or anyone that the Plaintiff was suffering from kidney failure, although he was aware of developing renal insufficiency which was dealt with appropriately;

- D5 admitted being aware of the possibility that the Plaintiff was suffering from increased pressure in his abdominal cavity from 4.30pm but denied negligently failing to diagnosis ACS;

- D5 prepared the Plaintiff for any surgery which might have been necessary but the need for surgery did not become apparent until around 8.00pm;

- The most responsible physician ("MRP") for the Plaintiff while he was in ICU between December 11 and December 30, 2008 was the intensivist employed or appointed by BHB and on duty from time to time.

The expert evidence

Mr Collin (D1-2)

15. Mr Jack Collin MA MD FRCS is a Professorial Fellow at Trinity College, Oxford. He prepared three expert reports which asserted the central thesis that, based on hospital records, the December 11, 2008 operation should have been carried out earlier based on a diagnosis of abdominal bleeding (not ACS) and the failure to do so on the part of D4 and ICU staff at the Hospital fell below the reasonable standard of care. This breach of duty also caused subsequent complications requiring the Plaintiff to be flown to Massachusetts General for further treatment:

    - **June 5, 2012**: in his first report, Mr Collin crucially opined: "*Following the completion of his abdominal wall hernia repair surgery on the 10th December 2008 the medical records confirm that Mr Medeiros displayed the physical signs and symptoms associated with postoperative haemorrhage…The clinical and haematological observations were sufficient to allow the obvious conclusion to be drawn that Mr Medeiros was bleeding. He required a blood transfusion to restore his haemoglobin to a normal level and he required the operation of exploration of his abdomen to arrest the source of the haemorrhage…As a consequence of substantial un-replaced blood loss causing hypovolaemia…Following the operation on the late evening of the 11th December 2012 Mr Medeiros continued to bleed . He required dialysis and subsequently further abdominal surgery on the 14th December 2008. Following the first operation on the 14th December 2008 he had a major bleed from the abdominal wound that was controlled by a reoperation later that day on the 14th December 2008. If Mr Medeiros had received appropriate treatment for his postoperative bleeding following his operation on the 10th December 2008 and before his cardiac arrest on the late evening of the 11th December 2008 then he would not have suffered the cardiac arrest and renal failure and the need for multiple reoperations and subsequent transfer to the Massachusetts General Hospital for continuing medical care.*"

- **August 6, 2013**: in his second report, Mr Collin agreed with the opinions expressed by Dr Warshaw and Dr Winters, and further opined that "*by no later than the afternoon of the 11th December 2008 any competent medical service would have ensured that Mr Medeiros was returned at the earliest possible opportunity to the operating theatre for emergency surgery on his abdomen.*"

- **July 6, 2014**: in his third report, Mr Collin commented on the report of Mr McDonald and confirmed his own previous central opinion.

- **February 1, 2017**: in his fourth report, Mr Collin disagreed with aspects of Professor Aitkenhead's and Mr Meleagros' reports which countered Mr Collin's assertions that significant haemorrhaging was occurring primarily based on an analysis of the fluid loss which had occurred. He crucially concluded: "*There can be little doubt that at the time Dr Dore performed the operation on the late evening of the 11th December 2008 Mr Medeiros would have had substantial quantities of retained blood and serum within the abdominal wall wound and (probably) deep to the ventral hernia prosthetic closure material.*"

16. Under cross-examination by Mr Harshaw, Mr Collin conceded that based on a review of documents not considered at the time of his initial report, the Plaintiff had not technically suffered cardiac arrest on December 11, 2008. In relation to his fourth report, Mr Collin retracted his assertion that by "*07.35 hours on the 11th December 2008 Mr Medeiros had lost more than 1.5 litres of blood*"; this calculation had failed to take the Plaintiff's body mass into account. Under cross-examination by Mr Doughty, Mr Collin agreed that Dr Krow had done all that could be expected of a doctor at her level. Mr Collin was clearly shaken when cross-examined by Mr Harshaw on Mr. Meleagros' analysis of fluid loss (produced as Exhibit 4), which purported to show that Mr Collin's own broad brush assumptions about significant fluid loss due to bleeding were unfounded on closer scrutiny. Histrionically, and in stark contrast to the generally calm professional tone of his evidence, he angrily dismissed these calculations as "*worthless*", failing to convincingly undermine the calculations on their merits. This appeared to me to be a 'deer in the headlights' moment which seriously undermined my confidence in his central thesis. Nevertheless, in calmer mode, Mr Collin did concede that his own fluid intake calculation required an upward adjustment.

17. Under further cross-examination by Mr Harshaw, Mr Collin insisted that the decision to regard ACS as the issue was the central diagnostic mistake which was made. He clarified that during the initial operation there would have been a loss of both blood and serum (through oozing). The loss of serum is why he believes in using two to three drains, rather than the single drain used by Dr Doré. He stated that his own blood loss calculations were based mainly on the Plaintiff's haemoglobin levels, and while accepting that there may many causes for a decline in such levels, those possibilities did not apply to the Plaintiff, who had no blood disorders.

18. Under re-examination, Mr Collin said that he would not have waited six days to prepare a post-operative note as Dr Doré had done, and further stated that Dr Doré should have gone in to investigate the Plaintiff's condition the evening before the

surgery, rather than simply receiving telephone reports from a junior Hospital doctor. In questions arising from my own question about what the platelets were, Mr Collin agreed that the fall in the Plaintiff's platelet levels could have been due to a dilution of his blood from the fluids he was being given.

Mr Meleagros (BHB)

19. Mr Luke Meleagros is a Consultant Surgeon in general, abdominal and laparoscopic surgery at the North Middlesex University Hospital NHS Trust, and qualified as a doctor over 25 years ago. Between 1994 and 2000, he was Consultant Surgeon at the Homerton Hospital NHS Trust and Honorary Senior Lecturer in Surgery at St. Bartholomew's & Royal London Medical College. He prepared a Report dated December 29, 2016. I found him to be an impressive witness who always attempted to answer questions put to him in a balanced manner, even if he was not unwilling to vigorously defend his central propositions.

20. The crucial conclusion which this expert reached was as follows:

> "*5.63 If the Plaintiff had been returned to the operating theatre to treat bleeding, the surgeon would not have found any significant haemorrhage, given that none was found when the abdomen was opened in the ICU on the evening of 11/12/08…If the surgeon had succeeded in closing the abdomen following a negative exploration for suspected postoperative bleeding, the Plaintiff would still have deteriorated with rising IAP pressure leading to ACS and all the sequelae that ensued. Therefore he would still have had to have the abdomen opened and the mesh removed.*
>
> *5.64 Therefore, I do not agree with the Plaintiff's assertion that the open abdomen could have been avoided if the Plaintiff had been treated for a purported significant haemorrhage or returned …to the operating theatre earlier.*"

21. His own detailed fluid loss calculations were explained in a convincing manner. He described the suggestion that six litres of blood had been lost as "*absurd*". His initial opinions were not undermined in cross-examination by Mr Elkinson. He reiterated that the medical notes did not make any reference to Dr Doré stopping the bleeding and suspected that the shadowy area in an ultra sound was fluid in the patient's bowel rather than blood. His cross-examination by Mr Elkinson could not be concluded on February 24, 2017 when he was scheduled to return to London and resumed on August 21, 2017 when Mr Elkinson and Mr Harshaw concluded their cross-examination.

22. Mr Meleagros, under further cross-examination by Mr Elkinson, reiterated that he considered Mr Collin's assessment that the Plaintiff's crisis on December 11, 2008

was a result of having lost over six litres of blood was "*imaginative*". This was because it was simply "*not consistent with life for there to be a loss of 2/3rds of a patient's blood*". He opined that the ultra-sound report did not exclude the possibility that the fluid shown was blood, but if it was blood this was a very small proportion of the total volume Mr Collin asserted had been lost. He also stated that having regard to the limited extent of medical consensus on ACS in 2008, it was impressive that D4 made the diagnosis which he did. Under cross-examination by Mr Harshaw, BHB's expert accepted that it was possible for bleeding to cause ACS. However, in the present case, there was no doubt that any blood which had been lost had been replaced by the fluid which had been administered. If anything too much fluid may have been administered; however, it was very difficult to precisely work out how much fluid replacement was required.

23. At the end of the cross-examination when Mr Doughty foreshadowed 30 minutes of re-examination, I observed that it appeared that Mr Meleagros was being asked to say the same thing 10 times. In fairness, this was more a reflection of the expert's own extremely tight and focussed analysis of what the relevant medical considerations in this case are than it was a reflection of repetitiveness on the part of counsel. BHB's expert to my mind advanced two pivotal points resembling twin suns around which all of his supplementary (and often dizzyingly technical) answers orbited:

    - ACS was very difficult to accurately diagnose in the Plaintiff's circumstances and the accepted medical view was that less intrusive options than surgery were tried first and often succeeded with surgical intervention a last resort suggesting that surgery should have been performed sooner was the judgment of hindsight;

    - if the Plaintiff's main presenting problem had been bleeding from the initial surgical wound which ought to have been stemmed before his condition worsened, substantial quantities of blood would have been found in the course of the second operation, and Dr Doré would have no motivation to conceal that fact in the context of life-saving surgery. He would have recorded the fact that he took effective steps to stop the bleeding and save the Plaintiff's life.

24. Under re-examination, Mr Meleagros explained why he disagreed with various opinions expressed by Mr Collin on points of detail, while being careful to acknowledge aspects of his evidence which he also agreed with, For instance:

    - BHB's expert agreed that fluid ingested by the Plaintiff would be lost both through leaking from blood vessels into the third space between cells and blood vessels and through so-called insensate losses (breathing, sweating). However, Mr Meleagros testified that his fluid retention figures took these losses (which would occur in every case) into account. As the Plaintiff had been supplied the equivalent of his entire blood volume in fluid during the period in question, it could not be suggested that insufficient fluid was

administered. There was no precise way of computing how much fluid a patient required in such circumstances;

- BHB's expert conceded that Mr Collin was correct to assert that hypovolaemia could explain impaired kidney function. However, Mr Meleagros opined that the factual evidence in this case did not support Mr Collin's hypovolaemia thesis because it was clear that from the beginning of the post-operative period the Plaintiff's renal function was impaired (as evidenced by low to no urine production). This was more consistent with raised intra-abdominal pressure immediately after the hernia repair surgery, rather than post-surgical bleeding which over time caused the renal system to be compromised;

- BHB's expert conceded that Mr Collin was right to point out that certain readings typically indicative of muscle damage (such as CPK and Myoglobin) actually got worse after the Plaintiff's abdomen was supposedly decompressed. However, Mr Meleagros opined that this was entirely consistent with initial damage caused by elevated pressure being exacerbated by oxygen rushing back into the abdomen after decompression, thus causing more damage.

25. I declined to permit re-examination of Mr Meleagros on the various articles exhibited to his Report because, although he made passing reference to them in the course of his oral evidence, no challenge was made to the scientific basis for his opinions in the course of cross-examination and the articles upon which he relied. The main disputes which appeared to me to exist between the surgical experts in the present case centred entirely on the interpretation of the data collected by the Hospital after the hernia repair surgery and controversy over what the underlying presenting problem was, bleeding or ACS. Mr Meleagros' opinions that, *inter alia,* (1) the link between ACS and elective hernia repair surgery has only recently become well recognised, and that (2) adopting a step by step approach to treating suspected ACS before resorting to re-opening the abdomen to reduce the pressure is an appropriate medical response, were not (or not directly[4]) challenged.

Dr Winters (BHB)

26. Dr Bradford Winters has been an Anaesthetist since 1997 and an Intensivist since 1998. He was an Associate Professor of Critical Care and Anaesthesiology at Johns Hopkins University School of Medicine when he prepared a Report dated February 19, 2013 based on BHB's "chart" in relation to the Plaintiff. This was apparently based on an earlier informal opinion dated February 29, 2012. His central conclusion was as follows:

[4] A February 9, 2012 Opinion from Dr Warshaw prepared for the BHB but not relied upon by BHB suggested that as soon as ACS was identified surgery should have occurred. This was put to Mr Meleagros in cross-examination by counsel for D1-2, but no positive evidence to this effect was adduced at trial. Mr Collin's case for earlier intervention was based on the premise that the primary presenting problem was post-operative bleeding, not ACS.

"*…bladder pressure measurements [at 1700 and 1800] should have led to the diagnosis of ACS being made at 1800hrs and the surgeon contacted with this information…The standard of care (defined by what a reasonable physician would do if presented with the same circumstances) in this situation required that the Intensivist make the diagnosis of abdominal compartment syndrome at 1800 hrs based on the constellation of signs and symptoms and communicate this diagnosis and the need for emergent exploratory laparotomy to the surgeon. From my review there is no documentation by Dr Arnold that this occurred that would constitute a reasonable body of evidence that Dr Arnold had met this standard of care. There is a note by Dr. Arnold, at midnight, describing the some of the details prior to the arrest but this note does not indicate that the required communication occurred to meet the standard of care. The standard of care does not require Drs Arnold or King to open the abdomen themselves.*" [Emphasis added]

27. It seemed possible that Dr Arnold's Witness Statement signed on November 28, 2012 before Dr Winters' Report had not yet been served by February 19, 2013. However, it was difficult to comprehend why it was only on August 22, 2017, that Mr Doughty for BHB was in a position to advise the Court and D1-2 that Dr Winters (due to give evidence via Skype that morning) wished to change his central opinion. This was purportedly based on reading a transcript of Dr Arnold' evidence in February 2017 about the communications which took place with Dr Doré prior to the ICU surgery. In fact, Dr Arnold had refuted the central complaint of Dr Winters (the alleged failure to report the raised abdominal pressure proxy readings), over four years before he gave his oral evidence at trial. He had identified the person who relayed the readings to Dr Doré and asserted that the surgeon prescribed remedial action. In cross-examining Dr Doré, Mr Elkinson appeared to accept that D4 had been in contact with the ICU nurse as D5 testified in his Witness Statement in relation to the rectal tube (inserted on D4's instructions) after abdominal pressure measurements had commenced. Long before the trial began, as Mr Harshaw complained at various points in the prelude to the trial, the case against D5 was held together by a very thin thread.

28. Be that as it may, due to technical problems Dr Winters' evidence could not be even opened in any event. The trial was adjourned, yet again, on terms that an amended Report would be served by Dr Winters and followed by, if necessary, responsive evidence from the other parties. In the event, he prepared a Supplemental Report dated September 4, 2017, and gave his oral evidence by Skype on November 14, 2017.

29. Dr Winters' Supplemental Report explained that that his two initial reports had been prepared based purely on Hospital records and that he had not at that juncture reviewed the witness statements and other expert reports. Having considered that material and a recording of Dr Arnold's evidence on February 27, 2017, he reached the following key conclusions:

"*14. While conservative management of ACS has been advocated as an option in some patients by some providers and would be consistent with a responsible*

body of opinion, the mainstay of therapy is a decompressive laparotomy. Choosing a conservative path requires careful patient selection and I believe that while a handful of intensivists would consider the conservative path in a patient like Mr Medeiros, the vast majority would advocate for a decompressive laparotomy. The ultimate decision though lies with the surgeon to weigh the risks and benefits of the surgical procedure. The intensivist does not perform the operation. The intensivist will well understand these but his/her primary concern is the immediate threat of end-organ ischemia. The surgeon will also consider this threat but also the potential consequences post-surgically. For Mr. Medeiros, these consequences are not insignificant given the size of his hernia. Given this balance, in my opinion, based on the testimony and statements not previously available to me at the date of my last report, Dr. Arnold performed his duty to monitor, assess, make the diagnosis and communicate that diagnosis to the surgeon."

30. Under cross-examination by Mr Elkinson, Dr Winters confirmed that having initially been supplied with the Hospital records upon which he based his February 2012 Opinion, he received no further documentation in 2013. He could not remember precisely when he received the Witness Statements and other Expert Reports, but this was possibly as late as the end of 2016. Dr Winters further testified that in his opinion ACS came to the top of the diagnostic list when the second elevated bladder pressure reading was obtained at 18.00 hrs on December 11, 2008. However, he emphasised that he was not qualified to express a view on when the surgeon should have operated. In addition to explaining that he changed his initial opinion about a breach of duty by Dr Arnold based on discovering evidence suggesting communication with the surgeon had taken place, Dr Winters explained that he also carried out further research before completing his Supplementary Report. He said that he was surprised to find that, contrary to what he was taught 20 years ago, a body of professional opinion now existed which favoured conservative management of ACS. He stated that a CT scan would have been risky given the Plaintiff's condition in the ICU, and he would not have requested one. He also explained that the anaesthetic used was a standard one and that it clearly caused the cardiac arrest by "unmasking" the Plaintiff's symptoms.

31. Under cross-examination by Mr Harshaw, Dr Winters agreed it should have been possible for him to have considered Dr Arnold's Witness Statement before his February 2013 Opinion as Mr Aitkenhead had clearly received it before he prepared his March 30, 2013 Report. He opined that the Plaintiff was in a stable condition prior to intubation and that he did not believe that a CT scan would have made any difference. Overall he opined, there was a lot of nuance to the entire situation. Under re-examination by Mr Doughty, Dr Winters opined that if the ultra-sound results had not been communicated to the doctors, this would have made no difference.

Mr McDonald (D4)

32. Mr Peter McDonald has been a Consultant Gastroenterological surgeon for over 25 years. He has been a Consultant with the Northwick Park and St Marks Hospitals in

Harrow (since 1991 and 1993, respectively). He is also an Honorary Senior Clinical Lecturer at Imperial College, London. He prepared Reports dated June 8, 2014 and July 19, 2016, respectively. In his First Report he opined that it was far from obvious initially that ACS was the appropriate diagnosis and stated that:

> "*10.4 there are good reasons for being cautious in advising immediate decompression of the abdomen…*
>
> *12….It is clear to me that surgeons are often more prudent when they wait for resolution (which sometimes clearly occurs without surgery and its consequences…*"

33. In his Second Report Mr McDonald opined that the records (including haemoglobin levels, blood pressure levels and the physiotherapist's observational report) were inconsistent with bleeding being a significant problem. In any event: "*If bleeding had been the primary problem that night Dr Doré would have found significant 'old' blood loss at his operation on 14th December 2008 which he did not)*" (5.10) .

34. The expert presented his evidence in a fair and balanced way. Under cross-examination by Mr Elkinson, he admitted that D4 might have attended the patient the previous evening which D4 did not do. He admitted that a CT scan might have been helpful, but noted that such scans were not routinely used in 2008. However, he also stated that he believed that Dr Doré was reassured by what he was told by Dr Krow and that "*the most dangerous surgeon is the one who keeps operating*". He also opined that "*assessing post-operative conditions is the hardest thing we do*". Under cross-examination by Mr Doughty, he reiterated that deciding whether or not ACS exists and requires surgery is "*one of the hardest decisions an abdominal surgeon has to make*".

Professor Aitkenhead (D5)

35. Professor Alan Aitkenhead has held consultant status as an anaesthetist since 1979 and is currently Emeritus Professor of Anaesthesia at the University of Nottingham. He prepared Reports dated May 30, 2013 and November 11, 2016, respectively. In his First Report he concluded:

> "*20. In my opinion, Dr Arnold's management of Mr Medeiros was entirely reasonable provided that he knew that Dr Doré had been informed about the measurements of the bladder. He was dealing with a patient with several possible reasons for deterioration and was attempting to investigate or treat the possible causes. In my opinion, having been informed of the pressure measurements, the decision as to whether to open the abdomen lay with Dr Doré.*"

36. Professor Aitkenhead gave his oral evidence in a low key and impressive manner. It was difficult for the Court to identify a coherent case against Dr Arnold if one

accepted his expert's explanation of the lines of authority over the patient. In answer to questioning by Mr Elkinson, Professor Aitkenhead most significantly opined that the decision to intubate was a decision for Dr Arnold, while the decision to operate was for Dr Doré. He asserted that D5 discharged his duty of care by involving Dr Doré.

Factual evidence

The Plaintiff

37. The Plaintiff's own evidence was not relied upon in relation to the liability issue.

Dr Doré (D4)

38. Dr Steven Doré has been a general surgeon licensed in Ontario since 1986 who has practised in Bermuda since 1994. He gave his factual evidence in a straightforward and impressively non-defensive manner. I found him to be a credible witness.

39. In his evidence-in-chief, D4 indicated that nurses normally sought his permission to change dressings. He also conceded that it was unusual for him to have dictated the post-operative note for the initial hernia repair surgery on December 10, 2008 as late as he did in this case, over a year later (December 16, 2009). Under cross-examination by Mr Elkinson, he explained that he had prepared it so late in this case because he was unable to find a report when requested by the Plaintiff's attorneys to produce one in late 2009. In relation to the ICU procedure on December 11, 2008, he prepared a handwritten distilled operative note. He also stated:

- "*This operation wasn't done for bleeding. If I'd operated for ACS and found bleeding, I would have noted it because it would have been surprising…Four hours after the dressing was reinforced it was dry and intact…If I'd seen blood, I would have recorded it. I would also have had to stop the bleeding*";

- he could not remember the content of the conversation with Dr Krow on the evening of December 10, 2008. However, it would be unusual for her as a junior resident doctor to tell him that surgery was required. She could have instructed that blood be prepared for possible transfusion of her own initiative and this would not have meant that an operation was anticipated. He strongly denied that administering blood earlier could have obviated the need for surgery. Nothing that Dr Krow reported to him was consistent with fascial dehiscence. Had this been the problem, the notes would have recorded changing bloody sheets, not changing dressings;

- ACS was initially only one possible diagnosis, and one had to avoid wasting money and possibly harming the patient by deciding to operate earlier. However, by 13.50 on December 11, 2008, ACS was moving up the list of suspected reasons for the Plaintiff's condition;

- he communicated with the ICU nurse and requested the insertion of a rectal tube to reduce pressure in the colon prior to the Plaintiff's crisis;

- that he accepted that hypovolaemia was also a potential concern and that, like ACS, would have affected kidney function and urine output. Prior to the Plaintiff's crisis of multiple organ failure, which "*left no room for the niceties of conservative management*", and which Dr Arnold relayed to him in summary form, he and Dr Arnold had been leaning towards opening the Plaintiff's abdomen and removing the mesh to reduce intra-abdominal pressure;

- the Plaintiff would have died, after his cardiac event, if they had waited to move him to the operating room.

40. Under cross-examination by Mr Doughty, D4 stated that if they had anticipated bleeding, they would have been wearing knee high boots and the blood would have come gushing out. He described it as fantastical to suggest that old blood found a few weeks later in the Plaintiff's lesser sac was the product of bleeding on a scale necessary to cause the problems the Plaintiff suffered.

Dr Abena Krow-Rodney (BHB)

41. Dr Abena Krow-Rodney (formerly at all material times in 2008 Dr Krow) gave evidence via Skype from Texas. She confirmed her Witness Statement and explained that she had no independent recollection of her dealings with the Plaintiff on December 10-11, 2008 at the Hospital. She was employed as a Surgical Officer by BHB until March 2009. During the period in question, she saw the Plaintiff at 11pm on December 10, 2008 and last dealt with him around 1.00pm on December 11, 2008. She reported on her assessments of the Plaintiff's condition to Dr Doré by telephone on three recorded occasions, around 11.00pm on December 10, and after 3.00am and 1.00pm on December 11. She gave her evidence in a somewhat tense manner, but was nevertheless credible and straightforward witness.

42. Under cross-examination by Mr Elkinson, after explaining the limits of her independent recollection beyond what she documented in medical notes at the time, she confirmed that the bandages she described in her Witness Statement as being "*soaked with serosanguinous fluid*" were wet with a "*bloodstained fluid*". She confirmed that she observed 50cc of fluid in the "JP Drain". She agreed that she had expressed concern to D4 about the need for surgical intervention during the 11.00pm call. She wondered whether the Plaintiff was suffering from fascial dehiscence. She was not in a position to decide whether bleeding was a problem based on a bedside examination and she assumed that at some point D4 would come in and examine the patient. Dr Krow-Rodney could not remember if preparing for a possible blood transfusion by cross-matching blood was her idea or Dr Doré's, but she would not ordinarily have taken any such steps without the approval of the surgeon. She denied that D4 had ever criticised her competence or disrespected her in any way. Dr Krow-Rodney stated that D4 himself visited the patient from 1.50pm and thereafter she does not recall following the Plaintiff's progress.

43. Under cross-examination by Mr Harshaw, she confirmed that she was not a surgeon and was now practising as a Family Doctor in Texas. She qualified as a doctor at the University of the West Indies (Barbados) in 2004, and in 2008 had probably worked for BHB for only one year.

Dr Arnold (D5)

44. Dr Matthew Arnold confirmed his Witness Statement dated November 28, 2012. He has been a doctor for 40 years and an Anaesthetist for over 30 years, initially qualifying in Zimbabwe. He was the on-call Anaesthetist on the evening of December 11, 2008. In his Witness Statement, D5 stated that ACS "*was one of the reasons Carlos Medeiros was admitted to ICU, so that he could be monitored for ACS more closely than in a recovery ward*". He also stated in his Witness Statement :

- Dr Christopher King admitted the Plaintiff to the ICU at around 1500 at D4's request;
- he (Dr Arnold) replaced Dr King at around 1630;
- a bladder catheter was inserted shortly thereafter to obtain an approximate measure of the Plaintiff's intra-abdominal pressure. After the initial reading showed pressure rising, the ICU Nurse contacted D4 who instructed that a rectal tube be inserted (the experts agreed this was in order to reduce pressure) between roughly 1730 and1800;
- between 1700 and 1930 the Plaintiff's breathing became more laboured and a swelling in his neck was increasing. D5 accordingly decided to intubate the Plaintiff and use artificial respiration both to assist his breathing and in anticipation of urgent surgery;
- at 2000 the Plaintiff was intubated and immediately had a cardiac arrest. The patient was quickly stabilized, D4 was summoned to assess him and surgery took place at 2030.

45. Under cross-examination by Mr Elkinson, he stated that:

- the Plaintiff came under his primary care once he was transferred to the ICU. As Intensivist D5 was the Most Responsible Physician ("MRP");
- it is generally difficult to measure abdominal pressure with patients who are obese;
- he was unsure who ordered the ultra sound and whether he saw the results. He probably saw the results and would have been unconcerned about a small amount of fluid shown on the chart. In the condition the Plaintiff was in, he would not at that point have ordered a CT scan. At what point to call D4 was probably running through his mind;

- in preparing the Plaintiff for intubation, he was concerned about the haematoma on the Plaintiff's neck. The cardiac event occurred at this stage. He resuscitated the patient and after intubation was completed called D4 at this stage. He conceded that Dr Winters' criticism that he might have called D4 sooner was "not an unreasonable suggestion".

46. Under cross-examination by Mr Doughty, D5 stated that he did ask staff to be in contact with Dr Doré. He stated that the Plaintiff was admitted to the ICU for ACS and he (Dr Arnold) was standing at the head of the patient's bed during the ICU surgery and saw no large quantity of blood.

Legal findings

The duty of care: BHB's non-delegable duty of care

47. In a decision reported as *Medeiros-v-Island Construction Company* [2014] Bda LR 3, I made the following legal findings on the trial of a preliminary issue at which I concluded that BHB did owe a non-delegable duty of care to the Plaintiff:

> *"15. In my judgment it is not for me at this stage to determine what the "nature of the undertaking" of the BHB was in all the circumstances of this case because I do not have all the facts before me. What I have been asked to determine is whether or not a general non-delegable duty of care exists and in these circumstances, it seems to me, it cannot be necessary or appropriate for me to go on to find (with incomplete facts) what the scope of that duty is in the circumstances of the present case.*
>
> *16. It may be that at the end of the day it is held that, based on the facts in question, that in the circumstances of this case no duty was actually "owed" to this Plaintiff in particular. But that, it seems to me, is a different thing from saying that because of the relationship between the parties a general non-delegable duty of care was owed despite the delegation of the surgical functions to Dr. Dore. What on the facts is necessary to establish a breach of the duty is a matter to be determined at trial.*
>
> *17. I was also referred by Mr. Harshaw to Williams-v-The Bermuda Hospitals Board [2013] SC (Bda) 1 Civ (9 January 2013) (Hellman J-obiter). It is significant that he found little difficulty with the proposition that a non-delegable duty of care exists in general terms. At paragraphs 84 to 85 he said this:*

'84. Those conducting a hospital are under a direct duty of care to those admitted as patients to the hospital. See X (Minors) v Bedfordshire County Council [1995] 2 AC 633 HL at 740, per Lord Browne-Wilkinson, with whom the other members of the House agreed. This includes a duty to set up a safe system of operation in relation to what are essentially management as opposed to clinical matters. See Robertson v Nottingham Health Authority [1997] 8 Med LR 1 CA at 13, per Brooke LJ.

85. Moreover, there is persuasive authority that English law (and by parity of reasoning Bermudian law) has reached the stage where a hospital generally owes a non-delegable duty to its patients to ensure that they are treated with skill and care regardless of the employment status of the person who is treating them. See Farraj v King's Healthcare NHS Trust [2010] 1 WLR 2139 at 88, per Dyson LJ, with whom the other members of the Court agreed. "

48. BHB thus owed a duty of care to ensure that the administrative systems of the Hospital were safe and capable of supporting the medical duty of care owed to the Plaintiff in relation to actual treatment. I should add that Hellman J's findings on this issue ([2013] Bda LR 1) were upheld by the Court of Appeal: *Williams-v-Bermuda Hospitals Board* [2014] Bda LR 22. BHB did not seek to challenge this aspect of the Court of Appeal's decision before the Privy Council: *Bermuda Hospitals Board-v-Williams* [2016] AC 888.

The scope and content of the 'medical' duty of care owed to the Plaintiff by D4, D5 and BHB

49. It was common ground that the relevant legal test was established sixty years ago by McNair J in *Bolam-v- Friern Hospital Management Committee* [1957] 1 WLR 582. The following portions of the judgment in that case were relied upon by counsel:

- Mr Elkinson (at page 586): "…*where you get a situation which involves the use of some special skill or competence, then the test as to whether there has been negligence or not is not the test of the man on the top of a Clapham omnibus, because he has not got this special skill. The test is the standard of the ordinary skilled man exercising and professing to have that special skill. A man need not possess the highest expert skill; it is well established law that it is sufficient if he exercises the ordinary skill of an ordinary competent man exercising that particular art…*";

- Mr Doughty cited the above passage but also the following (at 587-588): "*in the case of a medical man, negligence means failure to act in accordance with the standards of reasonably competent medical men at the time. That is a perfectly accurate statement, as long as it is remembered that there may be*

one or more perfectly proper standards; and if he conforms with one of those proper standards, then he is not negligent… the real question you have to make up your minds about on each of the three major topics is whether the defendants, in acting in the way they did, were acting in accordance with a practice of competent respected professional opinion… I myself would prefer to put it this way, that he is not guilty of negligence if he has acted in accordance with a practice accepted as proper by a responsible body of medical men skilled in that particular art. I do not think there is much difference in sense. It is just a different way of expressing the same thought. Putting it the other way round, a man is not negligent, if he is acting in accordance with such a practice, merely because there is a body of opinion who would take a contrary view. At the same time, that does not mean that a medical man can obstinately and pig-headedly carry on with some old technique if it has been proved to be contrary to what is really substantially the whole of informed medical opinion. Otherwise you might get men today saying: 'I do not believe in anaesthetics. I do not believe in antiseptics. I am going to continue to do my surgery in the way it was done in the eighteenth century.' That clearly would be wrong… it is not essential for you to decide which of two practices is the better practice, as long as you accept that what the defendants did was in accordance with a practice accepted by responsible persons…";

- Mr Harshaw cited the following important snippet from the same passage (at 587): "*a man is not negligent, if he is acting in accordance with such a practice, merely because there is a body of opinion who would take a contrary view.*" He also submitted that the *Bolam* test had been approved in various subsequent English authorities as well as, implicitly, by the Court of Appeal for Bermuda in *Williams-v- Bermuda Hospitals Board* [2014] Bda LR 22.

50. A further judicial statement which I find of assistance comes from the first instance decision in the *Williams* case[5] where Hellman J stated as follows:

"*89. However, the court is not bound to hold that a defendant doctor escapes liability for negligent treatment or diagnosis just because he leads evidence from a number of medical experts who are genuinely of the opinion that the defendant's treatment or diagnosis accorded with sound medical practice. The court has to be satisfied that the exponents of the body of opinion relied upon can demonstrate that such opinion has a logical basis. In particular in cases involving, as they so often do, the weighing of risks against benefits, the judge before accepting a body of opinion as being responsible, reasonable or respectable, will need to be satisfied that, in forming their views, the experts have directed their minds to the question of comparative risks and benefits and have reached a defensible conclusion on the matter. See Bolitho v City and Hackney HA[1998] AC 232 HL at 241 G — 242 A, per Lord Browne-Wilkinson, with whom the other members of the House agreed.*"

[5] [2013] Bda LR 1.

51. In other words, it is my duty as trial judge to critically assess and evaluate the expert evidence adduced by any party rather than meekly accepting it in an uncritical manner.

Findings: did D4 (Dr Doré) breach his duty of care and cause actionable damage by failing promptly to carry out remedial surgery after the Plaintiff experienced complications following his December 10, 2008 hernia repair surgery?

Main issues in controversy

52. The main issues in controversy were the following:

- whether the Plaintiff's complications were initially attributable to post-operative bleeding or abdominal compartment syndrome (ACS);
- in either case, was D4 negligent in failing to operate to treat the symptoms earlier than he did?
- did any delay which could be established cause actionable damage by exacerbating the Plaintiff's post-accident condition?

Were the Plaintiff's post-operative complications on December 10, 2008 initially due to blood loss?

53. The primary case against D4 was that after the hernia repair surgery he carried out on December 10, 2008, the Plaintiff suffered from post-operative internal bleeding which ought to have been addressed by prompt surgical intervention. Had this prompt intervention occurred, the later intervention requiring removal of the mesh inserted in the repair surgery would not have been necessary. I say this was the primary case because, despite the fact that failure to respond promptly to ACS was formally pleaded in the alternative, D1-2's surgical expert Mr Collin's central thesis was that bleeding was the main problem and the failure to address this before the onset of ACS and the cardiac event was the operative cause of the plaintiff's loss. This was his position in his following Expert Reports:

- **June 5 2012**: "*If Mr Medeiros had received appropriate treatment for his postoperative bleeding following his operation on the 10th December 2008 and before his cardiac arrest on the late evening of the 11th December 2008 then he would not have suffered the cardiac arrest and renal failure and the need for multiple reoperations and subsequent transfer to the Massachusetts General Hospital for continuing medical care*";
- **July 8 2012**: a review of Dr Winters' and Dr Warshaw's Reports did not alter his initial opinion;
- **August 29, 2012**: additional information disclosed did not alter his initial opinion;

- **September 24, 2012**: he listed various indicators of blood loss, including (a) visible post-operative blood loss, (b) diagnostic imaging showing an abdominal fluid collection, (c) systemic symptoms and signs of blood loss, (d) pulse rate, (e) blood pressure, (f) haemoglobin levels and fluid and blood transfusions;

- **August 6, 2013**: "*If as he should have been Mr Medeiros had been returned to the operating theatre by no later than the early hours of the morning of the 11th December 2008 then the operation performed would have been the opening of the abdominal wound and arrest of haemorrhage from the dissected area within the abdominal wound followed by the placement of the adequate number of four abdominal drains. Mr Medeiros would not have required opening of the abdominal cavity and he would not have developed intra-abdominal compartment syndrome…he would not have suffered a cardiac arrest on the evening of the 11th December and he would not have required the removal of the hernia mesh repair…*";

- **July 6, 2014**: in commenting on Mr Peter McDonald's Report, Mr Collin confirmed his latest opinion;

- **February 1, 2017**: in commenting on the Reports of Professor Aitkenhead and Mr Meleagros, Mr Collin reiterated his opinion that blood loss was the initial presenting problem commenting: "*There can be little doubt that at the time Dr Doré performed the operation on the late evening of the 11th December 2008 Mr Medeiros would have had substantial quantities of retained blood…There can be little doubt that Dr Doré would have evacuated substantial quantities of blood and serum and would have found it necessary to employ meticulous surgical technique to ensure that the many bleeding points present at that time were secured and further haemorrhage prevented.*"

54. Mr Collin's thesis did not withstand careful scrutiny at a technical or on a more elementary level. More technically, the indicators of blood loss he relied upon, carefully examined in the course of his cross-examination, did not credibly support blood loss at all. Mr Harshaw in his closing submissions reminded the Court of this portion of his cross-examination:

> "*Harshaw : Thank you. Now turning to the blood loss calculations by Mr. Meleagros.*
>
> *Collin : Yes.*
>
> *Harshaw : I will not ask you about them in detail. You said that the alternative calculations were worthless because they do not account for the likely blood loss?*
>
> *Collin : No, they are simply wrong in all respects.*
>
> *Harshaw : Thank you. I just wanted to make sure that I understood you.*

Collin : They are wrong, wrong, wrong. If I were a maths teacher, I would give it a two out of ten."

55. This was not a rational response and I found Mr Meleagros' analysis on fluid loss to be sound. It was supported by Professor Aitkenhead, who Mr Harshaw reminded the Court said this under cross-examination by Mr Doughty for BHB:

> "*Doughty : Do you have Exhibit 3 in front of you with the handwritten calculations from Mr. Jack Collin?*
>
> *Aitkenhead : I do have these.*
>
> *Doughty : Now, Mr. Collin said that his blood loss calculation is primarily based on the haemoglobin levels. What is your opinion of them?*
>
> *Aitkenhead : They are meaningless because they assume that nothing else happened but haemorrhage. Third space losses can cause oedema*
>
> *Doughty : So, you are saying that if you calculate this three things need to be known : the haemoglobin count, the dilution factor and other fluids?*
>
> *Aitkenhead : Fluid losses from the plasma.*
>
> *Doughty : Those are the three things that we need to know. So if we were to ultimately determine what this loss is you would need to have two of out three of them?*
>
> *Aitkenhead : Yes, two of which are unknowable.*
>
> *Doughty : So, it is incalculable. Now normally the cardiovascular system …the primary estimation of blood volume is the response of the body – blood pressure, central venous pressure…*
>
> *Aitkenhead : Mr. Collin's blood loss calculations are conjecture. I think they are meaningless. You cannot apply schoolboy arithmetic to this situation.*"

56. Mr Collin himself fairly acknowledged under cross-examination by Mr Doughty that his blood loss calculations did not form the basis of his opinion and were not calculations which the clinicians could have carried out at the time. He also accepted that it was in fact clear that the Plaintiff was given "*a lot of fluid on the ward*" and that *"this would have caused his haemoglobin to fall*". Mr Harshaw in his Closing Submissions relied on the following portion of Mr Meleagros' somewhat robust, but nonetheless impressive, oral evidence which I accept:

> "*I disagree and I refer to the calculations presented earlier and then amended. My comments regarding Mr. Collin's calculations are that he assumed:*

> *1. they are based on the premise of bleeding and he tried to fit in a formula to fit and he assumed that there was a drop only because he was losing blood, which is a circular argument;*
>
> *2. the volume was reduced from 9 to 7 something litres;*
>
> *3. when the blood was being lost, it was not being replaced.*
>
> *So because of these three assumptions those calculations are not reliable. Further, he concluded that Mr. Medeiros lost 6 litres of blood which is absurd. I say to Mr. Collin, if you are right what would haemoglobin have been? I got my haemoglobin figures from his calculations. We should have come up with a figure of 12.9 if Mr. Collin was correct but we don't. In fact, he had more than 277 mls. The haemoglobin is found in the packed cell volume and when you spin it down, the serum stays on the top and the packed cell volume is the haematocrit. I got a figure of 45 as the normal figure for a person who is not bleeding for the haematocrit. If haemoglobin was 10.9 before it was diluted, it would have been 45%, but now the haematocrit would be the same amount of packed cells. So it dropped down to 29% and this is the same with the rest of the calculations. So, at each of the calculation points I demonstrate this corresponding drop. So this is a simple calculation, because Mr. Collin used a simplified calculation. But the reality is more complicated than that. I would characterise Mr. Collin's calculations as school boy antics. I have further provided an alternative explanation for why the haemoglobin had dropped. Could that have happened by simply giving him more and more fluid and not blood? And the answer is yes. On page 5, number 1, the blood volume is reduced from 9 litres to 8.1 litres, for the dilution we see with 100% added volume that would have diluted his blood, depending on how much stayed in his circulation. So the haemoglobin dropped because he was given masses of intravenous fluid to get his kidneys to work. Despite 7.5 litres of fluid, there was no urine but the fluid diluted his blood. None of the fluid was getting to the right place.*"

57. The nurse's records, on close examination of references to bandages, did not reveal more than unremarkable external post-operative "oozing". The scan showing a fluid accumulation was ambiguous in terms of what type of fluid it showed and did not in any event obviously reveal a significant amount. Fluid collected in the one drain used by D4 was shown to be only 50 ml, not 500ml as Mr Collin had initially assumed. Pulse rate, blood pressure and haemoglobin readings were not dispositive. And, most significantly, Mr Collin's fluid loss calculations were completely discredited in cross-examination. Although these calculations were by Mr Collin's account not an essential part of his theory, it vividly illustrated the extent to which he was required to go in his attempt to give substance to his almost ethereal central thesis. Mr Meleagros' evidence on the surprisingly high platelet levels in the Plaintiffs' blood made blood loss positively impossible.

58. At the end of the day Mr Collin was, as he himself admitted, a "lone voice" proclaiming the blood loss theory. Mr Meleagros and Mr MacDonald's rejection of this thesis appeared to me to be more firmly grounded in hard contemporaneous data and to be generally sound. Mr Collin appeared to me to have started off with an instinctive theory of blood loss, and then subsequently strained to justify it by reference to the full medical record. The concern of Dr Krow-Rodney that surgical intervention might be needed overnight December 10-11 was endorsed by Mr Collin.

I agree that she acted diligently and professionally in keeping D4 informed and preparing blood transfusions for an operation that did in fact occur. But the view of a junior resident doctor, called as a factual witness, cannot displace the considerable weight of expert evidence as to what the true diagnosis ought to have been. Mr McDonald, after all, described ACS as uncommon and Mr Meleagros was impressed by the diagnostic acuity of Dr Doré in light of the limited knowledge about ACS in 2008.

59. However, there is a far more prosaic basis on which his blood loss theory must be rejected. Mr Collin himself opined in his above-cited February 1, 2017 Report that "*There can be little doubt that Dr Doré would have evacuated substantial quantities of blood and serum and would have found it necessary to employ meticulous surgical technique to ensure that the many bleeding points present at that time were secured and further haemorrhage prevented.*" This was the one point of principle upon which all the medical experts and D4-5 agreed. I entirely reject the desperate suggestion that that there was unnoticed 'phantom' blood which no one discovered when the surgery occurred. This appeared to me to require the Court to conclude that the bleeding had magically stopped by the time the surgery occurred which was inconsistent with both common sense and the predominant expert view on the matter. The possibility that D4-5 and the attending nurse engaged in a massive cover-up to conceal the fact that bleeding had occurred did not justify serious consideration.

60. Dr Doré testified, supported by Dr Arnold, that neither bleeding nor any substantial quantity of blood was found when the surgery eventually took place on the evening of December 11, 2008 in the ICU. They were entirely credible on this issue and generally. I accept this evidence and, based on the entirety of the evidence on this issue, have little difficulty at the end of the day in finding that there was no significant post-operative bleeding which warranted early surgical intervention after the December 10, 2008 hernia repair surgery.

Was D4 negligent in failing to diagnose ACS and operate earlier?

61. In my judgment it is self-evident and I am bound to find that no actionable damage flowed from any delay in implementing the surgical intervention which occurred for ACS. This is because in opening up the abdomen completely to release the pressure and removing the mesh, the Plaintiff was merely returned to the same condition he was in after the accident which was admittedly caused by the negligence of D1-D2. In these circumstances the question of whether there was any negligent delay in responding to identifiable symptoms of ACS is a somewhat academic one.

62. It was impossible for D1-2 to advance an internally logical alternative case that D4 ought to have operated sooner for ACS because of the drastic consequences which surgery entailed. Their internally logical primary case was that this draconian intervention could have been avoided through an earlier and less intrusive intervention to quell the chronic blood which Mr Collin opined was occurring on the evening and overnight December 10-11.

63. In his Closing Submissions, Mr Elkinson was only able to advance the following decidedly imprecise theory of negligence as regards the alternative scenario in which the Court rejected the blood theory. For instance, it was submitted:

> "*107. Simply put, both of the Doctors failed to ensure that reasonable care was at all times taken of Mr. Medeiros in relation to the medical care that they provided in the period of time when one or other of them was MRP for Mr. Medeiros. There are clear instances of negligence by both Dr. Doré and Dr. Arnold. As set out above, these acts or omissions are negligent no matter which diagnosis is to be linked to Mr. Medeiros' condition (although the Doctors are firstly negligent in their diagnosis if the Court is satisfied that Mr. Collin is right about hypovolemia/blood loss)…*
>
> *108.…*
>
> *(5)Delay: Dr. Doré was negligent in not attending the patient sooner. The Duty Nurse and Dr. Krow-Rodney gave repeated warnings to Dr. Doré, but he did not attend for more than 24 hours after the 10 December Surgery. In his evidence, Dr. Doré <u>accepted</u> that if Dr. Krow-Rodney had stated there was 'the need for surgical intervention' then he would have attended. Dr. Krow-Rodney also gave evidence that Dr. Doré would have known about and agreed to the cross-matching of 3 units of blood. Further, by 13:00 on 11 December Dr. Krow-Rodney noted that Mr. Medeiros was already suffering 'acute kidney failure', which she discussed with Dr. Doré as recorded in Case Note entry [Vol. 3, 1-29].*
>
> *(6) Around 13:50 on 11 December 2008 Dr. Doré attended the patient for the first time since the 10 December Surgery. He assessed Mr. Medeiros' condition and ordered that he be admitted to ICU for further observation and fluid management rather than conduct emergency surgery. This was despite knowing Mr. Medeiros was in kidney failure and exhibiting symptoms of hypovolemia/blood loss and/or ACS…*
>
> *(9)Diagnosis: Dr. Warshaw says Dr. Doré was negligent in the time it took his diagnose [sic] ACS and this should have been by 19:15 on 10 December 2008 …*
>
> *(18) Mr Collin concludes, in terms of the need to ensure 'emergency abdominal surgery by no later than the early hours*

> *of the morning of the 11th December 2008', those responsible 'fell seriously below the minimum standard of care that should have been provided to Mr. Medeiros'. No matter which of the diagnosis should have been made, there needed to be surgical intervention and this did not happen until far too late.*"

64. The following submission is simply untenable: "*No matter which of the diagnosis should have been made, there needed to be surgical intervention and this did not happen until far too late.*" It is necessary, having rejected the blood loss diagnosis, to analyse whether there was any blameworthy delay and any other material breach of duty by D4 by reference to the time when ACS ought to have been diagnosed and the expert onion evidence as to when surgery ought to have occurred. The view of Dr Warshaw can ultimately be disregarded because he was not called to give oral evidence and the contents of his reports were not agreed. Taking the case against D4 at its highest, Mr Collin opined as follows in his Fifth Report (August 6, 2013) upon which D1-2 relied for these purposes:

> "*By the time of his admission to the intensive care unit in the afternoon of the 11th December 2008 Mr. Medeiros had been suffering from continuing blood loss for more than 24 hours and had secondarily developed the additional serious and life threatening complication of abdominal compartment syndrome.*" [emphasis added]

65. That was 1450 hrs on December 11, 2008. Although I see no basis finding that this made any actual (as opposed to hypothetical) difference to the patient's ultimate condition, it is clear that if an operation had been advised by D4 for ACS at that point, it could have been scheduled for the operating theatre and more ideal surgical conditions. It is possible that the cardiac event may not have occurred but, again, I was taken to no evidence suggesting that this event had any material lasting and aggravating effect on the Plaintiff's post-operative condition. The submission that the "*delay was negligent in and of itself*" is, for present purposes, simply unintelligible. However it is necessary to evaluate the expert onion evidence as to when surgery

should have occurred for ACS alone stripped of those assumptions which are parasitic upon Mr Collin's now rejected blood loss diagnosis. Under cross-examination on the issue of the ACS diagnosis, Mr Collin was only willing to accept that ACS was a subsidiary factor. Mr Harshaw in his Closing Submissions referred to the following portion of Mr Collin's cross-examination by BHB's counsel:

> "*Doughty : In fact, you did conclude that Mr. Medeiros was suffering from ACS?*
>
> *Collin : I never believed that the predominant problem was ACS. This was the thinking of Dr. Doré and the American anaesthetist and the line which other medical experts have taken. In my view, there was never the prospect of ACS being a substantial part until the blood loss into the abdominal cavity became so substantial that it began to raise the pressure. But this is simply a case of blood loss….*
>
> *Doughty : So you did accept, at one point, that he had ACS?*
>
> *Collin : This is my view influenced by the medical reports received up until that point. Of my own volition, my view has always been that this problem was one of bleeding. None of the other evidence suggested to me that ACS was a substantial, primary cause of Mr. Medeiros' condition. There was no evidence that the ventilation was difficult, some of the readings were difficult, given his body size. My opinion has always been that the fundamental problem was Mr. Medeiros' post-operative bleeding which was not addressed. This case is about un-recognised bleeding that after the operation continued and got worse…*"

66. Under cross-examination by Mr Harshaw, Mr Collin reiterated this position. He never directly addressed the question of, assuming ACS was the predominant problem, at what point was it negligent to postpone operating. To my mind this was not simply an oversight. It flowed from the fact that it was impossible to identify any plausible damage which flowed from the decision to delay a surgical intervention which would likely undo the initial hernia repair altogether. Pleading technicalities apart, the case against D4 stood or fell on the proposition that blood loss was the predominant problem which could have been stemmed through less invasive surgery before the onset of ACS occurred. All other experts (both surgeons and anaesthetists) were agreed that it was in general terms appropriate for D4 to wait until there were obvious

symptoms of ACS to operate and that around 6pm on December 11, 2008 was the earliest when a definitive diagnosis should have been made:

- D4 himself gave a very clear and coherent account of how he patiently monitored the Plaintiff's condition until being satisfied that ACS was the appropriate diagnosis and resorting to surgery as the last option. He firmly and convincingly insisted that coming in to see the patient overnight when Dr Krow felt surgery was necessary would have made no difference;

- Mr McDonald under cross-examination by Mr Elkinson said that "*assessing post-operative conditions is the hardest thing we do*". He also agreed that he might have gone in to see the patient overnight and asked for more information than D4 did. Under cross-examination by Mr Doughty, he stated that deciding whether ACS exists is "*one of the hardest decisions a general abdominal surgeon has to make*". Paragraph 10.4 of his June 8 2014 Report was agreed by Mr Collin as a "*concise description of management options*" for suspected ACS (Joint Experts Report). This paragraph commended a cautious approach to surgical intervention;

- it was also agreed in the Joint Experts Report that the bladder pressure readings (used as a proxy for abdominal pressure) recorded on December 11, 2008 "*were not elevated enough to be absolutely diagnostic of compartment syndrome*";

- Mr Meleagros opined that despite receiving high intra-abdominal pressure readings and the existence of signs of renal failure (as late as 18.00hrs on December 11), "*it was reasonable to undertake conservative measures with intubation, sedation and analgesia rather than immediate abdominal decompression which is taken when conservative measures fail*" (29/12/2016 Report, paragraph 5.38);

- Professor Aitkenhead under cross-examination by Mr Elkinson opined that the Plaintiff's position was not critical until intubation occurred. He also noted

that assessing stomach tension (an indicator of ACS) was particularly difficult with obese patients such as the Plaintiff. Dr Arnold discharged his duty by summoning Dr. Doré at this juncture (around 8.00pm);

- Dr Winters under cross-examination by Mr Harshaw opined that by 1800hrs on December 11, 20008 when the second abominable pressure reading was obtained, the conditions for ACS were met. However as the Plaintiff was stable until intubation two hours later, he implied there was no need for immediate surgery, despite (without suggesting that this would have made any difference to the Plaintiff's condition after the second operation) giving the impression that he would have advocated surgery somewhat earlier than D5 did;

- intubation, a necessary precursor to surgery occurred at 8.00pm and the operation to decompress the abdomen took place around 8.30pm.

67. The preponderance of the expert and factual evidence supports a positive finding that no breach of duty occurred on the part of D4 in failing to operate before he did on the evening of December 11, 2008. D1-2 also failed to prove that any lesser medical acts or omissions (e.g. failing to order a CT Scan or operating in the ICU rather than in the operating theatre) amounted to evidence of negligence.

Was there any actionable damage?

68. No or no coherent theory of damage was or could be advanced in relation to carrying out the decompression surgery in circumstances where that was (a) the only appropriate treatment for ACS, and (b) ACS was the primary post-operative presenting problem. As already noted, the Plaintiff's earlier hernia repair surgery (which it was accepted was appropriate if not necessary) was effectively undone returning him to his original post-accident condition. Even if D4 (contrary to my findings on breach of duty) should have decided to schedule surgery earlier in the operating theatre (rather than waiting till the patient's condition deteriorated further), I

am unable to identify any or any sufficient evidence of actionable damage flowing from the fact that the surgery took place in the ICU.

Findings: liability of D4 (Dr Doré)

69. The claim against D4 has not been made out and is dismissed.

70. D1-2 made much in their closing submissions of the "sea-change" in BHB's case, after this Court ruled on January 21, 2014 that it did owe a non-delegable duty of care and dismissed its strike-out application on November 9, 2016[6] (Submissions of the First and Second Defendants (As to Liability) paragraphs 6-19). It was impossible to see how these background matters had any relevance (save, perhaps, as to costs) to the issues to be determined at the present liability trial. I summarily reject the fanciful argument that BHB has engaged in "expert shopping" which ought to be condemned. To my mind it reflected nimble footwork and clear-headed thinking for BHB to change course when it discovered that its initial 'blame the doctors' position was, on closer scrutiny (as the trial date approached and no interlocutory escape route was available) shown to be unsound. The evidential change of course which occurred in the course of the case cannot be ignored; it occurred. But it did not in my judgment undermine the credibility of the expert evidence adduced on behalf of BHB and D4-5 at trial.

Findings: did D5 (Dr Arnold) breach his duty of care as an ICU intensivist and cause actionable damage by failing to diagnose ACS soon enough and inform D4 (Dr Doré), the Plaintiff's surgeon?

The main issues in controversy

71. The case against D5 was that he had failed to diagnose post-operative bleeding or ACS soon enough and pass on that diagnosis to D4. It was ultimately common ground

[6] *Medeiros-v-Island Construction Company* [2014] Bda LR 3; *Medeiros-v-Island Construction Company* [2016] SC (Bda) 103 Civ .

that it was for the surgeon alone to decide whether or not and when to operate. The main issues in controversy were the following:

- whether the Plaintiff's complications were initially attributable to post-operative bleeding or abdominal compartment syndrome (ACS);
- in either case, was D5 negligent in failing to make the relevant diagnosis and report the critical symptoms to the surgeon (D4) earlier than he did?
- did any delay which could be established cause actionable damage by exacerbating the Plaintiff's post-accident condition?

Were the Plaintiff's post-operative complications on December 10, 2008 initially attributable to blood loss?

72. The findings recorded on this issue above in relation to D4 apply with equal force to D5. I find that the only relevant diagnosis which had to be made was ACS.

Was D5 negligent in failing to diagnose ACS and report the relevant symptoms to D4 earlier than he did?

73. The findings recorded on the diagnosis issue above in relation to D4 apply with minor modifications to the position of D5. D5's position covers a narrower time-frame starting with the time when the Plaintiff came under his charge in the ICU (1630 hrs on December 11, 2008 when he replaced Dr Christopher King) until the time when he summoned Dr Doré after the cardiac incident following intubation to assist the patient's breathing (around 2000hrs).

74. There were two crucial portions of Dr Arnold's Witness Statement dated November 28, 2012. First:

> "*9.6 The initial readings from the bladder catheter were 27cm of H20 at 1700 and 33cm of H20 at 1800, a rise of 6cm in 1 hour. Both timings are approximate. Dr Doré was informed by the ICU nurse, Vicky Smith, of the*

elevation of pressure. He ordered a rectal tube to be inserted at approximately 1735."

75. This evidence was supported by contemporaneous records. It was not disputed that a brief period of cardiac arrest followed intubation. D5 went on:

> "*9.11 Immediately after intubating Carlos Medeiros, I asked for Dr Doré to be called in to the ICU urgently, to assess the patient. At this stage I thought his abdomen should be reopened to relieve the abdominal compartment syndrome, and to remove any collection of blood that may be present in the abdomen…*
>
> *11…Prior to my decision to intubate Carlos Medeiros, it became more likely, in my opinion, that he was developing a worsening acute abdominal compartment syndrome, which would require surgical intervention. Hence my urgent call to Dr Doré to ask his opinion about the timing of surgery…*"

76. This diagnosis has been vindicated by my above findings in relation to the correctness of D4's diagnosis following the trial. Dr Winters, BHB's expert anaesthetist, and D5's own expert, Professor Aitkenhead, were *ad idem* at trial that D5 discharged his duty most critically by ensuring that D4 was aware of the bladder pressure readings which were strongly indicative of ACS. D1-2 called no expert of their own to support their case against D5 as such. Mr Collin's criticism of D5 was based on the assumption that the patient was suffering from post-operative bleeding which required urgent surgical intervention long before the intubation decision was made. Dr Winters' change of position had no impact on the weight to be attached to his oral evidence and his Supplementary Report. To the extent that D1-2 felt they could rely on his initial criticism of D5, the failure on the part of BHB to properly brief Dr Winters would only be relevant to costs. I find it impossible to identify any or any cogent evidence which supports the case that D5 was negligent.

77. D1-2 in their closing submissions could only advance the following case based on the evidence at trial:

> "*The most crucial aspect of Dr. Arnold's evidence was in the last question and answer of his cross-examination when having acknowledged Dr Winters' views as expressed in his reports accepted that it was reasonable for Dr. Winters to suggest, when he did so in his reports of 29th February 2012 and 19th February 2013, that he (Dr. Arnold) should have contacted Dr. Doré sooner on that evening on 11 December 2008. Of Dr. Winters' expert opinions, Dr. Arnold candidly stated: 'It's not an unreasonable suggestion.' As to whether this could properly be described as an admission of negligence by Dr. Arnold, it is certainly at the very least an acceptance by Dr. Arnold that he contributed to the delay in the 11 December Surgery*…."

78. The concession by D5 that he could be criticised for not calling D4 earlier does not come close to being an admission of a breach of duty, particularly in light of the fact that the only relevant experts called at trial agreed that he discharged his duty by ensuring that the surgeon was aware of the high pressure readings. At most, D5 was conceding that in hindsight he could have been more forceful and "summoned" D4 as soon as he received the second (elevated) bladder pressure reading rather than waiting until the Plaintiff's condition deteriorated further to do so. However, he did ensure that the surgeon was notified of these readings with all the experts who approached this issue from the standpoint of ACS being the predominant problem opining that D5 did enough.

79. I have little difficulty in recording a positive finding that Dr Arnold did not breach his duty of care to the Plaintiff.

Was there actionable damage?

80. For the same reasons as in the case of Dr Doré, I find that no actionable damage has been proved in any event. Even if D5 ought to have "summoned" D4 earlier and one speculates that D4 would have decided to schedule surgery in the Operating Theatre, I am unable to identify any or any sufficient evidence of actionable damage flowing from the fact that the surgery took place in the ICU.

Findings: liability of Dr Arnold

81. The case against Dr Arnold has not been proved and is dismissed.

Findings: did BHB breach its non-delegable duty of care by failing to provide the Plaintiff adequate care?

The main issues in controversy

82. Reflecting on the evidence adduced at trial, it is difficult to readily identify what case if any was advanced against BHB which is capable of surviving the findings that (1) post-operative bleeding and consequential blood loss requiring prompt surgical intervention was not the Plaintiff's main problem, (2) the doctors themselves were not negligent, and (3) that no actionable damage was proved in any event.

83. It is helpful to recall that it was centrally pleaded by the Plaintiff (Amended Statement of Claim, paragraph 14) that BHB breached a :

> "*direct non-delegable duty of care to ensure that reasonable care was at all times taken in relation to the medical, nursing and other care with which the Plaintiff was provided by or on behalf of the Third Defendant…The Third Defendant was negligent in failing to return the Plaintiff to the operating theatre before midnight on the 10th of December 2008 for the evacuation of blood already lost and for the arrest of further haemorrhage…was negligent in failing to operate on the Plaintiff to arrest further bleeding until very late evening of the 11th December 2008…*"

84. The entirety of the pleaded case against BHB not only mirrored that pleaded against D4-5, but was based on the explicit premise that blood loss was the presenting problem. D1-2 in their Amended Defence also pinned their colours to the blood loss hypothesis. Ignoring repetitions, five particulars of negligence were set out:

(1) "*The observations made by the Third Party over a period of 36 hours…would have led any competent medical practitioner, including the hospital as caregiver, to be aware that there was a substantial life-threatening haemorrhage occurring*";

(2) BHB failed to provide adequate blood and fluid replacement;

(3) BHB waited until too late to operate to stop further bleeding;

(4) "*The Third Party was negligent in failing to provide the Plaintiff with an adequate level of care from the time of the operation on the 10th December 2008*";

(5) BHB should have been aware of the "*not uncommon complications of bleeding*".

85. Only one of these five particulars of negligence, the fourth, does not explicitly relate to an alleged failure to deal with a presumed blood loss problem. It is impossible to make sense of this general plea of failing to provide adequate care in its wider context independently of the blood loss hypothesis. Extracting a coherent case against BHB independently of a finding that bleeding was the patient's main post-operative complication from the closing submissions of D1-D2 is no easier. The following arguments are advanced:

(1) "*33. The Court may find that blood loss was the primary cause of the patient's condition, in which case there was a negligent diagnosis by the Doctors. Alternatively the Court may find that ACS was primarily causative of the patient's condition. Yet a finding that ACS was more likely to be the correct diagnosis does not excuse the Doctors and the Hospital from liability. The Court must go on to consider whether there was negligence in the treatment Mr. Medeiros received*";

(2) The Court will be assisted by the Privy Council decision in *Bermuda Hospitals Board-v-Williams* [2016] AC 888 in analysing the issue of negligence in relation to delayed treatment;

(3) BHB is liable for any negligence of the doctors;

(4) "*110. Further, there is a troubling systemic negligence on the part of the Hospital. The Original Defendants will rely on the following negligent events, which expose a shambolic system at the Hospital in this instance.*

a. There is a concerning lack of clarity regarding the Hospital's procedure as to who was the MRP and when. After cross-

examination, the Doctors appear to concede that Dr. Doré was the MRP from the 10 December Surgery until the ICU and that Dr. Arnold was MRP thereafter until the 11 December Surgery. But it was not ever thus. Contrast the Affidavit evidence from Dr. Doré. There are also the various changes in the pleadings by the Hospital. This is addressed more fully in the Opening at [25]. This breakdown over who was MRP, and when, and what level of oversight that MRP needs to have if absent from the Hospital, is a direct systemic failure by the Hospital."

b. *The Diagnostic Imaging Scan ("Ultrasound") sent by Jeffrey Crabbe of the Diagnostic Imaging Department of the Hospital at 06:33 P (ie. 18:33) on 11 December 2008 [V.1, 2-725] showed "a 7.6 x 6.6 x 9.2 cm complex fluid collection". This document says it was "renal" ultrasound scan but a further document [V.1, 2-726] relating to the "abdomen" ultrasound scan timed at 12:56pm refers back the "renal" report. The Ultrasound was allegedly not seen by Dr. Doré before the 11 December Surgery (or indeed at all until the litigation). This is a direct failure by the Hospital.*

c. *Jeffrey Crabbe of the Diagnostic Imaging Department of the Hospital recommended CT Scan. The recommendation was endorsed by all the medical experts who discussed the point. Yet no CT Scan occurred. This is addressed above at Section (H).*

d. *There are a concerning number of missing documents, including:*

    i. *The Transfusion Services Request Form for the blood cross match request by Dr. Krow-Rodney on the night of 10 December.*

    ii. *The Operative Report for the 11 December Surgery.*

    iii. *The majority of records from the ICU.*"

86. The first three points in my judgment no longer require determination because I have found that D4-5 were not negligent in the treatment which they administered to the Plaintiff. The case of *Bermuda Hospitals Board-v-Williams* [2016] AC 888 is in my judgment of no assistance in the present case as it concerned a delay in carrying out an operation which ought to have been carried out sooner. It would have been of assistance had the Plaintiff and the Original Defendants established that post-operative bleeding had occurred and that an earlier surgical intervention would have obviated the drastic intervention which ultimately occurred.

87. It is unclear what tangible evidential support there is for the "systemic negligence" which is complained of:

- no expert evidence on hospital management systems was adduced to support the view that the MRP system was so flawed as to constitute, without more, a breach of the non-delegable duty of care. Mr Collin commended Dr Krow-Rodney for the way in which she supported Dr Doré before the Plaintiff was admitted to the ICU and I have rejected the case that Dr Arnold failed to adequately communicate with the surgeon about the Plaintiff's condition;

- there is no sufficient evidential basis for a finding that it was a breach of duty in systemic terms for BHB to have failed to ensure that D4 saw the ultra-sound results before he operated. The only proper finding that can be made about that chart is that it was both inconclusive and insignificant in terms of what it showed (a small quantity of fluid the nature of which was unidentifiable);

- there is no sufficient evidential basis for a finding that BHB's record keeping was so poor as to constitute a breach of duty in systemic terms.

Did BHB breach a duty of care owed to the Plaintiff in respect of the treatment administered by the doctors or systemically?

88. The Plaintiff and D1-2 have failed to prove that any breach of duty on the part of BHB occurred as regards the treatment administered by D4-5 or systemically.

Did BHB cause any actionable damage?

89. Even if any breach of duty had occurred, I am bound to find in any event that no actionable damage occurred for the same reasons as in the case against the doctors. The miscellany of complaints advanced about alleged systemic failures are impossible to credibly link to any actionable damage caused to the Plaintiff. I am bound to find that no actionable damage was caused by any systemic failures which may have occurred.

Findings: liability of BHB

90. The case against BHB has not been proved and is dismissed.

Summary

91. The case on liability against BHB and D4-5 is dismissed. D1-2 advanced the central thesis that the Plaintiff's December 10, 2008 hernia repair surgery was only reversed because of (a) a delayed surgical intervention, which was caused by (b) a failure to diagnose post-operative bleeding. The primary case that the Plaintiff's main post-operative complaint was bleeding was rejected and no coherent alternative case was advanced. I shall hear counsel if necessary as to costs and the terms of the final Order.

92. It may be helpful if I set out my provisional views on the appropriate costs order. It is difficult to see why costs, as between the Original Defendants (D1-2) and the vindicated hospital and doctors, subject to one important *caveat*, should not follow the event. The one *caveat* is my strong provisional view that BHB acted unreasonably in failing to ensure that Dr Winters was given, in particular, Dr Arnold's Witness

Statement which was apparently available in early 2013. Dr Winters provided a Supplementary Report in September 2017 because he was only given this Witness Statement and other relevant documentation in the months or weeks immediately preceding the trial.

93. If an expert has a duty to notify any change of opinion to the parties and the Court as soon as possible (reference was made at trial to the Supreme Court Practice paragraph 38/4/3), a party must be under a corresponding duty to ensure that its expert is promptly supplied with information which might cause an expert to change his opinion. On the face of it, this duty does not seem to have been met and the case against D5 was maintained by D1-2 on the assumption that it would be supported by BHB's expert Dr Winters. The logical consequence would appear to be, subject to hearing counsel if required, that BHB should not be entitled to recover its costs in relation to its successful defence of the claim based on the negligence of D5.

Dated this 6th day of December, 2017 _____

IAN RC KAWALEY CJ