CORONERS ACT, 2003

SOUTH *AUSTRALIA*

FINDING OF INQUEST

An Inquest taken on behalf of our Sovereign Lady the Queen at Adelaide in the State of South Australia, on the 7th, 11th, 12th, 13th, 14th and 21st days of May 2010 and the 30th day of December 2010 , by the Coroner's Court of the said State, constituted of Anthony Ernest Schapel, Deputy State Coroner, into the death of Antonia D'Agostino.

The said Court finds that Antonia D'Agostino aged 59 years, late of 4 Caddy Court, Grange, South Australia died at Western Hospital, 168 Cudmore Terrace, Henley Beach, South Australia on the 25th day of March 2007 as a result of sepsis due to faecal peritonitis due to perforation of sigmoid colon complicating left oophorectomy for benign serous cystadenoma of left ovary. The said Court finds that the circumstances of her death were as follows:

1. Introduction

1.1. Mrs Antonia D'Agostino was a 59 year old woman who died on the operating table at the Western Hospital. She was married with adult children. She lived at home at Seaton with her husband, Leonardo, and daughter, Belinda.

1.2. Following Mrs D'Agostino's death, a post-mortem examination was conducted by Dr John Gilbert, a forensic pathologist at Forensic Science South Australia. In his post-mortem report Dr Gilbert expresses the opinion that the cause of death was sepsis due to faecal peritonitis due to perforation of sigmoid colon complicating left oophorectomy for benign serous cystadenoma of left ovary. I find that to have been the cause of Mrs D'Agostino's death.

1.3. The cause of death requires some explanation. By way of background, Mrs D'Agostino had undergone a hysterectomy in 1990. The resulting adhesions had the potential to complicate any further abdominal surgery in her lifetime. In late 2006 Mrs D'Agostino was diagnosed as suffering from a left ovarian cyst. This lesion is the benign serous cystadenoma that is mentioned in Dr Gilbert's recitation of the cause of death. The cyst was diagnosed by way of a CT scan of Mrs D'Agostino's pelvis. At the time of diagnosis, the cyst was strongly suspected to be benign. It was ultimately established post surgical removal that the cyst was in fact benign. Notwithstanding strong clinical suspicion that the cyst was not malignant, Mrs D'Agostino's ovarian cyst was nevertheless regarded as pathological and she was advised to have it be removed. The surgical removal of an ovary, in this case by reason of its lesion, is known as an oophorectomy. Mrs D'Agostino underwent that operation and was subsequently discharged from hospital. It was during a further surgical procedure to rectify the complications of the original operation that Mrs D'Agostino died.

1.4. The sigmoid colon is that part of the bowel adjacent to the rectum. As with the ovaries, the sigmoid colon is located in the lower pelvis.

1.5. Faecal peritonitis is a condition that refers to infection and inflammation of the peritoneum that, in this case, was caused by the leakage of faecal material from a perforation of the sigmoid colon. This condition in turn led to a generalised sepsis within Mrs D'Agostino and it was this sepsis that caused her death.

1.6. I describe how all of this came to pass in a moment, but suffice to say at this point, the cause of Mrs D'Agostino's death was the sepsis that had been caused by infection due to the leakage of faecal material from the failed surgical repair of a perforation of her bowel that had accidentally been inflicted during the original surgery for the removal of the ovarian cyst. Her death occurred during a subsequent operation designed to again repair the bowel.

1.7. The original surgery for the removal of the ovarian cyst had taken place at the Western Hospital on Thursday 15 March 2007. The surgery had been performed by Dr Julie Grant. Dr Grant is an experienced obstetrician and gynaecologist in private practice at Henley Beach. Dr Grant also enjoyed practising rights at the Western Hospital. The surgery had been conducted by way of laparoscopy which is conducted

under general anaesthetic. Laparoscopy, sometimes referred to as keyhole surgery, involves the introduction of surgical instruments through small incisions made in the abdominal wall. Sight of the abdominal contents is gained by way of a laparoscope, camera and monitor. An alternative method of surgery known as laparotomy involves a large surgical incision extending from one hip bone to the other. In a laparotomy the ovary and its lesion are removed surgically in the normal way and the incision is then closed. I was told during the course of the evidence, and I have no reason to doubt it, that laparoscopy is now the preferred method of surgery in respect of several gynaecological procedures including the removal of an ovarian cyst. The advantages that laparoscopy has over laparotomy are several, including the avoidance of the need to inflict a major surgical incision, less pain and as well, a much reduced recovery time following surgery and a reduced stay in hospital as a consequence.

1.8. Laparoscopy can have its intrinsic difficulties. Firstly, in a woman who has undergone previous abdominal surgery, such as a hysterectomy, adhesions within the lower abdomen might be expected. Secondly, as a result of the hysterectomy the architecture of the organs within the pelvis might be altered in such a fashion that the ovary in question might now be situated retroperitoneally. Neither of these conditions could be known with certainty in advance of the procedure, but they were on the cards and indeed both of these conditions proved to be the case with respect to Mrs D'Agostino. All of this meant that even before the procedure commenced, difficulties of access to the diseased ovary might be anticipated. This also proved to be the case with Mrs D'Agostino. I add here that difficulties of access can also prove problematic even with laparotomy where direct sight of the pelvic viscera can be achieved.

1.9. It was during the laparoscopic procedure that Dr Grant encountered adhesions within the abdomen as well as a retroperitoneally situated left ovary. In the course of separating the adhesions that existed between the bowel wall and the ovary by use of a cutting instrument, Dr Grant accidentally cut the bowel wall. She knew immediately from the resulting and visible faecal soiling that she had perforated the full thickness of the bowel wall.

1.10. The situation that had now developed required immediate surgical rectification. To that end Dr Grant abandoned the laparoscopy and converted the procedure to a laparotomy. This involved surgically opening the lower abdomen and then accessing the damaged part of the bowel. She did this and repaired the defect within the bowel

wall by way of suturing. The affected area was then washed out. During the course of the laparotomy Dr Grant completed the procedure which had originally been planned, that is to say she removed the diseased ovary. Dr Grant then closed the surgical incision. The entire procedure from the beginning of the laparoscopy to the closure of the laparotomy incision was conducted under general anaesthetic.

1.11. Mrs D'Agostino remained in hospital until her discharge on Wednesday 21 March 2007. She went home that day.

1.12. By Saturday 24 March 2007 Mrs D'Agostino's condition had deteriorated markedly. As a result she was readmitted to the Western Hospital in the late afternoon. Dr Grant, who had been at a social function during the course of the evening, attended at the Western Hospital where she assessed Mrs D'Agostino. I add here that there is no suggestion that Dr Grant had consumed alcohol at the function. If it was not strongly suspected already, when Dr Grant assessed Mrs D'Agostino there was very good reason to believe at that point that the repair of Mrs D'Agostino's bowel had broken down and that as a result Mrs D'Agostino had become septic from faecal contamination within the pelvis. Further surgery was thus required. Having arranged for the attendance of a general surgeon, Dr Grant scheduled a further laparotomy for 9am the following morning[1]. This would have been approximately 12 hours after Dr Grant's examination of Mrs D'Agostino. In the event the surgery had to be brought forward because of an acute deterioration in Mrs D'Agostino's condition that was identified by nursing staff early that morning. The surgery in fact commenced at approximately 8am. When the abdominal wound was reopened, faecal peritonitis resulting from leakage out of the previously oversewn tear in the bowel was readily confirmed. It was decided that Mrs D'Agostino should undergo a Hartmann's procedure, but during the course of the surgery she experienced one cardiac arrest from which she was resuscitated and then a further cardiac arrest in respect of which resuscitative efforts were unsuccessful. A retrieval team from the Royal Adelaide Hospital attended during this crisis but Mrs D'Agostino died on the operating table.

1.13. A number of issues were ventilated during the course of the Inquest. I examined the circumstances in which Mrs D'Agostino suffered the bowel perforation in the course of the surgery for the removal of the diseased ovary. There was also an issue raised as to the appropriateness and timing of Mrs D'Agostino's discharge from the Western

[1] Transcript, page 455

Hospital on 22 March 2007. The principal issue, however, was whether or not the delay in the commencement of Mrs D'Agostino's further surgery on the morning of Sunday 25 March 2007 was an undue delay which could have been, and ought to have been, avoided. An associated question naturally for the Court's consideration was whether more timely surgical intervention may have altered the outcome. In short, I examined the question as to whether Mrs D'Agostino's death could have been prevented by more timely surgery and, in particular, whether more timely surgery in a tertiary hospital could or should have made a material difference to the outcome.

2. The expert witnesses

2.1. Mrs D'Agostino's clinical and surgical management was examined by two experts in their field. The first of these was Professor Roger Pepperell who is a specialist obstetrician and gynaecologist. Professor Pepperell had a Professorial Fellowship at the University of Melbourne until 2005. Thereafter he continued to work as an Emeritus Professor and in private practice as well. Professor Pepperell is currently the Professor in the Penang Medical College in Malaysia. He was asked to overview this matter from a gynaecological point of view. Professor Pepperell has no known association with any of the individuals involved in this matter nor with the Western Hospital.

2.2. The second medical expert was Associate Professor Dr Nicholas Rieger. Dr Rieger is a surgeon in private practice and is also an Associate Professor of Surgery at the University of Adelaide. Dr Rieger's surgical specialty is colorectal surgery. He is a consultant colorectal surgeon at The Queen Elizabeth Hospital and has been so since 1999. He has also at one time been a consultant colorectal surgeon to the Royal Adelaide Hospital. He is also a visiting surgeon at the Women's and Children's Hospital. Dr Rieger conducts his private practice from rooms in North Adelaide. He has practising rights at a number of private hospitals including the Western Hospital at Henley Beach, the hospital in which Mrs D'Agostino's surgery was conducted and in which she died.

2.3. Dr Rieger was asked to overview this matter from a surgical point of view. He provided a report dated 19 April 2009[2]. Dr Rieger also gave oral evidence. There are two matters about Dr Rieger that I should mention at the outset. Firstly, Dr Rieger

[2] Exhibit C23a

and his practice partner, Dr Peter Hewitt, both had practising rights at the Western Hospital at the time with which this Inquest is concerned and they continue to enjoy those rights. As was revealed in the Inquest, when Dr Grant during the evening of 24 March 2007 decided that Mrs D'Agostino required further abdominal surgery at the Western Hospital, she endeavoured to contact both Dr Rieger and Dr Hewitt to assist her with that surgery. She did this because a colorectal surgeon would be the most appropriate surgeon to deal with a suspected failed bowel repair and because both of these surgeons had practising rights at the Western. Dr Grant told me that she had been unsuccessful in contacting either surgeon by telephone. She did not leave messages for either surgeon to return her call. So it was, according to Dr Rieger, that he had no knowledge of Dr Grant's attempt to call him that evening. I know nothing of Dr Hewitt's state of knowledge in that regard. In the event Dr Grant was able to contact and secure the services of a general surgeon, a Mr Michael France. Secondly, aside from Dr Rieger's connection with the Western Hospital, Dr Rieger was also personally known to Dr Grant at the time of these events. Dr Rieger described his association with Dr Grant as being one whereby they are on 'reasonable and good terms'[3]. Dr Rieger knows Dr Grant both professionally and socially. Both Dr Grant and Dr Rieger are members of a committee at the Calvary North Adelaide Hospital. Dr Rieger is in fact the chairman of that committee. Dr Grant and Dr Rieger attend meetings of that committee.

2.4. The set of circumstances that involved Dr Rieger's relationship with the Western Hospital and with Dr Grant caused the Court to experience some hesitation in respect of Dr Rieger's impartiality, or at least the appearance of impartiality. Dr Rieger's report furnished in April 2009 did not reveal any professional or other relationship with any medical practitioner in respect of whose professional conduct he might have to pass comment. Notwithstanding these matters Dr Rieger, in his evidence on oath, assured me that his relationship with Dr Grant and the Western Hospital and with some of the employees at that hospital whom he knows, and with whom he has worked, has not and would not affect his impartiality or the appearance of it as far as his evidence was concerned. I have considered all of these matters. I have also had regard to the fact that no counsel, including counsel for Dr Grant, for the Western Hospital or for the family of the deceased Mrs D'Agostino, objected to Dr Rieger's participation in the Inquest or passed any adverse comment about him or his evidence

[3] Transcript, page 690

that was either in whole or in part based upon any suggestion of partiality. I closely observed Dr Rieger's demeanour in the witness box. I listened carefully to his evidence and I have read his report and the transcript of his evidence on numerous occasions. I have at no time detected any hint, suggestion or evidence of partiality. I have considered the possibility that a lack of impartiality may operate in a number of ways, including by way of partisanship towards a particular entity that might manifest itself in favourable treatment or, more subtly, by reason of a tendency to be critical of a particular entity in order to dispel the appearance of partiality towards that entity. I detected none of that. The content of Dr Rieger's evidence also tended to dispel the suggestion or appearance of partiality. His evidence in a number of respects did not differ materially from that of Professor Pepperell, a witness whose impartiality cannot be questioned. Accordingly, I was content to accept Dr Rieger as an impartial expert and to regard his evidence in that light. I have taken his evidence at face value and I have not in any way regarded any of his evidence as being based on partisanship for or against any particular entity involved in the Inquest.

2.5. I naturally regarded as experts in their own respective fields of medicine the witnesses who had been involved in Mrs D'Agostino's management and who gave evidence in the Inquest, namely Drs Grant, Richards, France and Dhillon.

2.6. I also regarded Registered Nurses Earle and Poznanski as experts in their field insofar as their expertise was brought to bear in answering questions that required recourse to their professional knowledge.

3. Preliminary discussion

3.1. There are a number of issues that can be discussed relatively briefly. A faint suggestion was made during the course of the Inquest that Mrs D'Agostino's consent to the original laparoscopic oophorectomy had not been a fully informed one in the sense that she may not have been properly advised of the risks involved. This suggestion seems to have originated from a reported lack of enthusiasm on Mrs D'Agostino's part about laparoscopic surgery as expressed to her daughter, Belinda. Some of the documentation regarding the recording of Mrs D'Agostino's consent may also have left something to be desired.

3.2. Belinda D'Agostino's witness statement[4] explains that her mother was not keen on having keyhole surgery because she had heard that people had bad experiences with it. Her statement does go on to say, however, that she believed that Dr Grant had explained the process to her mother, after which Mrs D'Agostino made the decision to go ahead with laparoscopy. Mr Leonardo D'Agostino, the deceased's husband, who also provided a statement and gave evidence, does not suggest otherwise. It appears that in any event none of the members of Mrs D'Agostino's family were present at any discussions that Mrs D'Agostino may have had with Dr Grant about this issue. Dr Grant told me that she gave Mrs D'Agostino a pamphlet concerning the risks associated with laparoscopy. The document was tendered in evidence[5]. It explains, among other things, the possibility, albeit rare, of injury to the large intestine in which event laparotomy to repair the damage would have to be carried out. It states that this carries the risk that in very rare cases a colostomy might be required. The document also goes on to state that peritonitis, a potential complication of a bowel perforation, can be life threatening. There is no evidence to suggest that Mrs D'Agostino's consent to laparoscopy, or to the surgery in general, surgery that I was satisfied had been quite necessary in her case, was anything other than a fully informed and properly obtained consent.

3.3. Another issue can be disposed of relatively briefly. It will be apparent from the analysis so far that Dr Grant herself accidentally caused the bowel perforation in the first instance during the laparoscopy. In addition, it is clear that the surgical repair, also conducted by Dr Grant, failed. At first blush it might be thought by some that this in itself implies a degree of ineptitude on Dr Grant's part, in terms of not managing the risk of surgical misadventure, by the infliction of the original bowel perforation or in respect its inadequate repair. There is no evidence of any of this. The evidence establishes that although it might have been expected that Mrs D'Agostino would have adhesions within her pelvis as a result of her previous hysterectomy, and that the possibility that the diseased ovary was situated awkwardly might be reasonably anticipated, these matters would not in and of themselves have operated as bars to laparoscopic oophorectomy.

[4] Exhibit C2a
[5] Exhibit C13

3.4. It will be seen from the contents of the brochure that was provided to Mrs D'Agostino[6], and the expert evidence supported this, that the perforation of the bowel is a recognised risk in respect of laparoscopic surgery for the removal of a diseased ovary. Professor Pepperell in his report[7] refers to the possibility that access to the ovary might be difficult for the reasons that I have already described. Indeed, he refers to this difficulty as not only existing in respect of laparoscopic surgery but also in an open laparotomy as well, although in his oral evidence Professor Pepperell did say that the well recognised complication of bowel trauma was more likely to occur in a laparoscopic procedure than in a laparotomy. In any event, the risks that might be engendered by the possibility of difficult access are not in themselves contraindications to the performance of laparoscopic surgery.

3.5. As to whether or not a proceduralist would go ahead with laparoscopic removal of a diseased ovary that was difficult to access, in Professor Pepperell's view this would depend upon the expertise of the proceduralist, taking into account the risk and considering whether the removal could more safely be done by way of laparotomy. In the event I did not understand Professor Pepperell to be critical of any decision that Dr Grant made to proceed by way of laparoscopic removal of the ovary, either in respect of the decision to commence that procedure or in connection with its continuation once the difficulties of access were encountered. He did say that inexperienced proceduralists would have desisted from proceeding with laparoscopic removal once the extent of the adhesions was recognised. He said that in those circumstances resort to laparotomy, or cessation of the laparoscopy and the obtaining of someone more experienced to complete it, would then normally occur[8].

3.6. Dr Grant testified as to her wide experience in the conduct of this particular procedure. She told me that she performed a laparoscopic cystectomy approximately once per month. Thus over the course of the last 10 years she estimated that she would probably have performed about 100 such procedures[9]. This was in addition to the number of procedures that she had conducted during the course of her gynaecological surgical training. She told me that a substantial proportion of the laparoscopic cystectomies that she has performed were performed in women who had

[6] Exhibit C13
[7] Exhibit C21
[8] Transcript, page 533
[9] Transcript, page 683

a previous hysterectomy and in whom adhesions and possible retroperitoneal positioning of the ovary might be expected.

3.7. There was no evidence to suggest that Dr Grant's experience in performing this procedure, even in cases involving difficulty of access to the diseased ovary, was anything other than adequate.

3.8. In her evidence Dr Grant explained how the bowel laceration occurred:

> 'I believed that I was in the plane between the ovary and the bowel wall, and that where I was cutting was separating those adhesions between the bowel wall and the ovary, and so I cut that tissue, which I believe was the adhesions between the two structures, and it wasn't - and when I cut the tissue and I could see faecal soiling, then I knew that that was bowel and not the tissue between the bowel and the ovary.' [10]

3.9. As to the fact that the repair to the bowel failed, there is a well understood incidence of failure in these circumstances. In his addendum report[11], Professor Pepperell suggests that the bowel had been repaired by the use of an 'appropriate technique'[12]. Dr Rieger in his report likens the failure of a bowel repair such as this to anastomotic dehiscence which is a common and well recognised complication of any bowel anastomosis. He refers to an incidence of somewhere between 2% to 8%. Neither he nor Professor Pepperell suggested that the bowel repair conducted by Dr Grant had been incompetently performed. The fact of the matter is that bowel repairs occasionally do fail, even in competently performed procedures. I was satisfied that Dr Grant's training, expertise and experience in repairing a perforated bowel was adequate.

3.10. There is one matter, however, that I should mention in this context. The evidence of Dr Gilbert, the forensic pathologist who performed Mrs D'Agostino's post-mortem examination, suggested that there may have been two adjacent full thickness penetrations of the bowel wall, not merely the one that Dr Grant had identified and repaired. The further suggestion as I understood it was that Dr Grant therefore may not have seen, and therefore not repaired, a second perforation which had then leaked. Dr Grant told me that there was only the one penetration that she had identified.

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[10] Transcript, page 589
[11] Exhibit C21a
[12] Exhibit C21a, page 1

3.11. The post-mortem evidence that there was more than the one full thickness penetration lacked clarity. The evidence as a whole demonstrates that it is unlikely that there were two full thickness penetrations at the time of the surgery on 15 March, only one of which was repaired. I say this for two reasons. Firstly, it was almost universally accepted that if there had been a second full thickness penetration that had gone unrepaired there would have been leakage from it. In those circumstances Mrs D'Agostino's presentation in the days following the original surgery would have been quite different as she would have developed signs of faecal contamination within the abdomen well before any of the difficulties that were to occur several days later were identified. Secondly, having closed the wound after repairing the bowel and performing the oophorectomy, Dr Grant inserted a drain into the lower abdomen. It remained there for a number of days before its eventual removal. It was designed to drain, and therefore enable detection of, any further leakage from the repaired bowel. Dr Grant told me in evidence that she had situated the drain in such a position relative to the repaired section of the bowel that she would have expected some issue from the drain if there had been any further leakage. There was no further leakage.

3.12. In the event it seems highly unlikely that when Dr Grant repaired the bowel there was a second unrepaired full thickness penetration. In my view it is highly unlikely that an unrepaired perforation was the cause of Mrs D'Agostino's deterioration several days later. To my mind the deterioration in Mrs D'Agostino was wholly caused by the failure of the repair that Dr Grant had undertaken. The evidence is clear that when Mrs D'Agostino was again operated on, the original bowel repair was seen to have failed. I do not understand that the evidence from the autopsy suggested anything different. There is insufficient evidence to suggest that there was in existence at the time of the repair on 15 March 2007 a second unrepaired full thickness perforation of the bowel.

3.13. The fact that Mrs D'Agostino's bowel was accidentally perforated does not of itself imply careless infliction. The fact that the repair failed does not of itself imply that the repair was incompetently performed.

3.14. There is no escaping the fact that the infliction of the bowel injury at the hands of Dr Grant, and the failure of the repair to that injury, ultimately caused Mrs D'Agostino's death.

3.15. Before dealing with what was the real issue of substance in this Inquest, I should very briefly mention one final peripheral matter. Mrs D'Agostino's family has questioned whether Mrs D'Agostino had been discharged from hospital too early. This issue was not fully developed during the course of the evidence, but I can record the following. Mrs D'Agostino was discharged on Wednesday 21 March 2007. She had experienced an elevated temperature the night before. In any event, Mrs D'Agostino was not obviously unwell on the day of her discharge and her temperature had descended to a normal level by the morning[13] of that day. By the day of her discharge there was no evidence from which a reasonable suspicion that her bowel repair had failed, or that Mrs D'Agostino was developing peritonitis, should have been entertained. I make no further comment about the timing of Mrs D'Agostino's discharge from the Western Hospital.

4. The period from Mrs D'Agostino's discharge from hospital to her readmission

4.1. According to Mr D'Agostino and Belinda D'Agostino, the first signs that Mrs D'Agostino was acutely unwell following her discharge from hospital emerged on Friday 23 March 2007. On that day Mrs D'Agostino reported that she had experienced bad diarrhoea to the point that she had lost control of her bowels and soiled her clothes. She had also been in pain. She had reportedly rung the Western Hospital for advice and was told that she should stop taking Mylanta as that is known to cause diarrhoea.

4.2. According to Mr Leonard D'Agostino's statement[14] his wife spent that night until the next morning getting up and down from bed because of the pain in her stomach. He says that she had attempted to lie on the lounge but could not get comfortable because of the pain. The next morning between about 7:30am to 8am Mrs D'Agostino woke up 'screaming in pain from her stomach'[15]. In his oral evidence before me Mr D'Agostino said that his general impression was that his wife was in 'serious pain'[16]. In cross-examination by counsel for Dr Grant, Mr Harris QC, Mr D'Agostino suggested that the screaming that he described in his statement was more akin to 'groaning out loud'[17].

[13] Mrs D'Agostino's temperature at 10am on the day of her discharge was 37.2°C
[14] Exhibit C12
[15] Exhibit C12, page 4
[16] Transcript, page 87
[17] Transcript, page 95

4.3. Belinda D'Agostino in her statement[18] states that on the Saturday morning she had actually been woken by her mother screaming. She describes her mother as sounding like she was in pain. Belinda D'Agostino also describes her mother as moaning. Her mother lay on the couch in the family room and Belinda D'Agostino sat there with her for some time. Belinda D'Agostino's perception was that her mother was in 'very bad pain'. She obtained a wet face washer that she placed on her mother's forehead.

4.4. Mrs D'Agostino herself telephoned Dr Grant sometime that morning. The call must have occurred prior to 9:10am because as a result of the call, Mr D'Agostino drove to the West Lakes National Pharmacy and bought some Buscopan and, according to the pharmacy receipt from that transaction, the sale had occurred at 9:10am. Unfortunately neither Mr D'Agostino nor Belinda D'Agostino were present during the telephone conversation that took place between Mrs D'Agostino and Dr Grant. Therefore, the only version that the Court has in respect of this telephone conversation is that of Dr Grant. Dr Grant's police statement of 3 pages taken on the day of Mrs D'Agostino's death[19] does not describe this telephone conversation. However, Dr Grant subsequently prepared a statement on her practice letterhead. This document is dated 21 August 2009[20]. In that statement Dr Grant describes the telephone conversation in the following terms:

> 'Mrs D'Agostino contacted me on the morning of 24/03/07 at approximately 0900 hours. She reported that she had had an increase in wind pain and a feeling of lower abdominal bloating. She however reported that she otherwise felt very well, that she did not feel that she had a temperature, that she was eating and drinking normally and that she had had breakfast that morning. She also reported that she had had her bowels open that morning. She did however feel that she had wind pain. I suggested that she try Buscapan (sic) to settle the colicky pain. I asked her to contact me again should she have any further concerns.' [21]

In her evidence before me, Dr Grant reiterated that version of the conversation. In her evidence in-chief she told me that other than the statement made by Mrs D'Agostino that she had told Dr Grant that she had wind pain or colicky abdominal pain, the information that is contained in the above description of the conversation was elicited by specific questions asked by Dr Grant. Dr Grant said that she had asked Mrs D'Agostino whether she had her bowels open, whether she felt that she had a

[18] Exhibit C2a
[19] Exhibit C19
[20] Exhibit C19a
[21] Exhibit C19a, page 2

temperature, whether she felt well in herself, whether she was eating and drinking and how she generally felt.

4.5. The image of Mrs D'Agostino as drawn by her husband and daughter is to my mind not in keeping with the information that Dr Grant says she was given by Mrs D'Agostino however elicited. In particular, even if Mrs D'Agostino had experienced a normal and satisfactory bowel motion that morning, it is surprising that she would not also have told Dr Grant about the diahorrea the day before, especially if she had lost control of her bowels to the point of soiling her clothes as has been suggested by Belinda D'Agostino. Moreover, the general image of significant pain and lassitude on the part of Mrs D'Agostino does not sit comfortably with the suggestion that Mrs D'Agostino 'otherwise felt very well' in fact, or indeed with the suggestion that she had described herself in those terms. Human nature suggests that if a person is in severe pain, the person's preoccupation is with that pain. The pain would mask any other feelings of general well-being. A description of otherwise feeling very well would be incongruous in those circumstances even if the description was elicited by way of Dr Grant posing a leading question in those terms and Mrs D'Agostino simply saying yes.

4.6. The materiality of what was actually discussed during this telephone conversation was brought into sharp focus in Dr Grant's own evidence. She herself testified that if Mrs D'Agostino had given a description of herself during the telephone conversation that involved pain of a severity that caused her to scream, and with diarrhoea or fever, her management would have been different. She would have advised Mrs D'Agostino to attend hospital at that point in time for review. There is no direct evidence that Mrs D'Agostino was suffering from a temperature at the time of this conversation, but there is some evidence that later during the day she was suffering from a raised temperature. In any case, whether she had described a temperature or not during this conversation, the evidence would suggest that even a description of severe pain and diarrhoea should and would have prompted Mrs D'Agostino's earlier presentation to the Western Hospital that morning.

4.7. The only common ground within the description of Mrs D'Agostino given by members of her family and the description of the conversation as described by Dr Grant is that Mrs D'Agostino was experiencing pain. It is true, however, that it was suggested that she try Buscopan which was then obtained by Mr D'Agostino. The

suggestion of Buscopan is in keeping with a belief on Dr Grant's part that Mrs D'Agostino may have been suffering from wind. Mr D'Agostino in his statement says that after the telephone conversation, to which he was not privy, his wife told him that Dr Grant had suggested that the pain was from wind in her stomach and bowels caused by the keyhole surgery.

4.8. To my mind a finding that Mrs D'Agostino must have told Dr Grant that she was suffering very severe pain, that she had had uncontrolled diarrhoea and had said nothing about feeling otherwise very well, would carry two implications. Firstly, it would mean that Dr Grant has not been entirely frank with the Court about the contents of the telephone conversation. Secondly, having regard to the materiality of the nature of this conversation and what implications it would have carried in terms of Mrs D'Agostino earlier being admitted to hospital, it would mean that Dr Grant had been neglectful in not advising Mrs D'Agostino to attend the hospital and neglectful in not going to see Mrs D'Agostino there that morning. In my view although findings of such importance might be made inferentially, they would not be made lightly or on inexact evidence or supposition. I am mindful of the observations made in the well-known case of **Briginshaw v Briginshaw** (1938) 60 CLR 336, where although the standard of proof of the balance of probabilities does not alter, there are cases in which, owing to the seriousness of allegations and findings that might be made in relation to the behaviour of an individual, the Court should remind itself that such findings should not be made lightly or on unconvincing evidence. I also have regard to the fact that an adverse finding against Dr Grant would possibly affect her professional standing. I adopt a **Briginshaw** approach in this case.

4.9. In reaching any conclusion about the content of this telephone conversation I have had regard to a number of matters. Firstly, there is no version of the telephone conversation other than that as described by Dr Grant. Whilst inferentially one may have expected Mrs D'Agostino to have imparted a description of her wellbeing that was in keeping with that provided by Mr D'Agostino and Belinda D'Agostino, which descriptions I accept, the fact remains that no-one in her household is able to describe in precise terms what it was that Mrs D'Agostino said about herself. Secondly, whatever was said, it seems that there is little doubt that the conclusion that Dr Grant drew from what Mrs D'Agostino said about herself was that the pain was of a colicky nature. If Mrs D'Agostino had described severe pain, or pain which had involved a

response of screaming, or had described uncontrolled diarrhoea the day before, had scoffed at the notion that she was feeling otherwise very well and that all of this had occurred against a background of recent bowel repair surgery, it is almost inconceivable that an experienced and professional medical practitioner would ascribe all of that to something that might be remedied by an over the counter product such as Buscopan. It would take cogent evidence to dissuade a Court from that view. There is sufficient doubt in my mind whereby I am unable to reach a conclusion on the balance of probabilities, having regard to the seriousness of such a finding, that Mrs D'Agostino gave a completely accurate picture of herself during the telephone conversation. This is not to say that I have certain doubts and misgivings about the accuracy of Dr Grant's description of the conversation. I say no more about the matter.

4.10. During the day Mrs D'Agostino took the Buscopan and also Panadol. According to Mr D'Agostino, her pain appeared to increase as the day wore on. From time to time Mrs D'Agostino apparently took her own temperature and at one point recorded in writing a temperature of 39°C at 12:30pm[22]. If this was accurate, it represented a fever. Her daughter Belinda states that her mother said she was feeling warm and when Belinda herself felt her mother, this appeared to be the case. Both Mr D'Agostino and Belinda D'Agostino state that later in the afternoon, at around the time that Mrs D'Agostino endeavoured to call Dr Grant again, Mrs D'Agostino's lips and fingertips started to turn blue and her breathing became shallow. I am mindful of the fact that there may well have been an element of cross-fertilisation between the statements given by Mr D'Agostino and his daughter, Belinda, but I have no reason to doubt their joint observation that Mrs D'Agostino's extremities were turning blue. This observation was also later to be made by nursing staff at the Western Hospital. Mr D'Agostino also describes his wife as apparently feeling nauseous and that she was trying to make herself vomit. Mr D'Agostino's perception was that his wife was running a fever.

4.11. Dr Grant received a message for her to ring the D'Agostino household and she did so at approximately 5pm[23]. As a result of the telephone conversation, Dr Grant advised Mrs D'Agostino to go to the Western Hospital where Dr Grant would assess her. Mrs

[22] Transcript, page 110
[23] Transcript, page 671

D'Agostino arrived at Western Hospital at approximately 6pm[24]. Dr Grant was not to assess Mrs D'Agostino until probably between 9pm and 9:30pm that evening. In the meantime, Dr Grant had been attending a function at a sailing club at North Haven.

5. Mrs D'Agostino's presentation at the Western Hospital on Saturday 24th March 2007

5.1. Mrs D'Agostino was driven to the Western Hospital by her husband. She arrived at approximately 6:00pm. She was at that time seen by a registered nurse Andrea Earle. Ms Earle provided a statement to the investigating police[25]. She also gave evidence at the Inquest.

5.2. At first Mrs D'Agostino was admitted to a general ward. She presented with back pain, abdominal pain and her abdomen was visibly distended. There were no bowel sounds when Ms Earle listened to her abdomen with a stethoscope. Mrs D'Agostino was cyanotic peripherally and centrally. This fact was noted by Ms Earle in the Special Nursing Record[26] against the time of 1900 hours. At the conclusion of her shift at 10:30pm, she made an additional note of that observation within the progress notes[27]. The cyanosis that she observed is in keeping with the observations made by Mr D'Agostino and Belinda D'Agostino to which I have already alluded. I have no doubt that the observations of peripheral and central cyanosis were accurate.

5.3. Ms Earle took some observations that were recorded both at 7:00pm and 7:30pm that suggested that Mrs D'Agostino was suffering from a fever. She had a temperature of 38.7ºC at 8:00pm, she was tachycardic and was hypotensive with a blood pressure of 87/45 at 7:30pm. A blood pressure recording of 132/42 at 8:00pm was probably inaccurate because at 8:30pm her blood pressure was again recorded as hypotensive at 97/49. Ms Earle administered oxygen to Mrs D'Agostino having regard to the cyanosis. Ms Earle transferred Mrs D'Agostino to the high dependency unit. She commenced Mrs D'Agostino on half hourly observations. The cyanosis improved after the administration of oxygen[28].

[24] Transcript, page 638
[25] Exhibit C14
[26] Exhibit C7, page 30
[27] Exhibit C7, page 20
[28] Transcript, pages 142-143

5.4. At some point Ms Earle and Dr Grant conversed by telephone. Dr Grant indicated that she would come to the hospital to review Mrs D'Agostino and advised that in the meantime Mrs D'Agostino could be administered Pethidine for her pain. Mrs D'Agostino was first administered with Pethidine at 6:50pm. This administration was ordered by Dr Grant at the time Ms Earle telephoned her to advise her of Mrs D'Agostino's arrival and presentation at the hospital. It is likely, therefore, that the telephone conversation in which Dr Grant said she would attend at the hospital and review Mrs D'Agostino occurred sometime before 6:50pm.

5.5. During the phone conversation, Dr Grant ordered intravenous fluid resuscitation to be administered in an attempt to bring Mrs D'Agostino's blood pressure up. However, Ms Earle was unable to put the necessary IV line in. Ms Earle explained that she was unable to locate a vein. Ms Earle thought that Mrs D'Agostino had poor veins because her blood pressure was low, but pointed out in her evidence before me that she was relatively inexperienced at administering the jelco for an IV line. She said 'I was still new at putting drips in as well.'[29]

5.6. In the event, Ms Earle, of her own initiative, sought the services of an on call anaesthetist to administer the drip. A Dr William Richards attended the hospital. Dr Richards is a specialist anaesthetist in private practice. As part of his anaesthetic practice he provided services to the Western Hospital. He was on call that evening. It is difficult to reconstruct the precise time at which Dr Richards attended. He prepared a brief account of his attendance in a document dated the 19th February 2010[30], but made no contemporaneous note of the time at which he attended. In his brief statement[31] he states that the time of his arrival was approximately 7:30pm. One interpretation of Nurse Earle's note timed at 10:30pm is that she contacted Dr Richards at 8:15pm, but this could also be interpreted as constituting a reference to the time at which the IV was ultimately successfully inserted by him. However, the last entry in the special nursing record[32] prior to the notation therein about Dr Richards' attendance is the entry at 8:30pm which suggests that Dr Richards attended some time after that and before 9:30pm when the next entry in the nursing record is made. Between the two entries timed respectively at 8:30pm and 9:30pm Nurse Earle has written:

[29] Transcript, page 169
[30] Exhibit C15
[31] Exhibit C15
[32] Exhibit C7, page 30

'S/B anaesthetist. IVT inserted. 2 x gelofusine'.

I think it more likely than not that Dr Richards administered the fluid no earlier than 8:30pm.

5.7. Dr Richards also gave evidence in the inquest. He was able to insert two lines in either hand, one being an 18 gauge line into the right hand a 22 gauge line into the left hand. Dr Richards told me in evidence that the reason for the two lines was that Mrs D'Agostino was difficult to gain IV access as her veins were not dilating. For that reason he originally established IV access with a very small gauge in the first instance and then put a larger line in. Dr Richards was asked whether there was anything about Mrs D'Agostino's overall condition that had contributed to the difficulty in securing a line. Dr Richards told me that he did not believe so. He said that difficult IV access is just 'one of those things'[33]. I understood Dr Richards not to agree with the suggestion that the difficulty in securing IV access was because of Mrs D'Agostino's low blood pressure. However, it is clear from Dr Richards' evidence that he believed that notwithstanding that Mrs D'Agostino was able to speak lucidly and give him a detailed history, she was generally unwell.[34] He told me that he was concerned about his patient and he wanted Dr Grant to know that he was so concerned. To this end he telephoned Dr Grant and spoke to her about Mrs D'Agostino's condition. In the meantime he had taken bloods from Mrs D'Agostino. Dr Richards had the impression that Mrs D'Agostino was suffering from sepsis. He told me in evidence that in the phone call with Dr Grant he had suggested that appropriate antibiotic medication be prescribed for Mrs D'Agostino. Dr Richards told me that such was his level of concern that it was an unusual thing for him to have contact with the referring doctor when he had simply been asked to administer an IV line.[35] Notwithstanding Dr Richards' subsequently proven suspicions that Mrs D'Agostino was septic, there was no discussion between him and Dr Grant in the telephone conversation about the fact that Mrs D'Agostino had experienced a bowel perforation in the course of her gynaecological procedure earlier in the month.

5.8. I return to another aspect of Dr Richards' evidence later and this concerns opinions that he expressed about the timing of any surgery that Mrs D'Agostino may have needed to undergo that night. Suffice it to say at this stage Dr Richards had no

[33] Transcript, page 214
[34] Transcript, page 198
[35] Transcript, page 208

recollection of asking Dr Grant whether the latter intended to take Mrs D'Agostino to theatre that night, although Dr Grant was later to testify that he had made such an enquiry of her.

5.9. Dr Grant herself told me that the telephone conversation that took place between her and Dr Richards occurred while she was en route in her private vehicle from the yacht squadron at North Haven to the Western Hospital. There is no record of the time of the conversation, but Dr Grant told me that the journey that she undertook was undertaken in the dark.

5.10. At 9:30pm Mrs D'Agostino's blood pressure had gone up marginally, but she was still feverish with a temp of 38.3 ºC. She was still being administered oxygen at that time. The increase in blood pressure may well be reflective of the administration of fluids.

6. Mrs D'Agostino is reviewed by Dr Grant

6.1. Dr Grant attended the Western Hospital and reviewed Mrs D'Agostino. Dr Grant made an entry in the progress notes[36]. She did not record a time against her entry. Thus the time of her examination of Mrs D'Agostino cannot be established with complete certainty. In her self made statement[37] Dr Grant has stated that she attended Mrs D'Agostino between 7:00pm and 9:00pm. It was clearly subsequent to Dr Richards' examination. To my mind Dr Grant's examination of Mrs D'Agostino took place closer to 9:00pm than 7:00pm and may well have occurred after 9:00pm. It was a number of hours after Mrs D'Agostino's admission to the Western.

6.2. Dr Grant recorded in her self made statement that when she examined Mrs D'Agostino the patient looked unwell, but she was able to converse and was clinically stable apart from what Dr Grant regarded as a borderline low blood pressure. Dr Grant formed the view that Mrs D'Agostino was suffering from sepsis due to a probable breakdown of her bowel repair. She noted in the progress notes that Mrs D'Agostino 'will need laparotomy in morning'[38]. Her plan was to resuscitate Mrs D'Agostino with fluids and IV antibiotics overnight and to operate in the morning. Dr Grant did not believe that Mrs D'Agostino was critically unwell. I observe that the all of those diagnostic conclusions and the plan based thereon would have been available

[36] Exhibit C7, page 20
[37] Exhibit C19a
[38] Exhibit C7, page 20

had Mrs D'Agostino been examined by Dr Grant shortly after Mrs D'Agostino's admission.

6.3. Dr Grant made the necessary arrangements for Mrs D'Agostino to go to theatre the following morning which included organising theatre staff and an anaesthetist. I have already referred to her unsuccessful attempts to contact two colorectal surgeons. She was able to contact a general surgeon, Mr Michael France. As it so happens, Mr France had been attending the same function at North Haven that Dr Grant had been attending. He was still at the function when he received a phone call from Dr Grant. He believes he received this call at 9:45pm.

6.4. There was some debate during the inquest about whether Mr France should have taken a more proactive role in the decision as to when Mrs D'Agostino's further surgery should have taken place. It was suggested that Mr France ought personally have reviewed Mrs D'Agostino that evening. There was further contention surrounding the suggestion that Mr France was the leading surgeon or ought to have been the leading surgeon in the procedure that was to take place the following morning. Mr France gave evidence in the inquest. He also provided a statement to the police taken on the 18th August 2009[39]. Mr France was adamant that at the time he was contacted by Dr Grant he did not believe that he was being asked to express any view about the necessity for and timing of any further surgery. Mr France told me this:

> 'I wasn't being asked - that's not - I wasn't asked to be, to carry out a medical assessment review. Dr Grant was the patient's primary doctor or primary carer and I was relying on her assessment but I think - it's probably hard for people to possibly understand but an assistant as surgical operation is an assistant at the time of the operation to help carry out the technical point. It's not someone who is there to evaluate the patient and to determine whether that patient needs an operation or whether they have an infection. So I wasn't asked to do that and if she had, you know, it would have been different if that was the question that she had been posing to me.'[40]

It is important to note that when Mr France was asked about his availability, the query was confined to his availability the following morning. As Mr France pointed out in his evidence he was not on call that evening. He was with his wife at a social gathering at which he had consumed alcohol. Moreover, Mrs D'Agostino's condition was reported as stable. In my view Mr France was in no real position to be able to offer anything by way of review or his surgical expertise that night, and the request to

[39] Exhibit C17
[40] Transcript, page 261

him by Dr Grant was not in such terms in any case. I do not see how Mr France can be the subject of any criticism irrespective of the role he was asked to play or would possibly have to play the following morning.

6.5. During the course of his evidence Mr France was asked to comment upon the details of Mrs D'Agostino's presentation had that level of detail been imparted to him that night. To summarise Mr France's view was that her presentation would probably have indicated that although she required resuscitative measures, she also probably required surgery sooner rather than later[41]. In addition, the question of transfer to a hospital that could provide intensive care provided by an intensive care specialist would have needed to be considered by reason of, among other things, the possible need to administer inotropic support in relation to blood pressure having regard to the fact that there is a limit to how much fluid resuscitation a patient can tolerate[42]. This to my mind does raise a question as to whether or not Dr Grant provided Mr France with an appropriate level of detail as far as Mrs D'Agostino's observations were concerned.

7. Mrs D'Agostino's condition during the course of the night

7.1. The surgery that Dr Grant contemplated was scheduled for 9:00am on the Sunday morning. It was intended that it take place at the Western Hospital. No consideration was given to having Mrs D'Agostino transferred to a tertiary hospital, either for the preoperative period or for the surgery itself. She remained in the Western Hospital high dependency unit where she was observed periodically overnight.

7.2. After Dr Grant left the hospital, Mrs D'Agostino was not seen by any medical practitioner during the course of the night. Registered Nurse Andrea Earle finished her shift at about 10:30pm when she made her note in the progress notes. Thereafter Mrs D'Agostino was cared for by Registered Nurse Lena Poznanski who was the night shift clinical manager at the hospital. Ms Poznanski commenced her shift at 10:00pm and there was a handover of patients between herself and Ms Earle. Ms Poznanski provided a statement to the police on the 16th February 2010 and then an addendum statement on the 18th February 2010[43]. At handover Ms Poznanski was informed that Mrs D'Agostino was septic and was febrile. She understood the

[41] Transcript, page 308
[42] Transcript, page 308-309
[43] Exhibit C16 & C16a

surgical history thus far. Ms Poznanski took a set of observations with respect to Mrs D'Agostino at 10:30pm that included a pulse of 129, respirations of 30, a blood pressure of 102/40 and 98% saturation on oxygen. Mrs D'Agostino was awake and she spoke to Ms Poznanski when she saw her and she continued to verbalise throughout the night. At 10:50pm Ms Poznanski administered a further 100mg of Pethidine for the pain. It appeared to Ms Poznanski that the Pethidine did work for a short time but its effect would eventually wear off. Ms Poznanski conducted regular observations. Throughout the night Mrs D'Agostino found it difficult to get comfortable due to a distended abdomen, high temperature and pain.

7.3. At about 1:45am some blood results became available which showed that Mrs D'Agostino had a haemoglobin level of 87 which is low[44]. The normal range for haemoglobin is 115-165. This result is recorded in the progress notes in a Clinpath Laboratories document timed at 1:23am. There is in fact an earlier haemoglobin result of 96 timed at 2235hours[45]. There is another blood result document that is timed at 1845hours on the 25th March that speaks of neutrophils showing a marked left shift with toxic changes[46]. Another blood result refers to a creatinine level of 121 timed at 2246 hours on the 24th March[47]. This level is slightly elevated. The evidence is not clear as to the precise circumstances in which one or more blood samples were taken and whether all of these results were necessarily seen during the course of the night. What is known is that Ms Poznanski noted the haemoglobin level of 87 and as a result of seeing that, she contacted Dr Grant by telephone. Ms Poznanski noted the time of this communication as 1:45am. She told Dr Grant of the haemoglobin result as well as a blood pressure of 84/27 that represented a low blood pressure. Ms Poznanski noted also that she advised Dr Grant that Mrs D'Agostino's abdomen was distended and firm, that the patient was restless and was unable to get comfortable. She recorded that Dr Grant ordered a further 500mls of gelofusine and also ordered the administration of two units of blood over three hours to improve the haemoglobin count. Ms Poznanski stated that in their communication Dr Grant said that the observations of which Ms Poznanski advised her were 'understandable'[48] and that surgical theatre was to stay as scheduled.

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[44] Exhibit C7, page 60
[45] Exhibit C7, page 57
[46] Exhibit C7, page 56
[47] Exhibit C7, page 55
[48] Transcript, page 232

7.4. Ms Poznanski conducted observations upon Mrs D'Agostino every half hour throughout the night. She administered further Pethidine at 4:00am. Ms Poznanski also administered Panadol. Mrs D'Agostino's pulse hovered between 120-130 beats per minute which is rapid and her blood pressure averaged between 80 and 90 systolic which is low.

7.5. At 6:00am Ms Poznanski conducted further observations. At that time Mrs D'Agostino's temperature had spiked to 38.2 ºC. At 6:30am Mrs D'Agostino's pulse had risen to 140 beats per minute and her blood pressure had dropped to 77 systolic. Her oxygen saturations went down to 90% on oxygen. She noted in the progress notes that Mrs D'Agostino's clinical observations included minimum sleep, the administration of Pethidine with minimum effect and that she was drowsy but orientated. There was shallow breathing as well. Ms Poznianski correctly identified all of this as reflective of a significant deterioration in Mrs D'Agostino's condition.

7.6. At approximately 7:15am Ms Poznianski telephoned Dr Grant and informed her of the patient's deteriorating observations. Dr Grant ordered the surgery to be brought forward. Dr Grant in her self made statement recorded that she was contacted by nursing staff and was told that Mrs D'Agostino was looking more unwell than she had before. Her response was to proceed as quickly as possible with the planned surgery. She contacted Mr France and asked him to attend earlier. Dr Grant made her way to the hospital where she saw Mrs D'Agostino at about 7:30am. In her statement she states that although Mrs D'Agostino was unwell, she was lucid and able to have a conversation. She had deteriorated from a clinical standpoint with slightly lower blood pressure and spiking temperatures. Dr Grant states that Mrs D'Agostino certainly elicited no signs of septic shock at that point.

8. Mrs D'Agostino is taken to the operating theatre

8.1. Mrs D'Agostino was also seen by Dr Dhillon, the anaesthetist who during the course of the night had been engaged to assist in the scheduled surgery. Dr Dhillon gave a statement to the police in August of 2009. He also gave evidence in the inquest. In his statement he explains that when he first saw Mrs D'Agostino it was obvious that she was 'very, very unwell'[49]. He describes her as sitting up and in severe pain. She was breathing rapidly and had a swollen belly. She had low blood pressure and her

[49] Exhibit C18, page 4

pulse was racing. Dr Dhillon also observed that Mrs D'Agostino had cold and cyanosed peripheries. He assessed her as being in probable septic shock at that point. To Dr Dhillon's observation, Mrs D'Agostino could not really speak very much because she was breathing rapidly and she was in pain. He was thus unable to gain much information from her. In his view, due to her deteriorating condition which he agreed was very likely due to an infection within the abdomen, there was a need for urgent surgery. Dr Dhillon told me in evidence that he was concerned about giving Mrs D'Agostino the necessary general anaesthetic, but he believed that at that point there was no sense in providing Mrs D'Agostino with any further resuscitation because it was clear that the surgery needed to take place immediately. In his witness statement, Dr Dhillon goes to some length in explaining why the surgery was then conducted without any further attempt to stabilise or resuscitate Mrs D'Agostino. I do not think that there can be any question but that the decision immediately to operate upon Mrs D'Agostino was appropriate and utterly necessary. I do not think that Dr Dhillon needs to be concerned about any question as to the appropriateness or the timing or the place of the surgery. In any event the situation that he was confronted with was not in any way of his making,

8.2. The surgeon, Mr France, says in his statement that when he first saw Mrs D'Agostino on the Sunday morning she appeared to have evidence of an infection. She was conscious and was talking and she appeared 'to be a little bit septic' but did not look shocked which is a more severe form of infection when the body starts shutting down. He mentions nothing of Dr Dhillon's observations as to cyanosis.

8.3. In my view, the evidence of Dr Dhillon is to be preferred in respect of Mrs D'Agostino's condition prior to surgery. I say this because Dr Dhillon was the anaesthetist whose task it was to assess the patient for the purpose of surgery and whose task it was to keep her alive during that surgery. By way of contrast, Mr France told me that he did not specifically make detailed observations of the patient because he did not want to subject her to unnecessary discomfort. I accept the evidence of Dr Dhillon when he says that Mrs D'Agostino was manifestly and seriously unwell with cyanotic extremities and that she was relatively unresponsive. All of this, in my view, is a reflection of the fact that Mrs D'Agostino had dramatically deteriorated prior to her surgery, a state of affairs that had been identified by Ms Poznanski.

8.4. The laparotomy was commenced and it was confirmed that the repair had broken down and that Mrs D'Agostino was suffering from faecal peritonitis as a result. Mr France decided that a Hartmann's procedure would be appropriate. This would have involved Mrs D'Agostino having to wear a colostomy either temporarily or permanently had she survived. The course of the operation is described by Dr Dhillon in so far as it relates to Mrs D'Agostino's condition. According to Dr Dhillon, Mrs D'Agostino commenced the surgery with a low blood pressure of 85 systolic. Dr Dhillon states that just after the surgery commenced, Mrs D'Agostino's condition deteriorated rapidly and although there was a cardiac rhythm, he was unable to feel a pulse. Dr Dhillon commenced giving Mrs D'Agostino inotropes in order to improve her blood pressure, but they did not work. Her blood pressure plummeted and she then went into cardiac arrest. A retrieval team from the Royal Adelaide Hospital was called and a second anaesthetist was also asked to assist. After resuscitative efforts of some minutes, a pulse and a cardiac rhythm was re-established. This lasted for approximately 15 to 20 minutes. Mr France at this stage decided simply to close the bowel perforation with sutures pending Mrs D'Agostino's retrieval by the RAH team. However, Mrs D'Agostino then suffered a second cardiac arrest. Further resuscitative efforts were undertaken including those administered by Dr Bullen, the second anaesthetist, and by the Royal Adelaide retrieval team after their arrival. Despite all of their attempts, Mrs D'Agostino died. Dr Dhillon says this in his statement:

> 'The patient was very unwell, and in a very unwell patient that can always happen. We did not expect her to go into cardiac arrest but it was not unexpected in a severely ill patient'.[50]

Neither Dr Grant nor Mr France had any expectation of a cardiac arrest during this procedure. Neither believed that Mrs D'Agostino had been in septic shock. Mr France said, in respect of Mrs D'Agostino's death, 'we couldn't believe it'.[51] Dr Grant was equally shocked. It seems that Dr Dhillon's level of surprise at the outcome was somewhat lower than that of Dr Grant and Mr France. The impression that Dr Dhillon's statement and evidence generates is that having regard to Mrs D'Agostino's degree of debility, which he regarded as reflective of septic shock, a cardiac arrest in the course of an operation in such unfavourable circumstances was not an unusual event, albeit a very unwelcome one. Dr Dhillon's views about the matter are reflective of the fact that Mrs D'Agostino deterioration had been a severe one and one

[50] ExhibitC18, page 7
[51] Transcript, page 332

that was life threatening in a surgical setting. The surgery had originally been scheduled for 9:00am, but events were very much overtaken by Mrs D'Agostino's rapid and serious deterioration to a point where immediate surgery had to be undertaken. This was something of a paradox as not only did the surgery have to happen immediately because of the unsatisfactory condition to which she had descended, but it had to happen immediately in spite of the dangers her condition presented.

9. Discussion concerning the venue and timing of Mrs D'Agostino's surgery

9.1. Under this heading there are two issues that require discussion. Firstly, there is the question as to whether or not Mrs D'Agostino should either have been sent to a tertiary hospital in the first instance or been transferred to such a hospital following her admission to and assessment at the Western Hospital. Secondly, there is the question as to whether the surgery should have taken place earlier than the scheduled time of 9:00am or indeed before the actual commencement time of 8:00am.

9.2. It is important to consider a number of fundamental factual matters that are not seriously in dispute and that in any event I find to have been the case. They are as follows:

- There was good reason to believe even before Dr Grant reviewed Mrs D'Agostino on the night of the 24th March 2007 that Mrs D'Agostino was septic, or was at least experiencing some symptomatology of a breakdown of the bowel repair.

- A diagnosis of sepsis from a suspected failed bowel repair could have been made almost immediately upon Mrs D'Agostino's admission to the Western Hospital at approximately 6:00pm if she had been examined by a medical practitioner at or about that time.

- The need for further surgery could have been identified immediately upon Mrs D'Agostino's admission to the Western Hospital at approximately 6:00pm if she had been examined by a medical practitioner at or about that time.

- When Dr Grant examined and reviewed Mrs D'Agostino it was conclusively established that Mrs D'Agostino was septic.

- When Dr Grant examined and reviewed Mrs D'Agostino there was good reason to believe that her sepsis had resulted from a breakdown of her bowel repair and that this possible diagnosis ought to have governed her clinical management from that point onwards.

- If a bowel repair was to be considered necessary, Mrs D'Agostino would need a second laparotomy as soon as possible.

- The laparotomy that was needed to rectify the broken down bowel repair could have been carried out at the Western Hospital satisfactorily and safely. Dr Dhillon, the anaesthetist, told me that everything that was required was available at the hospital.

- The laparotomy could have been carried out at the Western Hospital during the course of the night if the necessary surgical and anaesthetic expertise was obtained.

- Regardless of the venue of the surgery, Mrs D'Agostino would have required admission in an intensive care unit following the surgery. The Western Hospital did not have an intensive care unit. This meant that following the surgery, Mrs D'Agostino would have required transfer from the Western Hospital to a hospital that had an intensive care unit such as a major tertiary hospital. This therefore raises a question as to whether Mrs D'Agostino should have been managed in an intensive care unit before her surgery.

- There was no impediment or other matter that would have prevented Mrs D'Agostino either being admitted to a tertiary hospital in the first instance or being transferred to such a hospital during the early evening of 24th March 2007.

- There was a need for and an opportunity for resuscitative measures to be administered prior to the surgery that Mrs D'Agostino required. Such resuscitative measures included the administration of fluid and IV antibiotics.

- A tertiary hospital would have had the necessary expertise and personnel to have managed her resuscitation and to have carried out Mrs D'Agostino's surgery during the course of the night.

9.3. There were a number of views expressed during the course of the inquest as to whether Mrs D'Agostino should, in advance of the surgery, have been hospitalised in a tertiary hospital and in particular in an intensive care unit (ICU). Dr Grant did not consider that to have been necessary at any point in time, including the time at which she advised Mrs D'Agostino to attend the Western Hospital or at any other time throughout the course of the night. This included both the occasion on which she reviewed Mrs D'Agostino and also at approximately 1:45am when she was telephoned by the nursing staff. Professor Pepperell suggested that if one had been certain of the diagnosis right from the outset, then one would probably have transferred a patient such as Mrs D'Agostino to an ICU. However, he did point out that a transfer could potentially delay an operation even if one were sure of the diagnosis. In the event, I did not understand Professor Pepperell to be critical of the decision to pre-operatively manage Mrs D'Agostino in the Western Hospital.

9.4. Dr Rieger suggested that having identified that Mrs D'Agostino was suffering from sepsis as a result of a probable breakdown of the repair to the bowel, it is easy to say in hindsight that she should have been transferred to a hospital that had intensive care facilities. He said it would have been 'nice if she was managed in an intensive care environment'[52]. He went on to say that there were certain advantages that an ICU would have over the Western Hospital, even allowing for the Western's high dependency unit's regime of close observation. There would have been medical monitoring of a patient in an ICU and he suggested that there would have been better managed resuscitation because of the closer scrutiny and input by a medical practitioner. He said, 'so an ideal environment would have been somewhere else'[53]. He suggested that if Mrs D'Agostino had been in an ICU there would have been greater pressure to take her to the operating theatre earlier because there would have been other medical practitioners scrutinising what was taking place. In Dr Rieger's opinion, medical practitioners in an ICU would have been inclined to offer the view that Mrs D'Agostino was sick and that they would have robustly said something along the lines of 'bloody well get on into theatre with her and sort it out'[54]. However, Dr Rieger said that moving Mrs D'Agostino from the Western Hospital would not necessarily have been a straightforward task. To begin with, this would have taken some hours to achieve. Time would have been consumed by organising an

[52] Transcript, page 708
[53] Transcript, page 709
[54] Transcript, page 747

ambulance, transporting the patient, reassessing the patient and calling in surgical staff. It goes without saying that difficulties of this kind could have been avoided if Mrs D'Agostino had originally been sent to a hospital that had an ICU. In the event, Dr Rieger expressed what appeared to be a reasonably firm opinion that he personally would not have readmitted Mrs D'Agostino to the Western Hospital in the first place. He would have taken her to a facility were she could be managed in an ICU environment.

9.5. It is worthwhile observing that Dr Grant, when asked in her evidence as to whether she could identify something that may have avoided this unfortunate outcome, said that in retrospect if Mrs D'Agostino had been somewhere else things may have been different.

9.6. The overall consensus was that while it would have been desirable for Mrs D'Agostino to have been managed in a tertiary institution or private hospital that had an ICU, it was not necessarily indicated, especially having regard to the difficulties that may well have been occasioned in securing her transfer from the Western Hospital. On the other hand, there appears to be a strongly held view, at least by Dr Rieger, that Mrs D'Agostino would have been better off in an ICU especially if she had been sent to a tertiary hospital in the first place, all of which he would probably have done himself. I do not need to repeat what were the perceived advantages that management in an ICU would have provided except to stress that in all probability it would have resulted in Mrs D'Agostino being operated on earlier. This brings me to what in my view was the real issue in this case, namely whether the delay in the surgical procedure was avoidable and should have been avoided and whether earlier surgery may have altered the outcome. I turn to that issue now.

9.7. In assessing whether the delay to operate on Mrs D'Agostino was appropriate or not, it has to be acknowledged that on any view of the matter there was a period of time over which Mrs D'Agostino required resuscitation prior to any surgical treatment. It is worthwhile observing here that having arrived at approximately 6:00pm on the Saturday evening, Mrs D'Agostino was at the Western Hospital for 14 hours prior to the commencement of her surgery at 8:00am, it having been brought forward an hour. If one were to take the time of Dr Grant's examination as having taken place between 9:00pm and 9:30pm, there was a time interval prior to the surgery of 10.5 to 11 hours following that examination. In her evidence before me, Dr Grant rejected the notion

that she had unduly delayed her examination of Mrs D'Agostino. She said that she had been contacted by the hospital at 6:30pm at which time she was at a social function that had just commenced. She pointed out that she had at that time given orders to commence the intravenous fluid management that was designed to stabilise Mrs D'Agostino's blood pressure and that by the time of her examination this therapy had been commenced. She said that she had said 'hello and goodbye' at the function and had then made her way to the hospital. She had initially become lost in the dark upon leaving the North Haven location in her motor vehicle. Whichever way one views the matter, it appears there was a time lapse of something of the order of 2 to 3 hours between the phone call from the Western Hospital and Dr Grant's review of Mrs D'Agostino at the hospital. There does not appear to be any reason why, if Dr Grant had attended earlier, her impression of Mrs D'Agostino of sepsis and a probable failure of the bowel repair could not have been entertained at that time.

9.8. In any event at 9:00pm or 9:30pm that impression of Mrs D'Agostino was certainly entertained by Dr Grant and the evidence would suggest that even if resuscitative measures had then been commenced for the first time, there would have been sufficient time not only those for measures to have been conducted, but also for surgery to have taken place at a time much earlier than it ultimately did.

9.9. Dr Grant was asked by her counsel, Mr Harris QC, as to why she did not send Mrs D'Agostino straight into the operating theatre when she reviewed her or as soon thereafter as theatre staff could be assembled together with a surgeon. Her answer is as follows:

> 'Because I was - my intention was to improve her prior to undergoing surgery. Surgery is a stress and, in any surgical procedure, if the patient has low blood pressure and they are systemically unwell then the risks of the subsequent anaesthetic and further surgical procedure are higher. So, by resuscitating her, improving her cardiovascular status and her respiratory status, as well as starting to treat the infection. The intention is to then decrease the risk from the subsequent surgical procedure; she definitely needed a surgical procedure and I was in no doubt of that, but improving her clinical status to minimise the risk from that subsequent procedure was at the forefront of my mind at that time.'[55]

Dr Grant went on to explain that the risks of taking Mrs D'Agostino straight into surgery prior to resuscitation and stabilisation included the risk of a cardiac arrest during general anaesthesia from lack of blood in her system. When asked as to why she believed she had until the following morning to resuscitate Mrs D'Agostino, Dr

[55] Transcript, pages 424-425

Grant went on to explain that Mrs D'Agostino appeared to have only become unwell during the course of the Saturday afternoon and that she was still functioning very well in herself, was behaving normally and was orientated, so Dr Grant felt that she could start making some improvement in Mrs D'Agostino's clinical status in order to lessen the risk of her becoming further unwell from subsequent treatment. She believed that she could extend the preoperative period to the following morning because she anticipated that the fluid resuscitation and the administration of antibiotics would result in Mrs D'Agostino's blood pressure stabilising or perhaps improving slightly and that she would therefore become more suitable for surgery and be at less risk from that surgery[56]. To questions posed by me, Dr Grant said that she did not anticipate that in the timeframe between her assessment and the planned surgery at 9:00am, Mrs D'Agostino would experience a deterioration in her condition. Her expectation was that the patient would remain stable and would potentially improve her clinical status so as to minimise the risk of the surgical stress. When asked as to whether she would perform the surgery as soon as she was satisfied that the patient was stable enough to undergo that surgery, Dr Grant explained that once she was satisfied that the patient was stable and that fluid resuscitation had been effective, she would then proceed with the surgery. Dr Grant explained that her expectation was that this would all occur over the course of the 10 to12 hours between her review of Mrs D'Agostino and the planned surgery. As to how such a level of stabilisation could be identified, Dr Grant explained that this would be measured by an improvement in Mrs D'Agostino's blood pressure, by a reduction in her respiratory rate towards normal, by the expected expansion of her vascular volume from fluid therapy and by the expected reduction in the infective load that antibiotics would have helped to achieve.

9.10. When specifically asked as to whether it would have been adequate to have resuscitated Mrs D'Agostino for a period of only 2 to 3 hours, a period almost universally suggested in the evidence by other witnesses as being sufficient, Dr Grant acknowledged that this duration may have been adequate depending upon the circumstances at the time. She pointed out that a haemoglobin reading of 87 had come back necessitating a blood transfusion during the night and that this also would hopefully have improved Mrs D'Agostino's clinical status prior to surgery. I add here, however, that the evidence was clear that although the drop in haemoglobin was

[56] Transcript, page 425

a worrying sign at 1:45am, any required blood transfusion could have been administered during surgery and need not have delayed that surgery.

9.11. As to the 1:45am phone call that she received from Ms Poznanski concerning the adverse haemoglobin reading of 87, Dr Grant said that this call did not cause her to revise her thinking or to arrange for urgent surgery for the bowel repair or to retrieve Mrs D'Agostino to another hospital. This was because Mrs D'Agostino's observations were not drastically different from what they had been at 9:00pm the previous evening. She reiterated that her expectation had been that with adequate resuscitation, Mrs D'Agostino's observations would trend to improvement from 1:45am onwards[57].

9.12. Dr Grant rejected the notion that waiting overnight and simply administering fluid replacement and antibiotics was exposing Mrs D'Agostino to risk. She said that she had not anticipated any deterioration in Mrs D'Agostino. She stated that taking Mrs D'Agostino straight to theatre in an unstable state would have been a risk in itself. The risk that adhered to immediate surgery was to be ameliorated by fluid loading, administration of blood and the antibiotic therapy designed to treat the infection. I add here that nobody suggested in evidence that Mrs D'Agostino should have been taken immediately to surgery without prior resuscitation except of course when she was in extremis the following morning. The decision that Dr Grant had to make was not so much whether resuscitation was necessary because that was a given. The question for Dr Grant was how much resuscitation was required and more importantly, how soon surgery should take place.

9.13. Dr Grant agreed that surgery could have taken place at any point in time during the night if it was thought that such was required.[58] However, she pointed out that there was little to distinguish Mrs D'Agostino's presentation on the Saturday evening from that overnight until she experienced her acute deterioration at approximately 6:00am. Thus, she argues, there was no point in time that could be identified during the course of the night where a different decision concerning the timing of the surgery needed to be made. These observations proved to be something of a two-edged sword for Dr Grant because as will be seen, the lack of significant overnight change in Mrs D'Agostino's overall condition meant that there was no reason why the surgery ought

[57] Transcript, page 434
[58] Transcript, page 669

to have been further delayed and it also meant that there was every reason why it should have been expedited. But Dr Grant also stated that there are certain undesirable characteristics connected with conducting surgery in the middle of the night. That, however, seems to beg the question as to whether if the surgery was objectively necessary it should still have been conducted notwithstanding any intrinsic difficulties caused by the time of night. Dr Grant did agree that in retrospect it would have been preferable to have taken Mrs D'Agostino to theatre that night, but pointed out that she was, throughout the night, managing the patient in front of her without the benefit of hindsight and that she could not have predicted such an unfavourable outcome.

9.14. The evidence from the other medical practitioners who were called in the inquest, including those who were in some way involved in the matter, as well as the two experts to whom I have already referred, was that although there was a necessary period of resuscitation required before surgery, the delay in conducting Mrs D'Agostino's surgery that then ensued was both pointless and undesirable in all of the circumstances.

9.15. Firstly, as to the logistics involved in conducting an operation during the course of the night, the Western Hospital was adequately equipped for a laparotomy procedure. It is known that Dr Richards would have been able to attend as an anaesthetist. If say the two bowel surgeons whom Dr Grant unsuccessfully telephoned, namely Doctors Rieger and Hewitt, and Mr France had all been unavailable to conduct the surgery during the night, Dr Rieger told me that he knows of something in the order of fourteen colorectal surgeons who practice within Adelaide and on his estimate there are more than one hundred general surgeons with expertise in abdominal surgery. Dr Rieger suggested that, although Dr Grant may have needed to make several calls to secure the services of a colorectal or general surgeon, he suggested that ultimately she would have been successful. The issue as to whether or not any of them would have had practising rights at the Western could have been addressed by securing those rights ad hoc. There was no suggestion on the evidence that a surgical nursing team could not have been organised that night.

9.16. Each of the witnesses, namely Doctors Richards, France, Dhillon, Pepperell and Rieger, suggested that, as far as resuscitation was concerned, the matter could have been reviewed after 1, 2 or 3 hours following the commencement of resuscitative

measures that included the administration of fluids and antibiotics. Dr Richards suggested that the patient could be reviewed every thirty minutes and then consideration could be given to moving the patient to the operating theatre an hour or so once the patient had gone through the initial treatment stage. Dr Richards suggested that the decision regarding the timing of surgery could be made when one is satisfied that the patient is then in the best condition that the patient can be in prior to theatre[59]. Dr Richards said:

> 'I think I, at 8 o'clock that evening I would have been - I would have waited for blood results to know what they were. You would have a urinary catheter in, you would want to know what urine output is like in a septic patient. You would look to get the heart rate down a little bit from 129 or something like that. That would take an hour or two and then you would - if you knew there was a bowel perforation and you were going to have to operate at some stage or another you would probably say 'Well, this is the best we're going to get, this is the best condition we're going to get this patient into'[60]

Dr Richards suggested that the transfusion that Mrs D'Agostino required could have been administered during surgery.

9.17. Mr France suggested that Mrs D'Agostino had certainly required resuscitation, but he suggested that that could have been achieved within a couple of hours.[61]

9.18. Dr Dhillon, the anaesthetist at Mrs D'Agostino's operation on the 25th March, also expressed the view that Mrs D'Agostino had needed aggressive resuscitation. However, regardless of whether after a couple of hours of resuscitation her condition had improved or not, he believed surgery probably should have been undertaken after that time. Like Dr Richards, Dr Dhillon suggested that one's goal is to get the patient into as good a condition as one can and then to conduct the surgery.

9.19. Professor Pepperell believed that resuscitation over a period of 12 to14 hours with fluids and antibiotics could not have been expected to improve Mrs D'Agostino's condition. He believed that the resuscitation had no real meaningful effect on her pulse rate for instance.[62] Asked as to how long fluid replacement and antibiotic therapy might ideally take, he said that he would have thought somewhere around 2 to 3 hours maximum.[63]

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[59] Transcript, page 216
[60] Transcript, page 217
[61] Transcript, page 307
[62] Transcript, page 547
[63] Transcript, page 550

9.20. Dr Rieger, who agreed that resuscitative efforts were necessary, stated that in his view Mrs D'Agostino ideally required a short period of resuscitation in order to put her in the most favourable circumstance to endure anaesthetic and further abdominal surgery. Ideally this would have occurred some hours after that assessment had been made. He said 'in an ideal world' Mrs D'Agostino would have gone to theatre either in the late hours of the Saturday night or the early hours of the Sunday morning.[64]

9.21. Not one of the witnesses, apart from Dr Grant, expressed the view that it was in any way necessary for surgery to be postponed until the following morning. Dr Dhillon expressed the view that once it was assumed that the sepsis was caused by leaking faecal content into the abdomen, the best course would have been to aggressively treat Mrs D'Agostino, to manage her dehydration and then to perform the surgery to remove the source of infection, 'because she was not going to get better with the source of infection continually being present in the abdomen'[65]. Dr Dhillon also expressed the view that there was nothing in Mrs D'Agostino's clinical picture as it existed between 1:00am and 6:00am that would have precluded surgery taking place between those times. When asked by Counsel Assisting as to whether or not, say by 1:00am, Mrs D'Agostino had been sufficiently resuscitated for surgery, Dr Dhillon suggested that if by then her condition had not improved, then you would not expect it to further improve. Accordingly, at that point a decision had to be made to do something else than continuing resuscitation. I took Dr Dhillon to mean that the alternative would be immediate surgery. Dr Dhillon also referred to the need to take into account the possibility of a sudden deterioration notwithstanding the appearance of stability.[66] Dr Dhillon suggested that the possibility of deterioration was hard to predict.[67] Dr Dhillon suggested that if the patient's sepsis was not addressed and the source of infection not removed, then he believed that there would be some point in time when the patient would inevitably start deteriorating.

9.22. Professor Pepperell was of the view that Mrs D'Agostino's surgery ought to have been performed probably before midnight.[68] When asked by counsel for Dr Grant, Mr Harris QC, as to whether the plan to resuscitate until surgery the following morning would have been acceptable in any circumstance, Professor Pepperell expressed the

[64] Transcript, page 711
[65] Transcript, page 351
[66] Transcript, page 356
[67] Transcript, page 356
[68] Transcript, page 574

view that such a plan would not be acceptable when the patient's pulse rate was as high as it was, when there was evidence of peritonitis and when Mrs D'Agostino was markedly febrile. In those circumstances everything was pointing to the need for surgery to have been performed on the Saturday evening.[69] Professor Pepperell expressed the view that once an anaesthetist was happy to anaesthetise for the purpose of surgery, there was no reason to delay that surgery.[70] When asked as to whether Mrs D'Agostino's ability at around 9:00pm or 9:30pm to communicate with Dr Grant without difficulty might legitimately have influenced a clinical judgement about whether or not the patient's surgery could wait until the following day, Professor Pepperell said:

> 'You could make that assessment at that time but, as I indicated many times today, when someone has got a pulse rate that's as fast as hers, a respiratory rate that's had increased, she's febrile, she's cyanosed, she's not very well, you can't ignore that fact, even if she is able to discuss things with her and is orientated in time and place.'[71]

9.23. Mr Harris QC asked Professor Pepperell to consider a scenario that referred to Mrs D'Agostino's observations throughout the night including pulse rate and blood pressure as well as Mrs D'Agostino's clinical picture, that may have provided some indication of improvement and whether in the light of all that Mrs D'Agostino was a patient who could have been managed with intravenous resuscitation and been safely operated on during the following morning. Professor Pepperell responded as follows:

> 'I think it's clearly difficult because, in fact, there was a change in her condition as a slight improvement, certainly not a massive improvement overnight, but certainly there was a slight improvement that occurred at the time. The basic management of probable bowel perforation is make your diagnosis and deal with it. Certainly the earlier you get on to it the more likelihood you'll have in being successful in not having such a sick patient, but it doesn't always work. Often they are profoundly ill even when you operate fairly early. If you made a diagnosis of almost certain bowel perforation the answer is you should get on and do it and not spend hours observing the patient, that will only make things potentially much worse, even if there was some initial improvement.'[72]

9.24. Dr Rieger believed that as far as Mrs D'Agostino's resuscitation was concerned there had been little positive change overnight.[73] As indicated earlier, he was of the view that Mrs D'Agostino could have gone to theatre in the late hours of the Saturday night or the early hours of Sunday morning. [74] He expressed the view that there was nothing to be gained by delaying the procedure beyond a few hours of appropriate

[69] Transcript, page 574
[70] Transcript, page 575
[71] Transcript, page 576
[72] Transcript, page 578
[73] Transcript, page 708
[74] Transcript, page 711

resuscitation.[75] In this context, he suggested that one would have to consider the risk of deterioration. He suggested that patients can begin to deteriorate while they are septic and waiting for an operation. He suggested this was a recognised risk. Dr Rieger did agree that the timing of surgery would depend upon the response to resuscitation. He suggested that if Mrs D'Agostino had shown improvement as a response to resuscitation, exemplified by her pulse going down, by her blood pressure going up and if she had looked better, then one might justify performing the operation the next morning. However, Dr Rieger was of the view that in Mrs D'Agostino's case, her condition had in reality not changed despite resuscitation. One did not see a change in her observations, she still remained sick and she had remained so overnight until the following morning. He said 'so you would have to say that that did not help her clinical course by deferring and waiting for that operation to occur.'[76]

9.25. Dr Rieger expressed the succinct statement that he would have undertaken the surgery on the Saturday evening because Mrs D'Agostino was very unwell and needed an operation to make her better.[77]

9.26. Dr Rieger referred to a balancing act between on the one hand securing improvement in the patient up to the point where they are in the best possible condition to endure an anaesthetic and on the other hand guarding against the possibility of further deterioration of the patient. He referred to that as a fine balance.[78] In cross-examination Dr Rieger referred to the significance of Mrs D'Agostino's observations that included her cyanosis, her tachycardia, a high respiratory rate and low blood pressure. In this context Mr Harris QC asked Dr Rieger whether Dr Richards' and Dr Grant's view that Mrs D'Agostino was not profoundly or critically unwell could live with those observations, Dr Rieger said:

> 'The difficulty here is to try and assess how critically ill she is and how critically she needs to go to the operating theatre is a decision a practitioner makes that is not scientific. It's one of the art of medicine 'How crook is this person? How quickly do I need to get them to theatre?' To try and make it scientific and base it purely, say, on numbers with his observations and in some ways I am, but those observations are critically aberrant and quite abnormal and based on those observations I do think she is critically unwell. That's what - my opinion regarding those observations. She is not expressing perhaps that unwellness in herself and how she looks necessarily from the under - from the end of the bed, and 'a malaise' doesn't quite fit with those observations,

[75] Transcript, page 713
[76] Transcript, page 714
[77] Transcript, page 715
[78] Transcript, page 761

> is what you're implying. So - but I mean, I think critically they are still there. I think she's unwell.'[79]

9.27. To my mind the evidence overwhelmingly establishes the following facts all of which I find:

- Mrs D'Agostino required resuscitation before surgery.
- While there was some improvement in Mrs D'Agostino's condition as a result of resuscitation, the improvement reached a point during the night where no further improvement could reasonably have been anticipated.
- Once that point was recognised, there was nothing to be gained by delaying the surgery until the following morning. At a point in time after approximately 2 to 3 hours of resuscitation, a judgment could and should have been made that Mrs D'Agostino was as suitable as she was going to be for surgery.
- It was at that time that surgery could and should have been arranged and then have taken place. I accept the evidence described above that Mrs D'Agostino should have undergone her operation before midnight on the Saturday night or in the early hours of the Sunday morning at the latest.
- The delay in conducting Mrs D'Agostino's surgery exposed Mrs D'Agostino to the risk of further deterioration to a point where surgery was not only immediately urgent but was very likely to jeopardise her life in and of itself.
- By the time Mrs D'Agostino underwent the further surgical procedure her condition had descended to a point where her life was being placed in jeopardy by that very procedure.
- The acute deterioration that Mrs D'Agostino experienced around 6:00am on the Sunday may have been avoided if Mrs D'Agostino had been operated on at a time prior to that.

9.28. In my view the evidence demonstrates that Dr Grant underestimated the need for Mrs D'Agostino to undergo surgery during the course of the night and formed an erroneous judgement that her surgery could be delayed until the following morning. Further, in my view the evidence also demonstrates that Dr Grant failed to appreciate

[79] Transcript, page 763

fully and adequately take into account the risks that might be posed to Mrs D'Agostino as a result of delaying her surgery. In reaching those findings, I have again reminded myself that in all of the circumstances findings of that nature should not be made lightly or on unconvincing evidence.

9.29. No medical practitioner examined Mrs D'Agostino after Dr Grant examined her. She was at all times thereafter in the hands of a registered nurse. This observation is not to be taken as any criticism of the Western Hospital or its nursing staff. The plain fact of the matter is that Mrs D'Agostino would have been better looked after in a clinical setting that could have provided her with constant review by a medical practitioner such as would have occurred in an ICU. Dr Grant does not appear to have sought any advice about the timing of surgery and indeed was offered none. In that regard, she relied wholly upon her own judgment. Had she had recourse to a second opinion, there is little doubt that a view would have been reached that Mrs D'Agostino should undergo surgery during the course of the night and at a time before she experienced her acute deterioration the following morning.

10. Could Mrs D'Agostino's death been prevented by earlier surgery?

10.1. This is an issue that is not free from difficulty. In his report, Professor Pepperell states that even if Mrs D'Agostino had been operated on even twelve hours earlier than it actually occurred, it may not have made any difference to the ultimate outcome, although in his view clearly the delay was potentially disadvantageous.[80] In his oral evidence, Professor Pepperell referred to what in any event and even in an intensive care setting would have been a complicated and perilous post operative course for Mrs D'Agostino having regard to her diagnosis of faecal peritonitis and the complications to which it could give rise.

10.2. However, there is one matter that in my view requires serious consideration when assessing Mrs D'Agostino's chances of survival if an earlier operation been undertaken. The evidence very much suggested that by the time Mrs D'Agostino underwent her surgery, she was in a condition that was the worst it had been at any time since her admission to the Western Hospital on the Saturday evening. Her condition acutely took a turn for the worse at approximately 6:00am. I have already referred to the evidence of Dr Dhillon regarding the dangers of surgery posed by her

[80] C21a, paragraph 11

condition at that time. All of this means that if Mrs D'Agostino had been operated on at a point in time during the night, and at a point before her acute deterioration occurred, she would have been in a better clinical state to have tolerated an anaesthetic and the surgical procedure. It is impossible to say that in those circumstances Mrs D'Agostino would still have experienced a cardiac arrest during the course of her surgery. In this regard I note the evidence of Professor Pepperell that an earlier performed operation would have meant that Mrs D'Agostino 'was less likely to have died during the procedure.'[81] I acknowledge that the evidence does not, on the other hand, allow for a firm conclusion that her cardiac arrest would necessarily have been avoided if earlier surgery had taken place.

10.3. If Mrs D'Agostino had been operated on earlier, the eventual outcome is uncertain. However, it is difficult to escape the conclusion that her chances of surviving the operation would have been significantly better if she had been operated upon in a much more favourable clinical state.

11. Recommendations

11.1. By virtue of section 25(2) of the Coroners Act 2003 the Court may add to its findings any recommendation that might, in the opinion of the Court, prevent, or reduce the likelihood of, a recurrence of an event similar to the event that was the subject of the inquest.

11.2. I make the following recommendations:

(1) That these findings be drawn to the attention of the chief executive officers or equivalent of the Department of Health, the South Australian branch of the Australian Medical Association and the South Australian Medical Board.

(2) That the said chief executive officers or their equivalent draw to the attention of members of the medical profession the findings in this matter.

(3) That the said chief executive officers or their equivalent advise members of the medical profession that in cases similar to this where faecal peritonitis is suspected in a patient, they should have regard to the following matters:

(a) the need to avoid or minimise delay in surgery,

[81] Transcript, page 543

(b) the need to identify a point in time at which optimal resuscitation has been achieved and at which further resuscitation would be futile,

(c) the risk of acute deterioration in an otherwise apparently stable patient,

(d) the need to consider a worst case scenario,

(e) the need to consider admitting or transferring the patient, prior to surgery, to a hospital that has an intensive care unit,

(f) the need to consider obtaining a second medical opinion as to the appropriate clinical management of the patient.

Key Words: laparoscopy, laparotomy, peritonitis

In witness whereof the said Coroner has hereunto set and subscribed his hand and Seal the 30th day of December, 2010.

Deputy State Coroner