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 5th, 6th, 7th, 9th, 16th and 22nd days of December 2011, the 6th day of February 2012, the 17th, 18th and 19th days of July 2012, the 19th day of March 2013 and the 8th day of April 2013, by the Coroner's Court of the said State, constituted of Anthony Ernest Schapel, Deputy State Coroner, into the death of Terrill Anthony May.

The said Court finds that Terrill Anthony May aged 69 years, late of 103 Morphett Terrace, Kadina, South Australia died at Kadina, South Australia on the 3rd day of April 2009 as a result of subarachnoid haemorrhage with contributing cardiomegaly. The said Court finds that the circumstances of his death were as follows:

1. Introduction and cause of death

1.1. Terrill Anthony May was 69 years of age when he died. On the evening of Friday 3 April 2009, he was found dead on the floor of his bedroom at his premises in Kadina. Mr May had last been seen alive shortly before 6pm that day. The last person to see him alive was a woman by the name of Julie Smith[1]. Ms Smith last saw Mr May when he was cleaning up his shed. She had been with Mr May on and off for most of that day. He had seemed fine during the day but had indicated that he felt a bit flat. As will be seen during the course of these findings, Mr May had been experiencing some health difficulties in the days prior to his death including hypertension (high blood pressure) and headaches for which he had sought medical assistance.

[1] Exhibit C4a

1.2. Mr May had a previous medical history that included prostatic carcinoma and high blood pressure.

1.3. A post-mortem examination was conducted in respect of Mr May by Dr Neil Langlois who is a forensic pathologist at Forensic Science South Australia. In his post mortem report Dr Langlois expresses the cause of death as subarachnoid haemorrhage with contributing cardiomegaly[2]. I find that to have been the cause of Mr May's death.

1.4. In his report Dr Langlois explains Mr May's cause of death. A subarachnoid haemorrhage is bleeding over the surface of the brain. In Mr May's case the bleeding had arisen from a ruptured aneurysm. An aneurysm is an abnormal ballooning arising from a branch point of the arteries at the base of the brain. The sudden release of blood over the brain from the rupture of an aneurysm can cause very rapid death due to increased pressure inside the head and the irritant effect of blood over the region of the brainstem causing disruption of the vital centres that control breathing and circulation. High blood pressure is an important factor in the formation of an aneurysm as the pressure of blood causes the balloon like aneurysm to form at the site of the defect in the elastic layer of the artery. In Mr May's case a neurological examination revealed evidence of previous subarachnoid blood of at least two to three days in age. Features of the subarachnoid blood suggested that it was consistent with Mr May's history of severe onset headaches some two weeks prior to death. Dr Langlois explains that a small 'warning bleed' is not uncommon in patients who suffer subarachnoid haemorrhage. It seems clear that this is precisely what Mr May had experienced in the period prior to the fatal haemorrhage.

1.5. Cardiomegaly refers to the enlargement of the heart. Such enlargement has as its most common cause the presence of raised blood pressure during life. The presence of cardiomegaly is stated to be a contributing factor in Mr May's death. However, by far and away the more substantial cause of his death is the subarachnoid haemorrhage.

2. Reason for Inquest

2.1. The sad fact about Mr May's death is that it was entirely preventable. Indeed, the Inquest established that his death was preventable at any number of levels. Mr May had sought treatment for, and diagnosis of the origin of, his headaches in the weeks

[2] Exhibit C2a

prior to his death and during that period there were a number of missed opportunities to have diagnosed and treated his condition. I will come to the details of that presently, but it is as well to refer here to the evidence that demonstrated that had Mr May's brain aneurysm been recognised at the Royal Adelaide Hospital (RAH) where he had presented a fortnight prior to his death, as it ought to have been based upon radiological imagery taken the day before, medical intervention could have saved his life.

2.2. Professor Brian Brophy is the Director of Neurosurgery at the RAH. He has held that position for seven years. Professor Brophy is a neurosurgeon of considerable experience. Although Professor Brophy was not directly involved in Mr May's presentation and assessment at the RAH, he gave oral evidence in the Inquest and, based upon the radiological imagery that ought to have been available to the RAH at the time of Mr May's presentation there, his opinion was that Mr May would have had a '*good likelihood of surviving*' if intervention had then promptly taken place either by way of endovascular means or with open surgery and clipping of the aneurysm[3]. I accept that evidence.

2.3. In this Inquest the Court examined the circumstances in which Mr May sought medical advice, diagnosis and treatment, both from general practitioners and hospitals, the circumstances in which Mr May came to be subjected to radiological examination, the circumstances in which important radiological results went for the most part inadequately considered and the circumstances in which the possibility that Mr May might ultimately suffer a fatal brain haemorrhage failed to be identified.

3. Mr May seeks medical treatment on the Yorke Peninsula

3.1. Mr May lived at his home at Kadina. On Sunday 8 March 2009, when at home, Mr May had suddenly developed a severe headache. He had originally presented at the Wallaroo Hospital, had been observed there but had then been discharged, all on the same day. On Friday 13 March 2009, Mr May attended at the Moonta Medical Centre and saw Dr Seghal. His systolic blood pressure was significantly elevated at 211. Dr Seghal surmised that Mr May's headache was connected to his high blood pressure, so he prescribed Coversyl. On the following day, Saturday 14 March, Mr May sought treatment from Dr Benny Tang, another practitioner at the Moonta

[3] Transcript, pages 179-180

Medical Centre, and as a result was admitted to the Moonta Hospital. Mr May described his original severe headache as the worst headache he had ever had. He also said that he had experienced photophobia, which is sensitivity to light, nausea and some neck stiffness. Mr May indicated to clinicians that since the previous weekend he had been bed bound with a constant headache that he described as still being 4 to 5 out of 10 on a pain scale. He described an inability to sleep at night from the pain. He had no neurological deficits.

3.2. Mr May was observed at the Moonta Hospital for a number of days and a plan was made for him to be sent to Adelaide by ambulance for radiological assessment. A Moonta Hospital nursing note of 16 March 2009 records a booking for Mr May to undergo a 'CT scan of the head with contrast' for Tuesday 17 March 2009 at 2pm[4].

3.3. The evidence supports the conclusion which I reach that Mr May's presentation on 13 and 14 March 2009 and in the days before was reflective of what the pathologist, Dr Langlois, describes as a warning bleed not uncommon in patients suffering a subarachnoid haemorrhage. In addition, it is clear that the source of Mr May's haemorrhage was the aneurysm that would ultimately rupture and cause his death. Mr May's symptomatology of the worst headache he had ever experienced together with photophobia and some neck stiffness is indicative of such. It is said that this in fact is classic symptomatology of subarachnoid haemorrhage.

3.4. Mr May was conveyed by ambulance to Adelaide on the following Tuesday, 17 March 2009. That afternoon he underwent radiological scans at Dr Jones and Partners, radiologists. The first scan that Mr May underwent consisted of a CT scan of his brain without contrast. At that point the possibility of a subarachnoid haemorrhage was rightly a matter for consideration by the radiologists. The clinical presentation described in the ensuing radiological report consisted of persistent headache of sudden onset with a query that its origin was possibly a subarachnoid haemorrhage. The CT was conducted without contrast and therefore, although it might identify a subarachnoid haematoma, would be unlikely to identify an existing vascular irregularity, such as an aneurysm, as being the source of an intracranial bleed. This CT was reported on by Dr Chryssidis and the report has been electronically signed at 2:10pm on Tuesday 17 March 2009. The salient feature of the report is as follows:

[4] Exhibit C10, page 11

> '***No evidence of subarachnoid haematoma. Given the patient is at least 1 week post-onset of headaches, any possible subarachnoid blood would no longer be discernible. Evaluation for subarachnoid blood at this point would be best assessed with either a lumbar puncture or MRI.***' [5]

This meant that a subarachnoid haemorrhage had not been eliminated, having regard to the possibility that if the bleed had occurred over a week before the CT was conducted, radiological evidence of it might no longer be available. A lumbar puncture is an invasive measure designed to enable sampling and examination of the cerebrospinal fluid for the presence of blood. An MRI is magnetic resonance imaging which is another type of imaging modality.

3.5. This report was made available to Mr May who was at that time accompanied by his daughter Ms Chichi May who resided in Adelaide.

3.6. I am not certain why a CT without contrast was conducted in the first instance when the Moonta Hospital note in Mr May's clinical record stated that a CT head with contrast had been booked[6]. It may well be that a CT without contrast was preferred in the first instance in the hope that it might be diagnostic, thereby obviating the need to inject contrast. In any event the CT without contrast did not demonstrate any relevant abnormality, either of subarachnoid bleeding or the presence of an aneurysm.

3.7. In circumstances I will describe presently, that same afternoon Mr May also underwent a CT angiogram at Dr Jones and Partners. A CT angiogram is conducted with the injection of contrast and is undertaken in the hope of eliciting evidence of pathology such as an aneurysm within the brain vascularity, should such an aneurysm exist. This CT angiogram identified an aneurysm. The Dr Jones and Partners report signed by Dr James Harding purports to have been electronically signed at 1:01pm on 18 March 2009. The conclusion expressed in the report is as follows:

> '**CONCLUSION:** 6mm aneurysm arising from the inferior aspect of the anterior communicating artery. In the current clinical context urgent neurosurgical opinion is suggested.
>
> Results telephoned to Dr Tang.' [7]

[5] Exhibit C9
[6] Exhibit C10, page 11
[7] Exhibit C9

3.8. I pause here in the narrative to observe that Dr Grace Scott who was the neuropathologist who at Dr Langlois' request examined Mr May's brain as part of the post-mortem examination, concluded that the aneurysm identified by way of the CT angiogram of 17 March 2009 on the anterior communicating artery corresponds to the aneurysm that she identified within Mr May's brain. On post-mortem examination of the brain this aneurysm had a defect in its wall consistent with a site of rupture. The aneurysm was interpreted as the site of origin of the subarachnoid haemorrhage. No other aneurysms were identified on the basal arteries either on the angiogram or at post-mortem. No other sources for the subarachnoid haemorrhage were identified on post-mortem examination. The subarachnoid haemorrhage occurred with greatest severity in the region of the aneurysm. I accept Dr Scott's evidence. I find that a bleed from the aneurysm identified in the CT angiogram of 17 March 2009 was responsible for Mr May's then current symptomatology and that the aneurysm was in the event responsible for his ultimate fatal subarachnoid haemorrhage.

3.9. Mr May was not provided with a copy of the CT angiogram report that described the presence of an aneurysm, nor with the CT imagery. I infer that the report was not yet in existence at the time that Mr May was at Dr Jones and Partners. However, on the morning of 18 March, the results of the CT angiogram were telephoned to Dr Tang who had been identified by Dr Jones and partners, the radiologists, as Mr May's general practitioner. This communication was in accordance with the recommendation within the ultimate report that urgent neurosurgical opinion be sought. The patient's general practitioner would arrange this. Dr Harding who would sign the report, gave evidence during the Inquest and confirmed that he telephoned the results through to Mr May's general practitioner. This is also confirmed by Dr Tang himself.

3.10. Dr Benny Tang gave oral evidence in the Inquest. He told the Court that on Tuesday 17 March 2009 he received a call from Dr Chryssidis of Dr Jones and Partners who was the radiologist who had prepared the report that related to the original CT without contrast. Dr Chryssidis told him that the CT scan had been normal, but that the clinical history was suggestive of subarachnoid haemorrhage. They discussed the desirability of performing a CT angiogram and that was agreed to. As seen the CT angiogram was then carried out. It will be observed that this measure overtook the radiologist's original recommendation, as expressed in the CT without contrast report,

that the patient next undergo a lumbar puncture or MRI. The following day, Wednesday 18 March 2009, Dr Tang received a phone call from another radiologist at Dr Jones and Partners. The reasonable inference is that that was Dr Harding. The radiologist told Dr Tang of the results of the CT angiogram and in particular that it had demonstrated an aneurysm described as being 5.2mm in size. This is the aneurysm mentioned in the CT angiogram report of that same day wherein it is mentioned that there was an aneurysm of 6mm. The difference in the description of the precise size of the aneurysm is immaterial.

3.11. That morning Dr Tang telephoned Mr May to let him know the results of the CT angiogram. Dr Tang told the Court that he would have told Mr May that the CT angiogram showed the aneurysm and that it was probably the likely source of his difficulties. He suggested that he would have told Mr May that he likely did have a subarachnoid haemorrhage. He advised Mr May that he should present to the RAH for review. Mr May, of course, was not in possession of the CT angiogram report itself. All he had at that point was the earlier report which related to the CT without contrast and which demonstrated no abnormality.

3.12. That morning Dr Tang also telephoned the RAH neurosurgical registrar to let that person know that Mr May would present at the RAH. Dr Tang could not remember the exact details of his discussion with the neurosurgical registrar but he believed that he would have discussed Mr May's presentation and told him the result of the CT angiogram.

3.13. In the expectation that Mr May would proceed to the RAH Emergency Department that day, Dr Tang prepared a referral letter for the benefit of the RAH clinical staff. He also expected that the referral letter would, as it were, be married up with Mr May upon his presentation. In the event this would not take place. The referral letter explained in succinct detail Mr May's presentation over the previous 10 days. It referred to the aneurysm that had been radiologically identified and it postulated the presence of a likely small subarachnoid haemorrhage. The letter mentioned the size of the aneurysm as being 5.2mm. The letter also referred to Dr Tang's earlier telephone discussion with the neurosurgical registrar and the fact that Mr May would present to the Accident and Emergency Department of the RAH for assessment. The letter was faxed from the fax machine at the Moonta Medical Centre to a fax machine at the Accident and Emergency Department of the RAH at 11:59am. This is

demonstrated by Telstra records[8]. It is also supported by the time stamp on the document itself. The fax machine belonging to the number to which the letter was faxed was situated in the triage area of the RAH ED where Mr May would present within the hour.

3.14. In his evidence before the Court, Dr Tang explained his expectations in the following terms:

> 'I expected Mr May to be seen in the emergency department. I expected the doctor who saw him to call the neurosurgical registrar. In my mind I'd done everything. I've given a diagnosis, I've confirmed it with a CT scan, I've spoken to a neurosurgical registrar who is aware of the case. I've faxed a referral to the emergency department with all those findings. In my mind there really wasn't much for the emergency department to do with that information.
>
> …
>
> I thought - well, having worked in an emergency department I thought the case was quite simple. The general practitioner had done everything, it was just a matter of calling the neurosurgical registrar to let him know that this patient had presented with a history and with CT findings and that CT cerebral angiogram findings were 5.2 mm aneurysm and for him to come and have a look at the patient.' [9]

In short, Dr Tang did not expect the Emergency Department to repeat the entire diagnostic process that had occurred to date, but simply to refer Mr May to the Neurosurgery Department[10].

3.15. Naturally, to a substantial degree Dr Tang's expectations hinged upon the ability of the RAH to align Mr May with the referral letter and with Dr Tang's verbal discussion with the neurosurgical registrar. As things transpired, however, when Mr May presented at the Emergency Department of the RAH it was as if he had walked in unannounced off the street, and the only information that Emergency Department clinical staff worked off was Mr May's own clinical picture and the original Dr Jones and Partners CT scan without contrast demonstrating no relevant abnormality.

4. <u>Mr May's presentation at the RAH Emergency Department</u>

4.1. Mr May presented with his daughter, Chichi May, at the Emergency Department of the RAH where he was triaged. The admission time recorded on the admission form[11]

[8] Exhibit C20
[9] Transcript, page 34
[10] Transcript, page 35
[11] Exhibit C12, page 67

is 1:05pm. Other documentation suggests that Mr May arrived at 12:36pm or 12:41pm. Certainly Mr May was present at the triage counter before 1pm. It is clear and I so find that barring some unusual circumstance of which in any event there is no evidence, such as the RAH ED fax machine not printing the document, that the ED triage area staff should have had access to the faxed referral letter at the time of Mr May's arrival. The details on the admission form that describe Mr May's full name and address at Kadina were described on Dr Tang's referral letter. The date of birth on both documents is the same. There ought to have been no difficulty in identifying the referral letter as belonging to the presenting patient had anyone attempted to do so. The referral letter, however, would remain separate from Mr May for the duration of his attendance at the RAH. He was there from the early afternoon until well into the evening when he was discharged at 8:52pm[12].

4.2. Ms Chichi May provided a statement to police in respect of this matter[13] and gave oral evidence. Ms May's evidence makes it plain that her father understood the reason he needed to attend the RAH. Ms May's statement suggests that he understood that findings that gave rise to suspicion of a brain haemorrhage had been picked up on radiological scans. I am not as certain whether Mr May necessarily had specifically taken on board that that there was an aneurysm or that he said as much to his daughter after he spoke to Dr Tang on that morning. Ms May told the Court that when they arrived at the RAH Emergency Department and went to the window where members of the public report, they told the person on duty that her father had just received a call from his doctor and that he had been told to come straight to the Emergency Department at the RAH because he had an aneurysm[14]. However, the evidence as a whole that the word 'aneurysm' was actually used at that point is unconvincing. None of the triage documentation uses this word, and it is not used in any subsequently prepared documentation. In short, I am not convinced that the word 'aneurysm' was utilised at that time or whether it was simply a question of the fact of a possible brain haemorrhage being mentioned. There is no evidence that either Mr May or his daughter said anything to staff about a referral letter. I am not certain that either was aware of its existence.

[12] Exhibit C12c
[13] Exhibit C5a
[14] Transcript, page 533

4.3. Mr May and his daughter were asked to wait and in due course a doctor came to see Mr May. That doctor was Dr Sarah Ponce-Ng. Mr May was in possession of the report relating to the CT without contrast which by then had been overtaken by the result of the CT angiogram. Whether or not Dr Ponce-Ng was told about any other radiological evidence that had demonstrated a haemorrhage or an aneurysm, the fact of the matter was that the report in Mr May's possession did not demonstrate that. The report, however, to any reasonable medical practitioner could not have been interpreted as having excluded either a haemorrhage or an aneurysm.

4.4. Dr Ponce-Ng is a medical practitioner who in March 2009 was employed in the RAH Emergency Department as a resident medical officer. Dr Ponce-Ng attained her primary medical qualifications from a university in the Philippines in 2004. She came to Adelaide and took up her position at the RAH in November 2006. Her responsibilities within the Emergency Department of the RAH included the assessment of presenting patients, the taking of a history from the patient and the performance of a physical examination. Thereupon her responsibility was to form a provisional diagnosis and to formulate a management plan that might include blood investigations and/or radiological investigations. At that point in her career Dr Ponce-Ng was obliged to discuss her patients and management plans with either an Emergency Department registrar or an Emergency Department consultant. In particular Dr Ponce-Ng was not permitted to authorise or order CT angiograms, MRIs or MR angiograms.

4.5. Dr Ponce-Ng was aware of the existence of fax machines within the Emergency Department inside the treatment area and also in an area where the clerks are situated. In addition, she was aware that the staff in the triage and administration area had a fax machine. Dr Ponce-Ng was not aware of any process by which incoming facsimiles were reviewed including referral letters for patients who were expected to present at the Emergency Department. She said there was no clear cut rule about this. She did say that responsibility for incoming faxes would have rested with the clerks within the department. I am satisfied that the referral letter that had already been received in the Emergency Department from Dr Tang was never drawn to Dr Ponce-Ng's attention and she had no reason to believe that such a document even existed at the time she dealt with Mr May.

4.6. According to the RAH record, Dr Ponce-Ng saw Mr May at 1:05pm[15]. Dr Ponce-Ng made handwritten notes of her consultation. She noted that Mr May had been sent in by his general practitioner for persistent headaches over a period of 9 days with a query as to whether or not he was suffering from a subarachnoid haemorrhage. She noted the history of the sudden onset of his headache with its associated nausea and photophobia. She was aware of the presentation in the first instance at the Wallaroo Hospital, the persistence of the headache and the subsequent period of admission at the Moonta Hospital. Dr Ponce-Ng's note also refers to the report of the CT head scan of the day before that reported no material abnormality but which suggested a lumbar puncture or MRI for further evaluation. It is clear from Dr Ponce-Ng's written notation that she read the CT scan report in Mr May's possession. She was specifically aware of the fact, and noted it, that the scan had revealed no evidence of subarachnoid haematoma and so she must have also noted the rider that any possible subarachnoid blood would no longer be discernible on the CT imagery given that the patient was at least one week post onset of the headaches. There is no reference in Dr Ponce-Ng's note to any further imagery taken either on 17 or 18 March 2009 and in particular, no notation of the existence of a CT angiogram or its report. There is no notation in her notes as to the existence of any referral letter from Dr Tang, nor any reference to any information that may have been imparted verbally by Mr May or his daughter to the effect that either a subarachnoid bleed or an aneurysm had to that point been identified.

4.7. Dr Ponce-Ng noted her impression within the clinical record as a '? SAH'[16]. In her evidence before the Court Dr Ponce-Ng stated that she could not recall whether the patient had actually verbalised the possible existence of the subarachnoid haemorrhage or whether her note had emanated from his CT scan report. In my view it was plainly the latter as the CT report uses exactly the same expression, namely '? SAH'. Although to Dr Ponce-Ng Mr May seemed clinically well, she thought it was still possible that he may have suffered a subarachnoid haemorrhage. She also deduced that doctors who had already seen Mr May had been entertaining the same suspicion. She did not recall Mr May using the word 'aneurysm' at any time. She said that if it had been suggested that Mr May had an aneurysm, she would have noted this and discussed it with her consultant. She would also have discussed it with the

[15] Exhibit C12c
[16] SAH refers to a subarachnoid haemorrhage

Neurosurgery Department. I am not satisfied that the word 'aneurysm' was used at any time during this consultation.

4.8. Dr Ponce-Ng told the Court that at that time her understanding was that neither an MRI nor a lumbar puncture, the two possible measures that the CT report had recommended, would have identified an aneurysm. She discussed the matter of Mr May with the attending consultant, Dr Pandit, and a management plan was formulated to conduct an MRI of Mr May's head. Such a measure was undertaken later that day. It too would not demonstrate any relevant abnormality. The MRI report specifically referred to no intracranial haemorrhage being present and in particular that there was no subarachnoid haemorrhage evident. It stated that there was no intracranial aneurysm identified on limited views. An MRI is also a procedure that may be conducted with contrast. It was not conducted on this occasion with contrast. An MRI with contrast is usually referred to as an MR angiogram. In fact an MR angiogram would have been the more appropriate measure to have been conducted if one was looking for an aneurysm. There was a great deal of evidence adduced in the Inquest about the relative merits of CTs without contrast, CT angiograms and MRI as against an MR angiogram in terms of their respective abilities either to identify subarachnoid blood or an aneurysm. An MRI is said to have similar limitations to a CT without contrast insofar as either might not identify subarachnoid bleeding over a certain age and might not identify an aneurysm. Much of this evidence was somewhat otiose having regard to the fact that by the time the appropriate measure came to be considered within the RAH, there was already in existence imagery that demonstrated the existence of an aneurysm. All that can be said about the MRI that was conducted at the RAH was that it was superfluous, but if anything it represented another missed opportunity for diagnosis. An MR angiogram would have been the more appropriate procedure[17]. However, it is difficult to be critical of clinical staff at the RAH ED as an MRI was one of the possible measures recommended in the CT without contrast report, and they did not know that the recommendation had been superseded by the arrangement made between Dr Tang and the radiologists that a CT angiogram be undertaken, which arrangement had in fact by then been carried out.

4.9. Dr Sharad Pandit was a consultant physician in the Emergency Department at the RAH between 2002 and 2011. Dr Pandit graduated in India in 1984. He has a post

[17] Report of Emeritus Professor of Radiology, Michael R. Sage, Exhibit C18a

graduate degree in paediatrics. He also has a Fellowship of the American College of Emergency Medicine and a sub qualification in Paediatric Emergency Medicine. He has a Fellowship of the Australasian College of Emergency Medicine. Dr Pandit said that he recalled Mr May quite clearly[18]. Dr Pandit was working the morning shift on 18 May 2009. His shift concluded at 4pm that day. He was the Emergency Department consultant for that shift. Dr Pandit first became aware of Mr May's presentation in the Emergency Department through Dr Ponce-Ng. Dr Pandit told the Court that his involvement with Mr May occurred sometime between 2:30pm and 3pm that afternoon. Dr Ponce-Ng told him about Mr May's presentation of sudden onset severe headache and informed him that there had been CT scans and that the recommendation was for a further MRI. Dr Pandit examined Mr May who at that time did not have a headache. Mr May was in possession of the CT report of the previous day. To Dr Pandit, Mr May's presentation was consistent with subarachnoid haemorrhage. Dr Pandit, however, stated to the Court that, like Dr Ponce-Ng, he did not have access to the general practitioner's referral letter to which I have already referred. I accept that evidence. It is also clear that Dr Pandit did not have any knowledge of the existence of that letter. Dr Pandit stated to the Court that he was at a loss to explain why the fax was not seen that day. The only possible explanation he could proffer was that it had not arrived either at the triage area or within the administration clerk area, neither of which to the Court impresses as a sensible explanation and I reject those explanations as being in any way plausible[19].

4.10. Dr Pandit told the Court that he thought it possible that there might be in existence a CT angiogram. I am not certain why Dr Pandit thought that, other than from his own professional intuition. There does not appear to have been any information available within the Emergency Department to suggest that a CT angiogram had definitely taken place. Dr Pandit acknowledged in his evidence that a CT angiogram would have involved the patient being injected with contrast that involves an injection into the patient's arm. He therefore acknowledged that the patient himself would have recalled whether any such invasive procedure had occurred, and yet he did not think to ask Mr May whether that had occurred. Dr Pandit said that '*I did not think of it at that time*'[20]. Dr Pandit acknowledged that had he really wanted to know what procedures Mr May had been subjected to the day before, he should have asked that

[18] Transcript, page 82
[19] Transcript, page 99
[20] Transcript, page 107

question. Had that question been asked, and Mr May had indicated that he had undergone a radiological procedure that had involved an injection, it may have meant that efforts to contact the radiologists or the general practitioner for further information as to what diagnostic measures had taken place so far, efforts that I will describe presently, would have been all the more vigorous.

4.11. Dr Pandit was so impressed with the possibility that Mr May had actually undergone a CT angiogram that he asked Dr Ponce-Ng to telephone Dr Jones and Partners, radiologists, to see if any further radiological procedures had occurred in respect of Mr May. He also asked Dr Ponce-Ng to telephone Mr May's general practitioner in Moonta. The telephone numbers of both practices were readily obtainable. The letterhead of Dr Jones and Partners that appeared on the CT report bore a phone number, being 8309 2222. The phone number of the Moonta practice, 8825 2309, appeared on the triage documentation that had been raised when Mr May first presented.

4.12. About 15 minutes later, Dr Ponce-Ng reported that she had been unable to obtain any further information from Dr Jones and Partners and had not been successful in reaching the Moonta practice. According to Dr Pandit, Dr Ponce-Ng told him that she had attempted to telephone the number on the Dr Jones and Partners letterhead but that they had no record of the patient having had a CT scan. Of course this information was even at that point demonstrably incorrect insofar as Dr Pandit had Mr May's copy of a Dr Jones and Partners report that illustrated that Mr May had undergone a CT without contrast the day before. In her evidence Dr Ponce-Ng stated that she could not recall any instruction by Dr Pandit to telephone Dr Jones and Partners for further information, although she did not in terms deny that she had been so asked. In any event Dr Ponce-Ng claims that she has no recollection of any attempt made to obtain further information from Dr Jones and Partners. Ms Michelle Rathjen is the Administration Manager of Dr Jones and Partners. She provided a statement verified by affidavit to the Inquest[21]. The statement of Ms Rathjen in my opinion renders it highly unlikely that an inquiry made of the number 8309 2222 would not have borne fruit. On her evidence it is difficult to envisage a sensible reason why sufficiently persistent attempts by an emergency department practitioner to obtain information in respect of a patient would have been unsuccessful. This

[21] Exhibits C19 and C19a

would be all the more so if the existence of a report from Dr Jones and Partners that had been compiled in the previous 24 hours was pointed out to them. I am satisfied that Dr Pandit did instruct Dr Ponce-Ng to telephone Dr Jones and Partners and that Dr Ponce-Ng reported that she had been unsuccessful in obtaining any further information from that practice. I am further satisfied that had sufficiently persistent attempts been made to obtain information from Dr Jones and Partners it would have been established that Mr May had undergone a CT angiogram in addition to the CT without contrast. There is no doubt that by the time Mr May was in the Emergency Department of the RAH the results of that CT angiogram were in, which further satisfies me that had proper attempts been made of Dr Jones and Partners to obtain relevant information, the fact that Mr May had radiologically been diagnosed with an aneurysm would have been made known to Dr Ponce-Ng and Dr Pandit. However, I am not satisfied that adequate attempts were made to obtain relevant information from Dr Jones and Partners.

4.13. Dr Pandit told the Court that Dr Ponce-Ng reported that there had been no answer when she had attempted to telephone the general practitioner at Moonta. In her evidence Dr Ponce-Ng acknowledged that she had been instructed by Dr Pandit to telephone the general practitioner. She said that she had been asked to '*obtain more collateral history*' from the general practitioner, meaning:

> 'Nothing specific, just to see what the history or story the GP would be able to tell us or any additional information that he would be able to tell us.' [22]

She told the Court that she tried to telephone the general practitioner's clinic using the number on the patient's Emergency Department documentation[23]. The number in question was 8825 2309 which is indeed the Moonta Medical Centre practice number. She said that she attempted on at least three occasions over a period of an hour, although she acknowledged that it may have been over a period as short as 15 minutes which is the timeframe over which Dr Pandit said Dr Ponce-Ng came back to him with information about her attempts[24]. Dr Ponce-Ng said there was no answer on all attempts. The telephone had appeared to ring on each occasion. Her impression was that it had rung out after 2 or 3 minutes. She did not obtain the engaged signal and was not transferred to voicemail. She reported to Dr Pandit that she had been unable

[22] Transcript, page 423
[23] Specifically Exhibit C12, page 25
[24] Transcript, page 424

to make contact with the general practitioner. It will be observed that the alleged attempts to ring the Moonta Medical Centre occurred after 2pm and during the course of a Wednesday afternoon. Neither the instruction to make these enquiries nor the results of any attempts to make these enquiries were recorded in any of the RAH clinical notes. Dr Ponce-Ng had no recollection of Dr Pandit asking her to make any further attempt to call the general practitioner once she had reported to him that she had been unable to do so.

4.14. To my mind it is intrinsically unlikely that persistent attempts to call a medical practice in the middle of a Wednesday afternoon would all have been unsuccessful. Moreover, there is no evidence to support Dr Ponce-Ng's assertions that she made any attempt to call the general practitioner's office at Moonta other than her self-serving report to Dr Pandit. The Telstra records for the telephone number 8825 2309 for 18 March 2009 do not reveal any incoming call, failed or otherwise, from a number consistent with having originated from the RAH Emergency Department[25]. It is said that failed connections, be they by reason of calls being unanswered or by virtue of all lines being engaged, should be included within the record. I was not wholly convinced that this evidence in and of itself demonstrated that Dr Ponce-Ng did not make any attempt to call the Moonta practice, but the fact remains that her assertions are not supported by phone records.

4.15. At the material time Ms Sheila Cranwell was the Practice Manager of the Moonta Medical Centre. Ms Cranwell gave oral evidence in the Inquest. She was employed in the practice for a total of 13 years, 10 of which were as a receptionist. The effect of her evidence is that it is highly unlikely that repeated and persistent attempted calls to the Moonta practice, such as those that Dr Ponce-Ng asserted she had made, would have gone unanswered. Ms Cranwell had never known of any such unsuccessful attempt. Of course such failed attempts would not necessarily be drawn to the attention of administrative staff, but one would have expected that over a period of 13 years at least one such instance would have been drawn to Ms Cranwell's attention.

4.16. Dr Ponce-Ng's evidence was on oath. She is supported to the extent that Dr Pandit confirmed in his evidence also on oath that Dr Ponce-Ng had come back to him and had reported that she had attempted to telephone the general practice but had been unsuccessful. I do not know whether Dr Ponce-Ng rang a wrong telephone number or

[25] Exhibit C25

simply made no attempt at all. What to my mind is certain is that there was a more than adequate opportunity that afternoon for her to have successfully made contact with the general practice if she had duly persisted either at her own initiative or as instructed by Dr Pandit. There was in my opinion a lack of due persistence and if a lack of success in contacting the general practice occurred, it was because of a lack of such persistence.

4.17. There is no evidence that Dr Ponce-Ng or anyone else endeavoured to contact the neurosurgical registrar on call during that afternoon. Dr Ponce-Ng told the court that she did not make any such attempt. Mr May did not tell her that Dr Tang had spoken to the neurosurgical registrar that day[26].

4.18. Mr May underwent the MRI scan later that day. The scan did not reveal any material abnormality, but it too did not exclude the presence of an aneurysm. Mr May was discharged at 8:52pm. Dr Ponce-Ng prepared a discharge letter[27] addressed to Dr Tang at Moonta. It referred to Mr May's clinical presentation at the RAH and also to the MRI result as not demonstrating any subarachnoid haemorrhage or intracranial bleeding. The letter was silent as to what the MRI report had said about the lack of evidence of aneurysm. In a discrete paragraph the discharge letter states as follows:

> 'The diagnosis was HEADACHE, CAUSE UNKNOWN OR NOT SPECIFIED'

This was, in reality, no diagnosis at all and certainly not one that any reasonable medical practitioner with knowledge of the contents of the CT angiogram report could sensibly have entertained. In short, it failed to identify anything other than that which was already known. The discharge letter also advised that Mr May had been discharged home with analgesia as required and that he had been advised to follow-up with Dr Tang should his symptoms persist. Following his discharge Mr May ultimately made his way back to his home at Moonta. He presented to the Moonta Medical Centre on Friday 20 March 2009. It appears that this presentation was a routine appointment not of itself connected to Mr May's recent complaints of headache. I deal with this presentation in the next section.

5. Mr May's presentation to the Moonta Medical Centre on Friday 20 March 2009

[26] Transcript, pages 429-430
[27] Exhibit C12, page 27

5.1. Dr Tang gave evidence that on Friday 20 March 2009 Mr May telephoned him. He sounded puzzled that he had been discharged from the RAH two days earlier. Dr Tang noted that Mr May had a routine appointment to see Dr Sehgal that afternoon. As it happened, Mr May had forgotten about that appointment. Dr Tang suggested that he ask Dr Sehgal for review of the RAH discharge letter. Dr Tang himself had by this time seen the discharge letter compiled by Dr Ponce-Ng. Dr Tang was asked in evidence whether the discharge letter had effectively ruled out a subarachnoid haemorrhage. He answered:

> 'Yes, it did. In a way it did; I wasn't quite sure. I thought the MRI was a better test.' [28]

He added that sometimes CT scans have reported abnormalities that on further testing have been revealed to have been nothing. It was pointed out to Dr Tang in evidence that Mr May had been discharged without a diagnosis to which Dr Tang suggested that sometimes a person may have unspecified headaches where it is very difficult to obtain a diagnosis. In any event he believed that serious pathology had been ruled out having regard to the MRI test. When asked as to what he thought the possible cause of Mr May's headaches had been, he indicated that he was not sure. Later in his evidence Dr Tang suggested that he had believed the diagnosis of an aneurysm as revealed by the CT angiogram to have been incorrect. He said this notwithstanding that the discharge letter failed to deal with that issue. It is true that the discharge letter also does not mention the existence of the CT angiogram, but this of course is not surprising given that neither the CT angiogram nor its report were made known to the clinical staff at the RAH Emergency Department on 18 March 2009. It did not occur to Dr Tang that he should contact the RAH to speak with the consultant about Mr May. When asked as to whether he should have done so he said:

> 'Well, as a doctor sometimes you make a diagnosis which is incorrect. I thought my diagnosis was incorrect.' [29]

It also did not cross his mind that the RAH had not received and taken into account his own referral letter. When asked as to whether an MRI to his knowledge had the capability of demonstrating an aneurysm, Dr Tang said that an MRI would have required approval from an emergency consultant who would have had significant input into the management of Mr May. In effect he said that he would have trusted

[28] Transcript, page 56
[29] Transcript, page 321

the expertise of emergency consultants and so therefore did not question any diagnosis.

5.2. Dr Tang believed that he had left the discharge letter on his desk for Dr Sehgal to see later that day.

5.3. Dr Sehgal also gave evidence in the Inquest. Dr Sehgal obtained his original medical qualifications at Shimla Medical College in India. He obtained his membership of the College of General Practitioners in Australia in 2003. He was a general practitioner at Moonta from 2004 until 2010. As of March 2009 Dr Sehgal told the Court that he had not gained any experience with patients who had, or were suspected of having, a subarachnoid haemorrhage. He had not treated any such patient. His only knowledge of the condition was through his medical training and further discussion. He did understand that a typical presentation of subarachnoid haemorrhage involved great discomfort, unwellness with a severe headache and severe neck stiffness.

5.4. The first occasion on which Dr Seghal saw Mr May was 13 March 2009 when Mr May had originally presented with his complaint of ongoing headaches. As alluded to earlier, it was on that occasion that Mr May had been prescribed Coversyl for hypertension, recorded as being $^{211}/_{121}$ which is very high. Dr Sehgal formed the belief that that very high reading accounted for the headache. Mr May would present to Dr Tang the following day being 14 March 2009, to which I have already referred. It is evident from the Moonta Hospital notes that Dr Sehgal was aware that Mr May was to have undergone a CT scan on Monday 17 March 2009 to investigate possible intracranial pathology. Dr Sehgal did not have anything further to do with Mr May until 20 March 2009, which was at a time after Mr May had been seen and discharged from the RAH Emergency Department. It was that day that Dr Tang had spoken to Mr May on the phone. Dr Sehgal saw Mr May during a scheduled appointment at approximately 5:15pm. At this consultation Dr Sehgal had at his disposal the discharge letter that Dr Ponce-Ng had compiled. As seen, Dr Tang had left it for him. Dr Sehgal had no recollection of any discussion with Dr Tang prior to this consultation with Mr May. In cross-examination however, Dr Sehgal admitted to a vague recollection that Dr Tang had at least informed him of the existence of the discharge letter. Dr Tang had not told Dr Sehgal of any concerns that he had, or did not have, with the discharge letter, nor with the fact of the discharge. At the appointment, Dr Sehgal described the contents of the discharge letter to Mr May and

explained to him in layman's terms what it signified. Dr Seghal told the Court that at that time he did not have any particular expertise in relation to the capabilities of various radiological and MRI measures as far as diagnosis of subarachnoid haemorrhage or aneurysm is concerned. Dr Sehgal therefore believed that the discharge letter meant that any potential serious cause of Mr May's headaches had been excluded, and Mr May did not present with any symptoms.

5.5. Although Dr Tang's referral letter of 18 March 2009 would have been available to Dr Sehgal within the computerised records relating to Mr May during this consultation, Dr Sehgal did not have any recollection of having brought that letter up on the screen. Mr May himself did not raise the question of aneurysm.

5.6. In cross-examination Dr Sehgal admitted to some knowledge of the ability of a CT angiogram to possibly identify an aneurysm. The Moonta Medical Centre's clinical notes relating to Mr May had stated in respect of an entry dated Tuesday 17 March 2009 that a CT cerebral angiogram had been requested. Dr Sehgal rejected the suggestion that in that event it was incumbent upon him to have sought out the results of any CT angiogram when he saw Mr May on 20 March 2009. In defence against that suggestion he said that he thought the discharge summary had been clear insofar as it stated that there was no abnormality found. Therefore, he emphasised, there was no need for him to go further as he believed that the RAH had provided Mr May with a '*gold standard investigation*' that had excluded any intracranial pathology[30]. In effect he believed that the MRI that had been performed and which was described in the discharge letter had constituted a more effective investigation.

5.7. I note that also available to Dr Sehgal at this consultation of 20 March 2009 was a note in the clinical record of Wednesday 18 March 2009 that mentioned the existence of Dr Tang's referral letter to the RAH. As indicated earlier Dr Sehgal states that he did not access that actual letter. In any event he told the Court that if he had seen the letter that had referred to an aneurysm, he would have believed at that time that the investigations that had been conducted at the RAH would have, as it were, surpassed any previous investigation. In the event all that took place at this consultation was that Mr May was provided with a further prescription for his blood pressure medication.

[30] Transcript, page 372

5.8. It is fair to say that in the light of these unfortunate events, many of Dr Sehgal's preconceived ideas of about the efficacy of CT angiograms against MRIs has changed, and changed for the better.

5.9. The matter of concern that the Court entertains, notwithstanding the evidence of Dr Tang and Dr Sehgal, is that their patient had been discharged by the RAH without a diagnosis, except to the extent that it was that Mr May had suffered from a headache, a fact which was already apparent. The difficulty was that the cause of it was still unknown and not specified. The discharge letter pointed that out clearly. In the light of all that, it would have been far preferable if Dr Tang had spoken with staff at the RAH Emergency Department and satisfied himself that, in the light of the fact that the discharge letter mentioned nothing about his own letter or about the result of the CT angiogram demonstrating as it did an aneurysm, his referral letter had been seen and taken into account. That would not have been an unreasonable thing for Dr Tang to have done and it may have changed the outcome. If there had been a sensible explanation for Mr May's presentation, and in particular his history of headaches, the matter might be considered differently but there was no such explanation. Mr May's original clinical presentation had been almost classically that of subarachnoid haemorrhage and there was the CT angiogram result demonstrating an aneurysm. In addition, a more enquiring mind may have questioned the absence of any reference in the discharge letter to neurosurgical input into Mr May's assessment, having regard to the fact that Dr Tang had expected the Emergency Department to have acted more or less as something of a conduit to such assessment.

5.10. However, after considerable reflection, and with some hesitation, I am not prepared to be critical of Dr Tang. He had compiled and sent a referral letter to the RAH Emergency Department and had some entitlement to conclude that it had been received and taken into consideration. As well, he had contacted the neurosurgical registrar in the expectation that the discharge letter and the referral to the neurosurgical registrar would all be married up with Mr May. Therefore, there is an element of reasonableness about Dr Tang's conclusion that all that could be done diagnostically at the RAH had been done.

5.11. As far as Dr Sehgal is concerned, I think similar considerations apply. I accept that he did not know of the CT angiogram that had revealed an aneurysm. I also accept his evidence that he assumed that the tests that had been conducted at the RAH had been

definitive in any event. In addition, on 20 March 2009 this was a routine appointment that he had with Mr May who at that time demonstrated no clinical evidence consistent with his previous presentation of headache.

5.12. Nevertheless, there is no escaping the fact that if Dr Tang had contacted the RAH Emergency Department and had advised a responsible person there of the existence of the CT angiogram result and had queried the discharge letter in the light of that result, there would have been an opportunity for the outcome for Mr May to have been altered. However, as will be seen in the following section, the matter did not rest there as there was yet further opportunity for intervention to have occurred.

6. The involvement of the RAH Neurosurgery Department

6.1. It will be recalled that Dr Tang had spoken by telephone to the RAH neurosurgical registrar on the morning of 18 March 2009. But it is clear that there was no involvement in the assessment of Mr May on the part of the Neurosurgery Department that day. However, by 23 March 2009 the Neurosurgery Department had come into possession of at least the CT angiogram report, if not Dr Tang's letter as well, that described the aneurysm in Mr May's brain. On that day Dr Jason McMillen who at that time was a neurosurgical registrar, that is to say an advanced neurosurgical trainee, telephoned Mr May to discuss Mr May's case. Dr McMillen was originally of the view, as expressed in a written statement that he made[31], that he may have been the neurosurgical registrar who originally spoke to Dr Tang on 18 March 2009. In his oral evidence before the Court, however, he adduced evidence that he suggested rendered it unlikely that he had been that practitioner. In any event he has been consistent in saying that he has no actual recollection of any such telephone conversation regarding Mr May on 18 March 2009. I make no finding about the identity of the neurological registrar to whom Dr Tang spoke, but the important question remains as to why the neurological registrar on 18 March 2009 did not inform RAH ED staff that Mr May would be presenting because of the likelihood of a recent subarachnoid haemorrhage.

6.2. However, Dr McMillen's involvement on 23 March 2009 is clear because he prepared a document in his own handwriting that included reference to the fact that he telephoned Mr May on that day. It is clear that Dr McMillen had possession of the

[31] Exhibit C17

CT angiogram report because it describes in terms the exact type of aneurysm identified. It is also apparent that Dr McMillen's knowledge at that point also included the fact that Mr May had been assessed by the Emergency Department where an MRI had been performed but which had revealed no abnormality. The handwritten document also refers to the lack of any discussion with the Neurosurgery Department on that occasion. The document, which was essentially drawn up to arrange a consultation for Mr May at the Neurosurgery Clinic, states:

> 'Needs R/V of scans & face to face discussion.' [32]

The possibility of further investigation is also referred to in the document.

6.3. An appointment was made for Mr May to attend at the Outpatients at the Neurosurgery Department at the RAH on 9 April 2009, which it will be observed is 6 days after he died. It has been said during the Inquest that this appointment was too far into the future and that this is the case not only in hindsight. Dr McMillen defended his position by suggesting that the date of 9 April 2009 represented an expedited appointment that properly took into account the urgency of the matter but which in any event would have been set with the involvement of one of the neurosurgical consultants within the Department. He told the Court that he himself would not have had the authority to grant such an expedited appointment. Dr McMillen in any event suggested that in the circumstances an appointment on 9 April 2009 was not unreasonable having regard to the fact that Mr May lived in Moonta and also '*because the risk of re-bleeding in that period of time, whilst not zero, is not high*'[33].

6.4. It is worthwhile observing that in her statement Mr May's daughter, Ms Chichi May,[34] states that she had been aware that at some point her father had been contacted by a doctor and as a result her father had been required to come into the RAH. She states that he told her that *'they didn't understand why he had been released by the RAH'*. Ms May confirms that the appointment for her father to attend at the RAH was for 9 April 2009 and that he had written this on a piece of paper.

6.5. I have already referred to Professor Brophy who is the Head of the Neurosurgery Department of the RAH. I am confident that it was not he who had any input into the

[32] Exhibit C17, Attachment JLM1
[33] Transcript, page 139
[34] Exhibit C5a

setting of the date for Mr May's appointment at that department. Professor Brophy gave clear evidence that an appointment as far ahead as 9 April 2009 was not appropriate and that Mr May should have been called back to the hospital on the day that the appointment was fixed, namely 23 March 2009. He explained that the patient was indeed at significant risk of a re-haemorrhage. He quoted figures to suggest that in the first two weeks following a subarachnoid haemorrhage there is a 20% risk and within the first month there is a 30% to 40% risk. Professor Brophy stated that the setting of an appointment two weeks in advance '*doesn't show an understanding of the problem*'[35]. Professor Brophy went so far as to say that it was most unlikely that a consultant within the Department would have indicated to a neurosurgical registrar such as Dr McMillen that an appointment two weeks away would be appropriate.

6.6. From the Court's perspective, regardless of how this date was set, I accept the evidence of Professor Brophy that 9 April 2009 was inappropriate and too distant and that this should have been considered to be the case at the time. I prefer the candour of his evidence to that of Dr McMillen. Mr May should have been advised of the risks involved in his remaining untreated and he should have been advised that it was in his best interests to present at the Neurosurgery Department urgently. The fact that he was not given such advice represents yet another missed opportunity to have altered Mr May's fate.

7. Conclusions

7.1. I find that Mr May's death probably would have been prevented if any of the following events had occurred:

i) if Dr Tang's referral letter, once received by facsimile in the RAH Emergency Department, had been aligned with the arrival of the patient, Mr May, whose imminent arrival that day had been foreshadowed in the letter;

ii) if upon reading the referral letter efforts were made to obtain the CT cerebral angiogram report that related to the CT angiogram that the letter identified;

iii) if Mr May had been asked by Dr Pandit whether Mr May's radiological procedures the day before had involved him being injected prior to

[35] Transcript, page 181

the performance of any radiological procedure. This would have confirmed in Dr Pandit's mind that Mr May in all probability had in fact undergone a CT angiogram, as Dr Pandit had thought possible;

iv) if efforts by Dr Ponce-Ng to contact Dr Jones and Partners for information regarding the nature of radiological procedures that Mr May had undergone the day before had been appropriately vigorous and persistent, which undoubtedly would have resulted in clinical staff at the RAH Emergency Department being informed that a CT cerebral angiogram had revealed the presence of an aneurysm in Mr May's brain;

v) if efforts by Dr Ponce-Ng to contact Mr May's general practitioner, Dr Tang, for information regarding radiological procedures that Mr May had undergone the day before had been appropriately vigorous persistent, which undoubtedly would have resulted in clinical staff at the RAH Emergency Department being informed that a CT cerebral angiogram had revealed the presence of an aneurysm in Mr May's brain;

vi) if there had been liaison and communication between clinical staff of the RAH Emergency Department and the RAH Neurosurgery Department while Mr May was present at the RAH, in which event it would have been ascertained that Mr May's general practitioner, Dr Tang, had spoken to the neurosurgical registrar about the fact that an aneurysm had been identified;

vii) if Mr May had been referred by the clinical staff of the RAH Emergency Department to the hospital's Neurosurgery Department for review;

viii) if within the RAH Mr May had undergone an MR angiogram or even a CT cerebral angiogram instead of an MRI;

ix) if upon receiving the discharge letter compiled by Dr Ponce-Ng, Dr Tang had queried the lack of meaningful diagnosis, the lack of any reference in the document to the result of the CT angiogram that had demonstrated an aneurysm and the lack of any reference in the letter to consultation between the RAH Emergency Department and the RAH Neurosurgery Department;

x) if on 23 March 2009 an appointment for Mr May to be reviewed by the RAH Neurosurgery Department had been appropriately expedited and scheduled for a time and date prior to 3 April 2009, the day of Mr May's death;

8. Recommendations

8.1. Pursuant to Section 25(2) of the Coroners Act 2003 I am empowered to make recommendations that in the opinion of the Court might prevent, or reduce the likelihood of, a recurrence of an event similar to the event that was the subject of the Inquest.

8.2. Tendered to the Court during the Inquest was the affidavit of Dr Thomas Soulsby[36] who is the Assistant Director of the Emergency Department of the RAH and the affidavit of Ms Liviana de Meyrick[37] who is the Patient Safety Officer in the Safety, Quality and Risk Management Unit of the RAH. This material confirms that Dr Tang's referral letter was indeed received at the RAH Emergency Department. The number to which it was sent is the number of a facsimile machine that is located at the Emergency Department Triage desk. The letter and the CT angiogram report relating to Mr May were ultimately located in the RAH Medical Records service in November 2011 where they had been housed since March 2009. The date stamp on both documents bears the date 30 March 2009, nearly a fortnight after Mr May's presentation. In the intervening period it is apparent that Dr McMillen of the Neurosurgery Department had access at least to the CT angiogram report as I have already alluded to. The journey of either document prior to 23 March 2009 is something of a mystery. What is clear of course is that it was not seen by either Dr Pandit or Dr Ponce-Ng on 18 March 2009 while Mr May was within the Emergency Department.

8.3. The affidavit of Dr Soulsby explains that at the time with which this Inquest was concerned there was only the one triage nurse on duty. That nurse was expected to sight incoming faxes and direct them to the appropriate person within the Department. Dr Soulsby's affidavit also explains that the workload of that person at that period of time was intense which has now resulted in two triage nurses being placed on duty as well as a communications clerk who has responsibility for processing of such

[36] Exhibit C23
[37] Exhibit C24

documentation. Measures have been put in place that would address the failure of relevant documentation coming into the Emergency Department not being aligned with a presenting patient. Dr Soulsby's affidavit suggests that referrals are normally not only sent to the Department in writing by way of fax, but usually also involve a telephone call from the referring medical practitioner. Dr Tang did not telephone the Emergency Department either to tell them of Mr May's imminent presentation nor of the fact that he had sent a referral letter. However, it is clear that Dr Tang telephoned the neurosurgical registrar and his expectation was that all of his efforts would be assembled such that Mr May's letter of referral would be seen and that the Neurosurgery Department would have responsibility for Mr May's assessment. There is no question but that the neurosurgical registrar should have notified the ED that Mr May would present with a suspected subarachnoid haemorrhage and to have advised them of the diagnostic measures that had taken place so far. Steps should be taken to ensure that such a failure of communication should never be repeated.

8.4. I make the following <u>recommendations</u> directed to the Chief Executive Officer of the Royal Adelaide Hospital, the principal clinician of the RAH Emergency Department, the principal clinician of the RAH Department of Neurosurgery, the Chief Executive Officer or equivalent of the Royal Australian College of General Practitioners and the Chief Executive Officer or equivalent of the Australian College of rural and remote Medicine :

1) That procedures within the Royal Adelaide Hospital Emergency Department dealing with the alignment of referral letters with presenting patients be regularly reviewed with a view to ensuring such alignment;

2) That the principal clinician of the Department of Neurosurgery take the necessary steps to ensure that clinicians who are advised of the imminent arrival of a patient presenting with a suspected case of subarachnoid haemorrhage liaise appropriately and in a timely manner with clinicians at the RAH Emergency Department;

3) That clinicians within the RAH Emergency Department refer cases of suspected subarachnoid haemorrhage to clinicians within the

Department of Neurosurgery and/or the Department of Radiology in order to identify the most appropriate diagnostic measures to be instituted;

4) That general practitioners referring patients suspected of suffering a subarachnoid haemorrhage be encouraged to verbally notify Emergency Departments of the expected arrival of their patients.

5) That general practitioners who have referred patients suspected of suffering a subarachnoid haemorrhage to hospitals and emergency departments be encouraged to carefully scrutinise discharge summaries and letters to ensure that they are satisfied that all relevant diagnostic information has been taken into account, and in particular to carefully scrutinise and evaluate the discharge diagnosis. They should also be encouraged to query such diagnoses if they are not satisfied that they are adequate or accurate.

Key Words: subarachnoid haemorrhage, diagnosis

In witness whereof the said Coroner has hereunto set and subscribed his hand and Seal the 8th day of April, 2013.

Deputy State Coroner