CORONERS ACT, 1975 AS AMENDED

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 15th and 16th days of October 2002 and the 18th and 19th days of December 2002 and the 7th day of March 2003 , before Anthony Ernest Schapel, a Coroner for the said State, concerning the death of Steven Barry Graham.

I, the said Coroner, find that, Steven Barry Graham aged 35 years, late of 29 May Terrace, Ottoway died at The Queen Elizabeth Hospital, Woodville South, South Australia on the 27 July 2000 as a result of cardiac arrest, incessant venous thrombosis/ventricular fibrillation, ischaemic cardiomyopathy, cardiac failure and an old myocardial infarction.

1. Introduction

1.1. On the evening of 27 November 1999, Steven Barry Graham, the deceased, was involved in a fight at the Semaphore Hotel. He had been drinking with a friend during the course of the day and evening. That person was Mr Brendan Foote. Mr Foote had also been drinking. It is not necessary to describe in any detail how this fight arose, but it is evident that in the course of it the deceased received blows to the chest as he lay on the ground. The evidence is not entirely clear, but it is possible that the blows were administered with boots, a metal bar, a baseball bat or all of these things in combination. The deceased also received a cut in the vicinity of his eye. Brendan Foote, his companion, believes that he himself was knocked unconscious during the fight.

1.2. After the fight, the deceased and Mr Foote went to the Emergency Department of The Queen Elizabeth Hospital ('the Hospital'). They arrived at the Hospital at about

12:50am, at which time the deceased was triaged. Triage is the process by which patients in an Emergency Department are accorded priority of treatment. A triage assessment is based upon the nature of the patient's complaint and the degree of urgency required in a medical practitioner attending to the patient.

1.3. The deceased was aged 35 years. Prior to the fight, he had been a healthy man. There is no evidence to suggest that he had been suffering from any illness and in particular, any illness that affected his heart.

1.4. The deceased was initially triaged as a category 4 patient. He was asked to wait. Mr Foote did not seek treatment. He then went outside with Mr Foote and Mr Foote's partner Margaret Mibus. He possibly smoked a cigarette. The deceased at that point was observed to go white. He was sweating visibly. He began to collapse, was placed in a wheelchair and was taken back into the Emergency Department where his triage priority was upgraded to category 3. He was seen shortly after by medical staff. He complained of a number of things including pain in his chest.

1.5. An ECG was performed. This monitors the performance of the heart. The results of the ECG were not evaluated by medical staff at the Hospital that night. The significance of the ECG results, if any, was a matter that was the subject of debate during the course of this inquest. I return to this issue in the body of these findings. The deceased's facial cut was treated. He was given a tetanus shot and Panadeine Forte for the pain. A chest x-ray revealed no skeletal abnormality. However, a sternal x-ray was ordered to investigate the possibility that there had been a sternal injury, bearing in mind the history of assault and pain to his chest. The sternum is the breast bone.

1.6. The deceased discharged himself from the Emergency Department of the Hospital before Hospital staff had an opportunity to perform the sternal x-ray. He signed a form which clearly acknowledged the fact that he was leaving the Hospital against the advice of medical staff.

1.7. The deceased left the Hospital with Brendan Foote. Mr Foote spent the night at the deceased's residence in order to keep an eye on his friend. The deceased, throughout the night, continued to complain of pain in his chest. He also coughed blood. Mr Foote left to go to work in the morning, leaving the deceased at the deceased's residence. Later that morning the deceased telephoned his mother and said he needed

to go to hospital. His mother collected him and took him back to the Emergency Department of the Hospital. He was there diagnosed as suffering from an acute myocardial infarction (heart attack). He remained in the Hospital for several days and was discharged on 7 December 1999. The heart attack had left the deceased with seriously compromised heart function.

1.8. On 8 December, the deceased collapsed in a video store from heart failure. He was again hospitalised. He eventually died on 27 July 2000.

1.9. This inquest examined a number of issues. I examined the issue as to whether the results of the ECG examination performed upon the deceased's first presentation at the Queen Elizabeth Hospital were in any way diagnostic or indicative of whether the deceased was at the time of his examination suffering from or about to suffer from a myocardial infarction. I also examined the reasons for and the circumstances in which the deceased discharged himself from the Hospital contrary to medical advice and in particular whether his decision to discharge himself was a properly informed one. I investigated the possible reasons as to why he discharged himself without the results of the ECG being examined and the sternal x-ray performed.

2. The deceased's management while in the Emergency Department of the Hospital

2.1. The direct evidence of the deceased having received a blow or blows to his chest during the fight emanated in the main from the mouth of the deceased himself. I do not need to go into the detail of that evidence, but it is sufficient to say that he told doctors and a number of people that the had received a significant impact or impacts to this chest. When he presented at the Hospital, he was observed to have had a contusion to his chest, and this of course is consistent with an impact to that part of the body.

2.2. The sequence of events at the Hospital in the early hours of the morning of 28 November 1999 that led to the deceased discharging himself are as follows. After the deceased's collapse he was brought inside in a wheelchair by the triage nurse, Jason Walters, and was re-classified as a category 3 patient. He was handed over to another nurse, a Roger Binnekamp. An ECG was performed at 1:05am. His blood pressure, pulse and temperature were taken at 1:10am. The blood pressure and temperature were within normal limits. He had an elevated pulse rate, but this could be explained by the stress associated with his involvement in the fight and his presence in the

Hospital. At around this time, he was examined by Dr Sharon Semmler who was an Emergency Department Registrar. In a report that Dr Semmler compiled after these events, she stated that she began assessing the deceased at 1am. If this was correct, then her assessment would have been made before the ECG and the other tests to which I have referred were performed. Dr Semmler did not make any note of her examination until a time after the deceased discharged himself. Even then, she did not note the time of her examination. Thus, Dr Semmler was giving an approximation as to the time of her examination. I do not know for certain whether Dr Semmler examined the deceased before or after the ECG was performed. If anything, it was probably after because the normal routine is to do an ECG and check vital signs before the doctor becomes involved. The issue is probably of no consequence as she told me in evidence, and I accept what she says, that she was not aware at any time before the deceased discharged himself that an ECG had been performed. The deceased told Dr Semmler that he had been kicked in the chest and complained of chest pain. There is no suggestion that she was told anything about the use of an iron bar or a baseball bat. She ordered a chest x-ray that was to reveal no skeletal abnormality. Dr Semmler saw the deceased a second time when she reported to the deceased the result of the chest x-ray. He told her that he still had pain in his chest so he was given pain relief. The records reveal that he was given Panadeine Forte at 2:30am. Given the persisting chest pain, Dr Semmler thought it advisable that he have a sternal x-ray performed. Jason Walters, the triage nurse, told me in evidence that the deceased discharged himself at 2:55am without having the sternal x-ray performed. He looked up that time on computerised records since these events took place. There is no record of the time of discharge in the casenotes, but I accept Nurse Walters' evidence as to the time. Nurse Walters obtained the deceased's signature on a discharge form that forms part of the deceased's Hospital casenotes (Exhibit C12). It states as follows:

> '**Discharge at Own Risk**
>
> This certifies that I, the undersigned, leave the Hospital against the advice of the medical officer in charge of my case, and I thereby agree not to hold the Hospital authorities responsible for any harm or injury that may result from my action.'

Below this certification is the signature of the deceased, that of Nurse Walters and the date. A note to the certification reads as follows:

'*Note to Medical Officers:* The circumstances and advice given to patients discharged at own risk should be documented in progress notes.'

2.3. It is within this framework that the issues that arise in this inquest have to be examined.

2.4. As a starting point, it is as well to refer to the evidence of Dr Semmler as to her involvement. She was the practitioner responsible for the deceased's care. Before I do so, I mention one matter that arose in the inquest. It was suggested in the course of the investigation surrounding this death that another medical practitioner, a Dr Hurworth, had been involved in the deceased's management that morning. There is no evidence before me, that comes from a first hand source, that Dr Hurworth had been involved in this matter. There is no reference to the involvement of a practitioner of that name in the casenotes. As a result of the suggestion that Dr Hurworth had been involved, I caused Detective Senior Constable Jeffrey Brown of the Coronial Investigation Section to make certain enquiries. The results of those enquiries are encapsulated in Detective Brown's statement verified by affidavit (Exhibits C16 and C16a). Detective Brown established to my satisfaction that a Dr Hurworth, who no longer works at the Hospital, and who has not since been located, was as an intern in vascular surgery at the relevant time. It therefore seems unlikely that she played any role in Emergency Department that night. Unfortunately, the intern rosters for 1999 have not been located. However, I am satisfied from Detective Brown's enquiries and from the evidence given by Nurses Walters and Binnekamp and Dr Semmler that Dr Hurworth was not involved in the deceased's management on the occasion in question.

2.5. Dr Semmler was plainly aware of the deceased's complaint of chest pain and the fact that the deceased had received a blow to the chest. She established from the deceased that he had no previous medical history of significance and that he was not currently taking medication. Dr Semmler could not recall whether the deceased was pale or sweaty at the time of her examination. She did not include any reference to either matter in notes that she was to later compile. She also told me that she was unaware of the fact that the deceased had collapsed or that as a result of that collapse, his triage category had been upgraded to 3. An upgrading of triage status might well alert a practitioner to the increased urgency of the matter. It is to be observed that the triage assessment form, which describes the deceased as category 4, was not altered to

reflect the upgrade. The alteration was made on the computer which she evidently did not examine. In addition, the triage assessment form does not refer to the collapse as it was compiled before the collapse occurred. I formed the view that Dr Semmler was a truthful witness. There was no evidence to contradict her when she said that she was unaware of the collapse and the triage upgrade consequent upon that collapse. I accept her evidence as to this notwithstanding my surprise that two pieces of information, as important as these, were not made available to Dr Semmler. Nurse Binnekamp who had taken over the deceased after he was re-triaged, had an imperfect recollection of the events of that morning. He had no recollection as to whether the deceased was in a wheelchair when he first saw him, had no recall as to whether Nurse Walters had told him of the deceased's collapse (although the fact that he took a standing blood pressure would tend to suggest he did know), whether he had been told of the triage re-categorisation or whether he had performed the ECG at 1:05am. He did note, however, that the deceased was sweating profusely and was complaining of chest pain. He did not recall whether he had any conversation with Dr Semmler and so, for example, did not claim to have told her about the collapse or to have shown her the ECG result, if indeed he had performed the ECG examination himself. Nurse Binnekamp, because of his imperfect recollection, was not a particularly helpful witness. Nevertheless his evidence does not in any sense contradict Dr Semmler on any material point. In those circumstances, there is nothing in Nurse Binnekamp's evidence that would lead me to doubt Dr Semmler's evidence that she did not know of the collapse and did not see the ECG result. Nurse Binnekamp did, however, make a note that the deceased was, or had been, sweating profusely. Dr Semmler could not recall whether she had sighted that particular document.

2.6. Nurse Walters also had no recollection of telling Dr Semmler of the collapse or the triage re-categorisation. I have no reason to disbelieve Nurse Walters about that.

2.7. I find that there was a breakdown in a line of communication that should have ensured that Dr Semmler was made aware of the fact that the deceased had collapsed. It was important information for Dr Semmler to have known. I will return to this aspect of the matter later.

2.8. As to the fact of Dr Semmler not being aware of the ECG result, as I have earlier mentioned, there was debate in the course of the inquest about the significance of that result. The ECG trace taken at 1:05am was examined by two experts for the purposes

of this inquest. It was examined by Dr Geoffrey Lehmann and by Dr Leo Mahar, both of whom are very experienced cardiologists. Their views as to the significance of the ECG trace were markedly divergent. Dr Lehmann was of the view that the trace exhibited an abnormality that could be ascribed to the left anterior descending artery, which as it transpired, was later to become totally occluded and account for the acute myocardial infarction with which the deceased presented upon his return to the Hospital. Dr Lehmann said that in his opinion, the ECG trace may have reflected myocardial ischaemia associated with that artery, particularly given the fact that the ECG abnormality was unusual in a person of the deceased's age.

2.9. Dr Lehmann told me that the blow or blows to the deceased's chest could have been severe enough to have damaged the coronary artery and that the ECG result was a reflection of insufficient blood flow being supplied to the heart muscle as a result of that arterial damage. He postulated that a few hours later a clot formed over the initial tear in the artery and then totally blocked the vessel, causing the heart attack. Another possibility offered by Dr Lehmann was that the deceased had a pre-existing partial blockage in the artery and that the cholesterol plaque ruptured as the result of trauma, or from the emotional upset, again causing a total blockage and heart attack. Dr Lehmann in evidence produced a number of case studies demonstrating the connection between trauma and the occlusion of coronary arteries. Examples of such trauma included that caused by a horse stepping on a person's back, impacts sustained in motor vehicle accidents, blows sustained in football matches and blunt trauma sustained in a water-skiing accident.

2.10. On the other hand, Dr Mahar was of the view that the ECG changes were very non-specific. He acknowledged that there were some very minor abnormalities, but that they were not diagnostic of an acute heart attack. He thought that the changes could have been due to a whole range of things, for example, being anxious or upset, or being up late at night.

2.11. Dr Mahar disagreed with Dr Lehmann's suggestion that the changes could represent ischaemia, that is the limiting of blood flow to the heart muscle. In short, Dr Mahar was of the view that in the deceased's clinical setting, the ECG should not have given rise to any expectation that the deceased was to have an acute heart attack.

2.12. Dr Mahar was questioned about the possible connection between trauma and the deceased's heart attack. In his experience, acute heart attacks occur where 'it's really always after massive trauma' (T46). He believes that massive trauma was required to cause cardiac injury such that massive chest bruising and/or broken ribs would be present. In this case, there was a contusion to the deceased's chest. It has not been described as massive. There were no broken ribs on x-ray. Dr Mahar commented on Dr Lehmann's case studies and pointed out that he would have expected the trauma in each of those instances to have been massive. As to the possible causes of the deceased's heart attack, Dr Mahar referred to the deceased's family history of heart disease – his mother having suffered a heart attack at the age of 46, and referred to the fact that the deceased was a smoker. He also referred to the possible effects of stress from what in all probability would have been a stressful episode for the deceased. He put the matter in this way:

> 'I would not like to attribute probabilities. All I can say he was a man who was healthy with some risk factors for early coronary artery disease. He had an unpleasant experience on 27 November. He went to the emergency department not complaining of chest pain but of lacerations, had an ECG at that time which was non-diagnostic and then some hours afterwards he had a myocardial infarction. I think I'll leave that to the court to decide whether it's causal. Certainly it's contemporaneous but whether it's causal I don't know.' (T55)

2.13. Certainly, one has to consider the coincidence of slight ECG changes, the undoubted chest trauma that the deceased had suffered and the heart attack occurring only within a matter of hours of his sustaining that trauma. I have considered whether the juxtaposition of these facts reveals a connection between the trauma and the subsequent heart attack. Dr Mahar suggested that Dr Lehmann may have been examining the issue with the benefit of the retrospectoscope which is medical slang for hindsight. Dr Lehmann may well have utilised the retrospectoscope. On the other hand, the use of it may well have led him to a sound conclusion. The point however is this. Were the ECG changes such that a medical practitioner who had seen them, would have, without the benefit of knowing what was to happen, done anything differently in terms of the deceased's treatment or done anything differently as far as attempting to dissuade the deceased from discharging himself?

2.14. Dr Lehmann said that the appropriate action in the light of the clinical setting, complicated as it was by a history of chest trauma in a young man of 35, would have

been admission to hospital, probable treatment with blood thinning agents and medication, and at the very least, monitoring. In this regard, there is no escaping the conclusion that monitoring, including further ECG examinations, would later that morning in a hospital setting, have resulted in an earlier detection of the acute heart attack that was to follow. As well, its symptoms including the coughing of blood caused by acute pulmonary oedema would no doubt have been recognised. In this regard, the deceased's chances of survival would plainly have been enhanced if he had remained at the Hospital.

2.15. On the other hand, Dr Mahar was of the firm view that although he would be disappointed in the setting of his own hospital that an ECG was not reviewed, a review in this case would not have led him to alter his opinion that there was no expectation that the deceased was to have an acute heart attack.

2.16. Dr Mahar went so far as to agree that there was no warrant for the treating medical staff at the Hospital to have tried to persuade the deceased to stay on the basis of any suspected existing cardiac problem or the potential for such a problem, given that the ECG in his view revealed no significant evidence of either. In giving his opinions, Dr Mahar was mindful of the deceased's chest pain and collapse. However, he pointed out that when the deceased was discharged, his observations were normal. Regarding the possible significance of chest pain, Dr Mahar said:

> 'If he's been assaulted it makes it very hard. He's obviously got a lot of chest pain and I would always be very suspicious of someone who's had chest pain and the standard teaching is that no one is discharged from an emergency department with chest pain unless you've got a very good reason for it. In this case he did have a reason for it and I suppose I would have been more suspicious and I would like him to have remained if he's complaining of chest pain. It says in one of the articles that Dr Lehman gave that sometimes people underestimate the very small risk of a heart problem because there's so much other chest pain going on because of the trauma. In retrospect it's easy to say that. At the time I don't think it would have perhaps influenced the opinion very much, particularly in light of the ECG.
> …
> Certainly if someone came to the emergency department with severe chest pain and even with a normal ECG and normal cardiac enzymes we would admit them. But this is not sort of someone, 'I've got terrible pain in the chest, is it a heart attack or indigestion?' This is someone who's just had major trauma to his chest and it's pretty hard to differentiate those two. I don't think at any time was he not offered admission. He signed a risk form to go home.' (T68-69)

2.17. After Dr Lehmann and Dr Mahar gave evidence, I invited them to comment on the evidence each other had given. They both commented in writing (Exhibits C17a and C18a). Neither doctor resiled from the views that they had expressed in evidence. Nor did they identify any error in the analysis of the other. Dr Mahar reiterated his opinion that 'there is nothing to suggest that this man was about to have a myocardial infarction necessitating his admission to a monitored bed and anticoagulant therapy' (Exhibit C18a).

2.18. Dr Semmler was naturally questioned as to the significance of the ECG trace taken at 1:05am. As observed earlier, Dr Semmler testified that she did not see the ECG during the night in question. She told me that she only saw it after the deceased had re-presented at the Hospital suffering from the acute heart attack. Before I discuss Dr Semmler's view of the ECG, I should mention a matter that troubled me somewhat during the course of this inquest. Dr Semmler wrote a discharge letter at the end of her shift, at a time after the deceased had discharged himself, stating that his ECG was 'unremarkable'. Dr Semmler explained this entry in her discharge letter in these terms:

> 'I believe I have just assumed it has been done because he had chest pain, and other than that, no.' (T190)

> 'I can only assume that I thought one had been done and that I had seen it and, at the end of a long night, writing up a lot of notes, I just made an error. That is the only explanation I have. I am certain I wouldn't have described that ECG as normal if I had seen it.' (T216)

2.19. Dr Semmler told me, and I will come to the details of this presently, that in her view the ECG would not be described as normal. Her discharge letter thus contradicts her when she says that she did not see it on the night in question. As well, it contradicts her currently expressed view that it is not normal. I would have been suspicious of Dr Semmler's explanation for her claimed sighting of the ECG as expressed in her discharge letter but for her candid acknowledgement in the witness box that in her view it is an abnormal ECG trace. She said that she would not have reported it as normal if she had seen it. This concession led me to conclude that Dr Semmler was generally a truthful witness. I accept her evidence that she did not see the ECG trace during her shift. I also accept her evidence that she was not told of the deceased's collapse. Dr Semmler accepts that she should have enquired as to the existence of any ECG results (T192). However, Dr Semmler was of the view that any abnormality

revealed by the ECG trace related to an area that was not associated with the area of the heart where the infarction was to occur. This other possible area of abnormality was recognised by a Dr Fin Zhen Jun Cai, at the time, a cardiology resident at the Hospital. I received his record of interview verified by affidavit (Exhibit C15a). He reviewed the ECG trace after these events and expressed the view that depending on the clinical setting, the abnormality that he detected would have given rise to concern 'about the possibility of developing acute myocardial infarction' (page 5). He recognised, however, that this area of possible abnormality was in the inferior region of the heart, whereas the infarction that occurred was in the anterior area. Dr Cai seemed to be at pains to point out that he was expressing the views not of a cardiologist as such. Dr Mahar, the cardiologist, also recognised this other possible abnormality. He said, like Dr Cai and Dr Semmler, that it was not associated with the area of eventual infarction. It did not cause Dr Mahar to modify his view that there was in reality nothing in the ECG to have warranted concern.

2.20. Dr Semmler did say, however, that in the light of what she perceives to be non-specific changes in the ECG, the deceased should have stayed for longer observation and had a repeat ECG done in the next couple of hours in order to see if any further changes developed. She said in this regard that 'you do err on the side of caution' (T203). She said that people with cardiac ischaemia can have minor changes that then develop into significant changes. On the other hand, Dr Semmler said that she had not finished assessing the deceased and that she would have liked him to stay for observation whether the ECG was normal or not. Dr Semmler also stated that if she had known of the collapse, the profuse sweating as observed by nursing staff, and that the deceased had been observed to have been pale at the time of his collapse, she:

> '... would have been a lot more concerned about not only cardiac things but also internal bleeding in someone who had that sort of history because they are all elements that may be suspicious of shock, the collapse and the sweating and the looking pale, so that would probably have been more of a concern primarily, with the cardiac concern coming behind it but again, more of a constitution than an ischaemic problem initially.' (T217)

2.21. Dr Semmler told me that although she would have liked the deceased to have stayed for observation irrespective of the ECG result, she probably would have told the deceased about the abnormality as a lever to get him to stay, or at least told a member of the nursing staff to convey that to him. The irony of this, however, is that the abnormality to which Dr Semmler was referring was not associated with the eventual

heart attack. Dr Semmler also said that she would have told the deceased about the possibility of internal bleeding if she had known of the collapse, again somewhat ironic, because that was not what he was suffering from.

2.22. The evidence concerning the significance of the ECG result is very evenly balanced. This in itself would not necessarily preclude me from making a finding were I to be of the opinion that there was other evidence independent of the two experts that might indicate which side of the line the evidence might fall. The coincidence between the deceased suffering a significant impact or impacts to his chest, the immediate complaint of chest pain and his undoubted myocardial infarction is a striking one. On the other hand, I do not know whether stress may have had a significant role in disturbing whatever pre-existing pathology the deceased may have had in relation to his coronary arteries. There was a history of heart disease at an early age in his family and he was a smoker. In the event, I am unable to make any finding as to whether there was in fact any connection between the impact to the deceased’s chest and his eventual myocardial infarction. Dr Mahar impressed me as a very careful witness. There was nothing in his evidence to suggest that he had, in expressing his views on this issue, not taken everything into account that he should have or had taken irrelevant matters into account. In the face of his expert opinion, while I acknowledge that it is distinctly possible that Dr Lehmann is correct when he says that in his view there was a connection between the chest impact and the myocardial infarction, I am unable to draw that conclusion on the balance of probabilities.

2.23. For similar reasons, I am unable to conclude to that same degree whether the ECG result, insofar as it demonstrated any abnormality relative to the anterior descending artery, was, even in the clinical setting that existed, of any particular significance such that it required Dr Semmler to have taken any particular clinical action. I refer to the evidence of Dr Mahar in this regard also.

2.24. However, I still need to examine the issue as to whether the deceased’s decision to discharge himself was in any event a fully informed one.

3. <u>The deceased’s decision to discharge himself</u>

3.1. At 2am the deceased had a breath sample taken from him. It revealed that he had a blood alcohol level of 0.02. It was noted that he also smelt of alcohol. While the level described is not overly high, the evidence of Mr Foote suggests that he and the

deceased had been together drinking steadily that night to the point where Mr Foote described himself in evidence as 'quite drunk' (T254). He told the police in a statement (Exhibit C9a) that he had been drinking beer and scotch to the point where he was drunk and had very little memory of what happened in relation to the circumstances of the fight. Mr Foote said that the deceased's relatively low level of 0.02 had surprised him. Mr Foote himself said that he personally would have been over that level. He was not tested. What had surprised him about the deceased's level was that they had both been 'drinking quite well'. By the time the deceased discharged himself, Mr Foote said in a statement that he had made to a solicitor (Exhibit C9b) 'I was quite drunk and had got sick of standing around and was eager to leave'. He said in his evidence that while he was 'feeling okay' at that stage, he was obviously drunk (T267). I mention this evidence because at first sight, the deceased's decision to discharge himself seems irrational. As well, Mr Foote himself may have had a role to play in that decision.

3.2. I accept the evidence of Dr Semmler that she wanted the deceased to stay for further investigation. Unfortunately, Dr Semmler was not present when the decision was made by the deceased to discharge himself. She was attending to the resuscitation of another patient and it was left to Nurse Walters to deal with the situation. Dr Semmler had last seen the deceased at about 2:30am when she explained the negative outcome of the chest x-ray to him and suggested the necessity for the sternal x-ray. The deceased remained only for a further 25 minutes at the Hospital.

3.3. It is evident to me that both the deceased and Mr Foote were becoming impatient with progress as far as the deceased's treatment was concerned. I have already referred to Mr Foote's comment in his statement, Exhibit C9b, that he had been quite drunk and was eager to leave. Mr Foote also admitted in questioning by me that he had not encouraged the deceased to stay notwithstanding the fact that he knew that Hospital staff wanted to perform the sternal x-ray, that he did not know how serious an injury it might reveal, that the deceased was still complaining of chest pain and that the Hospital staff wanted him to stay.

3.4. In those circumstances, the observation can be made that a sober person, and one concerned with the welfare of a friend, may well have encouraged that friend to stay. Mr Foote's explanation for not encouraging the deceased to stay was this:

> 'Steve's a pretty individual kind of guy. If you told him to stay, if he didn't want to stay, he wouldn't stay.' (T269)

3.5. A dispute that arose in the evidence as to what was said by Hospital staff to the deceased when he left the Hospital has to be examined against that background.

3.6. Dr Semmler told me that when she spoke to the deceased at 2:30am about the necessity for a sternal x-ray to be performed, she could not specifically recall what she said to the deceased. However, she said that at that time she was concerned about possible internal chest injuries and that in normal circumstances she would have verbalised her concerns to the patient. At that time, the deceased and his male companion said that although they were tired of waiting, the deceased indicated that he would wait for the sternal x-ray. I was given to understand that the radiographer was not immediately available, hence the delay. Some time later, when Dr Semmler was attending to the resuscitation to which I have earlier referred, Nurse Walters told her that the deceased wanted to leave. Dr Semmler told Nurse Walters to try and talk the deceased into staying, but that if he refused to stay, to ensure that he signed a risk form and had the risks explained to him before he left. From what Dr Semmler could remember, she told Nurse Walters to spell out those risks to the deceased, namely risk of collapsed lung, injury to the heart, bleeding into the lungs or a fractured sternum.

3.7. Nurse Walters corroborated this and told me that when the deceased indicated that he wanted to leave, he told the deceased that he should wait for the sternal x-ray. He said that when the deceased again indicated that he wanted to leave, he consulted Dr Semmler. Nurse Walters confirmed that Dr Semmler had indicated that she wanted him to stay. He said that he explained to the deceased the risks involved in him leaving. Specifically, he said that he told the deceased about the possibility of bruising to the heart. He says he also told him that if he became short of breath, had further chest pain or collapsed again, he should come back. Nurse Walters said that he told the deceased the doctor wanted him to stay. He read the discharge form to the deceased. The deceased signed the discharge form and left. As to the role of the deceased's male companion, Nurse Walters told me that he had been trying to persuade the deceased to leave. In this regard Nurse Binnekamp also said that when he dealt with the deceased earlier that night 'I recollect that his friend was trying to convince him to leave' (T153).

3.8. There is a dispute between Nurse Walters and Mr Foote as to the terms of the discussion at the time the deceased discharged himself. Mr Foote said he could not recall the discharge form being read out. Mr Foote has said that nothing was said about the possibility of a heart injury when the deceased discharged himself. He said in his statement that if any mention had been made along those lines 'there is no way I would have let Steve leave the Hospital'. This comment by Mr Foote has to be examined against the fact that at that time he was still affected by alcohol, was eager to leave himself and that on his own version of events he did not encourage his friend to stay when he knew of the Hospital staff's desire that he stay and knew that a potentially important x-ray needed to be performed. This all affects my opinion as to Mr Foote's reliability.

3.9. Given the issues in this inquest, particularly those in relation to a possible cardiac pathology or injury arising out of the deceased's presentation, and the undoubted failure by Dr Semmler to examine the ECG result, it occurred to me that Nurse Walters and Dr Semmler had colluded as to whether anything was said, or was meant to have been said, to the deceased about the possibilities of a cardiac injury. Both Nurse Walters and Dr Semmler were questioned as to their opportunity for collusion. I scrutinised their evidence about this carefully and I observed their demeanour. They were both rigorously cross-examined by counsel assisting me, Ms Hodder.

3.10. I also took into account another matter. I have already referred to the requirement that the discharge at own risk form required that the circumstances and advice given to patients discharged at their own risk should be documented in the patient's progress notes. The note contained in Dr Semmler's handwritten notes, made at the end of her shift, states:

> 'risk of pneumothorax, etc explained'

Her discharge letter refers to the deceased having been advised 'to return if increasing pain or respiratory distress develops.' It is to be observed that neither document makes reference to the risk of cardiac injury having been explained to the deceased. Dr Semmler was not privy to what Nurse Walters actually said to the deceased, but she said that the 'etc' after 'pneumothorax' was intended to reflect what she had instructed Nurse Walters to tell the deceased. Although I was by no means convinced that Mr Foote gave reliable evidence of this conversation, it does not follow that the

opposing version given by Nurse Walters has for that reason to be accepted. However, I found Nurse Walters to be an intrinsically reliable historian. I have no reason to doubt what he says. I saw nothing in the evidence nor in their demeanour to suggest that he and Dr Semmler had colluded in preparing their accounts in relation to the issue of what should have been said or what was in fact said to the deceased. Dr Semmler's note-taking in terms of its timing and precision was generally unsatisfactory and her failure to refer in her notes specifically to the risk of cardiac injury is explicable on that basis. I find that Nurse Walters did mention the risk of cardiac injury to the deceased. Notwithstanding this, the deceased was still determined to leave the Hospital. The lateness of the hour, alcohol, fatigue, the delay in having the sternal x-ray performed and Mr Foote's admitted eagerness to leave may all have played a role in that decision.

3.11. There is one other matter I should mention. In his statement to a solicitor (Exhibit C9b), Mr Foote said that when he visited the deceased in Hospital on the Monday evening following his heart attack, he discovered, presumably through the deceased, that the deceased had 'apparently complained to one of the Hospital staff when they were there in the early hours of the Sunday morning that he had a numb left arm'. Mr Bonig for the Department of Human Services, objected to this evidence on the basis that it was hearsay. The obvious riposte to this was that I was not bound by the rules of evidence (Section 22 of the Coroner's Act, 1975). I received this evidence de bene esse initially, and admitted it unconditionally at the conclusion of the evidence, indicating that I would give it the weight it deserved.

3.12. I know from other inquests that radiating pain into the arm, particularly the left, can be a sign of angina. I do not know about numbness. Dr Semmler recorded the deceased's description of his chest pain thus, 'tender chest anteriorly'. Her discharge letter states that her examination 'revealed some ant. chest wall tenderness'. Pain nor numbness to the arm does not feature in any records. Admittedly, Dr Semmler's records were not made at the time of her examination. If the deceased mentioned numbness in his initial presentation, he is most likely to have mentioned it to Dr Semmler, his treating doctor. Dr Semmler said this about pain:

> 'Q. What exactly were his complaints in relation to pain.
>
> A. He had pain on the head where he had been hit, pain in the chest where he told me he had been kicked, and pain in his knee where he had another injury to his knee.

Q. Did he verbalise that he had pain in those three areas.

A. I assume what I would have done is go in there and say “Where do you have pain?” or “Where have you been hurt?”, and he would have went through and told me.

Q. Did he show any other physical signs of being in pain. For example, was he clutching himself, was he groaning.

A. Not that I can recall, no.' (T176)

She told me that she asked the deceased if the pain went anywhere else and he said it did not. Neither the deceased nor anyone else told her about numbness in an arm or arms. When Mr Foote was cross-examined by Mr Bonig, he was asked whether the deceased could have been referring to the fact that he had a numb left arm immediately prior to the heart attack that brought him to Hospital. His answer was ‘I don’t know that’.

3.13. I have carefully considered whether I should accord the evidence of Mr Foote on this subject any weight. It may well be that the deceased said something to Mr Foote about numbness on an occasion subsequent to his heart attack and may even have told Mr Foote that he had conveyed this to Hospital staff on the night in question. The weight to be accorded to this in my view is minimal, however, and does not displace my confidence in Dr Semmler’s evidence that the deceased did not mention radiating pain or numbness.

3.14. It was regrettable that information such as the deceased’s collapse and the result of the ECG were not conveyed to Dr Semmler. In the Observations notes contained within the deceased’s casenotes, there is provision for a box to be ticked in the event that an ECG is conducted. It was not ticked in this case and if Nurse Binnekamp had taken the ECG, his failure to tick this box would have been contrary to his usual practice. In addition, an ECG should in any event be shown straight away to the most senior medical practitioner in the Emergency Department. Nurse Binnekamp could not recall whether he had done that in this case. Dr Semmler on the other hand said that the practice then was that the ECG trace would be placed with the casenotes or handed directly to the medical practitioner. As to how either system broke down, whether by way of exclusion from the notes or by a failure to hand the ECG trace to the doctor, is unclear. However, as a result of what occurred in this case, an ECG result now has to be shown to one of the senior doctors and it has to be signed. This

is done to ensure that a senior practitioner sights and evaluates the ECG promptly so that any abnormality is detected.

3.15. The failure of Dr Semmler to have been informed of the deceased's collapse was particularly significant. It may well be that if the deceased had been informed of the possibilities flowing from that, for example, internal bleeding, it would have been enough to persuade him to stay. Dr Semmler's own views as to the significance of the ECG may also have had a similar impact. However, there is insufficient evidence to base such a conclusion in this case and it is difficult to be critical of Dr Semmler's failure to explain to the deceased what to her mind were ECG abnormalities when Dr Mahar, an experienced cardiologist, tells me there was no warrant for medical staff to have persuaded the deceased to stay on the basis of the ECG result.

4. **Cause of death**

4.1. A post-mortem examination was not conducted in relation to the body of the deceased. The Doctor's Certificate of Cause of Death dated 28 July 2000 (Exhibit C1a) refers to the following conditions leading to death and the duration of those conditions between onset and death.

A	Cardiac arrest	8 months
B	Incessant VT/VF (venous thrombosis/ventricular fibrillation)	8 months
C	Ischaemic cardiomyopathy	8 months
D	Cardiac failure	8 months
E	Old myocardial infarction	8 months

The Death Certificate issued pursuant to the Births, Deaths and Marriages Act 1996 lists the same causes of death. I have no reason to doubt the accuracy of the original doctor's certificate. I find the causes of death in this instance to be cardiac arrest, incessant venous thrombosis/ventricular fibrillation, ischaemic cardiomyopathy, cardiac failure and an old myocardial infarction.

5. Recommendations

5.1. I do not perceive the need to make any recommendations in this matter.

Key Words: Emergency Departments; Hospital Treatment; Ischaemic Heart Disease; Chest Injury

In witness whereof the said Coroner has hereunto set and subscribed his hand and

Seal the 7th day of March, 2003.

Coroner

Inquest Number 18/2002 (2055/2000)