CITATION: *Inquest into the death of Kenneth William Hill* [2009] NTMC 027	
TITLE OF COURT:	Coroner's Court
JURISDICTION:	Darwin
FILE NO(s):	D0145/2007
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HEARING DATE(s):	15- 16 February 2009
FINDING OF:	Mr Greg Cavanagh SM
CATCHWORDS:	Unexpected death in Hospital on admission, Heart disease, Triage, Nursing protocols

REPRESENTATION:

Counsel:

Assisting:	Dr Celia Kemp
Department of Health and Families	Kelvin Currie

Judgment category classification:	B
Judgement ID number:	[2009] NTMC 027
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IN THE CORONERS COURT
AT DARWIN IN THE NORTHERN
TERRITORY OF AUSTRALIA

No.

In the matter of an Inquest into the death of Kenneth Hill

ON 13 SEPTEMBER 2007

AT THE ROYAL DARWIN HOSPITAL

FINDINGS

Mr Greg Cavanagh SM:

INTRODUCTION

1. Kenneth Hill, known as Kenny Hill, was 37 when he died. He developed chest pain and shortness of breath during football training and presented to the Royal Darwin Hospital Emergency Department and was seen by a triage nurse at 6:45 pm. He died at 7:10 pm when he was inside the Emergency Department on a bed, about to be attended to by a nurse. An autopsy was performed which showed that he had a blood clot blocking one of his major heart arteries and he had longstanding coronary artery disease, that is he died from a heart attack.

2. This inquest looked into the triage process at the Emergency Department to determine if what was done was reasonable and, in particular, if Kenny should have been admitted quicker and whether this would have made any difference.

3. Kenny was born on 17 August 1970 in Darwin. He lived with his partner, Kim Ellis, and they had two children, Anthony and Sheena. Kim had two

sons; Michael and Wayne Solowski from a previous relationship. Kenny loved them like his own sons.

4. Kenny worked as a field officer and counselling educator with the Council for Aboriginal Alcohol Programme Services (CAAPS). He was a well known football player who played with the University Rats and was a former St Mary's player. He played rugby for Nightcliff and the University Sharks.

5. Kenny was a very popular and very well loved man. He was a generous man who is described as 'always giving'. He used to go hunting and fishing and drop off fish and goose and wallaby to elderly people. It is an indication of how widely he was grieved for, that there is now a plaque up at CAAPS in honour of Kenny, the University Sharks football club now have a 'best and fairest Kenny Hill award' for B grade and there is now a trophy in Kenny's honour with the University Rats.

6. Kenny's family attended throughout the inquest; Kim Ellis, Kim Hill, Wayne Solowski, Anna Day, Gail Ah Kit and Jeanneen McLennan were all present at various stages. They are all still grieving the loss of Kenny. I would like to particularly thank Kim Ellis and Wayne Solowski for the assistance they provided to Dr Kemp in the lead up to the inquest and during the inquest. It was evident from the number of people that attended how well loved Kenny was, and how deeply his loss has been felt.

7. Kenny's death was reported to me because it was unexpected. This was not a mandatory inquest but I chose to hold a public inquest to fully examine the circumstances surrounding his death.

8. Senior Constable Neale Carlon has conducted a detailed investigation into this death on behalf of the Coroner's Office and this investigation brief was before me, as well as Kenny's original medical records. I thank him for his investigation.

9. On 16 February 2009 I heard evidence from Senior Constable Neale Carlon, Wayne Solowski (Kenny's son who was with him in the Emergency Department), Henry Craigie (another patient in the Emergency Department), Patient Care Assistant James Shattock (who wheeled Kenny inside), Registered Nurse Henry Janssen (who was about to examine Kenny when he collapsed) and Registered Nurse Jennifer Lindsay (the triage nurse), whose evidence I heard by video link. On 17 February 2009 I heard evidence from Registered Nurse Rebecca Weir (a nurse educator from the RDH), Dr Ian Norton (an Emergency Consultant who treated Kenny) and Professor Peter Cameron.

10. Professor Cameron is a Professor of Emergency Medicine at the Alfred Hospital and Monash University. He has been a senior examiner for the Australasian College of Emergency Medicine and is a past President of the College and has co-edited two textbooks on Emergency Medicine. My office approached him to provide an independent expert medical opinion to my office and his evidence in the written opinion, and in court, was of great assistance to me.

11. Pursuant to section 34 of the *Coroners Act*, I am required to make the following findings:

> "(1) A corner investigating –
>
> (a) a death shall, if possible, find –
>
> (i) the identity of the deceased person;
>
> (ii) the time and place of death;
>
> (iii) the cause of death;
>
> (iv) the particulars needed to register the death under the Births, Deaths and Marriages Registration Act;

12. Section 34(2) of the Act operates to extend my function as follows:

> "A Coroner may comment on a matter, including public health or safety or the administration of justice, connected with the death or disaster being investigated."

13. Additionally, I may make recommendations pursuant to section 35(1), (2) & (3):

> "(1) A coroner may report to the Attorney-General on a death or disaster investigated by the coroner.
>
> (2) A coroner may make recommendations to the Attorney-General on a matter, including public health or safety or the administration of justice connected with a death or disaster investigated by the coroner.
>
> (3) A coroner shall report to the Commissioner of Police and Director of Public Prosecutions appointed under the Director of Public Prosecutions Act if the coroner believes that a crime may have been committed in connection with a death or disaster investigated by the coroner."

RELEVANT CIRCUMSTANCES SURROUNDING THE DEATH

14. Kenny was a healthy man and rarely became sick. He had infrequent visits to doctors and nothing suggesting any heart related illness. There was no known family history of heart disease. I heard evidence from Professor Cameron, and am aware from many previous inquests, that this is not infrequently the case for those who die suddenly from coronary atherosclerosis. The death in these cases is completely unexpected.

15. On Thursday 13 September 2007 at about 5:30 pm Kenny went to the 'University Rats' football club training at Gardens oval. He felt unwell during the training, with difficulty breathing, so he left early to go home. As he was driving home he called Kim on his mobile phone and asked her to have Wayne ready to take him to hospital when he got home. As soon as he arrived home, Wayne drove him to the Royal Darwin Hospital. On the way, Kenny said his chest was hurting and he was struggling to breath.

16. They arrived at the hospital with Kenny lying in the back seat of the car and clearly too unwell to walk. Wayne went inside to the triage counter at the Accident and Emergency Department. There are five triage categories. A triage category 1 is given to patients who are to receive 'immediate simultaneous assessment and treatment' and is given to situations that are immediately life threatening. A triage category 2 requires assessment and treatment within 10 minutes. A triage category 3 requires assessment and treatment within 30 minutes. Chest pain which is of a likely cardiac nature should get a triage category 2. Chest pain which is likely to be non cardiac and of moderate severity should get a triage category 3.

17. RN Jennifer Lindsay was the nurse at the triage counter. She had been a nurse for 10 years and had over four years experience at triaging. She was the only nurse at triage, a second staff member was at a meal break. She answered the phone when Wayne got to the counter, it was a call in relation to an incoming ambulance, and he waited for the call to finish. There was a discussion about a wheel chair and Wayne got a wheel chair and went get his father and wheel him in. When they got back to the counter another patient was there. RN Lindsay finished with that patient and then assessed Kenny, her triage screen shows that she started doing this at 6:45 pm. I note that the initial assessment is done from behind glass, which is to protect the triage nurses. She gave Kenny a triage category 3 because she thought that chest pain that was worse on inspiration was more of a respiratory problem than a cardiac problem, which would have warranted triage category 2.

18. RN Lindsay had a 'gut feeling' that something was wrong and so, although there were other triage category 3 patients sitting in the waiting room, she called the Team Leader inside the Department and asked for a bed, and was given the last bed in the Department. She then called for a Patient Care Assistant (a PCA), James Shattock, to take Kenny to a cubicle inside the Emergency Department, ahead of the other triage 3 patients. This occurred some minutes later when the bed became available. This was a slightly

unusual practice and is an indication that she thought he needed a full assessment as soon as possible.

19. The PCA, James Shattock, came and took Kenny to a bed inside. There are two sides with eight beds inside; the nurse in charge of the side Kenny was on was RN Henry Janssen. RN Janssen saw Kenny being brought in. He was dealing with another patient who was very unwell and was about to do a blood gas on that patient, which takes a couple of minutes. He saw Kenny sitting in the wheelchair quietly and didn't think he was in distress. He asked the PCA to put him on the bed and make him comfortable and to call up his information on the computer screen. He said that he then intended to go and assess Kenny.

20. PCA Shattock helped Kenny onto the bed. He said that Kenny couldn't lay down because he found it very hard to breathe and so he helped him to sit up on the side of the bed with his legs hanging over. He says that Kenny collapsed 5 – 10 minutes after being wheeled in. RN Janssen estimates that he collapsed two minutes after his conversation with PCA Shattock. The records indicate that Kenny collapsed at about 7:10 pm. RN Janssen says he was about to do an ECG and take formal observations.

21. All attempts were made to resuscitate Kenny, indeed resuscitation attempts continued for much longer than usual due to his young age, but he was unable to be resuscitated and he was declared to be dead at 8 pm. I find that he died at approximately 7:10 pm when he collapsed.

22. Kenny's family were concerned about delays in the lead up to the triage process and during the triage process, about the way RN Lindsay treated Kenny, about Kenny being given a triage category of 3 rather than a higher category and about why he wasn't seen by someone inside the Emergency Department sooner. These were the central issues for the inquest and I heard detailed evidence on each of them.

23. There were marked differences in the evidence as to what happened in the triage department between Wayne Solowski, Henry Craigie, and RN Lindsay. All these witnesses gave evidence consistent with their statements before me and made appropriate concessions and I consider that all three were doing their best to assist the court by telling the truth as they remember it. These were stressful events, and events that have been much thought over by those involved since they occurred, and it is not surprising to me that there are some differences in people's memories of events. I find all three witnesses were mistaken on some points.

24. Wayne says Kenny was in the car and unable to walk, he ran inside and came to the triage counter. RN Lindsay was on the phone. He said he had to wait for 'roughly five minutes' until she got off. He told RN Lindsay that his dad was short of breath and couldn't walk and she told him to get a wheelchair, there were wheelchairs near the counter, and to bring him in. He did that and when he came back with his dad, RN Lindsay was dealing with another patient. They waited again, he estimates it was 5 – 10 minutes and said he was not 100% sure of the time but was fairly sure, and then were seen.

25. RN Lindsay gave evidence that the only phone calls that would be taken at triage would be from an incoming ambulance. They were calls on a radio phone. She would be given details in relation to an incoming patient, and the call 'would have just been a minute. There is never any 'chit-chat''. She says that Wayne asked for a wheelchair and she said he could take one and Wayne left with a wheelchair to get his father. She says at that stage he didn't say that his father couldn't breathe, if he had then she would have called a patient care assistant (PCA) to come and assist. She said when they came back she was just finishing with a couple of people at triage and she was telling them to go to the receptionist, she thinks it would have been 30 seconds. She said that she really didn't think it could have been five minutes.

26. I find that it is likely that RN Lindsay was on the phone for a minute or two at the most, but that this would have seemed a long time to Wayne who was anxious for his father. I do not find it necessary to make a finding as to the exact nature of the conversation between Wayne and RN Lindsay about the wheel chair as the evidence before me was that it was probably quicker to get Wayne to bring Kenny in, rather than call for a PCA, and so if this was requested, that this was not an unreasonable request. I find that it is likely that RN Lindsay was with the other patients for 2- 3 minutes at the most, and again that this seemed like a long time to Wayne. Overall it seems likely that it took less than 10 minutes from when Wayne first came into the Department to when Kenny's triage commenced.

27. Wayne says that Kenny was unwell. He describes him sitting, with his head down and his hands in his lap, and his leg moving up and down. He said the nurse wanted Kenny's medicare card and was banging on the table asking for the card and saying 'Sir I can't serve you unless you're looking at me and talking'. He said he ended up running out to the car to get Kenny's wallet to give to her. He says is dad may have mumbled something, he can't remember, but otherwise he didn't say anything at all. He told the nurse that his dad had chest pain, couldn't breathe and was lying in the back of the troopy on his back. He says Kenny was not wearing a hat.

28. RN Lindsay found it difficult to make a triage assessment of Kenny. She says Wayne was saying that he couldn't breathe. Kenny was sitting in the wheelchair with his head down, she could not see his face, and his arms were on the arm rest. She said he had a baseball cap on which was pulled down low. She couldn't get him to say anything, nor to look at her. She repeatedly asked him for his name, and she raised her voice and tapped on the glass which separates the nurse from the patients, to get his attention and to encourage him to talk to the hole in the glass window. She ended up taking the history from his son. She says she did not ask for a medicare card or health care card; she had no need for such a card and doesn't ask for

them. She said she did ask several times for his name and birth date. Kenny then took a wallet from his back pocket and gave it to Wayne and said 'give her the fucking wallet'. She says Wayne didn't leave at any point.

29. Her triage notes state *Short of breath; STATES SOB, CHEST PAIN WORSE ON INSPIRATION. STATES PLAYING FOOTY, FELT SOB, STATES NO TRAUMA TONIGHT. WONT LOOK UP DIFFICULT TO ASSESS.* SOB stands for 'Short of breath'. She says she got information from his son. Kenny did not appear to be struggling to breathe, he was not clutching his chest and he didn't look unwell to her. He seemed quite relaxed.

30. Henry Craigie was waiting in the Emergency Department at the time. He had heard of Kenny Hill but didn't know him personally. He gave evidence about seeing Kenny in a wheelchair at the counter with his son standing behind him, and the nurse behind the counter asking for a medicare card. He remembers the son going outside to get the card. He remembers the nurse tapping the counter and he remembers her saying 'I don't want you to answer, I want him to answer'.

31. I find that RN Lindsay had difficulty triaging Kenny because he was not talking to her and he was looking down. I find that she asked him for his name, more than once, she raised her voice and she tapped on the glass, and that she was frustrated because she was having difficulty getting the information that she required. It is clear that she was blunt and assertive, and I understand that this could have been perceived as rude by an onlooker. However I also find that the triage process is, by its nature, time pressured, and that ascertaining the patient's response, and getting their name and date of birth, is an important part of the process so it was not unreasonable for her to have acted in this way.

32. I consider that it is likely that she did ask Kenny for an identity card of some sort in order to get his details from it, and that it is likely that Wayne went to the car to get his wallet, and that she is mistaken about these details.

33. The evidence is consistent that Kenny was sitting in the wheelchair with his head down. There is some difference as to how sick he looked. Wayne thought he looked like he was struggling to breathe, Henry Craigie said he was bending over holding his chest, and PCA James Shattock said he looked short of breath. RN Lindsay said he didn't look like he was short of breath or in pain and RN Janssen said the same thing. It would be understandable that those who knew someone well would pick up changes in them better than others, and I find that the assessment of RN Lindsay was reasonable, backed up as it is by the assessment of the other senior nurse, RN Janssen.

34. I have considered whether Kenny could speak. Wayne said he may have mumbled or said something at the triage counter but Wayne didn't hear anything. Henry Craigie said he wasn't saying anything. RN Lindsay says she remembers him saying a few words about the wallet which sounded annoyed. PCA Shattock said Kenny was talking to him when he wheeled him in, saying 2-3 words at a time, not complete sentences, and that his impressions was that he had difficulty talking. He says Kenny told him that he wasn't doing very well. It seems likely that Kenny was able to say a few words, despite him being so unwell, but did not talk to the triage nurse, perhaps because he was sick, worried and annoyed at what he perceived as a delay in his being admitted.

35. There was some conflicting evidence in relation to the times. Wayne told the court that Kim Ellis had called, and he had taken the call while still waiting to be seen by the triage nurse. The phone records that call as having been received at 6:58 pm. However the triage sheet states that the triage commenced at 6:45 pm. These two cannot both be correct and so either one or the other is in error. It seems less likely that the full triage process took

place, including Wayne running out to get the medicare card, and Kenny was taken inside, and collapsed all within a 10 minute period and so I find that it is more likely that the triage record is correct, that is that the triage commenced at 6:45 pm.

WOULD EARLIER TREATMENT HAVE MADE A DIFFERENCE

36. Professor Cameron gave evidence that Kenny died from a lack of blood supply to the heart resulting from a blood clot blocking his coronary artery. He said that there are two treatments for this condition; a cardiac catheter which is not available at the Royal Darwin Hospital and thrombolysis which is available. Dr Norton was the Emergency Consultant on that evening and so the person overall in charge of the Department. He gave evidence that the reason that cardiac catheterisation can't be done is that there is no cardiothoracic back-up at the Royal Darwin Hospital and so should a complication occur the nearest surgeon that could fix it is 3000 km away. He said that it would take 15-20 minutes from when a patient came in before thrombolysis commenced and best estimates are that it takes 15- 20 minutes to be effective. Thus even if a decision had been made to give him thrombolysis the instant he appeared in the Emergency Department, the outcome is not likely to have been different.

37. I find that even had Kenny been seen by an Emergency Department doctor, had an ECG and received treatment earlier, it is unlikely to have made a difference.

ANALYSIS OF TRIAGE PROCESS

38. I heard from RN Weir, the Clinical Nurse Educator, that it is common practice to ask for a friend or family member to bring a patient in. She said that it would be inappropriate for a triage nurse to leave the desk to get a patient, it is important that the desk be staffed at all times. She said it is often slower to use a PCA than a family member because you have to page

them. She said that an ambulance call should take precedence over everything else because it could be an unconscious patient coming in and it takes time to prepare for receiving a trauma patient. She said it was reasonable to see another patient while waiting for the first patient to be brought in as it takes 2- 5 minutes to triage a patient and it would be reasonable to expect to be able to do this in the interval. She explained that getting the name and the date of birth are very important parts of the triage process as they enable the patient to be tracked through the hospital system and patient notes to be made available. These are important for giving allergies, medical conditions and past interactions with the hospital. She said talking to a patient is also very important for assessing them. She said she herself has used a medicare or health care card as a way of obtaining the patient name to put on the system.

39. Professor Cameron gave evidence that he considered that it was reasonable to give Kenny a triage category of 3 given what RN Lindsay knew. He said that Kenny's presentation was atypical for a heart attack. He looked closely at the times taken at each stage of the process and gave evidence that it was quicker to get Wayne to bring him in and then wait for a PCA and so that was reasonable. He says if the nurse was on the phone for 1-2 minutes that was reasonable. He said the 20 minute delay in getting him to a cubicle was not ideal, but was not unreasonable in a busy department and was within national standards for what is a reasonable time frame for a triage category 3 patient. He said that the decision of the triage nurse to get Kenny into a cubicle was the best way to deal with the communication problems that were occurring.

40. Dr Norton described that this death was reviewed in the Emergency Department's internal review process and they had concluded that they couldn't find fault with anything that had been done. He said that a triage Category 3 was appropriate on the information as presented.

41. I find that the triage category of 3 given to Kenny was reasonable in the circumstances. National standards are that Category 3 patients should be seen within half an hour and Kenny was about to be seen when he collapsed at the 25 minute mark. I therefore find that he was seen within an appropriate time frame. The evidence was clear that while it is not ideal that he had been present in the Department for 25 minutes (probably somewhat more minutes if the time before he was triaged is taken into account) without any observations or an ECG being done, in a busy department this sometimes happened and it was not unreasonable that it happened. I find that each of the individuals involved behaved professionally and did their best to assist Kenny and I have no criticisms of the actions of any individual on the day.

42. I heard evidence about the Emergency Department on that night being extremely busy. RN Lindsay remembers there being in the order of 20-25 people waiting to be seen and there were people queued up to see the receptionist. Dr Norton had done some research in relation to the numbers and gave evidence that on that particular day 150 patients passed through the Emergency Department, and 29 of those patients were seen from 5 pm to 7 pm. He gave evidence that having 29 patients present in a 2 hour period is a 'huge number' and that it is very difficult to process that number of patients. He said there were 9 other category 3 patients in the Department when Kenny was admitted, that is he was admitted ahead of all of them.

43. In addition I heard that there was a problem with 'access block' which occurs when there are a shortage of beds available in the hospital, which then means the Emergency Department is filled up with patients waiting for a hospital bed and there is a shortage of beds available for emergency patients coming into the Department. This is an Australia-wide issue and it makes work very difficult and stressful. It is a particularly serious problem in Darwin because there are no other hospitals to send patients to so the

hospital can never go on ‘bypass’, that is all non-urgent cases are sent to another hospital, to help relieve the problem.

44. The triage nurse has responsibility for all that patients that are presenting and stays responsible for them until they are taken into the Department. On that day RN Lindsay had started work at 7 am and, because the Department was short-staffed, did a double shift and so was still working in the evening when Kenny came in. The Department is staffed so there are two nurses on, except from midnight to seven am when there is one nurse. However when a nurse went on break, the position was not back-filled so there was one nurse on, and this was the situation when Kenny came in. RN Lindsay described how, when there were two nurses at triage, one nurse would triage at the counter, the second would see the patient after they had been to the receptionist and call them in to the observation room and get more of their story, do observations, give pain relief and so some tests if needed. However when there is only one triage nurse the priority is staying at the counter to triage people presenting.

45. Professor Cameron gave evidence that it seemed like the triage nurse was under pressure, and it may have been better to have a back-up nurse. He said ideally there should be enough nurses so that a nurse isn’t doing a double shift. He said it would be worth reviewing the resourcing of the triage area to make sure it is capable of responding to peaks in demands to avoid unnecessary delays in assessment for potentially critical ill patients.

46. It seems particularly unfortunate that there was no second nurse available during the period from 5 to 7 pm that day which was so busy. It seems likely that had there been two triage nurses on, Kenny would have been seen more quickly; the delays before he was seen would likely have been less and one nurse could have taken him into the observation room and started observations and an ECG leaving the other to continue at the triage counter. Dr Norton said, in response to a question from Dr Kemp, that it would be

helpful to have a floating nurse who could back fill into triage when one of the nurses was away so at all times up to midnight there were two nurses.

RECOMMENDATION

47. That the Royal Darwin Hospital should give consideration to making provision for backfilling the second triage nurse position (there are two nurses except from midnight to 7 am) when a nurse takes a meal break or is otherwise absent.

Formal Findings

48. Pursuant to section 34 of the *Coroner's Act* ("the Act"), I find, as a result of evidence adduced at the public inquest, as follows:

(i) The identity of the deceased person was Kenneth William Hill born on 17 August 1970 in Darwin. The deceased resided at 25 Bayfield Road, Malak, in the Northern Territory of Australia.

(ii) The time and place of death was at the Emergency Department of the Royal Darwin Hospital at 7:10 pm on 13 September 2007.

(iii) The cause of death was a complete blockage of the right anterior descending coronary artery with blood clot on a background of longstanding coronary artery disease. .

(iv) Particulars required to register the death:

1. The deceased was Kenneth William Hill.

2. The deceased was of Aboriginal decent.

3. The cause of death was reported to the Coroner.

4. The cause of death was confirmed by post mortem examination carried out by Dr Terrence Sinton.

5. The deceased's mother was Noreen Jane Hull and his father was Kim Joachim Hill.

6. The deceased lived at Bayfield Road, Malak.

7. The deceased worker as a field officer and counselling educator with the Council for Aboriginal Alcohol Programme Services (CAAPS).

Dated this 30th day of June 2009.

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GREG CAVANAGH
TERRITORY CORONER