OFFICE OF THE STATE CORONER

FINDINGS OF INQUEST

CITATION:	**Inquest into the death of Sharon Faye Congoo**
TITLE OF COURT:	Coroner's Court
JURISDICTION:	Cairns
FILE NO(s):	COR 1556/07(0)
DELIVERED ON:	8 December 2009
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FINDINGS OF:	Kevin Priestly, Northern Coroner
CATCHWORDS:	CORONERS: Inquest – Quality of Care, Rural community, Mareeba Hospital, Bacterial septicaemia, medical record keeping

REPRESENTATION:

To assist the Coroner:	Mr Peter Johns
For Family	Ms Walker Munro I/B LAQ Mackay
For Dr O'Neill, Dr Wenck & Dr Stewart:	Ms Rosengren I/B Minter Ellison Lawyers
For Dr Majeed:	Mr Ashton I/B Spark Helmore Lawyers
For Dr Byrnes:	Mr Luchich I/B TressCox Lawyers
For Evelyn Kincaid:	Mr Rebetzke I/B Roberts & Kane Solicitors
For Dr Hannah & Susan Dahlstrom:	Mr Fitzpatrick I/B Corrs Chambers Westgarth

Surrounding Circumstances

Sharon Faye Congoo lived in Mareeba with her husband, Andrew Congoo and their 5 children, who were aged from a few months to 11 years of age. During the Christmas / New Year period of 2006-2007, the children contracted chicken pox and everyone in the home had some kind of flu. Around New Years Eve, Mrs Congoo also had the flu.

Early in the week after New Year's day 2007, Mrs Congoo was in bed when her two year old daughter was jumping around on the bed and bumped her head on the shin area of Mrs Congoo's right leg. The bump initially caused some pain. On or about Friday 5 January 2007, Mrs Congoo told Mr Congoo that she felt like she was over the flu but her leg was painful. On Saturday 6 January 2007, Mrs Congoo reported her leg was becoming more painful. She rested the leg all of that day.

By Sunday 7 January 2007, Mrs Congoo needed assistance in mobilising. Mr Congoo saw that she was in more pain and experiencing a fever. They decided to go to the Mareeba Hospital where Mrs Congoo presented with flu like symptoms and right leg pain. She was examined by Dr Byrne who ordered various blood tests. He provisionally diagnosed a viral illness and advised Mrs Congoo to return, for possible admission, if her condition deteriorated. Treatment was by way of fluids, paracetamol and anti-inflammatory medication.

Mr Congoo states that on Monday, 8 January 2007, his wife's condition worsened but they did not return to the hospital, despite the increased pain, because they had been told by the doctors that the results from the tests would not be back until sometime on Wednesday. They did not believe that the hospital could do anything more for them.

On Tuesday 9 January 2007, Mrs Congoo felt worse, represented with her husband to Mareeba Hospital and was examined by Dr Majeed. The blood and other results initiated on Sunday were not available. Mrs Congoo continued to complain of flu like symptoms together with non-specific leg pain. Again, she was treated conservatively and returned home.

The next day, Wednesday 10 January 2007 at about 12.30 Mrs Congoo represented to Mareeba Hospital and was examined by Dr Majeed. Examination suggested further deterioration in her general condition. She was admitted and underwent further investigation. During transfer to the ward at about 3.15pm, nursing staff noticed her fingers were cyanosed. She displayed other signs and symptoms of septic shock. There was a further sudden and serious deterioration in her condition. Notwithstanding medical evacuation that afternoon by helicopter to Cairns Base Hospital and admission to Intensive Care, she died at 6.30am the next morning.

During the course of this coronial investigation and at the hearing, there was considerable evidence adduced relating to the quality of the treatment and care provided to Mrs Congoo. It is not the role of the Coroner to determine the merits of every issue whether of fact or expert opinion about which there is a conflict on the evidence. In the context of a death in a health care setting, the immediate priority is to focus on those issues about quality of care and treatment that are causally connected to the cause of death. A Coroner may also consider secondary or coincidental matters

(not causally connected with the cause of death) that give rise to important questions of public health and safety.

Therefore, adopting this approach, the issues which I am required to determine are framed as follows:

1. What was the cause of the serious deterioration in Mrs Congoo's medical condition on the afternoon of Wednesday and her death?
2. Were there any missed opportunities on presentation of Mrs Congoo to Mareeba Hospital for medical intervention (including admission for observation) that would have affected the outcome?
3. Were there failings on the part of the hospital or its staff that contributed to any such missed opportunity?
4. Although not contributing to her death, were there any significant aspects to the treatment and care of Mrs Congoo that warrant consideration?

Medical Cause of Serious Deterioration and Death

On 17 January 2007 Dr Max Stewart, Pathologist, performed an autopsy including internal examination and concluded that Mrs Congoo died from an overwhelming septicaemia without a defined precipitating cause. He considered an overwhelming viral septicaemia was a possibility but that a bacterial septicaemia was more likely. His examination of the right leg failed to reveal any abnormality.

Professor Anthony Brown, Senior Staff Specialist, Department of Emergency Medicine, Royal Brisbane and Women's Hospital, reviewed the clinical records and statements of witnesses at the request of the Office of State Coroner and provided an expert report. He also gave evidence at the hearing. Professor Brown accepted and concurred with the opinion of Dr Stewart as to the cause of death and noted that in 16-25% of all severe sepsis/septic shock cases, the primary site of infection remained unknown.

Another expert witness, Dr Michael Whitby, a highly qualified and experienced infectious diseases physician, also provided a report to the court on reviewing the clinical records, witness statements and other expert reports. He concluded that the most probable cause of the death was an overwhelming bacterial infection leading to circulatory collapse and multi-organ failure. Dr Whitby noted the absence of any identified source or focus of the infection, either pre-morbidly or post mortem; and that no specific infecting organism was ever identified. Dr Whitby also notes that the right leg pain remains completely unexplained. As with the other experts, Dr Whitby considered other possible causes of the deterioration and death but all other possibilities could be reasonably excluded. Therefore, notwithstanding the limitations in the diagnosis in explaining many of the major presenting features, by a process of exclusion and taking into account the mode of death, an overwhelming bacterial sepsis was the most likely cause of death. Dr Whitby also regarded a diagnosis of viral sepsis as not unreasonable in the circumstances.

There was a number of specialist staff at Cairns Base Hospital involved in the management of Mrs Congoo. Those specialists worked on a provisional diagnosis of an overwhelming sepsis but were unable to identify a precipitating cause.

The unanimous opinion of the expert medical witnesses is that Mrs Congoo died of an overwhelming sepsis notwithstanding the fact that the diagnosis does not explain all of her presenting features and the absence of a precipitating cause or focus of infection.

Opportunities for Intervention

Opportunities for medical intervention need to be considered in light of the capacity of the hospital, concerns of the family of Mrs Congoo, and the medical evidence as to the cause of death.

Ms Julie Hartley-Jones, Chief Executive Officer of the District Health Service, provided a statement describing the facility at Mareeba as an accredited 44 bed hospital offering a range of services including outpatient and emergency, medical, general surgical, low risk maternity and paediatric. It offers only limited visiting specialist services. Mareeba Hospital does not have an 'Emergency Department' as set out by the Australasian College for Emergency Medicine guidelines, but rather provides an Outpatient and Emergency Service which is classified as a Level 1 Emergency Service. This means that it provides limited treatment of acute illnesses and injuries as well as resuscitation and stabilisation of emergencies before transfer or retrieval by more specialist qualified medical practitioners to a higher acuity facility. The majority (75 – 80%) of the presentations to the outpatient and emergency service are of a lower acuity nature, similar to those that would be seen in general practice. Mareeba Hospital is staffed by medical practitioners with general practice qualifications.

The family of Mrs Congoo have expressed concern about her clinical management during presentations to Mareeba Hospital. The family believe Mrs Congoo should have been admitted for observation when she presented on Tuesday 9 January 2007. It is suggested that there would have been an earlier recognition and better understanding of the severity of her condition thereby increasing the prospect of earlier intervention and a different outcome.

Mr Congoo said in his statement:

> *"In relation to the presentation on the 9th of January, I am of the opinion that Dr Majeed should have admitted Sharon to the hospital and started running more tests. She would have been in a better position to have her condition monitored. They may have detected a pattern in regard to her deterioration quicker. She was sicker on Tuesday night when she was sent home after seeing Dr Majeed. If she had been admitted, the medical staff would have seen this. Sharon was not sleeping at home at all. She was in pain and not comfortable at home. With the Nurses checking her at regular intervals they would have had more data on her condition I was not trained to do these observations."*[1]

Understandably, a great deal of court time was occupied with examination of witnesses about the detail of the circumstances surrounding the presentation on Tuesday and whether or not Mrs Congoo should have been admitted overnight for observation. There are conflicting accounts in the evidence of Mr Congoo and Dr Majeed about aspects of this presentation. For example, Dr Majeed says that he offered to admit Mrs

[1] Paragraphs 6-7, page 15 and paragraph 1, page 16 of the statement of Andrew Congoo

Congoo overnight for observation but that Mr and Mrs Congoo declined that offer. Mr Congoo says that no such offer was made; it should have been made and if made, would have been accepted as Mrs Congoo was packed, ready in expectation for admission. It will be recalled that on the presentation on Sunday, Dr Byrne advised them to return to hospital if her condition worsens and raised the possibility of admission in that event.

The need to resolve these and other conflicts in the evidence is dependent on whether or not an admission overnight might have resulted in a different outcome. On one view, it may be argued that in the absence of an admission overnight it will never be known whether or not any useful information would have emerged. However, I am inclined to the view that there is ample, reliable evidence about the condition of Mrs Congoo relating to the presentations on Tuesday (including clinical observations) and Wednesday including her subsequent deterioration to answer this question. Together with the benefit of expert opinion based on those clinical observations and in the context of her medical cause of death, a conclusion as to the likely value of overnight observations can be reached.

The starting point for consideration of this aspect is the uncontentious evidence of the medical experts that the prospect of survival in septicaemia/ septic shock is inversely proportional to the time of delivery of antibiotics. In other words, the earlier the recognition of septicaemia/ septic shock and administration of antibiotics, the greater is the chance of survival.

Professor Brown initially expressed the opinion in his report that Mrs Congoo should have been admitted on Tuesday 9 January for repeated vital signs and observations, a thorough medical examination and work up, and the earlier commencement of fluid resuscitation plus empiric antibiotics. Under cross-examination and by reference to the clinical observations recorded at that presentation, Dr Brown accepted that the only markedly abnormal clinical sign was elevated heart rate, the most likely diagnosis at that stage was a viral illness and there was no serious reason to consider a diagnosis of septicaemia[2]. Professor Brown also accepted the proposition, given the clinical observations; a competent medical practitioner might offer admission overnight and if declined, accept that patient's decision without further discussion. It appears that the initial opinion of Professor Brown was proffered in the absence of knowledge of clinical observations of Mrs Congoo taken on examination by Dr Majeed shortly after her presentation on Wednesday 10 January. These observations were not part of the medical records provided to Professor Brown and came to light later in the coronial investigation. According to these records, Mrs Congoo had a pulse rate of 105 beats per minute, a blood pressure of 105/75, a respiratory rate of 20 breathes per minute and oxygen saturation of 98% at room air. Clearly, there had been an improvement based on the clinical observations when compared with those taken on Tuesday 9 January. When presented with this information, Professor Brown agreed that Mrs Congoo did not suffer a progressively deteriorating or incipient form of septicaemia or septic shock[3]. Further, there was no clinical basis to consider that possibility on presentation on Tuesday. He also agreed with the suggestion that admission overnight would not have advanced any diagnosis of bacterial infection (in terms of differentiating a diagnosis of a viral illness) as any further blood test results would not have been

[2] 3-84 of the Transcript
[3] 3-86 to 3-87 of the Transcript

available before the serious deterioration on Wednesday afternoon. Finally, Professor Brown accepted, as a good suggestion, by way of explanation for the very unusual clinical features the proposition that Mrs Congoo had earlier had a viral illness that lowered her immune system and then suffered a secondary fulminant bacterial infection causing her death within a matter of hours[4].

Dr Whitby, with the benefit of the clinical observations at presentation on Wednesday 10 January at the time of preparing his report, opined that the provisional diagnosis of a viral infection on presentation on Tuesday 9 January was reasonable taking into account no markedly abnormal clinical observations except the elevated heart rate then potentially attributable to the right leg; and the full blood count which showed no increase in white cell count and no increase in neutrophil count.

In light of the important and appropriate concessions made by Professor Brown and the evidence of Dr Whitby, I find that admission on 9 January 2007 is not likely to have affected the outcome for Mrs Congoo. It is not necessary for me to resolve any conflicts on the evidence between Dr Majeed and Mr Congoo including any offer to admit Mrs Congoo.

The next potential opportunity for intervention occurred from presentation on Wednesday 10 January to medical evacuation by helicopter at about 6.45pm that evening.

Professor Brown was initially critical of the management of Mrs Congoo at presentation on Wednesday. However, part of his criticism was based on his understanding that no clinical observations taken on presentation at the Hospital and on examination by Dr Majeed. He was later provided with the clinical observations in fact taken about 1.15pm and conceded that they were essentially normal and not suggestive of a progressive septicaemia. As at 1.15pm, Dr Majeed provisionally diagnosed a viral illness and possible deep vein thrombus. He initiated further investigations and commenced Mrs Congoo on fluids. In his report, Dr Whitby expressed the opinion that the provisional diagnosis of Dr Majeed was appropriate and reasonable in the circumstances. That diagnosis did not warrant administration of anti-biotics. In any event, Dr Whitby was of the view, with which Professor Brown concurred, administration of antibiotics at that stage was unlikely to alter outcome.

It will be recalled that the first clinical observation suggestive of a serious deterioration in the condition of Mrs Congoo was cyanosed fingers at about 3.15pm. Although there was detailed examination of witnesses about the care and treatment of Mrs Congoo in the following period, there is no evidence to suggest that any identified opportunity for improvement would have affected the outcome.

Dr Wenck, the Director of Intensive Care at Cairns Base Hospital, was also asked to prepare a report commenting on the management of Mrs Congoo at Mareeba and he reported:

> *" … despite our best efforts we were unable to identify a clinical focus to explain Mrs Congoo's profound septic shock. This along with her non-specific presentation, made*

[4] 3-88 of the Transcript

her treatment and management very difficult. I note from the autopsy report that the forensic pathologist was also unable to identify the source of any infection.

Regarding the treatment provided by the doctors at Mareeba Hospital prior to Mrs Congoo's transfer to the Cairns Base Hospital, I note it is very difficult even for an intensive care specialist to treat a patient when an underlying cause for their signs and symptoms cannot be identified. Mrs Congoo's management was further complicated by her complaints of a sore leg in circumstances where the clinical examination and the results of the radiological investigations revealed no significant abnormality.

A patient with this level of complexity was very challenging for a small country hospital such as Mareeba Hospital which does not have a recognised Emergency Department in accordance with the Australasian College for Emergency Medicine guidelines let alone an Intensive Care Unit. It was not fully equipped with resources nor staffed by doctors with the specialist experience to provide the level of care that Mrs Congoo required after she deteriorated at about 3.15pm on 10 January 2007. Importantly the doctors recognised this and appropriately arranged for her to be transferred by helicopter to a higher acuity hospital which would be more likely to be able to manage her condition.

Having treated Mrs Congoo, I doubt that even if she had been administered an additional, few litres of fluid at Mareeba Hospital, that it would have had any appreciable impact on the outcome because the infection was so overwhelming."

Therefore, in summary, the presentations of Mrs Congoo to Mareeba Hospital on Sunday 7 January and Tuesday 9 January were consistent with the working diagnosis of both treating doctors of a viral illness except for the right leg pain. Appropriate investigations were initiated and advice given. The increasing levels of symptoms suffered by Mrs Congoo did not suggest to the reviewing medical experts a different clinical path to that taken by treating doctors. There was no clinical information available to the treating team suggestive of a bacterial infection. Preliminary clinical indications from full blood tests suggested the contrary. On presentation on Wednesday, the clinical observations showed no significant abnormality. It was not until 3.15pm and the observation of cyanosed fingers, did the first indications of what was later revealed to be a sudden and overwhelming bacterial sepsis become apparent.

The clinical history does present a picture strongly suggestive that Mrs Congoo suffered a viral illness that weakened her immune system and left her vulnerable to the rapid onset of a fulminant bacterial sepsis. In retrospect, nothing more could have been done by way of medical intervention at Mareeba Hospital to arrest the clinical progression of the bacterial sepsis.

I find that there was no missed opportunity for medical intervention on presentation of Mrs Congoo at Mareeba Hospital that would have affected the outcome. It necessarily follows from this finding, that there were no failings on the part of the hospital or its staff that would have affected the outcome.

Opportunities for Improvement

The nature of the issues that arose in this coronial investigation necessarily subjected the clinical and organisational management at Mareeba Hospital to detailed examination. It was inevitable that opportunities for improvement would come to light. Some of those opportunities warrant comment. Before I do that, it is important that I acknowledge that Dr O'Neill, the Medical Superintendent, in performing the very difficult and challenging task of providing clinical leadership and bringing about improvements at Mareeba Hospital, was highly commended for his efforts by the reviewing specialist, Professor Brown. Dr O'Neill commenced as Medical Superintendent in March 2006. It is clear that Dr O'Neill initiated an agenda for enhanced clinical services prior to the death of Mrs Congoo and has since continued pursuing that agenda to benefit of the community in Mareeba. Dr O'Neill reviewed the circumstances surrounding this death, identified opportunities for improvement and implemented an action plan to realise those opportunities. It would be entirely wrong and mischievous of a reader of this section of the findings to interpret any identified opportunity for improvement as a shortcoming reflecting adversely on the clinical leadership of Dr O'Neill.

Staffing Levels

While I made it clear during the hearing that staffing levels were not identified as an issue of significant concern, evidence was adduced in witness statements addressing this issue and improvements made that are relevant to the public perception of the facility.

Dr O'Neill reported that in January 2007, there was only the capacity to roster one doctor to the outpatients and emergency section each day. Dr O'Neill sought and secured an exemption to the Health Insurance Act to enable the hospital to access medicare funding in respect of outpatient presentations which in turn enabled the Hospital to employ more doctors and nurses. The outpatients and emergency section now has two doctors available between 8am and 4.30pm on weekdays while offering increased levels of staffing in other sections.

Clinical Record Keeping

Justifiable criticism was made of the adequacy and quality of record keeping in the course of the management of Mrs Congoo. The failures include the absence of any record of treating doctor's advice about admission, the absence of clinical observations taken but not recorded in the patients charts, the manner and form of triage records and confusion amongst nursing staff about the appropriateness of retrospective notes.

I am satisfied that the steps taken by Dr O'Neill to identify and remediate deficiencies was reasonable and appropriate. However, there is one aspect that deserves greater consideration.

Clearly, the first and most important objective of good clinical record keeping is inform other health professionals involved in the treating team and subsequent treating teams of vital information relevant to decision making. A secondary objective is informing those reviewing clinical management, either internally or externally, of the relevant

history. An omission on the part of Dr Majeed to record the clinical observations of Mrs Congoo on presentation on Wednesday in the patient charts had a number of unfortunate consequences. The clinical observations only came to light much later in the coronial investigation. In the interim, a medical expert was briefed with what was considered to be a complete set of medical reports from Mareeba Hospital and resulted in initial criticism of Mr Majeed's clinical management. The direction of the coronial investigation might have been different had that information come to light much sooner.

Blood Testing

Professor Brown was critical of the lack of capacity at Mareeba Hospital for immediate blood testing such as full blood count, urea and electrolytes, and liver function tests. Normal blood tests must be sent to Cairns. Unfortunately, many small facilities in rural and remote locations are reliant on pathological services available at regional centres. Mareeba is but one example. There are legitimate logistical and financial obstacles to the provision of those services within the hospital. The real hope for access to such facilities is through advances in technology. Mareeba hospital has an iSTAT machine. It also now has white blood cell count analysis and C-reactive protein machines. Dr O'Neill reports that if blood test results are urgently required, that is in itself an indicator that the patients management requires a higher level of care and may result in a transfer of the patient to Cairns Base Hospital for admission.

There are no matters relating to this subject about which I might usefully make any recommendation.

Fluid Resuscitation

Professor Brown raised an issue about the adequacy of fluid resuscitation of Mrs Congoo during the afternoon of Wednesday 10 January. There also was examination of witnesses about this issue with a view to determining what level of fluid resuscitation was provided. This was an aspect about which poor record keeping practices played a role. It was and remains very difficult to make any final determination.

However, Dr Wenck, the Director of Intensive Care at Cairns Base Hospital, reported:

> *" In relation to her fluid resuscitation, there is little doubt that had Mrs Congoo been a patient at the Cairns Base Hospital when she deteriorated on the afternoon of 10 January 2007, I may well have ordered a larger volume of crystalloid fluids than was ordered and administered to her by the doctor at Mareeba Hospital. However, management of fluids in a septic patient in a small hospital whilst waiting for a helicopter transfer is not a simple exercise. The requirement for fluids whilst at Mareeba Hospital needed to be balanced with the real risk of pulmonary oedema requiring ventilation. Whilst this would have been readily managed at the Cairns Base Hospital or any other tertiary hospital by sedating, intubating and ventilating her, Mareeba Hospital's doctor was in no way equipped to undertake these advanced interventions. Intubation requires the use anaesthetic drugs which have the potential to be very dangerous in relatively inexperienced hands.*

I accept the opinion of Dr Wenck. In light of his opinion, it is not necessary for me to come to a final view about the timing and adequacy of fluid resuscitation.

Clinical Co-ordination and Review

During the afternoon of Wednesday 10 January and after the seriousness of Mrs Congoo's condition became evident, Dr Majeed made arrangements for her transfer to Cairns Base Hospital. However, it is evident that the manner he went about making those arrangements was in accordance with the practices at Mareeba Hospital but was less than optimal. He initially inquired of a Medical Registrar, Dr Hannah, about the prospect of Mrs Congoo being accepted into the Medicine Department. There is a significant difference in the accounts of each doctor about the detail of there conversations. In any event, Dr Majeed ultimately made contact with the Emergency Department at Cairns Base Hospital and was referred to the Clinical Co-ordinator to arrange medical evacuation. Satisfactory arrangements were ultimately made.

It is evident that substantial improvements have been made to process of arranging medical transfers between hospitals within the District as well as the knowledge and understanding of health workers about those procedures. Telehealth facilities have also been installed to facilitate access to and assistance from specialist expertise in assessing candidates for retrieval. Whilst there remains a need for more work to be done, Ms Julie Hartley Jones, CEO of the District Health Service, is aware of the need and is addressing that need. The issue does not require the making of a recommendation to progress that work.

Conclusion and Formal Findings

I find that Sharon Faye Congoo died at Cairns Base Hospital on 11 January 2007 due to bacterial septicaemia from an unknown organism. It is likely that Mrs Congoo initially suffered a viral illness that lower the capacity of her immune system and left her vulnerable to the sudden and unexpected onset of the bacterial septicaemia. There was nothing more that could have been done by way of medical intervention at Mareeba Hospital that would have led to an earlier recognition or to arrest the clinical progression of the bacterial sepsis that ultimately took her life.

I offer my condolences to the family of Mrs Congoo and to the extent that there has been any delay in concluding this investigation, I offer my apologies.

The inquest is closed.

Kevin Priestly
Northern Coroner