OFFICE OF THE STATE CORONER

FINDINGS OF INQUEST

CITATION:	**Inquest into the death of Marjorie Joyce Tanner**
TITLE OF COURT:	Coroner's Court
JURISDICTION:	Maroochydore
FILE NO(s):	COR 167/05
DELIVERED ON:	28 November 2007
DELIVERED AT:	Maroochydore
HEARING DATE(s):	21 November 2005, 3 & 4 July 2006
FINDINGS OF:	CJ Taylor, Coroner
CATCHWORDS:	CORONERS: Inquest – appropriateness of medical care at Maryborough and Hervey Bay Hospitals, policies and procedures, adequacy of inter-hospital transfer procedure

REPRESENTATION:

Counsel Assisting:	Senior Sergeant AJ Hurley
Fraser Coast Health Service District:	Ms J Rosengren i/b Corrs Chambers Westgarth
Nurse Kerri Webster:	Mr J Allen i/b Roberts and Kane, Solicitors

Introduction

These are my findings in relation to the death of Marjorie Joyce Tanner who died after having presented initially to the Maryborough Hospital with a three-day history of abdominal pain, distension and vomiting. She was subsequently transferred to the Hervey Bay Hospital where she was diagnosed with bowel obstruction. The deceased was being conveyed by helicopter to the Nambour General Hospital when during the course of the flight the deceased's condition deteriorated and she passed away. These findings seek to explain how the death occurred and consider whether any changes to policies or practices could reduce the likelihood of deaths occurring in similar circumstances in the future. The *Coroners Act 2003* provides that when an inquest is held into a death, the coroner's written findings must be given to the family of the person who died and to each of the persons or organisations granted leave to appear at the inquest. These findings will be distributed in accordance with the requirements of the Act and also placed on the website of the Office of the State Coroner.

The evidence

It must be said by way of background that initially, on Tuesday the 18th of January 2005 the deceased was taken by her husband, Mr Cyril Tanner (who is himself now deceased), to the Accident and Emergency Department of the Maryborough Base Hospital as a result of her complaint that she was experiencing pain and discomfort in her stomach which was bloated.

The medical records of the Maryborough Base Hospital that attach to the deceased (see Exhibit 19) appeared to disclose that the deceased was given some medication and inferentially allowed to go home.

The records further disclosed that the deceased was then admitted to its Accident and Emergency Department at 3.10pm on the 19 January 2005 and assessed by a triage nurse, (S Muirhead) as a Code 4 patient. (i.e., a non-urgent case but is required to be seen within two hours.)

In consequence, the deceased was examined by Dr Lawrence Lip, the senior medical officer, at 4.25pm on that same date and his preliminary diagnosis was that she was constipated, which is a form of bowel obstruction, however she did not present as having a serious bowel obstruction as her abdomen was only mildly distended, in the result Dr Lip ordered an abdominal X-ray upon the deceased, the result of which showed two or three fluid levels in the upper abdomen, but nothing down below save for faeces, which indicated to the doctor that the faeces was blocked in the lower region and confirmed his preliminary diagnosis.

At this stage Dr Lip could not order that a barium enema be performed as the hospital X-ray facility had closed at 5pm. Thus he requested the deceased's husband return the following day; that is, the 20 January 2005 to collect his wife's referral.

Nursing staff then, under direction from Dr Lip, performed a fleet enema upon the deceased at 6.10pm and at 6.15pm she took 20 milligrams of Sorbitol

orally. She was then kept under observation by Dr Lip for approximately one hour and after further examining her and in the exercise of his clinical judgment, the deceased was again allowed to go home as she was no longer displaying signs of pain and was not vomiting and her abdomen was not distended.

The deceased's husband returned as requested by Dr Lip to the hospital at 10.55am on the 20 January 2005. However, Dr Lip was unable to issue an urgent referral as he was informed by the consultant radiologist attached to the Southern Cross X-ray Clinic, Maryborough that the clinic was fully booked for the two week period. Thus, Dr Lip made a decision to order, and consequently made arrangements with the clinic at Maryborough as there was no radiologist stationed at Hervey Bay Hospital, for an urgent CAT scan of the deceased's abdomen which, allowing for patient preparatory time of approximately 24 hours, could not be scheduled until 11am on the 21 January 2005.

At 3.20pm on the 20 January 2005 the deceased's husband telephoned Dr Lip and informed him that because of his wife's condition and his own medical condition, that he was unable to cope with his wife's situation. Consequently, the deceased's husband returned the deceased to the Accident and Emergency Department of the hospital where she was very shortly thereafter examined by Dr Lip, and at this time the deceased was not distressed, she was not vomiting or showing signs of significant distress or any other symptoms that would indicate she was seriously ill.

Dr Lip ordered a further abdominal X-ray as is the standard practice for patients who have previously undergone an enema as well as blood tests, the X-ray results of which on this occasion showed multiple fluid levels on both the top and bottom, indicating to him that the enema had been unsuccessful in alleviating the obstruction.

The deceased was again seen by Dr Lip at just after 4pm and thereafter she was admitted to General Ward 2 between 4.30pm and 4.45pm and at this time she appeared to Clinical Nurse Pollock to be relatively settled. However, at approximately 5pm the deceased's condition deteriorated. That is, she became pale, cold, clammy and sweaty and somewhat distressed, hence, the deceased was in receipt of constant nursing care, including regular observations of her condition. Also Nurse Pollock attempted to contact three doctors, namely, Dr Abdul-Razak, Dr Zhou, and Dr Johnson to attend upon the deceased in the ward. However, Nurse Pollock found that she could not raise Abdul-Razak by page. And in relation to Dr Zhou he was contacted by her at 5.15pm but as he was rostered on duty at the Hervey Bay Hospital as from 5.30pm, he was unable to attend personally, but he did telephone and order the deceased be administered Maxolon. In the case of Dr Johnson, it was Nurse Pollock's recall that she contacted him on at least two occasions, whilst it was Dr Johnson's recall that he was contacted on no more than three occasions whereby Nurse Pollock informed him that the deceased's condition was deteriorating. However, he was prevented from attending as he was in the process of treating other patients in the emergency department who, in his

clinical opinion, were more urgent cases.

It should be said at this stage that the deceased was admitted to General Ward 2 for the purpose of being further assessed for a bowel condition by Dr Abdul-Razak, who was the rostered surgical principal house officer at Maryborough until 5pm on 20 January 2005. However, about that time, Dr Abdul-Razak was called to the Hervey Bay Hospital to attend to an urgent admission in his capacity also as the on-call surgical principal house officer from 5pm onwards.

At approximately 6pm on 20 January 2005 Dr Johnson, who was a resident medical officer attached to the same department as Dr Lip, was called to General Ward 2 to review the deceased's condition and, in that regard, it was Dr Johnson's recall that he was the only doctor rostered on duty at the hospital at 5pm that day. However, Dr Johnson was of the view that the lack of medical resources on the day in question would not have significantly altered the clinical outcome in relation to the deceased.

Dr Johnson also formed the opinion upon review that the deceased was likely to be suffering from a bowel obstruction due to the fact that her bowels had not opened for three days. She was experiencing some intermittent vomiting, and her blood tests showed a raised white cell count indicating an infection, with a degree of secondary ileus or sepsis.

Dr Johnson therefore increased her rate of intravenous fluids to ensure that her extremities were adequately profused, and that she was not intravascularly dry and did not lapse into septic shock and he also ordered that she be administered antibiotics in the form of Ampicillin, Gentamicin and Metronidazole.

Further, Dr Johnson contacted Dr Abdul-Razak at the Hervey Bay Hospital to discuss the possibility of surgery for the deceased. However, for that decision to be made, it was necessary for the deceased to be transferred to the Hervey Bay Hospital to enable Dr Abdul-Razak to examine her.

It was also Dr Johnson's opinion that the deceased in all probability was too unwell to remain at the Maryborough Base Hospital. He therefore made the decision that she should be transferred to the Hervey Bay Hospital by ambulance with the expectation that the process involved in arranging for an ambulance to attend would take between one to two hours which, in his view, would not be unreasonable given the deceased's condition was emergent, but not completely urgent and, that after 6.30pm her condition in general improved slightly, albeit, the deceased was still acutely unwell, but her hypertension had started to resolve somewhat, as had the tachycardia.

In the result, the deceased was transported by ambulance from the Maryborough Hospital departing approximately 8pm on the 20 January 2005, and arriving at the Hervey Bay Hospital Emergency Department at approximately 8.30pm on that same day, whereupon the deceased was admitted with an inserted IV line, and indwelling catheter, to that department

by Registered Nurse Webster who, it must be said, had only been employed in that particular department for approximately one to three months, but was untrained in that field, albeit that she was under some form of triage nurse supervision. It also should be said that Nurse Webster was required to perform the role of admittance nurse, as the rostered triage nurse was busily attending to other patients.

In any event, upon admission the deceased was observed by Nurse Webster to be agitated during the course of her shift which concluded at 12.30pm the following day. The deceased was in receipt of constant nursing care by herself as the primary nurse carer, and other nursing staff, and that care included close observation of her condition, whereby the deceased continued to be agitated and at times she was verbally confused, which was attributed to her Alzheimer's.

However, her physical wellbeing was otherwise not of concern as she was not tachycardiac; her blood pressure and her pulse were within acceptable limits and, further, there became the requirement for re-insertion of the IV line and nasogastric tubing as a result of the deceased's removal on two occasions, and the subsequent bandaging in the form of mittens of each of the deceased's hands to prevent further removal and, the re-clothing of the deceased after she had removed her hospital gown on a number of occasions.

The deceased was then examined some 10 to 15 minutes later by Dr Abdul-Razak, and he also diagnosed her condition as one of bowel obstruction, but not peritonitis, which would have required immediate surgery.

Dr Abdul-Razak then instituted the standard treatment regime for such a condition which included the insertion of a nasogastric tube to decompress the bowel and drain secretions and she was given oxygen. He also ordered an arterial blood gas analysis whereupon some 30 to 45 minutes later he contacted the on-call surgical consultant, Dr May, as was procedurally required, as Dr Abdul-Razak had to be surgically supervised at that time as part of his registration under the area of need scheme with the Medical Board of Queensland.

Dr May confirmed that not only would he be present, but that he would commence the requisite surgery, that is a laparotomy, upon the deceased.

Thereafter, Dr Abdul-Razak contacted the on-call consultant anaesthetist, Dr Adel Tanious, in the result Dr Tanious attended at the Emergency Department and viewed the arterial blood gas results and, at this time, Dr Abdul-Razak was informed by Dr Tanious that because of the ABG results, which indicated the deceased had a high lactate level, that it was his opinion that if surgery proceeded there was a high risk that the deceased's condition may deteriorate to the point that she would need a ventilated bed post-operatively if she was unable to maintain her own airway. But, in any event, such a bed was not available and Dr Tanious had been informed by the relevant nurse manager, Ms West, that there was not, in particular, any nursing staff that could be

utilised to provide the one-to-one patient care that would have been necessary for the deceased, as the one ventilated bed generally in use at the Hervey Bay Hospital intensive care unit was already occupied by another patient.

Armed with the opinion of Dr Tanious who would have had the responsibility of ensuring the integrity of the deceased's airway if surgery had to proceed and, the opinion of the consultant that surgery should not proceed without a ventilated bed, and his own knowledge that without the availability of a ventilated bed at Hervey Bay Hospital, the deceased could not have been operated on, save in the very emergent situation of her condition presenting as one as peritonitis, which was not the case here. Dr Abdul-Razak then made, in accordance with usual practise, the clinical decision based on the fact that after surgery, tertiary institutions do not accept patients who are unstable and without ventilation, that the deceased should be transferred to a hospital that had a ventilated bed available which represented the deceased's best changes of survival.

At approximately 9.45pm Dr Abdul-Razak commenced the cumbersome and time consuming task of trying to find a ventilated bed for the deceased and in that regard he contacted firstly the Royal Brisbane Hospital, being the receiving hospital for his area, where he spoke in turn with the surgical registrar, the registrar of the Intensive Care Unit and then the Nurse Manager, without success.

Secondly, the Princess Alexandra Hospital, where he spoke to the surgical registrar and the registrar of the Intensive Care Unit. However, he did not speak to the nurse bed manager as he was aware by that stage that there was no relevant bed available.

Thirdly, the Nambour General Hospital where, finally, at approximately 10.58pm he was able to secure an admittance to a ventilated bed for the deceased at that hospital.

Dr Abdul-Razak was also of the opinion that even if the deceased had been operated on, given the findings made by the pathologist in his autopsy report, then any major abdominal surgery performed on the deceased would have also placed her at significant risk of having a heart attack on the operating table.

During the course of the approximately three hours the deceased remained at the hospital, Dr Abdul-Razak attended upon the deceased at least five or six times, and it was his observation that she received very close nursing attention, albeit that the deceased's medical records, at face value, do not accurately reflect the amount of attention given to the deceased by himself and the nursing staff.

In the interim, a small Queensland Ambulance Service long range helicopter had been despatched from its base at Maroochydore. It would appear at approximately 12.24pm, after it must be said, some initial delay which was

caused by the malfunctioning of the relevant pilot/crew paging system, and without the Maroochydore communication centre having been informed by QEMS Brisbane of the deceased's actual medical condition. And further, the questioning of the pilot by the Intensive Care Paramedic Sweedman who was assigned to the flight, as to why this particular aircraft was being taken rather than the larger one which was also available for use at the relevant time. And in that regard, it was Paramedic Sweedman's opinion that the smaller aircraft was not suitable for inter-hospital transfer as there was insufficient room to treat a patient, especially if the need for resuscitation arose.

In any event Intensive Care Paramedic Sweedman subsequently arrived at the Hervey Bay Hospital at 1.50am on the 21 January 2005 and at 1.55am the deceased was examined by him and found to be an elderly patient who was pale and clammy with a fast heart rate of 120 which, in his opinion, was abnormal. However as there were no guidelines in place at the relevant time to deal with the deceased's situation, it fell for a "judgment call" by him that the transfer should proceed at 2.30pm, based upon the fact that he was aware that the relevant hospital did not have a ventilated bed, and that the deceased had a Glasgow coma score of 15, indicating that she was conscious, alert and responding, and she was orientated, able to obey verbal commands, although agitated and she did not require pain relief and, in the event of vomit occurring during flight which, in his opinion, presented as an increased risk due to the altitude of the aircraft was required to fly at, then it was planned that she be suctioned, seated upright, attempted to be rolled on her side, which he was aware would be difficult given the aircraft in question, incubating and taking care of her airway.

During the flight and at approximately 2.50pm the deceased became agitated again and started pulling on her nasogastric tube in the result that the deceased vomited profusely, hence attempts were made to clear her airway by rolling her onto her side, but this proved unsuccessful because of the small confines of the aircraft.

Further suction was utilised and the container filled with vomitus. IPPV was then initiated and an OP airway was placed in the deceased's mouth.

The deceased then became bradycardic and no cardio pulse was able to be palpated, therefore adrenalin was administered and a fluid bolus given, however limited resuscitation proved ineffectual and treatment ceased at 3.15am.

The deceased was subsequently conveyed to the Nambour General Hospital where she was pronounced life extinct at 3.30am on the 21 January 2005 by Dr I Ignatovich.

As a direct result of the deceased's demise, a clinical audit was undertaken in February 2005 by the then Chief Health Officer Dr Gerry Fitzgerald and a Mrs Susan Jenkins, the manager of the Clinical Quality Unit who was attached to the office of the Chief Health Officer. The purpose of the audit was to measure the quality and safety that related to the transfer of the deceased

from the Hervey Bay Hospital to the Nambour Hospital and identify areas of improvement (see Exhibit 20).

Subsequently both staff at the Maryborough and Hervey Bay Hospitals raised concerns at a meeting on the 8 July 2005 that inaccuracies were included in the clinical audit previously referred to, hence the production by Miss V Elves, (Integrated Risk Manager and Miss J Haffejee, Clinical Liaison Nurse, both of the Fraser Coast Health Service District) in August 2005 of a confidential audit report amendments (see Exhibit 21).

On the 22 December 2006 Miss Kerry Winsor was appointed to the position of District Manager for the Fraser Coast Health Service and thereafter in collaboration with Drs Waters and Hanelt, a master action plan (work in progress) was developed identifying responsive action to address the recommendations of Fitzgerald and Jenkins and included measures necessary to address other identified areas of need (see Exhibit 22 in part).

In consequence it would now appear that the Fraser Coast Health Service (that is the Maryborough and Hervey Bay Hospitals) has a surgeon establishment of three full-time surgeons, a deemed specialist, one Emergency Medical Officer and a yet to be made appointment of a second emergency medical officer, where as in January 2005 there was a compliment of two full-time surgeons and a Senior Medical Officer, and in the area of principal health officers there has been an increase from two to three, as well as junior staff being of one to two, and further in the area of anaesthetics, the service now has five anaesthetists and a deemed specialist as opposed to three anaesthetists and a senior medical officer.

The increase in the establishment of the principal health officer should now mean that if a doctor such as Abdul-Razak was placed in the position that he found himself in January 2005, then with the consent of the Director of Surgery, he would have been able to remain at the Maryborough Hospital to treat a patient such as the deceased.

In relation to the provision of radiology services which appears still to be in the hands of the private provider Southern X-ray, Miss Winsor has advised that for non-urgent barium enema tests, the time frame remains up to two weeks. However if the test is an urgent one and, provided the relevant medical officer contacts the radiologist, the time frame could be reduced to two days.

The intensive care unit at Hervey Bay now has the nursing capacity to ventilate two patients comfortably. However, there would be a struggle to maintain a third, albeit that the nursing compliment has been increased by one full-time nurse.

There also has been an increased focus on improving the orientation and education in the area of documentation, including the emergency department of both hospitals.

In relation to the issue of time delay in transporting patients from Maryborough

to Hervey Bay via the Queensland Ambulance Service, it was Miss Winsor's understanding that the Queensland Ambulance Service has increased their staff by three, thereby allowing for acutely ill patients to be transported more quickly to Hervey Bay, and there has also been the establishment of a designated transfer and observation area at the Hervey Bay Hospital that has an accommodation capacity of four patients, which effectively reduced the patient transfer handover to once only; that is the patient is received in the emergency department or transfer lounge area and thence handed over directly to the ward staff.

It was also Ms Winsor's understanding that there had been no change in the process that is required to take place when transferring a non-critical patient out of the district to a higher level facility.

Ms Winsor has also detailed in evidence that a number of initiatives have been implemented to approve the delivery of emergency services in both the Maryborough and Hervey Bay Hospitals, so that a safe and effective service is provided to the public, notwithstanding that at the relevant time medical and nursing staff levels were insufficient, given that there was also the medical supervision requirement to be met and the ongoing difficulties of attracting suitably qualified intensive care nurses, which was a global problem.

These initiatives include the provision of 17 additional rostered general practitioners to maintain 24-hour emergency services; joint training program with nursing and Queensland Ambulance Service staff; appointment of residential paramedics to improve response transportation times; training of up to 15 to 25 nursing staff to rural and remote isolated practice endorsement to enable approved medication to be administered and the allocation of extra clinical nurse hours.

It should also be said at this stage that at my own initiative, but with the assistance of the office of the State Coroner, I called for a review of the circumstances surrounding Mrs Tanner's death to be conducted, and this was done via hospital clinical notes by Dr David Thiele (Senior), Dr Chris Joyce and Mr Sean Birgan, and I wish to place on record my appreciation for the time and effort taken by the learned authors in the provision of their review report signed off by Dr Thiele and dated the 4 July 2006 (see Exhibit 24).

Findings required by s45

Identity of the deceased – The identity of the deceased person is Marjorie Joyce Tanner.

How he died – The deceased person died after having presented initially to the Maryborough Hospital with a three-day history of abdominal pain, distension and vomiting. She was subsequently transferred to the Hervey Bay Hospital where she was diagnosed with bowel obstruction in the result the deceased was being conveyed by helicopter to the Nambour General Hospital. However, during the course of the flight the deceased's condition deteriorated and she passed away.

Place of death – The deceased person died in the Energex Rescue helicopter en route from Hervey Bay Hospital to the Nambour General Hospital.

Date of death– The deceased died at approximately 3.15am on Friday 21 January 2005.

Cause of death – The cause of death was (as certified by Dr N Milne, forensic pathologist)

1. (a) coronary atherosclerosis; and,
2. Ischaemic small bowel, Alzheimer's Disease

Comments and recommendations

Having said that, I now turn to make comment pursuant to section 46(1)(a) and (c) of the said Act which relevantly provides that a coroner may, whenever appropriate, comment on anything connected with a death investigated at an inquest that relates to public health or safety or ways to prevent death from happening in similar circumstances in the future.

Be that as it may and now returning to the comments that I wish to make in relation to section 46(1)(a) and (c) of the said Act.

It must be said that at the inquest there were a number of systemic issues that were canvassed that organisationally and otherwise could have been handled better. I will not address them here as I have already alluded to them during the course of my findings. However, it must be said that with the benefit of hindsight that if an appropriately staffed ventilated bed could have been found for the deceased at the Hervey Bay Hospital then this tragic death may have been avoided, and I emphasise the word "may", having regard to Dr Abdul-Razak's caveat that even if abdominal surgery had been performed there still remained a significant risk of the deceased having a heart attack on the operating table, thus the clinical judgement called for and acted on in this instance was a reasonable one in all the circumstances.

It is regrettable that Mrs Tanner's death had to be the catalyst for the changes that have now and will continue to be implemented to ensure that a safe and effective health service is provided to members of the public that access the Maryborough and Hervey Bay Hospitals, and perhaps some of those changes may also have state-wide application. But in any event, I will endorse those changes that have been outlined in evidence given by the relevant witnesses called at this inquest, and I would also endorse the learned comments of the review committee that the clinical needs of patients, especially in the acute area, would best be served by the establishment of one hospital that has an appropriate level of medical and nursing staff and, I would add, so as to meet the flexibility of the population demands.

Further, I would recommend that appropriate procedures/protocols be put in place conjointly if that has not already been done by the appropriate agencies

in this case; that is, the Queensland Ambulance Service, QEMS and Queensland Health, to ensure that the appropriately sized patient retrieval aircraft is utilised to meet, as far as is reasonably practical, foreseeable medical contingencies inter-flight.

On the evidence placed before me I am satisfied that the actions of the medical, nursing and paramedic staff involved in the care of the deceased were reasonable in all the circumstances. I therefore do not propose to take any action as set out in section 48 of the *Coroners Act 2003*.

The inquest is now closed.

CJ Taylor
Coroner
28 November 2007