

# **OFFICE OF THE STATE CORONER**

# **FINDINGS OF INQUEST**

CITATION:	Inquest into the death of Arthur Lawrence Smith
TITLE OF COURT:	Coroner's Court
JURISDICTION:	Brisbane
FILE NO(s):	COR 2057/04(2)
DELIVERED ON:	5 April 2007
DELIVERED AT:	Brisbane
HEARING DATE(s):	14 & 15 March 2007
FINDINGS OF:	Mr John Lock, Coroner
CATCHWORDS:	Coroners: inquest, Hospital/health procedures death
REPRESENTATION:	

REPRESENTATION:

Counsel Assisting:

Mr N Jarro

The Prince Charles Hospital & Royal Brisbane and Women's Hospital:

Ms D P Condon

The *Coroners Act 2003* provides <sup>1</sup> that when an inquest is held, 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 are my findings in relation to the death of Arthur Lawrence Smith. They will be distributed in accordance with the requirements of the Act and a copy will be sent to the Office of the State Coroner.

## Introduction

On 19 August 2004, Mr Arthur Lawrence Smith presented to the Royal Brisbane and Women's Hospital ("RBWH") with acute shortness of breath. His wife had earlier contacted The Prince Charles Hospital ("TPCH") and had been directed to take him to RBWH rather than TPCH.

She had contacted TPCH initially because approximately two weeks prior, Mr Smith underwent a mitral valve repair and coronary artery bypass grafts at the TPCH. He had only been discharged from TPCH five(5) days earlier. An echocardiograph performed at the RBWH Emergency confirmed severe mitral valve regurgitation. In view of his deteriorating condition, Mr Smith was intubated and ventilated and was urgently transferred to TPCH. An emergency operation to replace the mitral valve was performed at TPCH. The valve was replaced successfully, however Mr Smith could not be weaned from cardiopulmonary bypass support and in the early hours of 20 August 2004, he passed away.

These findings seek to explain how the death occurred and consider whether any changes to Queensland Health policies or practices and in particular those of The Prince Charles Hospital could reduce the likelihood of deaths occurring in similar circumstances in the future.

## The Coroner's jurisdiction

I will say something about the nature of the coronial jurisdiction before referring to the evidence.

<sup>&</sup>lt;sup>1</sup> s 45 Coroners Act 2003

## The scope of the Coroner's inquiry and findings

A coroner has jurisdiction to inquire into the cause and the circumstances of a reportable death. If possible he/she is required to find:-

- whether a death in fact happened;
- the identity of the deceased;
- when, where and how the death occurred; and
- what caused the person to die.

There has been considerable litigation concerning the extent of a coroner's jurisdiction to inquire into the circumstances of a death. The authorities clearly establish that the scope of an inquest goes beyond merely establishing the medical cause of death.

An inquest is not a trial between opposing parties but an inquiry into the death. In a leading English case it was described in this way:-

It is an inquisitorial process, a process of investigation quite unlike a criminal trial where the prosecutor accuses and the accused defends... The function of an inquest is to seek out and record as many of the facts concerning the death as the public interest requires.<sup>2</sup>

The focus is on discovering what happened, not on ascribing guilt, attributing blame or apportioning liability. The purpose is to inform the family and the public of how the death occurred with a view to reducing the likelihood of similar deaths. As a result, the Act authorises a coroner to make preventive recommendations concerning public health or safety, the administration of justice or ways to prevent deaths from happening in similar circumstances in future.<sup>3</sup> However, a coroner must not include in the findings or any comments or recommendations statements that a person is or maybe guilty of an offence or is or may be civilly liable for something.<sup>4</sup>

<sup>&</sup>lt;sup>2</sup> R v South London Coroner; ex parte Thompson (1982) 126 S.J. 625

<sup>&</sup>lt;sup>3</sup> s46

<sup>&</sup>lt;sup>4</sup> s45(5) and 46(3)

## The admissibility of evidence and the standard of proof

Proceedings in a coroner's court are not bound by the rules of evidence because the Act provides that the court "may inform itself in any way it considers appropriate."<sup>5</sup> That does not mean that any and every piece of information however unreliable will be admitted into evidence and acted upon. However, it does give a coroner greater scope to receive information that may not be admissible in other proceedings and to have regard to its provenance when determining what weight should be given to the information.

This flexibility has been explained as a consequence of an inquest being a factfinding exercise rather than a means of apportioning guilt: an inquiry rather than a trial.6

A coroner should apply the civil standard of proof, namely the balance of probabilities, but the approach referred to as the *Briginshaw* sliding scale is applicable.<sup>7</sup> This means that the more significant the issue to be determined, the more serious an allegation or the more inherently unlikely an occurrence, the clearer and more persuasive the evidence needed for the trier of fact to be sufficiently satisfied that it has been proven to the civil standard.<sup>8</sup>

It is also clear that a coroner is obliged to comply with the rules of natural justice and to act judicially.<sup>9</sup>This means that no findings adverse to the interest of any party may be made without that party first being given a right to be heard in opposition to that finding. As Annetts v McCann<sup>10</sup> makes clear that includes being given an opportunity to make submissions against findings that might be damaging to the reputation of any individual or organisation.

<sup>&</sup>lt;sup>5</sup> s37

<sup>&</sup>lt;sup>6</sup> *R v South London Coroner; ex parte Thompson* per Lord Lane CJ, (1982) 126 S.J. 625

<sup>&</sup>lt;sup>7</sup> Anderson v Blashki [1993] 2 VR 89 at 96 per Gobbo J

<sup>&</sup>lt;sup>8</sup> Briginshaw v Briginshaw (1938) 60 CLR 336 at 361 per Sir Owen Dixon J

<sup>&</sup>lt;sup>9</sup> Harmsworth v State Coroner [1989] VR 989 at 994 and see a useful discussion of the issue in Freckelton I., "Inquest Law" in The Inquest Handbook, Selby H., Federation Press, 1998 at 13 <sup>10</sup> (1990) 65 ALJR 167 at 168

## The investigation

The matter was investigated by the State Coroner's office and it was determined that an inquest should be held. A pre-hearing conference was held in Brisbane on 6 February 2007. Mr Jarro was appointed Counsel Assisting. Leave to appear was granted to Ms Condon representing The Prince Charles Hospital. She was later given formal leave to represent the Royal Brisbane and Women's Hospital. The family of Mr Smith was not separately represented but they consulted with those assisting me before and throughout the inquest. The inquest then proceeded over two days commencing on 14 March 2007. Seven witnesses gave evidence and eighteen exhibits were tendered.

## Issues and findings to be determined

It is not necessary to repeat or summarise all of the information contained in the exhibits and of the oral evidence given but I will refer to what I consider to be the more important parts of the evidence.

It will be seen that the issues concerning how Mr Smith died are uncontroversial, in the sense that they are not really in contest. There were two issues that arose out of concerns by the family and which plainly arise from the facts and evidence. Those issues concern:

- the direction of Mr Smith from The Prince Charles Hospital to the Royal Brisbane and Women's Hospital and subsequent transfer back to TPCH;
- Patient education and information at TPCH.

## The Evidence

#### **First Operation**

On 2 August 2004, Mr Arthur Lawrence Smith, aged 75, underwent a mitral valve repair and coronary artery bypass grafts under the care of Dr John Dunning, Deputy Director of Cardiothoracic Surgery at the TPCH. Dr Dunning is a fully qualified Medical Practitioner and Specialist Cardiothoracic Surgeon and Heart/Lung Transplant Surgeon, registered in the State of Queensland. He was in 2004 and is now employed as Deputy Director of Cardiothoracic

Surgery at TPCH. He provided a statement dated 11 January 2005 and he gave evidence at the inquest. From his evidence it is clear that over the 12 months prior to the operation, Mr Smith had a history of angina and shortness of breath. Mr Smith's symptoms had been deteriorating over the months immediately before the operation. Investigations performed before the operation confirmed the presence of significant obstructive disease affecting the left coronary artery system with a 90% narrowing in the left anterior descending vessel and a 60% narrowing of the obtuse marginal branch of the left coronary system. Both of these vessels were judged to be suitable for coronary artery bypass grafts. There was some disease visible in the right coronary artery on the angiographic examination, but this disease produced a 50% narrowing at the worst point and this lesion was judged not to be flow limiting in the right coronary system. In addition, echocardiography had confirmed the presence of moderate to severe mitral valve regurgitation.

Dr Dunning's opinion was that the coronary artery disease led to the symptoms of angina, and the leaking mitral valve contributed to the breathlessness on exertion that Mr Smith had experienced.

During the operation, the coronary artery bypass grafts were first performed and then the mitral valve was repaired. In relation to the MVR repair it is recorded in the Operation Report (dated 20 August 2004) as follows:

. . .

. . .

"...Good exposure to the mitral valve was achieved and the P2 section of the posterior leaflet was confirmed to be prolapsing...The valve was tested in static conditions by inflating the left ventricle with normal saline. The valve repair appeared competent.

The patient returned to the Critical Care area in a stable cardiorespiratory condition.

**N.B.** Intra-operative echocardiography immediately post cessation of cardiopulmonary bypass confirmed satisfactory function of the mitral valve repair without any severe mitral valve leak."

5

Mr Smith remained in the TPCH until discharge on 14 August 2004. A review of the patient chart indicates that immediately after the surgery Mr Smith was anxious, confused and agitated; however that seemed to resolve a few days later. These are common after affects of such a surgical procedure. By 13 August 2004, he was very keen to go home. Referrals were made by TPCH to the St Luke's Nursing Service for ongoing support and education at home. A staff member of the hospital faxed information to St Luke's Nursing Service, although it is unclear what information was provided.

At the time of discharge on 14 August 2004 a nursing entry noted that Mr Smith was discharged home with his wife, and medications and letters were given and explained. At that time, the entry also records that Mr Smith's observations were stable and within normal limits. The brief discharge summary dated 14 August 2004 and prepared by a Registered Medical Officer (RMO) states, amongst other things, as follows:

"GP to please monitor and adjust blood pressure and medications accordingly and to please arrange trial of void at trial of void clinic at RBWH (8<sup>th</sup> floor) next week."

It is apparent that at the time of discharge his heart condition was relatively stable. The main complication which had delayed his discharge was his difficulty in discharging his urine, hence the insertion of the catheter and the arrangements for the Trial of Void Clinic. It would seem that such difficulties in discharging urine are not unusual, particularly in elderly people<sup>11</sup> although I note it is not mentioned as a potential complication in some of the patient information material or consent forms.

The daughter of Mr Smith, Sheree Smith, in her letter to the Deputy Coroner dated 9 September 2004 alleges, amongst other things, that no information or patient education was given to her mother/carer as to what changes in the patient's health state would have required immediate attention. Mr Smith's wife states that at the time of her husband's discharge, she was shown how to

<sup>&</sup>lt;sup>11</sup> evidence of Dr Dunning

change his urine bag briefly and given some spares. She was also given a list of medications and when to take them and a discharge paper to take to her husband's doctor. She notes that:

"The staff were very helpful and we were told to ring the ward if we had any problems. An appointment was made for my husband to have a bladder ultrasound on Monday 16 August."

It appears Mrs Smith together with her daughter Mrs Harrison took Mr Smith back to the TPCH for an ultrasound on 16 August 2004.

On 18 August 2004, Mrs Smith noted that St Luke's were to visit and she telephoned them and got a recorded message. She left her telephone number to which they did not respond. Mr Smith was due to visit his GP the next day.

#### **Referral to Royal Brisbane Hospital**

In the early hours of 19 August 2004 Mr Smith was experiencing shortness of breath and one of his motions was black. He had a doctor's appointment scheduled for 10.00 a.m. but Mrs Smith decided that hospital was the appropriate place for him to be.

Mrs Smith telephoned the TPCH and asked for Dr Mott. She was informed that the doctor was in theatre and she was put through to the emergency department. *"I…asked for Dr Mott I was told he was in theatre, I was put through to Emergencies. I told the lass that my husband had had open heart surgery on 2 August and that his motions were black and he was coughing up pink phlegm, she referred to someone and came back and said to take him [to RBWH] as they couldn't treat him at [TTPCH]. I said he had been treated previously for the same thing, she referred to someone and came back and said to take him go to [RBWH]. I said he would have to go to [RBWH]. I said he would he very upset having to* 

go to another hospital. She also said if it was a heart problem they would transfer him back to [TTPCH].....<sup>12</sup>

As will be seen the reason for the decision to direct him to RBWH is that the description of a black motion/stool or melaena is a clear indicator of gastro-intestinal bleeding.

Dr Ward and Dr Dunning gave evidence that TPCH does not have the facilities or staff expertise to deal with gastro-intestinal bleeding. Dr Ward states that the decision to refer Mr Smith to RBWH was the correct one and would be still the decision made now.

In her statement, Dr Ward stated that TPCH is a tertiary/quaternary referral hospital for cardiothoracic medicine and surgery as well as providing some services of a community hospital. The Admission Policy – Acute Inpatient Services (versions 4 and 5 provided)<sup>13</sup> clearly states that:

"If the principal diagnosis does not fall within the expertise of any of the hospital services, that patient should be stabilised and then transferred to another appropriate hospital with the available expertise."

Dr Ward says, and I accept, that gastroenterology is not one of the services provided at TPCH and the patients who phone the hospital reporting symptoms of gastrointestinal bleeding (haematemesis or melaena) were (and still are) advised to go to RBWH as TPCH has no gastroenterologist or urgent endoscopy service. Similarly an ambulance would take a patient with such symptoms to RBWH, not to TPCH.

One of the confusions for Mrs Smith and the family is that in the year 2000 Mr Smith had a right knee replacement operation at TPCH. One of the post operative complications from that procedure was recorded episodes of melaena. He received treatment at TPCH for the melaena, including endoscopy, hence the reference by Mrs Smith to having been previously treated for the same thing.

<sup>&</sup>lt;sup>12</sup> Exhibit B10

<sup>&</sup>lt;sup>13</sup> Exhibit D2

Dr Ward stated in evidence that the post operative services such as endoscopy and colonoscopy would have been performed by a private clinic service conducted in buildings attached to TPCH but not part of the hospital. That private service was not operating in 2004 or now. A perusal of the TPCH medical records for Mr Smith shows confirmation of his treatment for his melaena and for those procedures in the hospital records, not those of a private clinic. The consent forms are headed "TPCH Day Procedure Unit" and with references to the Acting Director of Gastroenterology and Hepatology. Without knowing it was a separate unit, a perusal of the TPCH records would for all intents and purposes lead one to think it was a part of the hospital and a patient, unless told, would think such services were routinely provided. This no doubt explains or has contributed to the family's confusion.

It is noted that TPCH has recently in 2007 opened a new general surgery ward where such patients would now be treated rather than being referred on. That is at least the intention, however due to staffing constraints, at the time of hearing evidence that had not been fully implemented. No doubt we would all wish that to occur, but that is a matter for Queensland Health and the Government to sort out, and is not an issue that should be the subject of any formal comment by me.

#### **Triage Assessment**

Whether or not TPCH could provide an effective response to an episode of melaena, it is clear that the decision to refer Mr Smith to RBWH is one which the family is very much concerned about, and understandably so.

Accepting that the Policy Admission would preclude a referral for gastrointestinal bleeding simpliciter, Dr Ward's opinion as to the correctness of the referral to RBWH is based primarily on her assessment of the description of the symptoms when he presented at RBWH. Those were recorded as being firstly, a shortness of breath and then an episode of melaena.

It is also apparent that TPCH cannot find any record of the telephone conversation that Mrs Smith had, although it is not suggested or doubted that the call was made. An internal review found,<sup>14</sup> that it was thought a doctor took the call. Whoever took the call, TPCH had in place a system that recorded such calls on a Triage Documentation Form<sup>15</sup>. Presumably, if the call was taken by a nurse, the procedure to record the conversation was not followed in this case. TPCH has since extended the recording of such information to medical as well as nursing staff and this may reduce or minimise the risk of such information not being recorded in the future.

Dr Ward gave evidence that the Triage process of directing patients to appropriate hospitals is a practice conducted in all emergency departments in Australia. She stated the Queensland Health telephone service 1300HEALTH operates a similar system although recently she found that calls to that service were being redirected to TPCH Emergency in any case. TPCH intended to have a dedicated senior nurse allocated full time on the expansion of TPCH in 2007. At the time she provided her statement triage duties would form 50-70 % of the allocated triage nurse.

Certainly having an experienced nurse on duty for such calls would be essential and of great benefit. By definition, a triage assessment needs to look at the degree of urgency to decide the type and order of treatment. All of this of course only emphasises the need for those performing that assessment to do so with sufficient information at the person's disposal. Obviously the symptoms need to be assessed together with the history known of the patient and other relevant matters.

As Dr Dunning said in his evidence if he had taken the call he would have wanted to know more about the symptoms and what event was causing the biggest problem. Here there were a number of symptoms. What needed to be decided was what was the problem which required the most urgent attention.

<sup>&</sup>lt;sup>14</sup> Perhaps unfairly, and in my view it does not necessarily or logically follow.

<sup>&</sup>lt;sup>15</sup> Exhibit D1.6

As Dr Ward said if the caller had reported only an acute shortness of breath (with no reference to melaena) from a patient who only some days before had been discharged after major heart surgery then the direction given in accordance with existing policy would have been to come to TPCH.

With a mixture of symptoms of shortness of breath and melaena it would seem to be obvious that before the decision is made it would be important that further information is ascertained to establish what problem was giving the most concern. On the evidence of Mrs Smith that does not appear to have occurred.

Interestingly, in her evidence Dr Ward was surprised to hear for the first time of the reporting of a symptom of "coughing up pink phlegm". It would seem she had not seen a copy of Mrs Smith's statement and her evidence had been based on a review of the TPCH and RBWH medical records. Those records do not include a reference to coughing up pink phlegm when he was admitted to Emergency at RBWH. Dr Ward said that in her opinion this latter symptom is a clear sign of pulmonary oedema and that is a strong indicator that it was a difficulty with his heart. I note that she said that pulmonary oedema can be treated at RBWH and at TPCH but the implication of pulmonary oedema being added to the equation surely would suggest that under existing policy he should or would have been directed to TPCH.

In this case, the family can feel justifiably concerned that the person taking the call from Mrs Smith did not gather enough information to make that assessment or failed to realise the significance of the symptom of coughing up pink phlegm. The person who made the assessment obviously went away twice to get more advice. Whether that was on the medical symptoms or policy issues as to referral and intake is not clear, but it was not an optimum service.

In hindsight there is no doubt that Mr Smith should have been treated immediately at TPCH. As Dr Ward says in her statement, "with hindsight his

major problem was progressive failure of the mitral valve and his melaena was less important."

However, even without the benefit of hindsight, it seems that in reporting someone who had recently had heart surgery as now coughing up pink phlegm was a clear indicator of pulmonary oedema and a referral to TPCH should have been made. The person taking the call did not explore the symptoms or history sufficiently to make a proper assessment and simply relied on the one episode of melaena to determine which hospital he should be directed to.

#### Presentation at RBWH Emergency

Mr Smith presented to the emergency department of the RBWH at approximately 10.06 a.m. He was examined by Dr Roger O'Gorman, who has provided a statement dated 13 January 2005<sup>16</sup> and gave evidence. Amongst other things, Dr O'Gorman has noted that the deceased presented with acute shortness of breath following an episode of melaena at home. Mr Smith's history and examination were immediately considered consistent with acute pulmonary oedema.<sup>17</sup>

Treatment for acute pulmonary oedema was commenced. There is no complaint made by the family as to the care Mr Smith received at RBWH and the evidence would indicate that it was appropriate and at a high level.

It is apparent that when he was admitted to the emergency department he had a haemoglobin count of 87 g/l which Dr Ward says is indicative of a gastrointestinal bleed. In the emergency department he received Omerprazole

 <sup>&</sup>lt;sup>16</sup> Exhibit B2
<sup>17</sup> That finding again highlights the need for the Triage Assessment to have been completed in a manner which sought much more information during the course of the telephone call with Mrs Smith. If the assessor had considered pulmonary oedema then clearly with a person of Mr Smith's recent history of heart surgery the referral would have been made to TPCH, as Dr Ward acknowledges.

for a possible gastrointestinal bleed, however other than that it is apparent the concerns were with his heart. It is noted that Mr Smith's vital observations remained stable throughout his stay in the emergency department. An echocardiograph indicated severe (3/4) mitral valve regurgitation.

An Intensive Care bed was arranged for Mr Smith and he was transferred to the Intensive Care Unit at approximately 16.30 hours on 19 August 2004. Cardiologists of the RBWH ICU were immediately called to do a further echocardiograph. The echocardiograph confirmed severe (4/4) mitral valve regurgitation.<sup>18</sup> This was evidence of a deterioration in his condition since admission. It was noted that in light of Mr Smith's deteriorating condition, he was incubated and ventilated, and within 2 hours of admission to the ICU an intra-aortic balloon pump was inserted and he was urgently transferred to the TPCH for management of his mitral valve.

Dr Ward's review of RBWH records noted that "when Mr Smith presented to RBWH, his condition was not immediately life-threatening, but the severity of the mitral valve regurgitation progressed while he was in the ED. This deterioration was documented by echocardiography as well as manifested in development of cardiogenic shock. Two echocardiography tests were made during his stay at RBWH and they indicated a deteriorating mitral valve regurgitation. By the time it was recognised that valve replacement was essential and Mr Smith was transferred to TPCH, almost twelve hours had elapsed and he was severely haemodynamically compressed."

#### Admission to TPCH

Mr Smith was transferred to the TPCH and admitted to the emergency department at approximately 20.36 hours. He was by then in cardiogenic shock. Mrs Smith (with family members) after having a discussion with Dr John Dunning provided her written consent for an urgent Mitral valve post-breakdown and MVR repair. I accept the discussion included the significant

<sup>&</sup>lt;sup>18</sup> See the statement of Professor Lipman/Dr William Parsonage dated 13 December 2004 exhibit B3.

risks *"involved but there was no option"*. It is recorded in the medical charts of a *"life threatening situation"*.

Dr Dunning, with the assistance of Dr Alan Gale, performed the emergency surgery with a view to replacing the mitral valve, which was shown to be freely regurgitant on echocardiography. In his Operation Report (dated 20 August 2004), Dr Dunning relevantly notes as follows:

- Mr Smith's circulation on arrival to the TPCH was supported by Adrenaline, Noradrenaline, Dopamine and an intra-aortic balloon pump.
- Mr Smith was in a very poor condition.
- His previous mitral valve repair was shown to have failed with a posterior leaflet defect being present.
- Mr Smith's preoperative condition was optimised with inotropic support but despite this he was in established cardiogenic shock with low urinary output and a poor systemic perfusion.
- Discussions were held with his family to explain the serious nature of his condition and the poor prognosis associated with emergency reoperation.
- The previous left atriotomy was reopened in Sondergard's groove and the mitral valve repair inspected. All sutures from the repair appeared intact and in particular the leaflet repair was still intact. However the annuloplasty had separated, despite the fact that all sutures were intact and all knots still in place. The tissue that had been sutured in the annuloplasty repair had simply shredded and pulled apart.
- The native mitral valve was excised, the annulus sized and found to accept a 27mm Perimount tissue valve, which was implanted using horizontal non-everting mattress sutures of 2/0 Ethibond. The valve was seated in place and tested for competence. There was a regurgitant jet and it was noted that the leaflets were failing to coapt properly in relationship to one strut of the valve. The suture opposite this strut was excised and further sutures were in place to re-secure the prosthetic annulus to the native valve annulus. This was achieved

successfully and the valve was once again tested and found to be competent on this occasion.

- After appropriate deairing procedures the aortic cross clamp was removed and the heart recovered electromechanical activity spontaneously.
- Atrial and ventricular pacing wires were sutured to the heart and AV sequential pacing was commenced at 90 bpm. An attempt was made to wean from cardiopulmonary bypass at this stage with the patient fully rewarmed systemically.
- This attempt was initially successful but cardiac function faded very rapidly. It was decided to reinstitute cardiopulmonary bypass and to support the heart for a period of time. During this time metabolic abnormalities were further corrected and inotropic agents were adjusted to try to optimise haemodynamics. Despite this modification of inotropic support, on further attempts to wean from cardiopulmonary bypass the heart was unable to support the systemic circulation.
- Cardiopulmonary bypass was discontinued and in the face of increasing pulmonary oedema with associated hypoxaemia, the cardiac function declined very rapidly. The heart was not making any significant mechanical contractile effort and when the intra-aortic balloon pump was switched off and the epicardial pacing system was switched off, there was no spontaneous electromechanical activity from the heart. Circulation ceased and the patient was declared dead at 0507 hours on 20.08.04.
- Bypass details: bypass duration 101 minutes + 9 minutes + 92 minutes; ischaemic time – 60 minutes.

Dr Alan Gale has provided a statement dated 13 January 2005 and he gave evidence. He is a Specialist Cardiothoracic Surgeon. He relevantly notes as follows:

"...and in my opinion the procedure followed standard lines for this acute stage of emergency as in the detailed operation note provided...by Dr Dunning. I have no different interruption [sic] of the

procedure as described in this operative note of the 19<sup>th</sup> of August 2004. In the light of the emergency procedure and the poor clinical status of the patient who was in extremis, an expeditious mitral valve replacement was considered the most appropriate procedure and this was performed without complication. Unfortunately an attempt to wean the patient from the cardiopulmonary bypass machine, despite maximum inotropic and counter pulsation support failed to allow a successful re-establishment of the circulation and the patient passed away on the operating table from acute heart failure."

Dr Sonia Louise Vaughan was the anaesthetist who administered anaesthetic to Mr Smith at the emergency operation on 20 August 2004. Her statement was provided <sup>19</sup> and she gave evidence. It is not necessary to repeat her evidence as it supports my view that the team at TPCH during the emergency procedure applied all appropriate skill and care, but despite this, Mr Smith's condition was such that he could not survive the necessary operation.

One issue which arose in my mind, and no doubt also with the family, was whether the delay in his admission to TPCH impacted on his survival chances. Dr Dunning said he could not comment on whether an operation 12 hours earlier would have increased his chances of survival.

It has to be recognised that whatever hospital took him in there would have been a series of investigations and tests performed before deciding on further surgery to repair the mitral valve. Mr Smith's condition deteriorated during the day. Obviously a timely referral to the hospital that would ultimately perform the emergency operation maximises a person's chances, but there is no evidence that suggests in Mr Smith's particular circumstances that he would otherwise have survived the second operation if it had occurred earlier.

On that basis, although the referral to RBWH in the first place was in my view flawed, and the proper referral should have been directly to TPCH, there is no evidence to suggest that this caused or was causally related to or contributed to his death.

<sup>&</sup>lt;sup>19</sup> Exhibit B6

### Autopsy evidence

The Deputy State Coroner's file indicates that Dr Dunning personally referred the matter to the Deputy State Coroner and after consultation with the Deputy State Coroner, Mr Smith's death was reported to police, namely Constable Amy Drummond, at around 9:04am.

An autopsy of the deceased took place at approximately 11.00 a.m. on 23 August 2004. It is noted that an order for an external and full internal examination was initially made (order 21/08/04). After discussion with the Deputy State Coroner, this was changed to an external only examination (order performed 23/08/04). The summary of the autopsy report conducted by Dr Milne records as follows:

"…

External post-mortem examination showed evidence of recent surgery. The surgical wounds showed no evidence of complication.

In my opinion, based on a review of the medical notes, the cause of death is acute heart failure secondary to mitral valve disease. The surgical notes showed no initial complications of the procedure, however when they had to re-operate there was disintegration of part of the mitral valve. As the abnormal area was removed by the surgeons, an internal post-mortem examination was unlikely to add any significant additional information.

#### Cause of death

- 1. (a) Acute cardiac failure, due to or as a consequence of
  - (b) mitral valve disease (surgically treated)."

There is ample evidence to support that opinion and is the finding I intend to make.

#### Patient Information and Education at TPCH

These issues were raised by the family and in particular are set out in Sheree Smith's letter to the coroner. The issues were commented upon by Dr Ward and I have also had regard to the hospital records.

Generally it has to be said that the state of the hospital records is good, with the Triage Assessment record or lack thereof the obvious exception. I am satisfied that Mr Smith was provided with post operative information and advice and this would seem to have been in the process of being acted upon. Information concerning the urinary catheter was given and follow up organised.

Ms Sheree Smith was critical of some aspects of his stay in TPCH but her concerns are not about issues that are related to the cause of death and are beyond the reach of this inquest.

In relation to pre-operative advice and information there is evidence that the necessary consent forms and information pre-operation were given and are recorded as having been given. The documentation clearly sets out that the decision as to mitral valve repair or replacement is a clinical decision made by the surgeon during surgery, and it was noted that a replacement would have required long term treatment with Warfarin which Mr Smith had been reluctant to use in the past.

It is also clear that Mr Smith attended a pre-admission clinic which I accept would have been comprehensive although it would seem that the booklet *"Your Guide to having Cardiac Surgery"*<sup>20</sup>was not given to him. Mrs Smith and Mrs Harrison both recall being told the information was in a blue book which was currently out of print. The booklet is indeed blue and although there is mention in correspondence that it was produced to the coroner's office by TPCH in response to a request for medical records, for some reason it was not with the file. Rather it was produced at the inquest and it was apparent that the family had not previously seen it.

I note what Mrs Harrison said about being told in the pre-admission clinic that they would probably forget a lot and to refer to the booklet when it was sent to them in the mail. Certainly the booklet is quite comprehensive, and the failure to have it available or to be sent was again not desirable nor an optimum service. It may have resolved some of those outstanding issues which concerned the family.

## Findings required by s45

I am required to find, as far as is possible, who the deceased was, when and where he died, what caused the death and how he came by his death. I have already dealt with the last of these issues, being the circumstances of Mr Smith's death. As a result of considering all of the material contained in the exhibits and the evidence given by the witnesses I am able to make the following findings in relation to the other aspects of the death.

## Identity of the deceased

The deceased person was Arthur Lawrence Smith

<sup>&</sup>lt;sup>20</sup> Exhibit D1.5

Place of death	He died at The Prince Charles Hospital, Brisbane, Queensland
Date of death	He died on 20 August 2004
Cause of death	1.(a) Acute cardiac failure, due to or as a consequence of
	(b) mitral valve disease (surgically treated).

#### Concerns, comments and recommendations

Section 46 of the Act provides that a coroner may comment on anything connected with a death that relates to public health or safety, the administration of justice or ways to prevent deaths from happening in similar circumstances in the future.

Mr Smith was a very ill man when he was eventually admitted to TPCH on the evening of 19 August 2004. His condition had deteriorated during the day. It can never be known how an earlier admission would have assisted in a better result for him.

I accept that TPCH had a clear admission and intake policy not to accept emergency patients with gastro-intestinal bleeding and at the time it did not have the personnel to treat such a condition. It would also appear clear that Mr Smith did have some form of gastro-intestinal bleeding as his Hb was 8.

He was however a person who only days earlier had been discharged after major heart surgery at TPCH. His other symptoms of shortness of breath and coughing up of blood were more importantly indicators of pulmonary oedema and it is clear in my view that an appropriate Triage assessment would have resulted in him being directly referred to TPCH. It was apparent to RBWH Emergency that the condition of his heart was of most concern, not what was causing the gastro-intestinal bleeding, and once it was clear that his mitral valve was deteriorating he was transferred to TPCH.

There is nothing in the Admission Policy or his treatment at either hospital that I can be formally critical of. It does seem to me that the Triage Assessment on this occasion was of doubtful quality, not only with the benefit of hindsight, but as a process. There have been some improvements in the Triage process put in place and it is expected that more experienced full time staff will complete the Triage Assessments in the future. With the full operation of the general surgical ward it may not be an issue. The 1300HEALTH assessment process has also only just been implemented and it may have better results.

It is difficult to formulate recommendations for improvement. What was needed was for the Triage Assessment to have been done properly in the first

place. The family would then have had no concerns on that issue. There is however no evidence which suggests the delay in admission to TPCH was causally related to his death. He was very unwell and the operation would have had to take place after some time for observation and tests and although necessary it was very risky.

On patient education there are not any issues which would lead me to make formal comment. It would obviously have been better if the Guide had been made available. Other than ensuring best practice is followed including making available such information as the Guide it is not evident that more could be done.

On that basis I do not intend to otherwise make any other formal comments or recommendations.

I offer again my condolences to the family.

I close this inquest.

John Lock Coroner, Brisbane 5 April 2007