Court Reference: 5862 / 2008

#### **FORM 37**

Rule 60(1)

## FINDING INTO DEATH WITH INQUEST

Section 67 of the Coroners Act 2008

(Amended pursuant to S76 of the *Coroners Act 2008* On the 12<sup>th</sup> November, 2010 at 3.00pm)

## Inquest into the Death of Veronica CAMPBELL

Delivered On:

5<sup>th</sup> November, 2010

Delivered At:

Shepparton

Hearing Dates:

12<sup>th</sup> -16<sup>th</sup> April, 2010

Findings of:

Ms Stella Stuthridge

Representation:

Mr Constable- for Ambulance Victoria

Mr Maloney- for Cobram District Health

Mr Hammill- for Campbell Family

Ms Lawson- Human Rights Law Resource Centre

Mr Wraight- for Dr Illic Jeftic

Mr Willcox- For Genevieve Nielsen

Place of death/Suspected death:

Goulburn Valley Base Hospital, Shepparton

Counsel Assisting Coroner

S/C Penny LAWLER

Court Reference: 5862 / 2008

#### **FORM 37**

Rule 60(1)

### FINDING INTO DEATH WITH INQUEST

Section 67 of the Coroners Act 2008

In the Coroners Court of Victoria at Shepparton

I, Stella Stuthridge, Coroner having investigated the death of:

#### Details of deceased:

Surname:

CAMPBELL

First name:

Veronica Therese

Address

2 Denson Court, Cobram

AND having held an inquest in relation to this death on 12<sup>th</sup> – 16<sup>th</sup> April, 2010

at Shepparton

find that the identity of the deceased was Veronica Therese CAMPBELL

and the death occurred on 31/12/2008

at Goulburn Valley Base Hospital from

COMPLICATIONS FOLLOWING A RUPTURED ECTOPTIC PREGNANCY

in the following circumstances:

## **Introductions**

Inquests are a unique court process. An inquest is not a trial and does not attribute blame. An inquest is an inquiry led by a Coroner that seeks to establish the cause of death and how a death occurred. A coroner has a wide discretion to investigate issues arising out of the circumstances of a

<sup>&</sup>lt;sup>1</sup> Coroners Act, 2008 (Vic) s. 69

death.<sup>2</sup> This is not a 'free ranging' power.<sup>3</sup> A coroner is specifically empowered to consider issues of prevention and public health and safety and to make recommendations on those matters.<sup>4</sup>

An inquest is concerned to establish the facts surrounding a death. A coroner is not bound by the normal rules of evidence.<sup>5</sup> Where findings of fact are made, the test is whether there is sufficient evidence to be satisfied on the balance of probabilities. When a coroner is considering issues of causation, in relation to individuals or entities, acting in their professional capacity, a higher standard of proof applies.<sup>6</sup> Thus findings that may be adverse to individuals or entities must be based on cogent and persuasive proofs. I have applied this standard of proof in this case.

## Victorian Charter of Human Rights

The Human Rights Legal Resource Centre was granted leave to make submission. I have carefully considered those submissions and the responses provided by other parties.

Veronica Campbell's right to life is protected by the terms of s.9 of the *Charter of Human Rights* and Responsibilities Act 2006 (the Charter).

The power of a Coroner at an Inquest is defined by section 67(1) of the *Coroners Act* 2008. A Coroner is not empowered to make findings of guilt or negligence. The functions exercised by a Coroner under s. 67 are confined to considerations arising under the *Coroners Act* 2008. There does not appear in the text of *the Charter* or the *Coroner's Act* any expressed power for a Coroner to make a 'finding' of a breach of the right to life under *the Charter*. In the exercise of my power under s.67 (1), in this case, it is not necessary to further consider this issue.

<sup>&</sup>lt;sup>2</sup> Coroners Act, 2008 (Vic) s. 67, s. 72

<sup>&</sup>lt;sup>3</sup> Harmsworth v The State Coroner (1989) VR 989

<sup>&</sup>lt;sup>4</sup> Coroners Act, 2008 (Vic) s. 1(c), 8(f), s.67(3), s.72

<sup>&</sup>lt;sup>5</sup> Coroners Act, 2008 (Vic) s. 62

<sup>&</sup>lt;sup>6</sup> Coroner's Case No 2912/01, Coroner Byrne; Briginshaw v Briginshaw (1938) CLR 336

<sup>&</sup>lt;sup>7</sup> S.69(1), Harmsworth v The State Coroner (1989) VR 989

# Findings s.67 Coroners Act 2008

Veronica Therese Campbell was 38 years old and lived in Denson Court, Cobram. She had been married to Jason Campbell for four years, and the couple had been together for 11 years. They had a young son, Daniel, who was almost three years old. Veronica had no known health issues. She was a journalist working as a media officer at Moira Shire Council.

On Tuesday the 30<sup>th</sup> December 2008, Veronica had a consultation with Dr. Ronan. He confirmed she was pregnant, at an estimated six weeks, and requested an ultrasound.

About 7pm the same day, while at home with Jason and Daniel, Veronica began to experience pain that continued to worsen throughout the evening. At approximately 9.45pm Jason drove her to Cobram District Hospital.

When the couple arrived at Cobram District Hospital, about 10pm, Veronica was seen by Nurse Genevieve Neilsen. Veronica appeared pale but alert and was crying and distressed. She described her pain to the nurse as 10 out of 10.8 Soon after on-call Dr Derrick Pang arrived and diagnosed Veronica with a possible ectopic pregnancy.9 She was given morphine for pain relief and IV line access was established. Cobram District Hospital did not have whole blood products to administer. Administration of Hartmann's solution began at 10.30pm. Administration of Hartmann's solution began at 10.30pm.

Dr Pang telephoned the Goulburn Valley Hospital gynaecology registrar to discuss Veronica's condition and diagnosis, and confirm that the hospital was able to take her for surgery. 14

At 10.30pm, Dr Pang telephoned Ambulance Victoria, using a 133009 number – the number normally used by hospitals to book patient transfers. He advised the call taker, Christine Sewell, that the patient had a possible ectopic pregnancy and requested an urgent transfer from Cobram

<sup>&</sup>lt;sup>8</sup> Exhibit 2, pg 1

<sup>&</sup>lt;sup>9</sup> An ectopic pregnancy occurs when the foetus forms outside the uterus, usually in the fallopian tube. As the embryo increases in size, rupture and bleeding results. Often the bleeding is difficult to control. – Dr Pang at Tr 6-11

<sup>&</sup>lt;sup>10</sup> Exhibit 2, pg 1

<sup>&</sup>lt;sup>11</sup> Tr 7. Cobram District Hospital does not have access to blood products.

<sup>&</sup>lt;sup>12</sup> Hartmann's solutions is used intravenously to replenish fluid and electrolytes

<sup>&</sup>lt;sup>13</sup> Exhibit 2, pg 1

<sup>&</sup>lt;sup>14</sup> Exhibit 1, pg 1

District Hospital to Goulburn Valley Hospital Accident and Emergency. He gave details of the medications administered<sup>15</sup> but there was no discussion of Veronica's clinical statistics.

At that time Ambulance Victoria had two case allocations systems within the Ambulance Medical Priority Dispatch System (MPDS): the New Case Card system, which relies on information from the caller to make entries; and the Pro QA system, which utilises a professional question and answer process to allocate a priority code to the job. The Pro QA system is used for all '000' calls. <sup>16</sup> The New Case Card system was regularly used for patient transfers as hospital staff often found the Pro QA process cumbersome. <sup>17</sup> In this instance, Ms Sewell used the New Case Card system; the case was allocated as a Code 2 priority transfer and sent by Ms Sewell to the dispatcher. <sup>18</sup> Ambulance Victoria response protocols define a Code 2 priority as an urgent case that needs to be attended promptly, compared with a Code 1 emergency that requires lights and sirens. The protocol further stipulates that Code 2 priorities are to be attended within 25 minutes. <sup>19</sup> The time required for a Code 2 priority transfer between Cobram and the Goulburn Valley Hospital is usually about 50 minutes. <sup>20</sup> Ms Sewell gave evidence that even if Dr Pang had given further medical information or the Pro QA system had been used, the computer-aided dispatch system would still have allocated the case as a Code 2 priority. <sup>21</sup>

At 10.37pm Ambulance Victoria Dispatcher Shaw had a short conversation with the MICA ambulance crew based at Shepparton. The dispatcher considered whether to use the Cobram ambulance crew, which was off-duty, or one of the Shepparton ambulances. Shepparton had available a MICA (see Appendix 1) and the afternoon crew was still working [Ambulance 625].<sup>22</sup> A second Shepparton ambulance crew was on duty. They were working another job and therefore unavailable for the transfer.

<sup>&</sup>lt;sup>15</sup> Pg 01, Vol 2

<sup>&</sup>lt;sup>16</sup> Tr 214

<sup>&</sup>lt;sup>17</sup> Tr 172-214

<sup>&</sup>lt;sup>18</sup> Tr 204, 221, 226, 261, a dispatcher may change the code when allocating the ambulance

<sup>&</sup>lt;sup>19</sup> Pg 90-97, Vol 3

<sup>&</sup>lt;sup>20</sup> Tr 432-3

<sup>&</sup>lt;sup>21</sup> Tr 173, 192-3,194-199, 210-213

<sup>&</sup>lt;sup>22</sup> Pg 13-15, Vol 2

At 10.41pm Dispatcher Shaw contacts Ambulance 625, which was enroute to Goulburn Valley Hospital, regarding Veronica's transfer. The urgent nature of the matter was not mentioned.<sup>23</sup>At 10.44 pm the Ambulance 625 crew confirmed it would take the Cobram job and work on<sup>24</sup> and would contact the dispatcher when they were clear of Goulburn Valley Hospital.

At 10.47pm, Dispatcher Shaw telephoned Cobram District Hospital. He tells Nurse Melissa Neal that the ambulance (Ambulance 625) was dropping a patient off at Goulburn Valley Hospital and would then continue to Cobram to collect Veronica. Nurse Neal immediately advised Nurse Neilsen – the nurse who first saw Veronica when she arrived at Cobram District Hospital. <sup>26</sup>

At 10.51pm, Nurse Neilsen telephoned Ambulance Victoria. She spoke with Dispatcher Shaw and explained that the ambulance needed to be up-graded to 'quite urgent.'<sup>27</sup> She told Dispatcher Shaw that Veronica's blood pressure had dropped to 70/50, she had a pulse of 70, was quite pale and hypotensive and there was distension.<sup>28</sup> The dispatcher said he would let the ambulance crew know<sup>29</sup> but this did not occur.<sup>30</sup> Neither the call or Veronica's clinical statistics were recorded in Ambulance Victoria's New Case Card system.

At 11.29pm, Nurse Neilsen telephoned Ambulance Victoria to ask for the estimated time of arrival of the ambulance and was advised by the call taker, Ms Sewell, that the ambulance was leaving Goulburn Valley Hospital in Shepparton.<sup>31</sup> The call was transferred to Dispatcher Kelly so Nurse Neilsen could request that the ambulance be upgraded to Code 1 priority. Nurse Neilsen explained that Veronica's blood pressure was 72/43, she had increased pain, a pulse of 80 and had been administered 3.5 litres of fluids. She asked for an ambulance as 'fast as you can.'<sup>32</sup> There was further discussion of the patient's condition and that the facilities at Cobram District Hospital were

<sup>&</sup>lt;sup>23</sup> Pg 16, Vol 2

<sup>&</sup>lt;sup>24</sup> Pg 14 - 22, Vol 2

<sup>&</sup>lt;sup>25</sup> Pg 23, Vol 2

<sup>&</sup>lt;sup>26</sup> Exhibit 4, Tr 149-151

<sup>&</sup>lt;sup>27</sup> Pg 29, Vol 2

<sup>&</sup>lt;sup>28</sup> Veronica's hypotensive state and systolic blood pressure of 72 and distension is consistent with blood loss; Submission of Dr Illic-Jeftic, para 8.

<sup>&</sup>lt;sup>29</sup> Pg 29, Vol 2

<sup>&</sup>lt;sup>30</sup> Tr 230 - 234

<sup>31</sup> Exhibit 6, pg 1

<sup>&</sup>lt;sup>32</sup> Pg 35 - 37, Vol 2

inadequate to deal with the patient.<sup>33</sup> Dispatcher Kelly said he would 'get the crew up there as quickly as possible' and considered calling the off-duty Cobram ambulance crew.<sup>34</sup> Neither the call nor Veronica's clinical statistics were recorded in Ambulance Victoria's New Case Card system.<sup>35</sup>

At 11.31pm, Dispatcher Shaw contacted Ambulance 625 and confirmed it was en route to Cobram. He describes the patient as slightly hypotensive and the ambulance was not upgraded.<sup>36</sup>

At 11.40pm, following discussion between Dr Pang and the Gynaecology Registrar at Goulburn Valley Hospital, the fluid being administered to Veronica was altered to Gelofusine.<sup>37</sup>

At 12.09am, Nurse Neilsen again telephoned Ambulance Victoria to determine when the ambulance would arrive. On this occasion, she spoke with Dispatcher Kelly. Describing Veronica's condition, Nurse Neilson said blood pressure was dropping, she was quite anaemic and they could not get any more blood out of her.<sup>38</sup> Dispatcher Kelly asked her to hold while he contacted Ambulance 625 to organise the upgrade. Nurse Neilsen was clearly frustrated and said to the dispatcher, 'They should have been upgraded an hour ago.'<sup>39</sup> This was the first time the crew of Ambulance 625 knew the matter was 'urgent' and was considered an 'emergency'.

At 12.12am, Nurse Neilsen telephoned Dispatcher Kelly to confirm that the MICA unit was also coming. She was advised it was not.<sup>40</sup> Dispatcher Kelly immediately organised the MICA unit.<sup>41</sup> During this phone call, the MICA officer suggests taking whole blood to Cobram District Hospital from Shepparton. This did not occur due to the amount of time required to organise it.

<sup>&</sup>lt;sup>33</sup> Pg 35 - 37, Vol 2

<sup>&</sup>lt;sup>34</sup> Pg 35 - 50, Vol2

<sup>&</sup>lt;sup>35</sup> Tr 230-243

<sup>&</sup>lt;sup>36</sup> Pg 85-87, Vol 2; Tr 331 - 332

<sup>&</sup>lt;sup>37</sup> Gelofusine is an alternative to Hartmann's solution, Tr 5; Exhibit 1, pg 1

<sup>&</sup>lt;sup>38</sup> Pg 90-93, Vol 2

<sup>&</sup>lt;sup>39</sup> Pg 90-92, Vol 2

<sup>&</sup>lt;sup>40</sup> Pg 104 - 5, Vol 2

<sup>&</sup>lt;sup>41</sup> Pg 106 - 112, Vol 2

At 12.18am, Ambulance 625 arrived at Cobram District Hospital. 42 At 12.21am, after assessing Veronica, Ambulance Officer Lothian contacted Dispatcher Kelly and advised that Veronica was too sick to be transported by regular ambulance, confirmed that a MICA unit would attend and that the Air Ambulance might be needed. Dispatcher Kelly decided to use the Air Ambulance for the transfer and organised same.

Nurse Neilsen and Dr Pang discussed the possibility of using Ambulance 625 to transfer Veronica to Shepparton or meet the en route MICA ambulance. An ambulance Neilson and Dr Pang thought this might save time. This suggestion did not eventuate. An ambulance officer advised Dr Pang and Nurse Neilsen that MICA was on its way. It appears that it was generally accepted there was a risk that Veronica's condition could deteriorate rapidly and it was appropriate to wait for the MICA unit as the crew had the specialist skill set needed.

MICA arrived at Cobram Hospital at 12.45am.

Veronica's condition had continued to deteriorate. A blood sample taken at 12.20am for haemoglobin estimation found the levels were unreportable. <sup>46</sup> Dr Pang commented in evidence that Veronica was severely hemodiluted, <sup>47</sup> was considered very unstable and at risk of rapid deterioration. <sup>48</sup>

Around this time there was confusion regarding whether Veronica was to be transported to Goulburn Valley Hospital or Melbourne and the Adult Retrieval Service was involved. <sup>49</sup> Dr Pang had originally determined that Veronica would be taken to the nearest available operating theatre, in Shepparton. Discussion between Ambulance Victoria members and Adult Retrieval confirmed this decision. It was appropriate for Ambulance Victoria to undertake this discussion. This did not affect Veronica's care and ensured she was taken to the nearest and most appropriate facility.

<sup>&</sup>lt;sup>42</sup> Exhibit 16, Exhibit 17, Tr 361, 376

<sup>&</sup>lt;sup>43</sup> Tr 21, 130, 138; Exhibit 3, pg 3;

<sup>&</sup>lt;sup>44</sup> Tr 21; 47-49; 373

<sup>&</sup>lt;sup>45</sup> Tr 8, 74-5, 117,138

<sup>&</sup>lt;sup>46</sup> Tr 63; Exhibit 1, pg 1; Tr 44

<sup>&</sup>lt;sup>47</sup> Tr 44, 66

<sup>&</sup>lt;sup>48</sup> Tr 370-373;

<sup>&</sup>lt;sup>49</sup> Exhibit 1, pg 2

Nurse Kelly assisted in the arrangements for the Air Ambulance to land at the Cobram Showgrounds<sup>50</sup> and the Cobram Ambulance Crew attended to turn on the landing beacons and lights.<sup>51</sup>

Veronica was asked by an ambulance officer if she could assist in moving herself from the hospital bed to the ambulance trolley, at which point she lapsed into unconsciousness and for a short time her blood pressure was unrecordable. <sup>52</sup> The lapse into unconsciousness was not unexpected. <sup>53</sup> Veronica was being stabilised by ambulance and hospital staff when the Air Ambulance crew arrived at Cobram District Hospital at 1.26am. The Air Ambulance crew intubated Veronica and she was transported to the helicopter, which left the Cobram Showgrounds at 2.11am.

At Shepparton there was some confusion as to where to land the helicopter<sup>54</sup> as the helipad at Goulburn Valley Hospital was closed. The pilot however was aware that it was still safe to land there and did so, so there was no delay caused by the confusion. MICA Flight Paramedic Barkmeyer explained that as soon as the helicopter blades stopped turning the ambulance was there ready to transport Veronica to theatre.<sup>55</sup>

On landing at Goulburn Valley Hospital at 2.35am Veronica went into cardiac arrest.<sup>56</sup> Cardio pulmonary resuscitation [CPR] commenced and adrenaline was administered.<sup>57</sup> Veronica was conveyed to the emergency department where hospital staff took over CPR. Multiple units of blood were administered and there was a period of spontaneous circulation. A short time later, no pulse was recorded and resuscitation recommenced in the operating theatre.<sup>58</sup> A mid-line laparotomy was performed and there was no bleeding from the surgical cut.<sup>59</sup> Veronica received a total of 28 units

<sup>&</sup>lt;sup>50</sup> Exhibit 3, pg 2

<sup>&</sup>lt;sup>51</sup> Exhibit 3, pg 2

<sup>&</sup>lt;sup>52</sup> Tr 64; Exhibit 3, pg 4

<sup>&</sup>lt;sup>53</sup> Tr 382; 498

<sup>&</sup>lt;sup>54</sup> Exhibit 22, pg 1

<sup>&</sup>lt;sup>55</sup> Tr 416; Tr 427

<sup>&</sup>lt;sup>56</sup> Tr 416

<sup>&</sup>lt;sup>57</sup> Exhibit 21, pg 2;

<sup>&</sup>lt;sup>58</sup> Medical Investigation Report, pg 10

<sup>&</sup>lt;sup>59</sup> Tr 486-498

of blood.<sup>60</sup> She was unable to be resuscitated and after a further 35 minutes resuscitation ceased. Veronica Campbell had passed away.

Doctor Sarah Parsons performed a full post mortem examination on Veronica Campbell. The histopathological report from Goulburn Valley Hospital confirms the presence of a ruptured tubal pregnancy. <sup>61</sup> Dr Parsons concluded that Veronica died due to complications following a ruptured ectopic pregnancy. <sup>62</sup>

# Recommendations on the evidence and submissions s. 72 *Coroners Act* 2008 Cobram District Hospital Facilities

Throughout the Inquest, it became clear there were issues stemming from Ambulance Victoria having incomplete information about the facilities at Cobram District Hospital.<sup>63</sup>

Cobram District Hospital is a small rural health service<sup>64</sup> providing medical care to a population of approximately 14,000 people.<sup>65</sup> The district population increases each Christmas period with an influx of tourists visiting the region, in particular the Murray River.

The hospital operates an urgent care centre. Overnight the centre is staffed with an on-call doctor who resides locally and nursing staff from the ward. There is an operating theatre but no access to whole blood or an anaesthetist. Whole blood is not stored at the hospital, primarily because of the short expiry period for blood products. Cobram District Hospital does not have access to on-call pathology or x-ray facilities. 8

<sup>&</sup>lt;sup>60</sup> Medical Investigation Report, pg 11

<sup>&</sup>lt;sup>61</sup> Medical Investigation Report, pg 10

<sup>&</sup>lt;sup>62</sup> Medical Investigation Report, pg 10

<sup>&</sup>lt;sup>63</sup> Tr 123-148,345,382,414-425,425-430,430-435

<sup>&</sup>lt;sup>64</sup> Tr 162

<sup>&</sup>lt;sup>65</sup> Tr 163

<sup>&</sup>lt;sup>66</sup> Tr 163

<sup>&</sup>lt;sup>67</sup> Tr 163, 7-9, 67 110

<sup>&</sup>lt;sup>68</sup> Tr 163-164

Cobram District Hospital is defined in the Department of Health funding structure as an 'urgent care centre,' not a designated emergency department. <sup>69</sup>Designated emergency departments at major regional hospitals have a higher level of staffing and facilities in order to deal with emergencies. In a medical emergency, Cobram District Hospital provides limited medical care before transferring the patient to another appropriate medical facility. <sup>70</sup>

There was evidence from Ambulance Victoria staff that they believed Veronica was at a designated hospital emergency department and receiving whole blood products. <sup>71</sup> This was incorrect. Veronica was not at an emergency department and was not receiving whole blood products.

In order to make appropriate decisions on the priority allocated to a case, dispatchers at Ambulance Victoria need to have a thorough knowledge of facilities available at small hospitals and their ability to respond to emergencies. The local knowledge of individual ambulance officers is insufficient to prevent misunderstandings about the level of care received by a patient at a small rural hospital.

#### Recommendation:

Hospital facility descriptions, summarising the facilities available at rural hospitals, should be created and utilised by Ambulance Victoria. These hospital descriptions need to be readily available to dispatchers.

Use of the term 'emergency department' should not be used for small rural hospitals with only urgent care facilities and a limited ability to respond to medical emergencies.

<sup>&</sup>lt;sup>69</sup> Tr 169

<sup>&</sup>lt;sup>70</sup> Tr 9

<sup>&</sup>lt;sup>71</sup> Tr 228, 294-296 Dispatcher Shaw said he believed Veronica was in a hospital emergency department; Tr 335-6, Dispatcher Kelly assumed she was receiving whole blood.

# Initial Response By Ambulance Victoria

The Wangaratta Call Centre had facilities for two dispatchers and two call takers.<sup>72</sup> During afternoons it was usually staffed by two dispatchers and one call taker. This was the situation when Dr Pang initially requested an ambulance transfer for Veronica Campbell. During the night shift, from 11pm, there were only two dispatchers to handle all calls, dispatching and other enquires.<sup>73</sup>

At the time of this incident, dispatchers were responsible for dispatching vehicles, signing cars on and off, finding staff to cover sick leave, answering general enquires, organising break-down response and providing overtime shift codes to staff who had worked on (past the end of their shift).<sup>74</sup>

On the night, an on-call officer staffed the Cobram Ambulance station. The Shepparton district had two ambulances, only one of which was staffed by a MICA paramedic. When the call came for an urgent transfer from Cobram to Shepparton the case was coded as a Priority 2 transfer by the call taker. Dispatcher Shaw received the case and was required to manage the case within Ambulance Victoria's guidelines.<sup>75</sup> The guidelines require:

'All cases are dispatched based on the highest priority and that the nearest and most appropriate, available resource is used. The management of cases underlies the principle of the best use of available resources and ensuring that sufficient resources are available for current and projected response.'

The code Priority 2 protocol states:

'The most appropriate resource will be dispatched on all Priority 2 cases, providing the resource is able to be on scene within 25 minutes. If unable to be on scene within 25 minutes then the closest resource will be dispatched or as indicated by the dispatch determinate.

<sup>&</sup>lt;sup>72</sup> Tr 172 - 191

<sup>&</sup>lt;sup>73</sup> Tr 172-191

<sup>&</sup>lt;sup>74</sup> Tr 201

<sup>&</sup>lt;sup>75</sup> Pg 90 ff, Vol 3

<sup>&</sup>lt;sup>76</sup> Pg 91, Vol 3

Alternatively, consideration should be given by the Emergency Medical Dispatcher to upgrading the case to response Priority 1.<sup>77</sup>

Dispatcher Shaw gave clear evidence that the Code 2 time frames identified in Ambulance Victoria protocols [25 mins] could often not be achieved in country areas.<sup>78</sup> The evidence from Cobram District Hospital staff was that an ambulance would normally arrive within 10 to 50 minutes.<sup>79</sup> Dr Pang's evidence was this time frame was satisfactory most of the time.<sup>80</sup>

Dispatcher Shaw commented that he tried to manage his resources 'as best he could' within Ambulance Victoria's guidelines.<sup>81</sup>

At the time of dispatch the Shepparton afternoon shift, Ambulance 625, was still working and was en route to Goulburn Valley Hospital to deliver a patient. In Dispatcher Shaw's words:

'Well, basically we discussed the operational demands at the time and the cars that we've got available, and based on use of many call crews and cars going out through the night and leaving areas uncovered, this was a spare crew that we could utilise for this transfer.'82

The Cobram Ambulance crew had worked until 10pm and was then on call. Dispatching it to transfer Veronica may have affected ambulance availability at Cobram throughout the evening and the following day. 83 The other Shepparton ambulance was already on a case. The dispatcher considered all available resources. He then decided to dispatch Ambulance 625 knowing the ambulance would not be able to respond according to the Code 2 protocol. 84

<sup>&</sup>lt;sup>77</sup> Pg 97, Vol 3

<sup>&</sup>lt;sup>78</sup> Tr 219, Pg 97, Vol 3

<sup>&</sup>lt;sup>79</sup> Tr13, 117-120, 150-1

<sup>&</sup>lt;sup>80</sup> Tr 5-70

<sup>&</sup>lt;sup>81</sup> Pg 90 ff, Vol 3

<sup>&</sup>lt;sup>82</sup> Tr 262

<sup>83</sup> Tr 430-435

<sup>84</sup> Tr 262

There was considerable evidence from Ambulance Victoria staff that on the night resources were spread thinly across the region. This created a need to juggle resources to ensure sufficient ambulance coverage in the event of another emergency. There was evidence of a reluctance to utilise the MICA Ambulance as it was considered a 'valuable resource' that the dispatcher wanted to keep available. 86

The shortage of available ambulances on the evening gave rise to the dispatcher having to prioritise resource allocation over and above patient needs. This meant the dispatcher had to break Ambulance Victoria protocols regarding allocating Code 2 priority cases during the initial response.

#### Recommendations:

Ambulance Victoria increases the number of ambulances available in the Shepparton region on evening and night shifts.

# Cobram Hospital Staff Requests for Upgrade and Ambulance Victoria Response

Ambulance 625 received Veronica's case at 10.45pm and it then took 45 minutes to clear Goulburn Valley Hospital. Officer Lothian gave evidence this was not an unexpected period.<sup>87</sup> Ambulance 625 arrived at Cobram District Hospital at 12.18am. Veronica had deteriorated significantly and her condition was far worse than it had been at 10.30pm when Dr Pang first telephoned for an ambulance.

During the intervening period, Cobram District Hospital nursing staff had telephoned Ambulance Victoria twice, stressing the urgency of the situation and giving clinical statistics indicating Veronica's deterioration. This information was not entered on the New Case Card System and did not result in an upgrade of the ambulance response. The relevant dispatchers failed to respond to the repeated requests by hospital staff for an upgrade or more timely response. This was caused by a complex array of reasons.

<sup>85</sup> Officer Shaw Tr 219, 226, 238, 298; Officer Kelly Tr 331-332, 333-351

<sup>86</sup> Tr 242

<sup>&</sup>lt;sup>87</sup> Tr 366

It was clear that on the night in question staff felt overwhelmed by their workload. They described being exhausted and consequently not in a position to properly assimilate information or make appropriate decisions. <sup>88</sup>

Dispatcher Shaw gave evidence that the call centre was generally pretty short staffed and that it was difficult to manage the regional demands with the resources he had available. Ambulance call taker Ms Sewell described the night of the 30<sup>th</sup> December 2008 as 'busy, swift flowing' and staff as being 'on our toes all night. Both dispatchers gave evidence of the high volume of work in the call centre on that evening.

The workload on the evening was impacted by several factors:

a. The dispatchers were responsible for a large array of operational responsibilities beyond simply dispatching vehicles, such as organising break-down recovery and providing shift codes for overtime.

b. There had been a crisis in the southern part of the region earlier in the evening resulting in numerous ambulances and officers being called into work. They became absorbed into the system and were still working as Veronica Campbell's matter was unfolding. This meant the two dispatchers at Wangaratta were managing a greater number of vehicles on the night than usual, adding to their workload.

c. The way in which the call taker and dispatcher were rostered meant that on a busy night there was insufficient coverage to allow them to take a break, eat or go to the toilet.

The above operational circumstances resulted in two critical failings: a failure by staff at Ambulance Victoria to record the requests and clinical information on the Case Card system; and a failure to recognise the validity and importance of the hospital requests for an upgrade to Code 1 priority.

<sup>&</sup>lt;sup>88</sup> Officer Shaw Tr 218 pretty short staffed, Tr 219 code 2 time frames cannot be achieved, 222-223 more staff would have helped, 226 resource allocation, 230-233 work was overwhelming, 238 tired overworked and under resourced, 248-251 exhausted and needed a break, 298 ff other things in region on the night impacting on decision-making; Officer Kelly Tr 331-332 not upgrade not concentrating, 333-334 and 351 multitude of things going on – clouded his judgment

<sup>89</sup> Tr 218, 265-267

<sup>&</sup>lt;sup>90</sup> Tr 202

<sup>&</sup>lt;sup>91</sup> Tr 351, Tr 230-233

# Entering communications onto system

Dispatcher Shaw gave evidence that he did not enter the information provided by hospital staff during the subsequent phone call on to the case card. <sup>92</sup> Consequently, during later phone calls, Dispatcher Kelly was unaware of the earlier clinical information or call. <sup>93</sup> This clearly compromised the dispatcher's ability to assimilate the information being provided by the hospital and ultimately compromised Veronica's care. <sup>94</sup> The importance of the case card information was highlighted by the dispatchers in their evidence. <sup>95</sup>

If the relevant information had been entered on the case card, the dispatcher would have had time to assimilate the situation as it unfolded. There would also have been a greater potential for another operator to detect the urgency in the matter. The ratio of dispatcher to incoming work needs to be at a sufficient level to allow input of critical information into the New Case Card system. This is especially the case when there is a high workload and the entries therefore become a critical way of monitoring the case, or when the case cannot be managed by one dispatcher or is being transferred between the dispatcher and clinicians. Operations centre staffing should be at a level that allows the proper assimilation and entry of information onto the operational systems used by Ambulance Victoria.

Ambulance Victoria has undergone significant changes in its operations centres since December 2008. The Wangaratta Operations Centre has ceased operation and the Emergency Services Telecommunications Authority in Ballarat (Ballarat Operations Centre) now undertakes Hume Region dispatching. As part of this process there is a greater number of call takers and dispatchers on each shift. There is also a greater ability to increase the number of dispatchers working. It is also possible now for dispatchers to access a 'clinician' who monitors cases and provides clinical advice. <sup>96</sup>

<sup>&</sup>lt;sup>92</sup> Tr 243

<sup>&</sup>lt;sup>93</sup> Tr 328

<sup>&</sup>lt;sup>94</sup> Tr 330

<sup>95</sup> Tr 298, 330

<sup>&</sup>lt;sup>96</sup> Statements of Garry Cook, Regional General Manager, Ambulance Victoria; Mark Rogers, General Manager Specialist Services, Ambulance Victoria.

Ambulance Victoria staff gave evidence that increased staffing levels together with a clinician would have alleviated their workload issues on the night.<sup>97</sup>

The shift to the Ballarat Operations Centre is unlikely to be sufficient to prevent a re-occurrence of similar circumstances if the ratio of dispatchers and clinicians is not set at a level that allows for the proper entry of information into the New Case Card system and time for dispatchers to assimilate information.

#### Recommendations

Ambulance Victoria undertakes a complete systems review to determine the optimum ratio of dispatching staff to ambulance vehicles, on each shift.

Staffing must be at a level sufficient to enable staff to enter information on the Medical Dispatching System [or New Case Card system].

Staffing should be at a level that ensures dispatchers and call takers are able to take appropriate breaks.

## Communication

The transcript of calls on the evening of the 30<sup>th</sup> December 2008 demonstrates serious deficiencies in the communications between Cobram District Hospital and Ambulance Victoria.

At 10.51pm Nurse Neilsen requested an upgrade of the ambulance and provided sufficient clinical information to make it clear that the request was justified. At 11.29pm Nurse Neilsen again calls Ambulance Victoria and in clear and express language requests an ambulance on Code 1 priority. Nurse Neilsen again provides sufficient clinical information to justify the request for an ambulance 'as fast as you can.'

Dispatcher Kelly gave evidence that he perceived this call as a request for an ambulance on Code 1 priority. He was also aware, from the clinical information provided by Nurse Neilsen, that Veronica

<sup>&</sup>lt;sup>97</sup> Tr 353-359, 176, 193, 198-9, see Footnote 90

was losing blood. 98 The call taker, Ms Sewell, also gave evidence that she was in no doubt at 11.29pm that the nurse was requesting an ambulance on Code 1. 99 Ambulance Victoria failed to upgrade Ambulance 625 [which was still 40 minutes away] or to call in the Cobram Ambulance crew. If either of these alternatives had been taken it is highly probable Veronica would have received life-saving surgery. Ambulance Victoria at no time communicated the decision not to upgrade the priority status to staff at Cobram District Hospital.

A combination of insufficient resources, high work volume, fatigue and a failure to assimilate the clinical information provided by Nurse Neilsen led to this critical delay.

Ambulance Victoria was inconsistent during the inquest in respect to who had responsibility for ensuring information about a patient's clinical status was communicated and the assessment of urgency in a case. At times, Ambulance Victoria stated they relied on the hospital to provide clinical information on a patient and thus to establish what the priority was.<sup>100</sup>

It was clear from evidence from the dispatchers that an upgrade request from a hospital was not sufficient reason to up grade an ambulance.<sup>101</sup> Ambulance Victoria is required to assess all requests for ambulance priority in the light of other demands on its service at the time. The evidence suggested an organisational reluctance to assimilate requests for an upgrade by hospital staff into their decision making. It is important to note that the requests by Nurse Neilsen occurred with the provision of sufficient clinical information to make it clear the request was necessary. Ambulance Victoria protocols require a dispatcher to consider up-grading or down-grading the priority of an ambulance as additional information is received.<sup>102</sup>

#### Recommendation:

Clear lines of responsibility and decision-making should be mapped out between Ambulance Victoria and hospitals with respect to the delivery of clinical information and requests for priority upgrades.

<sup>&</sup>lt;sup>98</sup> Tr 332-335

<sup>99</sup> Tr 188-190

<sup>&</sup>lt;sup>100</sup> Tr 176 - 183,196, 328-330, 333-334, Ambulance Victoria Submissions dated 15 June 2010, para 14-24, 54-55

<sup>&</sup>lt;sup>101</sup> Tr 234-235, 293, 333-334

<sup>&</sup>lt;sup>102</sup> Pg 93, vol 3

Where there is disagreement, or the dispatcher is considering not providing an upgrade, there should be a structured decision making process. This process should include communicating the decision to the treating doctor.

After Veronica's death significant changes were made to improve communication between Ambulance Victoria and hospital staff. Immediately after Veronica Campbell's passing Ambulance Victoria and Cobram District Hospital identified communication between the two services as an issue that needed urgent review. <sup>103</sup>

Ambulance Victoria immediately undertook a Critical Incident Review and Cobram District Hospital completed a Root Cause Analysis. Cobram District Hospital and Ambulance Victoria immediately began a consultation process in order to improve communication and develop new protocols for hospital transfer requests.

As a result of these consultations Ambulance Victoria introduced a number of changes, from January 2009, including the following.

Ambulance Victoria and Cobram District Hospital developed a new call-taking procedure, which was then introduced across the state. This clarified the process of requesting an ambulance and clearly defined terms such as acute, critical and routine for both hospital staff and Ambulance Victoria. 104

Urgent inter-hospital transfers now require confirmation through the relevant operations centre and with the Adult Retrieval Service.

This protocol has been summarised in a poster provided to all hospitals across the state.

On the 7<sup>th</sup> January 2009, operations centre staff state-wide received a work instruction sheet and staff bulletin requiring all calls for hospital transfers to use the structured call-taking system (Pro QA). Call takers are advised that they are responsible for asking whether the transfer is 'time

<sup>&</sup>lt;sup>103</sup> Ambulance Victoria, Critical Incident Review Report; Cobram Hospital, Root Cause Analysis Report.

<sup>104</sup> Statement of Garry Cook, Regional Manager, Hume Region for Ambulance Victoria, Tr 437-440

critical, requiring transfer within 1 hour'. Calls that are identified as time critical are triaged using MPDS and allocated Code 1 in the computer-aided dispatch system. <sup>105</sup>

On the 25<sup>th</sup> February 2009, a training and education session between Cobram District Hospital, Ambulance Victoria and Adult Retrieval Victoria was held at the Cobram District Hospital. 107

Ambulance Victoria personnel have also undergone training to revise the relevant protocol for hospital transfers. <sup>108</sup>

Ambulance Victoria has introduced a call-taking audit process in all rural operations centres.<sup>109</sup> This audit process aims to monitor and improve the call-taking process and identify possible improvements.

The MPDS protocol was amended to include 'known ectopic pregnancy' as a high-risk pregnancy complication. This incident has also been included in basic training for new ambulance officers. <sup>110</sup> These changes are important, as the MPDS system would otherwise allocate a Code 2 priority response in the event of an ectopic pregnancy. <sup>111</sup>

Ambulances across the region have been fitted with vehicle locators, which provide the dispatchers with the location, availability and current activity of each vehicle. 112

These changes have resulted in staff at Cobram District Hospital noting that Ambulance Victoria now requires significantly more information when booking a hospital transfer.<sup>113</sup>

<sup>&</sup>lt;sup>105</sup> Tr 176-180, Statement of Garry Cook, Regional Manager, Hume Region for Ambulance Victoria, pg 1-2, Tr 437-440

<sup>&</sup>lt;sup>106</sup> Statement of Garry Cook, Regional Manager, Hume Region for Ambulance Victoria, Tr 437-440; Tr 86

<sup>&</sup>lt;sup>107</sup> Statement of Garry Cook, Regional Manager, Hume Region for Ambulance Victoria, Tr 437-440; Tr 86

<sup>108</sup> Statement of Garry Cook, Regional Manager, Hume Region for Ambulance Victoria, Tr 437-440; Tr 86

<sup>&</sup>lt;sup>109</sup> Statement of Garry Cook, Regional Manager, Hume Region for Ambulance Victoria, Tr 437-440

<sup>&</sup>lt;sup>110</sup> Statement of Garry Cook, Regional Manager, Hume Region for Ambulance Victoria, Tr 437-440

<sup>&</sup>lt;sup>111</sup> Tr 193,198-9

<sup>&</sup>lt;sup>112</sup> Tr 193, 198-9

<sup>&</sup>lt;sup>113</sup> Tr 11-15, 167, 176-177, 438-439

Detailed information about the changes to Ambulance Victoria operation procedure was provided in written submissions, a portion of which is provided in Appendix 2.

The above changes and processes were an appropriate response to Veronica's death.

# Time analysis

Veronica's case was first given to Ambulance 625 at 10.45pm. There was an initial 45 minute delay in the Ambulance 625 response as the ambulance cleared Goulburn Valley Hospital. The initial response time was therefore one-and-a-half hours; a significant delay.

When Ambulance 625 arrived at Cobram District Hospital ambulance officers made the decision to wait for the MICA crew and Air Ambulance to transport Veronica. Officer Gardiner explained the decision as follows:

'The risk there would be that if we were to transport this patient, we were not authorised to manage an uncontrolled haemorrhage, and if the patient deteriorate, which was extremely likely in this case, I believed, we wouldn't have the appropriate skills to ...manage her airway.' 114

The MICA crew that had been dispatched at 12.12am and arrived at Cobram District Hospital at 12.45am.

Air Ambulance received the job at 12.30am and arrived at Cobram at 1.20am. The Air Ambulance crew attended Cobram District Hospital and intubated Veronica. Once the Air Ambulance had arrived it was appropriate to wait for rapid sequence intubation to be performed by Air Ambulance officers.<sup>115</sup>

The Air Ambulance left Cobram at 2.11am, landing at Goulburn Valley Hospital at 2.36am. 116

Analysis of the periods for road transport and waiting for Air Ambulance reveal that if Veronica had been intubated at Cobram District Hospital when the MICA crew arrived and transported by road to Goulburn Valley; she would have arrived at the Goulburn Valley operating theatre shortly

<sup>&</sup>lt;sup>114</sup> Tr 378

<sup>&</sup>lt;sup>115</sup> Exhibit 18, pg 2

<sup>&</sup>lt;sup>116</sup> Pg 66-67, Vol 1

after Air Ambulance had arrived at Cobram. Further, she would have had surgery before Air Ambulance took off from Cobram.

Throughout the inquest, Ambulance Victoria led evidence and made submissions that the decision to wait for MICA and the Air Ambulance was appropriate. The response by Ambulance Victoria after the first ambulance arrived was in accordance with protocols relating to the patient's need to be intubated and airway management during transport. Although each individual officer's decision was appropriate to his or her particular skill level, the global effect was a further delay in Veronica receiving the surgery she needed.

The decision to call Air Ambulance was taken by the dispatcher shortly after the 12.12am telephone call from Nurse Neilsen that made it clear that Veronica needed surgery as soon as possible. In the words of Nurse Neilsen:

'We just haven't got time for anything. You need to get her out.'119

It is important to note this decision was made further into the dispatcher's shift, with the same operational issues, outlined above, continuing to influence decision making in the call centre. It appears that at the time the dispatcher made the decision to call Air Ambulance he expected it would take 30 minutes for the Air Ambulance to arrive at Cobram, <sup>120</sup> however it took 50 minutes.

It appears that at no stage was a critical analysis undertaken of the time it would take to transport the patient by Air Ambulance and the time critical nature of Veronica's need for surgery. 122

The decision to wait for transport by Air Ambulance was made without consulting Dr Pang or hospital staff. Once Ambulance Victoria had made the decision to call Air Ambulance there was no further assessment of the available alternatives. 124

<sup>117</sup> Submissions of Ambulances Victoria, dated 15 June 2010, para 30-33

<sup>&</sup>lt;sup>118</sup> Submissions of Ambulances Victoria, dated 15 June 2010, para 30-33, Tr 370,375,380, 386

<sup>&</sup>lt;sup>119</sup> Pg 104-105, Vol 2

<sup>&</sup>lt;sup>120</sup> Tr 345-348

<sup>&</sup>lt;sup>121</sup> There is no suggestion that there was any delay on behalf of Air Ambulance.

<sup>&</sup>lt;sup>122</sup> Tr 117,120, 345

#### Recommendation:

Information on the response time of Air Ambulance needs to be available to dispatchers before a decision to use Air Ambulance is made. This information should be obtained and considered before a decision to use Air Ambulances. This assessment should be mandatory when the transport of a patient is time critical.

Ambulance officers should consult the treating doctor if a decision may result in a delay in transport, so all issues can be considered.

# **Blood Product Availability**

Throughout the inquest it became clear that access to blood products might have prevented Veronica's death. <sup>125</sup> Mr Nick Bush, CEO of Cobram District Hospital, gave evidence there were difficulties in maintaining sufficient quantities of blood at small rural hospitals. <sup>126</sup> There was evidence from Air Ambulance officers that having access to whole blood would have assisted in the care and management of Veronica. <sup>127</sup>

As rural hospitals do not have access to blood supplies, consideration should be given to another method of obtaining blood products in emergencies in rural locations. Ambulance Victoria included the following information in written submissions:

'Ambulance Victoria has developed a pilot plan to assess the practicality and benefit to the Victorian community of carrying blood products on helicopters and this is currently being developed for organisational approval.' 128

<sup>&</sup>lt;sup>123</sup> Tr 27

<sup>&</sup>lt;sup>124</sup> Tr 381-386, Pg 136-139, Vol 2

<sup>&</sup>lt;sup>125</sup> Tr 16

<sup>126</sup> Tr 161

<sup>&</sup>lt;sup>127</sup> Tr 424

<sup>&</sup>lt;sup>128</sup> Ambulance Victoria Submissions, dated 15 June 2010, pg 25

#### Recommendations:

Ambulance Victoria and the Victorian Government develop a viable method of providing blood products in emergencies in rural communities.

## Comments s. 67(3) Coroners Act 2008

There were many issues raised by the family in its correspondence and submissions, but not all of them can be dealt with by a Coroner. Many of the matters raised by the family have been dealt with in detail above. The following issues raised by the family require some short comment.

- 1. There was significant concern at the beginning of this matter that there was a history of difficulties between Cobram District Hospital and Ambulance Victoria. As part of the preparation for the Inquest a Coroner's Authority was served on both organisations seeking any relevant material. There was no evidence to support the proposition of a pre-existing poor relationship between the two organisations.
- 2. The family raised concerns about who was present in the communications room at Wangaratta on the evening in question and whether they may have had an influence on what was occurring with Veronica's management. The audio of the communications room includes a significant amount of background noise, which appears to be originating in part from other communications in the room. At 12.47am Dispatcher Kelly asks Senior Communications Officer Bill O'Brien to come into the communication room. It was appropriate to make that call at that time. There is no evidence to suggest anyone other than Wangaratta Communication Centre staff were present on the evening in question. There is no evidence to suggest Wangaratta Communications Centre staff were absent.
- 3. There was a great deal of evidence and cross examination about the method used by Ambulance Officers to shift Veronica from the hospital bed to their stretcher. Hospital staff had offered the use of a pat slide. The style of movement used was unfortunate. At the time Veronica was extremely

unwell and her quick deterioration into unconsciousness not unexpected.<sup>129</sup> The failure to use the pat slide was not the cause of Veronica's deterioration into unconsciousness.

- 4. The family have expressed distress and concern at the manner in which Veronica was referred to by Ambulance Victoria staff, saying she was referred to with a lack of dignity. Coroners have previously commented on the need for emergency staff to be mindful of how patients are referred to, even under circumstances of high stress. <sup>130</sup>
- 5. There was evidence from one Ambulance Victoria staff member that he thought Veronica's case was a Code 3 [non-urgent]. There was no other evidence to support this view. I am satisfied Veronica's case was not treated as a Code 3 case by Ambulance Victoria staff.

### Conclusion

I am satisfied Veronica Campbell's death was preventable. I am satisfied on the evidence that surgical intervention within one or two hours of the initial request for an urgent transfer from Cobram District Hospital would have prevented Veronica Campbell's death.

Coroner Stella Stuthridge

<sup>&</sup>lt;sup>129</sup> Exhibit 29, Tr 382

<sup>&</sup>lt;sup>130</sup> In the matter of Scott Funslow, 6 June 2000, Coroner Johnson