CORONERS COURT
NEW SOUTH WALES

Inquest:	Inquest into the death of Ivy Dwyer
Hearing dates:	29 April-1May 2015, 21 October 2015
Date of findings:	16 November 2015
Place of findings:	Wellington Local Court, NSW and Glebe Coroners Court
Findings of:	Magistrate C. Forbes, Deputy State Coroner
Catchwords:	CORONIAL LAW-Cause and manner of death-Care and treatment in remote area-illness not responding to treatment-myocarditis
File number:	2012/176374
Representation:	Dr P. Dwyer , Counsel Assisting instructed by Ms J de Castro Lopo , Office of the General Counsel, Department of Justice Mr B De Mars, Legal Aid representing the Dwyer family Ms L Boyd, Solicitor Advocate, Crown Solicitor's Office representing NSW Health Western Local Health District Mr M Walsh instructed by Holman Webb Solicitors representing Dr S Wakista Mr B Whyburn and Mr N Dawson representing Nurses and Midwives Association Mr C Jackson instructed by Avant representing Dr M Rose
Findings:	I find that Ivy Dwyer died on 2 June 2012 at Dubbo Base Hospital, Dubbo, NSW. I am satisfied the cause of her death was severe cardiogenic shock caused by myocarditis as a consequence of an unknown viral infection "occurring over several months" and the manner of her death was natural causes.

IN THE STATE CORONER'S COURT
GLEBE
SECTION 81 CORONERS ACT 2009

REASONS FOR DECISION

Introduction

1. This inquest concerns the sad death of Ivy Dwyer. She was only 18 years of age at the time of her death. She died at Dubbo Base Hospital on 2 June 2012 from complications of myocarditis.

2. The role of a Coroner as set out in s.81 of the *Coroner's Act 2009* ("the Act") is to make findings as to:

   (a) the identity of the deceased;

   (b) the date and place of the person's death;

   (c) the physical or medical cause of death; and

   (d) the manner of death, in other words, the circumstances surrounding the death.

   Section 82 of the *Act* also permits a Coroner to make recommendations that are considered necessary or desirable in relation to any matter connected with a death that relates to issues of public health and safety.

3. In this Inquest there is no controversy in relation to Ivy's identity, the date, place or cause of her death. The focus of this inquest is whether there is anything that can be done to prevent a similar death in the future.

4. This Inquest has been assisted by the expert evidence of the following independent experts:.

   - Dr J B Hobbs, Medical practitioner.
   - Dr J Duflou, Specialist forensic pathologist
   - Dr John England, Cardiologist
   - Dr P Roy, Cardiologist

- Dr M Herman, Cardiologist

Ivy Dwyer

5. Ivy is dearly missed by her parents Fay and Kevin Dwyer. They described her as having a beautiful and generous nature and that she lit up a room with her smile. She was part of a loving extended family living in Narromine and Brewarrina.

6. Ivy had recently turned 18 and completed her HSC and at the time of her death she was living in Narromine with her aunt, Vicki Dickens.

7. Ms Dickens told the Court that Ivy came to live with her about eight months before her death as she had a job as a domestic assistant at Narromine Hospital, just across the road from Ms Dickens' house. Ivy loved her job and she told her Aunt that she enjoyed helping with the older patients.

8. She was taking no regular medications and was a very active teenager. She loved socialising with family and friends, and exercised every day. Before March 2012, Ms Dickens had no concerns about her health.

9. In the weeks and months prior to her death she developed a fatal heart condition that was not diagnosed.

Narromine Shire Family Health Centre

10. Ivy was a patient of the Narromine Shire Family Health Centre, which has a number of doctors, a full time pathologist and nurse practitioners. Between July 2010 and April 2012 she was treated for health concerns including an ear infection, dental abscess, upper respiratory tract infections, scabies and smoking consultations.

11. From July 2010 through to about April 2012, Dr Sam Wakista was one of a number of doctors who treated Ivy at the Narromine Family Health Centre and he was involved in her treatment in Narromine Hospital on the day before she passed away, on 1 June 2012. Dr

Wakista is a general practitioner and a visiting medical officer (VMO) at Narromine Hospital.

12. In February 2012, Ivy underwent an Aboriginal health assessment screening by a practice nurse, Ms Natasha Davis. That screening involved a number of basic health checks. Importantly, it involved a check of Ivy's cardiovascular system, which seemed to be functioning well at that time.

13. On 26 March 2012, Dr Wakista saw Ivy at the Narromine Medical Practice when she attended with symptoms of nausea and tiredness. Dr Wakista ordered a full blood test as well as an ESR (a test that measures inflammation in the body), liver function tests, thyroid function tests and a fasting glucose test. Those blood tests were performed on 3 April and the results were considered to be normal except for mild derangement of liver function and elevated transaminase with a notation that follow up may be indicated.

14. Ms Dickens gave evidence that around 11 April 2012, Ivy became sick with what appeared to be a head cold. She had a stuffy nose and a dry cough.

15. A couple of weeks after that she complained of aches and pains to her body that persisted and she spoke of having heartburn. From the end of April, right through May, she seemed to get very tried and lost her appetite.

16. Around the week of 20 May, Ms Dickens noticed that Ivy had trouble walking, and she seemed to be wheezing when she walked. She stopped going into work because she felt so sick, and that was very unusual for her.

17. On 22 May, Ivy attended the Narromine Family Health Service and saw Dr Marie Rose. That was the first time she had seen Dr Rose, who was a GP based in the Blue Mountains, doing a 3 week locum at Narromine. Ivy reported a three day history of vomiting, diarrhoea and minor respiratory symptoms. Dr Rose performed an abdominal examination and noted a soft abdomen. Her preliminary diagnosis was gastroenteritis and Ivy was prescribed Imodium for the diarrhea and Maxolon to treat the nausea and vomiting.

18. On 26 May, Ivy attended the outpatient clinic at Narromine Hospital and again saw Dr Rose. She recorded a history of vomiting, diarrhea and cough since last Friday. The

diarrhea had settled but the cough and vomiting were persistent. Dr Rose performed a chest examination, she felt the abdomen and again noted that it was tender and she saw no signs of dehydration. She prescribed Maxolon and follow up oral Maxolon or Ondansetron if further vomiting occurred and she advised Ivy to return if the symptoms persisted.

19. On Saturday 27 May, Ivy's friend picked her up to take her to the football, but her friend had to bring Ivy back home because she was so sick, and she lay down in the car on the way home.

20. On 28 May, Ivy returned to the Narromine Family Health Service and again saw Dr Rose. The gastric symptoms had eased but Ivy felt unwell, was coughing and had bodily aches. Dr Rose did a further chest examination and recorded coarse crepitations – that is the rattling or crackling sound made by one or both of the lungs during breathing. Ivy was prescribed Amoxycillin, a common antibiotic and Panadeine Forte, a pain killer and advised to quit smoking.

21. On 29 May, Ivy was back at Narromine Heath Service and saw Dr Rose for the 4th time that week. Ivy reported that the vomiting was back, she was still unwell, she had stopped smoking, her chest was clear, there were no signs of dehydration. Dr Rose gave evidence that she thought Ivy may have had side effects from the medications –the Amoxicillin and Panadeine Forte-which might have caused the vomiting to recur. Dr Rose ordered that a blood test be done and recommended that Ivy come back for review in a few days.

22. On 31 May**,** Dr Rose received a call from the pathologist who advised that in his opinion Ivy was suffering from viral Epstein Barr Hepatitis, and he also wanted to test for another similar virus called CMV - cytomegalovirus. Ivy attended with her Aunt later that day and Dr Rose told them of the diagnosis. She ordered ongoing Maxolon and a full blood count was requested for follow up pathology. The antibiotics were ceased.

23. There is some divergence in the evidence of Ms Dickens and Dr Rose as to how Ivy presented on the last occasion she was seen by Dr Rose. According to Ms Dickens, around that time Ivy was very weak. She said that Ivy couldn't comb her own hair, her cousin Sara had to sit Ivy on a chair to help her shower and she had to wash her hair for her because she

lacked the strength to do it herself. Ms Dickens gave evidence that she had to help her to walk in the surgery. She said that she had hold of her under her arm and was just sort of supporting her to help her walk. Ms Dickens said that when Ivy walked down the corridor to Dr Rose's office she could not walk unassisted and Ms Dickens had hold of her the whole time.

24. Dr Rose gave evidence that when Ivy came back into the surgery that afternoon, she was actually looking better and her condition was satisfactory. Dr Rose gave evidence that she recalls explaining to Ivy and her Aunt about the Pathologist's report and that now we appeared to have an actual diagnosis. On the basis of the pathologist's report and her own diagnosis, Dr Rose thought that the Epstein Barr virus was the cause of Ivy's present problem and symptoms. In that case, Dr Rose said that she didn't do anything more than order some more blood tests and get her to continue the way she was going. She was to take Maxolon if she continued vomiting.

25. Dr Rose gave evidence that she did not see Ms Dickens having to support Ivy, and that it was possible that Ivy was bought to her in her room in a way that she didn't observe her walking at all.

Narromine Hospital

26. On 1 June 2012, Ivy was at home and felt breathless and lethargic, and she had coughed up blood. Her Aunt called Dr Rose and told her that Ivy's condition had gotten worse and Dr Rose recommended that she be taken to the Narromine Hospital. Both Dr Rose and Dr Wakista were working at the Narromine Family Health Centre at that time and Dr Wakista was on call for the Hospital. Dr Rose gave Dr Wakista details of Ivy's history over the past week and the pathologist's diagnosis.

27. Ivy and her aunt arrived at the Hospital around 3.10pm and Ivy was assessed by nursing staff who then contacted Dr Wakista to tell him she was there. Ivy was observed by nursing staff to be pale, nauseated and dehydrated and she had low blood pressure. She reported feeling unwell and tired for the past 3-4 weeks with chest and abdominal pain. She

was noted to have coughed up small amounts of blood stained sputum en route to the Hospital.

28. Ivy was jaundiced, reported coughing blood for a day, had moderate dehydration, was vomiting bile and had bilateral crepitations.

    Dr Wakista wrote his initial Plan as:

    1. Transfer to Dubbo Hospital for investigations
    2. IV fluids
    3. Nil by mouth

29. Dr Wakista needed further investigations in order to make a diagnosis, but he was limited by the lack of facilities at Narromine. Narromine Hospital is a small 24 hour rural hospital with a capacity of 29 beds (18 acute/sub acute; 7 Nursing home type beds and 4 Transitional Aged Care Places). Dr Wakista had assessed Ivy as dehydrated, vomiting and suffering possible viral hepatitis**.** He requested transfer to Dubbo Hospital for further review in the Emergency Department because he thought Ivy needed a chest x ray and Narromine did not have the capabilities to perform one.

30. There is a transcript of the phone call made by Dr Wakista to arrange transfer to Dubbo Hospital. The three people involved in the conversation were Dr Wakista, Nurse Jade O'Brien, Patient Flow Coordinator for the Western Local Health Network, and Dr Richard Draper, who was the Evening Senior in charge of the Emergency Department at Dubbo Base Hospital.

31. Dr Draper gave evidence that one of the responsibilities of the evening senior was take phone calls from doctors from other hospitals requesting patient transfer to Dubbo Hospital. The decision as to whether a patient is actually accepted was his, but he would expect a doctor who thinks a transfer is necessary to advocate vigorously on a patient's behalf. Dr Draper would assume that, in terms of the decision to be made for Ivy on the evening of 1 June, he and Dr Wakista would discuss the patient's needs and then come to an agreement.

32. In fact, that was what appears to have occurred initially on that night. It is evident from the transcript that Dr Wakista told Dr Draper that he had an 18 year old girl who was unwell, with severe dehydration and hemoptysis. There were no x ray facilities at Narromine and Ivy needed to be x-rayed and to have further blood and urine tests done. Dr Wakista was clear that he needed his patient to go to Dubbo.

33. Dr Draper explained that there were no beds at Dubbo spare at that moment so that if Ivy was transferred at that time, the Hospital could accommodate her, but she may have to be on a stretcher in the corridor rather than a room. Dr Draper was the first to exit the call and when he left, he was of the view that Ivy would be transferred and that Nurse O'Brien and Dr Wakista would sort out the formalities.

34. After Dr Draper exited the call Nurse O'Brien continued to talk to Dr Wakista to get the patient's details and then organized for the patient transport driver to pick up the pathology from Narromine. A decision was made that bloods should be taken at Narromine and collected by Dubbo Hospital for analysis and that Ivy would remain at Narromine overnight, unless the blood tests showed an abnormality. Dr Wakista stated that it was expected that the blood tests would be abnormal, but ultimately he did not insist that Ivy be transferred immediately. Dr Wakista appeared to accept that Nurse O'Brien was making the decision about what would happen next, in spite of what had been agreed earlier with Dr Draper.

35. Nurse O'Brien gave evidence that it was a doctor's decision as to whether or not Ivy was transferred to Dubbo at that stage. Nurse O'Brien said that it wasn't her intention to try and dissuade a doctor from sending a patient if she thought they could be dealt with in the clinical setting they were in. She said that part of her role was trying to problem solve and coming up with a solution that was in the best needs of the patient and the base hospital. She felt the conversation was ambiguous, and she accepted that because of the confusion in phone call, Dr Draper's decision to accept Ivy wasn't acted on at that time.

36. The plan recorded by Dr Wakista in the clinical notes at 6pm that evening was:

a) admit
b) IV fluids
c) IV panadol
d) Nil by mouth

e) Omeprazole (treats inflammation of the stomach)

37. Ivy was also given Maxolon and Pantoprazole for the nausea and IV fluid therapy for dehydration.

38. Blood pathology was taken and urinalysis performed. Dubbo Base Hospital sent a transport car to Narromine to collect Ivy's blood pathology specimens and testing was arranged at Dubbo as had been agreed during the phone conversation.

39. Dr Wakista reviewed the blood pathology results, which showed a raised liver function and reduced renal function. There was no follow up call to transfer Ivy to Dubbo that night.

40. Dr Wakista was the only doctor on duty at Narromine Hospital and was assisted by three nurses in the afternoon shift and two in the evening**.** It was a busy evening, there were seventeen inpatients, including eight acute care patients in the Hospital**.** Dr Wakista was on duty until 10.30pm that evening.

41. Ivy was monitored throughout the evening and into the early hours of the morning.

42. At 9.30pm, Ivy's vital signs were all within normal limits except for her blood pressure, which had been low since admission.

43. Nurse Thea Finlayson gave evidence that when she first saw Ivy on the night shift she looked pale, she was comfortable but tired and requested something to help her sleep. A clinical note recorded by Nurse Goodman at 10pm states that "patient feels awful and weak".

44. At 11.15pm, Ivy was given Temazepam. Nurse Finlayson told the court that between 10.45 and midnight she had been in and out of Ivy's room at least 8 times and Ivy appeared to be resting. Some time between midnight and 1am, RN Finlayson's colleague told her that Ivy had unplugged the infusion pump and walked herself to the toilet with the pump and pole.

45. Clinical notes record that when observations were taken at 2.30am by Nurse Gayle Barling, there was a sudden and obvious deterioration noted. Nurse Finlayson attended on Ivy when told of her observations, which showed an increase in respiration rate. Nurse Finlayson noted that Ivy had laboured breathing, was pale, had clammy skin and had vomited a small

amount of blood into the sputum bag beside her. Ivy said that she felt terrible and had chest pain. Nursing staff administered oxygen and urgently phoned Dr Wakista to ask him to come back in. He asked the nurse to do an ECG and returned to the Hospital, arriving at 2.45am.

46. Dr Wakista reviewed Ivy and the ECG and formed the view that she was deteriorating. He thought that she may be suffering pericarditis. He called the admitting officer at Dubbo Hospital and arranged for Ivy's urgent transfer by ambulance. In the meantime, he ordered that Ivy be give Maxolon and Morphine.

Dubbo Base Hospital

47. On 2 June**,** 2012 at around 4am, Ivy was taken to Dubbo Base Hospital by ambulance. On arrival she was noted to be hypotensive (low BP), tachycardic (excessive heart rate), and she had poor peripheral perfusion (capillary refill). She was grey in colour and could barely answer questions or keep her eyes open. She coughed up more blood.

48. Urgent attempts were made to stabilise Ivy. By 5.31am she still had seriously low blood pressure. At 5.51am she became unresponsive and resuscitation efforts were commenced. Ivy was intubated and CPR was commenced with adrenaline administered. Despite further infusions and medications, Ivy's heart rate continued to drop and at 7.45am she was declared deceased.

Cause of Death

49. Dr Hobbs conducted an autopsy and determined that the direct cause of death was inflammation of the sac surrounding the heart. He found an enlarged heart, with right and left heart failure.

50. Professor Jo Duflou, Forensic Pathologist, reviewed the pathological findings and agreed that Ivy died as a result of severe heart disease. She had significant enlargement and inflammation of the heart muscle.

51. Cardiologists Dr Herman, Dr Roy and Dr England, all gave evidence that Ivy died from viral myocarditis and that it is impossible to say what virus caused the infection.

Expert Review of Ivy's care and treatment

52. Dr Roy, Dr Herman and Dr England each reviewed Ivy's medical records.

53. Dr Roy formed the opinion that the blood test results of 3 April 2012 were indicative of some form of viral infection. Ivy's liver function was slightly abnormal and her lymphocyte count was down. He said that when Dr Rose noted the 'coarse crepitations' in Ivy's lungs on 28 May, a chest x-ray should have been performed together with follow up blood tests. He said that the chest x-ray would have revealed an enlarged heart and the need for further investigation and treatment. He said it is not possible to say what the further blood tests would have revealed but it may have given more clues. He said that there was a chance that Ivy's death could have been avoided if she had been transferred from Narromine a day or two earlier.

54. He acknowledged that myocarditis can be a difficult diagnosis for someone who is not seeing the problems on a regular basis.

55. Dr Herman explained that myocarditis is characterised by symptoms including shortness of breath, fatigue as well as signs of fluid retention. He said that whilst it was very likely that Ivy had been developing a progressive cardiomyopathy as a result of a prior viral myocarditis she had no specific symptoms or signs suggesting heart failure in the early stages of her disease process. Rather she presented with a number of non-specific symptoms such as nausea, vomiting, fatigue, dry cough and listlessness, all of which are likely to be due to a virus rather than heart failure in a young lady. He said there were no clinical signs of heart failure that would divert a doctor's attention from the working diagnosis of viral infection to the heart system.

56. He said that on 28 May when the coarse basal crepitation was heard by Dr Rose in a setting of breathlessness and a persistent cough, it could suggest heart failure and may have warranted further investigation with a chest x-ray, ECG and if possible an echocardiogram. In cross examination Dr Rose had given evidence that in her examination of Ivy the crepitation did not sound like cardiac failure but more bronchial. Dr Rose also gave evidence that if a similar situation occurred after this experience she would definitely order a chest x-ray, particularly now that she is so aware that cardiac disease disproportionately affects Aboriginal people. Dr Herman said that as Ivy was a smoker it wasn't unreasonable that there was a diagnosis of bronchitis.

57. Dr Herman said that, had Ivy's diagnosis been made several days earlier, she could have been give extracorporeal membranous oxygenation (ECMO) support for her failing heart muscle, possibly giving it time to recover. He did however go onto to say that, given the amount of myocardial damage noted at post mortem, it is unlikely that she would have recovered. He said that cardiac transplantation could have been considered which may have given her a chance of survival, though the likelihood of survival would have been poor.

58. Dr England gave the opinion that the treatment provided to Ivy from Narromine Family Health Centre was appropriate. He said that in a situation of a tragic death of a young person it is always possible with hindsight to be wise but that he was of the opinion that the outcome was inevitable and treatment would not have changed the final outcome and death. He gave evidence in court that Ivy was a very sick girl who was not getting better and that an x-ray should have been ordered by 28 May. He said that there were no x-ray facilities in Narromine and while arrangements could have been made for her to attend Dubbo for an x-ray, he understands that doctors are always trying to practice medicine within financial constraints and Dr Rose was not aware of how sick Ivy really was.

59. Dr England said that, once the pathological process of disseminated intravascular coagulation had been set in motion, intervention would not have helped. He said that by the time Ivy got to Dubbo Hospital, nothing could have been done to save her. He said that the outcome would have been the same even if she had been sent 24 hours earlier.

60. Dr Roy said that once treatment is started at the end stage, chances of survival are low but that Ivy's chance was taken away from her by not referring her on 28 May for a chest x-ray. Dr Herman agreed that she had a very low chance of survival.

What can be done to help prevent a similar death in the future?

61. Dr Roy said that the main lesson to be learnt from Ivy's death, was that when a sick young patient attends a doctor with the same symptoms repeatedly, and the treatment is not working, then a doctor should contact a colleague for further opinion and perhaps admit the patient to Hospital while you get to the bottom of the symptoms.

62. Dr Roy said that the other lesson to be learnt from Ivy's death is that extra care should be taken when obtaining a medical history and that a doctor should talk to relatives who can give vital information for making decisions on investigation and diagnosis. He said that

Ivy was a lot sicker than the doctors realised and the family was more aware than the doctors as to how sick Ivy really was.

63. Dr Herman agreed with Dr Roy and said that everyone appeared to notice Ivy becoming progressively more unwell and that further investigations should have been done rather than to persist with therapy that did not seem to be working. He said that the issue in this case was not whether an x-ray is performed or not, but rather that the learning experience is the need to seek help in a situation where a sick young person repeatedly keeps coming back.

64. They agree that even though Ivy's chances of survival might have been slim she would have had a much better chance had the x-ray, ECG and echocardiogram been done weeks earlier.

65. A new program has been established since Ivy's death where General Practitioners, Locums and hospital staff in the western NSW Local Health District can contact a specialist for telephone medical advice at the newly established Critical Care Advisory Service. The specialist will be able to give advice on diagnosis, treatment and the whereabouts and availability of relevant diagnostic testing equipment.

66. Locums will also be provided with an induction manual advising them of this new service and other issues specifically relating to populations in the area. The guide is still in draft form and is intended as a quick orientation for a locum.

67. Since Ivy's death the Local Health District has also made the following changes to the medical service in Narromine:

Education and training

- All Narromine Hospital staff members involved in the care of Ivy received feedback on the RCA report, its findings and recommendations.
- On 11 June 2012 and 18 November 2013 at meetings of the visiting medical officers who work at Narromine Hospital the importance of their participation in DETECT training (detecting deterioration, evaluation, treatment, escalation and communication in teams) was stressed. Two have completed the training and one doctor has booked.

- A seminar was held following the death of Ivy in September 2012 and a compulsory Nursing In-Service on 30 November 2012 was held highlighting, amongst other things, the importance of documenting vital signs and maintaining written contemporaneous records.

Team nursing

- In August 2012 a Team Nursing Model of Care was introduced at Narromine Hospital. Each team is led by a team leader which is usually a registered nurse. The model is designed to ensure the individual skills, experience and level of training of the staff member is taken into account in order to provide optimum care.

- A WNSWLHD Team Nursing Model of Care Toolkit was revised in August 2013 to provide guidance for new, agency and temporary staff in relation to handover, patient review, contemporaneous documentation, and clinical management. It ensures the orientation of new staff with their roles and responsibilities.

"Between the Flags – Recognition and Management of the patient who is clinically deteriorating" (WN_PD2011_127)

- This local policy directive was effective at the time of Ivy's death and is currently under review following the revised NSW Health state wide directive published in December 2013.

- The policy requires the use of the coloured Standard Adult General Observation chart.

- Relevantly the policy provides, amongst other things, that "if more than one vital sign enters the yellow zone a clinical review should be initiated according to local policy".

- Vital signs in the yellow zone must be repeated and recorded within 30 minutes.

- Unless the frequencies of observations have been altered by a medical officer vital signs must be recorded 8 hourly as a minimum.

New Adult General Observation Chart

- The standard Adult General Observation Chart was amended in April 2015 by NSW Health and is now used at Narromine Hospital.

- The yellow zone response on the chart states "if your patient has any yellow zone observations or additional criteria you must:

    1. Initiate appropriate clinical care;

    2. Repeat and increase the frequency of observations as indicated by your patient's condition;

    3. Consult promptly with the nurse in charge to decide whether a Clinical Review should be made".

- The Yellow Zone criteria have been expanded to include 14 new criteria.

- Where a decision is made to call a Clinical Review, and that review does **not** occur within 30 minutes or the staff member is becoming concerned the Clinical Emergency Response System (CERS) should be implemented.

- Notification to the Clinical Emergency Response System is for use when there is no onsite medical officer and may be made between 8am – 8pm (out of hours the call will divert to Aeromedical and Medical Retrieval Service). CERS utilises one way video (the fixed camera in the hospital) and two way audio (hands free telephone) to allow a Critical Care Specialist to provide advice.

Transfer of Patients

- In 2013 a new Local Guideline – Patient Flow Transport Unit Business Processes – was developed to provide specific information about the mechanism for transferring a patient between hospitals.

- On 13 May 2014 a Local Directive was published (WN_PD2014_011 Patient Flow Management). This directive provides much more detailed guidance to staff including the responsibilities of various staff members involved in organising patient flow.

- Sitting within PFTU is a new program whereby contact can be made with the Critical Care Advisory Service (evidence of A/Professor Greenberg) which allows access by telephone to specialist medical advice. This can be accessed by hospital staff and local GPs in the Western NSW LHD.

68. In light of the above I am of the view that there are no recommendations to be made in this case. I now turn to my formal findings.

Findings under s 81 Coroners Act 2009

I find that Ivy Dwyer died on 2 June 2012 at Dubbo Base Hospital, Dubbo, NSW. I am satisfied the cause of her death was severe cardiogenic shock caused by myocarditis as a consequence of an unknown viral infection "occurring over several months" and the manner of her death was natural causes.

Magistrate Carmel Forbes

Deputy State Coroner

16 November 2015