

#### Coroner's Court of Western Australia

#### RECORD OF INVESTIGATION INTO DEATH

Ref No: 34/18

I, Evelyn Felicia Vicker, Deputy State Coroner, having investigated the death of **Christopher John DEBNAM** with an Inquest held at Perth Coroners Court, Courts 51 and 85, Central Law Courts, 501 Hay Street, Perth, on 15-16 October & 14 November 2018 find the identity of the deceased was **Christopher John DEBNAM** and that death occurred on 21 November 2014 at Montgomery Ward, Graylands Hospital, and was **consistent with Cardiomyopathy with early pneumonia in a man with reported sleep apnoea and a high body mass index, in the following circumstances:-**

#### Counsel Appearing:

Sergeant L Housiaux assisted the Deputy State Coroner

Ms H Richardson (State Solicitors Office) appeared on behalf of North Metropolitan Health Services (NMHS)

Ms B Burke (Australian Nursing Federation) appeared on behalf of nurses G Smith, A Malone and S Mueller

#### **Table of Contents**

INTRODUCTION	2
BACKGROUND	
The Deceased	3
Medical Treatment	5
ADMISSION 10 SEPTEMBER – 12 NOVEMBER 2014	8
POST DISCHARGE 12 NOVEMBER 2014	
READMISSION TO GRAYLANDS HOSPITAL 20 NOVEMBER 2014	17
POST MORTEM EXAMINATION	
Toxicology	27
Sleep Apnoea	33
CONCLUSION AS TO THE DEATH OF THE DECEASED	38
Manner and Cause of Death	42
SUPERVISION TREATMENT AND CARE OF THE DECEASED WHILE AN INVOLUNTARY PATIENT	
21 NOVEMBER 2014	
RECOMMENDATIONS	50
Recommendation No. 1	51
Recommendation No. 2	
Recommendation No. 3	51
Recommendation No. 4	51

#### INTRODUCTION

During the early hours of 21 November 2014 Christopher John Debnam (the deceased) was observed by nurses on Montgomery Ward (MW) at Graylands Hospital (Graylands) to be sleeping, on his back, noisily snoring. When checked again at approximately 7.10 am he was no longer snoring and the nurse could not see the rise and fall of his chest to indicate he was breathing. He could not be roused and a code blue (medical emergency response) was instituted. Despite aggressive intervention the deceased could not be revived.

The deceased was 40 years of age.

MW at Graylands is a secure ward and the deceased had been admitted late on 20 November 2014 as an involuntary patient due to a relapse of his mental health issues.

The death of an involuntary patient under the *Mental Health Act* (WA) 1996 (the Mental Health Act) mandates the holding of an inquest under the provisions of the *Coroners Act 1996* (WA) (the Act). In addition, by section 25 (3) of the Act, a coroner holding that inquest must comment on the supervision, treatment and care of that person while held as an involuntary patient under the provisions of the Mental Health Act.

The evidence before the court comprised of two volumes of documentary evidence, exhibited as Exhibits 1 & 2, a review on behalf of North Metropolitan Health Services (NMHS), Exhibit 3,

and the oral evidence of a number of witnesses called to expand upon the documentary evidence, including the deceased's treating psychiatrist in the community who signed the orders for the deceased to be assessed as an involuntary patient, the psychiatric registrar who admitted the deceased for the purposes of assessment, an independent respiratory and sleep disorder physician, an independent psychiatrist, independent pharmacologist, the head of clinical services at Graylands and a number of the nurses monitoring the deceased before his apparent arrest.

#### **BACKGROUND**

## The Deceased

The deceased was born on 3 October 1974 at Osborne Park, Perth, Western Australia (WA). He was the youngest child of four with two sisters and one brother and completed all of his education in the Perth Metropolitan area. He did TEE at Tuart College before doing computer graphics at Edith Cowan University for a couple of semesters.

The deceased met an American lady on line when 21 years of age and then travelled to the USA to be with her and they married. While in the USA the deceased is reported to have had admissions to hospital for mental health issues, but his family of origin were not aware of concerns for his mental health until his later return to Perth. The deceased and his wife moved backwards and forwards between the USA and Australia for a

number of years, until the deceased returned on his own, suffering obvious mental health issues.

The deceased became increasingly unstable and his family described him as verbally aggressive. He returned to the USA in late 2007 after assaulting a fellow patient while an involuntary patient. He remained there until approximately 2010 with some admissions to hospital in USA. He returned by himself in 2010, followed sometime later by his wife. They had no children. His wife returned to the USA in 2011 and thereafter they effectively separated in 2012, although the deceased appears to have been in denial about the end of his marriage.

The deceased was placed on a disability pension due to his mental health issues and was under the care of the Mirrabooka Adult Community Mental Health Service (MACMHS) with admissions to mental health facilities when he deteriorated, where he was reported as aggressive and difficult to manage.

The deceased's parents found him difficult to manage and preferred he lived away from the family home although they were supportive of his difficulties. His father was diagnosed with a terminal illness and his mother became increasingly distressed at trying to manage the family dynamic when her son was also unwell. In mid-2014 the deceased deteriorated further

٠

<sup>&</sup>lt;sup>1</sup> Ex 3

and it was necessary he be hospitalised for increasingly frequent periods of time.

# Medical Treatment

In addition to the deceased's mental health issues he was also diagnosed with a number of physical medical conditions for some of which he required medication; type 2 diabetes, hypertension, hypothyroid, high body mass index and apparent sleep apnoea. He was a heavy smoker with a history of previous amphetamine abuse.

The deceased was first diagnosed with a psychotic disorder in 1997 when he was 23 years of age at Cambridge Hospital, on one of his returns from the USA. He underwent a voluntary admission and was treated with the antipsychotic Olanzapine. In 1999 he had a voluntary admission to an institution in Columbia USA, and was later assessed in Western Australia (WA) by Dr Kostou, Consultant Psychiatrist, in 2002 and received a diagnosis of chronic psychosis likely. He was referred to follow up in the Australian public mental health services.<sup>2</sup> In 2002 he was recorded as a patient of the MACMHS (in Osborne Park) and diagnosed with recurrent psychotic episodes.

The deceased was reviewed intermittently between 2002 and 2014 by his GP when he was in Australia. His GP confirmed his physical health problems were diabetes, hypothyroidism, hyperlipidaemia and bipolar affective disorder (BPAD) type 2 by

<sup>&</sup>lt;sup>2</sup> Ex 1, tab 40

2014. He noted the deceased was generally non-compliant with medication,<sup>3</sup> and spent time as an involuntary patient in Fremantle Hospital, Swan Valley Centre and Graylands when in WA.

In 2007 the deceased was a patient at the Swan Valley Centre when he seriously assaulted another patient and was transferred to Graylands. His discharge summary confirmed a diagnosis of chronic paranoid schizophrenia. He then returned to the USA where he was diagnosed with Bipolar Affective Disorder (BPAD) and commenced on mood stabilisers.

Following the deceased's final return to Perth to live with his parents, while going through divorce proceedings in 2013, he was admitted to Graylands from Sir Charles Gairdner Hospital (SCGH) Emergency Department (ED) for an extended period from June to September 2013. His diagnosis of BPAD was confirmed. It was noted the deceased appeared to have short apnoeic episodes during that admission and he was referred to the respiratory clinic at SCGH and an alert was noted on PSOLIS.<sup>4</sup> In blood tests following his time in SCGH ED, his results on 2 July 2013 showed an elevated serum bicarbonate level, suggestive of sleep hypoventilation. That level returned to normal.<sup>5</sup>

<sup>&</sup>lt;sup>3</sup> Ex 2, tab 5

<sup>&</sup>lt;sup>4</sup> Ex 2, tab 1

<sup>&</sup>lt;sup>5</sup> Ex 1, tab 33

Due to his parents difficulty managing him arrangements were made for him to live in supported accommodation at the Richmond Fellowship and he was again referred to MACHMS where he was seen on a monthly basis by a psychiatrist.<sup>6</sup>

The deceased appeared to do well during this time and his antipsychotic medication was slowly reduced and ceased in April 2014. He appeared stable and the intention was for him to be discharged into the care of his GP.

However, in June 2014 the deceased's father was diagnosed with lung cancer and it was decided the deceased would remain a client of MACMHS through an undoubtedly difficult time for the family.<sup>7</sup>

The deceased first started being treated by Dr Angelene Chester, then a Senior Registrar in Psychiatry now a Consultant Psychiatrist, in August 2014 while under the care of the MACMHS. Dr Chester reviewed the deceased as living at home with his parents and that his father was unwell. He reported being compliant with his medication and denied any thoughts of harm or psychotic symptoms. He was still hopeful for accommodation with the Richmond Fellowship and was open to Dr Chester's suggestion his GP perform some physical investigations to track his physical health. His case manager while in the care of MACMHS during this period was Registered

\_

<sup>&</sup>lt;sup>6</sup> Ex 2, tab 3

<sup>&</sup>lt;sup>7</sup> Ex 2, tab 4

Mental Health Nurse (RMHN) David Balakrishnam and he attempted to follow the deceased's treatment, both while in the community and on any admissions.

There is no record in the deceased's medical history that the concern of clinicians as to his sleep apnoea was ever formally investigated by a respiratory physician despite the alert on PSOLIS. His GP file does not record any chest X-rays or echocardiograms within his recent medical history.<sup>8</sup> There is no record of him complaining of any cardiac or respiratory difficulties.

#### ADMISSION 10 SEPTEMBER - 12 NOVEMBER 2014

On 10 September 2014 the deceased was taken to SCGH by police. It appeared he had a relapse of his mental health issues as he was thought disordered, irritable and had threatened the paramedics attempting to assist him. He was sleep deprived, noncompliant with medication and it was suspected he had been abusing illicit substances. There was also a note there was concern as to his medical and physical illnesses. He was diagnosed as having a relapse of his BPAD and as being at risk to himself and others. He was referred to Graylands to be assessed under the *Mental Health Act* as an involuntary patient.<sup>9</sup>

<sup>9</sup> Ex 2, tab 1

<sup>&</sup>lt;sup>8</sup> Ex 1, tab 33

When in Graylands he refused his physical health medications and refused investigation for his diabetes. There were ongoing notes of agitation, delusions and intrusive behaviour, however, his parents remained supportive of him and were liaising with his clinicians.

While treated in Graylands during that extended admission the deceased had been treated on an as needed basis (PRN) through the following steps for managing his periods of increased agitation and arousal.

**Step one:** Quetiapine 50-100mg (antipsychotic)

**Step two:** Clonazepam 1-2 mg (benzodiazepine)

**Step three:** Haloperidol 5-10 mg (antipsychotic)

**Step four:** step two + step three repeated (combined)

He had required 24 doses of PRN medication during his stay. On two occasions they were given intramuscularly and, on 23 October 2014, a dose of the short acting, high potency antipsychotic acuphase was given. At no time throughout his medical record in that period is it documented his respiratory function was compromised after the administration of sedatives. His medication chart revealed Clonazepam and Haloperidol were given together or sequentially on a number of occasions. 10

The deceased was recorded as being abusive and threatening towards staff, and there were intimidating and abusive

<sup>&</sup>lt;sup>10</sup> Ex 2, tab 1.20

interactions with other female patients. Frequently security would be called to assist staff in controlling his behaviour prior to sedation being implemented. He was recorded as difficult to deal with despite his involuntary status, and it was difficult to give him his medication or perform scheduled observations or investigations.

When it was possible to take observations the deceased's clinical condition was essentially normal, with his blood pressure being within acceptable limits. Routine investigations for renal function, thyroid function, cholesterol, liver function and his full blood counts were essentially normal, but there is no evidence of a full physical examination, presumably due to his resistance to compliance with what he considered to be unnecessary and intrusive observations.

A partial examination was performed on 24 September 2014 when he complained of physical symptoms to do with urination and rectal bleeding. He was assessed as requiring antibiotics and he complied with that treatment.

It was due to his continued difficult behaviour the deceased's family requested he again be considered for supported accommodation at the Richmond Fellowship, as well as independent accommodation.

On 8 October 2014 the deceased was made a voluntary patient and allowed home leave in the care of his parents as he seemed to be improving.

At home the deceased's mental status deteriorated resulting in him again being detained as an involuntary patient under the *Mental Health Act* on 19 October 2014, until 12 November 2014, when he was again made voluntary and at the same time discharged home to his parents care, with referral to MACMHS. This does not appear to have been communicated to MACMHS.

The failure to notify his CMHS followed a meeting on 29 October 2014 with the deceased's carers in the community, excluding his CMHS team who had been ringing for updates as to his status. There was no meeting on 12 November 2014, when he was discharged, and again his CMHS team was not included in any of the information available.<sup>11</sup>

Nevertheless, the deceased was released into his parents care on 12 November 2014, with a suggestion he be kept separated from his sister with whom he appeared to have a particularly difficult relationship. His mother was anxious he be at home if other satisfactory accommodation could not be provided.

<sup>&</sup>lt;sup>11</sup> Ex 1, tab 34

#### **POST DISCHARGE 12 NOVEMBER 2014**

The first MACMHS knew of the deceased's discharge was when he attended at Osborne Park on 13 November 2014 asking to be provided with accommodation so he could move out of his parents' home. RMHN Balakrishnam contacted MW and requested MACMHS be provided with the deceased's discharge summary. The doctor with whom RMHN Balakrishnam spoke was unable to find the discharge summary on the data base.

RMHN Balakrishnam contacted the deceased at home later that day to check his status with his parents and determine whether he had enough medication. He spoke to the deceased's father who supported his son's wish to live independently. A plan was formulated to visit the deceased at home on 14 November to assess his mental state, check his medication and to provide an appointment with Dr Chester at MACMHS.<sup>12</sup>

According to the MACMHS notes<sup>13</sup> RMHN Balakrishnam received a telephone call from the deceased prior to the home visit. His mood had changed and he did not wish to discuss his medical issues with the nurse. He asked that his appointment with Dr Chester be posted out to him and he did not wish RMHN Balakrishnam to discuss his situation with his father. RMHN Balakrishnam found the deceased to be very challenging and threatening on the telephone and was concerned the deceased was deteriorating. He attempted to get information from

<sup>&</sup>lt;sup>12</sup> Ex 1, tab 34

<sup>&</sup>lt;sup>13</sup> Ex 2, tab 3

Graylands, but was again unable to contact anybody who knew about the deceased's current management.

The clinicians at MACMHS reviewed the situation and were concerned the deceased needed to be reviewed. They contacted the police and the deceased's treating team at Graylands. Dr Chester was informed the deceased had been made voluntary and discharged without being placed on a Community Treatment Order (CTO). Graylands considered the deceased had been settled for two weeks prior to discharge and was pleasant and compliant. He had been discharged home because of his father's illness and the family preference he be discharged outright due to the difficulty with organised leave.

The circumstances described concerned Dr Chester and it was decided the team would continue to attempt to contact the deceased's family for a home visit. RMHS Balakrishnam spoke with the deceased's father and he confirmed he was not concerned about the deceased's mental state. The abrasive telephone interaction was more due to the deceased's personality than a deterioration in his mood. His father believed the deceased to be medication compliant and confirmed the deceased would attend the scheduled appointment with Dr Chester on 18 November 2014. The family were provided with contact details for emergency services and it was confirmed the deceased had enough medication to last him until the appointment. Later that day a draft copy of the deceased's

discharge summary from Graylands on 12 November 2014 was received by MACMHS.

On 18 November 2014 the deceased attended at Osborne Park MACMHS as scheduled and assured Dr Chester his home situation was improving and that he was feeling relaxed. Dr Chester was concerned his cooperation was superficial and believed she saw some underlying irritability, confirmed by her observations of him when he was unaware of being observed. The deceased advised Dr Chester his admission to Graylands had been unproblematic and denied he was a risk to himself, others, his finances, reputation or relationships. He was adamant he was compliant with his medication regime which was administered by his parents.

The deceased denied the use of illicit substances and alcohol and believed he was progressing well. He was still in denial about his divorce and Dr Chester found that, as the interview progressed, the deceased became more argumentative and irritable. She believed he had some mild thought disorder and was generally evasive. The deceased did not wish for home visits because he believed it intruded on his father's situation and he preferred to visit the clinic. He was insistent Dr Chester not communicate with his family directly. He was quite aggressive, declined readmission, agreed to be compliant with his medication and be compliant with management.

Dr Chester did not believe the deceased met the criteria for an involuntary patient, however, was concerned he was becoming hypomanic. She considered the situation for his family in view of his father's illness and believed it was preferable the family have time together if possible.<sup>14</sup>

The following day the deceased returned to Osborne Park saying he had lost his blood test referral. He was quite irritable at the thought of being contacted at home. He would not allow a nurse to assess him and was aggressive.<sup>15</sup>

Later that day the deceased's mother rang Dr Chester and was concerned the deceased was experiencing manic symptoms. Dr Chester believed there was carer distress with the deceased's father being unwell and his mother in a situation of having to manage the deceased and care for her husband. The deceased's mother did not want him to return to hospital and Dr Chester suggested the deceased's antipsychotic Olanzapine be increased in an attempt to control his mood. Dr Chester made an appointment for the deceased the following day and confirmed the emergency numbers provided to the family earlier.

The deceased's mother and the deceased attended Dr Chester on the morning of 20 November 2014 and Dr Chester assessed the deceased as thought disordered, irritable and paranoid. He was aggressive towards Dr Chester and declared he did not

<sup>&</sup>lt;sup>14</sup> Ex 1, tab 34

<sup>15</sup> t 15.10.18, p16

require outpatient management. He left without saying where he was going and his mother stated he could not return to the family home. 16 Dr Chester arranged for the deceased to be readmitted to Graylands and completed forms 1 and 3 under the *Mental Health Act* for assessment by his treating hospital team. There were no beds available at Graylands and the deceased returned home with his mother while awaiting a bed on the expected admissions list for Graylands later that day. The deceased's mother was anxious and supported by a social worker.

Later that day the deceased's mother recontacted the social worker. She was very concerned about the deceased as he was acting quite irrationally. He had been provided with his extra Olanzapine without affect. The social worker advised the deceased's mother that a bed was not yet available, but when it became available mental health nurses would attend the home with police to return him to Graylands. It was suggested the family needed to contact police directly if they felt threatened by the deceased prior to the bed becoming available.

Sometime later mental health nurses and the police attended at the deceased's home and he was conveyed to Graylands without difficulty. The mental health nurses noted underlying irritability and manic behaviour, but a PSOLIS report on 20 November 2014 indicated the mental health nurses who

<sup>16</sup> t 15.10.18, p16

attended the deceased's home with police had experienced no difficulties.<sup>17</sup>

# READMISSION TO GRAYLANDS HOSPITAL **20 NOVEMBER 2014**

The deceased was triaged at 5.51 pm on 20 November 2014 and later reviewed by the Psychiatric Registrar Dr Andras Papp. Dr Papp was a trainee psychiatric registrar who had been employed in that capacity since February 2014. commenced at Graylands in August 2014 and 20 November 2014 was his first shift as a night duty medical officer (DMO). Dr Papp was called due to the deceased's behaviour. assessed the deceased as having BPAD with psychotic features and that he was being readmitted due to a relapse.

Dr Papp documented the deceased as being neurologically grossly intact with a medical history of type 2 diabetes, sleep apnoea and hypothyroidism. The PRN medication chart for agitation and arousal was completed in the same terms as the one for his admission between September and November 2014.18

Dr Papp added benztropine to the deceased's PRN chart for dystonic reactions.<sup>19</sup> Dr Papp was not able to locate the

19 t 15.10.18, p30

<sup>&</sup>lt;sup>17</sup> Ex 1, tabs 11, 12, 34 & t 15.10.18, p23

<sup>&</sup>lt;sup>18</sup> Ex 2, tab 2.20

deceased's discharge summary from 12 November 2014 in the medical file nor could it be located on PSOLIS.<sup>20</sup>

Dr Papp did not believe the deceased to be physically unwell during his interview and the physical observations done at 8.30 pm indicated a respiration rate of 20, oxygen saturation of 99%, his pulse rate was not raised and he had a blood pressure of 150/80. The deceased was afebrile and alert.

The deceased was difficult and uncooperative and Dr Papp had a male nurse present through the review. Dr Papp did not believe the deceased would be agreeable to full physical examination that night and it was arranged that would be done in the morning. The policy required, where possible, physical medical examination should be completed within 24 hours of admission. Having completed his assessment, provided a PRN agitation and arousal chart, Dr Papp left MW.

The hospital nursing notes indicated the deceased's agitation and arousal was extremely high at approximately 8.30 pm and he was loud and abusive towards other female patients and not responding to directions from the nursing staff. Dr Papp had authorised the PRN medication steps 2 and 3 be provided. This was done and the nursing notes document the deceased appeared to settle in half an hour and the observations at 60 minutes indicated he was either asleep or unconscious. His

<sup>&</sup>lt;sup>20</sup> Ex 1, tab 12 & t 15.10.18, p32

observations were within normal levels apart from a slightly elevated blood pressure.

In evidence, Dr Papp stated he believed the observations performed on the deceased were in accordance with policy. Following the administration of intramuscular (IM) medication there was frequent monitoring until effective, and the Clonazepam and Haloperidol were administered orally and were slow acting and therefore it was not necessary there be close observations. He also explained the deceased had tolerated that combination of medication numerous times on his prior admission and tolerated them well without any difficulties recorded from a respiratory or cardiac perspective.<sup>21</sup>

Dr Papp stated MW does not provide C-PAP machines for sleep apnoea and the deceased did not bring one with him. They are individually specific and need to be calibrated for an individual. Dr Papp was aware it was policy for patients under sedation to have their respiratory rate assessed hourly, without waking them while asleep. Dr Papp did not believe additional, more intrusive monitoring was warranted in a psychiatric ward which was not providing acute care. Frequently, mentally unwell patients do not tolerate intrusive continuous monitoring of the type in operation in emergency departments or acute wards.

Dr Papp agreed an oximeter, if the deceased was prepared to tolerate it, may have been able to measure the deceased's

\_\_\_

<sup>&</sup>lt;sup>21</sup> t 15.10.18, p40

oxygenation while he was asleep, but it was not standard practice in these types of wards in Graylands in 2014 unless a patient was acute.<sup>22</sup> Where a patient became acute they would normally be transferred to the emergency department of a tertiary hospital. There was nothing about the deceased's presentation to cause Dr Papp concern as to his physical wellbeing.<sup>23</sup>

Overnight on MW the acting clinical nurse coordinator for the night shift from 20-21 November 2014 was Steen Paul Mueller, with a number of nurses assisting. The nurse involved with the deceased overnight was Geoffrey Tyndale Smith who, along with RN Mueller, conducted the overnight observations.

Unless a medical practitioner directed otherwise, observations on MW were eight hourly for all routine observations, but hourly for sedated patients overnight with respect to their physical state and respiratory rate.<sup>24</sup> Due to the fact most of the patients on MW would be sedated overnight the practice was for the nurse doing the security checks to attend each patient with a torch and observe how they were while measuring their respiratory rate.<sup>25</sup> It was not practice for patients on MW to have continuous oximetry, nor is a purely mental health ward expected to provide acute care. Should a patient be unwell to the extent acute or high dependency is necessary, the

\_

<sup>&</sup>lt;sup>22</sup> t 15.10.18, p41

<sup>&</sup>lt;sup>23</sup> t 15.10.18, p34

<sup>&</sup>lt;sup>24</sup> t 15.10.18, p44

<sup>&</sup>lt;sup>25</sup> t 15.10.18, p46

emergency is dealt with and they are then transferred to the emergency department or ICU of a relevant facility.<sup>26</sup>

There was nothing from the medical assessment for the deceased on his initial admission, nor his admission to the ward which indicated elevated monitoring or observations were necessary. His history recorded that he had sleep apnoea and was obese. It was also the case he was recorded as agitated and had required sedation. At the time both RN Mueller and RN Smith came on duty the deceased was already asleep.<sup>27</sup> There was nothing to indicate he needed more frequent monitoring than the usual respirations hourly. Hourly respirations are recorded on a different chart from a patient's individual chart. The overnight chart for the visual observations checklist MW indicated that once asleep the deceased's observations were recorded roughly hourly as ranging between 16 and 18 respirations per minute. The deceased was in a ward with two other patients and the doorway to the ward was open to enable the nurses to see into the room, and patients to exit the room if necessary.<sup>28</sup>

RN Mueller received handover at roughly 11.00 pm on 20 November 2014 and the visual observations chart indicated the deceased was checked at midnight, 1.00 am, 2.00 am, 3.00 am, and 4.00 am by RN Mueller, who then handed over the security checks to RN Smith who checked him at 5.00 am,

\_

<sup>&</sup>lt;sup>26</sup> t 15.10.18, p49 & t 16.10.18, p94

<sup>&</sup>lt;sup>27</sup> t 15.10.18, p47

<sup>&</sup>lt;sup>28</sup> t 15.10.18, p45

6.00 am, 6.30 am and then again at 7.10 am. There was no indication from either of the nurses there had been any issues with the deceased overnight although they were aware of his sedation and his reported sleep apnoea. RN Smith stated that at 5.00 am on 21 November 2014 when he conducted his routine security check of male patients he observed the deceased sleeping on his back, on his bed in his room breathing normally and not snoring. His respiration rate at that stage was 18 breaths per minute.

RN Smith conducted the 6.00 am security check and located the deceased in more a less the same position on his bed breathing normally, but this time snoring. His respiration rate at that time was 16 breaths per minute.<sup>29</sup>

RN Smith had cause to attend the deceased's room at 6.30 am in relation to another matter and saw the deceased on his bed, on his back breathing normally and snoring loudly. There was nothing apparently amiss with the deceased at that stage.

The next routine check performed by RN Smith occurred at 7.10 am at which time he observed the deceased to 'not look right'.30 He recorded he could not see the deceased's chest rise and fall, he was not snoring and he looked limp by comparison to his normal presentation, as when he had seen him at 6.30 am.

<sup>&</sup>lt;sup>29</sup> t 15.10.18, p54 <sup>30</sup> Ex 1, tab 15

RN Smith immediately tried to rouse the deceased, but was unable to get a response and ran to the nurses station to initiate a code blue before returning to the deceased's room to start cardiopulmonary resuscitation (CPR).<sup>31</sup>

In evidence, RN Smith advised the court that while the deceased had been in the same position on his bed on each prior occasion, there had been little difference in his presentation and he did not believe the type of snoring to be uncommon in the patients in MW. It was not of particular concern.

RN Smith and another nurse moved the deceased to the floor to make CPR more effective. The Oxyviva equipment was obtained and other nurses responded to the code blue. Dr Papp, who had originally admitted the deceased into MW attended as part of the code blue. On Dr Papp's arrival in the deceased's room he found the deceased on the ground with a number of nursing staff performing CPR. CPR was being performed competently and Dr Papp ensured an ambulance had been called and the defibrillator was operating properly. There was no shockable rhythm and as far as Dr Papp was concerned everything was being done as it should be done until the ambulance crew arrived and took over resuscitation of the deceased.<sup>32</sup>

Dr Papp stated the routine visual observation of respiration rate and presentation of patients hourly, without disturbing them

\_

<sup>&</sup>lt;sup>31</sup> t 15.10.18, p56

<sup>32</sup> t 15.10.18, p39

through the night, was appropriate in the case of patients such as the deceased. Oximeters weren't available on MW routinely for the monitoring of patients in November 2014 and people with sleep apnoea are capable of surviving adequately on a lower level of oxygenation than those unused to lowered oxygen saturations.<sup>33</sup>

Dr Papp was of the view that provided the deceased was sleeping and his respiration rate was within the normal range for a sedated patient the additional difficulty of continuous monitoring was unnecessary. It was Dr Papp's view the deceased would not have tolerated continuous monitoring at his level of arousal when first arriving onto the ward.<sup>34</sup> The medication he was provided with was to lower his level of arousal, not render him unconscious. However, the fact he had been so aroused would imply he was tired and therefore when sedated fell asleep quite comfortably, which appeared to last through the majority of the night.

Dr Papp confirmed that continuous monitoring for oxygenation may have roused an alarm as to the deceased's unresponsive state earlier than occurred, however, his breathing had seemed perfectly normal for the majority of the night and there was no indication additional monitoring would be necessary, nor was it standard practice at a mental health facility as opposed to an acute care facility.<sup>35</sup>

\_

<sup>&</sup>lt;sup>33</sup> t 16.10.18, p73

<sup>&</sup>lt;sup>34</sup> t 15.10.18, p41

<sup>35</sup> t 15.10.18, p41-42

SJA Paramedics arrived on the ward at 7.36 am and took over resuscitation of the deceased. They inserted a laryngeal mask airway and compressions were performed via the Lucas device. Five doses of adrenalin were given, but after 25 minutes there had been no return of circulation for the deceased and he remained in asystole. CPR was ceased at 7.54 am on 21 November 2014 and the deceased declared life extinct.

All those dealing with the deceased overnight from 20-21 November 2014 at Graylands observed nothing which caused them concern as to the deceased's physical wellbeing despite his level of agitation prior to being medicated. His respiratory rate and his sleep appeared normal in the circumstances of a sedated patient overnight in a secure psychiatric ward.

#### POST MORTEM EXAMINATION

The post mortem examination of the deceased was undertaken by Dr Jodi White, Forensic Pathologist on 25 November 2014 at the PathWest Laboratory of Medicine WA.<sup>36</sup>

Dr White noted on examination the deceased's lungs appeared heavy and congested with evident aspiration, an enlarged softened heart, fatty liver and mild to moderate coronary artery disease. At the conclusion of the initial examination Dr White recorded her conclusion as undetermined pending the further

<sup>&</sup>lt;sup>36</sup> Ex 1, tab 6

investigations necessary to conclude a cause of death for the deceased.

Those further investigations were completed on 26 May 2015 and Dr White noted the deceased's biochemistry results indicated fair diabetic control, while toxicology showed amounts of prescription medications, including a high level of his blood pressure medication amlodipine, however, not at levels considered to be relevant to his death.

There were therapeutic levels of lithium and valproic acid (consistent with his BAPD treatment) and Dr White's review of the deceased's medical notes indicated he had a history of hypertension, diabetes, high cholesterol, hypothyroidism and chronic paranoid schizophrenia, with multiple associated voluntary and involuntary hospital admissions.

Microbiology isolated *Streptococcus*, from lung tissue, while histology showed scarring in the heart with an evolving pneumonia. Dr White indicated it was possible the deceased's enlarged softened heart related to his hypertension, coronary artery disease and his recorded high BMI.

In conclusion, Dr White was of the opinion the deceased's death was consistent with cardiomyopathy with early pneumonia in a man with reported sleep apnoea and a high body mass index.<sup>37</sup>

<sup>&</sup>lt;sup>37</sup> Ex 1, tab 6 & 7

## **Toxicology**

Professor Joyce is a Physician of Clinical Pharmacology and Toxicology, employed by both the Schools of Medicine and Pharmacology at University of Western Australia, with a clinical practice at QEII Medical Centre, Nedlands.<sup>38</sup>

Professor Joyce was asked to comment on the care of the deceased with respect to his need for medication, in view of his presentation on 20 November 2014. Professor Joyce was asked to consider the possibility the combination of medications administered to the deceased may have contributed to his death and the likely involvement of the drugs provided to the deceased.<sup>39</sup>

Professor Joyce took into account the deceased's background medical history and the drug therapy he was receiving with respect to each of his physical conditions. In addition to the type 2 diabetes, hypothyroidism, obesity, un-investigated but suspected obstructive sleep apnoea and illicit substance abuse, Professor Joyce noted that it had not been possible to conduct a routine physical examination of the deceased on his admission as an involuntary patient on 20 November 2014. Nor Professor find could Joyce a comprehensive physical examination of the deceased with respect to his prior admission from September to November of 2014.

<sup>38</sup> Ex 1, tab 41

<sup>&</sup>lt;sup>39</sup> Ex 1, tab 7

There is no record of the deceased having an ECG either at Graylands or during admissions to SCGH. Professor Joyce concluded he could not see that an ECG had ever been performed on the deceased, other than on admission to Graylands in November 2007. The 2007 ECG did not reveal any pre-existing congenital problems for the deceased which might have been predictive of an arrhythmia with antipsychotic drugs due to a congenital problem.<sup>40</sup> Professor Joyce concluded that in more recent times the presentation of the deceased on admission to clinical facilities precluded comprehensive physical examination.

The post mortem examination indicated the deceased had undiagnosed cardiac disease which means he may have been susceptible to the effects of some antipsychotic drugs.

In addition to the more recent psychiatric records Professor Joyce was aware of the deceased's background and psychiatric history from approximately 1997. He noted the change in diagnoses from chronic paranoid schizophrenia with alcohol and substance abuse through to BPAD with psychotic features. He noted the deceased's medications as both an inpatient and as an outpatient of the MACMHS at Osborne Park.

Professor Joyce noted that the particular combination used to reduce the deceased's level of arousal on 20 November 2014 was a combination he had been provided with successfully, and

<sup>&</sup>lt;sup>40</sup> t 16.10.18, p89

without adverse reaction, at least six times during the admission between September and 12 November 2014.<sup>41</sup>

Professor Joyce considered each of the deceased's medications, as disclosed by the post mortem toxicology individually and in combination. Those he considered to be of particular relevance deceased's treatment the benzodiazepine to the were Clonazepam, and the two neuroleptic drugs, Haloperidol and While those drugs theoretically could have Olanzapine. contributed to the deceased's death through several pathways, it was that of respiratory compromise he considered to be of the most interest for investigation.<sup>42</sup>

Professor Joyce noted the deceased had a history consistent with obstructive sleep apnoea, although it had never been formally diagnosed, he had a high BMI which would provide an increased risk of obstruction when lying supine, but without any sleep study results to assist with determining the type of apnoea. Peripheral apnoea would mean the problem was largely one of anatomy, while central apnoea would mean that the brain was not sensing low oxygen levels competently and so not increasing respirations appropriately. Professor Joyce noted both types of apnoea are worsened by drugs suppressing respiration, but this was more prevalent with the central sleep disorders.

\_

<sup>&</sup>lt;sup>41</sup> t 16.10.18, p91

<sup>42</sup> t 16.10.18, p90

Professor Joyce also noted the post mortem examination of evolving pneumonia, which in combination with sleep apnoea and a possible respiratory compromise due to his cardiomyopathy and the addition of drugs, could have suppressed his respiration. Professor Joyce considered all those possibilities, but thought overall the evidence was against the coexistence of probable sleep apnoea, evolving pneumonia, susceptible habitus (high BMI) and drugs that suppress respiration, as a contributor to his death, because the most relevant drugs were only present in unmeasurably small concentrations at the time of death and not detected on the toxicology screen.

Professor Joyce stated it would be "outside my experience for such low amounts to cause respiration to suddenly stop, even in a predisposed person".<sup>43</sup> Professor Joyce could find no such reference in the literature.

The other factor against the deceased's drug therapy having contributed to his death was the fact that his observations when he was awake and his continued consistent respiration once asleep, up until 6.30 am on 21 November 2014, indicated the drugs were not suppressing the deceased's breathing when at their highest level closer to the time he first fell asleep, following sedation in the evening of 20 November 2014.<sup>44</sup> The observation of apparently normal respiratory rate for 10 hours after

<sup>&</sup>lt;sup>43</sup> Ex 1, tab 41

<sup>44</sup> t 16.10.18, p94

administration of the relevant drugs, and the cessation of breathing within a 40 minute interval seemed to Professor Joyce to be inconsistent with a credible history of sedative related death.

Professor Joyce went on to consider psychiatric disorders in and of themselves carry an increased risk of sudden death for undefined reasons. He noted that the reported elevated agitation level for the deceased preceding his admission, and indeed during his admission up until medicated, in a patient with obesity, sleep apnoea and heart or lung disease can lead to exhaustion. However, exhaustion as a reason for final clinical deterioration to the point of death has never been able to be clinically assessed.

Overall, Professor Joyce did not believe any of the therapeutic drugs administered to the deceased on the evening of 20 November 2014 contributed to his death. He thought it unlikely the deceased would have deteriorated to the extent there were perfectly normal respiratory observations until death sometime between 6.30 and 7.10 am.

This meant it is more likely the deceased's death was a sudden event, and while his deterioration may have been picked up promptly had he been connected to continuous monitoring, it would be impossible to determine whether intervention more rapidly would have improved the outcome.

Professor Joyce noted that a more recent complete examination and ECG may have alerted clinicians to his cardiac disorder, but that alone would have been unlikely to lead to any change in his treatment on 20 November 2014 in view of his continued agitation and arousal.

In evidence Professor Joyce stated with respect to the drugs which had been administered to the deceased;

"There had been long treatment with these drugs without provoking a lethal outcome. And in fact, in the previous admission, there had been around half a dozen instances when exactly the same mixture had been used without having apparently any adverse cardiac outcome. The second line of reasoning is parallel to the reasoning in relation to the obstructive sleep apnoea, and that there just seem to be such low amounts of drugs that it would be difficult to see that they could transform a survivable cardiac disease into an unsurvivable cardiac disease. My opinion at the end of it, then, was that on grounds of probability, I thought that the drugs were probably not involved in death."45

Professor Joyce confirmed that in his clinical experience trying to use oxygen monitors on very agitated patients usually failed, and that if they had a patient who had been very agitated and finally settled and gone to sleep and their breathing looked reasonable, then the practice was not to interfere with their sleep. He confirmed patients who were in the obviously greatest risk area, that is very obese and very agitated, may have to be looked after in high dependency units or even intensive care units if there was a likelihood they may stop breathing before their agitation could be brought under control.

\_

<sup>&</sup>lt;sup>45</sup> t 16.10.18, p91

In some circumstances these patients need to be kept in an acute environment, even to the extent of unconsciousness and ventilation, until the drugs to decrease their arousal began to be effective and they were no longer in danger of sudden death.<sup>46</sup>

## Sleep Apnoea

Review of the deceased's management was also sought from Dr Scott Claxton, a physician specialising in respiratory and sleep disorders. Dr Claxton was asked to review the deceased's medical record and consider whether he was of the opinion the deceased's reputed obstructive sleep apnoea contributed to his death while on MW.47

Dr Claxton reviewed the history for the deceased's admission on 20 November 2014 to Graylands and noted he was diagnosed as having a history of schizophrenia with sometimes a high level of aggression. On the occasions the deceased had been highly agitated and aroused it was the practice to provide him with specified quantities of Haloperidol and Clonazepam. These had been used on the deceased on numerous occasions, apparently without adverse effect, during his recent admission from September to November 2014.

Dr Claxton noted they appeared to have been useful in lowering the deceased's level of agitation and arousal on 20 November 2014 and observations taken shortly after administration of the

<sup>47</sup> Ex 1, tab 33

<sup>46</sup> t 16.10.18, p94

medication were normal. It appeared that one hour later he was "either asleep or unconscious" and was recorded through the night as sleeping well, although it was also recorded that his sleep apnoea was quite evident.<sup>48</sup>

Dr Claxton commented that it was not known whether the deceased's sleep apnoea had ever been studied and formalised, however, noted references to sleep apnoea as far back as June 2013.

The deceased's SCGH records refer to an incident in June 2013 when the deceased was given Olanzapine and Lorazepam in quite large quantities at the time of his admission, following which he had severe sleep apnoea and his oxygen levels dropped to 81% on room air. The deceased was provided with a laryngeal airway and a collar in an acute setting. An emergency doctor recorded that deep sedation should be avoided for the deceased as he was at risk of apnoea and hypoxia. It was noted the deceased should be observed for apnoea whenever sedation was given. A referral was sent to the respiratory clinic requesting the deceased's review for continuous positive airway pressure (C-PAP) assessment. There is no record in any of the deceased's medical files with any facility that he had a study for obstructive sleep apnoea, although it was generally accepted he suffered sleep apnoea.

<sup>48</sup> Ex 2, tab 1

During evidence the deceased's family advised the court they had been informed by the deceased's wife the deceased had a C-PAP machine. His family had never seen him with a C-PAP machine or using one.<sup>49</sup>

Dr Claxton stated it was possible to buy C-PAP machines online. The fact the deceased's family, with whom he was staying at the time of his death, had never seen him use a C-PAP machine would indicate it was something the deceased was not comfortable with or would have tolerated.<sup>50</sup>

Dr Claxton noted the deceased appeared to have been a smoker, although there was no indication in his history of any lung He referred to the post mortem evidence of a cardiomyopathy, which he believed to be a non-ischaemic cardiomyopathy, which could well relate to obstructive sleep apnoea. He noted blood tests in July 2013 showed an elevated bicarbonate suggestive of serum a degree sleep hypoventilation, but that measures of serum bicarbonate over the following month were normal, which suggested the deceased's sleep apnoea was not pathological in 2013.<sup>51</sup>

Dr Claxton commented that obstructive sleep apnoea could be worsened by sedating medications such as Haloperidol and Clonazepam, which may precipitate significant hypoxemia and hypoventilation. He noted this would not have been evident at

<sup>50</sup> t 16.10.18, p83-84

<sup>&</sup>lt;sup>49</sup> t 16.10.18, p82

<sup>&</sup>lt;sup>51</sup> t 16.10.18, p73

the time observations were taken on 20 November 2016, shortly after the administration of those sedatives. Hypoxemia (lowered oxygen) and hypercapnia (elevated carbon dioxide) could well have developed through the night and that hypercapnia would lead to a degree of sedation and therefore worsening hypoventilation.

## As Dr Claxton stated in evidence;

"As your carbon dioxide level rises, your conscious state reduces, your drive to breathe reduces – it's a self-perpetuating." 52

The post mortem examination of heavily congested lungs and a dilated heart suggested pulmonary oedema may well have been an acute event which could have been aggravated by the deceased's worsening sleep apnoea and hypoxemia. Dr Claxton considered the reports of sleep apnoea overnight were ambiguous in that he could not determine whether it was actual sleep apnoea or respiratory distress due to evolving pulmonary oedema.

In view of the history of obstructive sleep apnoea, the deceased's level of agitation and the observations of breathing disturbance during the night Dr Claxton's opinion was that the deceased's cardiorespiratory arrest may have been the result of respiratory failure due to hypoventilation which would have been observable as a drop in the deceased's oxygen saturations. He believed that worsening obstructive sleep apnoea with hypoxemia and hypercapnia contributed to the deceased's

<sup>&</sup>lt;sup>52</sup> t 16.10.18, p85

death and that continuous oxygen saturation monitoring may have assisted in detecting this cycle.<sup>53</sup>

Dr Claxton agreed that for patients with the build of the deceased and his level of agitation, continuous oximetry may be intrusive and indeed disturb their sleep, necessary for their recovery. It was the general view of clinicians that facilities such as the MW at Graylands do not provide the best environment for protecting those at risk from cardiorespiratory arrest due to underlying sleep apnoea and cardiomyopathy and that where there is a recognised significant risk it would be prudent to transfer the patient to a facility capable of dealing with those issues.<sup>54</sup>

Dr Claxton stated that in the circumstances we presume affected the deceased overnight 20-21 November 2014, visual observations every 15 minutes were unlikely to be useful. There were two considerations, one of which was obstructive sleep apnoea which is airway collapse, which is quite obvious, but the other factor was that despite the deceased being observed to have a satisfactory respiratory rate when observed hourly, that did not mean his ventilation was adequate. The deceased would appear to be breathing regularly, but was not moving enough air through his system to meet the demands of his system. The oxygen saturations would drop despite the respiratory rate appearing normal for a sedated patient and so visual

-

<sup>&</sup>lt;sup>53</sup> t 16.10.18, p73~75

<sup>54</sup> t 16.10.18, p85, 94

observations would not record the impending difficulty for the deceased of cardiorespiratory arrest.<sup>55</sup>

In any event Dr Claxton stated that if any patient's oxygen saturation dropped below 90%, regardless of their ability to survive at lower than average levels of oxygenation, it was a cause for concern and would require intervention.<sup>56</sup>

Overall, Dr Claxton was of the opinion the deceased's circumstances, that was obese, agitated, sleep deprived, sedated, with a history of sleep apnoea, smoking, prior respiratory problems with sedation, (although this did not occur during his September 2014 admission), it was possible the deceased's worsening obstructive sleep apnoea with hypoxemia and hypercapnia contributed to his death in conjunction with his heart disease.<sup>57</sup>

#### CONCLUSION AS TO THE DEATH OF THE DECEASED

I am satisfied the deceased was a 40 year old, obese male, originally diagnosed with chronic paranoid schizophrenia later refined to suffering BPAD with psychotic features, who was prone to a high degree of arousal when he became unwell. Past history indicated he could become very aggressive and violent when unwell. This caused not only his family difficulties when trying to deal with him, but also staff in a facility where other vulnerable patients were accommodated.

<sup>55</sup> t 16.10.18, p85

<sup>&</sup>lt;sup>56</sup> t 16.10.18, p86

<sup>&</sup>lt;sup>57</sup> Ex 1, tab 33

I accept there was no record of any heart condition for the deceased, other than a reference to chest pains in 2007. I further accept the deceased's agitation and the difficulty he presented to clinicians trying to treat him made it difficult for there to be proper physical examination of the deceased, due to his resistance. I note that with his body habitus it would have been preferable if the deceased could have been persuaded to comply with, at least, an ECG during his periods of long admission to provide clinicians with some indication as to his cardiac status. I accept that was not possible on the evening of 20 November 2014.

I am concerned the SCGH ED note, referring to the deceased's lowered oxygenation while sedated, in July 2013, does not appear to have raised an issue for consideration in September to November 2014, but accept the lack of issues in that period would have supported continuation of that sedation regime on 20 November 2014.

I also accept that it is not uncommon for sufferers of periods of extreme mental unwellness, such as the deceased, to suffer breathing difficulties when asleep. There is a tension between the need for sleep, uninterrupted, the need for sedation and the practicality of observations which may interrupt their sleep, where they are at risk of respiratory distress for whatever reason.

On 20 November 2014 the deceased, who was relatively recently discharged from Graylands as a voluntary patient into the care of his family, was exhibiting elevated levels of agitation. The difficulty was his accommodation with his family and the difficulty for his family in attempting to deal with his unwellness in the face of the family dynamic with his unwell father and carer fatigue for his mother.

The deceased's parents wanted him home because of their situation, however, accepted by 20 November 2014 they were unable to control his behaviour. They asked for assistance and eventually the deceased was provided with a bed a Graylands after being escorted there without difficulty by mental health nurses and the police.

The deceased was admitted pending assessment and provided with a bed on MW, with the primary focus being a reduction in his agitation for both his own and other persons' safety. He was reviewed and provided with medication he had tolerated well over his prior two months while at Graylands.

I am satisfied from the entirety of the evidence, despite the lack of a formal investigation of obstructive sleep apnoea in Australia, the deceased suffered from obstructive sleep apnoea. The situation overnight of the 20 -21 November 2014 saw the deceased suffer from hypoxemia and hypercapnia, despite his observed regular visual respiratory observations hourly. This led to a reduction in his respiratory effort and cardiorespiratory

arrest sometime after 6.30 am on 21 November 2014 on the background of his other comorbidities.

I accept the deceased was not in a state prior to his sedation on the evening of 20 November 2014 for a complete physical examination and that unreasonable was not I accept the priority was to reduce the circumstances. deceased's level of agitation, which was usually successfully done via sedation, and that due to the same sedation having been used successfully in the prior six months, it was not considered the deceased was at risk of respiratory arrest and so warranted transfer to an acute clinical setting. knowledge of the SCGH ED notes of June-July 2013 that appeared reasonable.

Patients at high risk of respiratory arrest, but requiring sedation need to be subjected to continuous oxygen monitoring or one on one active nursing in an environment capable of dealing with an arrest, unlike MW.

I am satisfied that overnight the deceased's condition saw him become hypo-ventilated until at some time between 6.30 and 7.10 am on 21 November 2014 he suffered a cardio respiratory arrest and died.

I find the deceased was visually observed to be apparently respiring effectively at approximately 6.30 am on the morning of 21 November 2014. Unfortunately by 7.10 am, when CPR

was initiated, he had arrested and was not capable of being revived.

# Manner and Cause of Death

I am satisfied the deceased died as the result of his combined undiagnosed cardiomyopathy and reported obstructive sleep apnoea following a cardiorespiratory arrest.

There is no evidence the sedation with which he had been provided on the evening of 20 November 2014 was still providing sedation at 6.30 am on 21 November 2014. Rather his increasing carbon dioxide levels and reducing oxygen levels caused respiratory depression on the background of his naturally occurring cardiac disease, developing pneumonia and obesity.

I find death occurred by way of Natural Causes.

# SUPERVISION TREATMENT AND CARE OF THE DECEASED WHILE AN INVOLUNTARY PATIENT 20-21 NOVEMBER 2014

The deceased had a long history of requiring hospital admissions for his mental health. He was initially diagnosed as suffering chronic schizophrenia and was treated as both an inpatient and an outpatient of various public mental health facilities. His admissions were generally required for a relapse of his illness, secondary to noncompliance with medication.

During the early 2000's the deceased met and eventually married an American lady and spent considerable periods of time in the USA where he was reportedly also treated for his mental health problems.

The deceased was admitted to the Swan Valley Centre in 2007, but following a serious physical assault on another patient was transferred to Graylands. His diagnosis in 2007 in Australia was chronic paranoid schizophrenia. Following his discharge from hospital the deceased returned to WA and at some later stage was diagnosed with BPAD with psychotic episodes. He was managed with mood stabilisers.

An ECG conducted in 2007 did not reveal any significant cardiac co-morbidities at that time.

Thereafter the deceased spent time in both USA and Western Australia where he continued to be reviewed by consultant psychiatrists. There is no evidence there was any sharing of information with respect to his mental health between countries.

In 2013 the deceased commenced living with his parents, while divorcing his wife in USA. This was a stressful time and he was again admitted to SCGH ED before being transferred to Graylands from June to September 2013 with a diagnosis of BPAD. He had been noted to suffer short apnoeic episodes and was referred to the respiratory clinic at SCGH with an alert

entered into his paper and electronic mental health records. The SCGH ED notes stated he should not be sedated without oxygen available. It appears the respiratory clinic review was never performed and the deceased never formally diagnosed with sleep apnoea in Australia. His family stated the deceased had a personal C-PAP machine which they had never seen or seen him use.

Following discharge in September 2013 the deceased was referred to MACMHS where he was reviewed by a psychiatric team until February 2014 when he was transferred to the continuing care team of the same clinic.

Following reduction of the deceased's antipsychotic medication in April 2014 the deceased appeared to remain stable and it was MACMHS' intention to discharge him into the care of his general practitioner. However, the deceased's father was diagnosed with terminal lung cancer and it was considered it prudent to maintain the deceased with his mental health team due to the recognised stress of his father's diagnosis for both the deceased and his family. He appeared to remain stable throughout July and August 2014.

The deceased deteriorated in September 2014 and was made an involuntary patient at Graylands. He had a short period of home leave with his parents which resulted in a deterioration and he was again returned to Graylands for a further period until 12 November 2014. He was again discharged home to his

parents as a voluntary patient, on the same day his status was changed from involuntary to voluntary. He was not placed on a CTO.

There was no effective discharge planning around this discharge. His CMHS were not even aware of the fact he had been discharged despite their continued contact with his hospital treating team for information. During that extended period in Graylands the deceased had required sedation a number of time due to his high level of agitation. He was not observed to suffer any adverse effects, but he had never allowed any proper physical examination to investigate his physical health.

There was no plan in place for the deceased communicated to his CMHS. I accept his parents wished him to be at home and were provided with emergency contacts, including to call the police if they felt threatened.

The deceased himself contacted MACMHS following his discharge. His CMHS responded well by ensuring he had enough medications and providing an appointment for review as soon as possible. They had no information about his medication other than as his parents described.

The deceased was reviewed on 18 November 2014 and it was noted he might be hypomanic, however, there did not appear to be any imminent risk and he was agreeable to taking medication and complying with reviews which meant the provisions of the *Mental Health Act* for a CTO were not considered applicable.

The deceased deteriorated and his family became distressed. They did not, however, wish the deceased to return to hospital and his medication was increased. Eventually his family found him to be unmanageable.

The deceased's treating community psychiatric registrar, Dr Chester, reviewed the deceased on 20 November 2014 and found him to be at risk, both from his personal perspective and that of others. He was referred to Graylands as soon as a suitable bed became available. He was transferred without incident from his parents' home to Graylands by CMH nurses and the police.

By the time the deceased was reviewed by the triage nurse at Graylands, just before 6.00 pm on 20 November 2014, he was in a very agitated state and the assessment was hampered by the deceased being uncooperative and not allowing any physical examination.

By 8.20 pm he was highly aroused and considered to be a threat to other patients. A request for the authorised PRN sedation was made and given. This appeared to achieve the result required and it was considered the best therapy for the deceased was to allow him to sleep. Observations taken shortly after the administration of the medication appeared normal.

The RMO who had assessed the deceased on admission had requested physical examination of the deceased occur the next morning. This was not unreasonable in the circumstances with which staff were faced. The fact the deceased had been successfully treated with exactly the same sedation numerous times in the past few months resolved clinical concerns as to the level of his response to sedation. No one seems to have been aware of the SCGH ED concern in 2013 that the deceased not be sedated without the availability of oxygen with airway support. Had that been a more current concern in November 2014 it may have seen the deceased transferred to an acute facility capable of monitoring the deceased's respiratory function. It had not appeared to be a concern since 2013.

The deceased's mental health history was reviewed by Dr Adam Brett, a Consultant Psychiatrist, on behalf of the Office of the State Coroner (OSC) and also Dr Heble on behalf of NMHS with respect to the policies in Graylands concerning sedation.<sup>58</sup>

Dr Brett was concerned at the apparent lack of appropriate discharge planning surrounding the deceased's release from Graylands in November 2014. However, while of concern, it does not seem to be of direct relevance to what occurred overnight 20-21 November 2014, when the deceased was readmitted as an involuntary patient and treated for his high level of agitation.

<sup>58</sup> Ex 3

I do not believe any level of appropriate discharge planning would have prevented that deterioration. The deceased was in touch with his CMHS and appropriately medicated. He was not on a CTO due to his reported compliance with medication and the fact his parents were supervising his medication.

The deceased had undiagnosed cardiomyopathy. Diagnosis of his heart condition would have been possible with an ECG, but may also have been seen on a chest x-ray or echocardiogram. Other than the ECG of 2007 the deceased had never been investigated for the combination of his medical difficulties to see whether he had developed a heart condition. Cardiomyopathy puts people at risk of heart failure and sudden death due to arrhythmias.

In hindsight, the deceased was at risk of sudden death as a result of his cardiomyopathy and obstructive sleep apnoea. If these matters had been investigated at an earlier time, had the deceased been compliant with clinical intervention, the fact he was at risk of respiratory failure may have prompted a different facility for his sedation. The deceased was generally a very difficult patient and as such a difficult proposition for the clinicians.

Certainly, overnight 20-21 November 2014, the period for which I am concerned as to the deceased's supervision, treatment and care while on forms pending involuntary patient status, his supervision, treatment and care appears to have been reasonable.

Graylands complied with their relevant policies overnight with respect to monitoring of the deceased hourly for his respiratory rate, but in view of the lack of understanding of his true clinical status, due to the lack of clinical investigation of his physical status, that supervision, treatment and care could not detect increasing hypoventilation and hypercapnia as described by Dr Claxton.

So while I find the deceased's supervision, treatment and care overnight pending assessment as an involuntary patient was reasonable, I am concerned the lack of prior investigation of the risks to his clinical state when an involuntary patient, put the clinicians dealing with those circumstances at disadvantage in appreciating the extent of the clinical risks facing the deceased. He should have been in a facility capable of more extensive monitoring.<sup>59</sup> Whether in all the circumstances of this case that would have prevented his death, other than have alerted staff to his vulnerable state more rapidly, it is impossible to say, but proper ventilation following detection of low oxygen levels, if that were the case, should certainly have improved his prognosis.

I note that following the death of the deceased in 2014 Graylands has implemented or updated a number of policies related to sedation, physical health care and discharge which

\_

<sup>&</sup>lt;sup>59</sup> t 14.11.18, p103

should ameliorate some of the issues seen in the case of the deceased.<sup>60</sup>

#### RECOMMENDATIONS

Despite updated policies I am of the view it is reasonable to make recommendations that in the case of very difficult patients, such as the deceased, there be adequate discharge planning between the facilities needed to deal with him when highly aroused, and his CMHS team to ensure appropriate clinical investigation of patients with physical conditions which would predict a risk with his necessary treatment when highly unwell.

In the event a patient was not compliant with proper clinical investigations, there would be a proper record with good communication between the CMHS, general practitioners and inpatient facilities dealing with the patient's physical health while in the community, with respect to their known physical vulnerabilities.

In addition, the availability of acute mental health observation areas attached to acute facilities, EDs ICUs or HDUs, as discussed in the Ashley inquest (Ref No.36/18) held in the week following this inquest would be a highly desirable addition to the mental health management options available for patients

-

<sup>&</sup>lt;sup>60</sup> Ex 3 & t 14.11.18, p99~109

such as the deceased who have high clinical risk factors for cardiorespiratory deaths.

I recommend:

# Recommendation No. 1

Compliance with proper discharge planning between all facilities dealing with patients with mental health issues.

# Recommendation No. 2

Emphasis on clinical medical health issues for those suffering mental health conditions while in the community so risk factors when inpatients are properly appreciated.

### Recommendation No. 3

Consideration and documentation of the benefits or otherwise of oxymetric observations of sedated mental health patients with other risk factors for respiratory arrest, especially sleep apnoea where visual observations may not detect hypoventilation

#### Recommendation No. 4

More availability of appropriate acute facilities for highly aroused mental health patients at times of essential sedation.

E F Vicker **Deputy State Coroner** 22 May 2019