REPORT OF THE OFFICE OF THE HEALTH OMBUD IN TERMS OF SECTION 81A (11) OF THE NATIONAL HEALTH AMENDMENT ACT (ACT NO: 12 OF 2013)

FINAL REPORT INTO ALLEGATIONS OF CLINICAL MISMANAGEMENT RESULTING IN THE DEATH OF A PATIENT AT MEDICLINIC HIGHVELD HOSPITAL REF NUMBER: 32186

Contents

ACRONYMS

BMI : Body Mass Index

BNP : B-Type Natriuretic Peptide

BP : Blood Pressure

COVID-19 : Coronavirus Disease caused by SARS Cov-2

ECG : Electrocardiogram

EN : Enrolled Nurse

Est GFR : Estimated Glomerular Filtration Rate

FFP : Fresh Frozen Plasma

FiO2 : Fraction of Inspired Oxygen

ICU : Intensive Care Unit

IVI : Intravenous Infusion (Drip)

INR : International Normalised Ratio

MH : Mediclinic Highveld

NHAA : National Health Amendment Act, 12 of 2013

PN : Professional Nurse

S-Creat : The serum (blood) creatinine test

SLED : Sustained Low-Efficiency Dialysis

SpO2 : Saturation of Peripheral Oxygen

WH : Wilgers Hospital

1. EXECUTIVE SUMMARY

1.1 The Final Report of the Health Ombud (Ombud) in terms of Section 81A (11) of the National Health Amendment Act, 12 of 2013 (NHAA) read in conjunction with Regulation 48(a) of the Procedural Regulations Pertaining to the Functioning of the Office of Health Standards Compliance and Handling of Complaints by the Ombud (Procedural Regulations); to inform the Complainant and the Health Establishment of his findings and recommendations.

1.2 An investigator from the Ombud was assigned in accordance with Section 81 (3) (c) of the NHAA pursuant to an investigation regarding allegations of clinical mismanagement resulting in the death of a patient at Mediclinic Highveld Hospital (MH) in Mpumalanga Province. The investigation was conducted by analysing medical records, conducting interviews, and conducting an onsite investigation.

1.3 The Complainant, Mrs. Sonja Liebenberg (Mrs. Liebenberg), alleged that her husband was clinically mismanaged and provided with substandard patient healthcare services at MH, which resulted in the death of her late husband, Mr. Izak Gerhardus Liebenberg (Mr. Liebenberg).

1.4 The investigation of the allegations levelled against MH established the following:

1.4.1 According to Mrs. Liebenberg, during the last week of December 2021, Mr. Liebenberg was treated by a family doctor for water retention. The family doctor recommended that he be hospitalised for close monitoring and treatment. On 3 January 2022, Mr. Liebenberg was still not feeling better and was admitted to MH due to water retention.

1.4.2 On 3 January 2022, at approximately 08h03, Mr. Liebenberg, a 65-year-old male, was admitted to MH. He had complained of shortness of breath since 1 January 2022. He was triaged and classified as triage orange. He was given 4 litres of oxygen per nasal cannula, an intravenous infusion was commenced, oxygen saturation was 95%, and the patient's full medical history was obtained. A doctor saw Mr. Liebenberg and prescribed medication, which was administered. At about 10h30, he was taken to the General Unit, Ward G.

1.4.3 Upon admission, Mr. Liebenberg was diagnosed with shortness of breath and respiratory distress, tested positive for SARS-Cov-2 Coronavirus (COVID-19) and was later diagnosed with COVID-19 pneumonitis. He also presented with chronic kidney disease and decompensated heart failure. Furthermore, Mr. Liebenberg's medical history revealed that he had Type 2 diabetes mellitus, hypertension, ischemic heart disease with a previous coronary artery bypass in 2015 and valve replacement on lifelong Warfarin therapy. Mr. Liebenberg had a cardiac pacemaker in situ, which was marked as not present during the admission assessment.

1.4.4 On 6 January 2022, Mr. Liebenberg phoned his wife, and he was worried about his swollen legs, which became reddish from his knees to his toes. Mrs. Liebenberg alleged that upon admission, Mr Liebenberg was feeling better, and his legs were not swollen. Mrs. Liebenberg promised to contact the treating doctor and find out the cause of the swollen legs. According to Mrs Liebenberg, she phoned Dr Khomo, a Specialist Physician at MH (Dr Khomo), but she did not answer. Mrs Liebenberg left a voicemail message, but her calls were not returned.

1.4.5 On 7 January 2022, Mrs Liebenberg visited Mr. Liebenberg at MH and met with Dr. Khomo to discuss her husband's condition. According to Mrs. Liebenberg, the swelling on Mr. Liebenberg's legs was severe, and he was admitted without any swollen legs. Mrs. Liebenberg enquired about his condition and treatment. Dr. Khomo confirmed that Mr. Liebenberg was treated for heart failure, COVID-19, because he tested positive, and she mentioned that his kidneys were getting better.

1.4.6 Mrs. Liebenberg asked Dr. Khomo about water retention, which was the main reason for his admission. Dr. Khomo confirmed that she was also treating Mr. Liebenberg for water retention.

1.4.7 On 8 January 2022, Mrs. Liebenberg alleged that her husband's condition totally changed. Mr. Liebenberg reported to his wife that he was feeling confused, very tired, and sleeping all the time. According to Mrs. Liebenberg, she enquired from the nurse if Mr. Liebenberg was okay. The nurse responded and said, "He is just fine." Mrs. Liebenberg thought that he was sleepy due to the effects of medication and that he did not eat his meal.

1.4.8 On 9 January 2022, Mrs Liebenberg alleged that Mr Liebenberg's condition did not improve. Mr. Liebenberg appeared very tired; he was lying on his bed and had not eaten his meal. Mrs. Liebenberg left the hospital at about 17h00. Mrs Liebenberg alleged that Mr Liebenberg phoned her at about 19h15 and reported that he was being transferred to the Intensive Care Unit (ICU) because his International Normalised Ratio (INR) was above 10 and he was bleeding. INR is a blood test used to determine how long it will take for your blood to clot. However, the investigation found that the abnormal INR results were available and communicated to the ward on 9 January at 05h44 in the morning.

1.4.9 Upon hearing about the transfer to the ICU, Mrs Liebenberg contacted Dr Khomo and requested she immediately transfer Mr Liebenberg to Wilgers Hospital (WH) in Pretoria. According to Mrs. Liebenberg, Dr. Khomo refused to transfer her husband to WH because it was late that evening. Mrs. Liebenberg insisted that Mr. Liebenberg should be transferred early on Monday morning. However, the investigation found that Dr Khomo did not transfer Mr Liebenberg to WH because Mr Liebenberg was not stable enough to be transported by ambulance for about 160km. Furthermore, Dr. Khomo established that Mr. Liebenberg's cardiologist would only be available at WH on Monday, 10 January 2022.

1.4.10 On 10 January 2022, Mrs Liebenberg went to see Mr Liebenberg at the ICU, and she found him lying on the bed with his head towards the foot end of the bed. Mr. Liebenberg was in the ICU as a High Care patient with only a pulse monitor; there was no intravenous infusion (Drip), no oxygen supply, and no ECG leads connected to him as a cardiac patient. Mrs. Liebenberg alleged that a nurse told her that there was nothing wrong with Mr. Liebenberg, he was just lazy. Mrs. Liebenberg alleged that her husband was critically ill, and he could not even lift his head.

1.4.11 Mrs. Liebenberg felt that her husband was neglected and not provided with appropriate healthcare at MH; she alleged that when there were abnormal blood results, she noted that there were unreasonable delays in adjusting the patient's treatment accordingly. Dr. Khomo was not always available to assess and adjust treatment accordingly. Mr. Liebenberg had poor appetite and was not assisted to eat his meals. At times, he was not assisted with bathing and

changing his clothes. Mrs Liebenberg decided to lodge a complaint with MH but was not satisfied with the outcome.

1.4.12 On 10 January 2022, Mr Liebenberg was transferred in an ambulance from MH in Mpumalanga to WH in Pretoria. Upon arrival at WH, Mrs. Liebenberg received a call from a doctor requesting permission to place Mr. Liebenberg on restraints. Furthermore, Mrs. Liebenberg alleged that the WH doctor informed her that her husband was severely dehydrated and in need of dialysis. WH diagnosed Mr. Liebenberg with renal failure complicated by severe metabolic acidosis, hyperkalaemia and congestive cardiac failure. According to Mrs Liebenberg, the damage was too much, and her husband, unfortunately, died on 12 January 2022.

1.4.13 According to Mrs Liebenberg, if her husband had been provided with appropriate healthcare and close monitoring at MH, complications of his illness would have been adequately managed, and his death could have been prevented. Furthermore, Mrs Liebenberg indicated that Dr Khomo, as the treating doctor, failed or neglected to provide proper healthcare to the late Mr Liebenberg, who was a critically ill patient but treated in a normal ward without any close monitoring.

1.4.14 The investigation found that Mr. Liebenberg was indeed admitted as a patient at MH from 3 January 2022 until 10 January 2022, when he was eventually transferred in an ambulance to WH. During the onsite investigation interviews, Mrs. Liebenberg raised certain concerns about the failure of the MH to inform her when Mr. Liebenberg was resuscitated in the ICU. The issue of the doctor's orders was said to be a wrong entry regarding dialysis. The issue of doing a potassium shift on a patient with a pacemaker and its potential to cause abnormal heart rhythms.

1.4.15 The investigation found that there was no cardio-pulmonary resuscitation performed on Mr. Liebenberg in ICU. However, the resuscitation done in the ICU referred to the treatment given in a hyperkalaemia emergency when a potassium shift was done using a combination of 50% dextrose and 10 units of

insulin. Furthermore, the investigation found that the potassium shift in a patient with a pacemaker does not cause abnormal heart rhythms.

1.4.16 The investigation found that there was poor record keeping in respect of the assessment and healthcare provided to Mr. Liebenberg. That was evidenced by a pattern of inconsistencies in Mr. Liebenberg's medical records. Furthermore, the investigation found that the consent form for Fresh Frozen Plasma and Administration of Blood Products was not correctly filled, and the patient's state of mind (confusion) and his prior conduct indicate that he was not fit to give informed consent to any medical procedure, including the administration of Fresh Frozen Plasma.

1.4.17 Mr. Liebenberg was diagnosed with COVID-19 pneumonitis, this diagnosis coupled with other factors, such as his advanced age of 65 years old, overweight with a Body Mass Index (BMI) of 31.94 and the collection of pre-existing comorbidities such as diabetes, hypertension, heart failure, kidney failure, ischemic heart disease with previous coronary bypass surgical operation, pacemaker in *situ*, on warfarin treatment, increased INR of 10 and confusion which impaired his ability to comply or co-operate with healthcare professionals at MH. The investigation viewed Mr. Liebenberg's clinical picture holistically and carefully, considering that he tested positive for COVID-19 with all the pre-existing comorbidities mentioned above. The investigation found that Mr. Liebenberg was seriously ill and a high-risk patient who needed appropriate treatment and close monitoring.

1.4.18 The investigation considered the pathophysiology of the above-mentioned conditions and the effects of various conditions on the respiratory, cardiovascular, and renal systems. This was evidenced by the abnormal blood test results and the patient's overall clinical presentation, coupled with other comorbidities and medical treatment he was taking during hospitalisation.

1.4.19 The investigation found that Mr. Liebenberg was immuno-compromised due to COVID-19 pneumonitis, and the combination of his other illnesses affected his respiratory system, causing shortness of breath and respiratory distress. The cardiovascular system (heart) was also affected, resulting in mitral valve regurgitation and heart failure, and the renal system was severely affected due

to kidney failure, resulting in a build-up of wastes and toxins in the bloodstream requiring dialysis.

1.4.20 The investigation found that blood results for the previous year, 2021, demonstrated abnormal readings for the estimated glomerular filtration (Est FGR) of 38 ml/min—55 ml/min. These readings indicate that Mr. Liebenberg had chronic kidney disease prior to his admission in 2022.

1.4.21 The investigation found that when Mr. Liebenberg was admitted at MH, it was during the COVID-19 outbreak era, and he had tested positive, which posed a risk to healthcare professionals and created certain limitations, such as staff shortages and restrictions to physical contact. However, the investigation found that Mr. Liebenberg had access to healthcare services during hospitalisation at MH; he was allocated enrolled nurses to care for him and report to a professional nurse-in-charge; this proved to be a limitation due to their limited scope of practice. However, at times the quality of care given was inconsistent with the nature and severity of his health condition.

1.4.22 The investigation found that Mr. Liebenberg was transferred by Dr. Khomo on 10 January 2022 to WH for multidisciplinary care. Upon admission assessment at WH, Mr. Liebenberg presented with acute on chronic renal failure complicated by severe metabolic acidosis, with hyperkalemia in congestive cardiac failure and fluid overload. Furthermore, Mr. Liebenberg exhibited confusion classified as a severe level of delirium, which necessitated the use of restraints.

1.4.23 The investigation found that Mr Liebenberg was closely monitored for renal failure at WH due to an eGFR of 46 mL/min on 6 January 2022 and the subsequent decline to 26 mL/min on 10 January 2022, indicative of acute on chronic kidney failure. Mr. Liebenberg's renal illness was aligned with Stage 3A chronic kidney disease, and he was admitted to the ICU and started on dialysis.

1.4.24 The investigation found that on 12 January 2022, Mr. Liebenberg’s renal function deteriorated despite being on dialysis. His metabolic acidosis continued to worsen, and he had a cardiopulmonary arrest and was resuscitated with no return of spontaneous pulse. Mr. Liebenberg succumbed to his illness, and he was declared dead at 07h37.

1.4.25 Mrs. Liebenberg was not satisfied with the complaint resolution at MH regarding the quality of healthcare and clinical mismanagement that resulted in his death. The investigation found that few meetings were held between MH Management and Mrs. Liebenberg, but she was not satisfied. As a result, she lodged a formal complaint with the Office of the Health Ombud.

2. INTRODUCTION AND BACKGROUND

2.1 The Report details the outcome of an investigation into allegations of clinical mismanagement, which resulted in the death of a patient at Mediclinic Highveld (MH) in Mpumalanga. Mrs Liebenberg alleged that her husband was clinically mismanaged and was provided with substandard patient care, which resulted in the death of her late husband, the late Mr Izak Gerhardus Liebenberg (Mr Liebenberg). The Complaints Call Centre Unit received a complaint against MH, and reference number 32186 was allocated. The complaint was referred to the Complaints Investigation Unit on 26 April 2022 following screening and assessment.

3. SUMMARY OF THE COMPLAINT

3.1 On 29 March 2022, Mrs Liebenberg lodged a complaint with the Ombud alleging that her husband was clinically mismanaged and provided with poor patient care at MH, which resulted in the death of her late husband, Mr Liebenberg. Furthermore, Mrs. Liebenberg alleged that Dr. Khomo failed or neglected to assess and provide appropriate treatment to Mr. Liebenberg when he was critically ill. There were abnormal blood results from the laboratory. Mrs. Liebenberg's complaint letter is attached to this report as Annexure 1.

3.2 Allegations made by Mrs. Liebenberg

(a) That Mr. Liebenberg was clinically mismanaged and provided with substandard healthcare at MH.

(b) That Mr. Liebenberg was treated in the ICU with only a pulse oximeter connected to him.

(c) That Mr. Liebenberg signed the consent form for Fresh Frozen Plasma (FFP), and the potassium shift affected the pacemaker, resulting in abnormal heart rhythms.

(d) That Mr. Liebenberg's kidney failure deteriorated to the extent that he needed to be put on dialysis upon arrival at Wilgers Hospital.

(e) That Mr. Liebenberg's clinical mismanagement at MH resulted in his death.

3.3 The following issues were identified and investigated:

(a) Whether Mr. Liebenberg was clinically mismanaged and provided with substandard healthcare at MH that resulted in his death.

(b) Whether Mr. Liebenberg was treated in the ICU with only a pulse oximeter connected to him.

(c) Whether Mr. Liebenberg signed the consent for Fresh Frozen Plasma and that potassium shift affected the pacemaker resulting in abnormal heart rhythms.

(d) Whether Mr. Liebenberg's kidney failure deteriorated to the extent that he needed to be put on dialysis upon arrival at Wilgers Hospital.

(e) Whether it was Mr. Liebenberg's clinical mismanagement at MH that resulted in his death.

3.4 Due to the above background, the Ombud deemed it necessary to investigate the allegations against MH.

4. POWERS AND JURISDICTION OF HEALTH OMBUD

The Ombud was appointed in terms of Section 81(1) of the National Health Amendment Act (NHAA), 2013 (Act No. 12 of 2013). Section 81A(1) of the NHAA stipulates that the Ombud may, on receipt of a written or verbal complaint relating to norms and standards, or on his initiative, consider, investigate, and dispose of the complaint in a fair, economical, and expeditious manner.

5. PURPOSE OF THE INVESTIGATION

5.1 This Report serves to communicate the Health Ombud's findings and recommendations from an investigation conducted by his investigator, authorised in terms of Section 81 (3) (c) of the National Health Amendment Act, 2013 (Act No. 12 of 2013), pursuant to an investigation into allegations of clinical mismanagement and substandard care which resulted in the death of Mr Liebenberg.

5.2 The findings were determined through the analysis of evidentiary material received and witness interviews which enabled the Ombud to decide on the action to be taken on this complaint in accordance with the Procedural Regulations Pertaining to the Functioning of the Office of Health Standards Compliance and Handling of complaints by the Ombud (Procedural Regulations).

6. SCOPE OF THE INVESTIGATION

6.1 The scope of the investigation was limited to the allegations alluded to by Mrs. Liebenberg. The investigation sought to gather first-hand information regarding the allegations levelled against MH. The investigation focused on 3 January 2022, when Mr. Liebenberg was admitted to the MH, and his subsequent transfer to the Wilgers Hospital, until his death on 12 January 2022.

6.2 The investigation was conducted in terms of the NHAA and the Procedural Regulations. Considering the circumstances of the complaint, as indicated by Mrs. Liebenberg, an Investigator was assigned in accordance with Section 81A(3)(a) – (c) of the NHAA to investigate the complaint against MH.

7. METHODOLOGY AND APPROACH

6.1 The complaint was lodged with the Ombud on 29 March 2022. The investigation was conducted by obtaining information and documentary evidence in terms of section 81A (3)(b)(iii) of the NHAA.

6.2 The available documentary evidence and interviews were analysed to establish the facts surrounding the allegations against MH. Mr. Liebenberg's MH medical

records, laboratory results, MH Management's response to the Ombud's enquiries, MH internal investigation findings, witness interviews records, WH medical records and reports were reviewed in connection with the alleged clinical mismanagement of the patient and poor patient care at MH, which resulted in the death of Mr. Liebenberg.

8. THE INVESTIGATION

8.1 The investigation into the allegations of clinical mismanagement and poor patient care at MH, which resulted in the death of Mr. Liebenberg. The investigator considered and analysed all relevant factors, such as Mr. Liebenberg's illness, the patient's clinical presentation, pre-existing comorbidities, medical devices, medical history and treatment given. Analysis of available evidentiary material in the form of Mr Liebenberg's medical records, laboratory reports and witnesses' interview records were undertaken.

9. INVESTIGATION FINDINGS

The following was found in relation to the allegations made:

(Presentation and treatment of Mr. Liebenberg at MH until his demise.)

9.1 Regarding whether Mr. Liebenberg was clinically mismanaged and provided with substandard patient care at MH that resulted in his death.

9.1.1 According to Mrs. Liebenberg, during the last week of December 2021, Mr. Liebenberg was treated by a family doctor for water retention. The family doctor recommended that he be hospitalised for close monitoring and treatment. On 3 January 2022, Mr. Liebenberg was still not feeling better, and he was taken to MH due to water retention.

<u>Patient Assessment, Diagnosis and Treatment</u>

9.1.2 The investigation found that on 3 January 2022 at approximately 08h03, Mr. Liebenberg a 65-year-old male, was admitted to MH. He complained of shortness of breath since 1 January 2022. He was triaged and classified as triage orange. He was given 4 litres of oxygen per nasal cannula, intravenous infusion in situ, oxygen saturation at 95% and the patient's medical history was obtained. At about 08h25, the emergency department doctor saw Mr.

Liebenberg, and the prescribed medication was administered. At about 10h30, he was taken to the General Unit.

9.1.4 Upon admission, Mr Liebenberg was diagnosed with shortness of breath and respiratory distress, tested positive for SARS-Cov-2 Coronavirus (COVID-19) and was later diagnosed with COVID-19 pneumonia. He also presented with chronic kidney disease and decompensated heart failure. Furthermore, Mr. Liebenberg's medical history revealed that he had Type 2 diabetes mellitus, hypertension, ischemic heart disease with previous coronary artery bypass in 2015 and valve replacement on lifelong Warfarin therapy. Mr. Liebenberg had a cardiac pacemaker in situ, which was marked as not present on the admission assessment sheet, and thus the information regarding the pacemaker was incorrect.

9.1.5 The investigation found that at about 12h55 on 3 January 2022, Mr. Liebenberg was seen by Dr. Khomo, and new doctor's orders were given. Mr. Liebenberg was kept on 4 litres of oxygen via the nasal cannula, and the percentage of his blood saturated with oxygen (SP02) was 90%, and he had a short drip in situ. At about 18h10, Mr. Liebenberg's SP02 was 87%, and his oxygen supply was increased to 5 litres. Mr. Liebenberg's vital observations were checked and these ranged within normal limits. Mr. Liebenberg was transferred to Ward G due to the Covid-19 positive test results.

9.1.6 The investigation found that on 3 and 4 January 2022, Mr. Liebenberg was prescribed the following medication, Lasix 40mg IVI Stat, Lasix 60mg IVI, Clexane 20mg, Augmentin 1.2g, Azithromycin 500mg, nicotinic acid 25mg, ceftriaxone 2g, vitamin D 2000 IU, Pulmicort nebuliser, bisolvon inhalant solution, Warfarin 5mg tab, colchicine 0.5mg tab, talomil 20mg, Glucophage 850mg tab, degranol 200mg, circadin 2mg tab, Solu-Cortef 100mg/2ml Actovial, thiamine 100mg, stillpain tab. The investigation found that most medication was administered as prescribed, except for warfarin, which was only given on 05/01/2022 and 07/01/2022, omitted as per doctor's instructions on 08/01/2022 and stopped on 09/01/2022. It can be noted that warfarin administration is influenced by the INR results.

Specific Care Plan

9.1.7 The investigation found that a Specific Patient Care Plan (care plan) was developed for Mr. Liebenberg on 3 January 2022 and used until 8 January 2022. The care plan listed various problems and expected outcomes, such as shortness of breath, positioning the patient in a Fowler's position, assessing for signs of phlebitis such as swelling, pain, redness or burning sensation, monitoring intravenous infusion and reporting any abnormalities.

9.1.8 However, the investigation found that the nursing care plan did not cover other important aspects such as cardiac failure and renal failure, for nurses to assess, treat and report symptoms like fatigue and edema. Strict monitoring of fluid intake and output to prevent fluid overload. Furthermore, that the patient was on warfarin therapy, required close monitoring of INR results and to urgently report abnormal results to the professional nurse or doctor. The investigation found that an incomplete care plan may result in the limitation or omission of specific care and monitoring provided to a patient. Furthermore, any limitation or omission of healthcare or monitoring may worsen the patient's illness.

Abnormal Blood Results

9.1.9 The investigation found that various blood tests were done on Mr. Liebenberg, and the following abnormal blood test results were received from the laboratory:

(a) Blood Test Results

Blood Test & (Normal Ranges)	03/01/22 08h50	04/01/22 08h00	04/01/22 17h00	05/01/22 03h33	08/01/22 04h50	09/01/22 03h48	09/01/22 20h20
Electrolytes & Kidney Functions							
S-Urea (2.9 - 8.2 mmol/L)	*20.7	*21.7		*23.6			
S-Creat (71 – 115 mmol/L)	*151	*136		*154	*147		*191
Est GFR (>60 mL/min)	*41	*47		*40	*43		*31
Liver Function							
S-GGT (<64 U/L)	*126						*199
S-ALT (13 – 40 U/L)	* 76						*1763
S-AST (19 – 48 U/L)	*87						*1921
S-LD (125 -220 U/L)		*335		*386			
Cardiac & Skeletal Muscle Markers							
P-BNP (<100 pg/L)	*1176	*1864					*3238
Haematology: Coagulation Parameters							
P-PT (9.9 – 11.8 sec)			*50.2	*31.5	*41.8	*84.3	
INR (0.9 – 1.2)			*5.7	*3.4	*4.7	* >10	
P-D-Dimmer ELFA (<0.5mg/L)	*2.71						

9.1.10 Based on the abnormal blood results recorded above in paragraph 9.1.8. The investigation found that when Mr. Liebenberg was admitted to MH on 3 January 2022, his medical history, presentation and initial abnormal blood results provided a clear clinical picture of cardiac and renal failure. Furthermore, his abnormal blood test results identified his cardiac, renal function and coagulation parameters as areas of concern that required immediate medical treatment and close monitoring.

9.1.11 The investigation established that the B-Type Natriuretic Peptide (BNP) test is done to assess whether there is heart failure or if it is getting worse. BNP is a peptide produced by the heart and blood vessels; it works as a hormone. The heart makes more BNP when it is working harder than it should to pump and move blood through the body. This hormone also triggers the kidneys to filter out more water and salt to be eliminated through the urine.

9.1.12 The investigation found that in the P-BNP blood test done on 3 January 2022, the blood test results were 1179 pg/L, whereas the normal range should be below 100 pg/L. Furthermore, in the subsequent P-BNP blood test done on 4 January 2022, the blood test results were 1864 pg/L. Both blood test results were abnormally high and demonstrated an increase of P-BNP from 1179 pg/L to 1864 pg/L the following day. The investigation established that these blood results clearly indicated that Mr. Liebenberg was experiencing heart failure; the subsequent increase of P-BNP to 1864 pg/L was a sign of worsening heart failure.

9.1.13 The investigation established that creatinine is a waste product from the digestion of protein in food and the normal breakdown of muscle tissue. Creatinine is removed from the blood through the kidneys. The serum (blood) creatinine test (S-Creat blood test) is used to check how well the kidneys filter blood. High levels of creatinine in the blood signal kidney function issues, such as kidney failure.

9.1.14 The investigation found that in the S-Creat blood test done on 3 January 2022, the blood test results were 151 umol/L, whereas the normal range is 71 – 115 umol/L. Furthermore, the results of the subsequent S-Creat blood test on 04 & 05 January 2022 were 136 umol/L and 154 umol/L, respectively. High levels of

creatinine in the blood were an indication of kidney function issues, such as kidney failure. The deteriorating kidney function was further confirmed by abnormal blood results of the Est GFR (Estimated Glomerular Filtration Rate) test, ranging between 41-40mL/min over 3 days, whereas the normal range for Est GFR is >60mL/min.

9.1.15 The investigation established that Mr. Liebenberg was provided with adequate medical treatment for his cardiac condition (heart failure); this is evidenced by the medication prescription. However, the investigation established that adequate management of a cardiac condition such as heart failure must include adequate management of kidney failure to avoid overloading the heart.

Strict Intake and Output

9.1.16 On 4 January 2024, Mr. Liebenberg was placed on a Strict Intake and Output, as per Dr. Khomo's orders and prescription. According to medical records, the intake and output were marked as monitored from 04/01/2022 to 09/01/2022. The investigation found that Mr. Liebenberg could go unsupervised and pass urine in the bathroom, making it impossible to measure and monitor his urine output accurately.

9.1.17 On 6 January 2022, Mr. Liebenberg phoned his wife, and he was worried about his swollen legs, which became reddish from his knees to his toes. Mrs. Liebenberg alleged that upon admission, Mr Liebenberg was feeling better, and his legs were not swollen. Mrs. Liebenberg promised to contact the treating doctor and find out the cause of the swollen legs. According to Mrs Liebenberg, she phoned Dr Khomo, a Specialist Physician at MH (Dr Khomo), but she did not answer. Mrs Liebenberg left a voicemail message, but her calls were not returned.

9.1.18 According to Mrs. Liebenberg, the redness on his legs was a sign of dehydration, and the doctor ignored it. Dr. Khomo informed Mrs. Liebenberg that she was not worried about his red legs because she was treating him for that abnormality. However, Mrs. Liebenberg requested Dr. Khomo to phone his cardiologist because Mr. Liebenberg was a high-risk patient, but she failed to call the cardiologist.

9.1.19 On 7 January 2022, Mrs Liebenberg visited Mr. Liebenberg at MH, and she met with Dr. Khomo to discuss her husband's condition. According to Mrs. Liebenberg, the swelling on Mr. Liebenberg's legs was worse than when he was admitted without any swollen legs. Mrs. Liebenberg enquired about his condition and treatment. Dr. Khomo confirmed that Mr. Liebenberg was treated for heart failure, COVID-19, because he tested positive, and she mentioned that his kidneys were getting better.

9.1.20 The investigation established that the swollen legs were due to the accumulation of fluids caused by pre-existing heart failure and the kidney's inability (kidney failure) to remove excess fluid from the body. Excess swelling on the lower extremities is associated with either chronic kidney disease or end-stage renal disease and congestive heart failure. This was consistent with Mr. Liebenberg's clinical presentation and the subsequent dialysis treatment that was administered at Wilgers Hospital three days later. The investigation found that the swollen legs were not elevated with pillows or foot end of the bed while lying down to alleviate the swelling.

9.1.21 On 8 January 2022, Mrs. Liebenberg alleged that her husband's condition totally changed. Mr. Liebenberg reported to his wife that he was feeling confused, very tired, and sleeping all the time. According to Mrs. Liebenberg, she enquired from the nurse if Mr. Liebenberg was okay. The nurse responded and said, "He is just fine." Mrs. Liebenberg thought that he was sleepy due to the effects of medicine and that he did not eat his meal.

9.1.22 Mrs. Liebenberg alleged that Mr. Liebenberg did not eat his meals on 8 and 9 January 2022, as evidenced by his food being left untouched in the ward. The investigation found that Mr. Liebenberg's condition changed from 7 January 2022, as evidenced by the recorded output in paragraph 9.1.23 below. The investigation found no entries in medical records indicating that Mr. Liebenberg ate his meals over the period 8 – 9 January 2022.

9.1.23 The investigation found that Mr. Liebenberg was placed on strict intake and output monitoring. However, he could still go to the toilet unsupervised, and that had the potential to miscalculate the urine output. The investigation found apparent discrepancies recorded on the Fluid Balance Sheet on 07/01/2022. The input was 2444 ml, and the output was 120 ml. On 08/01/2022, the input

was 1920 ml, and the output was 180 ml. On 09/01/2022, the only thing recorded at 09h00 was 200ml of juice; nothing was recorded for the rest of the day.

9.1.24 The investigation found that Mr. Liebenberg's fluid intake and consistent minimal output were signs of deteriorating kidney function. This was further confirmed by abnormal blood results of the Est GFR (Estimated Glomerular Filtration Rate) test, ranging between 41-40mL/min over a 3-day period, whereas the normal range for Est GFR is >60mL/min.

9.1.25 Furthermore, the investigation found that Mr. Liebenberg had a normal saline intravenous infusion prescribed. However, the medical records reveal that he only received normal saline infusion as follows:

(a). On 05/01/2022 Normal Saline 1000 ml at 16h30 and 700 ml at 21h00.

(b). On 06/01/2022 Normal Saline 600 ml at 07h00 and 1000 ml at 22h00.

(c). On 07/01/2022 Normal Saline 600ml at 21h00.

The investigation found that Mr. Liebenberg was hospitalised at MH over the period 03 – 10 January 2022 (08 Days). During hospitalisation, Mr. Liebenberg was on diuretics, but his fluid output was not adequately monitored.

9.1.26 The investigation found that there was poor record keeping in respect of Mr. Liebenberg's medical records. On 9 January 2022, Mr. Liebenberg spent the whole day in hospital, but only 200 ml of juice was recorded at 09h00. The investigation found that a patient with kidney failure and on strict intake and output monitoring spent the whole day without any form of fluid intake and output monitoring. However, the investigation noted that the poor record keeping was a clear indication of omission or neglect by healthcare professionals; if the healthcare interventions or monitoring is not recorded, it should be assumed that it was not done.

9.1.27 The investigation established that there were other areas of poor record keeping in respect of Mr. Liebenberg's medical records. He had a pacemaker in *situ*, but the admission evaluation indicated that he had no pacemaker. COVID-19 positive was the only diagnosis that appears on implementation records. On 8 and 9 January 2022, it was recorded that the patient appeared sick and weak, with recorded decreased blood pressure. However, there is no

entry made about what was done about that, whether it was reported to senior healthcare professionals, and what were the medical interventions.

9.1.28 On 9 January 2022, in the morning, it is reported that the patient was refusing to be connected to oxygen and a short drip. This entry does not reflect the patient's state of mind or reasons for such refusal. Mrs. Liebenberg alleged that Mr. Liebenberg reported feeling confused and sleepy, but that is not reflected in the medical records.

9.1.29 According to Sr. Linda Ferreira, a critical care nurse specialist and a night shift leader on 9 January 2022, she stated that *"Mr. Liebenberg was restless and removed all cables and attachments. I spoke to him, and he complied for a short period, but defaulted again-removing cables again"*. The investigation found that Mr Liebenberg's behaviour and confusion were consistent with the symptoms of a worsening kidney failure. Furthermore, the investigation established that such behaviour could also be as a result of neurologic complications of COVID-19, leading to an altered mental state resulting in confusion and acting out of character.

9.1.30 The investigation found that Mr. Liebenberg was not treated in a manner that was consistent with the severity of his kidney failure condition when the healthcare professionals at MH failed, neglected or omitted to adhere to Strict Intake and Output monitoring. The investigation found that the persistent minimum output recorded over a few days was a clear indication of a *'Red Flag'* coupled with other symptoms and abnormal blood results of the Est GFR, that Mr. Liebenberg's kidney failure was getting worse, which aligned with Stage 3A chronic kidney disease.

9.1.31 The investigation found that the abnormal blood results indicated a worsening heart failure and deteriorating kidney function, were not taken into consideration to adjust the level of care accordingly and transfer the patient to High Care or Intensive Care Unit as soon as possible. Furthermore, the investigation found that Mr. Liebenberg was critically ill with abnormally high blood results. However, he was still nursed in a normal ward under the direct care of an enrolled nurse with a limited scope of practice.

9.1.32 The investigation found that failure or omission to move Mr. Liebenberg earlier to high care or intensive care unit to provide adequate treatment and adhere to Strict Intake and Output monitoring for a patient with kidney failure coupled with a worsening heart failure amounted to clinical mismanagement and was inconsistent with regulation 5(1) of Norms and Standards Regulations Applicable to Different Categories of Health Establishments, 2018 (Norms and Standards), which states that "*The health establishment must ensure that users are attended to in a manner which is consistent with the nature and severity of their health condition".* The allegation that Mr. Liebenberg was clinically mismanaged and provided with substandard healthcare at MH is substantiated to the extent that the healthcare professionals at MH failed or neglected to adhere to Strict Intake and Output monitoring on a patient with kidney failure. Furthermore, that Mr. Liebenberg was not moved to higher level of care such as high care or intensive care unit earlier, despite his deteriorating health condition. However, he was still nursed in a normal ward under the direct care of an enrolled nurse with a limited scope of practice.

Abnormal INR and Transfer to ICU

9.1.33 On 9 January 2022, Mrs. Liebenberg alleged that Mr. Liebenberg's condition did not improve. Mr. Liebenberg appeared very tired; he was just lying on his bed, and he had not eaten his meal. Mrs. Liebenberg left the hospital at about 17h00. Mrs Liebenberg alleged that Mr Liebenberg phoned her at about 19h15 and reported that he was being transferred to the Intensive Care Unit (ICU) because his International Normalised Ratio (INR) was above 10 and he was bleeding. INR is a blood test used to determine how long it will take for your blood to clot. INR of 1.1 or below in healthy people is considered normal and INR range of 2.0 to 3.0 is regarded as an effective therapeutic range for people on warfarin therapy.

9.1.34 The investigation found that the laboratory results of an abnormal INR of 10 were available and communicated to the ward on 9 January at 05h44 in the morning. However, the abnormal INR results were not communicated to the doctor early or acted upon. The investigation found that there was an unreasonable delay between receiving the abnormally high INR of 10 at 05h44

in the morning and 19h15 in the evening when Mr Liebenberg reported that he was being transferred to the ICU because he had an INR of 10.

9.1.35 The investigation found an unreasonable delay of about 13 hours from when the abnormal INR results were available to the time of transfer to the ICU. The investigation noted that Mr. Liebenberg was classified and treated as a High Care patient. It can be noted that an abnormal INR of 10 is a cause for concern, and it should be attended to urgently to adjust or omit warfarin dosage accordingly. The investigation found that increased INR above the therapeutic range had a potential risk of bleeding incidents; such patients should be closely monitored.

9.1.36 The investigation found that there was an unreasonable delay of 13 hours for healthcare professionals to become aware of and respond to an abnormal INR of 10 in a patient on warfarin therapy. This was inconsistent with regulation 5(1) of Norms and Standards Regulations Applicable to Different Categories of Health Establishments, 2018 (Norms and Standards), states that "*The health establishment must ensure that users are attended to in a manner which is consistent with the nature and severity of their health condition."* The investigation found that Mr. Liebenberg was not treated in a manner that was consistent with the severity of his condition as a patient on warfarin therapy.

9.1.37 The allegation that Mr. Liebenberg was clinically mismanaged and provided with substandard care at MH is substantiated to the extent that the healthcare professionals at MH failed or neglected to adhere to Strict Intake and Output monitoring on a patient with kidney failure. Secondly, to the extent that there was an unreasonable delay of 13 hours for healthcare professionals to become aware and respond to an abnormal INR of 10 in a patient on warfarin therapy. Furthermore, failure or neglect to consider and interpret abnormal blood results for Est FGR and adjust treatment accordingly.

9.1.38 However, whether there is a causal link between clinical mismanagement and the cause of death, it could not be substantiated without a postmortem report. Mr. Liebenberg had many comorbidities, such as heart failure, hypertension, chronic kidney failure, COVID-19 pneumonitis, and diabetes any combination of these comorbidities could have contributed to the patient's death.

9.2 Regarding whether Mr. Liebenberg was treated in the ICU with only a pulse oximeter connected to him.

9.2.1 On 9 January 2022 at approximately 19h15 in the evening, Mr Liebenberg reported telephonically to his wife that he was being transferred to ICU because he had an INR of 10 and he was bleeding. Upon hearing about the transfer to the ICU, Mrs Liebenberg contacted Dr Khomo and requested she immediately transfer Mr Liebenberg to Wilgers Hospital (WH) in Pretoria. According to Mrs. Liebenberg, Dr. Khomo refused to transfer her husband to WH because it was late that evening. Mrs. Liebenberg insisted that Mr. Liebenberg should be transferred early on Monday morning

9.2.3 The investigation found that Dr. Khomo did not transfer Mr. Liebenberg to WH, because Mr. Liebenberg was not stable enough to be transported by ambulance for about 160km on the road. Furthermore, Dr. Khomo established that Mr. Liebenberg's cardiologist would be available at WH on Monday. According to Professional Nurse Linda Ferreira (Sr. Ferreira), a Critical Care Nurse Specialist and the shift leader, on 9 January 2022, she received a call from Dr Khomo to transfer Mr Liebenberg from the General Unit to ICU for observation and to be transferred to Wilgers Hospital the following morning. Professional Nurse Martha van Emmenis confirmed that Mr. Liebenberg was admitted to the ICU for cardiac failure and warfarin toxicity.

<u>Restlessness and Irritability (Confusion)</u>

9.2.4 According to Sr. Linda Ferreira, a critical care nurse specialist and a night shift leader on 9 January 2022, she stated that *"Mr Liebenberg was restless and removed all cables and attachments. I spoke to him, and he complied for a short period, but defaulted again-removing cables again"*. The investigation found that Mr Liebenberg's behaviour and confusion were consistent with the symptoms of a worsening kidney failure.

9.2.5 According to Sr. Ferreira, she delegated Enrolled Nurse Msibi (EN Msibi) to look after Mr. Liebenberg. Sr. Ferreira communicated with Mrs. Liebenberg about the transfer and its purpose. EN Msibi received Mr Liebenberg from the General Unit at approximately 20h15, accompanied by EN Mashaba. Mr. Liebenberg was very restless and irritable, and he was connected to the cardiac monitor and vital signs

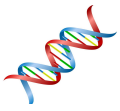
were monitored and it ranged within normal limits. He had a nasal cannula, was on 1 litre of oxygen, and saturation was at 88%. Dr. Khomo's orders were that if the patient becomes more restless, he should be restrained.

9.2.6 According to EN Msibi, the patient (Mr Liebenberg) became more restless and irritable; he wanted to jump over the cot sides and move around the bed. Furthermore, Mr. Liebenberg was removing all cables and attachments that were connected to him. The investigation found that Mr Liebenberg's behaviour (restlessness and irritability) and confusion were consistent with the symptoms of worsening kidney failure, resulting in encephalopathy, which is a change in how your brain functions. You may feel confused, agitated, or unwell.

9.2.7 On 10 January 2022 in the morning, Mrs. Liebenberg went to see Mr. Liebenberg at ICU and she found him lying flat on the bed with his head towards the foot end of the bed, Mr. Liebenberg was treated in the ICU as a High Care patient with only a pulse oximeter, there was no intravenous infusion (Drip), no oxygen supply, no ECG leads connected to him as a cardiac patient. Mrs. Liebenberg alleged that a nurse told her that there was nothing wrong with Mr. Liebenberg, he was just lazy. Mrs. Liebenberg alleged that her husband was critically ill, and he could not even lift his head.

9.2.8 However, the investigation found that on 10 January 2022 at 00h00, Mr. Liebenberg was reported to be restless and irritable. He wanted to jump over the bed and refused to be restrained. Furthermore, the investigation noted with concern that on the same day at 06h20, Mr. Liebenberg's condition remained the same; he was reported to be still very restless and removing oxygen, ECG leads and BP cuff. However, the patient's restlessness was not reported to the doctor, and nothing was given to calm the patient or investigate the underlying cause of this odd behaviour.

9.2.9 The investigation found that due to Mr. Liebenberg's restlessness and irritability, he simply removed all connections and attachments for his medical treatment and monitoring. Furthermore, the investigation established that nurses would reconnect the monitoring equipment hourly to check his vital signs. Mr. Liebenberg had a short drip in *situ,* and intravenous infusion was only connected



when needed to avoid fluid overload on the patient. His oxygen saturation on the room air was above 90%.

9.2.10 The investigation found that Mr. Liebenberg received all his prescribed medication, had been transfused with Fresh Frozen Plasma, and had a potassium shift done, with good effect. He was duly monitored on an hourly basis, and he then removed all connections and attachments for his medical treatment and monitoring. The allegation that Mr. Liebenberg was lying in the ICU with just a pulse oximeter is substantiated. However, valid reasons were advanced for the non-connection of all monitoring machines on the patient as stated in paragraphs 9.2.4 to 9.2.9 above. No physical or chemical restraints were used on Mr. Liebenberg.

9.3. Regarding whether Mr. Liebenberg signed the consent for FFP and that potassium shift affected the pacemaker resulting in abnormal heart beats.

9.3.1 According to EN Msibi, the late Mr. Liebenberg arrived at the ICU on 9 January 2022 in the evening with two units of blood products in the form of Fresh Frozen Plasma (FFP). Mr. Liebenberg had a short line in *situ* on the right-hand side, which he removed. Sr. Tshabalala and EN Mnisi inserted a new short line and explained to the patient that he would be transfused with FFP as ordered by his doctor. EN Msibi provided Mr. Liebenberg with a consent form, which he signed. Mrs. Liebenberg alleges that the signature on the consent form does not belong to Mr. Liebenberg.

9.3.2 The investigation found that Mr Liebenberg was not in the right frame of mind (unfit) to understand the contents and sign a consent form for medical treatment or procedure. His unfitness to give informed consent and sign the form is evidenced by his restlessness and irritability coupled with an odd behaviour of removing all connections and attachments for his medical treatment and monitoring.

9.3.3 The investigation established that the patient was restless, irritable and repeatedly removed all connections and attachments aimed at monitoring and improving his health condition. At that time, Mr. Liebenberg was experiencing confusion, and he could not distinguish between right and wrong and act in accordance with such appreciation. Therefore, he was unfit to sign a consent

for any medical treatment. Furthermore, the investigation found that the consent form for the Fresh Frozen Plasma was not correctly completed and had no doctor's signature, and Mr. Liebenberg was not fit to give consent to treatment.

9.3.4 Mr. Liebenberg was treated for warfarin toxicity, which is an increased INR > 3.5, the investigation established that Mr. Liebenberg had an INR of 10. According to EN Msibi, warfarin toxicity treatment included the administration of 5mg of vitamin K and transfusion with two units of Fresh Frozen Plasma. Warfarin dosage was omitted, and subsequent INR readings were reduced to 4. Mrs. Liebenberg alleged that warfarin toxicity was only diagnosed at Wilgers Hospital, but the investigation found that Warfarin Toxicity was diagnosed and treated at MH, as stated in paragraphs 9.3.7 to 9.3.8 below.

9.3.5 Furthermore, Mr. Liebenberg was experiencing Hyperkalemia, a potentially life-threatening metabolic problem caused by the kidneys' inability to excrete potassium. As a result, a potassium shift was performed using 10 units of insulin and 50% dextrose in water, as requested by PN Ferreira. The investigation found that Hyperkalemia posed an immediate risk to cardiac stability. A potassium shift was an appropriate immediate medical intervention to correct potassium levels and stabilise Mr. Liebenberg. Potassium shift did not affect the functioning of the pacemaker.

9.3.6 Mrs. Liebenberg alleged that Mr. Liebenberg was resuscitated at the ICU, but she was not contacted as a next of kin. However, the investigation found that there was no cardio-pulmonary resuscitation done on Mr. Liebenberg, but the 'resus' mentioned was for the warfarin toxicity and when potassium shift procedure was performed.

9.3.7 The investigation found that administering Fresh Frozen Plasma to treat warfarin toxicity and conduct a potassium shift was an appropriate medical intervention. Mr. Liebenberg needed urgent warfarin toxicity treatment and potassium shift intervention to correct elevated potassium levels and stabilise him.

9.3.8 The investigation found that the administration of Fresh Frozen Plasma to treat warfarin toxicity and to conduct a potassium shift was consistent with regulation 5(1) of Norms and Standards Regulations Applicable to Different Categories of Health Establishments, 2018 (Norms and Standards), which states that "*The*

health establishment must ensure that users are attended to in a manner which is consistent with the nature and severity of their health condition". The investigation found that Mr. Liebenberg was in need of an urgent warfarin toxicity treatment and potassium shift intervention to correct potassium levels and stabilise him.

9.4. Regarding whether Mr. Liebenberg's kidney failure deteriorated during hospitalisation to the extent that he needed to be put on dialysis upon arrival at Wilgers Hospital.

9.4.1 On 9 January 2022, Mrs. Liebenberg alleged that Mr. Liebenberg's condition did not improve. Mr. Liebenberg appeared very tired, lying on his bed and not eating his meal. Mrs. Liebenberg left the hospital at about 17h00. Mrs. Liebenberg alleged that Mr. Liebenberg phoned her at about 19h15 and reported that he was being transferred to the Intensive Care Unit (ICU) because his International Normalised Ratio (INR) was above 10, and he was bleeding.

9.4.2 Upon hearing about the transfer to the ICU, Mrs Liebenberg contacted Dr Khomo and requested she immediately transfer Mr Liebenberg to Wilgers Hospital (WH) in Pretoria. Mrs. Liebenberg alleged that her husband was provided with substandard care at MH. According to Mrs. Liebenberg, Dr. Khomo refused to transfer her husband to WH because it was late that evening. Mrs. Liebenberg insisted that Mr. Liebenberg should be transferred early on Monday morning. However, the investigation found that Dr. Khomo did not transfer Mr. Liebenberg to WH, because Mr. Liebenberg was not stable enough to be transported by ambulance for about 160km. Furthermore, Dr. Khomo established that Mr. Liebenberg's cardiologist would be available at WH on Monday.

9.4.3 On 9 January 2022, EN Msibi received Mr. Liebenberg from the General Unit at approximately 20h15 accompanied by EN Mashaba. Mr. Liebenberg spent a night at ICU as a High Care patient. He received medical treatment as stated at paragraphs 11.4 to 11.7 above.

9.4.4 On 10 January 2022, at approximately 06h00, Mr. Liebenberg's condition was reported as very sick. There was still no urine output, and the patient was still very restless removing oxygen, ECG leads, and the BP cuff. At approximately

10h00, Mr. Liebenberg was taken from MH in an ER24 ambulance and transported to WH in Pretoria. Mrs. Liebenberg was present during the handover of the patient from MH to an ER24 ambulance. Dr. Khomo provided the transfer letter for the patient.

9.4.5 Upon arrival at WH, Mr. Liebenberg was assessed by Dr. Makgabo, a Specialist Physician. According to Dr. Makgabo, Mr. Liebenberg exhibited significant confusion, classified as a severe level of delirium. This necessitated the use of restraints to prevent self-harm and dislodgement of essential intravenous lines and medical equipment. On assessment, Mr. Liebenberg presented with acute on chronic renal failure complicated by severe metabolic acidosis, Hyperkalemia and fluid overload in congestive cardiac failure. Liebenberg had bilateral pleural effusion and pulmonary congestion, evidenced by wheezing and crackles on chest examination, which confirmed a fluid-overloaded stage.

9.4.6 According to Dr. Makgabo, Mr. Liebenberg's renal function was closely monitored due to his abnormal blood results (Est FGR of 46 mL/min on 6 January 2022 while admitted to MH and the subsequent decline to Est FGR of 26 on 10 January 2022). Historical data from 19 April 2021 showed a consistent Est FGR of 44 mL/min which aligns with Stage 3A chronic kidney disease. There was an indication for dialysis, taking into consideration uraemic encephalopathy, as part of his delirium spectrum.

9.4.7 According to Dr. Makgabo, Hyperkalemia posed an immediate risk to cardiac stability. Coupled with severe metabolic acidosis, with a pH of 7.2, base excess of -18 and elevated lactate levels of 11.54. Mr Liebenberg was started on dialysis: sustained low-efficiency dialysis (SLED) on the evening of 10 January 2022. Mr. Liebenberg was classified as critically ill and clinical decisions were aimed at stabilising his critical condition.

9.4.8 Mrs Liebenberg alleged that Mr Liebenberg was so dehydrated to the extent that he needed to be put on dialysis upon arrival at Wilgers Hospital. The investigation found that Mr. Liebenberg had a deteriorating kidney failure, which aligns with Stage 3A chronic kidney disease. As a result, he needed dialysis to assist his body in filtering and excreting waste products from his body, as stated in paragraphs 12.5 to 12.7 above. The allegation that Mr. Liebenberg was severely dehydrated and needed dialysis was not substantiated.

9.4.9 According to Dr. Makgabo, the late Mr. Liebenberg was admitted to WH Intensive Care Unit (ICU), he remained sleepy but could respond to touch during his ICU stay. His oxygen saturations were maintained at 97% on 32% FiO2 (Fraction of Inspired Oxygen). His INR went up to 5.4, and warfarin treatment was omitted. Mr. Liebenberg's renal function deteriorated despite dialysis. His metabolic acidosis continued to worsen, and he had a cardio-pulmonary arrest on 12 January 2022, he was resuscitated with no return of spontaneous pulse. Mr. Liebenberg was declared dead at 07h37.

9.4.10 The investigation found that the assessment, treatment and prompt decision to put Mr. Liebenberg on dialysis at WH was consistent with regulation 5(1) of Norms and Standards Regulations Applicable to Different Categories of Health Establishments, 2018 (Norms and Standards), which states that "*The health establishment must ensure that users are attended to in a manner which is consistent with the nature and severity of their health condition".* The allegation that Mr Liebenberg's kidney failure deteriorated during hospitalisation at MH, to the extent that he needed to be put on dialysis urgently at WH, is substantiated. This is evidenced by Est FGR abnormal blood results during hospitalisation and historical blood results. Furthermore, Mr. Liebenberg's clinical presentation supports the diagnosis of kidney failure.

9.5. Whether Mr. Liebenberg's clinical mismanagement at MH resulted in his death.

9.5.1 Over the period 3 January 2022 until 9 January 2022 at 20h00, Mr. Liebenberg was admitted to MH and placed in the General Unit (Ward G). Mr. Liebenberg was admitted due to shortness of breath and fluid retention, tested positive for SARS-Cov-2 Coronavirus (COVID-19) and was later diagnosed with COVID-19 pneumonitis. He also presented with chronic kidney disease and decompensated heart failure. Furthermore, Mr. Liebenberg's medical history revealed that he had Type 2 diabetes mellitus, hypertension, ischemic heart disease with previous coronary artery bypass in 2015 and valve replacement on lifelong Warfarin therapy and had a cardiac pacemaker in *situ.*

9.5.2 On the fourth day of hospitalisation, Mr Liebenberg phoned his wife and he was worried about his swollen legs, which became reddish from his knees to his

toes. Mrs. Liebenberg alleged that upon admission, Mr Liebenberg was feeling better, and his legs were not swollen. Mrs Liebenberg promised to contact the treating doctor and find out the cause of the swollen legs. According to Mrs Liebenberg, it was concerning that the treating doctor was not reachable when she tried to contact her telephonically. Furthermore, Mr. Liebenberg's swollen legs were not getting better despite hospitalisation and being on diuretics.

9.5.3 Based on the abnormal blood results recorded above in paragraph 9.1.8. The investigation found that when Mr. Liebenberg was admitted to MH on 3 January 2022, his medical history, presentation and initial abnormal blood results provided a clear clinical picture. Furthermore, his abnormal blood test results identified his cardiac, renal function and coagulation parameters as areas of concern that required immediate medical treatment and close monitoring.

9.5.4 The investigation found that on 3 January 2022, the P-BNP blood test results were 1179 pg/L which was 10 x normal, whereas the normal range should be below 100 pg/L. Furthermore, in the subsequent P-BNP blood test done on 4 January 2022, the results were 1864 pg/L. Both blood test results were abnormally high and demonstrated an increase of P-BNP from 1179 pg/L to 1864 pg/L the following day, whereas the normal range should be below 100 pg/L. The investigation established that these blood results clearly indicated that Mr. Liebenberg was experiencing heart failure, and the subsequent increase of P-BNP to 1864 pg/L was a sign of worsening heart failure.

9.5.5 The investigation found that in the S-Creatinine blood test done on 3 January 2022, the results were 151umol/L, whereas the normal range is 71 – 115 umol/L. Furthermore, in the subsequent S-Creat blood test done on 04 and 05 January 2022, the results were 136 umol/L and 154 umol/L, respectively. High levels of creatinine in the blood were an indication of kidney function problems, such as kidney failure. The deteriorating kidney function was further confirmed by abnormal blood results of the Est GFR (Estimated Glomerular Filtration Rate) test ranging between 41-40mL/min over 3 days, whereas the normal range for Est GFR is >60mL/min.

9.5.6 The investigation assessed whether a reasonable specialist doctor, upon examining a patient presenting with Mr. Liebenberg's similar abnormal blood

results and similar clinical presentation, would have reasonable foreseeability of permanent harm occurring on the patient in the form of a heart or kidney failure, whether a reasonable specialist doctor would have taken precautionary measures to prevent such permanent harm from materialising. The investigation found that over the period of four days from the date of admission, Mr. Liebenberg's clinical presentation and abnormal blood results as stated in paragraphs 9.5.3 to 9.5.5 above, clearly indicated that his cardiac function and kidney function were deteriorating, and he needed higher or intensive level of healthcare and close monitoring. However, Dr. Khomo decided to keep a seriously ill patient with a worsening kidney failure and worsening heart failure in a general ward under the direct care of an enrolled nurse with a limited scope of practice.

9.5.7 The investigation found that abnormal blood results, as stated in paragraphs 9.5.4 and 9.5.5 above, indicated that Mr. Liebenberg was a seriously ill patient with both heart failure and kidney failure on warfarin therapy. Furthermore, this observation should have informed a decision to adjust the level of care provided to Mr. Liebenberg to high care as soon as possible to ensure adequate treatment, effective close monitoring of his deteriorating condition, and strict fluid intake and output. However, the investigation found that Mr. Liebenberg was kept at the General Unit for a period of seven days (3 to 9 January 2022), despite the consistent abnormal blood results and the very concerning clinical presentation.

9.5.8 On 4 January 2024, Mr. Liebenberg was placed on a Strict Intake and Output, as per Dr. Khomo's orders and prescription. According to medical records, the intake and output were marked as monitored from 04/01/2022 to 09/01/2022. The investigation found that Mr. Liebenberg was allowed to pass urine in the bathroom while unsupervised, which made it impossible to reliably measure his urine output.

9.5.9 The investigation found that Mr. Liebenberg was placed on strict intake and output monitoring. However, he was allowed to pass urine in the bathroom while unsupervised; this contributed to improper monitoring of the urine output. The investigation found apparent discrepancies recorded on the Fluid Balance Sheet on 07/01/2022; the input was 2444 ml, and the output was 120 ml. On

08/01/2022, the input was 1920 ml, and the output was 180 ml. On 09/01/2022, the only thing recorded at 09h00 was juice 200ml, and nothing was recorded for the rest of the day, nil output.

9.5.10 The investigation found that failure or omission to provide adequate treatment and adhere to Strict Intake and Output monitoring for a patient with kidney failure coupled with a worsening heart failure amounted to clinical mismanagement and was inconsistent with regulation 5(1) of Norms and Standards Regulations Applicable to Different Categories of Health Establishments, 2018 (Norms and Standards), which states that "*The health establishment must ensure that users are attended to in a manner which is consistent with the nature and severity of their health condition".*

9.5.11 The investigation found that the laboratory results of an abnormal INR of 10 were available and communicated to the ward on 9 January at 05h44 in the morning. However, the abnormal INR results were not communicated to the doctor early or acted upon. The investigation found an unreasonable delay of 13 hours between the receipt of the abnormally high INR of 10 at 05h44 in the morning to 19h15 in the evening when Mr Liebenberg reported that he was being transferred to ICU because he had INR of 10. The investigation found that an increased INR above the therapeutic range had a potential risk of bleeding incidents; such patients should be urgently attended to and closely monitored and where necessary adjust or omit the treatment accordingly.

9.5.12 The investigation found that Mr. Liebenberg was not treated in a manner that was consistent with the severity of his condition as a patient on warfarin therapy, with worsening heart failure and having a pacemaker in *situ.* The allegation that Mr. Liebenberg was clinically mismanaged and provided with substandard care is substantiated to the extent that there was an unreasonable delay of 13 hours for healthcare professionals to become aware and respond to the abnormal INR of 10. Such an act or omission was found to be inconsistent with regulation 5(1) of Norms and Standards Regulations Applicable to Different Categories of Health Establishments, 2018 (Norms and Standards), which states that "*The health establishment must ensure that users are attended to in a manner which is consistent with the nature and severity of their health condition".*

9.5.13 The investigation found that there was clinical mismanagement of Mr. Liebenberg at MH, as stated in paragraphs 9.5.3 – 9.5.12 above. However, whether there is a causal link between clinical mismanagement and the cause of death could not be specified and substantiated without a postmortem report. Mr. Liebenberg had other comorbidities, such as heart failure, hypertension, chronic kidney failure, COVID-19 pneumonitis, and diabetes, that could have independently or jointly contributed to the cause of death.

10. LIMITATIONS

10.1. The investigation found that the nurses allocated to provide direct care to Mr. Liebenberg were enrolled nurses (*i.e.* EN Msibi and EN Mashaba) who worked under the indirect supervision of a professional nurse. The allocation of enrolled nurses to look after a patient with high acuity proved to be a limitation due to the limited scope of practice for enrolled nurses. In certain instances, it was impossible for enrolled nurses to observe, diagnose and link their observations with the underlying condition and the corresponding treatment or urgency required. The investigation found that there was an inappropriate scope of deployed healthcare professionals when MH allocated enrolled nurses to look after a patient with high acuity.

10.2. The investigation noted with concern that failure or neglect to adhere to strict fluid intake and output monitoring for a patient with heart and kidney failure was a serious omission. The manner in which the issue of being restless, agitated, confused, and dislodged essential intravenous lines and medical equipment at MH demonstrated the shortcomings of a limited scope of practice of enrolled nurses when dealing with high-acuity patients.

11. COMMENTS TO THE PROVISIONAL REPORT

11.1 The provisional investigation report was issued to the Complainant, Mediclinic National Client Experience Manager and Health Establishment Management for inputs or comments within seven days. Due to the festive season holidays and the unavailability of key personnel to peruse the report and provide inputs, the Mediclinic Head Office requested an extension to submit inputs, and an additional three weeks were granted.

11.2 On 17 January 2025, MH Hospital Manager provided the Ombud with written feedback on the provisional investigation report, as follows:

(a*). "MH confirmed that it would not be productive for them to object to the contents of the report.*

(b). MH committed to improve their desired high standards of patient care and continue to deliver quality care to all patients.

(c). MH would like to apologise to Mrs Liebenberg for the experience she received, which did not meet the MH standards of care.

(d). MH acknowledged that there was a 13-hour delay in responding to the apparent abnormal INR results. MH recognise that they should improve communication between nursing staff and attending doctors to ensure timely responses in critical situations.

(e). MH has already taken specific steps to facilitate the implementation of the Ombud's recommendations and will provide feedback as indicated in the Recommendations".

12. CONCLUSION

12.1 Unfortunately, Mr. Liebenberg died; the investigation found that over the period 03 to 09 January 2022, his condition deteriorated drastically. The allegations of clinical mismanagement were substantiated to the extent of failure to adhere to strict Intake and output monitoring and management of a patient with kidney failure coupled with worsening heart failure. The investigation found an unreasonable delay of 13 hours in dealing with an INR of 10. Furthermore, the investigation found that there was failure or neglect to interpret the abnormal blood results properly, clinical presentation and to adjust medical treatment accordingly.

12.2 However, whether there is a causal link between clinical mismanagement and the actual cause of death could not be substantiated without a postmortem report. Considering that Mr Liebenberg had other comorbidities, such as heart failure, hypertension, chronic kidney failure, COVID-19 pneumonitis, and diabetes, these could have contributed individually or, more likely, jointly to the cause of death.

13. RESOLUTION

13.1 Regulation 41(1)(a)(iv) of the Procedural Regulations states that: *"at any time, the Ombud may decide to take no further action on a complaint if the Ombud reasonably considers that the complaint has been resolved or otherwise appropriately finalised by the Ombud."* This complaint is considered finalised and will be closed in Ombud's complaints management system, as no further action needs to be taken on this complaint, which has been resolved and appropriately finalised by Ombud.

14 RECOMMENDATIONS

14.1. Disciplinary Hearings

It is recommended that the MH should identify the healthcare professionals assigned to the care of Mr. Liebenberg who did not perform their duties diligently and in accordance with clinical and ethical guidelines when providing care to Mr. Liebenberg. All identified healthcare professionals should be allowed to appear before a disciplinary hearing and be disciplined accordingly within three months of receipt of the final investigation report. The progress and the outcome of the disciplinary procedure should be reported to the Health Ombud every six (06) months until concluded.

14.2 Record keeping

It is recommended that MH put measures in place to monitor, safeguard, and evaluate proper record keeping of all patients' medical records. All health care professionals should record their interventions, treatment prescribed or given, patient condition, tests, or procedures done on a patient within three months of receipt of the final investigation report.

14.3 **Management of Abnormal Blood Results**

It is recommended that MH should develop a Standard Operating Procedure (SOP) on how to handle and manage laboratory abnormal blood results with urgency. MH should plan and implement a strategy to track and distribute laboratory abnormal blood results to doctors as soon as the results are available within three months of receipt of the final investigation report. The health establishment should provide evidence of such SOP to the Health Ombud.

14.4 **Management of Medical Emergencies**

It is recommended that the Quality Assurance Coordinator facilitate the in-service training of all healthcare professionals on how to deal with medical emergencies for patients on warfarin therapy and administer appropriate treatment. The attendance registers should be available to the Health Ombud for inspection within three months of receipt of the final report.

14.5 **Complaints Management**

It is recommended that all complaints be handled and resolved at MH by the same team with both clinical and customer care expertise in accordance with the National Guidelines on Handling of Complaints, Compliments and Suggestions. Furthermore, the health establishment should keep a detailed record of the redress meetings held with the complainant and the outcome of such redress meetings within three months of receiving the final investigation report.

14.6 **Psychosocial Support**

It is recommended that MH should provide Mrs. Liebenberg and her daughter with psychosocial support services to help them deal with the loss of their loved one in the given circumstances. The arrangement and provision of psychosocial support services should be in place within three months of receipt of the final report. The outcome of the psychosocial support should be reported to the Health Ombud.

15. REFERENCES

15.1 Births and Deaths Registration, 1992 (Act No. 51 of 1992).

15.2 National Health Act, 2003 (Act No. 61 of 2003). National Health Amendment Act, 2013 (Act 12 of 2013).

15.3 Procedural Regulations Pertaining to the Functioning of the Office of Health Standards Compliance and Handling of Complaints by the Ombud, 2016.

15.4 Health Professionals Council of South Africa, Guidelines for Good Practice in health care professions: Ethical and professional rules of Health Professions Council of South Africa as promulgated in the government gazette R717/2006 (2nd ed.), Booklet 2, 2007.

15.5 National Policy to Manage Complaints, Compliments, and Suggestions in the Public Health Sector of South Africa, July 2016. South African National Department of Health.

15.6 Setor K, Kunutsor and Jari A, Renal Complications in COVID-19: A Systematic Review and Meta-Analysis: Annals of Medicine 2020, Vol. 52, 345-353.

15.7 Kang Y. and Chen T. et al: Cardiovascular Manifestations and Treatment Considerations in COVID-19: University of Pennsylvania, 2020.

15.8 National Guidelines on Management of Medical Emergencies.

15.9 Mediclinic Highveld Internal Response to Complaint Letter.

15.10 Mediclinic Complaints Management Minutes and Outcome.

15.11 Mr. Liebenberg Laboratory Blood Results and Medical Records.

16. APPENDICES

16.1 Mrs. Liebenberg's letter of complaint to the Health Ombud.

16.2 Mediclinic Highveld Management Response to the Allegations.

16.3 Notice of Complaint.

16.4 Mr. Liebenberg's: Laboratory Results.

16.5 Mr. Liebenberg's Death Certificate.

16.6 Mediclinic Highveld Internal Response to Complaint Letter.

16.7 Mediclinic Complaints Management Minutes and Outcome.

(NB: Only **Part A**: Appendices are attached to this report)

Annexure "1"

My husband was admitted to Mediclinic Trichardt on 3/1/22 for waterretension.

On 7/1 he was feeling good but worried about his legs that turn red on the 6th from his knees to his toes and it was swollen. The dr was in the ward and I discussed his condition with her and told her that we are worried about the red legs and that I am 100% sure it can't be waterretension after 5 days in hospital. I asked her to contact his dr at Wilgers but she never did. She then went away for the weekend and dr Okoli was standing in for her.

The next day the 8th my husband's condition totally changed. He told me he was feeling confused, was very tired and was sleeping all the time. I asked the nurse if he is ok because I was worried about him and she reply, "he is just fine". I thought that maybe he is so sleepy because of the medicine. He also did not eat, and his lunch was standing there.

The 9th is condition was the same. Did not eat, very tired and was just lying there. I left the hospital at 17h00 and 19h15 my husband phoned me to say that they transfer him now to icu because his INR is more than 10 and he was bleeding.

I then asked the dr to transfer him immediately to Wilgers but she refused because according to her it was to late. I insisted then that she transfer him early on Monday. On arrival at the hospital my husband was lying in icu/high care with only a pulse monitor, no drip no oxygen nothing. The nurse told me that there is nothing wrong with my husband and that he is just lazy. He was so sick he couldn't lift his head.

I logged a complaint the same day 10/1 with Mediclinic. On arrival at Wilgers the doctor phoned me to ask for permission to restraint my husband for dialysis. I was shocked when he told me that my husband is severely dehydrated "dried out" and in need of dialysis. He was diagnosed with renal failure complicated by severe metabolic acidosis, hyperkalemia and congestive cardiac failure. Damage was too big and my husband passed away on 12/1.

I reported the dr to the medical board and tried to get answers from Mediclinic but they refuse to answer all my questions.

I requested all the blood results, got a copy of the hospital file and Wilgers also gave me a full report on what my husband condition was on arrival.

In the hospital file it is noted on the 8th and the 9th "patient reported that he is feeling sick". "Patient appears weak and sick and needs close monitoring" yet absolutely nothing was done. The dr that was standing in for dr Khomo only came to see him 17h30 on the 8th although he reported early morning that he is not feeling good. Nothing was done by dr Okoli. Same on the 9th he reported early morning he is not feeling good and blood tests was done 4h40. The results are devastating. INR was more than 10, kidney count drastically dropped to 31, creatine levels dangerously high. Liver function S-GGT 199, S-Alt 1763, S-Ast 1921 and P-BNP was 3238.

Now this is shocking with these result Mediclinic and the dr say that my husband my was fine when he was transferred to Wilgers on the 10th . He was lying in a normal ward from 4h40 on the 9th when bloodtests was done and the dr only came to see him 15hours later at 19h15 on the 9th. They transferred him to icu but even in icu he was without a monitor or a drip.

I feel my husband was neglected. It is the responsibility a qualified nurse to report to the senior in the ward if a patient's condition deteriorated but Mediclinic say it was not necessary to report because his other vitals like blood pressure ect was fine. If this is the case this should be make public and I will tell my story when everything has been finalized.

If there is no doctor and a patient's condition deteriorated, the senior in the ward should make sure that they contact the dr or any other doctor that are available. But Mediclinic don't care No disciplinary action was taken against staff. My husband passed away because of negligence here at Mediclinic. His kidneys, liver heart everything was in trouble because he was severely dehydrated and because his INR that was more than 10. He was also diagnosed with warfarin toxicity at Wilgers. Bloodtest show from the 3rd to the 10th how his condition deteriorated under the care of Mediclinic Trichardt.