



CORONERS COURT OF QUEENSLAND

FINDINGS OF INQUEST

CITATION: Inquest into the death of Hazel Mary Ritchie Brodie

TITLE OF COURT: Coroners Court

JURISDICTION: BRISBANE

FILE NO(s): 2020/5363

DELIVERED ON: 22 July 2025

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HEARING DATE(s): 1, 2 and 3 April 2025

FINDINGS OF: Melinda Zerner, Coroner

CATCHWORDS: Coroners: Inquest, Chronic Obstructive Pulmonary Disease; Heart Failure; Decompensated versus Compensated Heart Failure; Treatment of patient with multiple co-morbidities including heart failure; Fluid Balance; Daily Weights.

REPRESENTATION:

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Brodie Family: Mr K. Brodie, Self-Represented

Gold Coast University
Hospital:

Mr E. Hooper, MinterEllison

Gold Coast Private
Hospital:

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Introduction

1. Mrs Hazel Mary Ritchie Brodie was born on 4 July 1938 and died on 27 August 2017 at the Gold Coast Private Hospital (**GCPH**). She was 79 years old. She was a loving wife, mother, and grandmother.
2. Mrs Brodie had a history of several medical co-morbidities. Notably this included severe Chronic Obstructive Pulmonary Disease (**COPD**) and heart failure. She was treated at both the Gold Coast University Hospital (**GCUH**) and the GCPH over a number of years.
3. Mrs Brodie had three hospital admissions in the first half of 2017. One for a small bowel obstruction (**the January GCUH admission**), one for exacerbation of her COPD (**the April GCUH admission**), and one for investigations for abdominal pain, anorexia, and weight loss (**the May GCPH admission**).
4. Mrs Brodie was seen as an outpatient at the GCUH between her hospital admissions. On 9 June 2017, she was reviewed by her cardiologist, Professor Howes, who found *‘from a cardiac point of view she remains fairly well’*¹ and requested he review her in 12 months’ time. Her respiratory physician was Dr Basham. There was a documented physical and cognitive decline in Mrs Brodie in 2017.
5. On Saturday 19 August 2017, Mrs Brodie presented to the GCPH emergency department (**ED**) with abdominal pain, and a two week history of nausea, and vomiting (**the August GCPH admission**).
6. On 20 August 2017, Mrs Brodie was diagnosed with left ventricular failure (**LVF**). Her condition deteriorated and on 27 August 2017 at 11pm, Mrs Brodie was declared deceased.
7. Mrs Brodie’s husband and son have raised concerns about the treatment Mrs Brodie received at the GCPH, and that it caused or contributed to her passing. I have found there were some missed opportunities by two of the physicians caring for Mrs Brodie at the GCPH.

The Role of a Coroner

8. On 21 May 2024, the State Coroner requested I review the concerns raised by Mrs Brodie’s husband about the health care provided to Mrs Brodie which may have caused or contributed to her death.
9. Following some further investigations, on 6 November 2024, I accepted Mrs Brodie’s death was a reportable death (health care related death) and determined pursuant to s 28(1) of the *Coroners Act 2003* (**Coroners Act**), it was in the public interest to hold an inquest into her death.

¹ Ex C1, p344

10. The purpose of my investigation is to establish the facts, not to cast blame or determine criminal or civil liability. My investigation is about attempting to find the root cause of the incident that precipitated Mrs Brodie's death and to consider whether appropriate remedial steps have been taken.
11. I am not able to make adverse findings against, or comments about individuals, unless the evidence provides a comfortable level of satisfaction that they caused or contributed to Mrs Brodie's death.
12. As required by s45(2) of the Coroners Act, I am required to make findings as to:
 - a. Who the deceased person is; and
 - b. How the person died; and
 - c. When the person died; and
 - d. Where the person died; and
 - e. What caused the person to die.
13. At the Pre-Inquest Conference (**PIC**) it was agreed that in addition to the findings required by s 45(2) of the Coroners Act, the following issues would be explored:
 - a. The adequacy and appropriateness of the treatment and care provided to the deceased by the Gold Coast University Hospital between January and August 2017 with respect to the management of the deceased's heart failure.
 - b. The adequacy and appropriateness of the treatment and care provided to the deceased by Dr Feather, Dr Kapadia, Dr Thompson and Dr Deshpande during the period 19 August 2017 through to the deceased's death with respect to the management of the deceased's heart failure.
 - c. Considering the deceased's medical co-morbidities, was there any clinically justifiable medical intervention that would have altered the outcome for the deceased during her hospitalisation from 19 August 2017 and her death. (**Coronial Issues**)
14. The Coronial Issues defined the scope of the inquest. From those issues several facts concerning the care Mrs Brodie received required determination by me.

15. The inquest was held over three days commencing on 1 April 2025. The Brief of Evidence (**BOE**) was tendered at the commencement of the inquest. Six witnesses were called to give oral evidence.
16. I engaged Dr Scott McKenzie, Cardiologist and General Physician to review Mrs Brodie's clinical records with a view to essentially identifying whether there were any deficits in the care Mrs Brodie received which caused or contributed to her death. I acknowledge Dr McKenzie is a specialist who works in Advance Heart Failure at The Prince Charles Hospital.
17. I have found the overall treatment and care provided to Mrs Brodie by GCUH between January and August 2017 for her heart failure was adequate and appropriate. It is therefore not necessary for me to outline in any detail the care Mrs Brodie received from the GCUH prior to August 2017. It is necessary to consider the care she was provided during the August GCPH admission.
18. I thank counsel assisting, Mr Ken Brodie (Mrs Brodie's son) and the parties' representatives for their assistance during the Inquest and for their written submission following the hearing, the last of which I received on 27 June 2025.
19. At the outset, I express my condolences to Mrs Brodie's family and friends for their loss.

The August GCPH Admission

20. On Saturday 19 August 2017, Mrs Brodie was admitted to the GCPH under the care of a general surgeon, Dr Stephen Markey.
21. Dr Markey said he would discuss Mrs Brodie with Dr Thompson, the on call respiratory physician regarding a pleural effusion identified on a chest x-ray, and her emphysema.²
22. In the early hours of 20 August 2017, there was a medical emergency team (MET) call due to Mrs Brodie complaining of '*Retrosternal Chest Pain*'. Her electrocardiogram (**ECG**) showed normal sinus rhythm with no acute changes. The impression was '*resolving chest pain on the background of IHD*' (ischaemic heart disease).³
23. On 20 August 2017, Dr Thompson reviewed Mrs Brodie. He recorded she presented with two weeks of nausea and vomiting. She denied worsening dyspnoea, cough, or chest pain. He referred to her recent chest pain, ECG and Troponin level. He wrote that she had '*Cardiomegaly (new) with pulmonary venous congestion, small (r) basal effusion*'. On assessment she had an elevated jugular venous pressure (**JVP**) of 4-5cm. His finding was that Mrs Brodie had LVF (left ventricular

² Ex C2.1, p41

³ Ex C1.1, p43

failure) due to query an ischaemic event despite previous angiography. He ordered intravenous **(IV)** Furosemide (diuretic) 40mg stat and commenced her on oral Furosemide 40mg each morning. He recorded, 'Cardiac review – Dr Kapadia'.⁴

24. Dr Markey noted the cardiology review ordered by Dr Thompson and asked that Dr Kapadia advise on intravenous fluids when he sees Mrs Brodie.⁵
25. Later that day Dr Kapadia reviewed Mrs Brodie. He noted her chest pain was not pleuritic (from the lungs); that she had an irregular pulse of 84 and was in atrial fibrillation (abnormal heart rhythm); and that she had a JVP of four centimetres. In oral evidence, he explained this is a feature of heart failure.⁶ He noted a heart murmur which he explained may have been representative of mitral valve leakage. He also noted she had some basal crackles in the lungs which he said could be from fluid but also due to her age and immobility. In explaining his clinical note, he stated,

*So there are some features of heart failure, I would say... but JVP, I wouldn't be too impressed by it, and ...murmur could – again, at this age, many people have some valvular regurgitation -ah – but that could be significant, may not be, you know.*⁷

26. Dr Kapadia ordered an echocardiogram (**Echo**). The Echo results were reported on 21 August 2017 and indicated Mr Brodie's left ventricle was mildly dilated and that she had an Ejection Fraction (**EF**) of ~33%.⁸ Dr Kapadia did not see Mrs Brodie again after his consultation of 20 August 2017.
27. On 22 August 2017, Dr Feather, respiratory physician made his first entry in the clinical record. Dr Thompson had been covering him for the weekend. He noted Mrs Brodie previously had LVF with preserved EF but 'now EF 33%. Angio x 3 – no structural IHD'.⁹ Dr Feather proposed to go through her 'GCUH notes in detail' the following day.
28. Mrs Bodie was noted by nursing staff before Dr Feather reviewed her on 22 August 2017 to be confused. She had been wandering overnight using her wheelie walker and requiring redirection back to bed multiple times. She was also incontinent of urine.¹⁰ Dr Feather continued to review Mrs Brodie each day until her passing on 27 August 2017.

⁴ Ex C2.1, p44-45

⁵ Ex C2.1, p46

⁶ D2-8.0

⁷ D2-8.15

⁸ Ex C2.1, p48

⁹ Ex C2.1, p49

¹⁰ Ex C2.1, p49

29. No acute reasons for Mrs Brodie's nausea could be established and from the clinical records, the last surgical review by Dr Markey appears to have been on 23 August 2017 wherein he recorded, '*p much the same*'.¹¹

Factual Circumstances

30. Who, When, Where and What caused Mrs Brodie to die are not in contention. How Mrs Brodie died is.
31. At the close of evidence at the Inquest, I received oral submissions regarding the factual issues which had fallen away and those which had been agreed to by the parties. The agreed facts include:
- a. There has been no criticism of Dr Basham's respiratory management (at the GCUH) of Mrs Brodie. Dr McKenzie's evidence is that Dr Basham appropriately referred Mrs Brodie to cardiology services.
 - b. It is accepted that Mrs Brodie had a degree of heart failure in January 2017.
 - c. The heart failure medication prescribed on discharge by the GCUH in January 2017 was appropriate given Mrs Brodie's recent renal dysfunction and hospital admission.
 - d. It is more likely than not Mrs Brodie did not have symptoms of decompensated heart failure during her GCUH April 2017 admission.
 - e. It is more likely than not that the heart failure medications prescribed to Mrs Brodie up until her discharge from GCUH in May 2017 were reasonable.
 - f. Given Mrs Brodie was already linked into the GEMITH (Geriatric Evaluation and Management in the Home) program and had previously participated in the community heart failure program, it was reasonable (for GCUH) not to have re-referred her to the community heart failure service.
 - g. The evidence suggests that with respect to Professor Howes' intent to review Mrs Brodie in 12 months following the 9 June 2017 review at the GCUH, it was unlikely Mrs Brodie would have been seen in Professor Howes' clinic before her August

¹¹ Ex C2.1, p59

hospitalisation to the GCPH (Dr McKenzie suggested it was his preference a review be held in 6 weeks to 3 months).

- h. It was Dr McKenzie's opinion that Dr Deshpande's (ED physician at the CGPH) referral of Mrs Brodie to a general surgeon (Dr Markey) was reasonable given her medical history and presenting symptoms.
- i. The evidence supports that given Mrs Brodie's symptoms and that she was on Digoxin during her August admission (at the GCPH) it would have been appropriate for a test of her digoxin serum levels to have been undertaken prior to the decision by Dr Feather to cease her Digoxin on 24 August 2017.

Factual Issues requiring determination

Should an Echocardiogram have been ordered by the GCUH in January 2017?

- 32. Dr Rahman, cardiologist and GCUH Clinical Director of Specialist Services opined the clinical assessment of a patient determines if echocardiography results would change a patient's management. He does not think an Echo would have changed Mrs Brodie's management and that it was not warranted.
- 33. Dr McKenzie acknowledged that the May 2017 Echo demonstrated only mild reduced EF but thought an Echo in January 2017 might have '*heightened the sense of urgency*' for clinicians to ensure Mrs Brodie maintained her heart failure medications (they had been restricted due to her recent renal dysfunction).
- 34. While I accept it may have been prudent for clinicians at the GCUH to order an Echo in January 2017 because of Mrs Brodie's symptoms of heart failure and her known cardiac history, I do not consider it changed the outcome for Mrs Brodie. Her heart failure had improved and there was no evidence she was suffering from decompensated heart failure during her April 2017 admission to the GCUH. Further, when Professor Howes reviewed Mrs Brodie on 9 June 2017, he thought '*from a cardiac point of view she remains fairly well*'. This in the context he was privy to her longitudinal cardiac history, including her past episode of acute heart failure prior to 2017.

Should Irbesartan have been introduced by the GCUH?

- 35. Irbesartan is an angiotensin II receptor blocker (ARF) which is sometimes used in patients to assist in managing heart failure.
- 36. Following Mrs Brodie's January 2017 admission to the GCUH, due to her renal function, her cardiac medications were not all recommenced. By 14

March 2017, her records indicated she had been recommenced on Spironolactone but not Irbesartan.

37. Dr Rahman considers it was reasonable not to recommence the Irbesartan given Mrs Brodie's co-morbidities and that the risks did not outweigh the benefits. He referred to Mrs Brodie's history of postural hypotension, her fragility and the use of a four-wheel walker, her kidney dysfunction, and her improved EF by May 2017.
38. Dr McKenzie accepted Mrs Brodie's situation was complex and said the opinion of Dr Rahman was not unreasonable. He thought would have approached Mrs Brodie's management differently. He stated,

I think we've got a lady who we know had has a reduced ejection fraction a few years prior, and we know that when we stop these medications, the reduced ejection fraction has a tendency to occur, which we eventually do see in her as well. And that was the real priority, to try and maintain at least some of – some dose of these medication as much as possible. So in the event she's had an intolerance of one of them, and there are many AR – many drugs in that family of ACE inhibitors, ARBs, that are available to choose from, I would favour a different one at her lower dose at a different time of day and making sure other circumstances were right to support that as best possible.¹²

39. Professor Howes who had treated Mrs Brodie for a lengthy period was satisfied with her cardiac status in June 2017 and did not consider an adjustment to her medications was required. This was following his review of the May 2017 Echo and his consultation with Mrs Brodie on 9 June 2017. He was satisfied to the point that he did not consider that she required an outpatient cardiology review for 12 months.
40. I accept the decision to recommence Mrs Brodie's Irbesartan comes down to the clinical judgement for the treating physician and I am not critical of the treatment Mrs Brodie received from Professor Howes at the GCUH.

Did Mrs Brodie have compensated or decompensated heart failure during her August 2017 admission to the GCPH?

41. Dr McKenzie was asked to explain what compensated versus decompensated heart failure is. He stated:

Compensated heart failure is a situation where the patient is not retaining excess fluid, so the total body fluid is normal, which is a vague concept, but clinical science of how you determine that- well there are a variety of signs to determine that, and that there are haemodynamics are normal, that being the blood pressure and the

¹² D3.8.2-11

*delivery of blood to the body's organs, and the heart rate are all in the normal kind of range.*¹³

*Decompensated would be the absence of all those parameters.*¹⁴

42. From this explanation I understand a patient with symptoms of decompensated heart failure will be retaining fluid which could cause symptoms such as shortness of breath and swelling in the legs and ankles.
43. Dr McKenzie gave evidence that while '*there are echo features that give you clues*'¹⁵ there are also clinical signs that will indicate whether a patient is experiencing compensated versus decompensated heart failure.¹⁶ Further, he advised there are also radiological signs, and that all this together assists in determining a diagnosis.¹⁷ It though is not straightforward.
44. Regarding the Echo and the EF, Dr McKenzie states,
- You can have a patient with perfectly compensated heart failure, terrible ejection fraction. You can have a patient with severely decompensated heart failure and very normal ejection fraction. Those states are all conceivably possible. You could also get a situation – talking about left and right heart failure – of having right heart failure decompensation without much or any evidence of left heart failure decompensation even though both – even though the heart as a whole is failing, failed, and the clinical signs of left heart failure are very minimal, particularly when it's been going on for a long time, which is a trap that happens here a bit.*
45. Concerning Mrs Brodie, he said the EF was worse and that should raise the alarm about potential decompensation.¹⁸ He also said her pulmonary artery pressure was quite a bit higher than before, noting though there are other differentials.¹⁹
46. On 20 August 2017, Dr Thompson diagnosed Mrs Brodie as having LVF (left-sided heart failure) which was based on his clinical assessment wherein he found Mrs Brodie had cardiomegaly with pulmonary venous congestion; small right basal effusion; and a raised JVP of 4-5cm.
47. I accept Dr Thompson determined Mrs Brodie was symptomatic because of her heart failure due to his prescription of a stat dose of 40mg of IV Furosemide, and then an ongoing oral dose of Furosemide each morning.

¹³ D3.13.5-11

¹⁴ D3.13.12-13

¹⁵ D3.13.31-32

¹⁶ D3.13.28-29

¹⁷ D3.13.26

¹⁸ D3.1-13.48

¹⁹ D3.14. 38

48. On 22 August 2017, Dr Feather noted Mrs Brodie had RVF (right ventricular failure/LVF and that her previous LVF was with preserved ejection fraction but that it was now 33%. Dr Feather did not document a clinical assessment in the records but in oral evidence says when he examined her, he did note a raised JVP and while he cannot remember much, he thought she had some peripheral oedema.²⁰ He did not alter the prescription by Dr Thompson of the oral Furosemide.
49. In evidence, Dr Kapadia acknowledged the chest x-ray conducted on 19 August 2017 showed 'some features of heart failure' but that it was 'very hard to say whether it's right or left' heart failure.²¹ He was not too impressed by the JVP, or the murmur given Mrs Brodie's age.²²
50. Counsel Assisting asked Dr McKenzie, 'so taking that whole clinical picture together, the signs and symptoms, the scans, the X-rays, the bloods, the fluid balance charts, is it your opinion that Mrs Brodie's was experiencing heart failure, decompensated heart failure, during her admission to the Gold Coast Private Hospital in August 2017?', he replied,

I do think that the bulk of that evidence available now suggests that that was the case, yeah.
51. While Dr McKenzie said 'now', it is noted Dr Feather (who is not a cardiologist) had all the relevant information when he was caring for Mrs Brodie, and further that he had access to her GCUH records which he says he had reviewed in detail (he though understandably cannot now remember if he had seen her previous Echo²³). In his first entry in the GCPH clinical record on 22 January 2017, Dr Feather refers to Mrs Brodie not only having severe COPD but also right and left heart failure. This seemed to be the starting point for his clinical decision making in the context of Mrs Brodie presenting with nausea, vomiting and poor oral intake.
52. In evidence Dr Feather said Mrs Brodie's raised JVP would 'normally be considered a sign of right heart failure', that Mrs Brodie's peripheral oedema was 'multifactorial, and the crackles on Mrs Brodie's lungs were 'pretty nonspecific' in the context of Mrs Brodie's lung disease.²⁴
53. I acknowledge this was a complicated clinical presentation given Mrs Brodie's medical history of COPD, confusion, gastrointestinal symptoms, her age, and her general fragility. There was though substantive evidence to support that Mrs Brodie's heart failure had progressed:

²⁰ D2.38.14

²¹ D2.8.18

²² D2.8.16

²³ D2.39.2

²⁴ D2.39

- a. Echo with EF of 33% and raised arterial pressure;
 - b. Raised JVP;
 - c. Basal crackles on examination;
 - d. Chest x-ray/CT scan – pleural effusions;
 - e. Biochemistry markers ²⁵ (for example very high NT-pro BNP²⁶); and
 - f. A constant elevated Troponin level (a maker of heart muscle damage)²⁷.
54. On balance, I accept Mrs Brodie was suffering decompensated heart failure during her admission to the GCPH in August 2017.
55. The interventions for heart failure outlined by Professor Rahman, are:

*The assessment of fluid status in a patient with a known history of heart failure with systolic dysfunction is primarily clinical. Management priorities focus on maintaining fluid balance through careful regulation of intake and output, optimising medication, and addressing underlying causes – such as controlling ventricular rate in the presence of atrial fibrillation.*²⁸

Was Mrs Brodie's treatment by Dr Kapadia appropriate?

56. For the reasons detailed below, I find that,
- a. Dr Kapadia's assessment of Mrs Brodie on 20 August 2017 which primarily only focused on her chest pain was a missed opportunity. This in the context of her history, and clinical signs. A more thorough assessment was required.
 - b. There was a sufficient trigger for a prudent cardiologist to have had a conversation with Dr Thompson about the results of the Echo, which in turn would have caused for there to have been a conversation between Dr Kapadia and Dr Feather. This did not occur and was again a missed opportunity.
57. Dr Kapadia had been asked to review Mrs Brodie's chest pain by Dr Thompson, and her IV fluid status by Dr Markey. Dr Kapadia had access to Mrs Brodie's clinical record. Dr Thompson had written in his note earlier in the day 'CXR (19 & 20.8) cardiomegaly (new) with pulmonary venous congestion, small (R) basal effusion. CT abdo (19.8)

²⁵ Addressed in more detail below.

²⁶ D3.41.39

²⁷ D3.23.14

²⁸ Ex B4.1, p3, para 16(a)

heterogenous liver density (R) basal pleural effusion' and noted Mrs Brodie had LVF.²⁹

58. Dr Kapadia does not recall if he saw Mrs Brodie's chest x-ray of 19 August 2017 when he reviewed her on 20 August 2017. He says if he did, he would have commented on it.³⁰ I accept it has been eight years since Dr Kapadia reviewed Mrs Brodie and that he cannot now remember if he saw Mrs Brodie's chest x-ray, but given he made no reference to the x-ray in his clinical note, I find it is more probable that he did not review the chest x-ray.
59. Dr Kapadia does not specifically recall reviewing Mrs Brodie's medications and says he would go through a patient's chart but that it was not something that he would write in his note.³¹ I accept it is likely he reviewed Mrs Brodie's medications.
60. Dr Kapadia acknowledged considering Mrs Brodie's gastrointestinal symptoms one could make a case for checking her Digoxin level and that would have been entirely appropriate.³² He though advised he did not do them routinely. In the case of Mrs Brodie, he was of the opinion with her degree of kidney impairment her usual dose was appropriate.³³ He thought it unlikely Mrs Brodie had digoxin toxicity.³⁴
61. When asked in evidence to consider the results of the chest x-ray, he agreed it showed features of heart failure on the back of COPD.³⁵ He explained the reference to CCF (congestive cardiac failure) meant a patient has a bit of both right and left heart failure.³⁶
62. On the basis I have found Dr Kapadia did not review the chest x-ray, he would have been at least aware of the note by Dr Thompson, given Dr Thompson was the referring doctor. If he was not, then he should have been. I consider given the referral for 'chest pain' and review of IV fluids in the context of a diagnosis of LVF, and both Dr Thompson and Dr Markey noting Mrs Brodie had a pleural effusion in the clinical record, it would have been incumbent on Dr Kapadia to have reviewed Mrs Brodie's chest x-ray. This was an oversight on his part.
63. Dr Kapadia does not now recall what he did regarding Mrs Brodie's IV fluid status.³⁷ He made no reference to it in his clinical note.
64. I note Mrs Brodie's IV fluids which had been administered at one litre over 12 hours were ceased by Dr Thompson at or around 4.20pm on 20

²⁹ Ex C2.1, p44

³⁰ D2.9.7

³¹ D2.15.29

³² D2.23.7

³³ D2.30.34

³⁴ D2.31.4

³⁵ ExC2.10.4

³⁶ D2.10.20

³⁷ D2.5.37

August 2017. This occurred after Dr Kapadia's review of Mrs Brodie.³⁸ It is not possible to establish the impetus for Dr Thompson ceasing the IV fluids including whether there had been a verbal conversation which may have occurred between Dr Kapadia and Dr Thompson.

65. Dr Kapadia was asked given the x-ray and the clinical assessment of Mrs Brodie whether there was an obligation on him as a cardiologist to provide some advice regarding the management of Mrs Brodie's heart failure.

Dr Kapadia:

I would – I would - I would think so, yes, in retrospect. I sort of stuck to my relationship – Dr Thompson was, in my opinion, very specific about what he wanted. He wanted me to talk about chest pain. I addressed but – I addressed chest pain – I did, but – yes, I would think I – I agree.³⁹

Counsel Assisting:

And, Dr Kapadia, what would that treatment be, given that?

Dr Kapadia:

Would I probably given more diuretics and – uh – then antifailure medication. We use ACE inhibitors – uh- diuretics, beta blockers if needed, digoxin in her case, and, - um – uh – one or two of the newer drugs that we-re using now, but – uh – all in the context of how she is – she was somewhat on the frailer side – and – and how she tolerated medication – um.⁴⁰

66. Dr Kapadia agreed that a Furosemide bolus might have been indicated for Mrs Brodie.⁴¹ I note however, this had already been contemplated by Dr Thompson earlier in the day, and that Mrs Brodie had already been administered 40mg of IV Furosemide at 11.20am.⁴²
67. Dr Kapadia acknowledged as a cardiologist he regularly managed patients with heart failure.⁴³ He said in hindsight he should have recommended to Dr Thompson that Mrs Brodie be commenced on medications to manage her heart failure.⁴⁴

³⁸ Ex C2.1, p47

³⁹ D2.11.12

⁴⁰ D2.11.10-23

⁴¹ D2.11.46

⁴² Ex C2.1, p170

⁴³ D2.26.31

⁴⁴ D2.12.10-15

68. Dr Kapadia ordered an Echocardiogram. He is noted as the referring doctor on the report and the report is not copied to any other consultant (for example Dr Thompson or Dr Feather).⁴⁵
69. Dr Kapadia says he ordered the Echo to see if there was any evidence of Takotsubo (an acute reversible heart failure⁴⁶) as he was aware Mrs Brodie had had that in the past.⁴⁷
70. I accept Dr Kapadia did not have access to Mrs Brodie's previous cardiac records. He did though have access to a letter on her chart from Dr Griff Walker of 26 May 2017, wherein Dr Walker referred to Mrs Brodie's medical history, including Takotsubo cardiomyopathy and her current medications.⁴⁸ Dr Kapadia was not asked in evidence how he knew of Mrs Brodie's history of Takotsubo (Dr Thompson does not mention it in his clinical note).⁴⁹
71. It became necessary for me to consider the issue of Takotsubo further, because in his line of questioning, Mrs Brodie's son suggested Mrs Brodie may have again been experiencing Takotsubo syndrome and that that was the cause of her heart failure symptoms. This because she had suffered a stressful event (bowel obstruction in January 2017 or acute chest pain during her admission to the GCPH).⁵⁰
72. Dr McKenzie says he saw no evidence of Takotsubo syndrome at the time of Mrs Brodie's admission to the GCPH but that if she did have Takotsubo syndrome, the appropriate treatment would have been the same as for decompensated heart failure.⁵¹
73. Dr McKenzie made the finding there was no evidence of Takotsubo syndrome because in his opinion the Echo '*pretty much rules it out*'. He advised Takotsubo has a particular pattern which Mrs Brodie did not have.⁵² In subsequently reviewing the Echo, Dr Kapadia also advised he did not see any features suggesting Mrs Brodie had Takotsubo.⁵³
74. Dr McKenzie explained, the most probable explanation for Mrs Brodie's symptoms and the Echo result is that Mrs Brodie had a continuation of heart failure and that continued during her hospitalisation. He stated,

It is more likely that it's deteriorated, probably since the – the heart failure medications had been stopped earlier in the year. And there is good evidence that – the timeline's very good, actually, around the six months after you stop their heart failure medications, that

⁴⁵ Ex C2.1, p168

⁴⁶ Ex A5 (A stressful trigger is typical but not always present)

⁴⁷ D2.16.13

⁴⁸ Ex C2.1, p8

⁴⁹ Ex C2.1, p44 and p45

⁵⁰ D3.32 and 33

⁵¹ D3.12.41-47

⁵² D3.32.48

⁵³ D2.17.2

their heart failure will worsen. Interestingly enough, actually, for what it's worth, the paper had just published this week, I would imagine in German [indistinct] cardiology, said that ones that are most likely to result in worsening is the angiotensin receptor blockers such as Irbesartan and Spironolactone.⁵⁴

75. I accept Mrs Brodie did not have Takotsubo syndrome causing her heart failure at the GCPH but that her heart failure was a progressive condition which caused a deterioration in her heart function.
76. As to the ongoing cardiac review of Mrs Brodie, Dr Kapadia does not believe he was asked by Dr Thompson to provide ongoing management of Mrs Brodie's heart failure.⁵⁵ He says as Dr Thompson had asked him to assess Mrs Brodie's chest pain and that is what he focused on during his review.⁵⁶
77. Counsel for Dr Kapadia submitted, that understanding was informed by Dr Kapadia's working relationship with Dr Thompson, wherein Dr Kapadia explained:

I had worked with Dr Thompson, who was a very senior and experienced physician, over many years, and my experience was that he would often refer patients to have me provide my opinion in response to specific queries, rather than refer his patients for ongoing cardiac management (which he would often manage himself).

That said, had I developed any specific concerns regarding the way Dr Thompson was managing Mrs Brodie's heart failure during my review of her on 20 August 2017, I would have raised these with Dr Thompson and made recommendations. I did not have any such concerns at the time of my review.⁵⁷

78. Unfortunately, Dr Thompson had passed prior to the inquest. He had though provided a statement on 19 May 2019 concerning the care he provided Mrs Brodie. He states,

Mrs Brodie was reviewed by Dr Kapadia in the afternoon of 20 August 2017. Dr Kapadia did not alter any therapy at that stage and requested a cardiac ECHO which was subsequently performed on 21 August 2017.

I would note that 20 August 2017 was a Sunday. I had been asked to see Mrs Brodie, who was known to Dr Iain Feather, Consultant Respiratory Physician, as I was providing weekend cover for Dr Feather at that time. In the evening of 20 August 2017, I therefore

⁵⁴ D3.33.38

⁵⁵ D2.5.17

⁵⁶ D2.8.38

⁵⁷ Ex B3, p2, para 5(d) and (e)

handed over further respiratory management of Mrs Brodie to Dr Feather. As stated, Mrs Brodie's cardiac management was being reviewed by Dr Vijay Kapadia.

I did not review Mrs Brodie again after 20 August 2017. However, I note that cardiac ECHO on 21 August 2017 did confirm the presence of left ventricular failure with a left ventricular fraction rate at 33% along with evidence of moderate mitral regurgitation and moderate pulmonary hypertension with a right ventricular systolic pressure of 57mmHg.

Mrs Brodie's presentation with nausea, vomiting and abnormal liver function did appear to be more related to cardiac failure rather than raising the possibility of Digoxin toxicity.

...

I therefore contend that, at the time of my one clinical review on 20 August 2017, the predominant issue was that of cardiac failure. There was some decline in renal function already beginning to occur, which progressed along with worsening heart failure during the subsequent days.⁵⁸

79. There appears to have been a miscommunication regarding Mrs Brodie's cardiac management. I understand from his statement that Dr Thompson was under the impression Dr Kapadia was providing ongoing cardiac management, whereas Dr Kapadia thought he was providing a one-off consultation, primarily for chest pain.
80. Counsel for Dr Kapadia suggests the evidentiary picture cannot support a positive finding that Dr Kapadia did not discuss the Echo with Dr Thompson on 21 August 2017. Dr Kapadia cannot recall if he reviewed the echocardiogram, he said, '*...I may have seen it, but I can't remember doing a review of that, no*'.⁵⁹ He said in a follow up he would note what he has seen and what information he needed to provide to the patient and what possible further interventions may be required, and that he would make a note of that. In the preparation for the Inquest, he acknowledged there was no evidence of any reference he had made to the Echo.⁶⁰ At no time does Dr Kapadia refer to a conversation with Dr Thompson or Dr Feather.
81. Dr McKenzie noted from looking at the Echo report, Dr Kapadia was the reporting doctor so says he did review the results.⁶¹ I find as the reporting doctor, if Dr Kapadia did not review the Echo report, he should have.

⁵⁸ ExB.5, p2

⁵⁹ D2.16.26

⁶⁰ D2.17.33

⁶¹ D3.31.14

82. Dr Thompson did not see Mrs Brodie again after 20 August 2017. It has been suggested by Counsel for Dr Kapadia that Dr Thompson was aware of the Echo results at the relevant time. In Dr Thompson's statement he notes the result of the Echo and attached a copy of the Echo report to his statement. It is the same report which is in Mrs Brodie's clinical record which has the header 'Sent 21/08/2017 05.31.33 PM'. Rather than seeing it as the relevant time, I consider the more likely scenario is that Dr Thompson reviewed Mrs Brodie's chart in preparing his 2019 statement, and on balance there was no conversation between Dr Kapadia and Dr Thompson about the Echo.
83. Regarding the results of the Echo, Dr McKenzie said,
- I think that the appropriate minimal response to that would have been on discovering the marked change in ejection fraction echo would have been to directly communicate with Dr Thompson that probably surprising deterioration and clarify whether he was still happy to continue to manage the care of Mrs Brodie at that point in time. I think that's probably what should have been done. At a personal level of that situation, I would have continued to be involved in her care. But, you know, I have a bias, that being one of my major interests in heart failure management.⁶²*
84. Dr McKenzie says the alarm bell for him was the change in the EF from 45-55% down to 33% and the pulmonary artery pressure being quite high when it was not before.⁶³ I acknowledge it was not established in evidence if Dr Kapadia was aware of Mrs Brodie's previous Echo results, he did though know of her history of Takotsubo.
85. Dr Kapadia said in retrospect he should have raised the issue of heart failure with Dr Thompson but that it was not something beyond Dr Thompson to address either.⁶⁴ He thought Dr Thompson could handle it and that if he wanted him to be involved again, he would ask. From Dr Thompson's statement, I take it he thought Dr Kapadia would continue to be involved.
86. Counsel for Dr Kapadia points out Dr Kapadia's evidence regarding Mrs Brodie's heart failure and the proposed treatment he suggested at the Inquest is based on what Dr Kapadia knows now.
87. I acknowledge Dr McKenzie accepts Dr Kapadia is not a heart failure specialist and it is possible he could have missed the features that mattered in identifying Mrs Brodie was suffering heart failure when he assessed her.⁶⁵ It is his experience that interventional cardiologists, like Dr Kapadia commonly do not pick up on such things.⁶⁶ I also appreciate

⁶² D3.12.18

⁶³ D3.14.38

⁶⁴ D2.31.24

⁶⁵ D3.37.43

⁶⁶ D3.38.1

Mrs Brodie's presentation was complex with her experiencing several medical co-morbidities.

88. In evidence, Dr Kapadia said '*I see heart failure patients regularly...it's not something that I would stay away from*'.⁶⁷
89. Taking all of this into account, I find Dr Kapadia had all the information available to him at the relevant time, and that a prudent cardiologist who had been asked to review an elderly patient who had a history of Takotsubo, a provisional diagnosis of LVF (with recent acute chest pain), documented pleural effusions, and who had been asked to consider her intravenous fluid status in the context of those issues would have assessed Mrs Brodie more thoroughly. I find by limiting his assessment, primarily focusing on Mrs Brodie's chest pain was a missed opportunity.
90. I consider an EF of 33% with an increased pulmonary artery pressure in the context of Mrs Brodie's elevated JVP⁶⁸, chest x-ray and basal crackles to have been a sufficient trigger for a prudent cardiologist to have had a conversation with Dr Thompson about the Echo, which Dr Kapadia had ordered. This may have included a request to obtain her previous Echo results/cardiac history, and to discuss what if any cardiology intervention would be of assistance. Noting by this stage Dr Feather had returned following Dr Thompson's cover over the weekend. As would be the usual course, Dr Thompson would have then asked Dr Kapadia to consult with Dr Feather, Mrs Brodie's treating respiratory physician. I consider this was another missed opportunity in the care that was provided to Mrs Brodie. That conversation may have triggered more active treatment of Mrs Brodie's decompensated heart failure.

Was Mrs Brodie's treatment by Dr Feather appropriate?

91. For the reasons detailed below, I find that,
- a. There was a failing by Dr Feather to appropriately assess and measure Mrs Brodie's fluid status/balance while she was under his care.
 - b. It would have been prudent for Dr Feather to have sought advice from Dr Kapadia as to the management of Mrs Brodie's fluid balance when he faced a diagnostic dilemma. That is, whether it was appropriate to give Mrs Brodie more fluid or whether it was necessary to increase her diuresis.
92. Dr Feather made a Medicare claim for consulting with Mrs Brodie on 21 August 2017 but there is no clinical entry of this consultation. He says his recollection is that he did see her but was not able to give a definite

⁶⁷ D2.16,1

⁶⁸ Dr Kapadia said an elevated JVP in elderly patient in hospital is not uncommon (D2.14.45), I prefer the evidence of Dr McKenzie concerning the relevance of the elevated JVP in Mrs Brodie which is referred to in paragraph 114 below.

explanation due to the passage of time.⁶⁹ He assumes it was either he could not access the records or because he felt he needed further information before developing a treatment plan.⁷⁰

93. In his statement of 26 September 2019, he says he was asked to review Mrs Brodie on 22 August 2017. There is no reference to a consultation on 21 August 2017.⁷¹
94. I am not able to make a finding as to whether Dr Feather did review Mrs Brodie on 21 August 2017, but I can make a finding that there was no change to her treatment, or any additional clinical investigations ordered by Dr Feather on 21 August 2017.
95. On 22 August 2017, Dr Feather noted the Echo EF of 33% and that Mrs Brodie had had previous LVF with preserved ejection fraction. He says Mrs Brodie was not able to give him a history and that he would need to review her previous clinical records.
96. Dr Feather formed the opinion that Mrs Brodie was very unwell and that this was predominantly a chronic process which had been ongoing since at least 2016.⁷²
97. There is no documented clinical assessment of Mrs Brodie in Dr Feather's clinical note.⁷³ There was no change to her medications.⁷⁴ There was no request for nursing staff to monitor Mrs Brodie's fluid balance, and no fluid balance chart kept by the nursing staff (one was commenced on 25 August 2017 at 3.30pm).⁷⁵ Mrs Brodie was not commenced on daily weights.
98. On 23 August 2017, Dr Feather had reviewed Mrs Brodie's history and says he had gone to a lot of trouble to review her medical history before he saw her again.⁷⁶ He notes that '*somewhere her heart function has markedly deteriorated*'. He reported she currently still had an increased JVP and some dependent oedema with a small right effusion. This despite a biochemistry picture of poor renal perfusion.⁷⁷ He had formed the view to attempt to diurese her (remove fluid) would make matters worse.⁷⁸ As to her liver enzymes, he was not clear of the cause but questioned hypoperfusion or an ischaemic injury or a congestion injury due to right ventricular failure.⁷⁹

⁶⁹ Ex B2, p2, para 4(a)

⁷⁰ Ex B2, p2 para 4(b)

⁷¹ Ex B2, p7

⁷² Ex B2, p8

⁷³ Ex C1.p49

⁷⁴ Ex C2.1, p170

⁷⁵ Ex C2.1, p97

⁷⁶ Ex B2, p8

⁷⁷ Ex C2.1, p51

⁷⁸ Ex B2, p8

⁷⁹ Ex B2, p8

99. Dr Feather formed the opinion Mrs Brodie's main issue was poor nutrition and that she was continuing to lose weight. He did not think she had actual evidence of heart failure syndrome but that there was impaired function.⁸⁰ He suspected her key co-morbidities of dementia and heart failure were unfixable, but improving her nutritional status was worth a try.⁸¹ He did not consider her biochemistry was indicative of heart failure but were due to volume contraction, or inadequate filling of the arterial tree.⁸² Similarly, he did not consider her considerably elevated NT-proBNP was indicative of heart failure as many other factors affect it, one being renal impairment which Mrs Brodie had.⁸³
100. On 23 August 2017, Mrs Brodie was reviewed by a dietician. Her weight was reported by family as 39kg and that she had lost weight in the last 8 months, with 48% weight loss since a motor vehicle accident in 2014.⁸⁴ (I can see no evidence of Mrs Brodie being physically weighed during her hospitalisation). Mrs Brodie was assessed by the dietician as being malnourished. Mrs Brodie was to try Ensure juice whilst in hospital.⁸⁵
101. There is an unexplained discrepancy regarding Mrs Brodie's weight loss. A pre-admission weight diary was provided which showed Mrs Brodie had put on over 3kg since early June 2017.⁸⁶ I accept no doctor, including Dr Feather was privy to this information, and it seems the information he and the dietician had been provided, was that Mrs Brodie was losing weight.
102. Mrs Brodie's last recorded weight in the diary was on 18 August 2017 and was 42.9/43.1kg (not 39kg as recorded by the dietician). It is likely the information being portrayed from the family was coming from various sources. Dr Feather says when he first saw Mrs Brodie there was family at the hospital who had told him Mrs Brodie had not eaten anything for at least six months.⁸⁷
103. Dr McKenzie provided evidence on the importance of objectively measuring fluid balance of a patient with heart failure. He says even if that is a very strict volume fluid or fluid management chart tracking a patient's input and output, a good quality weight is the best way of assessing the success or failure of diuresis, or rehydration. This is because any shift in weight from one day to the next is going to be water because you cannot gain fat or muscle weight in that period.⁸⁸ He accepted in the absence of a daily weight, a strict fluid balance chart was required.⁸⁹

⁸⁰ D2.40.21

⁸¹ Ex B2, p9

⁸² D2.37.24

⁸³ D2.37.34

⁸⁴ Ex C2.1, p54

⁸⁵ Ex C2.1, p55

⁸⁶ Ex A2, p4-7

⁸⁷ D2.35.1

⁸⁸ D3.21.23

⁸⁹ D3.21.40

104. In hindsight, I find Mrs Brodie's weight gain prior to her admission to the GCPH in the context of her significant gastrointestinal complaints over two weeks may have been excess fluid due to developing heart failure.

105. On 24 August 2017, Dr Feather wrote in the clinical record.

I believe Hazel has been existing on supplements for some time. She has not eaten much and has continued to lose weight.

I do not know how much of her problems are reversible but malnutrition is clouding the issue.

I have had a long discussion with her son in law (Dr Scott Kinley) in Boston and her daughter here in Australia.

I think we need to try to deal with her nutritional failure before making firm decision on the other issue.

*Therefore need NG feeding.
Request for cilinifeed via QXR.⁹⁰*

106. Dr Feather says he ceased Mrs Brodie's Digoxin because he did not think it was helping her heart condition, not because he thought she was suffering from digoxin toxicity.⁹¹ He also stopped her antibiotics and heparin/clexane.⁹²

107. Dr Feather was faced with a diagnostic dilemma (my words). He said,

The situation here was pretty difficult because I felt, when I examined her, she had a raised jugular venous pressure and I – I believe I'm quite good at identifying it, even though it's difficult – difficult sign. So that suggested to me there was at least some increased filling pressures on the right side of the heart. She has a little bit of peripheral oedema. So that's fluid in the interstitial tissues, not in the blood vessels – and yet we've got blood tests and other clinical features examining her suggesting that she's volume depleted. So then I'm looking at this woman and think, 'Well, do I give her fluids? Do I try and dry her out more? What really' – you know, they're diametrically opposed options really. And I note when she came in, the doctors who initially saw her did give her fluids.

So I – I guess I wasn't game to give her fluid and I left her on the lowish dose of the diuretics and we were – and we were moving towards giving her fluid as a nasogastric tube, not intravenously.⁹³

⁹⁰ Ex C2.1, p59

⁹¹ Ex B2, p12

⁹² Ex C2.1, p59

⁹³ D2.38.13

108. He also said,

Oh, I think through the – through the several days of that admission, there was, as we discussed earlier, this difficulty determining, because her JVP is raised and she's got a bit of oedema, she has some excess fluid in some compartments, but it's not really in a vascular – in the arterial compartment. Um – and you sort of oppose view about whether – how much of it's heart failure. Not really a lot of evidence of that, but she's got heart failure. Am I game to give her more fluid? It's just very difficult, but I think at this point, if I was going to do much, I probably would have given her more IV fluids, but I was also relying on giving her nasogastric fluids.⁹⁴

109. In oral evidence Dr Feather outlined his clinical assessment. He indicated he had observed Mrs Brodie had lost significant muscle mass, that her skin turgor was abnormal, that she had nausea and vomiting, that her urine output was low (while initially incontinent of urine she had an IDC inserted on 25 August 2017), that her mucus membranes, particularly her tongue was very dry. He says all these signs and symptoms made him very reluctant to increase Mrs Brodie's Furosemide as he believed Mrs Brodie was fluid depleted and it would have made things worse.⁹⁵

110. The only recorded clinical assessment by Dr Feather of Mrs Brodie occurred on 22 August 2017 and 26 August 2017. He does not refer to skin turgor or her mucus membranes in his clinical entries. I would have expected to have seen a more thorough physical examination recorded in Mrs Brodie's chart each time Dr Feather reviewed Mrs Brodie.

111. Dr Feather accepted Mrs Brodie's elevated JVP, crackles in her chest and some peripheral oedema were signs of heart failure or something else, and based on her Echo that she had impaired left ventricular function.⁹⁶ He though did not believe Mrs Brodie had any clinical signs of LVF. He stated,

...JVP would normally be considered a sign of right heart failure, which can be completely independent of left heart failure. Or it can be secondary to left heart failure. And as with the peripheral oedema, which is also multifactorial, it can be – you know – how good your blood vessels are, whether they're inflamed, gravity, all sorts of factors. The crackles are also pretty nonspecific. She's got a fair bit of lung disease. And crackles really don't have to be from heart failure at all. But I don't believe, when I saw her, she had clinical evidence of left ventricular failure. She had echocardiographic evidence of impaired left ventricular function.⁹⁷

⁹⁴ D2.45.39

⁹⁵ D2.62.42

⁹⁶ D2-39.23-37

⁹⁷ D2.40.40

112. As to Dr Feather's assessment and management plan, Dr McKenzie states,

...he had contradictory evidence – contradictory processes going on there in terms of – I mean, obviously I haven't examined the patient and am working entirely on what he says. I guess I will say that I don't think muscle mass had anything to do with the decision – should have anything to do with the decision making, and skin turgor is extremely unreliable in the elderly and recommended only in children as an assessment of volume status. Um, but I think most importantly, on the one hand he is saying she is dry, on the other hand he is continuing her with Furosemide, and I don't know how he can reconcile those two things. I think either he thinks she was dry, he should have stopped the Furosemide, or if he thinks she is wet, he should have done something more to get rid of the fluid, which would be increasing the furosemide. I don't think holding where we're at was the right approach in these circumstances, and I can't, you know, with confidence, having never seen the patient, say which of those is the better course. But I think the lack of commitment to either course suggests some discordant discrepancy.⁹⁸

113. As to Mrs Brodie's kidney function, Dr McKenzie did not believe Mrs Brodie had a volume issue but a perfusion issue. He said you don't treat to make a patient's creatine better but treat the patients' perfusion overall to make the situation better rather than treating and making the creatine lower.⁹⁹

114. Dr McKenzie opined the best approach was to have determined what the fluid situation was and act on that. He did not think creatine should be used as part of fluid assessment. He said the clinicians had identified Mrs Brodie had an elevated JVP, and that there are really only two things that elevate a JVP. They are a high arterial pressure or a severely regurgitant tricuspid valve. The Echo did not show a problem with the tricuspid valve but did show a high right arterial pressure. There therefore was some degree of venous congestion evident.¹⁰⁰ He states,

We have no idea how much, but we've got – we've got the core sign there. And people seemed – clinicians involved seemed to have been confident about that sign...so I think that the real way forward here would have been to have given her more Furosemide, and that would have – would have made some progress in some direction. It would have lowered her JVP, and what happened to her creatinine next, we'll never know, but it would have helped to get rid of excess fluid, potentially – or would have.¹⁰¹

⁹⁸ D3.15.32

⁹⁹ D3.20.10

¹⁰⁰ D3.15.10-27

¹⁰¹ D3.16.28

115. Dr McKenzie is of the opinion in the absence of a better explanation for the raised liver function tests when Mrs Brodie had features of elevated atrial filling pressure, and an elevated JVP, it should have been treated as congestion until proven otherwise.
116. Dr McKenzie says the NT-proBNP, was also very high and consistent with that diagnosis.¹⁰² He thought without assessing Mrs Brodie himself, the evidence was pretty good despite her dry mouth and poor skin turgor that she had decompensated heart failure.¹⁰³ [as above I have already accepted Mrs Brodie had decompensated heart failure during her admission at GCPH].
117. Dr McKenzie notes congestion from heart failure can cause patients to experience nausea.¹⁰⁴ I accept the most likely cause for Mrs Brodie's abnormal liver function results were because of her heart failure and that it is possible without any other explanation that her heart failure was what was causing the nausea she presented to hospital with. I do not consider there is sufficient evidence to support a finding that Mrs Brodie was suffering from digoxin toxicity. A topic which the Office of the Health Ombudsman (OHO) has previously examined.
118. As to Mrs Brodie's treatment, Dr McKenzie says he would probably have doubled Mrs Brodie's Furosemide dose and had some rigorous measurement of her output in place. For example, the insertion of an indwelling catheter (noting Mrs Brodie had an IDC inserted in the afternoon of 25 August 2017) or a daily weight. He did not think intravenous fluids had any part to play as it would have just made the situation worse. The main goal was to get rid of the fluid.¹⁰⁵ He did not consider any other cardiac medications were warranted, the primary intervention being to get rid of the fluid with Furosemide (he would have favoured intravenous Furosemide) and if that was failing, additional therapies could then be added to try and drive that process further.¹⁰⁶
119. Dr McKenzie was taken to Mrs Brodie's fluid balance charts of 25 and 26 August 2017. The chart of 26 August 2017 showed that Mrs Brodie had had 1100mls in and that her output was 400mls. He said she was gaining fluid rapidly, and regarding the significance of that, he stated,

*Well, that will worsen the heart failure situation there. Everything that's gone with it would have made it worse with the volume accumulating. So instead of getting rid of it, we're making it worse.*¹⁰⁷

¹⁰² D3.16.45

¹⁰³ D3.17

¹⁰⁴ D3.31.39

¹⁰⁵ D3.17.18

¹⁰⁶ D3.26.12

¹⁰⁷ D3.18.13

120. Dr Feather said in evidence he found daily weights to be an unreliable measure and did not generally rely on those.¹⁰⁸ Dr McKenzie said if there was unreliability, it was incumbent on Dr Feather to address that with nursing staff.¹⁰⁹
121. Dr Feather did not in place of daily weights ask that Mrs Brodie be commenced on a strict fluid balance chart. Given the diagnostic dilemma Dr Feather was facing and his concerns about Mrs Brodie's nutritional status, I find it very difficult to understand why there was no weight recorded in the clinical record, and that a fluid balance chart was not commenced until 3.30pm on 25 August 2017. Because Dr Feather had not put in place a system of closely observing Mrs Brodie's fluid balance, he did not have the full picture. This was a failing on his part.
122. Dr Feather was under the impression Mrs Brodie continued to be under the care of Dr Kapadia. He was aware Dr Kapadia had seen Mrs Brodie on 20 August 2017 and says he was not predicting what he was going to do next. He assumed he would be involved in her care.¹¹⁰ There is no evidence of any further consultation or reference to Dr Kapadia in the clinical record after 20 August 2017.
123. Dr Feather was asked if he made any inquiries with Dr Kapadia at all during the time he was caring for Mrs Brodie. He stated,
- I can't specifically remember that. Um – we do cross paths frequently and discuss the patients that are in the hospital – um – so, probably, but I can't really say that for sure.*¹¹¹
124. Dr Feather understood from his handover from Dr Thompson that Dr Kapadia would continue to be involved in Mrs Brodie's care.¹¹² As I found earlier, I accept this was Dr Thompson's understanding, and I consider it is likely he passed this on to Dr Feather. Dr Kapadia had a different view and had no recollection of further involvement with Mrs Brodie after 20 August 2017.
125. Dr Feather explained he did not expect Dr Kapadia to come every day and with every day unfolding he may have expected him to come back the next day. He though says he is not sure it would have added very much and that '*...I don't know that Dr Kapadia's input was necessarily critical to her care at that point*'. By 24/25 August 2017, he did not think he sought input into Mrs Brodie's care, and he is not sure what else Dr Kapadia could have added.¹¹³

¹⁰⁸ D2.56.3 and 20

¹⁰⁹ D3.21.30

¹¹⁰ D2.57.26

¹¹¹ D2.57.37

¹¹² D2.57.44

¹¹³ D2.59.2-23

126. If there was a conversation between Dr Feather and Dr Kapadia, despite Dr Feather's diagnostic dilemma it did not cause Dr Kapadia to review Mrs Brodie. I find on balance it is more probable there was no clinical consultation between Dr Feather and Dr Kapadia concerning Mrs Brodie.

127. Dr McKenzie was asked about the involvement of Dr Kapadia in Mrs Brodie's care. He stated,

Um, yeah, clearly there is a breakdown in communication between these two if that was the belief [indistinct] sorry. I think if he [Dr Feather] felt things were deteriorating, then it would be appropriate for him to have followed up on Dr Kapadia again as to re – you know, seeing if he was coming back, asking him to come back and review her again. I think that's appropriate, particularly if he was surprised by – and I would be surprised by the ehco result.. and I think if he wanted more or was concerned, he probably should have asked again.¹¹⁴

128. Dr McKenzie is of the opinion when Dr Feather faced his clinical dilemma about whether to provide Mrs Brodie with more fluids or to stop her diuretic (the diagnostic dilemma referred to above) he maybe should have sought Dr Kapadia's advice.¹¹⁵ He is of the opinion Dr Feather's clinical assessment and his clinical management diverged and he does not understand why that occurred.¹¹⁶

129. I do not doubt Dr Feather was doing his best to manage Mrs Brodie, and that hers was a complex presentation. When Dr Feather faced his diagnostic dilemma, he was not decisive in his management of Mrs Brodie. This is understandable given Mrs Brodie's, age, fragility, and her troubling biochemistry profile. However, with the knowledge of her ongoing elevated JVP, the Echo result, her increasing creatinine, and her condition deteriorating, I consider it would have been prudent for Dr Feather to have sought advice from Dr Kapadia as to the management of Mrs Brodie's fluid balance. That is, whether it was appropriate to give her more fluid or to increase her diuresis (remove fluid). I consider this was a missed opportunity on the part of Dr Feather and that had he consulted Dr Kapadia, Dr Kapadia would have suggested more active treatment for Mrs Brodie's decompensated heart failure.

Were there any interventions that would have potentially changed the outcome for Mrs Brodie?

130. With all the information and his review of Mrs Brodie's case in preparation for the inquest, Dr Kapadia was asked whether there was any clinically justifiable medical intervention that would have altered the outcome for Mrs Brodie. He thought she was quite unwell and frail but

¹¹⁴ D3.15.7

¹¹⁵ D3.15.47

¹¹⁶ D3.15.48

that treating her heart failure was important. He noted when he saw Mrs Brodie was being treated with Furosemide, Digoxin and was on Ramipril. So, he did not think she was totally devoid of heart failure medication.¹¹⁷ [according to the medication chart, the only heart failure medications Mrs Brodie was on were Digoxin and Furosemide.¹¹⁸]

131. Regarding treatment for heart failure, Dr Kapadia did not know how much it would have made a difference in the long-term, and that the heart failure was just one specific condition that she had to deal with.¹¹⁹

132. As to Mrs Brodie's likely prognosis Dr McKenzie was asked, '*Having reviewed all the material, and in the context of the different comorbidities that Mrs Brodie had the evidence that we've heard, do you stand by your opinion that she had months to year to live?*'. He stated,

*Not at the point in time in arriving in August, no. But by the time of that hospital stay in August, she was very high risk of dying, which is consistent with what's happened. Um, yeah. And certainly in hearing tales of her frailty that she was demonstrating, which is not really well documented on, she was very high risk of dying during this hospital stay in August. Um, but earlier in the year there was no reason to suspect, with good care for her comorbidities, that she wouldn't have had months to years to live.*¹²⁰

133. Dr McKenzie was asked if Mrs Brodie's decompensated heart failure had been treated with increased Furosemide would her outcome have been different. He concluded,

*I do think so. Um, I think she – I think she probably would have survived the hospital stay, yeah. The complicating factor is she probably got pneumonia during the later -at the end of that hospital stay, and that's, in an elderly frail person, can be fatal. But I think the heart failure was what put her in the situation to be at risk of that, and if you treated that, it's more likely that she would have survived the hospital stay and the pneumonia may or may not have occurred on top of that, but that is, in many ways, much easier to treat with antibiotics than getting rid of fluid with a patient with – what everyone said, and I agree – is complicated interplay of bad kidney failure and bad heart failure together, it makes the diuretic management – the fluid management harder, whereas you can just give her antibiotics for the infection and that should work, assuming heart failure doesn't withdraw.*¹²¹

134. I find had Mrs Brodie have been treated more aggressively with additional Furosemide and had her fluid balance strictly measured to

¹¹⁷ D2.12.32-37

¹¹⁸ Ex C.1, p171

¹¹⁹ D2.12.40

¹²⁰ D3.25.1

¹²¹ D3.26.43

address her decompensated heart failure she may have survived the hospitalisation. I accept there though can be no certainty to this given her frailty and co-morbidities.

Findings required by s. 45

Identity of the deceased: Hazel Mary Ritchie Brodie

How she died: Mrs Brodie died because of decompensated heart failure which was not identified and appropriately treated with additional Furosemide which was necessary to shift her excess fluid.

Place of death: Gold Coast Private Hospital SOUTHPORT QLD 4215 AUSTRALIA

Date of death: 27 August 2017.

Mrs Brodie's cause of death certificate (**CODC**) is authored by Dr Feather. The following is listed:

1(a) Dilated cardiomyopathy- two months duration.

2 Heart failure; acute chronic renal failure, COPD, acute liver injury, dementia.¹²²

There was no autopsy performed on Mrs Brodie.

When asked to consider the CODC, Dr McKenzie gave evidence that he agreed dilated cardiomyopathy of two months duration '*seems reasonable*' and '*the most likely*' and that while he did not think he '*would have written liver injury*', as he considered it was a consequence of the other diagnoses, all other listed conditions contributed to Mrs Brodie's death.¹²³ I accept Dr McKenzie's opinion as to the cause of death.

Cause of Death: 1(a) dilated cardiomyopathy with other significant conditions being (2) heart failure, acute on chronic renal failure, chronic obstructive pulmonary disease, and dementia.

Comments and recommendations

135. I consider it important for Dr Kapadia and Dr Feather to reflect on their management of Mrs Brodie. There were missed opportunities in how they approached her care which may cause them to adopt a different approach in managing a similar patient in the future.

136. For the reasons outlined herein, pursuant to s48(2) of the Coroners Act, I do not reasonably suspect any person has committed an offence.

¹²² Exhibit A1.

¹²³ Transcript, 3 April 2025, p 25, LL 17-20.

137. Pursuant to s48(4) of the Coroners Act, I do not consider the care provided to Mrs Brodie warrants a referral to a disciplinary body. While I have found there were errors in clinical judgment which led to missed opportunities in her care, Mrs Brodie's presentation was complex. I do not consider the care provided to Mrs Brodie would cause the Office of the Health Ombudsman to inquire into or take steps in relation to the conduct of Dr Kapadia or Dr Feather.

138. As is standard practice for all health care related deaths, a copy of these findings will be provided to the Office of the Health Ombudsman.

I close the Inquest.

Melinda Zerner
Coroner
BRISBANE