Agenda item: 3ii

Report to:	**Board of Directors**	**Date 6 March 2025**
Report from:	**Chief Nurse and Medical Director**	
Trust Objective/Strategy:	**GOVERNANCE: Patient Safety, Effectiveness of Care, Patient Experience and DIPC**	
Title:	**COMBINED QUALITY REPORT**	
Board Assurance Framework Entries:	**Unable to provide safe, high-quality care BAF numbers: 675, 742**	
Regulatory Requirement:	**CQC**	
Equality Considerations:	**None believed to apply**	
Key Risks:	**Non-compliance resulting in poor outcomes for patients and financial penalties**	
For:	**Information**	

1. Purpose:

The Medical Director and Chief Nurse would like to highlight the following items in addition to the Papworth Integrated Performance Report (PIPR) to the Board:

2. Surgical Site Infections (SSI)

Surgical site infection rates for Q3 are confirmed as 3.9% (for coronary artery bypass inpatients and readmissions) which is the lowest rate since 2019. Rates for Q4 are showing this sustained improvement though rates are subject to change with delayed reporting. The improvement in SSI rate is believed to be due to improvements in essentials of practice relating to infection prevention and control and the use of specialised post operative dressings for patients at highest risk. Improvement work continues to be supported with oversight provided by the SSI steering group and the infection prevention and control committee.

3. Inquests

Inquests/Pre-Inquest Review Hearings – December 2024
Two inquests were heard in December 2024 (see concluded inquest details).

There were two Pre-Inquest Review Hearings (PIRH) in December which involved Papworth and the Trust provided medical records and statements from clinicians to the Coroner.

The purpose of these hearings is for all interested parties to meet and agree the scope of the future inquest.

The Trust was notified of 3 new inquests/coroner's investigations in December 2024 and statements and clinical records have been requested.

Ther were 84 Coroner's investigations/inquests outstanding as at 31.12.24.

Concluded Inquests:

Patient A (Cambridgeshire & Peterborough Coroner) – Read only Inquest, no attendance required.

Background:
The patient underwent aortic valve surgery at RPH in September 2021. Five weeks post op, the patient was admitted to their DGH with peripheral oedema and breathlessness, consistent with hart failure. An echocardiogram was suspicious of pericardial constriction, which was confirmed by MRI the following week. The patient was accepted onto the treatment list for a pericardiectomy at RPH to treat the pericardial constriction. Due to miscommunication between DGH and RPH the planned procedure was delayed. Patient's condition continued to deteriorate and by early December they were not sufficiently well to undergo the planned procedure and died at their DGH later that month.

Medical Cause of Death:
1a) Unascertained
2) Pending histology

Coroner's Conclusion:
Patient suffered from severe aortic stenosis for which they underwent surgery at RPH in September 2021. Patient was then diagnosed with the very rare condition of constrictive pericarditis confirmed by MRI in October 2021 when the patient was re-admitted to their local DGH. A lack of effective communication between the DGH and RPH led to a delay in scheduling and carrying out surgical intervention in a timely manner. On the balance of probabilities, had treatment been implemented during the 4 week time period to the end of November 2021, the patient's chance of successful outcome to surgical intervention would have been in the region of 50%.

Serious Incident Investigation
NNUH completed a serious investigation report into this patient's death and RPH contributed to the investigation. Learning and actions have been discussed in relation to the in-house urgent process and information sharing via the PRIS system, sending operation notes to the referring Cardiologist, oversight of the virtual ward at NNUH and the re-referral process to the original Surgeon.

Patient B (Cambridgeshire & Peterborough Coroner)

Background:
Patient was admitted to RPH in October 2022 with a non ST elevation myocardial infarction and had triple coronary artery bypass graft surgery the following month. Their recovery, whilst initially good, was complicated with re-admission to theatre and critical care for a deep sternal wound infection and both thigh wound harvest sites. The sternal wound was closed early January 2023 and the leg wounds closed five days later, patient was found to be infection free that day. Following an RPH investigation, no definitive cause was found for the surgical site infection. Tests confirmed that preoperative decolonisation treatment was effective as no MRSA was found on culture samples.

Patient was readmitted to Critical Care Unit (CCU) on two occasions with persistent acidosis, Acute Kidney Injury and sepsis, low Blood Pressure and the instigation of haemofiltration to support the work of their kidneys. At the end of January 2023, patient was admitted to CCU with metabolic acidosis secondary to pyroglutamic acid from chronic therapeutic ingestion of paracetamol, a rare but known complication of the use of paracetamol medication.

A few days later, the patient deteriorated further with episodes of hypotension and bradycardia, low urine output and worsening respiratory acidosis. They were supported using intubation and

ventilation, escalating medication to support heart function and blood pressure and haemofiltration.

Heparin infusion was commenced as normal practice during haemofiltration to prevent the formation of blood clots. Clotting samples are taken to assess the effectiveness of the infusion in reducing the risk of blood clotting (APR). Patient's APR result was available at 22.46 hrs and was outside of the normal range. This was noted in critical care at 01.07 hrs. Heparin infusion was reduced and a further sample taken. Further clotting samples indicated abnormal results and heparin was stopped at 04.20 hrs. Later that day the patient showed signs of neurological deterioration and a CT scan showed a multifocal intracranial haemorrhage involving left frontal occipital and right frontal region. Consultation with CUH neurosurgical team deemed that patient's bleed was catastrophic and surgical intervention was not deemed appropriate due to poor prognosis and patient died at RPH.

Medical Cause of Death:

1a) Intracranial haemorrhage – multifocal
1b) Pyroglutamic acid toxicity
1c) Deep sternal wound infection – treated
2) 3 vessel coronary artery disease with recent non-ST elevation myocardial infarction – operated on, Type II Diabetes Mellitus, Lupus arthritis

Coroner's Conclusion:

Died as a result of rare but known complications of necessary lifesaving medical treatment.

Coroner's investigations closed

The Inquest team was notified in December 2024 of 1 Coroner's investigation which has been closed:

Inquest Reference		Coroner	RPH Assistance provided to HM Coroner	Conclusion / Outcome
INQ2324-11 ID498		Norfolk	Statement from clinician	Medical Cause of Death: 1a) Haemopericardium 1b) Subacute Myocardial Infarct 1c) Left Coronary Artery Thrombosis / Occlusion Coroner's conclusion - Natural death.

Inquests/Pre-Inquest Review Hearings – January 2025

Three inquests heard in January 2025 (see concluded inquest details). Only one required attendance by RPH staff (Patient E).

The Trust was not required to attend any Pre-Inquest Review Hearings (PIRH) in January 2025. The purpose of these hearings is for all interested parties to meet and agree the scope of the future inquest.

The Trust was notified of 1 new inquest/coroner's investigation in January 2025 and statements and clinical records have been requested.

There are currently 77 Coroner's investigations/inquests outstanding as at 31.01.15.

<u>Concluded Inquests:</u>

Patient C (Cambridgeshire & Peterborough Coroner)

Not an Interested Person (IP), no attendance required.

Background information requested regarding referral to RPH for drainage of pleural effusions in 2019. Following review confirmed no formal referral made.

Coroner's Conclusion:
Died due to complications encountered during a kidney/liver transplant operation.

Patient D (Cambridgeshire & Peterborough Coroner) – No attendance required

Background:
Patient with back pain and sciatica symptoms seen by GP. Blood tests arranged and before the results were known, patient was pre-emptively prescribed steroids for potential Polymyalgia Rheumatica (PMR) symptoms. The blood tests showed significantly elevated levels of C-reactive protein ('CRP') which is a reliable indicator of severe bacterial infection. GP reviewed to assess patient for signs of infection or 'red flags' but was satisfied that the provisional PMR diagnosis remained the most likely one and advised them to increase the dose of steroids. Patient's symptoms worsened and admitted to their DGH where they tested positive for staphylococcus aureus bacteraemia. They were placed on high dose antibiotics and an MRI scan revealed the development of an epidural abscess on their spine. Emergency transfer to CUH where during a pre-operative assessment, an ultrasound trans-thoracic echocardiogram showed they had developed mitral valve infective endocarditis and were transferred to the Royal Papworth Hospital.

Patient's condition continued to deteriorate as the infection had caused emboli to their kidney and brain, causing cerebral haemorrhage, which meant they were not suitable to undergo cardiac surgery to replace the mitral valve. Patient did not respond to the antibiotics and the infection continued to spread aggressively, to the point where medical support was withdrawn.

Medical Cause of Death:
1a) Septic shock
1b) Methicillin resistant staphylococcus aureus bacteraemia

Coroner's Conclusion:
Died from the effects of widespread septic infection, where the failure to recognise and take steps sooner to treat the infection allowed the aggressive and treatment-resistant staphylococcus bacteria to continue its spread virtually uninterrupted to the heart and spine and to embolise into other organs, which consequently precluded surgical intervention. This failure therefore probably contributed more than minimally to the death.

Patient E (Norfolk Coroner) – RPH required to give evidence

Background
Patient with a background of COPD, CKD, AF unwell in community. Various tests and referrals undertaken and following Echocardiogram, blood tests and cultures, patient diagnosed with infective endocarditis at QEHKL. Patient exhibiting atypical symptoms. Admitted to QEHKL for IV antibiotics, blood cultures became negative, but patient had aortic root abscess. Patient transferred to RPH for potential surgery but deteriorated within 12 hours of arrival. Transferred to critical care, had cardiac arrest, not a candidate for emergency surgery and sadly died.

Medical Cause of death:
1a) Cardiac Failure
1b) Infective Endocarditis (Enterococcus Faecalis) and aortic root abscess

Coroner's Conclusion:
Narrative conclusion: Died due to a naturally occurring condition. It is not possible to say on the evidence available whether an earlier diagnosis would have led to a different outcome.

4. Recommendation

The Board of Directors is requested to note the content of this report and its appendices.