Agenda item 3.iii

Report to:	**Board of Directors**	**Date: 5th September 2024**
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. Carbapenemase-producing Enterobacterales (CPE):

The Trust declared a CPE outbreak on 1st July 2024 that was identified by two cases linked to time and place with the same CPE organism. An Incident Management Team meeting was organised to manage and find the source of the outbreak and continued daily for approximately two weeks.

Infection control and control measures were put in place and included:

- Enhanced screening of all patients on admission and twice weekly on L5 and CCA.
- Strict infection prevention measures.
- Enhanced environmental cleaning.
- Enhanced cleaning of medical/clinical equipment.
- Environmental screening
- Stopping the use of floor scrubbers.
- Daily IPC audits.
- Patient screening.

Additionally, further mitigations were put in place as follows:

- Environmental screening.
- Cohorting of positive patients.
- Contact precautions.
- Education for staff.
- Antimicrobial stewardship.

The rapid response and control measures that were put in place ensured that the outbreak was quickly under control as evidenced by the rapid decrease in positive patients. In total, thirty one

patients were affected, and the Trust has not had any new cases since 22nd July. No patient came to harm as a consequence.

3. Surgical Site Infections (SSI)

An SSI Summit was held on 8th August 2024 and attended by circa one hundred and forty members of staff both face to face and via teams in facilitated rooms.

A full report of the Summit plus future focus is in Appendix 1.

4. NHS Adult Inpatient Survey Results 2023/24

The embargo for the NHS Adult Inpatient Survey 2023/24 was lifted on 21st August and the Chief Nurse is pleased to inform the Board that Royal Papworth Hospital has been placed in the top category of 'much better than expected', along with eight other trusts.

A report on the findings of the survey is attached as Appendix 2.

5. Inquests

Patient A (June)
The patient was diagnosed with sick sinus syndrome in 2014. This was treated by the insertion of a pacemaker. The patient underwent a further procedure to revise the device with a new atrial lead in February 2022. By January 2023 the device had become infected requiring complete extraction performed at Royal Papworth Hospital. The original pacemaker wires had become fibrosed and were difficult to remove. As a result the patient suffered a severe bleed due to a tear in a vein. This was repaired but sadly the patient had suffered an ischaemic brain injury and went on to develop pneumonia and died.

Medical Cause of death:

1a	Pneumonia
1b	Ischaemic brain injury
1c	Haemorrhage due to pacemaker wire removal
1d	Sick sinus syndrome (Pacemaker since 2014)

Coroner's Conclusion: Narrative conclusion:
Patient died as a result of a recognised complication of a necessary surgical procedure.

Patient B (June)
The patient had suffered extensive health challenges over several decades and in 2020 required a mitral valve replacement for severe heart disease. Patient was referred to the Royal Papworth Hospital where the cardiothoracic surgeons considered that they would be able to undertake the complex and high-risk surgery that was necessary. The patient underwent an operation to replace their mitral valve and carry out a bypass graft and initially made good progress. However, it was suspected they had developed a gastrointestinal bleed and the decision was taken to manage this conservatively. The patient's condition did not improve and their levels of consciousness declined. Repeat CT scans towards the end of the following month showed possible signs of ischaemia in their abdominal organs but by this time, they were not stable enough to undergo further surgical interventions and it was agreed that more active treatment would be futile and the patient died.

It is probable that a testicular germ cell tumour that the patient suffered in 1979 and the subsequent radiological treatment had some continued impact upon their heart disease which necessitated the cardiac surgery several decades later.

Medical Cause of death:

1a Mesenteric Ischaemia
1b Valvular and ischaemic heart disease (operated January 2020)
1c Testicular germ cell tumour (1979)

Coroner's Conclusion:

Died from recognised complications of necessary but complex cardiac surgery, where it is likely that ongoing and late complications of earlier treatment for germ cell tumour played a more than minimal part in the heart disease which led directly to the surgery.

Patient C (June)

The patient was diagnosed with aortic stenosis and coronary artery disease in December 2022. They suffered a cardiac arrest in the community in March 2023 and received extensive CPR which resulted in injuries to their ribs and sternum. The patient was subsequently transferred to the Royal Papworth Hospital and underwent surgery in the form of aortic valve replacement, coronary artery bypass grafting and a maze procedure to treat atrial fibrillation. Chest closure following surgery was complicated by the chest injuries caused by the earlier CPR.

Several days following surgery the patient developed a deep surgical site infection. This was treated with antibiotics and subsequently a VAC device to drain the infection and close the wound. A few days after this, they suffered a severe bleed from the surgical wound and cardiac arrest. This was caused by a sharp bone fragment causing a tear in one of the bypass grafts and was surgically repaired.

The patient was subsequently stabilised at Royal Papworth Hospital. Their wound healed and they were transferred to their DGH three months later. However, the patient sadly developed respiratory failure, cardiac failure and a decline in kidney function and died.

Medical Cause of death:

1a) Multi organ failure
1b) Klebsiella Surgical Site Infection and Cardiac Tamponade following Graft Bleed (Operated on April 2023)
1c) Aortic Stenosis and Coronary Artery Disease (Operated on March 2023)
II) Type 2 Diabetes Mellitus, Hypertension, Atrial Fibrillation

Coroner's Conclusion:

Died due to the effect of chest injuries caused by necessary CPR following a cardiac arrest in the community and rare complications of subsequent necessary cardiac surgery.

Patient D (June)

Patient presented to their GP in July 2018 with a new onset of breathlessness. An ECG demonstrated severe mitral valve regurgitation and patient was referred to RPH for surgery which took place in September 2019. During surgery it was found that patient's tissues were very friable and they suffered a tear to their inferior vena cava (IVC) requiring a stitch repair. Immediately post-operatively patient became acidotic. Investigations determined that the IVC repair needed to be revisited and they were taken back to the operating theatre where a patch repair was carried out. The patient was placed on Extra Corporeal Membrane Oxygenation (ECMO) to protect their heart and lung function whilst they recovered post operatively. Despite ongoing treatment, the patient continued to deteriorate.

Medical Cause of death:

Ia Multiple organ failure.
Ib Chronic degenerative mitral valvar disease (operated).
II Cor pulmonale, systemic hypertension, coronary artery atheroma (grafted).

Coroner's Conclusion: Narrative
Patient died as a result of recognised complication during elective surgery for a Mitral Valve repair and single vessel bypass graft.

Patient E (June)
Patient who was diagnosed with COPD and Alpha 1 Antitrypsin deficiency, underwent bilateral lung transplant in May 2023. From early post- transplant the patient's abdomen was unusually distended. A few days later they underwent an emergency laparotomy. Patient returned to Critical Care but continued to deteriorate and after discussion with the family end of life care commenced and the patient died.

Medical Cause of death:
1a. Mesenteric ischaemia and duodenal haemorrhage (operated)
1b. Chronic obstructive pulmonary disease treated by bilateral lung transplantation (May 2023)
1c. Alpha-1-antitrypsin deficiency and smoking
2. Intraoperative haemorrhage

Coroner's Conclusion:
Narrative – died of a recognised complication following lifesaving elective lung transplant surgery with intraoperative and post operative complications and ongoing treatment.

Patient F (July)
The patient presented to their DGH in Dec 2018 and was diagnosed with severe anaemia, lower respiratory tract infection and menorrhagia, low iron and B12. They were admitted and a large uterine fibroid was identified. Patient was treated and scheduled to be reviewed in 3 months' time with a plan for further treatment. Pulmonary embolism was considered as part of their differential diagnosis and was ruled out.

In January 2019 the patient presented to their Emergency Department with an acute myocardial infarction (MI). Percutaneous coronary intervention procedure was performed but the patient suffered severe cardiac damage as a result of the MI which was due to compression of the veins at the top of the patient's legs by a uterine fibroid, leading to a DVT and heart attack due to a hole in the heart.

The patient was transferred to RPH where they suffered coagulopathy complications including heparin induced thrombocytopenia, which was manged by a change to anti coagulation medications. Tests for anti-phospholipid syndrome were carried out. The patient was returned to their DGH to allow recovery and consideration to be given for heart transplant surgery.

The patient returned to Royal Papworth Hospital in March 2019 when a biventricular assist device was implanted successfully, which provided ongoing mechanical circulatory support. Two months later the patient underwent heart transplant surgery. Initial presentation post-surgery was within clinical parameters but required insertion of a right ventricular assist device and laparotomy to explore reversible causes but continued to decline. Patient was found to be in multi organ failure and died despite the provision of ongoing full supportive clinical care.

Medical Cause of death:
1a Multi-organ failure
1b Primary graft dysfunction
1c Heart transplant for myocardial infarction
2 Uterine fibroid. Pulmonary embolus. Paradoxical embolus

Coroner's Conclusion: Narrative conclusion:
Died as a result of complications of heart transplant surgery to treat severe heart failure contributed to by complex coagulopathy issues which were identified and treated.

Patient G (July)
Patient had been in hospital for several months having been originally admitted due to a brain injury/ bleed sustained during an unwitnessed fall at home in August 2023. The patient was transferred to RPH Critical Care and underwent mitral valve repair and transferred back to their DGH where they died.

Medical Cause of death:

1a	Acute Heart Failure, Cardiomegaly, Lobar Pneumonia, Cerebral Infarction
1b	Congestive Cardiac Failure
1c	Mitral Valve Disease
II	Fall From Height - Related Traumatic Brain Injury and Intracranial Bleed (Surgically Treated**)**

Coroner's Conclusion:
Natural causes with a contribution from an accident (fall).

Patient H (July)
Patient underwent surgery at RPH in 2023 for a dilated aortic arch. The surgery was complex but proceeded uneventfully. However, in the days after surgery the patient had left sided weakness and it was confirmed they had suffered a stroke, a recognised risk of the surgery. After a period of recovery, the patient was transferred to their DGH for rehabilitation. While there, they suffered a number of complications linked to undergoing major surgery and underlying heart failure and lung conditions. Due to excess fluid around the lungs and a concern that this may contain pus, patient underwent a pleural tap, but only limited fluid could be aspirated. Three days later, patient had a sudden hypotensive collapse and a computed tomography scan showed they had suffered an arterial bleed which, on the balance of probabilities, occurred during the pleural tap.

Patient was too unwell for transfer to the thoracic team at another hospital so a decision was made for palliative care and patient died at their DGH that day.

Medical Cause of death:

1a	Right Haemothorax
1b	Right Sided Intercostal Artery bleed between 10th and 11th Ribs
1c	Pleural Aspiration 18.07.23
II	Ischaemic Stroke following elective Aortic Valve and Aortic Arch Replacement 08.06.23, Bilateral Pleural Effusions of Unknown Origin, Hospital Acquired Pneumonia, Right Upper Arm Deep Vein Thrombosis on Anticoagulation

Coroner's Conclusion:
Died to due to a rare but recognised complication of a medical procedure which was not detected until patient had a sudden collapse, by which time they were too unwell for further treatment.

There are currently 87 Coroner's investigations/inquests outstanding.

The Inquest team has also been notified in July 2024 of 7 Coroners' investigations which have been closed during the past two years. These are summarised below.

Inquest Reference	Coroner	RPH Assistance provided to HM Coroner	Conclusion / Outcome
INQ2021-24	Lincolnshire	Medical Records and statement from clinician	Coroner's conclusion: Natural Causes.
INQ2021-11	Suffolk	Statements from clinicians	Coroner advised case closed - no inquest held
INQ2021-30	Norfolk	Statement from clinician	Coroner's conclusion - Narrative Conclusion: Natural causes - Died as a result of multiple emboli from an infective endocarditis which started to develop from February 2020 onwards but was not diagnosed until September 2020.
INQ2122-22	Hertfordshire	Statement from clinician	Coroner confirmed case closed following the Conclusion of an inquest hearing – conclusion not provided
INQ2122-11	Essex	Statement from clinician	Coroner's conclusion: Suicide
INQ2223-21	Norfolk	Medical records	Coroner's conclusion: Natural Causes Patient found deceased at his home from causes associated with his underlying, deteriorating health
INQ2223-17	Hertfordshire	Statement from clinician	Coroner confirmed investigation was closed with no further action and no inquest held.

6. Recommendation

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