MENTAL HEALTH AND DISABILITY DIRECTORATE

Data provided by Corporate Office from the Datix Incident Management System to the Weekly Governance De-Brief (Thursday mornings - 9am – 10am)

4. Status of SAI's

Summary of the status of SAI's between 03.08.2020 - 09.08.2020

Any reports received after Friday will not be reflected in the numbers below until the following week

More than 26 weeks	Less than 26 weeks	Within Timescales	Level 3 – No timescale	Total
23	11	16	3	53

5. Reopened Complaint

Personal Information redacted by the USI – A meeting is being arranged with the family ---

6. Issues escalated by Corporate or Directorate office TBC at meeting

CHILDREN AND YOUNG PEOPLE SERVICES DIRECTORATE

Data provided by Corporate Office from the Datix Incident Management System to the Weekly Governance De-Brief (Thursday mornings - 9am – 10am)

7. Status of SAI's

Summary of the status of SAI's between 03.08.2020 - 09.08.2020

Any reports received after Friday will not be reflected in the numbers below until the following week

Less than 26 weeks	More than 26 weeks	Within Timescales	On Hold	Total
6	1	0	3	10

The CYPS Governance Team is in regular contact re: the 3 SAIs which are currently on hold.

8. Reopened Complaint

12049 – Personal Information redacted by the USI

9. NIPSO

23045 Personal Information redacted by the USI – Information request – Complaint reopened

10. RIDDOR

W117948 - Carrickore – Staff member got thumb bend back by service user

11. Issues escalated by Corporate or Directorate office TBC at meeting

Nothing to escalate

OLDER PEOPLE AND PRIMARY CARE SERVICES DIRECTORATE

Data provided by Corporate Office from the Datix Incident Management System to the Weekly Governance De-Brief (Thursday mornings - 9am – 10am)

12. Status of SAI's

Summary of the status of SAI's between 03.08.2020 - 09.08.2020– 1 SAI deescalated

Any reports received after Friday will not be reflected in the numbers below until the following week

More Than 26 weeks	Within Timescale	Less Than 26 Weeks	Total
2	1	1	4

13. Early Alert

2 x GP OOH

14. Issues escalated by Corporate or Directorate office TBC at meeting

LITIGATION

15. New Clinical negligence

Ref	Directorate	Division	Incident date	Opened date	Description
MNS	ACUTE	MUC	31/01/2020	06/08/2020	The Plaintiff alleges negligence in relation to her post-partum care and treatment at CAH for a breast abscess. The PI alleges that the negligence resulted in emergency surgery having to be undertaken.

16. Clinical Negligence Claims Listed for Hearing in August 2020

No Hearings listed in August 2020.

17. Coroner's Inquiries and Inquests

No New Inquiries

No Full Inquest Hearings listed in August 2020

18. Preliminary Inquest Hearings in August 2020

Ref	Directorate	Division	Incident date	Opened date	Description	P Hearing Date/Venue
INQS104/23	MHD	MHS	26-May-2017	5-Jul-2018	There is a Preliminary Hearing scheduled related to the homicide of an elderly couple in their home on 26/05/2017, by an individual who had involvement with mental health services.	**07/08/2020** Further PH Scheduled for October 2020
INQ 1597-19	CYP	SOCIAL WORK	21/01/2019	04/07/2019	The deceased was known to the Trust's Gateway Service in relation to an allegation of historical abuse perpetrated by the deceased. On 22/01/19, the PSNI advised Social Work Staff that the deceased had died by suicide. Statements and information requested by the Coroner have been provided by the Trust.	**17/08/2020**

19. Number of Subject Access Requests exceeding timeframe for completion.

The Medico-Legal Team is unable to comply with the General Data Protection Regulations (GDPR) 2018 in respect of responding to Subject Access Requests within the statutory time-frames. This had been due to the sheer volume of requests (which had increased by approx. 1000 per year) and a lack of staffing to cope with the demand. An application has been made to the Strategic Investment Committee for additional funding for staff and it is hoped that the full IPT will be considered by the Strategic Investment Committee in July 2020. The Governance Committee have been advised of a back-log; it has been brought to the attention of the Trust's SIRO and placed on the HROD Risk Register.

There is currently a back-log of 167 requests that are in excess of 90 days across the following areas:-

Directorate	Acute Services	OPPC	MHD	CYP	TOTAL
Number of Outstanding Requests	124	0	15	28	167

Whilst the back-log has reduced slightly from the previous week, the week-end days are included in counting towards the 90+days and therefore impacts on the work carried out during the week.

As outlined previously, the reasons for back-log include (in addition to the staffing and volume issues) - difficulties accessing notes and records, and issues relating to redaction and consent to release. A concerted effort has been made to focus on the processing of the back-log resulting in a knock-on effect in SARs now accumulating for sign-off due to a combination of maternity leave, annual leave and vacancies. A focus on sign-off has however meant that the back-log at this stage has significantly reduced.

MEDICATION INCIDENTS

20.

SAFEGUARDING

21. Link to SharePoint site regarding RQIA Notifications/Alerts

http://sharepoint/pr/perfimp/scc/_layouts/15/WopiFrame.aspx?sourcedoc=/pr/perfimp/scc/RQIA%20Notifications%20and%20Alerts/Alert%20Notice%20Board.xlsx&action=default

22. Valley Nursing Home process remains the same.
23. Regionally referrals for adult safeguarding are reviewed fortnightly and compared to 2019 levels. SHSCT is showing a 30% decrease in referral activity. A potential reason for reduced referrals could be as a result of service areas doing business differently, however this cannot be assumed. All service areas are asked to consider refresh – rebuild plans.
24. Muckamore Review published 5th August.

INFORMATION GOVERNANCE

25. **Number of Subject Access Requests exceeding timeframe for completion.**

Directorate	ACUTE	OPPC	MHD	CYPS	FINANCE	P&R	HROD	CX
Number of outstanding Requests	16	0	9	15	-	-	-	-

These relate to Subject Access Requests which have not been completed within the legislative timescale (legal timeframe 30 days or 90 days for complex requests). These delays are in relation to the demands on Services to carry out redactions of these notes etc.

26. **Data Breaches reported to the ICO**

Directorate	ACUTE	OPPC	MH&D	CYPS	FINANCE	P&R	HROD	CX
Breaches	-	-	-	-	-	-	-	-

There are no data breaches reported to the ICO in this period. The Trust is responding to one Complaint from the ICO in relation to an FOI response that was issued, but information not released as this gathering the information would have exceeded the £450 cost of time to collate the information.

27. **Working Group Update**

Trial started on 29th June reducing the amount of patient identifiers on Handover Notes. CSCG keeping track of incidents which occur due to this change in 4 North, 2 South and Male Medical DHH. Between 29/07/2020 – 05/08/2020 there were no incidents reported which were due to this change in practice. A meeting will be held next week regarding the role out of this process.

NEW STANDARDS AND GUIDELINES RECEIVED AND ASSURANCES DUE OR SUBMITTED

28. Responses Due.

- **Directorates to provide an indication of when they feel Clinicians may be in a position to be able to respond to S&G queries/assurance. CGO will then contact the HSCB to ask if there a revised date for the S&G's outstanding. Nicole to write out to all Directorates to establish if October is a realistic date to go back to the DoH for Clinical Leads to recommence the implementation of NICE Guidelines.**

Title of Correspondence	Full Implementation Date for S&G	Directorates applicability
NI Formulary CNS Draft for Consultation	Meeting postponed until mid Aug. The aim would then be to agree a final content to present to the Formulary editorial group meeting scheduled for 16th September.	Acute
Aortic Stenosis Diagnosis and Follow-up	Response sent 07/08/2020	Acute, OPPC
Risk of Death and Severe Harm from Ingesting Superabsorbent Polymer Gel Granules	Trust to provide update to HSCB.	Nursing Lead?, Acute, CYPS
Positive Assurance & ANNEX A	10/04/2020 A new date will be communicated in due course **RECEIVED from ACUTE & CYPS**	Acute, OPPC, CYPS, MHD
Care of Women Presenting with Post-Menopausal Bleeding	Extension granted to 14th August	Acute, OPPC

29. Work Ongoing

- Delayed Diagnosis of Appendicitis – Due 27th December – (Acute, OPPC) - Regional extension now provided until 13th August 2020. Change leads in place.
- Risk of Death and Severe Harm from Ingesting Superabsorbent Polymer Gel Granules - work is progressing - being corporately led by Heather Trouton. Caroline in the final stages of compiling assurance within Acute and has updated the RA and SOP which will now be circulated to Professional Leads in Acute for approval. This will be shared with Heather's team (Olivia Delaney) as a resource that can be modified for use across the other directorates – aiming for completion by 31/08/2020
- Valproate –in relation to First Do No Harm Report. It was agreed that the MDT meeting would be reconvened to discuss Valproate. 2 meeting dates (10/09 and 17/09/2020 at 11am) have been circulated and availability being collated. Dr Gormley to chair the extensive MDT forum. Invite extended to Catherine Weaver who is sending a representative from Information Governance and she has also seeking rep from IT - this will be beneficial in exploring IT solutions to keeping a live register of patients who are on valproate


20170424_HSC-SQSD-19-17 - Valproate.p


HSS(MD) 8 2018 - Valproate Contraindic


July 2020 First Do No Harm report.pdf

- IV Fluid Management and Prevention of Harm from Hyponatraemia – agreed that this would be led by the Hyponatraemia Oversight Group. Correspondence received from Jilly. Stephen to confirm if Jilly's comments have been fed back to the DoH. These comments have been sent to report authors on 14/07/2020.

30. SHSCT - Assurances Safety and Quality Alerts due to Covid-19


S&G.DOCX

HYPONATRAEMIA

31. Regional PIVFAIT Audits

CYP

- CAH CYP week ending 09/08/2020 -2/2 = 100%
- DHH CYP – week ending 02/08/2020 - await data

Acute

- Acute - week ending 09/08/2020 - 1 case
- Outstanding cases to review –17 cases .


IVF audit_Acute and CYP summary for wee

AOB

32. Re-instatement of Regional Operational Policy Templates – June 2020. An extension is being requested re this. Early Alerts, Adverse Incidents and the Being Open have been worked on and will be shared with the Governance teams. Letter sent to Brian Godfrey 16th July 2020.


Memo reinstating HSC (SQSD) 24 19 Re

33. PPE Incidents - 
PPE Incidents.xlsx There is currently not enough information provided within the datix incidents to provide sufficient detail in relation to PPE

34. T34 Battery Management – Jilly circulating email to CYPS and OPPC. Procedure updated and available on the Palliative and end of life care SharePoint site. Meeting being held on Monday with the manufacturers of the pumps. Jilly has requested update from this meeting with Michael.

35. FOI for trips/falls in car park of CAH – Timeframe of FOI to be confirmed.


Secondary Care Incident Notification -

36. Secondary Care Incidents

Attendees:

Apologies:

Southern Health and Social Care Trust

Quality Care - for you, with you

Acute Clinical Governance and Social Care

MEETING WITH ACUTE DIRECTOR

Date: Tuesday 6th October 2020

AGENDA

1.0 SAI/ SEA reports

25 SAI

Personal draft for ACG.docx | Personal Level 1 Report.docx | 1. Level Personal final draft for ACG.docx | SAI Personal draft Wed 23rd Sept.docx | Personal draft report.docx

Personal

- Maternity case, may be held back in view of recommendations

1. Level 1 Report Personal

– This internal SEA was presented in January but radiology were not happy with the recommendations. – since then Damian Gormley has asked that it be escalated up as level 1 SAI in view of content.

Resubmissions

SAI report template Personal Information

ID Personal Information **– there were a few queries the team had. 1. The risk factors for ecoli were not addressed in the report – did the mother have any positive urine cultures which may have highlighted e coli infection?**
Who was the independent expert noted on the review panel?
There was one question around the advice given to parents to seek medical help if unwell. – is there any clearer guidance of where to go – as mother went to ward and not ED??

Persona | HSC RCA draft Thermablate HS V3 fi **SMT not happy with review, needed more on the device**

In addition 2 ready for resubmission following last month ACG.

2.0	**Complaints** **NIPSO cases. –1 new. (9 active)** **Reopened – 21 – 8 new 3 meeting are being arranged, remainder require responses.** **Complaints - 49 of this–21- outstanding (red) 28 within time frames. Sent reminders for responses. (Communication is the main issue and staff attitudes).** **MLA – 16 – 8 new this week.** **Internal Audit – Papers sent to Jenny McCall – she will come back to me for more information if required.**
3.0	**Governance staffing** **Appointed band 5- from waiting list – starts Nov.** **Band 3 post – started 1st Oct.** **Band 2- Peter upgraded band 3 to assist with outbreak.**
4.0	**Outbreak – is the 4 South deaths now being viewed as part of the outbreak? I sent an email to Stephen and Trudy to clarify last week.- will need to update the notification?** SHSCT meeting with PCC 02102020.docx Proposed model of support.docx **Meeting with PCC-** Need better engagement with staff affected and Patients/ families. Proposed resources - ? **Urology – 5 definite, 2 still no decision as waiting screened by urology opinion. Once confidentiality agreement signed I will forward to Mr Gilbert.** **Letters – Mark drafting the remaining two. TOR -** Acknowledgement letter- draft.docx
	AOB **Additional pressures**

LEVEL 1 – SIGNIFICANT EVENT AUDIT INCLUDING LEARNING SUMMARY REPORT AND SERVICE USER/FAMILY/CARER ENGAGEMENT CHECKLIST

SECTION 1

1. ORGANISATION: SHSCT	**2. UNIQUE INCIDENT IDENTIFICATION NO. / REFERENCE:** Coroner's case
3. HSCB UNIQUE IDENTIFICATION NO. / REFERENCE:	**4. DATE OF INCIDENT/ EVENT:** 01/12/2019
5. PLEASE INDICATE IF THIS SAI IS INTERFACE RELATED WITH OTHER EXTERNAL ORGANISATIONS: No	**6. IF 'YES' TO 5. PLEASE PROVIDE DETAILS:**
7. DATE OF SEA MEETING / INCIDENT DEBRIEF: 13/05/2020	

8. SUMMARY OF EVENT:

Personal Information was brought in by ambulance to Craigavon Area Hospital (CAH) Emergency Department (ED) on 01/12/2019 at 02:30 with sudden onset lower back pain around the kidneys. It was noted at triage that Personal Information had a past medical history of chronic obstructive pulmonary disease (COPD), Transient Ischemic Attack (TIA), and arthritis and known abdominal aortic aneurysm (AAA). Personal Information was triaged as a priority 3 (to be seen within 60 minutes). An urgent CT angiogram was performed and confirmed a rupture of thoracic aortic aneurysm and advised an urgent Vascular or Cardiothoracic Surgeon assessment.

The Royal Victoria Hospital (RVH) was contacted and arrangements were made for a blue light ambulance transfer. Personal Information was discharged from CAH ED for transfer to RVH theatre at 09:00.

Personal Information had Thoracic Endovascular Aortic Repair (TEVAR) on the 01/12/2019 in RVH and was admitted to High Dependency Unit (HDU). Personal Information remained as in inpatient awaiting transfer to Musgrave Park Hospital but unfortunately passed away on 10/02/2020. Cardio pulmonary Resuscitation (CPR) was attempted but not successful.

For coroner's investigation.

SECTION 2

9. SEA FACILITATOR / LEAD OFFICER: Mark Feenan – ED Associate Specialist	**10.** TEAM MEMBERS PRESENT: Sr Elaine Campbell - Senior Sister, ED Mr Mark Cochrane - NIAS Area Manager Mrs Carly Connolly - Clinical Governance Manager

11. SERVICE USER DETAILS:

H&C : Personal Information redacted by the USI

12. WHAT HAPPENED?

Personal Information was a Personal Inform year old gentleman when he was brought by ambulance to CAH ED on the 1 December 2019 at 02:30. Personal Information presented with sudden onset of moderate back pain. Personal Information was triaged at 02:35 by Nurse 1 and it was documented Personal Information had a sudden onset of lower back pain around the kidney area. It was noted by Nurse 1 that NIAS had administered Entonox for pain relief. Nurse 1 documented Personal Information had a past medical history of chronic obstructive pulmonary disease (COPD), Transient Ischemic attack (TIA), and arthritis and query abdominal aortic aneurysm (AAA). Personal Information's observations were taken and documented as pulse 73bpm; blood pressure (BP) 145/101mmHg; Temp 36.4^{o}c; SpO_2 (oxygen levels)100%, Glasgow Coma Scale (GCS) score 15/15 (GCS gives a reliable and objective way of recording the state of a person's consciousness for initial as well as subsequent assessment). Personal Information was categorised by Nurse 1 as a priority 3 using the Manchester Triage Tool i.e.to be seen within 60 minutes.

At 05:30 Personal Information was reviewed by Doctor 1 (Specialist Trainee 7). Doctor 1 noted she was asked to see Personal Information to prescribe analgesia (pain relief). Doctor 1 noted Personal Information's past medical history of AAA and that Personal Information had a sudden onset of right flank pain and pain into the back of the chest. It was noted by Doctor 1 that Personal Information stated he never had pain like this before and that he was well before this. Doctor 1 documented that Personal Information stated he had an MRI aorta and thought that the aorta was unchanged on that scan. Doctor 1 viewed Personal Information's previous ultrasound scan (USS) in 2018 and noted AAA was 4.7cm in size.

On examination Doctor 1 noted Personal Information was alert, that he was poor in colour and that his BP had increased to 175/102. Personal's abdomen was noted to be tender generally but there was no guarding. An USS was performed in ED which confirmed the size of proximal aorta of 4.5cm in diameter and 4.5cm at the bifurcation. Doctor 1 documented the need to exclude an aorta leak or dissection. Doctor 1's plan was for CT aorta, intravenous (IV) access and urinalysis. Doctor 1 noted Personal Information's recent blood results highlighting Urea 13.8mmol/L, Creatinine 162umol/L and eGFR 36.

At 05:56 a CT aorta scan was performed. At 07:00 doctor 1 contacted Everlight (provider for tele-radiology services) for the CT report and was informed no images were received. Doctor 1 therefore contacted the radiographer in CAH and the radiographer advised Doctor 1 that the images were already sent and that he/she would contact Everlight for the report.

At 07:15 Doctor 1 documented a telephone call was received from Everlight, who had advised Doctor 1 Personal Information had a ruptured thoracic aorta and that there was blood in the mediastinum.

CT aorta abdominal contrast conclusions:

'The entire aorta shows multifocal areas of aneurysm and is tortuous.
The maximum diameter of the thoracic aorta is 4.7 cm.
The minimum diameter of the suprarenal abdominal aorta at the level of the superior mesenteric artery is 2.7 cm.
The maximum diameter of the infra-renal abdominal aorta is 4.1 cm.
The right common iliac artery is also aneurysmal measuring 2.2 cm.'

Doctor 1 immediately contacted Doctor 2 (Cardiothoracic SpR) who advised Doctor 1 the report would be reviewed and would re-contact Doctor 1.

At 08:00 Doctor 1 had received no call back from Doctor 2 and re-contacted Doctor 2 back herself. Doctor 1 was advised Personal Information had a contained ruptured descending aorta and was advised to refer Personal Information to the vascular surgeons. Doctor 1 immediately contacted Doctor 3 (Vascular SpR) who advised Doctor

1 she would like to review the CT report with the Royal Victoria Hospital (RVH) radiologists and would telephone Doctor 4 with a plan.

Following discussion with RVH radiologists a plan was made for Personal Information to transfer directly via blue light ambulance to the RVH theatre 3 for surgery. Arrangements were immediately made for an urgent blue light ambulance transfer at 08:45 and Personal Information left CAH ED department at 09:00.

Personal Information arrived at RVH theatre 3 and had a TEVER performed and was admitted to the High Dependency Unit (HDU) post operatively. The RVH have documented that Personal Information's TEVAR was complicated by a spinal cord infarct causing Personal Information to lose power in his lower limbs. Personal Information was subsequently admitted to the spinal ward where he remained as an inpatient awaiting transfer to the Spinal Injuries Unit (SIU) in Musgrave Park Hospital.

On the 10 February it was reported Personal Information passed away (RIP), resuscitation attempts were made but were unsuccessful.

SECTION 3 - LEARNING SUMMARY

13. WHAT HAS BEEN LEARNED:

Patient Factors

Personal Information was a Personal Inform year old gentleman when he was brought by ambulance to CAH ED on the 1 December 2019 at 02:30. Personal Information had a past medical history of COPD, TIA, arthritis and AAA. Personal Information presented with sudden severe back pain around the kidney area. Personal Information had no other symptoms and Northern Ireland Ambulance Service (NIAS) had administered Entonox for pain relief.

Task factors

Clinical Assessment

The review team note Personal Information was appropriately triaged within 5 minutes of arriving to CAH ED. The review team acknowledge Nurse 1 documented Personal Information's past medical history and AAA was noted on the ED flimsy. The review team confirmed Nurse 1 completed observations, Personal Information's NEWS and GCS score were both normal. The review team determined Personal Information was appropriately triaged as a priority 3 as per Manchester Triage Tool (1). The review team have acknowledged Personal Information had no other clinical symptoms other than back pain at the time and a complete handover was provided by NIAS. In hindsight the review team recognise Personal Information was a male patient over the age of 65 years complaining of sudden onset of severe back pain and had a known AAA and therefore conclude consideration should have been given to warrant an earlier medical review regardless of stable observations.

The review team confirm appropriate bloods and investigations were completed after triage. The review team note Personal Information was not reviewed by a doctor within Manchester triage time guidelines. The review team have identified the ED was overcrowded at the time of Personal Information's presentation. The review team acknowledge Doctor 1 documented she was asked to prescribe analgesia for Personal Information's pain. The review team conclude Doctor 1 noted Personal Information's history of AAA and following examination appropriately requested an urgent CT aorta to exclude a leak/ dissection. Although there was documentation to note the report was not received by Everlight, the review team confirm Personal Information's CT scan was requested, performed and the result communicated with Doctor 1 all within a reasonable time frame.

The review team note Doctor 1 appropriately contacted the Cardiothoracic Surgeon immediately upon receipt of the report and was advised by the Cardiothoracic Surgeon that she would review the report and call back. The review team acknowledge Doctor 1 appropriately followed up again with the Cardiothoracic Surgeon and was appropriately advised to refer Personal Information to Vascular. The review team confirm Doctor 1 immediately contacted the Vascular Specialist Registrar who advised the images would be reviewed with RVH radiologists and would call back with a plan. The review team acknowledge it would be normal practice for Vascular Surgeons to request direction from the RVH Radiology team for a definitive management plan in such cases. The review team conclude Doctor 1's treatment and care was appropriate and Personal Information was immediately transferred to RVH theatre via blue light ambulance following discussion with RVH. The review team recognise Personal Information had TEVAR repair in the RVH but sadly passed away 9 days later.

Environmental Factors

The review team acknowledge the risk of serious incidents occurring increases when the ED is in code black (code black would denote an overcrowded ED). The review team have established that CAH Personal Information was in 'code black' on the 1st December 2019. As a result the ED had more patients that it could safely care for. Staff records confirm that there was a normal complement of nursing staff and medical staff working in CAH ED at the time of Personal Information's arrival, however the review team have determined the ED was overcrowded and was 2 doctors short up until 02:00. The SHSCT had no GP out of hours cover on the night. Throughout the 24 hour period there were 249 arrivals of which 57 were brought in by ambulance. The review team conclude the main issue with overcrowding in ED is the lack of space to assess new patients. Overcrowding consequently resulted in a delay in Personal Information being reviewed by a doctor within 60 minutes of arrival as per the Manchester triage guidelines. The review team acknowledge Personal Information was in pain whilst waiting for review and nursing staff appropriately contacted Doctor 1 to prescribe analgesia. Following assessment Doctor 1 immediately identified Personal Information was a high risk patient for AAA leak/dissection and requested the appropriate diagnostic investigations to be carried out urgently.

The review team determined Personal Information was a male patient over the age of 65 years with a known history of AAA. DH presented with a sudden onset of severe back pain and was potentially at risk of AAA leak /dissection. The review team conclude Personal Information should have been triaged as a priority 2 i.e. to be seen within 10 minutes. Conversely, the review team acknowledge that CAHED was in code black on the 1 December 2019 due to overcrowding and determined that had Personal Information been triaged as a priority 2 at the time a medical review still would have been impossible within the appropriate timeframe due to overcrowding.

The review team acknowledge this was an unfortunate case. The review team concluded Personal Information inappropriately waited 3 hours due to overcrowding which caused a delay in investigations, diagnosis and treatment. The review team conclude Doctors 1 and 4 immediately identified Personal Information was a high risk patient for AAA leak/ dissection and acted promptly requesting the appropriate tests and arrangements for blue light transfer to RVH for treatment. The review team acknowledge an Aortic Aneurysm leak carries a high mortality rate and therefore cannot confirm had Personal Information had an earlier review the outcome would have been different but can confirm Personal Information would have had an earlier diagnosis and transfer to RVH for treatment.

14. WHAT HAS BEEN CHANGED or WHAT WILL CHANGE?

The report will be shared with all ED staff to increase awareness of potential risk factors for Thoracic and abdominal aortic aneurysm.

15. RECOMMENDATIONS (please state by whom and timescale)

- The report will be shared with all ED staff for learning. (Head of Service for Medicine and Unscheduled Care)
- The report will be presented at ED Mortality and Morbidity (M&M) meeting for learning. (Governance team to forward report to Chair of ED M&M)
- Aortic aneurysm awareness posters will be displayed in ED triage rooms and staff rooms to increase staff awareness of thoracic and abdominal aortic aneurysm. (Head of Service for Medicine and Unscheduled Care)
- With regards to overcrowding within the emergency department the team feel that this is beyond the scope of this review. They acknowledge that there are currently several programmes directed both regionally and nationally to deal with this serious issue. Overcrowding in the ED department will remain on the SHSCT risk registrar.

16. INDICATE ANY PROPOSED TRANSFERRABLE REGIONAL LEARNING POINTS FOR CONSIDERATION BY HSCB/PHA:

17. FURTHER REVIEW REQUIRED? NO
Please select as appropriate

If 'YES' complete SECTIONS 4, 5 and 6. **If 'NO' complete SECTION 5 and 6.**

SECTION 4 (COMPLETE THIS SECTION ONLY WHERE A FURTHER REVIEW IS REQUIRED)

18. PLEASE INDICATE LEVEL OF REVIEW: LEVEL 2 / LEVEL 3 **Please select as appropriate**	**19.** PROPOSED TIMESCALE FOR COMPLETION: DD / MM / YYYY

20. REVIEW TEAM MEMBERSHIP *(If known or submit asap)*:

21. TERMS OF REFERENCE *(If known or submit asap)*:

SECTION 5

APPROVAL BY RELEVANT PROFESSIONAL DIRECTOR AND/OR OPERATIONAL DIRECTOR

22. NAME:	**23.** DATE APPROVED:

24. DESIGANTION:

SECTION 6

25. DISTRIBUTION LIST:

Personal Information's family
Staff involved in Personal Information treatment and care.
Director for Acute Services
Associate Director for Medicine and Un-scheduled Care
Assistant Director for Medicine and Un-scheduled Care.
Head of Service for Medicine and Un-scheduled Care.
Chair of ED M&M
The review team

Checklist for Engagement / Communication with Service User[1]/ Family/ Carer following a Serious Adverse Incident

Reporting Organisation SAI Ref Number:		HSCB Ref Number:	

SECTION 1

INFORMING THE SERVICE USER[1] / FAMILY / CARER

1) Please indicate if the SAI relates to a single service user, or a number of service users. **Please select as appropriate (✓)**	**Single Service User**		**Multiple Service Users***		
	Comment: ***If multiple service users are involved please indicate the number involved***				
2) Was the Service User[1] / Family / Carer informed the incident was being reviewed as a SAI? **Please select as appropriate (✓)**	**YES**		**NO**		
	If **YES**, insert **date informed**:				
	If **NO**, please select **only one** rationale from below, for **NOT INFORMING** the Service User / Family / Carer that the incident was being reviewed as a SAI				
	a) No contact or Next of Kin details or Unable to contact				
	b) Not applicable as this SAI is not 'patient/service user' related				
	c) Concerns regarding impact the information may have on health/safety/security and/or wellbeing of the service user				
	d) Case involved suspected or actual abuse by family				
	e) Case identified as a result of review exercise				
	f) Case is environmental or infrastructure related with no harm to patient/service user				
	g) Other rationale				
	If you selected c), d), e), f) or g) above please provide further details:				
3) Was this SAI also a Never Event? **Please select as appropriate (✓)**	**YES**		**NO**		
4) If **YES**, was the Service User[1] / Family / Carer informed this was a Never Event? **Please select as appropriate (✓)**	**YES**	If **YES**, insert **date informed**: DD/MM.YY			
	NO	If **NO**, provide details:			
For completion by HSCB/PHA Personnel Only (**Please select as appropriate (✓)**					
Content with rationale?	**YES**		**NO**		

SHARING THE REVIEW REPORT WITH THE SERVICE USER[1] / FAMILY / CARER

(complete this section where the Service User / Family / Carer has been informed the incident was being reviewed as a SAI)

5) Has the Final Review report been shared with the Service User[1] / Family / Carer? **Please select as appropriate (✓)**	**YES**		**NO**	
	If **YES**, insert date informed:			
	If **NO**, please select **only one** rationale from below, for **NOT SHARING** the SAI Review Report with Service User / Family / Carer:			
	a) Draft review report has been shared and further engagement planned to share final report			

SHARING THE REVIEW REPORT WITH THE SERVICE USER[1] / FAMILY / CARER

(complete this section where the Service User / Family / Carer has been informed the incident was being reviewed as a SAI)

	b) Plan to share final review report at a later date and further engagement planned	
	c) Report not shared but contents discussed ***(if you select this option please also complete 'l' below)***	
	d) No contact or Next of Kin or Unable to contact	
	e) No response to correspondence	
	f) Withdrew fully from the SAI process	
	g) Participated in SAI process but declined review report	
	(if you select any of the options below please also complete 'l' below)	
	h) concerns regarding impact the information may have on health/safety/security and/or wellbeing of the service user[1] family/ carer	
	i) case involved suspected or actual abuse by family	
	j) identified as a result of review exercise	
	k) other rationale	
	l) If you have selected **c), h), i), j), or k)** above please provide further details:	

For completion by HSCB/PHA Personnel Only (**Please select as appropriate (✓)**

Content with rationale?	**YES**		**NO**	

SECTION 2

INFORMING THE CORONERS OFFICE (under section 7 of the Coroners Act (Northern Ireland) 1959) *(complete this section for all death related SAIs)*

1) Was there a Statutory Duty to notify the Coroner on the circumstances of the death? **Please select as appropriate (✓)**	**YES**		**NO**	
	If **YES**, insert **date informed**:			
	If **NO**, please provide details:			
2) If you have selected 'YES' to question 1, has the review report been shared with the Coroner? **Please select as appropriate (✓)**	**YES**		**NO**	
	If **YES**, insert **date report shared**:			
	If **NO**, please provide details:			
3) 'If you have selected 'YES' to question 1, has the Family / Carer been informed? **Please select as appropriate (✓)**	**YES**		**NO**	
	If **YES**, insert **date informed**:			
	If **NO**, please provide details:			

DATE CHECKLIST COMPLETED	

[1] *Service User or their nominated representative*

LEVEL 1 – SIGNIFICANT EVENT AUDIT INCLUDING LEARNING SUMMARY REPORT AND SERVICE USER/FAMILY/CARER ENGAGEMENT CHECKLIST

SECTION 1

1. ORGANISATION: SHSCT	**2. UNIQUE INCIDENT IDENTIFICATION NO. / REFERENCE:** 119879
3. HSCB UNIQUE IDENTIFICATION NO. / REFERENCE: S17946	**4. DATE OF INCIDENT/ EVENT:** 16 April 2018
5. PLEASE INDICATE IF THIS SAI IS **6. INTERFACE RELATED WITH OTHER EXTERNAL ORGANISATIONS:** No	**7. IF 'YES' TO 5. PLEASE PROVIDE DETAILS:**
8. DATE OF SEA MEETING / INCIDENT DEBRIEF: 03 August 2020 & 15 September 2020	

9. SUMMARY OF EVENT:

Patient [redacted] attended the Emergency Department (ED) at Daisy Hill Hospital (DHH) on 16 April 2018 complaining of left sided chest pain. A chest x-ray was obtained and the casualty doctor interpreted it as normal. [redacted] was discharged home from ED with advice to take analgesia for musculoskeletal pain.

The official consultant radiologist's report, issued 6 days later, noted opacification in the right lower lobe and a follow-up radiograph was recommended.

On 3 June 2019 [redacted]'s General Practitioner (GP) referred her for a chest x-ray due to elevated CRP levels (blood test to identify inflammatory markers). At that time the chest x-ray reported a 6 cm mass in [redacted]'s right lower lobe.

No follow-up radiograph was ordered following the chest x-ray on 16 April 2018. Unfortunately this led to a missed opportunity to diagnose [redacted]'s asymptomatic right lung cancer, a condition that was unrelated to her presentation to ED on 16 April 2018.

SECTION 2

10. SEA FACILITATOR / LEAD OFFICER: Dr A Craig, Consultant in Emergency Medicine	**11. TEAM MEMBERS PRESENT:** Dr B James, Consultant Radiologist Mr D Cardwell, Clinical Governance Manager

12. SERVICE USER DETAILS:

[redacted] year old female. HCN [redacted]

13. WHAT HAPPENED?

[redacted] attended ED at DHH on 16 April 2018 at 10:33 with a two day history of chest pain. Triage Nurse 1 noted that [redacted] had no previous cardiac history and was not short of breath. Her clinical observations

were pulse (P) 86bpm, blood pressure (BP) 190/89, respiratory rate (RR) 18, Temperature (T) 36.1°C and oxygen saturations (SpO_2) 98%. At 11:00 her bloods were taken and sent to the laboratory. An ECG was carried out.

At 11:05 Personal Information was seen by Doctor 1 (LAT – locum appointment for training) who noted Personal Information's past medical history which included high blood pressure, breast cancer and lumpectomy. Doctor 1 recorded that since Saturday night Personal Information had left sided chest pain which was intermittent and no worse on movement. Personal Information had no cough/sputum/haemoptysis, calf pain or swelling and no injury to her chest. Personal Information reported that morning she had some pain in her left upper arm. She had no nausea or vomiting. Doctor 1 noted that Personal Information smoked 5 cigarettes a day and had done for the past 60 years. On examination Personal's airway was patient, her chest clear and there was no abnormalities detected in her abdomen.

Doctor 1's plan included a further ECG, bloods and a chest x-ray. Personal Information declined pain relief.

Personal Information had her chest x-ray carried out at 11:31 which was interpreted as normal by Doctor 1.

At 12:46 Doctor 1 made the diagnosis of musculoskeletal chest wall pain and noted that there was no consolidation/pneumothorax on the chest x-ray. At 12:50 Personal Information was ready for discharge and her clinical observations were taken and were P 89bpm, BP 164/85, RR 18, T 35.7°c and SpO_2 96%. Her pain score was 5 out of 10.

On 22 April 2018, the official chest x-ray report from the consultant radiologist was issued. The official report raised the possibility of a subtle abnormality in the right lung. As this finding was relatively ambiguous, the reporting radiologist recommended that a follow-up chest x-ray should be obtained in 6-8weeks to confirm persistence.

On 3 June 2019 Personal Information had a chest x-ray, organised by her GP, to investigate an elevated ESR (blood test to identify inflammation). The chest x ray reported a 6 cm mass in the right lower lobe with the appearance likely representative of tumour. A red flag CT chest was advised.

Personal Information's GP referred her as a red flag patient to the Respiratory Clinic at DHH on 6 June 2019 and her CT chest, abdomen and pelvis (CT CAP) was carried out on 17 June 2019 which concluded that there was advanced primary lung malignancy. Personal was reviewed at an outpatient clinic on 25 June 2019.

Personal Information passed away at home at 23:24 on 1 June 2020.

SECTION 3 - LEARNING SUMMARY

14. WHAT HAS BEEN LEARNED:

Patient Factors

At the time of attendance Personal Information was an Personal Inform year old female who had a past medical history of high blood pressure, breast cancer and lumpectomy. Doctor 1 noted that Personal Information had smoked 5 cigarettes per day for the past 60 years.

Clinical Assessment

The review team have examined the ED documentation associated with Personal Information's attendance on 16 April 2018 and have concluded that the medical assessment was appropriate. The review team have highlighted that the findings on the chest x-ray were incidental and unrelated to Personal Information's attendance that day.

The review team considered the family's request that a sample review of other patient journeys through ED on 16 April 2018 is carried out to ensure others were not affected in a similar manner. It is the consensus of the panel that this is not required as the diagnosis made by Doctor 1 was correct and the management plan for Personal Information was appropriate.

Task Characteristics

On review of the official report, the review team have noted that it was not flagged as "urgent", therefore its findings were not highlighted to the referring team by the Radiology administration team. The x-ray report was not created on the PACS system until 22 April 2018 which was 6 days after Personal Information was discharged. Therefore Doctor 1 would not have had access to this information whilst Personal was in ED.

The review team understand at the time of Personal Information's attendance, the usual process for the management of x-ray reports was that the official report was returned to the referrer for clinical correlation and appropriate follow up. This was done by printing off the official report in hard copy and either posting or hand delivering it to ED. These were then put into a box in the reception area for consultants to check. This system placed the onus on the referrer to follow up abnormal investigations. The review team accepted that this process is not fit for purpose.

The review team understand that since this incident was highlighted and in an effort to reduce recurrence of a similar incident, ED have introduced a Standard Operating Procedure (SOP) for the review of official x-ray reports returned to ED. The review team believe that had this SOP been in place at the time of Personal Information's initial attendance, the abnormality with her x-ray would have been picked up.

The review team have noted that there are ongoing local and regional discussions about the digital sign off of results on the Northern Ireland Electronic Care Record (NIECR). The review team agree that the use of digital sign off is a failsafe method of dealing with results which reduces governance issues and the amount of clerical time needed.

At present all radiology reports within the Southern Trust are available within NIECR. The sign off module is available, however, it is currently not utilised by the majority of the clinicians. As it has been made available regionally it has been left to the local Trusts to roll out this function within NIECR. The Trust is actively encouraging electronic sign off for laboratory results in the first instance and then for it to be used for radiology results.

Documentation

The review team have taken on board the family's comments in relation to the response to their complaint dated 28 October 2019. The review team have commented that the response did not convey the sense of sympathy it could have and felt and that the brevity of the response would not have been normal practice in this consultant's usual response to complaints. The review team wish to extend to the family an apology for any undue distress this has caused them. They have also taken on board that it is not always necessary to identify each member of staff in the response to a complaint.

The review team have noted that in paragraph three there is reference to an audit system in place

within ED whereby patients who attend overnight and are discharged by the following morning are included in a paper audit of attendances. The review team agrees that this gives the opportunity for patient's to be called back to ED, if the clinician who is conducting the audit has any concerns about a patient's management. The review team advise that in this case, Personal Information would not have been included in this audit as her attendance time and discharge did not take place during the night time.

15. WHAT HAS BEEN CHANGED or WHAT WILL CHANGE?

ED has introduced a SOP for the review of official x-ray reports returned to them from Radiology. The review team understands that essentially normal and abnormal x-rays are segregated. Abnormal results will be reviewed by a consultant who will decide what follow up action is required. Each doctor in ED has been given a pigeon hole, into which results from Radiology are now placed. These pigeon holes are monitored by administrative staff to ensure outstanding results are brought to the attention of the doctor who requested them.

16. RECOMMENDATIONS (please state by whom and timescale)

The review team recommend that:

1. The Trust implements the electronic sign off of radiology reports on NIECR.

2. Where responses to complaints contain clinical information, a peer review of each proposed response should be carried out before responses are issued.

17. INDICATE ANY PROPOSED TRANSFERRABLE REGIONAL LEARNING POINTS FOR CONSIDERATION BY HSCB/PHA:

18. FURTHER REVIEW REQUIRED? YES / NO
Please select as appropriate

If 'YES' complete SECTIONS 4, 5 and 6. If 'NO' complete SECTION 5 and 6.

SECTION 4 (COMPLETE THIS SECTION ONLY WHERE A <u>FURTHER REVIEW IS</u> REQUIRED)

19. PLEASE INDICATE LEVEL OF REVIEW: LEVEL 2 / LEVEL 3 **Please select as appropriate**	**20.** PROPOSED TIMESCALE FOR COMPLETION: DD / MM / YYYY

21. REVIEW TEAM MEMBERSHIP *(If known or submit asap)*:

22. TERMS OF REFERENCE *(If known or submit asap)*:

SECTION 5	
APPROVAL BY RELEVANT PROFESSIONAL DIRECTOR AND/OR OPERATIONAL DIRECTOR	
23. NAME:	**24.** DATE APPROVED:
25. DESIGANTION:	

SECTION 6
26. DISTRIBUTION LIST:
The family of the late Personal information The staff involved in the care of Personal information The Health and Social Care Board The Director of Acute Services The Assistant Director of Acute Services (Unscheduled Care and Cancer and Clinical Services) The Associate Medical Director (Unscheduled Care and Cancer and Clinical Services) The Chairs of ED and Radiology M&M

Checklist for Engagement / Communication with Service User[1]/ Family/ Carer following a Serious Adverse Incident

Reporting Organisation SAI Ref Number:	Personal information redacted by USI	HSCB Ref Number:	S17946

SECTION 1

INFORMING THE SERVICE USER[1] / FAMILY / CARER

1) Please indicate if the SAI relates to a single service user, or a number of service users. **Please select as appropriate (✓)**	**Single Service User**	✓	**Multiple Service Users***		
	Comment: ***If multiple service users are involved please indicate the number involved***				
2) Was the Service User[1] / Family / Carer informed the incident was being reviewed as a SAI? **Please select as appropriate (✓)**	**YES**	✓	**NO**		
	If **YES**, insert **date informed**:10/07/2020				
	If **NO**, please select **only one** rationale from below, for **NOT INFORMING** the Service User / Family / Carer that the incident was being reviewed as a SAI				
	a) No contact or Next of Kin details or Unable to contact				
	b) Not applicable as this SAI is not 'patient/service user' related				
	c) Concerns regarding impact the information may have on health/safety/security and/or wellbeing of the service user				
	d) Case involved suspected or actual abuse by family				
	e) Case identified as a result of review exercise				
	f) Case is environmental or infrastructure related with no harm to patient/service user				
	g) Other rationale				
	If you selected c), d), e), f) or g) above please provide further details:				
3) Was this SAI also a Never Event? **Please select as appropriate (✓)**	**YES**		**NO**	✓	
4) If **YES**, was the Service User[1] / Family / Carer informed this was a Never Event? **Please select as appropriate (✓)**	**YES**	If **YES**, insert **date informed**: DD/MM.YY			
	NO	If **NO**, provide details:			
For completion by HSCB/PHA Personnel Only (**Please select as appropriate (✓)**)					
Content with rationale?	**YES**		**NO**		

SHARING THE REVIEW REPORT WITH THE SERVICE USER[1] / FAMILY / CARER

(complete this section where the Service User / Family / Carer has been informed the incident was being reviewed as a SAI)

5) Has the Final Review report been shared with the Service User[1] / Family / Carer? **Please select as appropriate (✓)**	**YES**		**NO**	✓
	If **YES**, insert date informed:			
	If **NO**, please select **only one** rationale from below, for **NOT SHARING** the SAI Review Report with Service User / Family / Carer:			
	a) Draft review report has been shared and further engagement planned to share final report	✓		

SHARING THE REVIEW REPORT WITH THE SERVICE USER[1] / FAMILY / CARER *(complete this section where the Service User / Family / Carer has been informed the incident was being reviewed as a SAI)*		
	b) Plan to share final review report at a later date and further engagement planned	
	c) Report not shared but contents discussed ***(if you select this option please also complete 'l' below)***	
	d) No contact or Next of Kin or Unable to contact	
	e) No response to correspondence	
	f) Withdrew fully from the SAI process	
	g) Participated in SAI process but declined review report	
	(if you select any of the options below please also complete 'l' below)	
	h) concerns regarding impact the information may have on health/safety/security and/or wellbeing of the service user[1] family/ carer	
	i) case involved suspected or actual abuse by family	
	j) identified as a result of review exercise	
	k) other rationale	
	l) If you have selected **c), h), i), j), or k)** above please provide further details:	

For completion by HSCB/PHA Personnel Only (**Please select as appropriate (✓)**				
Content with rationale?	**YES**		**NO**	

SECTION 2							
INFORMING THE CORONERS OFFICE (under section 7 of the Coroners Act (Northern Ireland) 1959) *(complete this section for all death related SAIs)*							
1) Was there a Statutory Duty to notify the Coroner on the circumstances of the death? **Please select as appropriate (✓)**	**YES**		**NO**	✓			
	If **YES**, insert **date informed**:						
	If **NO**, please provide details:						
2) If you have selected 'YES' to question 1, has the review report been shared with the Coroner? **Please select as appropriate (✓)**	**YES**		**NO**				
	If **YES**, insert **date report shared**:						
	If **NO**, please provide details:						
3) 'If you have selected 'YES' to question 1, has the Family / Carer been informed? **Please select as appropriate (✓)**	**YES**		**NO**		**N/A**		**Not Known**
	If **YES**, insert **date informed**:						
	If **NO**, please provide details:						

DATE CHECKLIST COMPLETED	25/09/2020

[1] *Service User or their nominated representative*

LEVEL 1 – SIGNIFICANT EVENT AUDIT INCLUDING LEARNING SUMMARY REPORT AND SERVICE USER/FAMILY/CARER ENGAGEMENT CHECKLIST

SECTION 1

1. ORGANISATION: SHSCT	**2. UNIQUE INCIDENT IDENTIFICATION NO. / REFERENCE:** Personal Information redacted by USI
3. HSCB UNIQUE IDENTIFICATION NO. / REFERENCE:	**4. DATE OF INCIDENT/ EVENT:** 31/07/2014
5. PLEASE INDICATE IF THIS SAI IS **6. INTERFACE RELATED WITH OTHER EXTERNAL ORGANISATIONS:** No	**7. IF 'YES' TO 5. PLEASE PROVDE DETAILS:**
8. DATE OF SEA MEETING / INCIDENT DEBRIEF:	**20/05/2020**

9. SUMMARY OF EVENT:

Personal Informati on attended CAH ED on the 31 July 2014 following a referral from her GP reporting central abdominal pain radiating into the right iliac fossa area associated with dysuria. A possible diagnosis of appendicitis or urinary tract infection was made by Personal Informati on's GP.

In CAH ED blood tests were carried out and a diagnosis of pyelonephritis was made and Personal Informati on was admitted for treatment for same. On the 3 August 2014, following diagnostic scans a decision was made to precede to an appendectomy and during procedure a perforated appendix was noted.

Post procedure Personal Informati on became hemodynamically unstable with signs of significant bleeding. Personal Informati on was taken back to theatre for a laparotomy on the 5 August 2014 and was found to have significant intra peritoneal bleeding arising from her spleen. It was noted Personal Informati on had a delayed rupture of a splenic haematoma with complete detachment of splenic capsule from the spleen. No obvious laceration of the splenic parenchyma was noted and a splenectomy was carried out.

SECTION 2

10. SEA FACILITATOR / LEAD OFFICER:	**11. TEAM MEMBERS PRESENT:**
Chair Mr Gerarde McArdle - Consultant Surgeon	Mr Gerarde McArdle - Consultant Surgeon Mrs Dorothy Sharpe – Lead Nurse Surgery Carly Connolly – Clinical Governance Manager

12. SERVICE USER DETAILS:

DOB: Personal Information redacted by the USI Gender: Female Age: Personal Inform

Personal Informa

13. WHAT HAPPENED?

On 31 July 2014 at 16:01 Personal Information arrived at Craigavon Area Hospital (CAH) Emergency Department (ED) referred by her GP due to a 2 day history of vomiting and central abdominal pain with tenderness in the right iliac fossa (RIF) area with guarding. A urinalysis dipstick test was positive for leucocytes, ketones and blood. The GP queried appendicitis or urinary tract infection.

At 16:10 Personal Information was triaged and Personal Information's observations were noted by nurse 1. Pulse 113bpm, Blood Pressure (BP)130/79; respiratory rate (RR) 16, Temperature 37.5^{0}c, Sp0^{2} (oxygen levels) 100%, Glasgow coma scale 15/15 (GCS is a neurological scale which aims to give a reliable and objective way of recording the state of a person's consciousness for initial as well as subsequent assessment). It was documented Personal Information had a pain score of 8 out of 10. Personal Information was triaged as a priority 2 i.e. to be seen within 10 minutes.

At 18:40 Personal Information was seen by ED doctor 1. Doctor 1 noted Personal Information's recent history of abdominal pain, vomiting, urinary symptoms, lower back pain and temperature. Doctor 1 noted Personal Information had abdominal pain in the left and right side with rebound. Doctor 1 documented impression was that of a urinary tract infection and the plan was to check ketones, bloods, protein and white cell count (WCC is a marker for inflammation). Bloods were checked and results were noted as WCC 22.7, c reactive protein (CRP) (CRP is a marker for inflammation in the body) 268, Urea & electrolytes (U&E kidney function) was normal, Liver function test was normal. Doctor 1 documented he discussed Personal Information with the medical registrar. Following discussion the plan was to admit Personal Information with the possibility of scan in the morning.

On the 1 August 2014 at 00:10 Personal Information was reviewed by doctor 2 (CT1 medicine). Doctor 2 noted Personal Information's recent medical history. On examination it was noted Personal Information had no loin tenderness and that Personal Information had right flank tenderness with no guarding but with rebound. Personal Information's abdomen was otherwise soft with bowel sounds present. Doctor 2 documented Personal Information was sore on movement and had no history of urinary tract infections (UTI). Doctor 2 documented a differential diagnosis of a UTI, query pyelonephritis and to rule out appendicitis. Doctor 2 noted Personal Information's blood results and that the urinalysis dipstick test was positive for protein, blood, ketones and leucocytes.

Doctor 2 noted Personal Information was not vomiting since admission and was drinking well. Doctor 2 documented that if Personal Information was to continue vomiting to prescribe Intravenous fluids (IVF). Doctor 2's plan was to continue with Gentamicin (antibiotic), for a surgical review, an ultrasound scan (USS) of abdomen, paracetamol and one hourly monitoring.

At 01:30 Personal Information had a surgical review by doctor 3 (CT1 surgery). Doctor 3 noted Personal Information's history. On examination doctor 3 noted Personal Information's lower abdomen was tender, there was no peritonism, Personal Information's temperature was 38.5^{o}c. Doctor 3 documented his impression was a UTI, that it was very unlikely appendicitis and suggested continuing with IV antibiotics and an USS of the renal tracts. Doctor 3 noted he was happy to review on request.

Personal Information was reviewed again on the post take ward round on the 1st of August 2014 by doctor 4 (Consultant Physician). Again Personal Information's history was noted. It was noted Personal Information's temperature was 37.5^{o}c, Personal Information had a 3 day history of abdominal pain with dysuria (increased frequency). Doctor 4 noted Personal Information's abdomen was tender suprapubically, and CRP and WCC were increased. Personal Information's pulse was noted to be 105bpm, BP 112/82mmHg and she had a positive urinalysis result. Doctor 4's plan was to continue with Gentamicin, and await MSSU and to chase cultures.

It was noted later by Doctor 5 (??) that Personal Information was discussed with the appointments office and was informed there was no USS list that evening, and there were no free rooms/ sonographers. The morning list was full from the previous days back log. Doctor 5 documented to continue with the

current plan.

At 17:45 doctor 6 (Foundation Year FY 2) was asked to see Personal Information due to severe constant suprapubic pain. Doctor 6 noted Personal Information felt nauseated and had a decreased appetite. Doctor 6 noted Personal Information's temperature was 37.8°c and she felt warm, doctor 6 documented Personal Information appeared slightly confused. On examination Personal Information appeared pale and sweaty and was reluctant to let doctor 6 examine her due to a tender lower abdomen. Doctor 6 noted bowel sounds were present. Personal Information's observations were noted; RR 16, $Sp0^2$ 98% on RA; Temp 37.7°c, BP 160/80mmHg, HR 124bpm. Doctor 6 documented a plan for IV Zofram (anti sickness medicine), paracetamol and IV morphine 6mg, IV cyclizine and IV fluids. Personal Information was to have 15 minute observations for 1 hour. Doctor 6 documented he would review Personal Information when her pain settled.

At 19:30 Personal Information was reviewed again by Doctor 7 (Foundation Year FY1). On examination Personal Information's observations were stable. Doctor 7 noted Personal Information's abdomen tender throughout with voluntary guarding. Doctor 7 noted Personal Information was alert and reporting morphine had not helped her pain. Doctor 7 noted a plan to review following blood results.

At 20:00 doctor 7 noted bloods results as follows: Hb 140, WCC 14 (22), PLT 322, CRP 282 (269), amylase 26, Bone profile normal, U&E normal, Liver profile normal, Mg 0.80. Gent <0.4. Doctor 7's plan was to treat with gentamicin and to continue with the current management plan.

On the 2nd August 2014 the ward round was performed by Dr 8 (Consultant), It was noted that pain had improved and Personal Information was passing urine, the plan was to check bloods, continue with antibiotics, paracetamol and to mobilise. Bloods were later recorded as WCC 10.8 and CRP 379.

On the 3 August 2014 at 01:00 Personal Information was reviewed by doctor 9 (FY1), doctor 9 noted he was asked to see patient due to abdominal pain and query distension. Doctor 9 noted Personal Information had vomited twice that day at 15:00 and 20:00, Personal Information had one episode of diarrhoea type 7 stool recorded. Doctor 8 noted Personal Information's history of abdominal pain, vomiting and pyrexia. Doctor 9 noted previous review by the surgical team who noted unlikely appendicitis and was subsequently treated for UTI the last 3 days with gentamicin. Doctor 9 noted Personal Information's WCC had reduced from admission and CRP had increased, MSSU reported no significant growth and that Blood cultures were still awaited.

Observations were documented as RR16; BP 115/65mmHg; HS 1+11+0: HR 106bpm and regular pulse. Doctor 8 noted Personal Information's abdomen felt firm and tender over suprapubic area, bowel sounds were faint but present, doctor 9 noted Personal Information had no guarding or rebound tenderness and there was no suspicion for peritonism. Doctor 9 documented he discussed Personal Information with doctor 10 (surgical SHO). Doctor 10 kindly agreed to review. Doctor 9's plan was for an erect chest x-ray and abdominal x-ray, blood cultures and IV paracetamol if further temperature spike, a surgical review and to commence Tazocin for intra-abdominal sepsis.

Doctor 10, reviewed Personal Information and noted Personal Information's past medical history and completed a thorough examination. Doctor 10 documented Personal Information's symptoms were not clinically suggestive of appendicitis at present but noted it would warrant investigation and consideration for if Personal Information's symptoms did not settle, a note was made of Personal Information's Temperature of 38.7°c earlier in the day. Doctor 10's plan was for Tazocin for sepsis cover, IV fluids, USS and fast for the ward round in the morning.

Personal Information had an abdominal x-ray at 10:26 which reported multiple dilated loops of small bowel suggesting small bowel obstruction.

Personal Information was reviewed on the ward round by doctor 11 (Consultant Surgeon). Personal Information's history of abdominal pain was noted, doctor 11 noted Personal Information was constipated but bowels had moved the previous night.

Personal Information

Doctor 11 noted the x-ray result which reported distended small loops of bowel. On examination Personal Information's abdomen was soft but bloated and tender generally throughout, no guarding was reported. Doctor 11's plan was for a CT abdomen and for Personal Information to be transferred to surgical ward 4 North.

At 13:15 Personal Information had a CT abdomen and pelvis. The report concluded the following:

'*Significant inflammatory process in the right iliac fossa and suprapubic region with extra luminal air, in keeping with localised perforation and a small collection. The appearances suggest either perforation of a Meckel's diverticulum or the appendix. A large volume of free inflammatory fluid in the pelvis. Small bowel obstruction'.*

At 15:15 it was noted by the nurse that Personal Information was for theatre and that the doctor had spoken to her parents.

19:30 Personal Information was admitted to theatre for laparotomy.

Operation notes documented an inflammatory mass in the lower abdomen with pus and faeces, the appendix was perforated. Pus and faces were released and sent for O&S, the appendix was immobilised and excised in three pieces, it was documented the appendix was friable and perforated and a wash out with saline was performed.

On the 4 August 2014 Personal Information was reviewed by Doctor 12 (Consultant Surgeon). Doctor 12 documented Personal Information was day 1 post appendectomy; she had no temperature spikes and was feeling better. Doctor 12's plan was to continue with fluids and that she could try a light diet and to continue with Tazocin.

At 10:20 Personal Information was reviewed by doctor 4 on the ward round. Doctor 4 noted the events over the weekend and appendectomy. Doctor 4 noted Personal Information felt she was improving and was drinking fluids, Doctor 4 documented care was transferred to surgery.

On the 5 August 2014 Personal Information was reviewed during the ward round by doctor 11. Doctor 11 noted Personal In's temperature spiked during the night and that blood cultures were reported as negative. Doctor 11's plan was to continue eating and drinking, take the drip and catheter out, to increase analgesia and for routine bloods.

Later on 5 August doctor 13 (FY1) was asked by nursing staff to see Personal Information as she was feeling unwell with tachycardia. Doctor 13 noted Personal Information was alert and responsive, HR was reported as 120 bpm, RR 17, stats 98%, BP 100/50. An ECG reported normal sinus rhythm tachycardia, Personal Information's calves were reported to be soft non tender and no dyspnoea was noted. On examination Personal Information had no guarding or rebound tenderness, slight tenderness in right iliac fossa region and near the wound was documented. Doctor 13 noted Personal Information's bowels had not opened since Saturday and that she was complaining of fullness and needed to pass wind but was unable to do so. It was noted Personal Information felt nauseated earlier but not currently.

Dr 13 noted Personal Information's recent bloods results and recent abdominal x-ray result reporting multiple dilated small bowel.

At 18:10 Doctor 14 (Dr Spence CT2 medicine) documented a cardiac arrest call was made. On arrival Personal Information was sitting in the chair alert and talking. Doctor 14 noted Personal Information looked pale and that she complained of abdominal pain. On examination observations were noted: Stats 93% room air; BP 78/58mmHg; HR 160bpm. Doctor 14 noted Personal Information had not arrested, she was in bed, stood up and blacked out. Doctor 14 documented Personal Information's airway was patent, her chest was clear, heart sounds were normal, capillary

refill time (CRT) was 35, calves were soft non tender; GCS score was 15/15, it was documented the wound was satisfactory with no ooze, there was mild tenderness and bowel sounds were minimal. Doctor 14's plan was for oxygen non breather, bloods to include full blood picture; kidney function, CRP, magnesium and BP; to call the surgical team, IVF over one hour and repeat observations every 15mins.

Personal Information was reviewed by general surgical doctor 15 (Core Trainee CT2). Doctor 15 documented he was asked to see Personal Information due to a blackout episode. It was documented Personal Information was day 2 mini laparotomy for a perforated gangrenous appendix with pus and feculent material in the abdomen. Doctor 15 noted Personal Information's medical history and admission to hospital. Doctor 15 noted Personal Information had no chest pain or palpitations and that she complained of lower abdominal pain in the left side and around the wound. Personal Information had no feverish symptoms. Observations were documented as BP 70/50 increasing to 110/70, HR 130bpm reducing to 110bpm, temp 36.5^{o}c, O^{2} 100% on 2 litres of oxygen and RR 16. On examination doctor 15 documented Personal Information was tender around the wound and left side, her abdomen was slightly distended. Doctor 15 documented his impression was a vasovagal syncope secondary to current infection and recent surgery, doctor 15 queried if Personal Information was developing a collection. Doctor 15's plan was for IVF, repeat bloods, to continue with Tazocin and possibly add atypical cover. Doctor 15 would discuss Personal Information with consultant surgeon doctor 11 regarding USS in the morning.

At 20:25 Personal Information was reviewed by doctor 16 (Dr J Ong). Doctor 16 was asked to see Personal Information by nursing staff. Doctor 16 documented Personal Information's vasovagal episode earlier, observations were noted HR 116bpm; BP 111/70 and that Personal Information had no further temperature spike that day. On examination it was documented Personal Information looked pale, her abdomen was soft with mild tenderness to the left side and she was slightly nauseated. Doctor 16 documented Personal Information's recent bloods taken at 18;00, CRP was down to 336, haemoglobin down 110, WCC increased 19.5 and platelets were 448. Doctor 16 documented an impression of vasovagal episode secondary to post op bleed (day 2 post op). Doctor 16's plan was to transfuse 2 units of blood, if Personal Information was to remain hypotensive or tachycardia she would require a CT scan that night. Haemoglobin was to be checked early the following morning and observations to be checked regularly. Doctor 16 documented Personal Information's mother and father were informed of the possibility of a post operation bleed and documented they confirmed they were happy to transfuse tonight and CT scan tomorrow.

Personal Information was reviewed again at 22:00 by doctor 16 who noted Personal Information's recent haemoglobin result 67g/dl. Doctor 16 documented RG had 2 units of PRC transfused and remained tachycardia and pale looking. Doctor 16 documented his impression was likely bleeding and that Personal Information needed to return to theatre. Doctor 16 discussed Personal Information redacted with on call Consultant Surgeon doctor 17 (Mr Epanomeritakis). Doctor 17 advised that Personal Information needed to return to theatre that night and that the CT scan would be of no value as it was likely post operation bleeding. Arrangements were made for Personal Information to return to theatre for an exploration laparotomy and consent was obtained for same. A further 2 units of PRC were transfused prior to laparotomy.

The surgery was performed by Consultant Surgeon doctor 17. Theatre notes documented there was a large amount of blood around the spleen, the capsule of the spleen was detached. The findings were in keeping with a delayed rupture of splenic haematoma. There was no significant deep splenic laceration seen. In view of ongoing bleeding the spleen could not be preserved. There was evidence of pelvic phelgmon (inflammation of soft tissue) involving the sigmoid, bladder, uterus and ileum. It was noted the bladder was tensely attached to the abdominal wall and that led to a small perforation

which was repaired. Personal Information was transferred to Intensive care unit (ICU) following surgery.

On the morning of the 6 August 2014 Personal Information was extubated and reviewed post op by Dr 18 Consultant Intensivist (Dr Gail Browne). Dr 18 noted Personal Information's past medical history and recent surgeries. Personal Information's GCS score was noted as 15/15 and that she was on no sedation or inotropes. Arrangements were made for Personal Information to transfer to the ward. The plan was for Personal Information to stay on Tazocin and to be prescribed further antibiotic cover and vaccinations due to splenectomy. The surgical team to be contacted regarding eating and drinking and the catheter to remain insitu for 2 weeks.

Personal Information recovered on the ward post splenectomy and was discharged home on 13 August 2014 with arrangements for an outpatient gynaecology review for mid cycle bleeding, her catheter was to be removed on the 20 August 2014, suture removal in 10 days and an outpatient surgical review in 2 – 3 months. Personal Information's GP was to continue monitoring platelet and haemoglobin levels and review treatment for same.

SECTION 3 - LEARNING SUMMARY

14. WHAT HAS BEEN LEARNED:

Personal Information was a Personal Information year old female at the time when she was referred to CAHED by her GP on the 31 July 2014 at 16:01. The review team acknowledge the GP referral letter documented a positive urine dipstick analysis taken at the GP surgery reported positive for leucocytes and ketones/blood. The GP reported Personal Information was tender in the RIF area with rebound and had queried if Personal Information had appendicitis or a urinary tract infection (UTI).

The review team acknowledge Personal Information was appropriately triaged within 9 minutes of arrival as a priority 2 (to be seen with 10mins) as per Manchester Triage guidelines. However the review team note Personal Information did not receive a medical review until 18:40. ED doctor 1 reviewed Personal Information and completed a full medical review and assessment. The review team note doctor 1 documented Personal Information had urinary symptoms with a positive urinalysis for ketones, blood, protein and leucocytes, and blood results reported an increased WCC and CRP. A urine sample was sent to microbiology for further analysis. The review team accept there can be a wide presentation of symptoms and signs in patients presenting with appendicitis and ultimately it can be very difficult to make a diagnosis. A high index of suspicion therefore should be maintained and in this particular case the migratory nature of the pain, elevated temperature with raised inflammatory markers may have pointed consideration towards a surgical admission or surgical review in the ED department. However the review team determined a differential diagnosis of pyelonephritis and a plan for admission under the medical team and scan in the morning was acceptable at the time. The review team confirm Doctor 1 appropriately covered Personal Information for sepsis prescribing IV Gentamycin (anti-biotic) which was administered prior to Personal Information's transfer to the ward.

The review team are conscious sepsis is a medical emergency. The review team acknowledge Personal Information presented with symptoms in keeping with a UTI/pyelonephritis on 1st August 2014 and was appropriately admitted to the ward and treated for a suspected UTI/ pyelonephritis with IVAB Gentamycin. The review team note a MSU sample was sent to microbiology for confirmation of

Personal Information

UTI/pyelonephritis. The review team note nursing and medical notes document Personal Information's symptoms worsened over the next couple of days and Personal Information had multiple reviews. The review team confirm Personal Information had 2 normal MSU results available from 1 August 2014 at 11:24 which excluded a UTI/ pyelonephritis diagnosis. The review team are conscious this was never considered despite multiple reviews. The review team determined the reported MSU result available on 01 August 2014 warranted a change in the management plan and for an earlier consideration of appendicitis.

The review team note doctor 9 was asked to review Personal Information on 3 August 2014 at 1:00. The review team acknowledge doctor 9 completed a thorough history and examination and appropriately contacted the surgical team to review. The review team confirm Tazocin was correctly prescribed to cover intra –abdominal sepsis, chest x ray, abdominal x ray and surgical review were requested. Doctor 9 reviewed and again completed a thorough history and examination. Recent bloods were considered but again the review team note there was no documentation to indicate the MSU result was reviewed. The review team note Doctor 9 documented Personal Information symptoms were not clinically very suggestive of appendicitis at the time but documented it would warrant investigation and consideration for laparoscopy if not settling. Tazocin was prescribed to cover sepsis, IV fluids, USS and Personal Information was too fast for the ward round in preparation of the possibility of surgery.

The review team are mindful a diagnosis of appendicitis was not made until later that afternoon following the CT scan report at 13:49 which confirmed a perforated appendix or Meckel's diverticulum. The review team can confirm Personal Information was added to emergency theatre waiting list that day and was second on the list, theatre staff sent for Personal Information at 18:33 and surgery was commenced at 19:23. The review team are conscious Personal Information's CT report was available at 13:49 and a decision was made for an urgent laparotomy which was performed a little over four and half hours later.

The review team reviewed the theatre operation notes on 03 August 2014 and confirm a lower mid-line laparotomy was performed which confirmed a perforated gangrenous appendix. The review team confirmed that this is an acceptable approach when dealing with a presumed difficult perforated appendix with generalised tenderness. The review team conclude a lower midline laparotomy offers good access to the pelvis to perform a difficult appendectomy and thorough wash out. The review team note there were no documented issues with the procedure and samples were appropriately taken for histopathology. The review team can confirm histopathology results confirmed acute perforated necrotic appendicitis. The review team confirm microbiology testing from an intraabdominal swab taken at the time of surgery confirmed coliforms present and Gentamycin (commenced on 1 August 2014) was the appropriate treatment.

The review team note that following appendectomy it was reported during the ward round on the morning of the 4 August 2014 that Personal Information felt she was improving.

On the 5 August 2014 the review team note it was documented that Personal Information had a temperature spike post laparotomy and determined this can sometimes be a normal response following a laparotomy for a perforated appendicitis. Bloods were appropriately requested and Personal Information was able to eat and drink. It was documented Personal Information's WCC was elevated which again the review team determined would be normal after a perforated appendicitis and laparotomy. It was documented Personal Information had no peritonism on examination. The review team note Personal Information became tachycardia and hypotensive before the syncope episode and was again reviewed by the surgical team. In hindsight the review team acknowledge this was probably due haemorrhagic shock. The review team are conscious Personal Information's

symptoms were not unusual following a ruptured gangrenous appendectomy and therefore consideration was not given until later in the evening for a post operation bleed. The review team acknowledge doctor 16's decision at 22:00 to proceed to an explorative laparotomy without CT imaging was appropriate considering Personal Information had significantly deteriorated. The review team can confirm the emergency theatre list was very busy on 5 August 2014 with 5 patients, the last patient left theatre at 21:31 and Personal Information was sent for at 22:50 and procedure was commenced at 23:22.

The review team reviewed the theatre operation notes of the 5 August 2014 and noted the operative findings there was a large amount of blood around the spleen, the capsule of the spleen was detached, these findings were documented to be in keeping with a delayed rupture of a splenic haematoma. There was ongoing bleeding noted from the spleen and a splenectomy had to be performed as the spleen could not be preserved. The review team determined the initial laparotomy performed on the 3 August 2014 used a lower midline incision to gain access to the abdominal cavity, the appendectomy was performed in a site distant from the spleen and the only possible operative cause for a splenic haematoma would be during the washout of the abdominal cavity at the end of the procedure when suction may have been used to wash out the abdominal cavity.

The review team are aware intraabdominal sepsis is a medical emergency. The review team determined Personal Information presented to CAHED with symptoms of a possible UTI. However the review team noted the medical staff did not review the MSU result which was available on 1 August 2014 at 11.24. The review team determined the MSU result would have warranted a change to Personal Information's management plan and earlier consideration for appendicitis.

The review team conclude all care and management post operation on 5TH August 2014 was appropriate and Personal Information was discharged home.

15. WHAT HAS BEEN CHANGED or WHAT WILL CHANGE?

If a patient is admitted with a possible diagnosis of a UTI and subsequently the MSU returns with negative result this should prompt an immediate review and raise the possibility of appendicitis as an underlying cause.

Whilst the actual cause of the splenic haematoma may never be identified in this particular case. Great care should be taken during laparotomy to avoid occult splenic injury especially when performing a wash out of the abdominal cavity at the end of the procedure.

16. RECOMMENDATIONS (please state by whom and timescale)

1. In patients presenting with a possible diagnosis of a UTI or appendicitis consideration should be given towards a surgical admission or surgical review in the ED. If admitted Medically the Surgical team should be involved on a daily basis especially if there is an ongoing clinical suspicion of appendicitis. Actioned by ??

Personal Information

2. The report will be shared with staff involved for reflection and learning. Actioned by HOS for ED/ Surgery

3. The report will be presented at the ED, Surgical and Medical Morbidity & Mortality (M&M) meeting for learning. Actioned by : Acute Governance team to share report with M&M chairs.

17. INDICATE ANY PROPOSED TRANSFERRABLE REGIONAL LEARNING POINTS FOR CONSIDERATION BY HSCB/PHA:

18. FURTHER REVIEW REQUIRED? YES / NO
Please select as appropriate

If 'YES' complete SECTIONS 4, 5 and 6. If 'NO' complete SECTION 5 and 6.

SECTION 4 (COMPLETE THIS SECTION ONLY WHERE A <u>FURTHER REVIEW IS</u> REQUIRED)

19. PLEASE INDICATE LEVEL OF REVIEW:
LEVEL 2 / LEVEL 3
Please select as appropriate

20. PROPOSED TIMESCALE FOR COMPLETION:
DD / MM / YYYY

21. REVIEW TEAM MEMBERSHIP *(If known or submit asap)*:

22. TERMS OF REFERENCE *(If known or submit asap)*:

SECTION 5	
APPROVAL BY RELEVANT PROFESSIONAL DIRECTOR AND/OR OPERATIONAL DIRECTOR	
23. NAME:	**24.** DATE APPROVED:
25. DESIGANTION:	

SECTION 6
26. DISTRIBUTION LIST:

Checklist for Engagement / Communication with Service User[1]/ Family/ Carer following a Serious Adverse Incident

Reporting Organisation SAI Ref Number:		HSCB Ref Number:	

SECTION 1

INFORMING THE SERVICE USER[1] / FAMILY / CARER

1) Please indicate if the SAI relates to a single service user, or a number of service users. **Please select as appropriate (✓)**	**Single Service User**		**Multiple Service Users***		
	Comment: ***If multiple service users are involved please indicate the number involved***				
2) Was the Service User[1] / Family / Carer informed the incident was being reviewed as a SAI? **Please select as appropriate (✓)**	**YES**		**NO**		
	If **YES**, insert **date informed**:				
	If **NO**, please select **only one** rationale from below, for **NOT INFORMING** the Service User / Family / Carer that the incident was being reviewed as a SAI				
	a) No contact or Next of Kin details or Unable to contact				
	b) Not applicable as this SAI is not 'patient/service user' related				
	c) Concerns regarding impact the information may have on health/safety/security and/or wellbeing of the service user				
	d) Case involved suspected or actual abuse by family				
	e) Case identified as a result of review exercise				
	f) Case is environmental or infrastructure related with no harm to patient/service user				
	g) Other rationale				
	If you selected c), d), e), f) or g) above please provide further details:				
3) Was this SAI also a Never Event? **Please select as appropriate (✓)**	**YES**		**NO**		
4) If **YES**, was the Service User[1] / Family / Carer informed this was a Never Event? **Please select as appropriate (✓)**	**YES**	If **YES**, insert **date informed**: DD/MM.YY			
	NO	If **NO**, provide details:			
For completion by HSCB/PHA Personnel Only (**Please select as appropriate (✓)**					
Content with rationale?	**YES**		**NO**		

SHARING THE REVIEW REPORT WITH THE SERVICE USER[1] / FAMILY / CARER

(complete this section where the Service User / Family / Carer has been informed the incident was being reviewed as a SAI)

5) Has the Final Review report been shared with the Service User[1] / Family / Carer? **Please select as appropriate (✓)**	**YES**		**NO**	
	If **YES**, insert date informed:			
	If **NO**, please select **only one** rationale from below, for **NOT SHARING** the SAI Review Report with Service User / Family / Carer:			
	a) Draft review report has been shared and further engagement planned to share final report			

SHARING THE REVIEW REPORT WITH THE SERVICE USER[1] / FAMILY / CARER *(complete this section where the Service User / Family / Carer has been informed the incident was being reviewed as a SAI)*		
	b) Plan to share final review report at a later date and further engagement planned	
	c) Report not shared but contents discussed ***(if you select this option please also complete 'l' below)***	
	d) No contact or Next of Kin or Unable to contact	
	e) No response to correspondence	
	f) Withdrew fully from the SAI process	
	g) Participated in SAI process but declined review report	
	(if you select any of the options below please also complete 'l' below)	
	h) concerns regarding impact the information may have on health/safety/security and/or wellbeing of the service user[1] family/ carer	
	i) case involved suspected or actual abuse by family	
	j) identified as a result of review exercise	
	k) other rationale	
	l) If you have selected **c), h), i), j), or k)** above please provide further details:	

For completion by HSCB/PHA Personnel Only (**Please select as appropriate (✓)**				
Content with rationale?	**YES**		**NO**	

SECTION 2							
INFORMING THE CORONERS OFFICE (under section 7 of the Coroners Act (Northern Ireland) 1959) *(complete this section for all death related SAIs)*							
1) Was there a Statutory Duty to notify the Coroner on the circumstances of the death? **Please select as appropriate (✓)**	**YES**				**NO**		
	If **YES**, insert **date informed**:						
	If **NO**, please provide details:						
2) If you have selected 'YES' to question 1, has the review report been shared with the Coroner? **Please select as appropriate (✓)**	**YES**				**NO**		
	If **YES**, insert **date report shared**:						
	If **NO**, please provide details:						
3) 'If you have selected 'YES' to question 1, has the Family / Carer been informed? **Please select as appropriate (✓)**	**YES**		**NO**		**N/A**		**Not Known**
	If **YES**, insert **date informed**:						
	If **NO**, please provide details:						

DATE CHECKLIST COMPLETED	

[1] *Service User or their nominated representative*

Insert organisation Logo

Root Cause Analysis report on the review of a Serious Adverse Incident including Service User/Family/Carer Engagement Checklist

Organisation's Unique Case Identifier: [redacted]

Date of Incident/Event: 13 December 2019

HSCB Unique Case Identifier:

Service User Details: (*complete where relevant*)
D.O.B: Personal Information redacted by the USI Gender: Male Age: Personal Information redacted by the USI

Responsible Lead Officer: Dr John Simpson

Designation: Chair

Report Author: The Review Team

Date report signed off:

Personal Information

1.0 EXECUTIVE SUMMARY

Personal Information, a Personal Information year old man, was brought in by ambulance to the Emergency Department (ED) in Craigavon Area Hospital (CAH) on 13th December 2019 at 20:40 following a road traffic collision and experiencing suicidal ideation. He was admitted to a surgical ward and was also assessed by the psychiatric liaison team. He was noted to have a new psychosis and to be at high risk of absconding. A plan to transfer to a psychiatric unit in South Eastern Trust when medically fit was made. Whilst on the surgical ward Personal Information absconded. Following an extensive search of the hospital grounds and surrounding area he was found on the 18th December 2019 in a secluded area near the hospital having taken his own life.

Personal Information was suffering from a psychotic illness of a sudden and unusual presentation, this was the key causative factor leading to the tragic outcome. It is likely that he was able to conceal his level of psychotic thinking and suicidal ideation at various points in his interactions with staff.

The mental health risk assessment carried out in the ED was properly completed and is an example of good practice. However, because of how services are structured and resourced in CAH, such risk assessments do not necessarily lead to joint working by surgery (and other specialties) with mental health services following admission to an inpatient ward. As a result, the overall care delivered to Personal Information was somewhat disjointed. The absence of joint working is a systemic problem and is the most important contributory factor to this serious adverse incident.

An additional contributory factor is that there is no policy in CAH, as is often the case in general hospitals compared to mental health facilities, governing the use of nursing observations containing clear definitions of levels of observation and accompanying standard operating procedures. Therefore, the precise nature of increased levels of observation are left open to interpretation by the individual nursing staff in charge of a ward.

The apparent confusion over the role of the capacity assessment concerning deprivation of liberty as per the recently introduced Mental Capacity Act (MCA), as opposed to the role of the Mental Health Order, was a subsidiary contributory factor.

The recommendations flowing from the review of this serious adverse incident are that the SHSCT must resource and restructure its mental health liaison service to enable joint working of such cases, that a trust-wide policy governing nursing observations must be drawn up and implemented, and that further training is provided to all clinical staff and managers on the implementation of the MCA and its relationship to the Mental Health Order.

2.0 THE REVIEW TEAM

Dr John Simpson (Chair) – Independent Psychiatrist, Associate HSC Leadership Centre
Mr Adrian Neill – Consultant Surgeon, SHSCT
Mrs Dorothy Sharpe – Lead Nurse, SHSCT
Sergeant Alwyn Peters - PSNI
Mrs Patricia Kingsnorth – Acting Acute Clinical Governance Coordinator, SHSCT
Mrs Carly Connolly – Clinical Governance Manager, SHSCT

Personal Information

3.0 SAI REVIEW TERMS OF REFERENCE

- To carry out a review in the care provided to Personal Information, using a Root Cause Analysis (RCA) Methodology.
- To use a multidisciplinary team approach to the review.
- To provide an agreed chronology based on documented evidence and staff accounts of events
- To identify the key contributory factors which may have had an influence or contributed to Personal Information's treatment and care on 13 -18 December 2019
- Examine the nature of the Trust and the PSNI's response to the search.
- To ensure that recommendations are made in line with evidence based practice.
- To set out the findings, recommendations, actions and lessons learnt in an anonymous report
- To liaise with the family and facilitate them to contribute to the review
- To report the findings and the recommendations of the review through the Director of Acute Services SHSCT and Mental Health Directorate and to disseminate to the staff associated with the care and with Personal Information's family.
- To share the findings with the Coroner's office

4.0 REVIEW METHODOLOGY

Patients ED and Medical health records
Northern Ireland Electronic Care Record
PARIS records
Family's questions and account
Statements from staff prepared for the Coroner
Interviews with clinical staff and managers
Interviews with NIPS officer involved in the search

5.0 DESCRIPTION OF INCIDENT/CASE

Personal Information was a Personal Information year old man who was involved in a road traffic collision on the A1 between Dromore and Banbridge at approximately 18:45 on the 13th Dec 2019. Paramedics at the scene documented that Personal Information had been reported as a missing person earlier in the day and had been reported as 'acting strange' by his partner. It was noted that he had locked himself in his car. The Police Service Northern Ireland (PSNI) removed him from the car and detained him under article 130 of the Mental Health Order 1986.

Personal Information was noted to have small lacerations and a puncture wound to his neck. Paramedics described him as being uncooperative and difficult to assess. He was also noted to have a haematoma on the left side of his chest and ribs which was initially bleeding but had since stopped. There was good air entry and good oxygen saturation levels recorded. Observations were recorded as pulse (P) 84 beats per minute (BPM) blood pressure (BP) 177/96 respirations (RR) 20 oxygen saturations (SpO_2 97%). He was transferred to Craigavon Area Hospital (CAH) Emergency

Personal Information

5.0 DESCRIPTION OF INCIDENT/CASE

Department (ED) at 20:40.

He was triaged immediately by Nurse 1. Presentation was noted as mental health issues/self-harm. At triage it was documented that Personal Information was detained by the PSNI and was noted to be feeling suicidal. The mental state examination and risk assessment form was completed and observations were recorded as Temperature (T) 35.8 P80 BP 154/103 SpO_2 98%. An aspen collar was applied.

Personal Information was reviewed by Dr 1(ST5 ED) at 21:30 in the resus area. Dr 1 noted the history and that Personal Information was noted to be acting strange by his partner around 3pm and that he was reported missing. Personal Information denied taking alcohol or drugs. He stated that he drove into the back of a truck at a speed of around 90 miles per hour. He was wearing a seat belt and the airbags were deployed. Personal Information was noted to have a puncture wound to his neck. A haematoma was noted under the puncture wound to the left side of his chest. There was good air entry and his oxygen saturation was noted to be good (SpO_2 97%). The impression was of a road traffic collision as well as mental health issues. The CT scan for polytrauma was noted as "*a pneumomediastinum with extension into the retropharyngeal space of the neck. This most likely is secondary to a penetrating wound to lower neck on the right side anteriorly….post traumatic bruising of the subcutaneous tissues of the left lower anterior chest wall with presence of haematoma and thickening of the intercostal muscles anteriorly.*"

Personal Information was reviewed by Dr 2 (ST1 ED) who noted the history and blood results. Personal Information was noted to be bright and alert but said he had not slept in a week and wanted "*to kill himself and get away from it all*". He sustained a self-inflicted stab wound to neck and chest area using a pair of scissors and admitted to driving his car into the back of a truck. Personal Information said that if he goes home, he will try it again. No insight was noted. He said the car radio was talking to him and telling him what to do and listening to him.

On physical examination his spine was non-tender from neck a less than 2cm cut was noted on the left side of his neck. Bruising was noted to the left chest wall with superficial abrasion – not deep, tender over same, good air entry bilaterally.
A long standing skin lesion noted query basal cell carcinoma or squamous cell carcinoma.

His abdomen was soft and not tender. Bowel sounds were present. Dr 2 discussed the patient with cardiothoracic team, no intervention was required and Personal Information was advised to fast from food or fluids.

Dr 2 also discussed the patient with the ENT team who agreed to review Personal Information. The surgical team were busy in theatre but would review later. The plan was for Surgical/ ENT admission, for intravenous fluids and antibiotics. Cardiac monitoring was requested and a repeat electrocardiogram (ECG) was ordered. A plan for psychiatric assessment when medically fit was documented.

Antibiotics were administered intravenously and intravenous paracetamol was given for pain relief. He was seen by the surgical team who noted the CT scan showed a pneumomediastinum at level of upper thoracic region.

On 14th December 2019 at 00:20 Personal Information was reviewed by ENT SHO Dr 3. Dr 3 advised a general surgery review given the thoracic trauma and ongoing arrhythmic risk.

Personal Information

5.0 DESCRIPTION OF INCIDENT/CASE

Antibiotics and water soluble swallow were recommended. Personal Information was not for primary ENT admission.

At 07:25 Personal Information was clerked in by Dr 4 (CT1 surgery). Dr 4 noted a poly trauma call following a road traffic collision and self-inflicted stabbing injury to his neck. Blunt thoracic trauma from the air bag was also noted. Personal Information was noted to complain of chest pain on coughing. Dr 4 documented that Personal Information was experiencing poor mental state for a few weeks. He was reportedly fully orientated and no longer expressing suicidal ideation. Dr 4 noted that no intervention was required from the cardiothoracic team. Personal Information was noted to have full power in both upper and lower limbs and his Glasgow coma scale (CGS is an assessment to determine the level of consciousness in patients. The maximum is 15 which indicates a fully awake patient) was recorded as15/15.

Report from CT scan of chest abdomen and pelvis showed a pneumomediastinum. A plan was made for telemetry, repeat troponin, water soluble contrast swallow and to re-discuss with cardiothoracic team if any haemodynamic instability. A psychiatric review was discussed with Personal Information and the notes record that Personal Information was agreeable.

Admitted to ward 4 North at 11:00, 14th December.
Personal Information was reviewed by Dr 5 (Consultant Surgeon) on the post take ward round at 11:05. Personal Information was noted to be feeling sore across his chest and reported that he was not feeling suicidal that morning. The management plan included to re-contact cardiothoracic in the Royal Victoria Hospital (RVH), emergency echo, water soluble swallow, troponin for 2 days, repeat chest x ray and psychiatric review. He was to remain nil by mouth (NBM), prescribed intravenous proton pump inhibitor (PPI) (a drug used to reduce acid in the stomach) and intravenous tazocin (antibiotic).

At 11:53 the water soluble contrast study carried out on 14 December showed no evidence of oesophageal contrast leakage therefore conservative management was advised.
At 14:30 Dr 6 made a retrospective note which describes the outcome of the contrast study and suggested a further review with ENT and requested immediate inpatient psychiatric review.
At 15:30 ENT review by Dr 3 there was no evidence of neck swelling, stridor or oesophageal leak noted. He was reviewed by the ENT consultant and advised conservative management. Personal Information was advised to attend his GP regarding query basal cell carcinoma on upper chest.
At 14:55 Nurse 3 documented that she spoke with psychiatric liaison about urgent referral needs assessed today. Advised they don't normally see patients at the weekend and to re-refer on Monday.
At 22:40 Dr 7 contacted the psychiatric crisis response team for urgent review.
The crisis response team advised that they are "only able to cover ED and do not cover patients on wards". It was suggested to treat the patient with lorazepam, to call security if needed and use the Mental Health Order. They further advised to refer to psychiatric liaison team at 9am the following morning.

At 23:10 nursing notes describe an episode of agitation whereby Personal Information removed his cannula from his arm, he was advised that he was not allowed to eat or drink at present after requesting a glass of water. He was noted to have grabbed another man's jug of water for a drink but this was removed by nursing staff. Personal Information was noted to have tried to leave the ward but was prevented by portering staff. Nurse 4

Personal Information

5.0 DESCRIPTION OF INCIDENT/CASE

documented that there had been several attempts to engage with the psychiatric services but psychiatric liaison team advised staff to contact the crisis response team, who in turn advised they could only review patients in ED. The advice given was to administer lorazepam. 2mgs lorazepam was administered intravenously with good effect and Personal Information was noted to have settled. Personal Information was noted to be at high risk of absconding and therefore one to one supervision was in place.

A retrospective entry made on 15th December 2019 at 11:30 by Dr 6 describes the previous night's incident. Dr 6 stated she was called around 22:00 to review Personal Information who was very agitated and aggressive. Security was present on the ward. There was evidence of auditory hallucinations of command voices. Dr 6 documented there were two previous significant and violent methods of attempted suicide within the last 24 hours. No previous psychiatric history. He was noted to be a smoker and history of excessive alcohol consumption. Dr 6 discussed with the psychiatric SHO in Bluestone who was unable to review despite the above history being relayed. Dr 7 (FY1 surgery) was advised Personal Information would be reviewed when he was medically fit. Dr 7 also discussed with home treatment team who advised they only provide cover for ED and not in patient. Given the ongoing risk to both Personal Information and the other patients and staff a decision
On 15th December 2019 Personal Information was reviewed by Consultant Surgeon Dr 5 Personal Information settled. News 1. The plan was to continue nil by mouth, aim for fluids tomorrow, intravenous fluids and analgesia. A psychiatric review was planned.

On Sunday morning the 15th December the task of contacting mental health liaison was delegated to the F1 for surgery, the most junior member of the medical team, who had had no prior involvement in Personal Information's care. No actions arose from this contact other than advice to contact psychiatric liaison on the Monday morning.

The nurse in charge of the surgical ward carried out a capacity assessment later that day with a view to informing further decisions about depriving Personal Information of his liberty given the concern about his absconding the night before. She found that he had capacity.

On Monday 16th December 2019 at 07:00 night staff reported that Personal Information had not slept all night. At 09:30 Personal Information was reviewed by Dr 5 (Consultant surgeon) a repeat chest x ray was requested to ensure there was no pneumothorax. A light diet was prescribed and bloods were to be repeated. The plan was for a further 24 hours observation in the surgical ward before discharge.

Personal Information was reviewed by psychiatry consultant Dr 8 at approximately 10:30 on Monday 16th December. Personal Information reported increase in stresses and pressures, poor sleep for one week prior to the incident. Paranoia was thought to be secondary to sleep deprivation. Personal Information was noted to be suspicious and was not convinced he was in hospital. Personal Information denied any ongoing thoughts of self-harm or suicidal ideation at the time of assessment. The plan was that Personal Information required further psychiatry evaluation when medically fit and the consultant would organise an inpatient psychiatric admission within his own trust, the South Eastern Trust. He was to remain on the ward until this was arranged.

At 11:00 Nurse 5 described a peri arrest situation which was ongoing in the bay during Dr 8 assessment. Nursing and medical were not available to receive a formal handover from Dr 8.

At 12:30 Nurse 5 described in her statement to the coroner's office that she received

5.0 DESCRIPTION OF INCIDENT/CASE

a phone call from Dr 8 to advise that she was unable to speak to staff members in the ward in view of the ongoing emergency. Dr 8 advised that Personal Information was experiencing an new psychotic episode and would require to be transferred to a psychiatric bed when medically fit most likely the Ulster Hospital. Dr 8 advised that if Personal Information attempted to leave the ward he would need to contact the psychiatric team as he would need to be detained. Personal Information was closely observed by staff.

At approx. 19:00 the ward staff received a phone call from the PSNI reporting that Personal Information had attempted to contact them to report a crime but terminated the call. Personal Information then spoke on the phone to the PSNI and advised that he had reported about an abuse that happened when Personal Information was a child.

On Tuesday the 17th December 2019 at 09:05 it was reported Personal Information absconded from the ward. Ward staff initiated the absconding protocol and the PSNI were contacted and advised Personal Information was a high risk patient. Personal Information's partner was informed at 09:17 that Personal Information had absconded. Staff in ED reported to seeing a man fitting Personal Information's description on the green in front of the hospital. Security manager attended the ward and advised that he found the belt of Personal Information dressing gown which had been located around a tree in the hospital grounds. The security manager advised that a staff member whilst driving into the hospital to work reported seeing a patient running toward a local housing development. Two staff members left the ward to assist with the search. They drove towards the reported sighting but could not locate Personal Information. The PSNI reported that they had dispatched officers to conduct a search. Despite a search of the ward and grounds Personal Information could not be found.

On the 18th December 2019 Personal Information was found deceased in a secluded area a short distance from the hospital by his family. RIP.

6.0 KEY FINDINGS

1. The mental health risk assessment carried out in the Emergency Department (ED) of Craigavon Area Hospital (CAH) was properly completed and is an example of good practice. However, because of how services are structured and resourced, the risk assessment did not lead to joint working of Personal Information's care plan by surgery and mental health services following his admission to the surgical ward, as might have been expected given both his pressing surgical and mental health needs. The absence of joint working is a systemic problem and is the most important contributory factor in this serious adverse incident.
2. Mental health liaison into CAH does not extend to inpatient care but is restricted to ED. Liaison assessments are carried out on only those inpatients who are medically/surgically fit and ready for discharge. In addition, the mental health liaison team works with reduced physical presence over weekends and therefore CAH inpatient staff are reliant on telephone advice from other parts of the Trust's mental health service. It appears that the shortfall in this service was not well understood by clinical staff in surgery who consequently felt

Personal Information

6.0 KEY FINDINGS

exposed.

3. Although new investment to strengthen and reshape mental health liaison aiming to reduce these deficits had been made in late 2019, some key staff chose to leave during this period of change resulting in temporary staff shortages throughout the winter of 2019/20.
4. The lack of joint working of the care provided to Personal Information resulted in repeated referrals from different members of surgical staff to different mental health staff over the weekend from when Personal Information was admitted through ED to the surgical ward on the Friday night/Saturday morning until the following Monday morning when Personal Information was assessed face to face by the consultant psychiatrist. Requiring surgical staff to make repeated referrals is not good practice and leads to care being disjointed.
5. Personal Information's injuries did not require an immediate surgical intervention but a period of observation in a surgical ward over a matter of days. This would have been completed on the Tuesday following the Friday, allowing him to be discharged and admitted to a psychiatric unit. Unfortunately, he absconded on that morning before he was due to be reviewed at the surgical ward round.
6. During his admission it became clear that clinical staff on a surgical ward have great difficulty in observing and managing a patient such as Personal Information, who was experiencing a psychotic episode, in addition to delivering the nursing care appropriate to his injuries that they would be accustomed to. The longstanding absence of joint working between mental health services and medical/surgical services, which is not unique to CAH, has resulted in a lack of joint ownership of such patients, disjointed communications between the services therefore increasing the risk of harm to the patient. Interface issues between different specialties are a well recognised problem throughout all healthcare systems and all healthcare systems have the responsibility of mitigating these risks as patients and their families would expect.
7. A key moment and subsequent important missed opportunity occurred on the Saturday evening and Sunday morning. Personal Information appeared to be in a very disturbed state of mind and became uncooperative with the nursing staff on Saturday evening. Nursing staff were also concerned he may abscond. The surgical registrar was called as were portering/security staff. Mental health staff were consulted per phone by the surgical registrar. It was advised that Personal Information should be sedated and that he may need detained under the Mental Health Order. It was also advised that contact should be made again with mental health liaison the following morning. Personal Information responded well to the sedation. He was placed on one to one observations (1 to 1 obs) by the nurse in charge as a precaution, however he had a peaceful night. On the Sunday morning the important task of contacting mental health liaison was delegated to the F1 for surgery, the most junior member of the medical team, who had had no prior involvement in Personal Information's care. The information relayed to the member of mental health staff was therefore inadequate and an important opportunity for both services to review Personal Information's care plan was missed.
8. With the benefit of hindsight, it is now clear that Personal Information was suffering from a psychotic illness (albeit of a rather sudden and unusual presentation, given the absence of a past history of mental illness or recent abuse of drugs or alcohol), and that this was the key causative factor leading to the tragic outcome of this serious adverse incident. In addition, it is likely that he was able to conceal his level of psychotic thinking and suicidal ideation at various points in his interactions with staff.

Personal Information

6.0 KEY FINDINGS

9. It is also likely that the benefit of the one-off administration of sedation on the Saturday night would have been short term and indeed may have temporarily masked the underlying problem. Had there been joint working then this aspect of the case would surely have been discussed on the Sunday and would most likely have brought about a more active management plan regarding his mental illness. However, this opportunity was missed, he was not prescribed any regular medication and the 1 to 1 obs were discontinued.
10. Without the benefit of joint working with mental health staff, the nurse in charge of the surgical ward carried out a capacity assessment later that Sunday with a view to informing further decisions about depriving Personal Information of his liberty given the concern about his absconding the night before. She found that he had capacity. However, a psychotic illness such as Personal Information was suffering from occurs in a setting of clear consciousness, therefore a capacity assessment in the absence of a full mental health assessment is likely to be misleading, particularly at that point when Personal Information had probably found some temporary relief from the previous night's sedation and a peaceful night's sleep.
11. The apparent confusion over the role of the capacity assessment concerning the deprivation of liberty, as per the Mental Capacity Act (MCA) which had just been introduced some months before Personal Information's admission to hospital, was a subsidiary contributory factor in this serious adverse incident. This aspect of the MCA was clearly not intended to replace the functions of the Mental Health Order, and although this would be well understood by mental health staff, this does not seem to be so clearly understood by surgical staff. The nursing staff in the surgical ward had become familiar with the appropriate use of the capacity assessment, and subsequent deprivation of liberty, in cases of delirium where there is a risk of patients falling or wandering. They were misguided in applying this measure to Personal Information's case, even though mental health staff had more than once suggested the use of the Mental Health Order. However, given the understandable lack of experience of surgical staff in utilising the Mental Health Order, and the complexity arising in transitioning to the full implementation of the MCA in Northern Ireland, it is not surprising that such confusion has arisen.
12. Personal did have a full mental health assessment on the Monday morning by the consultant psychiatrist from the mental health liaison team. Although the assessment was disrupted to a degree by a medical emergency concerning another patient in the same four bedded bay, the correct diagnosis was arrived at and later confirmed after a telephone discussion by the consultant with Personal Information's partner. Crucially, the consultant concluded that despite his symptomatology, Personal Information was not suicidal, was agreeable to admission to a psychiatric unit and was therefore not liable to be detained under the Mental Health Order at that juncture.
13. The feedback from the consultant psychiatrist to the lead nurse in Personal Information's care was by telephone later that morning. The consultant had left the ward to attend to other liaison cases, having been unable to wait to discuss with clinical staff who were attending to the ongoing emergency. During the telephone discussion a miscommunication arose as to the level of observation Personal Information was under and what would be necessary over the coming 24 hours before he could be discharged from the surgical ward and transferred to the psychiatric unit. Once again it must be pointed out that in the absence of joint working such a miscommunication would be much less likely to occur. Whilst the consultant was under the impression that Personal Information was already on 1 to 1 obs and should

Personal Information

6.0 KEY FINDINGS

continue as such, this was not the understanding of the lead nurse who then relayed her understanding of the conversation to her deputy sister and colleagues. They took a different view, that Personal Information should be observed 'as closely as possible' and that 1 to 1 obs were not appropriate because he had capacity and was not liable to be detained at that point.

14. While 1 to 1 obs mean something very specific in psychiatric care, this is not commonly the case in surgical wards. The key features of 1 to 1 obs which have been established in all mental health settings in Northern Ireland can be summarised as follows:
    a) The nurse in charge of a ward can initiate 1 to 1 obs, however it can only be stopped after a multidisciplinary discussion (this being the decision with most risk attached).
    b) The 1 to 1 obs must be specified as either 'arm's length' or 'in sight of the staff member' depending on the level of risk.
    c) The rationale for and the details of the 1 to 1 obs must be clearly recorded on a regular basis and retained in the notes for review by the multidisciplinary team.
15. There is no policy extant in CAH governing the use of observations which contains clear definitions of either close observation or 1 to 1 obs and accompanying standard operating procedures (this is not unique to CAH). Therefore, the precise nature of increased levels of observation are left open to interpretation by individual nursing staff in charge of a ward – as happened over the time that Personal Information was in the surgical ward. This is something that mental health staff, or indeed a consultant psychiatrist, would not necessarily be aware of. As already stated, such a misunderstanding would be less likely to occur had there been an established practice of joint working and, of course, joint learning.
16. The search for Personal Information after he absconded was initiated in a timely manner and carried out with good cooperation between CAH staff and officers from the NIPS. It is possible that the search failed to find Personal Information in time to prevent the tragic outcome because Personal Information redacted was intent on avoiding being found given the effect of the psychosis on his state of mind.

7.0 CONCLUSIONS

Personal Information was suffering from a psychotic illness of a sudden and unusual presentation, this was the key causative factor leading to the tragic outcome. It is likely that he was able to conceal his level of psychotic thinking and suicidal ideation at various points in his interactions with staff.

The mental health risk assessment carried out in the ED was properly completed and is an example of good practice. However, because of how services are structured and resourced in CAH, such risk assessments do not necessarily lead to joint working by surgery (and other specialties) with mental health services following admission to an inpatient ward. As a result, the overall care delivered to Personal Information was somewhat disjointed. The absence of joint working is a systemic problem and is the most important contributory factor to this serious adverse incident.

An additional contributory factor is that there is no policy in CAH, as is often the case in general hospitals compared to mental health facilities, governing the use of nursing observations containing clear definitions of levels of observation and accompanying standard operating procedures. Therefore, the precise nature of increased levels of

Personal Information

observation are left open to interpretation by the individual nursing staff in charge of a ward.
The apparent confusion over the role of the capacity assessment concerning deprivation of liberty as per the recently introduced Mental Capacity Act (MCA), as opposed to the role of the Mental Health Order, was a subsidiary contributory factor.

8.0 LESSONS LEARNED

9.0 RECOMMENDATIONS AND ACTION PLANNING

The recommendations flowing from the review of this serious adverse incident are as follows:

1. The SHSCT must resource and restructure its mental health liaison service to enable effective joint working of such cases.
2. A trust-wide policy, governing nursing observations, must be drawn up and implemented.
3. Further training must be provided to all clinical staff and managers on the implementation of the MCA and its relationship to the Mental Health Order.

10.0 DISTRIBUTION LIST

Checklist for Engagement / Communication with Service User[1]/ Family/ Carer following a Serious Adverse Incident

Reporting Organisation SAI Ref Number:		HSCB Ref Number:	

SECTION 1					
INFORMING THE SERVICE USER[1] / FAMILY / CARER					
1) Please indicate if the SAI relates to a single service user, or a number of service users. **Please select as appropriate (✓)**	**Single Service User**		**Multiple Service Users***		
	Comment: ***If multiple service users are involved please indicate the number involved***				
2) Was the Service User[1] / Family / Carer informed the incident was being reviewed as a SAI? **Please select as appropriate (✓)**	**YES**		**NO**		
	If **YES**, insert **date informed**:				
	If **NO**, please select **only one** rationale from below, for **NOT INFORMING** the Service User / Family / Carer that the incident was being reviewed as a SAI				
	a) No contact or Next of Kin details or Unable to contact				
	b) Not applicable as this SAI is not 'patient/service user' related				
	c) Concerns regarding impact the information may have on health/safety/security and/or wellbeing of the service user				
	d) Case involved suspected or actual abuse by family				
	e) Case identified as a result of review exercise				
	f) Case is environmental or infrastructure related with no harm to patient/service user				
	g) Other rationale				
	If you selected c), d), e), f) or g) above please provide further details:				
3) Was this SAI also a Never Event? **Please select as appropriate (✓)**	**YES**		**NO**		
4) If **YES**, was the Service User[1] / Family / Carer informed this was a Never Event? **Please select as appropriate (✓)**	**YES**	If **YES**, insert **date informed**: DD/MM.YY			
	NO	If **NO**, provide details:			
For completion by HSCB/PHA Personnel Only (**Please select as appropriate (✓)**)					
Content with rationale?	**YES**		**NO**		

SHARING THE REVIEW REPORT WITH THE SERVICE USER[1] / FAMILY / CARER *(complete this section where the Service User / Family / Carer has been informed the incident was being reviewed as a SAI)*				
5) Has the Final Review report been shared with the Service User[1] / Family / Carer? **Please select as appropriate (✓)**	**YES**		**NO**	
	If **YES**, insert date informed:			
	If **NO**, please select **only one** rationale from below, for **NOT SHARING** the SAI Review Report with Service User / Family / Carer:			
	a) Draft review report has been shared and further engagement planned to share final report			
	b) Plan to share final review report at a later date and further engagement planned			

SHARING THE REVIEW REPORT WITH THE SERVICE USER[1] / FAMILY / CARER *(complete this section where the Service User / Family / Carer has been informed the incident was being reviewed as a SAI)*		
	c) Report not shared but contents discussed ***(if you select this option please also complete 'l' below)***	
	d) No contact or Next of Kin or Unable to contact	
	e) No response to correspondence	
	f) Withdrew fully from the SAI process	
	g) Participated in SAI process but declined review report	
	(if you select any of the options below please also complete 'l' below)	
	h) concerns regarding impact the information may have on health/safety/security and/or wellbeing of the service user[1] family/ carer	
	i) case involved suspected or actual abuse by family	
	j) identified as a result of review exercise	
	k) other rationale	
	l) If you have selected **c), h), i), j), or k)** above please provide further details:	

For completion by HSCB/PHA Personnel Only (**Please select as appropriate (✓)**				
Content with rationale?	**YES**		**NO**	

SECTION 2 **INFORMING THE CORONERS OFFICE** **(under section 7 of the Coroners Act (Northern Ireland) 1959)** *(complete this section for all death related SAIs)*							
1) Was there a Statutory Duty to notify the Coroner on the circumstances of the death? **Please select as appropriate (✓)**	**YES**		**NO**				
	If **YES**, insert **date informed**:						
	If **NO**, please provide details:						
2) If you have selected 'YES' to question 1, has the review report been shared with the Coroner? **Please select as appropriate (✓)**	**YES**		**NO**				
	If **YES**, insert **date report shared**:						
	If **NO**, please provide details:						
3) 'If you have selected 'YES' to question 1, has the Family / Carer been informed? **Please select as appropriate (✓)**	**YES**		**NO**		**N/A**		**Not Known**
	If **YES**, insert **date informed**:						
	If **NO**, please provide details:						

DATE CHECKLIST COMPLETED	

[1] *Service User or their nominated representative*

Root Cause Analysis report on the review of a Serious Adverse Incident including Service User/Family/Carer Engagement Checklist

Organisation's Unique Case Identifier: [redacted]

Date of Incident/Event: 23 March 2020

HSCB Unique Case Identifier: S17601

Service User Details: (*complete where relevant*)
D.O.B: [redacted] Gender: Female Age: [redacted]

Responsible Lead Officer: Dr H Nicholl

Designation: Chair

Report Author: The Review Team

Date report signed off:

1.0 EXECUTIVE SUMMARY

The patient, Personal Information redacted by was brought by ambulance to Craigavon Area Hospital (CAH) Emergency Department (ED) in the early hours of 23 March 2020 after an alleged assault. Her initial GCS on presentation to ED was 8. She was intubated and ventilated and a CT Head and Neck was carried out. The CT brain was reported as nil acute. Personal Information was then transferred to the Royal Victoria Hospital (RVH) Intensive Care Unit as a poly trauma case on 23 March 2020 mid-morning.

An urgent repeat CT Head and Neck was carried out on 24 March 2020 which demonstrated a left MCA territory infarct felt to be secondary to left carotid artery dissection and thrombosis. Review of the initial CT undertaken and reported in CAH demonstrates a left thrombus which was not picked up. A possibility of considering thrombectomy was therefore not possible following her deterioration. Personal Information passed away from her multiple traumatic injuries on 1 April 2020.

2.0 THE REVIEW TEAM

Dr H Nicholl, Consultant in Emergency Medicine
Dr R McConville, Consultant Radiologist
Ms E Boylan, Serious Incident Lead (Clinical), NIAS
Mr D Cardwell, Clinical Governance Manager

3.0 SAI REVIEW TERMS OF REFERENCE

- To carry out a review in the care provided to Personal Information, using a Root Cause Analysis (RCA) Methodology:
- To use a multidisciplinary team approach to the review:
- To provide an agreed chronology based on documented evidence and staff accounts of events:
- To identify the key contributory factors which may have had an influence on or contributed to the level of care provided to Personal Information.
- To ensure that recommendations are made in line with evidence based practice:
- To set out the findings, recommendations, actions and lessons learnt in an anonymous report:
- To liaise with the family and facilitate them to contribute to the review: and
- To report the findings and the recommendations of the review through the Director of Acute Services SHSCT and disseminate to the staff associated with the care and with Personal Information's family.

4.0 REVIEW METHODOLOGY

Personal Information's ED and Medical Records.
Northern Ireland Electronic Care Record.
Statements from staff.

5.0 DESCRIPTION OF INCIDENT/CASE

At 01:05 on 23 March 2020, CAH ED received a stand-by call from the Northern Ireland Ambulance Service (NIAS) for a female patient [redacted] who had been assaulted and sustained a head injury. Pre hospital the NIAS had recorded [redacted]'s observations as pulse (P) 136, blood pressure (BP) 158/96, respiratory rate (RR) 52, oxygen saturations (SpO_2) 95% on oxygen, temperature (T) 37.3^{O}C and Glasgow Coma Scale (GCS) (which is a neurological scale which aims to give a reliable and objective way of recording the state of a person's consciousness for initial as well as subsequent assessment) was 8 out of 15. At the scene NIAS believed [redacted] to be another person as the PSNI had found a passport in the car which they believed belonged to the injured female. The name documented on the passport was [redacted] and this was recorded as the name of patient on the NIAS patient report form. These details [redacted] were used to register [redacted] in ED.

[redacted] arrived at 01:17 and was taken straight into resuscitation where the team were waiting to receive her. She presented with a significant head injury. [redacted]'s observations were P 136, BP 165/87, RR 28, SpO_2 95% and GCS 8. Her National Early Warning Score (NEWS) (an early warning score used by clinical staff to quickly determine the degree of illness of a patient) was 11.

[redacted] was reviewed immediately by Doctor 1 (Specialty Registrar) who noted the history obtained by NIAS. It was reported that the Police had pulled over the car in which [redacted] was travelling. [redacted] was found in the front passenger seat with reduced GCS. On arrival at ED, [redacted]'s cervical spine was immobilised. Her airway was partially obstructed and her breathing was crackly throughout. Her heart sounds were normal and her GCS was 7. Her abdomen was soft and non-tender, her eyes were swollen and bruised, her nose had dried blood, her mouth was swollen and she had bruising to right upper arm. Doctor 1 noted that [redacted]'s nose was the "size of tennis ball."

Doctor 1 immediately contacted the anaesthetic team, Doctor 3 (CT1 Anaesthetics) and Doctor 4 (ST7 Anaesthetics) as it was recognised that [redacted] would require intubation. IV tranexamic acid was administered and a chest x-ray and computerised tomography (CT) Head and Neck was ordered at 01:38.

At 01:30 [redacted]'s NEWS were 11. At 01:35 her NEWS were 8. At 01:40 her NEWS were 8 and at 01:55 her NEWS were 7.

At 02.05 [redacted]'s CT Head and Neck was started and it revealed that there was swelling and injury externally on [redacted]'s face, she had a broken nose with soft tissue damage inside the nose but there was no sign of any brain abnormality. The scan also revealed collapsed lungs which suggested there had been injury to the chest also.

Doctor 2 noted that was that there was no intracranial haemorrhage, nasal bone fractures and a pneumothorax. Doctor 2 suggested there should be a CT Chest Abdomen and Pelvis (CT CAP) for further evaluation.

At 02:40 [redacted]'s NEWS were 6.

A urine toxicity test was carried out which confirmed the presence of benzodiazepines, cocaine and cannabis in [redacted]'s system.

At 02:50 [redacted]'s NEWS were 6 and remained at this when they were rechecked at 03:00.

5.0 DESCRIPTION OF INCIDENT/CASE

At 03:30 Personal Information had her CT Chest, Abdomen and Pelvis (CAP) carried out and following this she returned to ED resus area but was then transferred to CAH theatre at 04:45 for ongoing management before the report was available.

Doctor 5 reported this examination and concluded that there was "a moderate right pneumothorax with consolidation/atelectasis of the right lower lobe. Tiny left pneumothorax. Acute fractures of the lateral right third, fourth, fifth ribs. Displaced Fracture of posterior left ninth rib. Slightly prominent small bowel loops which is non-specific. A footnote read - please note this CT scan does not entirely exclude acute bowel or mesenteric injury, clinical correlation advised and you may wish to consider Imaging follow up if clinically appropriate."

Doctors 3 and 4 discussed the results of the CT CAP with Doctor 6 (Surgical SHO) who advised there was nothing worrying intra abdominally but a right sided chest drain required. Personal Information was discussed with Doctor 7 (Consultant Intensivist) who advised there were no Intensive Care Unit beds in CAH. Contact was established with the Royal Victoria Hospital who were happy to accept Personal Information under the thoracic team following discussion with on call consultant. A referral was made for the transfer.

Following this ED contacted Theatre 1 to advise they had tried to contact Personal Information's family with no success. The police were contacted and agreed to follow up with a visit to the address. It was noted again at 06:50 that ED had tried several times to contact family but have been unsuccessful. The property which came in with Personal Information was a blue hooded top, Irish Passport and white trainers.

At 07:00 a phone call was received from the mother of the passport holder Personal Information redacted by and she was spoken to by Doctor 4 who advised Personal Information was being transferred to RVH.

At 10:17 Personal Information left CAH for RVH and sadly passed away from her multiple traumatic injuries on 1 April 2020.

On receipt of the Interface Notification Form from the Belfast Trust on 7 April 2020, it became clear that Personal Information, on presentation to ED and until her transfer to RVH, was recorded under the name of another patient Personal Information redacted by .

6.0 FINDINGS

Patient Factors

Personal Information was a 32 year old female patient who was brought to ED alone and due to her clinical condition was unable to provide a history. On further investigation the review team have determined that Personal Information had a history of recreational drug use and that she was prescribed citalopram and diazepam in the community.

Individual Staff Factors

The review team have noted that Personal Information's CT brain was requested at 01:38, started at 02:05 and reported on by Radiologist 1 at 02:57. This is within in current guidance that urgent CT's should be reported on within 1 hour. The review team are conscious however that there was a reporting discrepancy with the report given by Radiologist 1 in that the CT scan images identify an occluded intracranial vessel which was not reported on. The review team understand that the CT scan images have since been reviewed at a radiology discrepancy

6.0 FINDINGS

meeting which consisted of 5 Consultant Radiologists, all of whom could identify the abnormality. 80% of those attending felt that the finding on the CT scan images was significant.

Staff Workload

Looking at the 24 hour period before Personal Information arrived, ED had seen a total of 132 patients, 83 of whom had been seen and discharged or admitted within 4 hours. 24 patients waited in excess of 4 hours, the longest being nearly 11 hours so there would have been some congestion in ED at the time but this did not impact on Personal Information's care.

Training and Education

The review team noted that Personal Information attended ED unaccompanied and was unable to provide an accurate history of the mechanism of her injury. The review team felt on balance that in such circumstances when ED doctors are unable to ascertain an accurate history, consideration should be given to carrying out a PAN scan (whole body CT scan). Whilst this was not initially carried out for Personal Information, the review team have considered that had it taken place it would avoided the need for Personal Information to go to the CT scanner on the second occasion. However the review team are mindful of the fact that the standby call received for Personal Information appeared to centre initially on her head injury.

Clinical Care

The review team have reviewed the documentation associated with Personal Information redacted by's ED attendance and the chair of the review team has spoken to Doctor 1. The review team consider that Personal Information was appropriately assessed on arrival and Doctor 1 took the correct course of action in relation to Personal Information's clinical presentation. It is noted that the anaesthetic team was involved at a very early stage of the presentation and the review team consider it was appropriate that they took over Personal Information redacted bys care when they did and in the context of a busy and congested ED, transferred her to theatres for management whilst awaiting transfer to Belfast. The review team are complimentary of how the teams worked well together making the best use of resources available to them at the time.

The Consultant Radiologist on the review team has commented that he has not seen a carotid artery dissection (is a condition whereby the layers of the carotid artery are spontaneously separated which potentially compromises blood flow to certain areas of the brain and can lead to a stroke) as severe as the one experienced by Personal Information. If this had been reported initially the clinical team would have consulted with Stroke Physicians and the Neurosurgical Team in Belfast to ascertain if any other specific treatment would have been appropriate or indeed available. The review team understand the service for the management of such conditions is managed by the Belfast Trust between Monday to Friday, 09:00 to 17:00, however do not believe that if Personal Information been transferred to Belfast any earlier than she was the outcome would have been any different, even if the service was available.

Scheduling and Bed Management

The review team understand that Personal Information was transferred to Theatre as there were no available beds in ICU CAH at the time of attendance. Personal Information arrived in Theatre at 04:45 and the agreement to transfer her to the care of the Thoracic Team in Belfast was reached at 06:00.

6.0 FINDINGS

Communication

Having reviewed all medical and nursing documentation associated with Personal Information's attendance the review team consider that there was good internal inter-speciality communication between teams in relation to the clinical care as well as externally with the Thoracics Team.

Identity of Patient

The review team have considered the HSCB's Regional Guidance for the registration of 'unidentified' patients (June 2020).

Doctor 1 has reported that the initial identity Personal Information redacted by was given to ED by NIAS on the basis of the passport in Personal Information redacted by's possession. Only when asked by the Coroner for a statement, after Personal Information redacted by's death, did Doctor 1 discover this was incorrect.

The PSNI have advised that on Sunday 22 March 2020 at 23:00 hours Police received a report of white Citroen C1 possibly being driven by an intoxicated driver on the M1 motorway heading towards Lurgan. Roads Policing stopped the vehicle at 23:10 hours and ascertained the driver's details. The passenger, who appeared to have facial injuries and was believed to be heavily intoxicated, was identified at this time as Personal Information and this is who the vehicle was registered to. There was also a passport in the car in the name of Personal Information. The female driver of the car identified the female in the passenger seat as Personal Information. The passenger was incoherent but responded to Police calling her Personal Information. The driver told Police that the female passenger had been assaulted but refused to give any further information. An ambulance was tasked and the passenger conveyed to Craigavon Area Hospital. On Monday 23 March 2020, the female passenger was transferred to ICU at RVH. The review team understand that by the evening of 23 March 2020 doubt had been cast on the identification of the female who had been assaulted. Personal Information's partner had contacted the RVH to say it was in fact Personal Information in ICU and not Personal Information. The PSNI have confirmed that Personal Information was located and spoken to. It was only after this that the female who had been assaulted was in actual fact Personal Information.

7.0 CONCLUSIONS

The review team have concluded the injury sustained by Personal Information was rare and that her case was complex and compounded by the fact that no-one attended with her who could have given an accurate history. Whilst they accept that there was an error in reporting the CT brain, they have not highlighted any concerns in the way in which Personal Information was assessed, examined, treated or referred onwards. The review panel are off the opinion that without a clot retrieval service being immediately available to Personal Information the outcome would not have changed.

8.0 LESSONS LEARNED

If an unaccompanied unconscious patient arrives at ED and staff are unable to obtain an accurate history or establish the mechanism of injury, a PAN scan should be carried out.

9.0 RECOMMENDATIONS AND ACTION PLANNING

The review team recommend that:

9.0 RECOMMENDATIONS AND ACTION PLANNING

1. If an unaccompanied unconscious patient arrives at ED and staff are unable to obtain an accurate history or establish the mechanism of injury, a PAN scan should be carried out.

2. There should be 24/7 access to the neuro radiology interventional service.

10.0 DISTRIBUTION LIST

Checklist for Engagement / Communication with Service User[1]/ Family/ Carer following a Serious Adverse Incident

Reporting Organisation SAI Ref Number:	Personal information redacted by USI	**HSCB Ref Number:**	S17601

SECTION 1

INFORMING THE SERVICE USER[1] / FAMILY / CARER

1) Please indicate if the SAI relates to a single service user, or a number of service users. **Please select as appropriate (✓)**	**Single Service User**	✓	**Multiple Service Users***		
	Comment: ***If multiple service users are involved please indicate the number involved***				
2) Was the Service User[1] / Family / Carer informed the incident was being reviewed as a SAI? **Please select as appropriate (✓)**	**YES**	✓	**NO**		
	If **YES**, insert **date informed**:				
	If **NO**, please select **only one** rationale from below, for **NOT INFORMING** the Service User / Family / Carer that the incident was being reviewed as a SAI				
	a) No contact or Next of Kin details or Unable to contact				
	b) Not applicable as this SAI is not 'patient/service user' related				
	c) Concerns regarding impact the information may have on health/safety/security and/or wellbeing of the service user				
	d) Case involved suspected or actual abuse by family				
	e) Case identified as a result of review exercise				
	f) Case is environmental or infrastructure related with no harm to patient/service user				
	g) Other rationale				
	If you selected c), d), e), f) or g) above please provide further details:				
3) Was this SAI also a Never Event? **Please select as appropriate (✓)**	**YES**		**NO**	✓	
4) If **YES**, was the Service User[1] / Family / Carer informed this was a Never Event? **Please select as appropriate (✓)**	**YES**	If **YES**, insert **date informed**: DD/MM.YY			
	NO	If **NO**, provide details:			
For completion by HSCB/PHA Personnel Only (**Please select as appropriate (✓)**)					
Content with rationale?	**YES**		**NO**		

SHARING THE REVIEW REPORT WITH THE SERVICE USER[1] / FAMILY / CARER

(complete this section where the Service User / Family / Carer has been informed the incident was being reviewed as a SAI)

5) Has the Final Review report been shared with the Service User[1] / Family / Carer? **Please select as appropriate (✓)**	**YES**		**NO**	✓
	If **YES**, insert date informed:			
	If **NO**, please select **only one** rationale from below, for **NOT SHARING** the SAI Review Report with Service User / Family / Carer:			
	a) Draft review report has been shared and further engagement planned to share final report	✓		
	b) Plan to share final review report at a later date and further engagement planned			
	c) Report not shared but contents discussed ***(if you select this option please also complete 'I' below)***			

SHARING THE REVIEW REPORT WITH THE SERVICE USER[1] / FAMILY / CARER *(complete this section where the Service User / Family / Carer has been informed the incident was being reviewed as a SAI)*		
	d) No contact or Next of Kin or Unable to contact	
	e) No response to correspondence	
	f) Withdrew fully from the SAI process	
	g) Participated in SAI process but declined review report	
	(if you select any of the options below please also complete 'l' below)	
	h) concerns regarding impact the information may have on health/safety/security and/or wellbeing of the service user[1] family/ carer	
	i) case involved suspected or actual abuse by family	
	j) identified as a result of review exercise	
	k) other rationale	
	l) If you have selected **c), h), i), j), or k)** above please provide further details:	

For completion by HSCB/PHA Personnel Only (**Please select as appropriate (✓)**				
Content with rationale?	**YES**		**NO**	

SECTION 2							
INFORMING THE CORONERS OFFICE **(under section 7 of the Coroners Act (Northern Ireland) 1959)** *(complete this section for all death related SAIs)*							
1) Was there a Statutory Duty to notify the Coroner on the circumstances of the death? **Please select as appropriate (✓)**	**YES**		**NO**	✓			
	If **YES**, insert **date informed**:						
	If **NO**, please provide details:						
2) If you have selected 'YES' to question 1, has the review report been shared with the Coroner? **Please select as appropriate (✓)**	**YES**		**NO**				
	If **YES**, insert **date report shared**:						
	If **NO**, please provide details:						
3) 'If you have selected 'YES' to question 1, has the Family / Carer been informed? **Please select as appropriate (✓)**	**YES**		**NO**		**N/A**		**Not Known**
	If **YES**, insert **date informed**:						
	If **NO**, please provide details:						

DATE CHECKLIST COMPLETED	

[1] *Service User or their nominated representative*

LEVEL 1 – SIGNIFICANT EVENT AUDIT INCLUDING LEARNING SUMMARY REPORT AND SERVICE USER/FAMILY/CARER ENGAGEMENT CHECKLIST

SECTION 1

1. ORGANISATION: SHSCT	**2. UNIQUE INCIDENT IDENTIFICATION NO. / REFERENCE: 95652**
3. HSCB UNIQUE IDENTIFICATION NO. / REFERENCE:	**4. DATE OF INCIDENT/ EVENT: 17 July 2018**
5. PLEASE INDICATE IF THIS SAI IS INTERFACE RELATED WITH OTHER EXTERNAL ORGANISATIONS: No	**6. IF 'YES' TO 5. PLEASE PROVDE DETAILS:**
7. DATE OF SEA MEETING / INCIDENT DEBRIEF: 07 August 2019	

8. SUMMARY OF EVENT:

Personal was referred to Craigavon Area Hospital Emergency Department on 2 November 2017 by her GP for a productive cough, lethargy, sweats and back pain for 2 months. Personal was admitted to the ward and treated for a urinary tract infection (UTI) and poor diabetic control. Personal was discharged home the following day with a plan for an outpatient renal tract ultrasound scan (USS) Personal had her USS on 16 November 2017 which reported further investigation was required to exclude renal malignancy.

Personal had a follow up CT renal abdominal scan on the 28 November 2017. The CT scan reported that appearances most likely represented areas of renal inflammation, and likely infected renal cysts with probable abscess formation and that the appearances were not typical for underlying malignancy (cancer).

Personal was contacted and advised to attend CAH ED for treatment of same. Personal attended CAH ED and was admitted to the ward for treatment of an infected renal cyst. Prior to her discharge a follow up outpatient urology review appointment was arranged for 6 weeks and a repeat CT renal abdominal scan in 3 months' time.

Personal never received a follow up urology outpatient review appointment. Personal had a repeat CT scan on 13 March 2018 which reported a solid nodule suspicious of renal cell carcinoma. There was no follow up following CT report.

Personal attended her GP on the 10 July 2018 complaining of right sided abdominal pain. Personal's GP noted the overlooked CT report and immediately forwarded a red flag urology referral to Craigavon Area Hospital.

SECTION 2

9. SEA FACILITATOR / LEAD OFFICER:	10. TEAM MEMBERS PRESENT:
Dr Damian Gormley –Consultant Physician	Ms Wendy Clayton- Operational Lead Mrs Katherine Robinson -Booking and Contact Centre Manager Mrs Carly Connolly -Clinical Governance Manager

11. SERVICE USER DETAILS:
H&C Personal Information redacted by the USI

12. WHAT HAPPENED?

Personal is a Personal year old female who was referred by her GP to Craigavon Area Hospital Emergency Department (CAH) (ED) on 2 November 2017. Personal's presenting complaint was a productive cough, lethargy, sweats and a 2 month history of back pain Personal complained of chest tightness at times, and was noted to have a high temperature with a CRP of 100 (a blood test to check for inflammation) Personal was reviewed by Dr 1 and was transferred to the ward for treatment of a urinary tract infection (UTI) and poor diabetic management. Personal was treated with antibiotic Trimethoprim and discharged home later the same day with a plan for an abdominal and renal tract ultrasound scan (USS) to be carried out as an outpatient on the 16 November 2017.

On the 16 November 2017 Personal attended CAH X-ray department for an ultrasound scan of the abdomen and renal tract. The report concluded a '*solid mass measuring 2.5cm at the upper pole of the left kidney required further investigation and to exclude renal malignancy'*. A urology review and CT imaging was advised.

On the 23 November 2017 Personal was added to the cancer tracker system following her recent ultrasound result on 16 November 2017. Personal was offered an outpatient urology appointment for 4 December 2017 at 09:00.

On the 28 November 2017 Personal attended CAH X-ray department for a CT renal and abdomen scan. The CT report concluded the following:

"*Two areas of altered enhancement within the left kidney as described with surrounding inflammatory change. Appearances are most likely to represent areas of renal inflammation likely infected renal cysts with probable abscess formation. Appearances are not typical for underlying malignancy.*
*In absence of significant left-sided hydro nephrosis (swelling of the kidney) the areas of calcification within the pelvis are unlikely to represent ureteric calcification (stones) and likely to represent phelboliths (*calcification within a vein). *A clinical correlation is advised and follow up ultrasound following appropriate treatment is advised."*

On the 29 November 2017 Personal was contacted at home by Dr 2 with regards to the CT scan result and advised Personal to attend CAH ED and that she would be under the care of the urology team. Personal was admitted to the gynaecology ward under the care of Dr 3, Consultant Urologist and treated with IV Gentamicin for an infected renal cyst. Personal complained of an ongoing chronic cough during her admission and it was noted that her GP was already investigating. A recent chest x-ray taken on 2 November 2017 was reviewed which showed no acute suspicious lung abnormality. Personal was discharged on 7 December 2017 on oral antibiotics with a plan for follow up at Dr 3's outpatient clinic in 6 weeks and a CT renal scan for 3 months' time.

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Due to lengthy waiting lists Personal never received a review appointment at Dr 3's outpatient urology clinic.

On the 13 March 2018 Personal attended CAH X-ray department for a CT renal with contrast. The CT scan was reported on 20 March 2018. Result below:

"Routine multi plane imaging of the kidneys.
No evidence of renal or ureteric calculi (stones). The right kidney is normal. The 4.9 cm cystic area with surrounding inflammation and posterior aspect of the left kidney has resolved. There is very minimal residual soft tissue change. The 2.6 cm enhancing nodule in the left mid-pole is unchanged and more keeping in keeping with the solid nodule rather than an abscess. No localised lymphadenopathy (inflammation/swelling). No free fluid in the upper abdomen. The pancreas and liver appear unremarkable. The lung bases are clear. No focal bony abnormality".

Conclusion:
"The abscess has resolved. The solid nodule is suspicious for a Renal cell carcinoma."

On 20 March 2018 the Radiology Department forwarded an email to Dr 3, secretary 1 and secretary 2 for follow up of the CT report.

On the 7 July 2018 Personal contacted the General Practitioner Out Of Hours (GP OOH). Personal's presenting complaint was abdominal pain which had increased. Personal was advised to attend CAH ED as there was no doctor in the GP OOH Craigavon base.

On the 10 July 2018 Personal attended CAH ED and was reviewed by Dr 4. It was noted in the ED triage notes Personal had moderate right sided abdominal pain for 2 days, with no vomiting and no diarrhoea. She was treated for a urinary tract infection (UTI) and discharged home with antibiotics and referred back to her GP.

On the 17 July 2018 Personal attended her GP with mild right sided pain. On examination the GP noted her abdomen was soft, with very mild tenderness on deep palpation only. Personal's GP accessed Personal's Northern Ireland electronic care record (NIECR) (a database which contains patient health information) and noted the CT scan from March 2018 which suggested a 2.5cm solid nodule suspicious for renal cell carcinoma (cancer). Personal's GP immediately forwarded a red flag (suspect cancer referral) urology referral to CAH.

On the 6 August Personal was reviewed at the outpatient Urology clinic and was reviewed by Dr 5. Dr 5 discussed the CT scan result carried out in March 2018 and a plan was made for a Magnetic Resonance Imaging (MRI) renal and for Personal to be reviewed again with the result.

On the 17 August 2018 Personal attended CAH for a MRI. The report concluded:

CONCLUSION: "No subtraction imaging. 2.3 cm left renal tumour. There are no features to allow reliable categorisation but some increased T2 signal change suggests it may represent a clear cell carcinoma."

On the 30 August Personal was discussed at the urology Multi -Disciplinary Meeting (MDM). A plan was made to review Personal at urology outpatients and discuss a biopsy.

On the 25 September Personal had a CT chest. The conclusion was no metastatic disease within the thorax.

On the 4 October 2018 Personal's case was discussed at urology MDM. It was agreed Personal was suitable for all treatment options and to proceed with a partial nephrectomy in CAH.

On 15 October 2018 Personal was admitted to CAH for partial laparoscopic nephrectomy (partial kidney removed) for a 2.8cm renal mass. It was reported Personal recovered well on the ward with no complications Personal was deemed medically fit for discharge home on 19 October 2018 with a plan for urology MDM review and histopathology.

Histopathology reported the following :

Histological examination shows a circumscribed and predominantly encapsulated tumour demonstrating features in keeping with papillary renal cell carcinoma, type I.

SECTION 3 - LEARNING SUMMARY

13. WHAT HAS BEEN LEARNED:

The review team reviewed Personal's first CAH ED attendance on 3 November 2017. The Review Team concluded treatment and care provided in CAH ED and on the ward was appropriate given Personal's presenting symptoms and the plan for an outpatient ultrasound scan was considered appropriate. The Review Team acknowledges Personal had her ultrasound scan 13 days post discharge. This was considered by the Review Team an appropriate time frame for follow up.

The Review Team recognise the result of the ultrasound scan was appropriately followed up the following day by Dr 2 and arrangements were made for Personal to have an urgent CT abdomen and pelvis scan to exclude renal malignancy on the 28 November 2017. The report was available the following day.

The Review Team identified Personal was appropriately referred on to the cancer tracker system on the 23 November but unfortunately did not attend her appointment on 4 December 2017 due to her inpatient status under the care of the Urology Team.

The review team has reviewed Personal's medical notes from her admission on 29 November 2017 to her discharge on the 7 December 2017, and considers treatment and care during this period was appropriate. The Review Team recognises results were appropriately followed up by doctor 2 and appropriate arrangements were made for Personal to re-attend CAH ED and to be admitted under the care of the urology team. Personal was admitted to the Gynecology ward under the care of doctor 3, Consultant Urologist Person was treated for an infected renal cyst with antibiotics. Personal was discharged home with antibiotics on the 7 December 2017 with a plan to be followed up at Dr 3's outpatient clinic in six weeks and a follow up CT renal scan in three months' time. The Review Team has concluded a differential diagnosis of an infected renal cyst was appropriate following the CT report on 29 November 2017 and has therefore considered treatment and care, and discharge arrangements were all appropriate at the time.

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The Review Team has reviewed the Patient Administration System (PAS) and confirmed Personal was added to Dr 3's urgent urology outpatient waiting list following discharge on 7 December 2017. The Review Team acknowledges there are demand and capacity issues with Urology outpatient appointments, and waiting lists are extremely lengthy (currently 3 years). The Review Team acknowledge clinics are scheduled in advance, and recognise doctor 3's clinics may not have been scheduled that far ahead. With no outpatient clinic scheduled it would have being impossible for medical staff to ascertain Personal would be appointed an outpatient appointment in six weeks' time. Personal was therefore added to Dr 3's urgent urology waiting list which at the time had a waiting time of 96 weeks. Conversely, the Review Team concluded had Personal been reviewed six weeks post discharge the management plan may not have changed given the recent CT scan result reporting an infected renal cyst and treatment received.

On 13 March 2018 Personal attended CAH X-ray department for a CT renal with contrast. The Review Team note the report was finalised on the 20 March 2019 at 14:05. The Review Team have confirmed communication was emailed to the referring Consultant Urologist Dr 3 and secretary 1 and an additional secretary 2 (secretary1 was off on leave) on the same day 20 March 2018 at 14:54.The email advised all correspondents an urgent report for Personal was available on Sectra Radiology Information System (RIS). The Review Team have identified Personal's report was completed in a timely manner and escalated to the referring consultant immediately by the Radiology Team. The Review Team on the other hand cannot confirm Dr 3 read the report. Secretary 2 has advised the Review Team that in incidents like this one whereby an urgent report is emailed, the secretary would print off the report and leave in the consultant's office for follow up. The Review Team therefore can neither confirm or rule out Dr 3 received the email or a paper copy of the actual report.

The Review Team acknowledge the Trust has an escalation policy for urgent/ significant or unexpected findings and although the Radiology Department did notify the referring consultant (Dr 3) that same day, the Radiology Department did not escalate Personal s CT report to the Cancer Tracker Team. Following discussion with the Radiology Department the review team understands that the ability to raise an alert for the Cancer Tracking Team directly is only available for reports that are done within the Southern Trust and not for outsourced reports as in this case. The Review Team note this was a missed opportunity for follow up o Personal 's urgent CT report.

The Review Team concluded had Dr 3 acknowledged and responded to the email from the Radiology Department and had the Radiology department escalated the result to the Cancer Tracker Team Personal would have received treatment for her cancer at an earlier stage. The Review team also note that the trust policy namely "Protocol for the Reporting & Communicating of Critical, Urgent & Significant Unexpected Radiological Findings" states under the appropriate section "Communicating Life Threatening Urgent or Cancer Findings to the Referrer or Cancer Tracker" that the appropriate action for secretarial teams to take is to "contact the appropriate team via phone with a confirmation email to the referrer, referrers' secretary and the reporter of the radiological examination" The Review team noted that there was no record of a direct phone call but that the confirmation email had been sent.. The Review team considers that a direct phone call provides a level of immediate assurance that the report has been brought to the attention of the referrer.

The Review Team are aware the Trust has no formal process for tracking letters or emails to ensure they have been received, acknowledged, reviewed or actioned. The Review Team recognises consultants receive numerous emails each day and this in itself presents difficulty in identifying priority

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correspondence. The Review Team therefore conclude the SHSCT should consider updating its current policy to ensure all correspondence relating to urgent/ significant findings are received and actioned by recipients. The Review Team also contemplate consultant secretaries should ensure the consultant has received any paper correspondence left out for them, especially when it is an urgent report needing immediate action.

Current practice regarding tests results is that the clinician who orders the test is responsible for reviewing, following up and signing off the result even if the patient is discharged. The Review Team recognise the SHSCT does not have a single formal process for following up of test results and electronic sign off and therefore conclude the SHSCT should consider developing a system and process that will enable referring consultants to manage requested test results electronically. The system should report back to the referring clinician, highlighting any urgent results and offer options for follow up and electronic sign off. The system should be capable of providing assurance that results are viewed and actioned.

The Review Team acknowledges Personal attended CAH ED hospital on the 10 July 2018 and was reviewed by Dr 4. Personal was treated for a urinary tract infection (UTI) and discharged home with antibiotics and referred back to her GP. It was only when Personal attended her GP a few days later with the same complaint, was the missed CT scan report identified and appropriate action was taken by the GP via red flag referral for follow up.

The Review Team conclude there were a number of failings in the Trust's systems and processes which ultimately lead to a delay in diagnosis and treatment and care of Personal's cancer. Exacerbated waiting lists, no single formal processes for following up test results, and no formal process for tracking letters or emails were contributing factors. The review team concluded that treatment and care was appropriate following Personal's new GP referral on the 17 July 2018 which highlighted Personal In overlooked CT report.

14. WHAT HAS BEEN CHANGED or WHAT WILL CHANGE?

The report will be shared with all staff involved in Personal's treatment and care for reflection and learning.

15. RECOMMENDATIONS (please state by whom and timescale)

1. The SHSCT to review its current processes of communicating, recording and signing off suspected cancer diagnosis to patient's consultants. The Trust is to consider a single system and process in which results can be communicated to referring clinicians and electronically signed off by the referring consultant. The system should be capable of providing assurances that all results are being viewed and actioned. Actioned by: Associate Medical Directors (AMD)/ Assistant Directors(AD) Head of Service (HOS) for Medicine, Surgery, Radiology and Emergency Department.

~~1. The SHSCT to review its current processes of communicating, recording and signing off suspected cancer diagnosis to patient's consultants. The Trust is to consider a single system and process in which results can be communicated to referring clinicians and electronically signed off by the referring consultant. The system should be capable of providing assurances~~

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~~that all results are being viewed and actioned.~~

2. Acute services should explore options for the introduction of a failsafe mechanism that could provide reassurance that reports issued to referring clinicians identifying cancer or query cancer have been action. This may require additional investment. Actioned by: AMD/ AD for Medicine, Surgery, Radiology and Emergency Department.

3. The Radiology department should review its policy —"Protocol for the Reporting & Communicating of Critical, Urgent & Significant Unexpected Radiological Findings". The policy should consider the process for outsourced reports in relation to the alert for the Cancer Tracking Team. Actioned: AD/HOS for Radiology.

4. The Review Team acknowledges Urology waiting lists are extensive and this was a contributing factor in this incident. The Review Team therefore advises the Trust to consider implementing a management plan to reduce Urology waiting times. Actioned by: AMD/ AD /HOS for Surgery.

The Aacute Clinical Governance ~~governance~~ team should review this report and rescreen this incident to see if it reaches the threshold for an SAI. Actioned by : Acute Clinical Governance Team.

5.

16. INDICATE ANY PROPOSED TRANSFERRABLE REGIONAL LEARNING POINTS FOR CONSIDERATION BY HSCB/PHA:

17. FURTHER REVIEW REQUIRED? NO
Please select as appropriate

If 'YES' complete SECTIONS 4, 5 and 6. If 'NO' complete SECTION 5 and 6.

SECTION 4 (COMPLETE THIS SECTION ONLY WHERE A FURTHER REVIEW IS REQUIRED)

18. PLEASE INDICATE LEVEL OF REVIEW: LEVEL 2 / LEVEL 3 **Please select as appropriate**	**19.** PROPOSED TIMESCALE FOR COMPLETION: DD / MM / YYYY

20. REVIEW TEAM MEMBERSHIP *(If known or submit asap)*:

21. TERMS OF REFERENCE *(If known or submit asap)*:

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SECTION 5	
APPROVAL BY RELEVANT PROFESSIONAL DIRECTOR AND/OR OPERATIONAL DIRECTOR	
22. NAME:	**23.** DATE APPROVED:
24. DESIGANTION:	

SECTION 6
25. DISTRIBUTION LIST:
Personal Director of Acute Services Assistant Director of Acute Service Medical Director for Surgery and Elective Care Assistant Director of Surgery and Elective Care Head of Service for Urology Head of Service for Radiology The review team. Staff involved in Personal's care.

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Checklist for Engagement / Communication with Service User[1]/ Family/ Carer following a Serious Adverse Incident

Reporting Organisation SAI Ref Number:		**HSCB Ref Number:**	

SECTION 1					
INFORMING THE SERVICE USER[1] / FAMILY / CARER					
1) Please indicate if the SAI relates to a single service user, or a number of service users. **Please select as appropriate (✓)**	**Single Service User**		**Multiple Service Users***		
	Comment: ****If multiple service users are involved please indicate the number involved***				
2) Was the Service User[1] / Family / Carer informed the incident was being reviewed as a SAI? **Please select as appropriate (✓)**	**YES**		**NO**		
	If **YES**, insert **date informed**:				
	If **NO**, please select **only one** rationale from below, for **NOT INFORMING** the Service User / Family / Carer that the incident was being reviewed as a SAI				
	a) No contact or Next of Kin details or Unable to contact				
	b) Not applicable as this SAI is not 'patient/service user' related				
	c) Concerns regarding impact the information may have on health/safety/security and/or wellbeing of the service user				
	d) Case involved suspected or actual abuse by family				
	e) Case identified as a result of review exercise				
	f) Case is environmental or infrastructure related with no harm to patient/service user				
	g) Other rationale				
	If you selected c), d), e), f) or g) above please provide further details:				
3) Was this SAI also a Never Event? **Please select as appropriate (✓)**	**YES**		**NO**		
4) If **YES**, was the Service User[1] / Family / Carer informed this was a Never Event? **Please select as appropriate (✓)**	**YES**	If **YES**, insert **date informed**: DD/MM.YY			
	NO	If **NO**, provide details:			
For completion by HSCB/PHA Personnel Only (Please select as appropriate (✓))					
Content with rationale?	**YES**		**NO**		

SHARING THE REVIEW REPORT WITH THE SERVICE USER[1] / FAMILY / CARER *(complete this section where the Service User / Family / Carer has been informed the incident was being reviewed as a SAI)*				
5) Has the Final Review report been shared with the Service User[1] / Family / Carer? **Please select as appropriate (✓)**	**YES**		**NO**	
	If **YES**, insert date informed:			
	If **NO**, please select **only one** rationale from below, for **NOT SHARING** the SAI Review Report with Service User / Family / Carer:			

SHARING THE REVIEW REPORT WITH THE SERVICE USER[1] / FAMILY / CARER *(complete this section where the Service User / Family / Carer has been informed the incident was being reviewed as a SAI)*		
	a) Draft review report has been shared and further engagement planned to share final report	
	b) Plan to share final review report at a later date and further engagement planned	
	c) Report not shared but contents discussed ***(if you select this option please also complete 'l' below)***	
	d) No contact or Next of Kin or Unable to contact	
	e) No response to correspondence	
	f) Withdrew fully from the SAI process	
	g) Participated in SAI process but declined review report	
	(if you select any of the options below please also complete 'l' below)	
	h) concerns regarding impact the information may have on health/safety/security and/or wellbeing of the service user[1] family/ carer	
	i) case involved suspected or actual abuse by family	
	j) identified as a result of review exercise	
	k) other rationale	
	l) If you have selected **c), h), i), j), or k)** above please provide further details:	

For completion by HSCB/PHA Personnel Only (Please select as appropriate (✓)				
Content with rationale?	**YES**		**NO**	

SECTION 2								
INFORMING THE CORONERS OFFICE (under section 7 of the Coroners Act (Northern Ireland) 1959) *(complete this section for all death related SAIs)*								
1) Was there a Statutory Duty to notify the Coroner on the circumstances of the death? **Please select as appropriate (✓)**	**YES**				**NO**			
	If **YES**, insert **date informed**:							
	If **NO**, please provide details:							
2) If you have selected 'YES' to question 1, has the review report been shared with the Coroner? **Please select as appropriate (✓)**	**YES**				**NO**			
	If **YES**, insert **date report shared**:							
	If **NO**, please provide details:							
3) 'If you have selected 'YES' to question 1, has the Family / Carer been informed? **Please select as appropriate (✓)**	**YES**		**NO**		**N/A**		**Not Known**	
	If **YES**, insert **date informed**:							
	If **NO**, please provide details:							

DATE CHECKLIST COMPLETED	

[1] *Service User or their nominated representative*

Southern Health and Social Care Trust

Quality Care - for you, with you

Root Cause Analysis report on the review of a Serious Adverse Incident including Service User/Family/Carer Engagement Checklist

Organisation's Unique Case Identifier: **ID: 108139**

Date of Incident/Event: [redacted]

HSCB Unique Case Identifier: **S16403**

Service User Details: (*complete where relevant*)
D.O.B: Personal Information redacted by the USI Gender: **M** Age: Personal Information redacted by the USI

Responsible Lead Officer: **Dr David Grier**

Designation: **Consultant Paediatrician**

Report Author: **Review Team**

Date report signed off:

1.0 EXECUTIVE SUMMARY

XX attended the Short Stay Paediatric Ambulatory Unit on [redacted] at 14.00 hours following referral by the Community Midwife 1 in relation to reduced feeds and distended abdomen. XX was reviewed and noted to be well with slight abdominal distention, dry skin and mild jaundice with normal observations. Observations were in keeping with a baby of his age and size, and no concerning features were identified. XX was discharged home at 17.10 hours with his mother who was advised to seek further advice if symptoms deteriorated.

On 3[redacted] at 04.55 hours XX's mother brought him in his travel seat to the Paediatric Ward. Staff noted that XX was white and took XX to the treatment room. XX was in cardiopulmonary arrest and CPR was commenced as per Advanced Paediatric Life Support (APLS) guidelines. XX was pronounced dead at 05.30 hours.

The review team identified that the management and treatment of XX was appropriate and carried out according to guidelines.

The review team consider that XX's death was likely due to overwhelming sepsis and pneumonia due to E coli infection. This can occur rapidly in small infants.

2.0 THE INVESTIGATION TEAM

Dr David Grier, Consultant Paediatrician, Chair
Laura Spiers, Lead Nurse, Paediatric Services
Paula Boyle, Lead Midwife for Community
Marita Magennis, Clinical & Social Care Governance Co-ordinator, CYPS
Dr Jenny Hughes, Consultant Paediatrican, Independent Paediatric Expert Advice

3.0 INVESTIGATION TERMS OF REFERENCE

- To carry out a review of the care and treatment provided to XX by the Southern Health and Social Care Trust from birth on [redacted] until XX's death on [redacted].
- To use a multidisciplinary team approach to the review.
- To provide an agreed chronology based on documented evidence and staff accounts of events.
- To engage with XX's family in line with Regional Guidance on Engagement with Service Users, Families and Carers (November 2016).
- To carry out an analysis into the care provided to XX using the National Patient Safety Agency Root Cause Analysis methodology and SAI Guidance.
- To ensure that any relevant recommendations are made in line with evidenced based practice.
- To set out the findings, and if relevant lessons learned, recommendations, and actions in an anonymous report.
- To adhere to the principles of confidentiality throughout the review.

- To report the findings and recommendations of the SAI Review to the Director of CYPS and Director of Acute Services, Southern Health & Social Care Trust (SHSCT), the staff associated with the care of XX, the Health & Social Care Board (HSCB), Public Health Agency (PHA), the Coroner and XX's family.

4.0 INVESTIGATION METHODOLOGY

- Review of patient/service user records and compile a timeline.
- Engagement with relevant staff.
- Engagement with service users/family members.
- Review of local, regional and national policies and procedures, including professional codes of conduct in operation at the time of the incident.
- Review of documentation, eg consent form(s), risk assessments, care plan(s), photographs, diagrams or drawings, training records, service/maintenance records, including specific reports requested from and provided by staff etc.

5.0 DESCRIPTION OF INCIDENT/CASE

Antenatal Service:

XX's mother (34 years old) had a history of three normal full term pregnancies. XX's mother was noted to have a history of LLetz and cervical cautery in 2017.

On 16 April 2019 XX's mother booked at 12 weeks gestation for consultant led shared care and therefore three weekly growth scans due to one risk factor – smoking, however on 25 May 2019 it was noted that XX's mother had stopped smoking.

XX's mother provided a urine sample as part of the booking process on 16 April 2019 and nothing abnormal was detected. Urinalysis was carried out at all antenatal visits and nothing abnormal was noted.

XX's mother attended all scheduled antenatal appointments and care was provided in accordance with antenatal pathway. Nothing abnormal was detected within these reviews.

On the [redacted], XX was born in Craigavon Area Hospital (CAH), via a normal vaginal delivery. APGARS: 9 & 9. XX was small for gestation, weight between 2nd to 9th centile. On [redacted] XX was discharged home from the post-natal ward.

Community Midwifery Service:

On [redacted] at 11:30 hours, a home assessment by Community Midwife 1 noted XX's abdomen to be distended with shiny skin. XX was feeding slowly, passed urine, had yellow bowel movement and occasional vomiting. Community Midwife 1

contacted Dr 1 in CAH to request that XX be seen. XX's mother was advised to bring XX in for assessment to the Short Stay Assessment Unit (SSPAU) in CAH at 14.00 hours.

Paediatric Service:

XX arrived at SSPAU at 14:00 on [redacted]. Initial observations were carried out by a Health Care Assistant (HCA 1): respiratory rate 48, heart rate 112, temperature 36.9, oxygen saturations 95% in room air. The observations were repeated at 16:00 hours: respiratory rate 53, heart rate 155, temperature 36.9, and oxygen saturations 100% in room air. Paediatric Early Warning Score (PEWS) was scored in the nursing notes as 1, due to elevated respiratory rate. XX had 30ml feed on arrival at 14:00 hours and had a small vomit post feed of approximately 10mls.

At 17:00 hours Dr 1, along with trainee Advanced Paediatric Nurse Practitioner (trainee APNP 1), assessed XX for "abdominal distention/vomiting". The history was noted as: vomiting post feeds, snuffly – present since birth, slight wheeze throughout the chest. The impression was XX was a well child with a slight abdominal distension, dry skin and mild jaundice. The plan was to check serum bilirubin (SBR) and to discharge home. XX's mother was advised to seek advice if XX's feeding was reduced or increased vomits, or if bowels had not opened for more than 3 days or green vomit.

At 18:50 hours on [redacted] XX's mother was contacted via telephone to inform her of the SBR results and was advised by trainee APNP 1 that no further treatment was required. XX's mother did not report any further problems at that stage.

At 04:55 hours on [redacted], XX was brought to CAH children's ward by his mother who approached nursing staff stating, "my baby is unwell". Nursing staff noted XX to be sitting in a car seat and was 'white' in appearance. XX was immediately brought into the treatment room, accompanied by Deputy Sister 1, Dr 2 and Dr 3. An oxygen mask was applied and XX was noted to be bleeding from the nose, with no respiratory effort. XX was given five inflation breaths, then reassessed and a further five inflation breaths were administered.

Chest compressions were commenced at a ratio 15:2. A cardiac arrest call was made. Pulseless electrical activity (PEA) was identified on Electrocardiogram (ECG). IV access was obtained on the third attempt, followed by interosseous access into the left tibia. Three doses of adrenaline were administered. XX also received a 20ml/kg bolus of normal saline 0.9%. The resuscitation was attended by Dr 4 at 05:25 hours. The adult arrest team and the anaesthetic team were also in attendance during the resuscitation. XX's mother was invited into the treatment room to observe the resuscitation efforts. Dr 4 discontinued the resuscitation attempt at 05:30 hours as the ECG monitor was demonstrating asystole and there had been no return of circulation despite effective ventilation.

Blood and urine samples were taken after XX had died. These demonstrated the presence of E coli bacteria in the blood and urine. XX went for a Coroner's post-mortem examination. Provisional reports from this have indicated that XX had extensive pneumonia at the time of death.

6.0 FINDINGS

Antenatal Service:

XX's mother attended all scheduled antenatal appointments and care was provided in accordance with antenatal pathway.

The review team note that XX was small at birth however did not demonstrate any significant problems before being discharged from the postnatal ward.

Community Midwifery Service:

Community Midwife 1 appropriately referred XX for hospital assessment following assessment on [redacted] at 11:30 hours, when she was concerned about his abdominal distension and vomiting.

Paediatric Service:

Doctor 1 and trainee APNP 1 assessed XX in the SSPAU at 17:00 hours. Observations were in keeping with a baby of his age and size, and no concerning features were identified. The review team consider that an appropriate management plan was put in place for XX based on the observations at that time.

The review team consider that there was no evidence of signs of sepsis or pneumonia from the assessment undertaken in SSPAU; such as lethargy, significantly elevated respiratory rate or heart rate for a child of his age, abnormal body temperature or reduced oxygen saturations. In addition, during XX's attendance at SSPAU XX took a feed and bowels were opening.

The review team note that an appropriate "safety net" was put in place in the event that XX's parents noted deterioration in his condition, advising that they should seek medical attention. It is noted that when XX's parents were contacted with the result of the blood test at 18:50 hours, they did not raise any concerns.

The review team consider that when XX was brought to the paediatric ward, appropriate help was obtained and resuscitation was commenced in accordance with resuscitation guidelines. Resuscitation was appropriately discontinued when there was no return of circulation after a period of effective ventilation.

The preliminary finding from the post mortem is possible pneumonia. The Trust awaits the final post mortem results and will review the review findings if required.

7.0 CONCLUSIONS

XX's mother attended all scheduled antenatal appointments and care was provided in accordance with antenatal pathway.

The review team consider that XX's death was likely due to overwhelming sepsis and pneumonia due to E coli infection. This can occur rapidly in small infants. The review

7.0 CONCLUSIONS

team note that XX was well at discharge from the postnatal ward.

When XX attended SSPAU his clinical presentation was not suggestive of severe infection and his assessment and management for mild abdominal distension and vomiting was appropriate.

When XX subsequently attended the paediatric ward on [redacted] at 04:55 hours he was already in cardiopulmonary arrest, his management was appropriate and was carried out according to guidelines.

Family Engagement

As part of the SAI process XX's mother was invited to contribute to the review. XX's mother provided an account of her experience which is summarised as follows:

1. Issues relating to antenatal care.

XX's mother identified that she waited 2 hours to be seen in the Maternity Admission and Assessment Unit when she attended on [redacted]. The review team have identified that the unit was very busy on that night and acknowledge how frustrating and anxiety provoking this can be for service users.

Following examination of XX's mother in the Maternity Admission and Assessment Unit it was noted that she was in the early stage of labour and was advised to go home or walk around the hospital. This is normal practice as a means of allowing the labour to progress naturally.

When XX's mother returned to the Maternity Admission and Assessment Unit, on examination it was noted that the labour had not progressed and due to the previous early delivery it was decided to admit XX to the Midwifery Led Unit. The review team note that following this the labour progressed extremely quickly. This is known as precipitate labour, a fast or rapid labour. The review team consider that the care provided to XX's mother prior to XX's birth was of an acceptable standard.

2. Assessment of XX when he initially attended the Paediatric Ward on [redacted].

XX's mother expressed concern in relation to XX vomiting and the examination undertaken of his abdomen.

The review team acknowledge the distress caused by the recurring vomiting and note that XX's mother was advised that yellow vomiting is common in babies following birth. During the assessment of XX it was noted that he had a slight abdominal distention. The review team consider that appropriate advice was provided to XX's mother in relation to XX's mother seeking advice if XX's feeding was reduced or increased vomits, or if bowels had not opened for more than 3 days or green vomit.

3. XX's arrival at the Paediatric Ward on [redacted].

XX's mother advised that she contacted the "Children's Hospital" when she discovered that XX was unwell during the night [redacted]) "requesting staff

7.0 CONCLUSIONS

to meet us as XX looked very unwell".

The review team have been unable to establish who XX's mother spoke to in relation to XX's return to the paediatric ward. The paediatric service were not aware of the telephone call and as such were not anticipating XX's arrival at the paediatric ward. The review team acknowledge the distress experienced by XX's parents in relation to their arrival on the ward. The paediatric service recommend that acutely unwell children attend the Emergency Department in the first instance.

Independent Expert Advice:

Please see appendix 1.

The Independent Expert made the following recommendations:

1. Safety Netting

The Trust accept this recommendation and have developed a discharge leaflet which provides safety netting advice for parents, and includes a contact number for the Short Stay Paediatric Assessment Unit should any further concerns arise.

2. Language

The Trust have implemented the new Regional Ambulatory Pathway which includes the requirement for noting first language information. The Trust have established a monthly audit in relation to compliance of completion of the pathway.

3. Discharge Checklist

The Trust have implemented the new Regional Ambulatory Pathway which includes the discharge checklist. The Trust have established monthly audit in relation to compliance of completion of the pathway.

4. PEWS scores

The Trust accept this recommendation and agree that blood pressure should be recorded as part of the baseline. The Trust have commenced a routine audit in the Short Stay Paediatric Assessment Unit in relation to compliance with PEWS.

5. Sepsis Pathway

The Trust accept this recommendation and can confirm that the Sepsis 6 Pathway is in place within the SH&SCT. The pathway is considered for all children and is stepped down if not required as part of patient assessment.

6. Parental Concern

The Trust welcome that the new PEWS chart takes account of parental concerns and view this as a positive step in parental engagement.

8.0 LESSONS LEARNED

The review team consider that the management of XX was appropriate and in accordance with guidelines.

9.0 RECOMMENDATIONS AND ACTION PLANNING

The review team have considered the recommendations of the Independent Paediatric Expert as outlined above. The review team did not identify any additional recommendations.

10.0 DISTRIBUTION LIST

Director of CYPS and Director of Acute Services, Southern Health & Social Care Trust (SHSCT), the staff associated with the care of XX, the Health & Social Care Board (HSCB), Public Health Agency (PHA), the Coroner and XX's parents.

Appendix 1 – Dr Jenny Hughes, Independent Expert Advice

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LEVEL TWO INVESTIGATION – Expert Independent Advice

SHSCT Unique Identifier	108139
Date of Significant Event	[redacted]
Report Author	Dr J L Hughes Consultant Paediatrician, Antrim Hospital, Northern Health & Social Care Trust

I have been asked by the Southern Health and Social Care Trust (SHSCT) to provide a report as part of a Level 2 Serious Adverse Incident review being undertaken following the death of [redacted] in Craigavon Area Hospital on [redacted]

I have had the opportunity to review medical and nursing notes as well as the Post Mortem report and the Root Cause Analysis (RCA) report undertaken by the SHSCT.

Summary:

[redacted] was born by normal vaginal delivery on [redacted] at 0411hrs at 38+4 weeks gestation following spontaneous onset of labour. There was no prolonged rupture of membranes or other risk factors for sepsis. [redacted] was discharged home from hospital with his Mother on 1st November at approximately 1415hrs. The following day, [redacted] was assessed by a community midwife. The community midwife was concerned about the appearance of [redacted] tummy and thus referred him to hospital for assessment. [redacted] tummy was described in the midwifery notes as being 'swollen and shiny'. [redacted] was also noted to have some vomiting after his feeds.

[redacted] was assessed in the Short Stay Paediatric Assessment Unit (SSPAU) at Craigavon Area Hospital on [redacted] at 1700 hrs having been in the department from 1400hrs. He was discharged home with his Mother at approximately 1715hrs. The family were contacted by phone with a bilirubin result at 1850hrs and were advised that no further follow-up was required. At 0455hrs on the [redacted] [redacted] was brought directly to the Paediatric Ward at Craigavon Area Hospital by his Mother. He was noted to be white and not breathing in his car seat. Paediatric resuscitation was immediately commenced. No cardiac output was noted at any time. Life extinct was pronounced at 0530hrs by the Consultant Paediatrician.

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Following Post Mortem, the cause of death has been recorded as Bronchopneumonia due to E. Coli Sepsis.

Analysis of care

When analysing the care given to Personal Information redacted by USI my main objective was to identify any opportunity that might have been missed to initiate treatment for sepsis.

1. **Immediate postnatal period**

After delivery, Personal Information redacted by USI was cared for by his Mother on the postnatal ward. There were no risk factors for congenital sepsis. Personal Information redacted by USI had a low birth weight (< 2nd Centile) and was thus monitored via the Newborn Early Warning Tool (NEWT). All observations were within normal range and observations were taken as per guidance for 12 hours. The chart was completed appropriately. The neonatal hypoglycaemia risk assessment tool was also completed and it was identified that Personal Information redacted by USI had 1 risk factor for the development of neonatal hypoglycaemia i.e. small for gestational age. As per guidance, 3 prefeed blood sugars were completed and all were within normal range.

Personal Information redacted by USI care during this period was appropriate.

2. **Community Midwifery Assessment**

Personal Information redacted by USI was assessed at home on Day 2 ([redacted] at 1130hrs) by a community midwife. He was noted to have a 'distended abdomen with shiny skin'. It was appropriate that Personal Information redacted by USI was referred for assessment at the Paediatric Unit in Craigavon Area Hospital. An appointment was arranged at 1400hrs at this unit by the Community Midwife.

Personal Information redacted by USI care during this period was appropriate.

3. **Ambulatory Assessment**

When reviewing this period of care given to Personal Information redacted by USI I considered the different means of identifying an infant with possible sepsis.

- Paediatric Early Warning Score.

Personal Information redacted by USI arrived in the Short Stay Paediatric Assessment Unit at 1400hrs. He was not seen by the medical team until 1700hrs. Whilst there could be some criticism of the delay in initiating the medical assessment, this delay allowed for a short period of observation in the Paediatric Unit. During this time, 2 sets of observations were performed at 1400hrs and 1600hrs, and plotted on the Paediatric Early Warning Score (PEWS) chart. A single PEW score can sometimes be falsely reassuring whereas a series of observations and

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calculation of PEW score can provide more useful information and early indication of patient deterioration. The PEW score change from 0 to 1. As per regional guidance this did not trigger escalation of assessment or increased frequency of observations. Personal Information redacted by USI underwent medical assessment following this last set of observations.

However, I note that blood pressure (BP) was not recorded at any stage during Personal Information redacted by USI assessment. Thus, the previously noted PEW score was potentially inaccurate. SHSCT guidance states that a BP must be completed and recorded with baseline observations. Furthermore, incorrectly totalled PEWS scores are required to trigger a critical incident as per SHSCT policy.

'Nr' is recorded on the PEWS chart for the BP. This may mean 'not recordable' or 'not required' or something else. This abbreviation is not explained in the SHSCT PEWS guidance.

I am unable to say what affect this omission may have had on Personal Information redacted by USI care. There is a possibility that it may have caused an increase in the PEWS score necessitating a medical review; however, a medical review actually took place after the second set of observations.

- Sepsis 6

There was no evidence that Personal Information redacted by USI was entered onto a Sepsis pathway. Review of Sepsis 6 pathway as produced by the Sepsis Trust shows that Personal Information redacted by USI may have fulfilled one of the initial screening questions for Sepsis i.e. parental concern. I am taking this information about parental concern from the Root Cause Analysis report written by the review team from the SHSCT. However, moving to the next stage of the Sepsis Pathway, I feel consideration was given for Sepsis and Personal Information redacted by USI did not have any red or amber flag criteria suggesting that further assessment for sepsis or treatment would be indicated.

- Experience in the specialty of Paediatrics

The Medical assessment was completed by a Paediatric Specialist Trainee of sufficient seniority as per RCPCH Facing the Future 2015 guidance. I feel that the doctor assessing Personal Information redacted by USI gave consideration to the primary reason that Personal Information redacted by USI was referred for assessment. The doctor specifically noted the appearance of the abdomen and the assessment documented 'shiny skin but dry rather than tense'. It is my opinion that this doctor probably gave some consideration to underling gastrointestinal pathology. In addition, it was documented 'no sepsis risk factors' showing consideration for this important aspect of a new-born's medical history.

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In a Neonatal Intensive Care Unit environment, a 'swollen and shiny abdomen' might suggest underlying GI pathology and would necessitate screening bloods for sepsis and consideration of an abdominal X-ray. However, in the ambulatory setting, with a baby with normal observations and no risk factors for sepsis, and with an examination as recorded in the medical notes, it is understandable why baseline bloods for sepsis were not sent.

Personal Information redacted by USI was noted to be jaundiced. As per NICE guidance a bilirubin level (SBR) was sent to assess if phototherapy treatment was required for the jaundice. Additional bloods are required if significant hyperbilirubinaemia is found; this was not the case in this situation.

There is an argument that as a bilirubin level was begin sent, and given that Personal Information redacted by USI was vomiting after his feed, albeit small volumes, and his abdomen was noted to be distended, that additional blood tests could have been requested at the time that might have indicated evolving sepsis. In writing this report I have spent some time debating this particular issue. Sometimes in medicine, experience and a gut feeling lead doctors to request test that are not absolutely indicated. However, there is documentation that the doctor assessing Personal Information redacted by USI gave consideration to risk factors for congenital sepsis and that he/she assessed the abdomen appropriately. Thus taking all of the above information into consideration, I do not feel there was an absolute indication for further blood tests to be performed at this time that might have suggested evolving sepsis and the doctor was justified in not in requesting them.

- Discharge home

I am unable to determine the exact timing of discharge home. The nursing notes suggest this is at 1715hrs, only 15minutes after the medical assessment began during which a bilirubin level was also taken. The discharge checklist in the multidisciplinary notes was not completed which would have detailed the discharge time.

- Communication with parents

There is documentation of a discussion with Personal Information redacted by USI Mother about when to seek advice if she had ongoing concerns about her son. I can only assume that Personal Information redacted by USI Mother's first language is English given that the box on the front cover of the chart 'First language if other than English' is left empty.
Whilst the advice given is documented in the medical notes, I am not sure if adequate information was given about who to contact, or how to contact for advice i.e. the ward phone number.

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- Further review

The family were contacted with a bilirubin result at 1850hrs. This telephone call is documented in the medical note which is good practice. Whilst the report suggests that the family did not raise concerns about [redacted] at that time, there is no record that this question was asked. However, my understating is that the main purpose of the call was to update the family about a blood test result and not for clinical review purposes.

4. Resuscitation

The attempted resuscitation was appropriately managed with the resuscitation team. It was appropriate to discontinue treatment with [redacted] Mother present at this time.

Recommendations

The RCA report from the SHSCT states there are no recommendations. I have the following recommendations:

1. Safety netting.

Consideration should be given to the development of a contact card that can be given to parents so that they are aware of an appropriate phone number to contact if they have concern following discharge home from the Short Stay Paediatric Assessment Unit.

2. Language

I am unable to verify if [redacted] Mother's first language was English. The cover page of the medical notes has a section to be completed if a parent's first language is 'other than English'. There is a possibility for this to be overlooked and thus noncompletion does not always imply English is the first language. The NI regional nursing documentation has this section rephrased such that a first language must be written. Consideration should be given to this.

3. Discharge Checklist

This was not completed. Processes should be put in place to ensure that this is completed for all children leaving the department.

4. PEWS Scores.

When completing a PEWS chart, all parameters should be measured in order for a score to be calculated. Whilst a BP can be challenging to obtain, this should be recorded on at least 1 occasion during an admission / assessment. The SHSCT guidance for PEWS

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states this. In addition, the SHSCT guidance recommends that a clinical incident report should be submitted for incorrectly totalled PEWS. The use of 'nr' must be clarified when written on the PEWS chart in place of a blood pressure.
Systems must be put in place to ensure that a BP is recorded as part of baseline observations as detailed in the SHSCT PEWS guidance.

5. Sepsis Pathway

I am not aware if a Sepsis pathway is in place within the SHSCT. Whilst a Sepsis pathway is very useful when a patient has been entered onto it, a problem arises when sepsis is not considered but is the ultimate diagnosis. In this particular case, Personal Information redacted by USI presentation in the short stay Paediatric assessment unit would not have triggered any further assessment as per a Sepsis pathway. Some Trusts however have adopted a policy that all children should be considered for Sepsis and subsequently removed from the pathway if this not applicable thus providing evidence of consideration of Sepsis recorded within the medical notes.

6. Parental concern

The RCA report documents that Personal Information redacted by USI mother expressed her concerns about her sons' vomiting and his abdominal examination. Implementation of planned updated PEWS charts, which includes a low level score for parental concern, will reinforce engagement with families in the care of their child.

Whilst I have listed a series of recommendations, on reviewing the clinical notes and the RCA report I do not feel there were any major omissions of care given to Personal Information redacted by USI by the SHSCT which might have allowed earlier detection and treatment of evolving sepsis.

Finally, I would like to offer my sincere condolences to the Personal Information redacted by USI family.

[redacted]

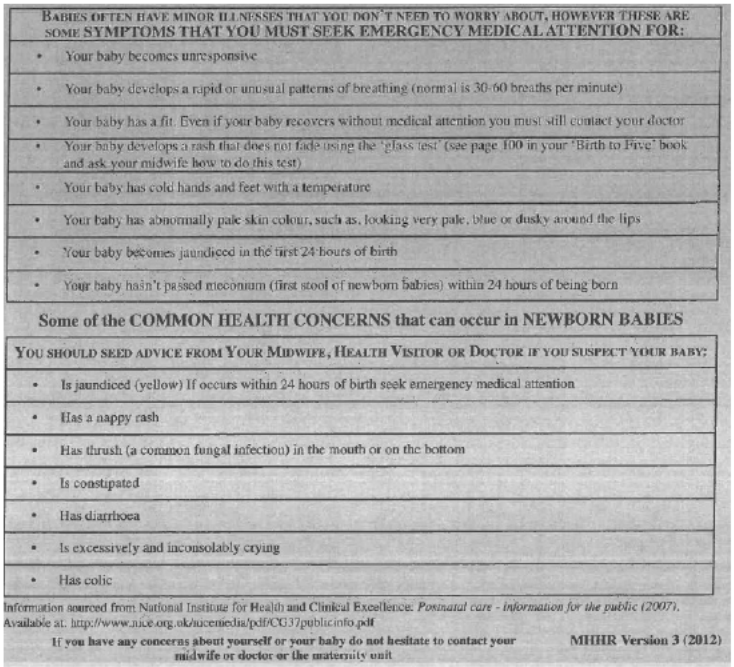
Dr Jenny Hughes
Consultant Paediatrician
Antrim Hospital
NHSCT

GMC: Personal Information redacted by the USI

Antenatal Timeline
Date of Incident: [redacted]
ID: 1[redacted]

Date and time	Significant events	Key to staff
	XX was a 34 year old para 3. 3 normal deliveries at Term in 2003, 2011, 2018. History of LLetz and cervical cautery 2017	
16/04/19	Booked at 12 weeks gestation for consultant led shared care and therefore 3 weekly growth scans due to 1 risk factor - Smoking CO reading was13 at booking but stopped on 14/09/2019 BMI 28.71 BP 120/60 EDC 10/11/2019 Low risk VTE, GTT and Aspirin risk assessments.	
26/04/19	Rescan to confirm EDC and confirmed 10/11/19	
	Scheduled antenatal appointments	
25/05/19	stopped smoking and all well - 17 weeks	
16/08/19	27+5 - all well - 1061g	
06/09/19	30+5 - bloods done - EFW 1502 Plan for DOU on 13/09/19 for weight review	
DOU 13/09/19	ATTENDED DOU 13/09/19 for amniotic fluid volume estimation and dopplers. Amniotic fluid index found to be > 5th percentile with normal dopplers	
20/09/19	32+5 - breech - 1816 Advised re reduced FM to attend MAU	
DOU 27/09/19	33+5 estimated foetal weight less than 10th percentile. Doppler's positive and amniotic fluid normal and planned to review next week	
04/10/19	34+5 - cephalic - all well - 2200g	
10/10/19	35+4 - all well, good foetal movement	
18/10/19	36+5 - 2588g	
	Labour and delivery	
[redacted] MAU 23:20	XX's mother presented to MAU with spontaneous rupture of membranes (SROM) at 38+3 weeks gestation. SROM at 20:00 Observations normal and CTG commenced Vaginal examination found cervix to be 2cms dilated and 1.5 cms long with the presenting part at ischial spines -3	

23:45	CTG evaluation normal and buddied the same	
[redacted] 02:20	XX's mother returned to maternity assessment unit with stronger contractions, vaginal examination showed the cervix to be 2cms dilated fully effaced with the presenting part at ischial spines-3 with clear liquor draining. Uterine contractions are noted to be irregular and short and labour not established at this time however XX's mother was anxious as her last labour had been quick.	
02:45	Observations were normal and after discussion with labour ward sister a plan was made to allow XX's mother to remain in the midwifery led unit until labour became established.	
02:50	SHO review (ST3) History noted and agreed admission and induction of labour within if labour does not become established	
03:15	Contractions unchanged, Foetal heart rate (FHR) 146 beats per minute (BPM) and accelerations evident with foetal movement. Intravenous access obtained and bloods sent to labs for group and hold and full blood picture.	
03:40	Transferred to midwifery led unit	
04:05	XX's mother appears asleep, midwife spoke to XX's mother and stated contractions unchanged. FHR 16bpm, no decelerations noted and accelerations present with foetal movement. Midwife left the room to respond to emergency buzzer.	
04:11	Midwife entered the room as XX's mother appeared distressed. Foetal head delivering and XX's mother stated she couldn't reach the buzzer in time. Spontaneous delivery of live male infant placed skin to skin and active management of third stage Apgars scores 9 at one minute and 9 at five minutes, weight 2740 grams, growth centile 1.8	
04:15	Placenta delivered perineum intact and total estimated blood loss 300mls. Post-delivery observations: BP 143/88, temperature 36.9, heart rate 84bpm	
05:10	XX's mother out to bath	
06:10.	resting in bed, light breakfast given, lochia average and uterine fundus firm Post delivery risk assessment of VTE was intermediate risk and therefore commenced on 10 days of enoxaparin appropriately.	
11:00	Postnatal check normal and no concerns during the day or overnight. Managed baby independently.	
[redacted] 08:30	XX's mother keen for home, baby bottle feeding well	
	Community postnatal care	
10:20	Postnatal check completed and normal, discharge information given	

14:15	Discharged home to community midwife Normal discharge advice given as per maternity hand held records 	
[redacted] 11:30	Postnatally well, advised re breast care in view of bottle feeding and contact numbers given, plan for review again the next day.	Community Midwife 1

BABIES OFTEN HAVE MINOR ILLNESSES THAT YOU DON'T NEED TO WORRY ABOUT, HOWEVER THESE ARE SOME SYMPTOMS THAT YOU MUST SEEK EMERGENCY MEDICAL ATTENTION FOR:

- Your baby becomes unresponsive
- Your baby develops a rapid or unusual patterns of breathing (normal is 30-60 breaths per minute)
- Your baby has a fit. Even if your baby recovers without medical attention you must still contact your doctor
- Your baby develops a rash that does not fade using the 'glass test' (see page 100 in your 'Birth to Five' book and ask your midwife how to do this test)
- Your baby has cold hands and feet with a temperature
- Your baby has abnormally pale skin colour, such as, looking very pale, blue or dusky around the lips
- Your baby becomes jaundiced in the first 24 hours of birth
- Your baby hasn't passed meconium (first stool of newborn babies) within 24 hours of being born

Some of the COMMON HEALTH CONCERNS that can occur in NEWBORN BABIES

YOU SHOULD SEED ADVICE FROM YOUR MIDWIFE, HEALTH VISITOR OR DOCTOR IF YOU SUSPECT YOUR BABY:

- Is jaundiced (yellow) If occurs within 24 hours of birth seek emergency medical attention
- Has a nappy rash
- Has thrush (a common fungal infection) in the mouth or on the bottom
- Is constipated
- Has diarrhoea
- Is excessively and inconsolably crying
- Has colic

Information sourced from National Institute for Health and Clinical Excellence: *Postnatal care - information for the public (2007).* Available at: http://www.nice.org.uk/nicemedia/pdf/CG37publicinfo.pdf

If you have any concerns about yourself or your baby do not hesitate to contact your midwife or doctor or the maternity unit **MHHR Version 3 (2012)**

Paediatric Timeline

Date of Incident: [redacted]

ID: [redacted] Personal Information redacted by USI

Date/ time	*Facts from the records- salient points*	*Key to staff*
[redacted]	04:11: XX born via normal delivery in CAH. APGARS: 9 & 9. Small for gestation, weight 2nd - 9th centile.	
[redacted]	14:40 XX Discharged from post-natal. Newborn examination part 2 satisfactory, naevus suiplex noted at back of neck and positional talipes, seen by physio.	
[redacted]	11:30 Assessment by Community Midwife. Abdomen noted to be distended & shinny skin. Baby feeding slowly PU & BO (yellow). Occasional vomiting. CAH contacted re abdomen. Mum to bring baby to CAH Blossom Ward Short Stay at 2pm	Community Midwife 1
[redacted]	14:00: Arrived in SSPAU CAH. Seen by HCA. Pews= 0-1 due to slightly elevated respiratory rate, HR: 112. Temp: 36.9 RR: 48, Sats- 95%. 16:00 Respiratory rate 53, Heart rate 155, Temperature 36.9, and oxygen saturations 100% in room air.	HCA 1
[redacted]	17:00 Dr 1 assessed child for "Abd distention/vomiting" alongside trainee APNP. History: Vomiting post feeds, Snuffly – present since birth, Slight wheeze throughout [chest] Imp: well baby with slight abd distension, dry skin , jaundice Mild Plan: allow H[ome], Check SBR, Mum to seek advice if [reduced] feeding [increased] vomits, NBO [No Bowel Opening] 3 days or green vomit.	Dr 1 Trainee APNP 1
[redacted]	18.50 SN1 made contact with XX'S mum via telephone to inform them the SBR level did not require treatment	Trainee APNP 1
[redacted]	04:55 Brought by mum to CAH children's ward saying "my baby is unwell". Brought to ward treatment room and assessed by Deputy Sister 1, Dr 2 and Dr 3. Oxygen mask applied, Bleeding from nose noted, No respiratory effort. 5 Inflation breaths given, Reassessed, further 5 Inflation breaths. Chest Compressions commenced (ratio 15:2). Cardiac arrest call, PEA on ECG. IV access obtained (third attempt) and intraosseous in left leg. 3 doses Adrenaline and 20ml/kg bolus N Saline	Deputy Sister 1 Dr2 Dr3
[redacted]	05:25 Assessed by Dr 4, as no return of circulation despite effective ventilation, resuscitation discontinued.	Dr 4

LEVEL 1 – SIGNIFICANT EVENT AUDIT INCLUDING LEARNING SUMMARY REPORT AND SERVICE USER/FAMILY/CARER ENGAGEMENT CHECKLIST

SECTION 1

1. ORGANISATION: SHSCT	**2. UNIQUE INCIDENT IDENTIFICATION NO. / REFERENCE:** Personal Information redacted by USI
3. HSCB UNIQUE IDENTIFICATION NO. / REFERENCE:	**4. DATE OF INCIDENT/ EVENT:** 11.09.2019
5. PLEASE INDICATE IF THIS SAI IS **6. INTERFACE RELATED WITH OTHER EXTERNAL ORGANISATIONS:** No	**7. IF 'YES' TO 5. PLEASE PROVIDE DETAILS:**

8. DATE OF SEA MEETING / INCIDENT DEBRIEF:

9. SUMMARY OF EVENT:

Personal Information redacted by the is a Personal Inform year old female patient who attended the Emergency Department (ED) at Daisy Hill Hospital (DHH) on 10 September 2019 following a fall from which she had an injury to the back of her head and also her right ankle. Following investigations Personal Information redacted by the was transferred from the ED DHH to the Trauma Ward in Craigavon Area Hospital (CAH) for repair of her ankle fracture; however Personal Information redacted by the had not been accepted by the Trauma Ward. Personal Information redacted by the was on an ambulance stretcher for 2½ hours whilst a decision was being made as to which ward would accept her as a patient. Whilst on the ambulance trolley Personal Information redacted by the had a cardiac event and was subsequently transferred to ED in CAH.

SECTION 2

10. SEA FACILITATOR / LEAD OFFICER: Mrs K Carroll Chair, Head of Service	**11. TEAM MEMBERS PRESENT:** Mrs S Holmes, Lead Nurse Emergency Department Mrs E Donnelly, Patient Flow Manager Mrs S Ward, Lead Nurse for Surgery Mr D Cardwell, Clinical Governance Manager

12. SERVICE USER DETAILS:

Personal Inform year old female. DOB Personal Information redacted by the USI

13. WHAT HAPPENED?

On 10 September 2019, Personal Information redacted by the attended ED DHH following a fall from which she had an injury to the back of her head and also her right ankle. At triage it was noted that Personal Information redacted by the had collapsed query from a cardiac nature and that she had a laceration to the back of her head and had pain in her right ankle. It was documented that Personal Information redacted by the had an implantable cardioverter defibrillator (ICD) insitu for 14 years (recently replaced in November 2018).

She was seen by Doctor 1 (Middle Grade ED) who noted that Personal Information redacted by the fell walking down a corridor to

check her blood sugar. He recorded that Personal Information redacted by the hit her head on the floor, injuring it and having a loss of consciousness. He also noted that Personal Information redacted by the had an ankle injury. At that time Personal Information redacted by the had no severe headache or any vomiting and appeared to be fully recovered from her loss of consciousness. Personal Information redacted by the had no shortness of breath. On examination her Glasgow Coma Scale (GCS) was 15/15 and her pupils were equal and reacting to light. Doctor 1 documented that she had normal power and tone, she was able to speak and her memory appeared normal. It is documented that Personal Information redacted by the's gait and vital signs were normal. The impression was that Personal Information redacted by the had a collapse with loss of consciousness. The plan was for Personal Information redacted by the to have computerised tomography of her brain (CTB) and if this was normal then she was to be referred to the medical team. An ECG was carried out and an x-ray of the right ankle performed. It was noted that Personal Information redacted by the was on warfarin, frusemide, bisoprolol, candesartan, insulin and that she had atrial fibrillation (AF) and cardiomyopathy. Doctor 1 noted that Personal Information redacted by the was a non-smoker and did not drink alcohol.

At 20:35 the result of Personal Information redacted by the's troponin test was recorded as 15. This was to be repeated again at 00:00. At 22:19 Personal Information redacted by the's CT brain was reported on which confirmed that there was no acute intracranial pathology and at 22:26 Personal Information redacted by the's x-ray of her right ankle was reported which confirmed a non-displaced fracture.

At 23:00 Doctor 1 returned to review Personal Information redacted by the. The diagnosis was that of a head injury with loss of consciousness. A medical referral was made and admission agreed by with the medical team.

At 01:15 the following morning the result of Personal Information redacted by the's troponin test was recorded as 31 and at 03:11 her chest x-ray was reported on as normal.

At 08:00 Personal Information redacted by the was discussed at the CAH trauma meeting and that it was agreed that she needed a CT of her ankle. The plan was for the CT to be reviewed and a decision on surgery would be made after that, although Personal Information redacted by the was an unlikely surgical candidate due to her significant cardiac issues.

At 08:15 Personal Information redacted by the had a blood glucose check and this was followed by novorapid (insulin) and breakfast.

At 12:00 Personal Information redacted by the was seen by Doctor 2 (Cardiologist) who noted that Personal Information redacted by the's head went "funny" prior to finding herself on the floor. Personal Information redacted by the reported that her blood glucose was 7.8 mmol/l and she did not feel the ICD delivered shock. Personal Information redacted by the's blood pressure (BP) was 110/55, heart rate (HR) 70 and she was in normal sinus rhythm. Her temperature was normal. Doctor 2 noted the past medical history and the plan was to admit Personal Information redacted by the to Cardiology. There were no immediate changes to Personal Information redacted by the's medications and she was to be put onto telemetry. It was noted that Personal Information redacted by the was a high risk patient for general anaesthesia.

Doctor 3 (T&O SHO on call) documented at 12:15 that Doctor 4 (Medical CT1 DHH) phoned to agree the plan for the management of Personal Information redacted by the's fractured ankle. Doctor 3 agreed she would be called when CT ankle was reported on and then she would discuss with the Registrar Personal Information redacted by the's clinical management and advise if surgery was required.

At 12:20 Personal Information redacted by the's observations were stable and she was given analgesia for pain. At this time she was awaiting a CT scan of her ankle. At 12:45 Personal Information redacted by the was given lunch and insulin.

At 14:31 the results of the CT of Personal Information redacted by the USI s ankle were reported on. It concluded that, "appearances are in keeping with a trimalleolar fracture. Reformatted multiplanar imaging has been saved to aid surgical planning."

At 14:45 an ambulance to CAH Trauma and Orthopaedics was booked and Personal Information redacted by the left ED at 16:21. Her discharge observations were BP 108/57, HR 69, RR 18, T 36.^{o}c and blood glucose 10.7.

Personal Information redacted by the arrived at CAH at 17:07. The Northern Ireland Ambulance Service (NIAS) staff have noted that there were no issues during transfer apart from a fall in Personal Information redacted by the's blood pressure.

On arrival at CAH, Personal Information redacted by the was taken to the Trauma Ward for admission however was not accepted. Doctor 3 telephoned Doctor 4 to find out why Personal Information redacted by the had been transferred and the situation was relayed to the Bed Manager.

At 19:00 Doctor 3 made a note that a Consultant from ED DHH telephoned and expressed disagreement with management. At 19:15 Doctor 3 noted that Personal Information redacted by the's blood glucose was 7.1 mmols and that she required insulin. It was agreed that Personal Information redacted by the would be transferred to the ED in CAH as she was in VT whilst Doctor 3 was on the telephone. Insulin was not given. She was seen by an ED doctor at 20:00 who diagnosed torsades (a specific type of abnormal heart rhythm that can lead to sudden cardiac death) and the plan was to admit her to Ward 1 North Cardiology.

Personal Information redacted by the had open reduction internal fixation to her right ankle under spinal anaesthesia and was discharged home on 5 October 2019.

SECTION 3 - LEARNING SUMMARY

14. WHAT HAS BEEN LEARNED:

Patient Factors

The review team have noted that Personal Information redacted by the is a Personal Inform year old female who is a type II diabetic and has ongoing atrial fibrillation (fast and irregular heart rhythm). Personal Information redacted by the also has moderate mitral regurgitation (MR is leakage of blood backward through the mitral valve) and tricuspid regurgitation (TR is a disorder in which the valve does not close tight enough causing blood to flow backward) and an underactive thyroid. It is documented that Personal Information redacted by the also has an implantable cardioverter-defibrillator (ICD) inserted.

Task Factors

The review team understands Personal Information redacted by the's case was discussed at the Craigavon Trauma Meeting on the morning of 11 September 2019 and that her injury was sustained by a collapse due to a ventricular tachycardia. From an orthopaedic point of view it was agreed that Personal Information redacted by the would require a CT of her right ankle to determine the next step in her management. At that time concern was expressed that due to Personal Information redacted by the's cardiac status she would be a high risk patient for surgery. The outcome of this meeting was communicated to the referring team at DHH and there was an understanding that they would re-contact the trauma team following the CT scan.

Later that afternoon when the Trauma Co-ordinator enquired if Personal Information redacted by the had been accepted for admission they were advised that she had not been accepted for admission as there had been no update on the outcome of the CT scan. The review team understand that when the CT result was uploaded to the system Doctor 3 discussed its findings with two staff grade orthopaedic surgeons who were in turn going to seek an opinion from a consultant. Subsequent to this it became apparent that Personal Information redacted by the was enroute in an ambulance from DHH to CAH. The review team understand that by this time it was agreed that Personal Information redacted by the's fracture would be managed in a cast and a follow up at the fracture clinic in 1 weeks' time and there was no need for her to have been transferred from DHH.

The review team have found that the patient flow team at CAH were not told that Personal Information redacted by the was for medical admission on arrival at CAH nor were they advised that she needed to be seen by a cardiologist. The review team understand that when a patient is accepted their name goes onto a "flow" board. In Personal Information redacted by the's case it was noted that even though she had not been accepted, her name was placed on the flow board as needing a trauma bed and this was not changed to a medical bed as it should have been.

The review team have determined from the written documentation available that Personal Information redacted by the's CT scan results were not discussed as agreed prior to transfer. They have also determined that staff who organised the transfer overlooked the fact that Personal Information redacted by the was for medical admission at DHH. The review team considers that according a medical note at 12:00 on 11 September 2019, Personal Information redacted by the's transfer to CAH was unnecessary as her medical condition could have been managed in DHH.

Policies and Procedures

At the time of Personal Information redacted by the's transfer there was no formal procedure in place for the management of inter-hospital transfers from DHH to CAH. The review team aware that since Covid-19 there is a standard operating procedure (SOP) in place which covers the transfer of patients from CAH to DHH and it is the review team's understanding that when ED in DHH re-opens this procedure will be amended to take provide guidance for the transfer of DHH ED patients to CAH. The current SOP is clear that patients should not move until they have been accepted by the receiving specialty and that appropriate discussions have taken place doctor to doctor.

Conclusion

The review team have concluded that there has been a breakdown in communication between the teams caring for Personal Information redacted by the prior to her transfer to CAH. In addition there was a misunderstanding in relation to the steps which were to be taken following the results of the CT scan becoming available.

15. WHAT HAS BEEN CHANGED or WHAT WILL CHANGE?

In the case of inter-hospital transfers, any transfer must be agreed in advance of it taking place and an ambulance should not be booked before a bed on the receiving ward has been confirmed.

When a patient is being transferred from one location to another, the patient flow team will now do a double check before the transfer is undertaken. This is carried out by a member of the patient flow who documents the name of the doctor who has accepted the patient and then telephoning them to verify the transfer.

The SOP for stabilisation and transfer of medical patients from CAH to DHH will be recirculated to teams in an attempt to highlight its principles.

16. RECOMMENDATIONS (please state by whom and timescale)

The review team recommends that:

1. Any issues regarding the non-acceptance of a patient either internally or by transfer from another hospital should be raised by the datix reporting system.

2. The learning from this case should be shared with ED, Surgical and Medical Teams via their respective M&M processes.

17. INDICATE ANY PROPOSED TRANSFERRABLE REGIONAL LEARNING POINTS FOR CONSIDERATION BY HSCB/PHA:

None.

18. FURTHER REVIEW REQUIRED? NO

Please select as appropriate

If 'YES' complete SECTIONS 4, 5 and 6. If 'NO' complete SECTION 5 and 6.

SECTION 4 (COMPLETE THIS SECTION ONLY WHERE A FURTHER REVIEW IS REQUIRED)

19. PLEASE INDICATE LEVEL OF REVIEW:
LEVEL 2 / LEVEL 3
Please select as appropriate

20. PROPOSED TIMESCALE FOR COMPLETION:
DD / MM / YYYY

21. REVIEW TEAM MEMBERSHIP *(If known or submit asap)*:

22. TERMS OF REFERENCE *(If known or submit asap)*:

SECTION 5

APPROVAL BY RELEVANT PROFESSIONAL DIRECTOR AND/OR OPERATIONAL DIRECTOR

23. NAME:

24. DATE APPROVED:

25. DESIGANTION:

SECTION 6

26. DISTRIBUTION LIST:

Personal information redacted by the
The staff involved with Personal information redacted by the 's transfer
The Director of Acute Services
The Assistant Director of Acute Services (Unscheduled Care and Surgery)
The Associate Medical Director (Unscheduled Care and Surgery)
Chairs of M&M (Unscheduled Care and Surgery)

Checklist for Engagement / Communication with Service User[1]/ Family/ Carer following a Serious Adverse Incident

Reporting Organisation SAI Ref Number:		HSCB Ref Number:	

SECTION 1

INFORMING THE SERVICE USER[1] / FAMILY / CARER

1) Please indicate if the SAI relates to a single service user, or a number of service users. **Please select as appropriate (✓)**	**Single Service User**		**Multiple Service Users***		
	Comment: ***If multiple service users are involved please indicate the number involved***				
2) Was the Service User[1] / Family / Carer informed the incident was being reviewed as a SAI? **Please select as appropriate (✓)**	**YES**		**NO**		
	If **YES**, insert **date informed**:				
	If **NO**, please select **only one** rationale from below, for **NOT INFORMING** the Service User / Family / Carer that the incident was being reviewed as a SAI				
	a) No contact or Next of Kin details or Unable to contact				
	b) Not applicable as this SAI is not 'patient/service user' related				
	c) Concerns regarding impact the information may have on health/safety/security and/or wellbeing of the service user				
	d) Case involved suspected or actual abuse by family				
	e) Case identified as a result of review exercise				
	f) Case is environmental or infrastructure related with no harm to patient/service user				
	g) Other rationale				
	If you selected c), d), e), f) or g) above please provide further details:				
3) Was this SAI also a Never Event? **Please select as appropriate (✓)**	**YES**		**NO**		
4) If **YES**, was the Service User[1] / Family / Carer informed this was a Never Event? **Please select as appropriate (✓)**	**YES**	If **YES**, insert **date informed**: DD/MM.YY			
	NO	If **NO**, provide details:			
For completion by HSCB/PHA Personnel Only (Please select as appropriate (✓)					
Content with rationale?	**YES**		**NO**		

SHARING THE REVIEW REPORT WITH THE SERVICE USER[1] / FAMILY / CARER

(complete this section where the Service User / Family / Carer has been informed the incident was being reviewed as a SAI)

5) Has the Final Review report been shared with the Service User[1] / Family / Carer? **Please select as appropriate (✓)**	**YES**		**NO**		
	If **YES**, insert date informed:				
	If **NO**, please select **only one** rationale from below, for **NOT SHARING** the SAI Review Report with Service User / Family / Carer:				
	a) Draft review report has been shared and further engagement planned to share final report				
	b) Plan to share final review report at a later date and further engagement planned				

SHARING THE REVIEW REPORT WITH THE SERVICE USER[1] / FAMILY / CARER *(complete this section where the Service User / Family / Carer has been informed the incident was being reviewed as a SAI)*		
	c) Report not shared but contents discussed ***(if you select this option please also complete 'l' below)***	
	d) No contact or Next of Kin or Unable to contact	
	e) No response to correspondence	
	f) Withdrew fully from the SAI process	
	g) Participated in SAI process but declined review report	
	(if you select any of the options below please also complete 'l' below)	
	h) concerns regarding impact the information may have on health/safety/security and/or wellbeing of the service user[1] family/ carer	
	i) case involved suspected or actual abuse by family	
	j) identified as a result of review exercise	
	k) other rationale	
	l) If you have selected **c), h), i), j), or k)** above please provide further details:	

For completion by HSCB/PHA Personnel Only (Please select as appropriate (✓)				
Content with rationale?	**YES**		**NO**	

SECTION 2							
INFORMING THE CORONERS OFFICE (under section 7 of the Coroners Act (Northern Ireland) 1959) *(complete this section for all death related SAIs)*							
1) Was there a Statutory Duty to notify the Coroner on the circumstances of the death? **Please select as appropriate (✓)**	**YES**		**NO**				
	If **YES**, insert **date informed**:						
	If **NO**, please provide details:						
2) If you have selected 'YES' to question 1, has the review report been shared with the Coroner? **Please select as appropriate (✓)**	**YES**		**NO**				
	If **YES**, insert **date report shared**:						
	If **NO**, please provide details:						
3) 'If you have selected 'YES' to question 1, has the Family / Carer been informed? **Please select as appropriate (✓)**	**YES**		**NO**		**N/A**	**Not Known**	
	If **YES**, insert **date informed**:						
	If **NO**, please provide details:						

DATE CHECKLIST COMPLETED	

[1] *Service User or their nominated representative*

Southern Health and Social Care Trust

Quality Care - for you, with you

Root Cause Analysis report on the review of a Serious Adverse Incident including Service User/Family/Carer Engagement Checklist

Organisation's Unique Case Identifier: SHSCT SAI [redacted]

Date of Incident/Event: 04/01/19

HSCB Unique Case Identifier: S14502

Service User Details: [redacted]
D.O.B: [redacted] Gender: (F) Age: [redacted]yrs

Responsible Lead Officer: Dr Meeta Kamath

Designation: Consultant Obstetrician and Gynaecologist

Report Author: The review team

Date report signed off:

Date submitted to HSCB:

1.0 EXECUTIVE SUMMARY

Personal information attended South Tyrone Hospital, Day Procedure Unit on 4 January 2019 for an elective hysteroscopy, endometrial biopsy and endometrial ablation. During the procedure a uterine perforation was diagnosed and the procedure was stopped. Personal information was immediately transferred to Craigavon Area Hospital for laparoscopy to fully inspect the uterus and exclude any damage to surrounding structures. A 4 centimetre defect was identified in the uterine fundus and a total abdominal hysterectomy and bilateral salpingectomy was performed due to an inability to maintain haemostasis in the previously ablated uterus. A superficial mesentery defect was sutured by surgeons and a small part of the sigmoid mesentery of terminal ileum showed some effects of the heat. Personal information redacted made a good recovery and was discharged home 4 days later with Consultant review post operatively.

2.0 THE REVIEW TEAM

- Dr Meeta Kamath, Consultant Obstetrician and gynaecologist
- Nigel McClelland, Medical Device Liaison Officer, Risk & Governance Manager
- Michelle Portis, Lead Midwife
- Donna King, Clinical Risk Midwife
- Patricia Kingsnorth, Acute governance co-ordinator
- Orlagh Murphy, Patient Safety and Quality Manager

3.0 SAI REVIEW TERMS OF REFERENCE

The terms of reference for the review of the safe use of the Thermablate device were:

- To identify key causal and contributory factors leading to the uterine perforation and to make recommendations which when implemented would reduce the likelihood of reoccurrence
- To identify and promote the learning that emerges from the review and, in particular, to identify system wide strengths and weaknesses and use relevant findings to improve the quality and safety of care.
- To use a multidisciplinary approach to the investigation using a systems analysis methodology
- To report the findings and the recommendations of the review to the Director of Acute Services SHSCT, and disseminate to the staff associated with care and to Personal information and her family.

4.0 REVIEW METHODOLOGY

- Medical records review
- Device records review
- Interviews with staff involved
- Interviews with the Device users

5.0 DESCRIPTION OF INCIDENT/CASE

Personal information was a Personal information year old woman with medical history of 6-8 weeks intermittent bleeding per vaginum (pv). She had a history of venous thromboembolism (VTE) and Lupus (long term auto immune disease causing inflammation to the joints, skin and other organs)

On the 16 October 2018 Personal information attended for a pipelle sample and experienced a vasovagal episode during the examination therefore the procedure was stopped and a plan made for a general anaesthetic (GA) hysteroscopy in 6 weeks.

On the 27 November 2018 Personal information attended a consultant appointment and as symptoms remained ongoing Personal information decided to have treatment with endometrial thermal ablation following a discussion with Consultant 1.

On 4 January 2019 Personal information attended the day procedure unit (DPU) in South Tyrone Hospital (STH) as planned for a hysteroscopy, an endometrial biopsy and endometrial ablation. She was admitted and all routine admission assessments were completed by nurse 1 and written consent was obtained. At 09:15 the procedure was commenced by Doctor 1 (ST2) under the direct supervision of Consultant 1.

A dilatation and curettage (D&C) was performed and following this there was a scope of the internal surface of the uterus. On the second scope there was some debris in the uterine cavity as is usual post curette but the cavity distended and again both ostea were visualised. The thermablate device was inserted into the uterus – the depth of insertion was noted at 8.5cm the same as the sound. The device was started and was not advanced any further than 8.5cm. On removing the device Consultant 1 noted that the volume used during the procedure was 24mls. This was considered to be a larger than normal volume. Following the ablation procedure a further scope was performed as normal but Doctor 1 was unable to distend the uterine cavity to visualise the ostea (internal opening of the fallopian tube) therefore a rescope was performed by Consultant 1. On rescope it was not possible to distend the endometrial cavity and the scope advanced beyond the 8.5cm of the cavity confirming perforation. Consultant 1 was unable to assess the uterine cavity thoroughly and therefore made a plan for a laparoscopy to be performed to assess if there had been invasion of the abdominal cavity by the ablation device.
The plan was to transfer Personal information to Craigavon Area Hospital immediately for further care. National Early Warning Score (NEWS) observations were monitored post procedure

5.0 DESCRIPTION OF INCIDENT/CASE

and were normal. Personal Information was safely extubated and once she was alert and orientated Consultant 1 discussed what had happened and the plan to transfer her for further care. Intravenous access was secured and prophylactic intravenous antibiotic therapy was commenced. Personal Information asked for her sister to accompany her in the ambulance, she was contacted and arrived soon after.

At 12:00 Personal Information was transferred to the gynaecology ward in Craigavon Area Hospital (CAH) accompanied by her sister as she had requested, they arrived at CAH at 12:15. The NEWS score was 1 as her blood pressure was slightly low at 109/73 mmHg. Oxygen saturations were 96%, Temperature 36.9º Celsius, Blood Pressure 109/73, Heart Rate 55 beats per minute.

At 12:30 Consultant 1 reviewed Personal Information on the ward and examined her abdomen. Personal Information was feeling some crampy abdominal pain and examination showed her abdomen was tender with no rebound. Morphine 5mg was prescribed to ease abdominal cramps and all routine pre-operation blood samples were sent and written consent was obtained for a laparotomy with potential to change to laparoscopy if necessary.

At 14:30 Consultant 1 reviewed Personal Information again and notes she was feeling well with the same crampy abdominal pain. The plan for laparoscopy was discussed with the surgical and gynaecology team and they planned to review Personal Information in theatre together.

At 15:15 Personal Information had intravenous morphine administered as prescribed and was observed to be sleeping on and off over the course of the afternoon.

At 17:45 Personal Information was transferred to theatre but had to return to the ward temporarily due to an emergency resuscitation call, apologies were given. All observations remained stable.

At 19:15 Personal Information was transferred to theatre and had a diagnostic laparoscopy and lower midline laparotomy. The team found a 4 centimetre perforation at the fundus of the uterus. Consultant 1 was unable to maintain haemostasis in the previously ablated uterus therefore a team decision was made for total abdominal hysterectomy, bilateral salpingectomy. Examination of the sigmoid colon, the rectum and small bowel were all normal. A small part of the sigmoid mesentery of terminal ileum showed some effects of the heat of perforation and a superficial mesentery defect was sutured by Doctor 2. The surgeons noted a healthy bowel with good motility and no further surgical intervention was deemed to be required.

At 23:15 Personal Information was transferred back into recovery and all routine post-operative care was provided before transferring back to the ward at 02:30.

At 11:45 Consultant 1 reviewed Personal Information recovery which had been uneventful and the plan was to continue with normal post-operative care with removal of the urinary catheter, encouraging normal mobilisation, normal oral intake and checking haemoglobin levels.

The next day, on 06 January 2019, the gynaecology registrar on duty (doctor 3 ST3) reviewed Personal Information and she remained well with a normal haemoglobin level 121 and normal vital signs. Examination of her abdomen was also normal with no tenderness