	Description	Main Findings	Recommendations	Progress
5	Fall resulting in fracture.	Mechanical fall.	Falls alarms to be used for those with significant falls risk.	Complete.
		The patient experienced delirium. Currently no delirium assessment or management pathway consistently used across Southern District Health Board.	Intentional Nurse Rounding. Introduction of the Confusion Assessment Method (CAM) and delirium pathway in Southland Medical ward when it is ready for district wide Roll out.	Complete.
		Medication patches had been ceased on discharge but this was not communicated in the clinical notes.	Improved communication when medications ceased.	Complete.
8	Fall resulting in fracture.	Removal of 1:1 patient watch, placing patient on 5-15 minute frequent observations. Insufficient response to the increased indication of risk following first fall.	Careful reassessment of level of observations – review need for 1:1 vs. frequent 5-15 minute observations. Priority use of rooms with availability of bedside call bell (8 & 9) for high falls risk patients.	Complete.
		No call bell or method of alerting staff available to the patient. Walking stick out of reach. Distance of patient's room from the nurses' station.	Obtain portable call bell for use in other rooms if Rooms 8 & 9 not available; consider installation of wall alarm capability in one of the specialist suite rooms adjacent to nurses' station.	Complete.
			Increase staff awareness of potential for adverse events to	Complete.

			occur at handover times and ensure that vigilance with observations is maintained over this period.	
			Further education sessions with staff around falls risk screening, assessment & interventions, and rescreening after falls and on a weekly basis.	Complete.
		No medical review after the first fall. Delay in diagnosis and commencement of treatment for a urinary tract infection.	Reinstate Falls Individualised Care Plan Tool into all patient files – consider colour printing so this stands out (edge of page is yellow).	Complete.
		Perceived difficulty in obtaining appropriate aids, particularly overnight or at weekends.	Clarification/education around special equipment and aids for high falls risk patients and multidisciplinary involvement and how to access these after hours.	Complete.
			Review medical cover for the unit over weekends/after hours; review procedures for access to same. Further staff education around post-falls response/care.	Complete.
			Investigate availability/purchase of true floor level bed/s.	Complete.

			Review Health & Safety implications for staff if nursing patients on mattresses on the floor. Review availability of bed rails as enablers – currently not compatible with the beds in the unit – if use of these is appropriate. Investigate availability/purchase of alarms which alert staff when patient gets out of bed. Improved signage on wall water controls in Low Stimulus Area (LSA).	Complete. Complete. Complete. Complete.
11	Fall. Subarachnoid haemorrhage.	Regular neurological observations were omitted until specifically requested to be 2 hourly by the ED registrar. Full Falls risk assessment was not completed until the patient had been in the Observation unit for 3 hours and fallen a second time.	Feedback to Emergency Department (ED) Charge Nurse Manager. Educate and improve compliance of Neurological Observation in a potentially head injured patient. Include falls screening policy in operational policy of ED observation unit. If initial screen indicates the need to go on to a full	Complete. Complete. Complete.

			falls screen this should be completed within 30-60min after being transferred to the Observation unit.	

	Description	Main Findings	Recommendations	Progress
12	Respiratory depression associated with opioid use.	No alert on the patients regarding Obstructive Sleep Apnoea (OSA). There is no policy or guidelines for patients with OSA who are scheduled for surgery. There is no specific and robust criteria for patients who deviate from the Total Hip Replacement pathway (THR). Bedside handover was not completed on day 2 post surgery despite patient still having Patient Controlled Analgesia (PCA) and Intravenous (IV) in situ.	Consider possibility of an alert to be attached to all patients' clinical records who have severe OSA. Develop guidelines around patients with OSA who are scheduled for planned surgery. Develop specific and robust guidelines with regard to variations for patients on a THR pathway. Institute bedside handover specifically for patients with PCA and IV fluids and document.	Recommendation to be implemented. Recommendation to be implemented. Recommendation to be implemented. Recommendation to be implemented.

13	Medication omission. Patient readmission.	Lack of clear plan for venous thromboembolism (VTE) prophylaxis. Apparent failure to provide adequate VTE prophylaxis peri-operatively. Lack of clear evidence of continuing VTE prophylaxis post operatively	Ensure VTE risk and plan determined preoperatively. Confirm VTE plan at time of preoperative Surgical Safety Check. Ensure VTE prophylaxis continues in the ward and after discharge. The surgical service should be asked to review its audit process as above and Clinical Leader asked to review VTE prophylaxis in team meeting.	Recommendation to be implemented. Recommendation to be implemented. Recommendation to be implemented.
14	Respiratory depression associated with opioid use.	The frequency of clinical observations did not enable detection of deterioration in the patient's condition when there was an increase in patient-controlled analgesia (PCA) bolus dose.	The Acute Pain Service (APS) to restrict long acting oral opioid use with a PCA to those who have been on long acting oral opioids long term prior to commencing PCA. This will require a multipronged approach including but not limited to restricting PCA prescribing to a limited number of prescribers (APS anaesthetic consultant and registrars), Medchart prompts and changes to the PCA prescription form. The APS to require increased observation frequency after an increase in the PCA bolus dose above the standard 1ml (1mg morphine, 20 mcg fentanyl).	In progress.

			Recommend at least hourly for 12 hours (MIDAS documents/PCA prescription charts/PCA training will need to be altered to reflect this change)	
		PCA prescribing not carried out by acute pain service (ASP)	All PCA requests are to be through the APS. There should be an accessible, structured referral process for APS review and PCA administration.	In progress.
		Pump malfunction cannot be excluded as a contributor as servicing not up to date.	Clinical Engineering team will provide schedules for PCA servicing which will be audited for compliance. The Service Manger will ensure adequate resource is available to carry out PCA safety checks as per the manufacturers' specifications.	Complete.

	Description	**Main Findings**	**Recommendations**	**Progress**
16	Delay in referral. Metastatic cancer.	Colonoscopy request forms comply with Ministry of Health guidelines.	Primary care advised to request clinical input early if concerns remain and colonoscopy declined at triage.	Complete.
		Waiting times for Gastroenterology Out patients Department	Patients should be offered appointments elsewhere in	Complete.

		appointments in Southland are too long (6 months).	Southern District Health Board if they cannot be seen in Southland within 3 months.	
18	Child Protection failure. No multiagency planning.	History taking was incomplete and the communication and sharing of information within and between clinical teams was inconsistent. A national multi-agency safeguarding protocol Memorandum of Understanding (MoU) was not followed prior to discharge home. Important clinical information was not communicated to clinical teams and was not included in the clinical details section of radiology request forms.	Ensure that the multidisciplinary team adopts a systematic approach to gathering, sharing, and documenting relevant information. Initiate a process to develop "shared care" principles between paediatrics and surgical specialties for patients admitted to Children's Ward. Ensure all staff are aware of, and follow, the national MoU. Ensure all children's health staff can access training and support in managing family violence / child protection issues. Convene a meeting regarding the findings of this investigation, and to consider findings from other agency reviews. Review service requirements and staffing requirements to ensure alignment.	In progress. In progress. Complete. Complete. Complete.

			Clinicians should be reminded of their responsibility to follow up inconclusive radiology reports. This could be by directly contacting the reporting radiologist (including from an outsourced service) or the relevant subspecialist radiologist.	Complete.
			All hi-tech imaging requests for children up to age of 12 years should be triaged and protocoled by a paediatric radiologist.	Complete.
			Clinicians should be reminded that providing relevant clinical details in radiology requests helps improve the quality of the reports.	Complete.
			SDHB paediatric radiology service should implement a district radiology policy for Non-accidental Injury to children.	Complete.
			A clear process is in place for general radiologists to access paediatric radiology support if SDHB paediatric radiologists are unavailable.	Complete.

19	Delay in diagnosis. Chest malignancy. Patient deceased.	Follow up of the unexpected abnormal finding on audit involved communication by email to the referring clinician but the Chest Clinic was left unaware of the abnormal finding We have had a poorly integrated patient radiology reporting system and IT radiology imaging systems. Chest clinic did not receive a copy of the radiology report.	That the Assistant to the Medical Director of Patient Services directly refers patients to chest clinic for further evaluation on receiving radiological reports that have not been actioned within an appropriate period of time. That our current system is re-emphasised to the radiology department whose consultants and registrars have to specifically mention on the report that the patient needs further evaluation. That current work with PACs reporting system provide an effective alerting system for abnormal radiology findings. That the staff who are "typing the reports" are made very aware that, if the patient is recommended for further evaluation, then copies of the report are sent both to the chest clinic and to the Assistant of the Medical Director of Patient Services.	Complete. Recommendation to be implemented. In Progress. Recommendation to be implemented.

	Description	Main Findings	Recommendations	Progress
21	Delay in follow up. Admitted with vomiting and diarrhoea. Patient deceased.			Investigation initiated.
22	Significant haemorrhage of home dialysis patient.			Investigation report in draft.
23	Retained wound packing item with delayed removal.			Investigation report in draft.
24	Post surgical complication. Patient deceased.	That a formalised protocol recognise that the low relatively low volume of major head and neck surgery being performed in here should have a bearing on the level of care placement immediately postoperatively (i.e. ICU vs HDU).	That the surgical teams plus the intensive care/HDU staff develop specific protocols and parameters for the post-operative care of major head and neck surgery in patients particularly with respect to airway management in the first 24-hours following surgery.	In progress.

		On calling for and getting the ultrasound machine in order to establish the exact position of the airway, the ultrasound machine did not function appropriately, and so time was lost while another machine was provided.	That the maintenance of vital equipment be meticulously performed and monitored.	Complete.
25	Delayed diagnosis. Infection. Loss of fingers and toes.	When the initial set of vital signs were done, the Early Warning Score (EWS) was not calculated. The EWS was not in use as it should have been. A score of 1, which this patient scored, would have mandated a repeat set of observations in 2 hours. Policy whereby observations are done when a patient is transferred to the Observation area of the ED was not followed. Time from Triage to being seen by a Medical Practitioner was long (over 2 hours for a Triage Category 3 patient).The CT scan was done in a timely fashion but no report was available for two hours.	Recommend that the EWS is calculated for patients having observations done, and that further action taken is related to this score. This needs to be audited. Recommend that a set of observations is done at the time a patient arrives in the Observation area of the Emergency Department. This requires audit. Recommend reviewing attendances to ensure that this is not a common occurrence. If this is the case then work flow processes and staffing levels on shift should be reviewed.	Complete. Complete. Complete.

		Even when the diagnosis was clear and action was taken, there was a long delay for antibiotics to be given. There is no sepsis pathway in use in Emergency Department. In investigating the case it was often difficult to interpret signatures in clinical notes and some entries were not clearly time stamped.	Recommend the case should be discussed with the Radiology service for their comment. Education for Medical and Nursing staff to reinforce to them the time critical nature of antibiotics in sepsis. This needs to be audited as part of a pathway (below) and quality key indicators. Recommend that ED consider initiating an evidence based "Sepsis Pathway" and auditing the use of such a pathway with clear measures such as time to antibiotics in sepsis. Recommend reinforcing the need for legibility for identifying staff and time of actions.	Complete. Complete. Complete. Complete.
26	Delay in diagnosis. Adenopathy. Cancer.	Lack of recognition and action related to persistent lymphadenopathy. Insufficient information supplied on histology request form.	Development of protocol and flow chart for fine needle aspiration and subsequent follow up. Additional space is made on the histology request form so there is sufficient space to ensure the insertion of the appropriate information can be added to	Recommendation to be implemented. Recommendation to be implemented.

			improve diagnosis.	
27	Delay in diagnosis of Breast cancer. Metastatic Disease.	Radiologists working in the Breast Screening Health Care programme for Southern DHB incorrectly reported the patient's mammograms in 2010 and 2012 as showing "no evidence of cancer". All mammograms were double read by Radiologists fully accredited by BreastScreen Aotearoa.	Ensure all Radiology Staff adhere to the quality guidelines recommended by the Royal Australia and New Zealand College of Radiology and the Ministry of Health.	Complete.
28	Delay in diagnosis. Herpes Simplex Encephalitis. Cognitive sequelae.	Early presentation of an evolving illness at a time when there was headache but no other clinical features of the disease. Diagnostic difficulty due to a history of alcohol use, and abnormal liver function tests. Overlooked subtle CT scan findings. Observations not repeated while in the Emergency Department (ED) on the first presentation. There is no evidence that the involvement of a nurse practitioner contributed to the outcome in this case. In discussion, however, it emerged as a possible risk in the future, if the role of the nurse	It is recommended that emergency doctors and internal medicine physicians review this topic as part of continuing medical education. It is recommended that the use of repeated observations and the maintenance of observation charts be formalised in the ED setting. Early Warning Score or equivalent tools should be used to inform decisions regarding frequency of observations on patients in ED. In the ED setting, the nurse practitioner role should be clearly defined and separate from the nursing role, and this should be explicit. In particular the nurse	Complete. Complete. Complete.

		practitioner is not clearly defined.	practitioner should not be responsible for performing repeat observations.	
29	Retained surgical item.	Lack of awareness of the current surgical count policy that had been put in place two months prior to the patient's surgery. Whilst the new surgical counts policy (2014) theoretically would prevent the retention of this item happening again, the review of the case still showed that there is some lack of uniformity as to what items are added to the formal count.	That a very clear and formal procedure be established for the introduction of new/updated policies changing clinical practice within the peri-operative environment. Recommend that there be formal educational sessions with theatre staff with regards to the details of the surgical count policy. That the surgical count policy (2015) be reviewed, with a view to developing uniformity as to what added in sundry items are formally noted on the surgical count list for each procedure. That Women's, Children's and Public Health Directorate review the resourcing, scheduling and planning of outpatient appointments for post-operative gynaecological cases further to this case.	Complete. Complete. Complete. Complete.

		Communication of risk nationally.	The Chief Medical Officer, in association with the Health Quality and Safety Commission, to notify other District Health Boards and the manufacturer of this event and the risk identified.	Recommendation to be implemented.
30	Malpositioned positioned gastric tube. Perforation.	Clearer and more accurate documentation of intubations and OGT placement in babies especially those less than 28 weeks is needed. X-ray review needed not clear if it included all nursing staff and placement of all lines and tubes.	Intubation record and OGT/NGT recommended at MDT to be adopted for use. Use of peer approach to OGT/NGT insertion for babies less than 28 weeks gestation in the first few days of life – includes review of clinical picture, ventilation, number of tube placement attempts and OGT/NGT insertions. Check measurement with two nurses, insert with second nurse observing, use lubricant for insertion. Review of X-rays by nursing and medical staff, findings documented at time of review. Placement of all tubes and lines as usual practice with all x-rays.	Complete. Complete.

31	Malpositioned gastric tube. Perforation.	Documentation was not clear and accurate.	Intubation record to be adopted for use. Record for tube insertion to be developed. Use of peer approach to OGT/NGT insertion for babies less than 28 weeks gestation in the first few days of life – includes review of clinical picture, ventilation, number of tube placement attempts and number of OGT/NGT insertions. Measurement check with two nurses, insert with second nurse observing, use of lubricant for insertion.	Complete.
		Documentation in clinical notes review needed. Was not chronological or clear in record of events and action taken especially in relation to the timing of emergency responses.	Development of a form for clinical records to provide clearer documentation of number of intubation attempts, OGT/NGT insertions.	In progress.
		Use of polyurethane (PVC) tubes review needed.	PVC feeding tubes have been removed from the NICU supply and changed to opaque polyurethane feeding tubes.	Complete.
		Review of ETTs (Endotracheal) and central lines required manipulation to lengthen or shorten tubes/lines to the correct length resulting in disruption of taping or securing devices, potential trauma and repeat	Review of national and international guidelines and policies for OGT/NGT insertion and methods of measuring for correct length of placement.	Ongoing.

		placement of OGT/NGT emergency responses.		

	Description	Main Findings	Recommendations	Progress
34-61	Loss of visual function			Investigation report in draft.