

# Waikato District Health Board

## Serious Adverse Events Report

### 2015/16

### November 2016



<b>S</b>	<b>Situation</b> What is happening?
<b>B</b>	<b>Background</b> What is the relevant clinical history?
<b>A</b>	<b>Assessment</b> What do I think the problem is?
<b>R</b>	<b>Recommendation</b> What would I do to correct the problem?
<b>R</b>	<b>Response</b> Is the response appropriate? What will I do?

- Reducing harm from falls
- Patient journey
- Perioperative harm prevention tools
- Medicine management



# Waikato DHB Serious Adverse Events Report 2015-16

## September 2016

### 1. Introduction

Care will never be risk free, but we can minimise these risks in order to provide high quality care for the people of Waikato DHB. Learning from adverse events is crucial to continually improve person-centred, safe and effective delivery of care. This will contribute to people who use health and social care services being safe from harm.

This report summarises the serious adverse events that occurred at Waikato DHB from 1 July 2015 - 30 June 2016. An adverse event is an incident which results in harm to people using health and disability services; serious adverse events are reported in accordance with the Health Quality & Safety Commission's (HQSC) national reportable events policy, and in general are those incidents where serious harm to a consumer or death has resulted.

It is recognised internationally that health care is a complex process, has associated risks and that patients may become harmed when receiving care intended to help them. It is important that there are robust and reliable processes in place to effectively manage adverse events, and that lessons are shared widely and used to support improvements in care and service delivery. The process of investigating and reporting serious adverse events is about transparency, improving the quality and safety of health services and managing the risks of providing care by identifying problems and failures in the system so we can learn from them and prevent similar events from happening.

This report provides some specific examples of improvements that have been made following adverse event reviews that have led to an improved quality of care for people. Additionally, the report provides an update on other initiatives to improve quality and patient safety. Supporting cultural change is at the heart of this work. We all want to achieve a positive safety culture that is open, just and informed, in which reporting and learning from error is the norm. Achieving cultural change is challenging and will take time, but we are seeing positive changes.

The Annual Serious Adverse Events reports are a source of data to guide and focus our attempts to prevent avoidable harm in the future from healthcare practices.

### 2. Our Commitment to Improving

Waikato DHB is committed to improving the quality and safety of patients and has a number of patient safety initiatives underway including the following key initiatives:

- Reducing Harm from Falls

Falls risk assessment is required for all patients being admitted to identify those who are at increased risk of falling and to put strategies into place as early as possible. Each patient identified at increased risk will have an individualised care plan

completed to ensure the care and prevention strategies are appropriate to their needs. Whilst we have made positive changes to how we recognise patients at risk and have access to resources we can use to help protect the patient, we must now look at new ways to keep our patients from falling and harming themselves and this work remains a priority. Refer to Section 3 for more information on falls.

- Deteriorating Patient

A number of different tools and systems are used to monitor the condition of patients whilst in hospital and support the recognition of clinical deterioration should it occur. These include early warning scores that are in use across the organisation as well as the use of SBARR as a communication framework. SBARR is widely used to support concise and effective communication whether at handover of care or in emergency situations.

We have a number of different data sources that inform us as to how well these systems are used. Despite this, recognition of and response to patient deterioration remains a common theme in mortality review investigations and in serious adverse events.

*Steps taken to improve*

The Health Quality and Safety Commission are running a national deteriorating programme and Waikato DHB is involved with this. The aim is to improve recognition of patient deterioration in adults, along with timely response. The programme started in July 2016 and will run for five years. The four focus areas include:

- standardised rapid response system
- patient and family/whānau escalation
- goals of treatment
- evaluation

- Perioperative

There is currently underway an initiative to reduce perioperative harm i.e. an unwanted outcome linked with any stage of an operation – before, during or after surgery.

*Background:*

This is work that has been underway since 2014, driven by the Health Quality and Safety Commission and now known as Safe Surgery New Zealand. The aim is to improve perioperative care – that is before, during and after surgery, by using safety checks for all patients and improving teamwork and communication. Waikato was involved in the pilot project for this work which tested and refined processes for

- surgical team briefings
- paperless surgical safety checklist
- debriefings

- supporting communication tools, such as SBARR (situation, background, assessment, recommendation, response) and closed loop feedback

An additional part of reducing perioperative harm is for venous thromboembolism (VTE) assessment. This is the assessment and management of the risk of a patient developing blood clots in the legs or lungs during and after surgery.

*Steps taken to improve*

The use of the surgical safety check list has been introduced in all 22 theatres in Waikato DHB. It is no longer a paper based form but is monitored by observation audits on a regular basis. Early feedback from audits indicates that staff engagement and compliance with the surgical safety check list is showing a positive trend upwards. A quality and safety marker was introduced in July 2016 and will be reported on a quarterly basis from the end of 2016 with targets set against each element of the check list.

- Medication management

Medication management is an important part of patient care both as inpatients and outpatients. It is important that we:

- Avoid errors in prescription and administration
- Recognise where patients have allergies and adverse reactions to medications so these can be avoided in the future
- Keep up to date with changing drug names, packaging and formulations
- Use the tools that are available to clinical staff to deliver medications safely – such as Guardrails medication software that is installed on electronic pumps
- Make sure patients understand what medications they are being given, why they are needed and what the side effects may be
- Continue to explore better ways of managing medications across the whole patient journey, from admission through to discharge into the community and for ongoing care

*Steps taken to improve:*

- The Medicines and Therapeutics Committee are a multidisciplinary clinical group who promote safe, rational and cost effective medicine use within Waikato District Health Board and provide leadership in all matters relating to medicines management. This includes reporting, monitoring and analysing medication errors or adverse drug reactions as well as keeping up to date with national and international developments in medication management and overseeing medicine safety initiatives.
- Over the past two years, some of our staff have been part of a national collaborative run by the Health Quality & Safety Commission to reduce harm from opioid medications. Opioids are a class of medicines that include morphine, methadone and oxycodone. Opioids have a number of benefits, but their use can be associated with adverse events and are known to cause harm to patients. Most of the district health boards in New Zealand have been involved in this work

and have concentrated on such aspects as nausea and vomiting, opioid induced constipation, respiratory depression and discharge prescriptions. The focus at Waikato was opioid induced constipation, which is an extremely common problem in particular following surgery. We know this is a problem due to the Trigger Tools data and it can result in additional treatment, longer hospital stays and sometimes further surgery. The work has now been completed and the final outcome will be the development of care bundles which will go through some further testing and refining over the coming year. The intention is then to introduce the bundles of care throughout New Zealand.

- Antibiotic stewardship: The Infectious diseases team is a branch of medicine that deals with the diagnosis and management of illnesses that involve infection from bacteria, viruses, fungi and parasites. They have a particular interest in the use and management of antibiotics. This is important due to the world wide increasing population resistance to antibiotics and the need to improve the effectiveness of antibiotic use for patient treatment. The team is working on medication safety campaigns for better use of antimicrobial drugs and support clinicians in their prescribing and management of antimicrobial therapy, particularly in complex patient treatments.
- In 2015 the team set up the Outpatient Antibiotic service or OPIVA. The aim of OPIVA is to:
  - Provide a streamlined pathway for patients who require long term antibiotic treatment
  - Enable patients to be discharged home sooner and continue to receive intravenous therapy in the community
  - Can prevent hospital admission through initiating treatment in the communityA pharmacist role supports the infectious diseases team to improve management of patient care by updating antimicrobial guidelines and improving the supply of antimicrobial therapies to patients when they are discharged home. They work closely with the medical staff to provide advice and support as well as collect and analyse data on antimicrobial medication prescribing and use. This helps target areas for education and changes in practice.

The DHB pharmacy service continues to work on a range of activities to improve medication safety throughout the DHB hospitals, such as:

- The introduction of a new community pharmacy on site (Pharmacy on Meade) to improved medicine supply and service to outpatients, staff and visitors
- Involvement in a range of activities to improve medication documentation on admission and discharge
- Continued development and review of medication safety software for infusion pumps and syringe drivers
- Surveys of insulin prescribing knowledge
- Review of medication incidents
- Improved prescribing education for doctors new to the DHB

### 3. Serious Adverse Events reported this year

Please note, with the exception of falls occurring in the Mental Health for the Older Person inpatient service this report excludes mental health events as they are reported by a separate process.

During 1 July 2015 - 30 June 2016 Waikato DHB 97,521 patients were discharged (excludes patients discharged/transferred to other parts of the DHB, self-discharges, and those discharged dead). In the same period, 12 Severity Assessment Code (SAC) 1 & 29 SAC 2 events were reported a rate of approximately 0.01% and 0.03% respectively per inpatient admissions (compared with 94,989 discharges in the previous financial year and a rate of 0.01% and 0.04%). The 41 combined SAC 1 and 2 events this year is less than 2014-15 when 53 events were reported. Of the 41 8 (19%) were of Māori ethnicity.

A further 12 events were initially rated either SAC 1 or 2 but were subsequently reclassified following investigation to SAC 3 and hence are not included in this report. An electronic risk management system, Datix, was implemented in February 2016 - this allows staff to report incidents electronically and to rate the severity of the incident. The assessment of severity can be problematic and has led to an increase in SAC 1 and 2 events reported although the SAC rating may be amended following investigation.

It is important to recognise that the distinction between SAC 1 and SAC 2 events can be subjective as this is based on the level of harm perceived to have occurred - this can be difficult to assess with patients who may have many co-morbidities (a comorbidity is the presence of medical condition/s existing simultaneously with another condition which may be independent or related to the primary medical condition/s) or whose outlook from their disease process is poor notwithstanding the best possible treatment. International literature does not support the use of the number or rate of reported events as a way of judging a hospital's safety as there is considerable variation in the rates of reporting rates, not just in the rate of events. Reporting is actively encouraged at Waikato DHB to enable learning and improvement.

Charts 1 & 2 demonstrate the number of SAC 1 events and SAC 2 events respectively per category.

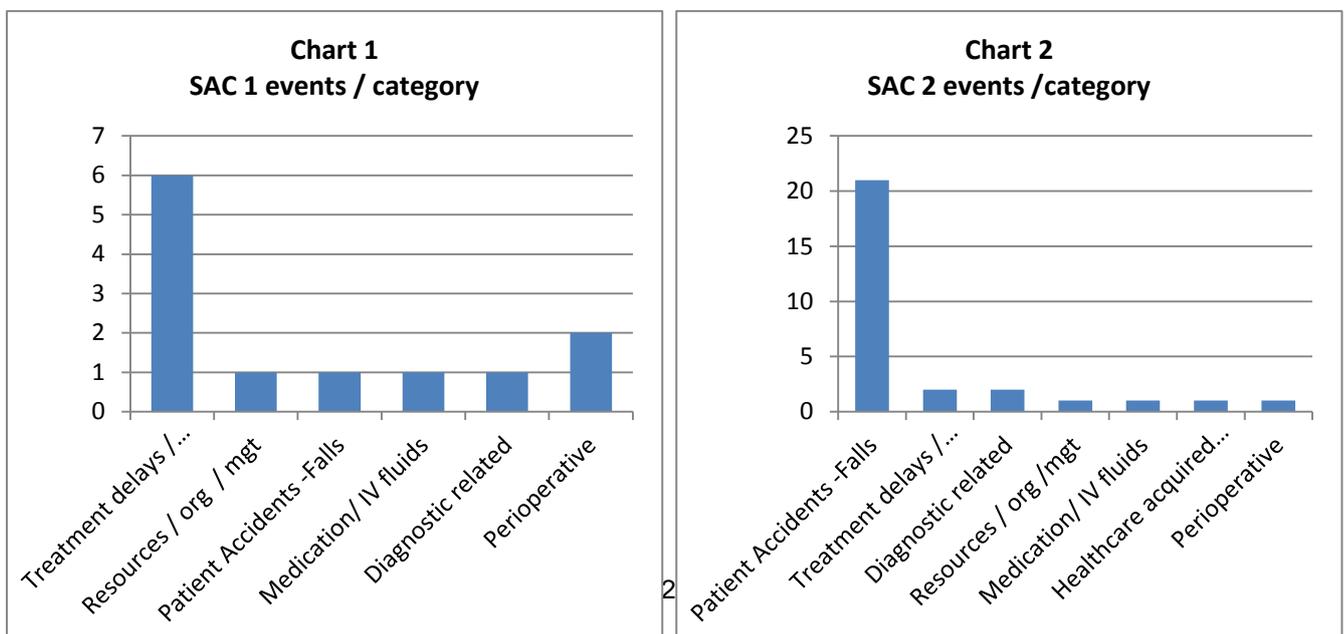
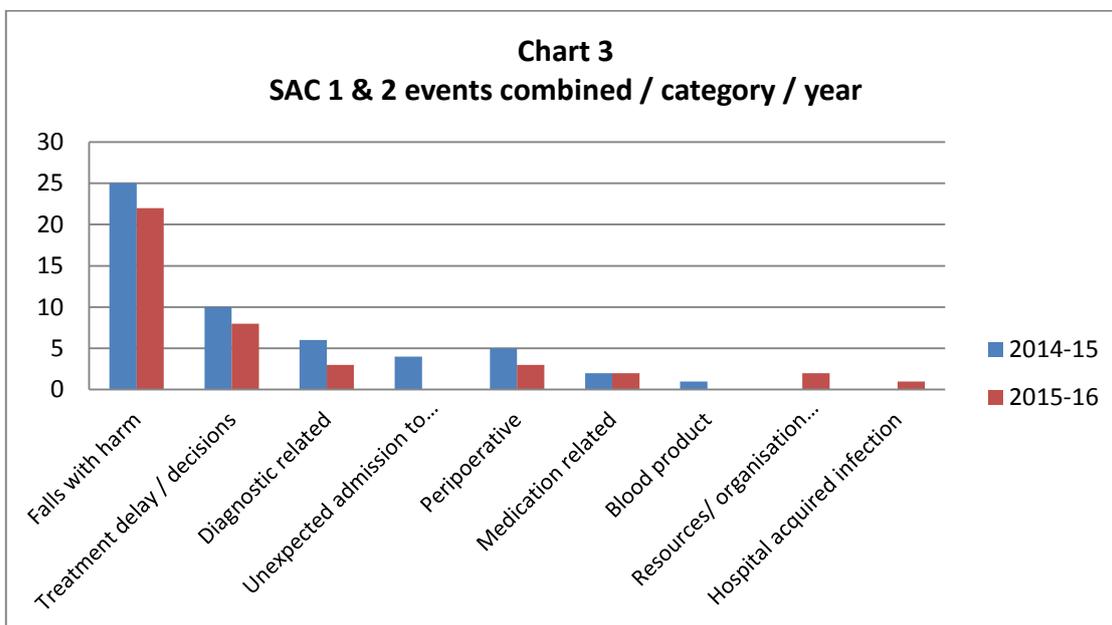


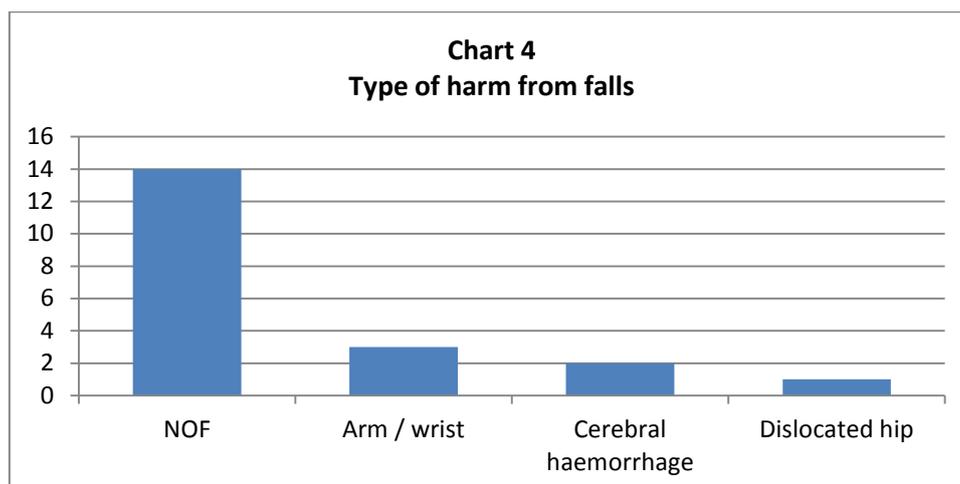
Chart 3 provides a comparison of the number of SAC 1 and 2 events per category for the last two financial years.



The three highest categories this year are the same as last year i.e. falls with harm (22), treatment decisions / delays (8) and diagnostic related and perioperative events (3 each) though numbers in all four categories are fewer than reported last year.

### Falls with injury / fracture

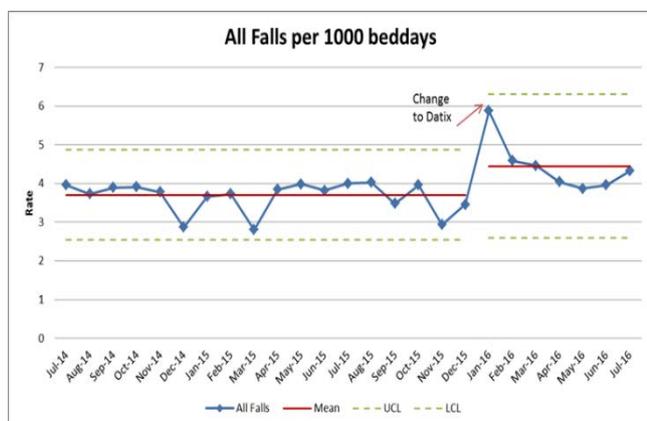
Chart 4 shows number of falls per type of harm sustained – fractured neck of femur (NOF) is consistently the most common injury sustained by patients who fall.



Despite considerable effort to reduce the numbers of falls and in particular the number of falls where patients have sustained an injury, we continue to experience higher rates than we would like.

Charts 5 & 6 show the number of falls and the number of falls with injury per bed day for the last two years respectively (injury can range from minor e.g. minor skin tear or bruise to major injury e.g. fracture). The introduction of Datix is marked on the graphs – an increase in reporting occurred, most likely in response to the education that accompanied the implementation of Datix.

**Chart 5**



**Chart 6**

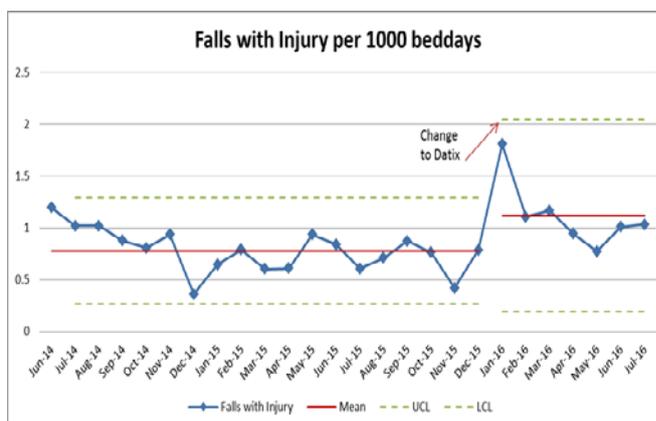
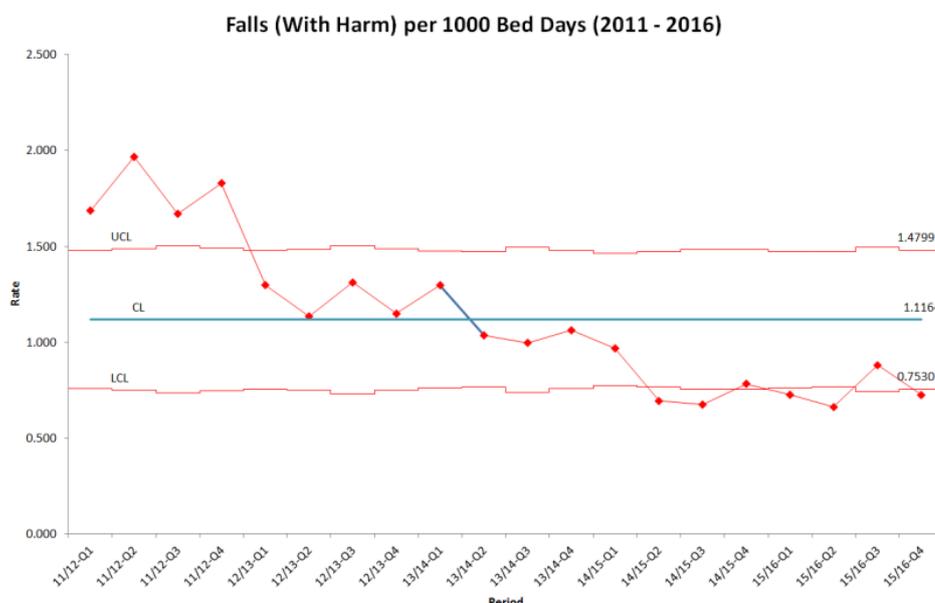


Chart 7 shows the number of falls with harm per bed day per year over the last five years – the significance of this graph is that it shows the steady reduction in falls with harm since 2012 following a focus at the DHB on fall prevention. Unfortunately it also shows that this improvement has plateaued. It signals the need to look at new ways to keep our patients from falling and harming themselves.

**Chart 7**



While falls with injury made up 54% of the total serious adverse events this year, there were other categories of significance i.e. treatment delay / decisions, diagnostic related and perioperative. As outlined in section 2, there are a number of initiatives underway to address gaps identified through serious adverse event review process and other mechanisms e.g.

mortality review, risk registers. Beside those already mentioned the following initiatives will also have a positive impact on patient care and help to reduce serious adverse events in our facilities:

- Fracture liaison service (funded by ACC and DHB) to identify patients  $\geq 50$  years who have new fragility fractures and initiate a plan of care aiming to reduce the risk of further fractures such as hip fractures.
- Women's Health Transformation programme – a number of streams of work already underway and completion due mid / late October 2017
- External review of elective services and appointment of an Elective Services Commissioner
- Acute patient flow work underway involving a number of areas e.g. increased resource for Emergency Department to better match resource to demand, increase range of post-acute care options, improved discharge planning, increased resource for Disability Services limited, etc.

## **Conclusion**

In conclusion, the Waikato DHB is sincere in its efforts to improve quality and patient safety throughout the organisation and to reduce preventable harm / deaths. Analysis / investigation of systemic or personal failures occurs whenever a serious or sentinel event is reported. Consideration is then given to the best way to prevent a recurrence of the event and evaluation of the effectiveness of identified remedial actions taken also takes place. Our aim is to listen, learn and improve. We are working more closely with patients and families to make sure their areas of concern are addressed.

Updates on our improvement projects can be found at [www.waikatodhb.health.nz/patientsafety](http://www.waikatodhb.health.nz/patientsafety).

## 2015 - 2016 Waikato DHB Annual Serious Adverse Events Overview

Table 1 provides an overview of the events reported in the last financial year, their findings and progress on recommendations made as a result of the investigations.

**Table 1**

Summary / Description	Findings	Actions Taken or Planned
<p>22 patients fell suffering harms as a result of their fall:</p> <ul style="list-style-type: none"> <li>• 22 sustained fractures:               <ul style="list-style-type: none"> <li>○ Neck of femur (14)</li> <li>○ Upper arm (2)</li> <li>○ Lower arm (1)</li> <li>○ Cerebral haemorrhage (2)</li> <li>○ Hip dislocation (1)</li> <li>○ Pelvis (1)</li> <li>○ NOF &amp; arm (1)</li> </ul> </li> </ul>	<p>For many investigations, no single root cause was identified although contributory factors were usually determined. These included:</p> <p><i>Environmental</i></p> <ul style="list-style-type: none"> <li>• Sloping / uneven shower floor</li> <li>• Cluttered environment</li> <li>• Curtains pulled for privacy but reduced visibility</li> </ul> <p><i>Patient Related</i></p> <ul style="list-style-type: none"> <li>• Patient condition e.g. cognitive factors (dementia, delirium, confused), impulsivity</li> <li>• Altered elimination, problems with indwelling catheter</li> <li>• Need for independence / refused staff assistance</li> <li>• Deaf, limited vision</li> <li>• Medical condition predisposed patient to falls</li> </ul> <p><i>Service Delivery problems</i></p> <ul style="list-style-type: none"> <li>• <i>Documentation:</i> <ul style="list-style-type: none"> <li>○ Falls risk assessment inaccurate</li> </ul> </li> <li>• <i>Medication</i> <ul style="list-style-type: none"> <li>○ Side effects / fall risk associated with prescribed medication not understood by staff</li> <li>○ Polypharmacy</li> </ul> </li> </ul>	<p><i>Lessons learnt</i></p> <p>Preventing harm from falls is an ongoing important piece of work in all hospitals and health care settings. Every patient is unique in their clinical presentation, their mobilisation abilities and fall minimisation requirements. One package will not suit all and it is essential that as health professionals we continue to make assessments about what is required to keep each of our patients safe, in all areas of the clinical environment to prevent falls or at least minimise harm from them. Consideration needs to be given to:</p> <ul style="list-style-type: none"> <li>• Environmental factors</li> <li>• Adequate and current nursing documentation</li> <li>• Patient factors</li> <li>• Care delivery (especially the need to individualise care so it can be targeted)</li> <li>• Staff factors e.g. knowledge of and compliance with Heinrich II falls assessment, understanding the impact medications can have on the risk of falling.</li> </ul> <p>Recommendations from reviews of these falls include:</p> <ul style="list-style-type: none"> <li>• Staff to refresh their knowledge of the Fall Minimisation Policy and Heinrich falls assessment</li> <li>• Compliance with falls minimisation policy to</li> </ul>

Summary / Description	Findings	Actions Taken or Planned
	<ul style="list-style-type: none"> <li>• <i>Equipment</i> <ul style="list-style-type: none"> <li>○ Alarm and landing mats not in place although recognised as high falls risk</li> <li>○ Shower chair not fully braked</li> <li>○ Gutter frame does not have brakes</li> <li>○ Patient wearing personal bed socks rather than grip sox</li> </ul> </li> <li>• <i>Treatment Decisions</i> <ul style="list-style-type: none"> <li>○ Patient left unattended in shower despite recognised fall risk and low blood pressure, left alone on toilet</li> <li>○ Increased level of care in long-term patient not recognised / actioned</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• be audited</li> <li>• Continue to develop and embed a coordinated, integrated fall prevention work plan, which is based on, and builds on, current DHB policy and practice and previous Health Quality and Safety Commission fall prevention self-assessment document:</li> <li>• Improve fall prevention engagement with both the patient and family</li> <li>• Staff should recognise and plan for the effect of communication messages with the patient: e.g. intentional rounding/continence checks can put toilet/bathroom thoughts into patient's heads which they act on once staff have left the room</li> <li>• Increase the visibility of high fall risk patients: review the use of curtains, cohorting in a location most accessible/visible to staff bases with dedicated care.</li> <li>• Implement a falls care bundle</li> <li>• Ensure visible falls measures are a component of everyday current practice and to raise awareness.</li> <li>• Implementation and monitoring of the use of the DHB delirium guidelines and resources</li> <li>• Patient equipment education: Monitor the education given to high fall risk patients, when they are supplied with new aids to daily living e.g. walking sticks and walking frame education, particularly if they are of a different type than usual</li> <li>• Review of medications prescribed for high fall risk patients and improve staff understanding of interrelationship between medications and falls</li> </ul>

Summary / Description	Findings	Actions Taken or Planned
<p>Treatment delays and / or decisions (8)</p> <ul style="list-style-type: none"> <li>Sudden unexpected death - client misdiagnosed with gastritis. Raised D Dimer not actioned</li> </ul>	<ul style="list-style-type: none"> <li>The incidence of AAD (acute aortic dissection) is rare but physicians should always have an awareness of the potential risk factors for AAD</li> </ul>	<ul style="list-style-type: none"> <li>Complex patients presenting at rural facilities should always be discussed with Waikato after investigation. Telemedicine should be used to discuss difficult and high risk patients.</li> </ul>
<ul style="list-style-type: none"> <li>Treatment decisions / delay with patient at rural facility following a seizure</li> </ul>	<ul style="list-style-type: none"> <li>Inadequate recognition and management of deteriorating patient post sedation.</li> <li>Delayed patient transfer of care</li> </ul>	<ul style="list-style-type: none"> <li>A review of retrievals from rural to tertiary services will be undertaken as part of the Rural Transformation project</li> <li>Medical staff documentation meets the standards in the Clinical Record Management policy, providing chronological description of assessment, clear evidence of care planning, the decisions made and the care delivered, all changes in condition and any problems that have arisen with actions taken to rectify them</li> <li>Amend the orientation handbook to include guidance for medical staff with inpatient referrals to Waikato</li> </ul>
<ul style="list-style-type: none"> <li>Acute admission requiring operative procedure – arterial catheter inserted. Patient subsequently developed ischaemic right hand</li> </ul>	<ul style="list-style-type: none"> <li>Extremely rare complication of a radial artery insertion. The patient’s chances of this complication were inherently increased by her comorbidities but would have been further increased if the arterial line was left in situ.</li> </ul>	<ul style="list-style-type: none"> <li>Staff comply with the requirements of the Lippincott procedure ‘Arterial Catheter Removal’ with particular reference to documentation re date and time of catheter removal, pressure was applied, complications, and assessment of the distal extremity</li> <li>That transfer/handover of care to the wards is written rather than verbal: the form should clearly capture key clinical information and be based on the SBARR principles</li> </ul>
<ul style="list-style-type: none"> <li>Delay with assessment and treatment of NSTEMI</li> </ul>	<ul style="list-style-type: none"> <li>The patient was not seen within the triage 2 timescale resulting in delayed assessment and treatment</li> </ul>	<ul style="list-style-type: none"> <li>Work to continue to ensure the MDT situational awareness of the emergency department senior roles (Medical and Nursing) is embedded</li> <li>Reinforce the individual responsibilities and accountabilities of the MDT, including appropriate escalation, to ensure efficient and</li> </ul>

Summary / Description	Findings	Actions Taken or Planned
		<ul style="list-style-type: none"> <li>• effective care of the patient</li> <li>• Reinforce the importance of robust documented patient handover</li> </ul>
<ul style="list-style-type: none"> <li>• Patient collapsed – initial diagnosis stroke and thrombolysis given. Later found to have aortic arch dissection</li> </ul>	<ul style="list-style-type: none"> <li>• The aortic arch dissection was not initially identified</li> </ul>	<ul style="list-style-type: none"> <li>• Radiology to develop a teaching file to improve interpretive knowledge when reviewing CTAs for Radiology Registrars, Neurologists and Neurology Advance Trainees. The inaugural teaching session for CTA interpretation to be facilitated by Neuro-radiologist.</li> <li>• Neurology and Radiology to review the routine use of CTA imaging for potential thrombolysis patients.</li> </ul>
<ul style="list-style-type: none"> <li>• Deterioration post-operatively – cause unclear but patient collapse and unable to be resuscitated</li> </ul>	<ul style="list-style-type: none"> <li>• Delayed recognition of sepsis in a post-operative patient</li> </ul>	<ul style="list-style-type: none"> <li>• A review of colorectal surgery to be undertaken to determine: <ul style="list-style-type: none"> <li>○ what if any further safeguards can be taken to improve patient safety</li> <li>○ whether these procedures should be only undertaken at a tertiary hospital.</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>• Woman's uterus ruptured during labour</li> </ul>	<ul style="list-style-type: none"> <li>• Failure to recognise the significance of abdominal pain in a patient with a high risk of uterine rupture</li> </ul>	<ul style="list-style-type: none"> <li>• Senior Medical Officer's bedside rounds currently undertaken in Delivery Suite after handover are to be extended into Women's Assessment Unit for all inpatients.</li> <li>• Development of a structured format/template e.g. SBARR to be used for the plan of care.</li> <li>• Update Analgesia in Pregnancy guideline to include pre and post monitoring.</li> <li>• CTG interpretation sticker to be used in clinical notes in Women's Assessment Unit</li> </ul>
<ul style="list-style-type: none"> <li>• Delay with recognition of deteriorating CTG</li> </ul>	<ul style="list-style-type: none"> <li>• Deteriorating condition of a high risk antenatal patient was missed by the multidisciplinary team along with a failure to follow the informal escalation process for non-reassuring CTGs</li> </ul>	<ul style="list-style-type: none"> <li>• Review of electronic fetal monitoring protocol to include the documented standard for escalation of concerns when there is deviation from normal parameters</li> </ul>

Summary / Description	Findings	Actions Taken or Planned
		<ul style="list-style-type: none"> <li>Clarify medical oversight of high risk (admitted) antenatal patients</li> <li>Integrate a multidisciplinary approach to CTG learning into standardised handover, case reviews and ward rounds</li> </ul>
<p>Resources / organisational management (2)</p> <ul style="list-style-type: none"> <li>Delay with assessment and treatment in ED</li> </ul>	<ul style="list-style-type: none"> <li>Due to lack of beds in the department the patient was placed in the Plaster room, an area not staffed after 11pm. Although interactions did occur overnight between the patient and HCA, not observations were taken until morning.</li> <li>She required a procedure to drain and abscess and was subsequently discharged home</li> </ul>	<ul style="list-style-type: none"> <li>Review of key nursing and medical officer roles which will result in improved clarity regarding accountabilities and responsibilities, escalation processes, co-ordination and leadership</li> <li>Implementation of a structured patient rounding process in the department followed by electronic whiteboard reviews with senior nursing and medical staff present</li> </ul>
<ul style="list-style-type: none"> <li>Patient presented to ED but assessment / treatment delayed.</li> </ul>	<ul style="list-style-type: none"> <li>Initial medical assessment found patient not in distress but patient found unconscious at follow up assessment</li> <li>Patient not seen within the recommended time frame due to high volume patients and insufficient staff</li> <li>Communication tools and channels of communication need to be clearly aligned</li> </ul>	<ul style="list-style-type: none"> <li>Review of key nursing and medical officer roles to improve clarity regarding accountabilities and responsibilities, escalation processes, co-ordination and leadership</li> <li>Structured patient rounding process to be implemented and by electronic whiteboard reviews with senior nursing and medical staff</li> <li>Introduce the practice that patient curtains remain open at all times in order to promote visibility and patient safety unless staff are delivering care at the bedside.</li> </ul>

Summary / Description	Findings	Actions Taken or Planned
Diagnostic related (3): <ul style="list-style-type: none"> <li>Delayed follow up of CT result showing malignant tumour</li> </ul>	<ul style="list-style-type: none"> <li>CT performed following referral from GP. The result was sent to both GP and the hospital but no record that it was ever sighted by Neurology or GP</li> <li>The CT result was belatedly seen when referred to another clinic 6 years later</li> </ul>	<ul style="list-style-type: none"> <li>Ongoing work to ensure accuracy of the carer tables is completed and business rules implemented to maintain their accuracy.</li> <li>Review the business rules regarding communication with GPs in relation to following up on blood results and plan of care. The business rules to be incorporated into the Electronic Result Acknowledgement: The Responsibilities of Consultants and the Delegation of Responsibility to RMOs (1452) as an appendix</li> </ul>
<ul style="list-style-type: none"> <li>Delayed follow up of diagnostic result</li> </ul>	<ul style="list-style-type: none"> <li>Delayed follow up of MRI investigation result due to not ensuring that an appropriate follow up appointment was arranged.</li> <li>Wait list time for surgical intervention post delay in follow up of MRI result</li> </ul>	<ul style="list-style-type: none"> <li>A new system for referrals has been implemented where they are now sent electronically mitigating data entry errors.</li> <li>A robust process for ensuring follow up occurs post investigations / diagnostics is developed by the service</li> </ul>
<ul style="list-style-type: none"> <li>Delay with colonoscopy appointment</li> </ul>	<ul style="list-style-type: none"> <li>The details of the CT findings were incorrectly stated on the discharge summary (from preliminary verbal result) causing delay in colonoscopy appt.</li> </ul>	<ul style="list-style-type: none"> <li>Quality assurance audits of discharge summaries to be done to ensure accuracy of the discharge summary and that appropriate actions have been taken</li> <li>Implement audit database</li> </ul>
Perioperative (3) Never Events e.g. wrong site surgery, wrong implant/prosthesis, retained foreign object post procedure (1) <ul style="list-style-type: none"> <li>Wrong side back surgery</li> </ul>	<ul style="list-style-type: none"> <li>The patient's spine was not marked: at the time this surgery was done it was not the practice to mark the patient's back to indicate which side was to be operated on. - hemi-discectomies are the only side specific spinal surgery done and, until recent years, the whole disc was removed. There is now a more conservative approach with only the affected side operated on.</li> <li>The procedure was performed in Acute theatre; the</li> </ul>	<ul style="list-style-type: none"> <li>Implement the Health Quality and Safety Commission Improving Surgical Communication and Teamwork project which includes surgeons leading Time Out; to be commenced in the Orthopaedic theatres</li> </ul>

Summary / Description	Findings	Actions Taken or Planned
	nurses assisting usually assisted in General Surgery theatre so were not familiar with orthopaedic surgery	
<ul style="list-style-type: none"> <li>Dressings sutured into the wound were not intended to be used in a closed wound</li> </ul>	<ul style="list-style-type: none"> <li>Medical staff were not familiar with the dressing product</li> <li>There was confusion between the terms absorbable vis-à-vis absorbent</li> <li>Lack of clarity regarding number of dressings to be removed</li> </ul>	<ul style="list-style-type: none"> <li>Clear written instructions should be provided for any foreign products e.g. dressings introduced in the theatre environment</li> <li>Wound management sheet for the management of complex wounds should be used</li> </ul>
<ul style="list-style-type: none"> <li>Acute bowel obstruction - laparotomy to resect an obstructing tumour during which there was formation of a stoma but incorrect part of colon brought out as colostomy</li> </ul>	<ul style="list-style-type: none"> <li>Patient booked for extended R hemicolectomy with planned defunctioning ileostomy rather than anastomosis in view of debilitated state.</li> <li>Returned to theatre, the ischaemic segment of her bowel was resected and a new stoma was formed. Unfortunately the patient developed multiorgan failure and subsequently died</li> </ul>	<ul style="list-style-type: none"> <li>Formalise and document the process / criteria for supervision (direct and indirect) of surgical staff from other countries until confident they can perform safely without supervision.</li> </ul>
<p>Medication events (2)</p> <ul style="list-style-type: none"> <li>Incorrect (high) dose of antibiotic given</li> </ul>	<ul style="list-style-type: none"> <li>Prescriber checked dose but confused daily and TDS dose when treating an acutely unwell patient with chronic respiratory disease</li> <li>Belief that bronchiectasis and cystic fibrosis patient groups received the same high dose of antibiotics</li> <li>Although dose checked by staff prior to administration due to human factors error not noticed</li> </ul>	<ul style="list-style-type: none"> <li>A review of, and possible amendment to, how aminoglycosides are charted is to be undertaken. Memo sent out as interim measure to all prescribers</li> <li>Review of Antimicrobial Handbook</li> <li>An alert to be put on the med-dispense machines for aminoglycosides.</li> <li>Sticker to be developed and placed in the Notes on Injectable Drugs books regarding frequency of administering tobramycin.</li> </ul>
<ul style="list-style-type: none"> <li>Spinal anaesthetic for femoral embolectomy - 4 hrs post—operatively patient given high dose anticoagulant, subsequently developing an epidural haematoma requiring urgent decompression surgery</li> </ul>	<ul style="list-style-type: none"> <li>The patient had known vascular disease with risk of clotting post-operatively</li> <li>The patient was inadequately fasted so the anaesthetists felt the risks of aspiration with a general anaesthetic were greater than the risks of a spinal anaesthetic.</li> </ul>	<ul style="list-style-type: none"> <li>Introduction of poster size wall-mounted checklist which acts as an aide memoire, prompt and discussion point to the Sign In, Time Out and Sign Out sections of the Surgical Safety checklist including therapeutic anticoagulants, regional anaesthesia as well as the VTE prompt.</li> </ul>

Summary / Description	Findings	Actions Taken or Planned
<p>Hospital acquired infection (1)</p> <ul style="list-style-type: none"> <li>• Patient transferred from Australia post stroke; the positive result for ESBL(CRE) (an antibiotic infection) was not recognised leading to transmission to 3 other patients</li> </ul>	<ul style="list-style-type: none"> <li>• Initial assessment focused on potential extension of stroke and missed CRE information</li> <li>• Pre-admission handover from Australia did not include CRE infection as it was not known at that point</li> <li>• Staff unfamiliar with CRE acronym (Carbapenem-Resistant Enterobacteriaceae) and did not realise its significance</li> </ul>	<ul style="list-style-type: none"> <li>• Improve guidance for staff regarding screening requirements and liaison with IPC for patients who have been in an overseas hospital in the last 12 months</li> <li>• Manual flagging to iPM of arranged transfers of overseas patients by Duty Nurse Manager team</li> <li>• Infection Prevention and Control procedures should be hyperlinked from DHB policies and procedures intranet site to Lippincott</li> <li>• IPC team review communications processes regarding screening criteria and how these are communicated so that staff remain aware of and implement the requirements.</li> </ul>