Waikato District Health Board

Learning from adverse events 2017/18

November 2018

Waikato District Health Board Strategy

Vision

Healthy people. Excellent care

Mission

Enable us all to manage our health and wellbeing

Provide excellent care through smarter, innovative delivery

Values

People at heart

Te iwi Ngakaunui

Give and earn respect – *Whakamana*

Listen to me; talk to me – *Whakarongo*

Fair play – *Mauri Pai*

Growing the good – *Whakapakari*

Stronger together – *Kotahitanga*

Health equity for high need populations *Oranga*	Safe, quality health services for all *Haumaru*	People centred services *Manaaki*	Effective and efficient care and services *Ratonga a iwi*	A centre of excellence in learning, training, research, and innovation *Pae taumata*	Productive partnerships *Whanaketanga*
Improvement initiatives					
Sepsis 6 campaign	Safety culture Implementation of national Early Warnings Score (EWS)	Greater consumer engagement throughout the review	Reduction of falls with serious harm	Pepi splint for neonates London Protocol workshops	Linking with primary care/ Lead Maternity Carers/NGOs for adverse event reviews

Waikato DHB Learning from adverse events 2017-18

This report summarises the adverse events that occurred at Waikato DHB from 1 July 2017 - 30 June 2018. Adverse events are reported to the Health Quality & Safety Commission's (HQSC) in accordance with their national Adverse events reporting policy.

Executive Summary

The purpose of adverse event reporting is to improve patient safety and to understand the experience of the affected patient and whānau. The process of national reporting demonstrates to the public an openness and culture of learning from these events.

Each event involves a person and their whānau, family and friends; the DHB acknowledges the people affected by the adverse events outlined in this report. They are often life changing for patients, families and staff and we need to continue to work hard to prevent them. These reviews help us achieve safer health care and reduce the risk of future events of the same kind.

The reporting of adverse events is one part of a broader safety framework to make healthcare as safe as possible; other measures and methods demonstrate changes over time - at Waikato these include Quality Safety Markers, mortality screening, mortality and morbidity meetings across the DHB, Health Roundtable data, trigger tools, internal and external audit, etc. All contribute to the overall picture; the process of improvement is gradual but incremental gains are made each year in the pursuit of patient safety.

The adverse events presented in this 2017-18 *Learning from reportable events* report are based on the requirements of the HQSC's Adverse event policy 2017 (and the matrix from the HQSC's previous National Reportable Events policy due to the delay with uploading of the new matrix to the Midland electronic reporting system). In 2017-18 sixty-three adverse events were reported:

- Clinical management events, a grouped category with 17 cases, largely related to delayed diagnosis or treatment
- Healthcare acquired infections were the largest single category with 17 cases - the introduction of the Surgical Site Infection Improvement Programme (HQSC), focused on reporting such infections in orthopaedic and cardiac procedures but the programme, and reporting, has now been extended at Waikato DHB to all serious infections.
- Serious harm from falls - 10 cases. Half of these caused a fracture of the neck of femur (hip). There has been an overall reduction in the reported incidence of falls with harm
- There were 3 medication-related, 1 patient accident, and 1 medical device / equipment related events
- Behaviour (Mental Health & Addiction Services) – this is the first year this data has been included in our report. Previously this data was released annually by the Director General of Mental Health but from 2017-18 will be included in the Health Quality & Safety Commission in their annual *Learning from adverse events report* hence the inclusion of this data in Waikato DHB's report.

Introduction

At Waikato DHB the adverse events reporting, review and learning process is in place to facilitate learning and quality improvement and to enable analysis of contributory factors / trends over a cluster of events or time. We have a responsibility to learn from them to improve the safety and experience for patients and their whānau.

We have a responsibility to communicate openly with patients and their families about this. The DHB has reviewed the adverse event process and finalised our procedure to make sure we let patients and their families know early that we are reviewing the care, asking what they might want us to specifically look at, keeping them informed during the review process and also letting them know what changes we have made to reduce the chance of a similar incident happening again.

We have put arrangements in place to share learning and improvements from adverse event reviews across services, the wider organisation and nationally as appropriate. A brief learning summary that outlines what happened, what went well, what if anything could be improved and what has been learned is produced following a reportable adverse event review. These summaries are shared with the executive group, directorate teams and also placed on the staff intranet.

The purpose of this report is to provide focused commentary, raise themes from adverse events for Waikato DHB to consider in the coming year and to update on quality improvement activities underway.

Brief outline of the review process for reportable adverse events

An adverse event which requires reporting to HQSC, i.e. a reportable event, is an event with negative or unfavourable reactions or results that are unintended, unexpected or unplanned. In practice this is most often understood as an event which results in significant harm to a consumer or even death.

All reportable adverse event reviews at Waikato DHB are undertaken by a team of clinicians (e.g. doctors, nurses, midwives) and a member of the Quality & Patient Safety team who has been trained in adverse event review methods such as root cause analysis and London protocol methodology. No-one in the review team has been involved in the event; all reviews are impartial.

If at any stage in the event review process it is deemed that disciplinary processes are required, the People and Performance (Human Resources) department is informed so that their process can begin - this is a separate process and not part of the event review.

With the exception of pressure injury reviews, deep wound infections and falls resulting in a fracture which are presented at their respective committees, each event report is reviewed by the Serious Adverse Event Panel, chaired by the Chief Medical Officer (CMO), to ensure the review has appropriately established the facts, addressed all issues and that the recommendations are robust. All recommendations are assigned to a responsible owner and completion is tracked by the senior management team of the area, on a monthly basis. The DHB board also receives quarterly reports on the incidence and findings from these events.

The DHB (and health) is a complex system and adverse events will occur. Each of these events is regarded as an opportunity to learn and to improve in order to increase the safety of our care system for everyone. We are on a journey to become an open and transparent organisation, aiming to provide high quality care that is safe, effective and person-centered. The adverse event process will need to continue to evolve and improve as national and international best practice emerges.

Learning from Adverse Events reported by Waikato DHB 2017-18

The adverse events presented in this report are based on the requirements set out in the Health Quality & Safety Commission's (HQSC) *National Reportable Events* policy 2012. The policy contains a matrix to assist providers when assessing the Severity Assessment Code (SAC) for each event (from 1-4): only those events assessed as SAC 1 (severe) or SAC 2 (major) are reported to HQSC. Although this policy was updated in 2017, the amended SAC matrix was not uploaded into the Midland electronic reporting system until June 2018: most staff continued to be guided by the previous matrix which considered likelihood as well as consequence when assessing severity. Any changes from the removal of the likelihood of an event occurring as a contributor to the SAC rating will therefore not be seen until the next financial year.

In 2017-18 sixty-three (63) adverse events were reported; in the same period 104,046 patients were discharged *from* Waikato DHB *(excludes patients discharged/transferred to other parts of the DHB and self-discharges),* a rate of approximately 0.06% per inpatient admissions. This compares with 102,806 discharges in the previous financial year and 43 adverse events (rate of 0.04% per inpatient admissions)). 14 (22%) of the patients affected were of Māori ethnicity and 40 (64%) identified as NZ European.

The increase in reportable adverse events this year relates to data in two of the categories: reported events from these two categories make up 31 of the 63 adverse events. Previously mental health adverse events data (often 'behaviour' category) was released by the Director General of Mental Health rather than being incorporated in the adverse event reports but from 2017-18 it will be included in HQSC's annual report hence that data also now features in Waikato DHB's report. For the other (Healthcare associated infections), the reporting criteria has been extended to a wider group of infections with a corresponding increase in number of events reported.

Adverse event reporting is not a reliable way of demonstrating change nor is the use of the number or rate of reported events reliable 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. Incident reporting is actively encouraged at Waikato DHB to enable learning and improvement.

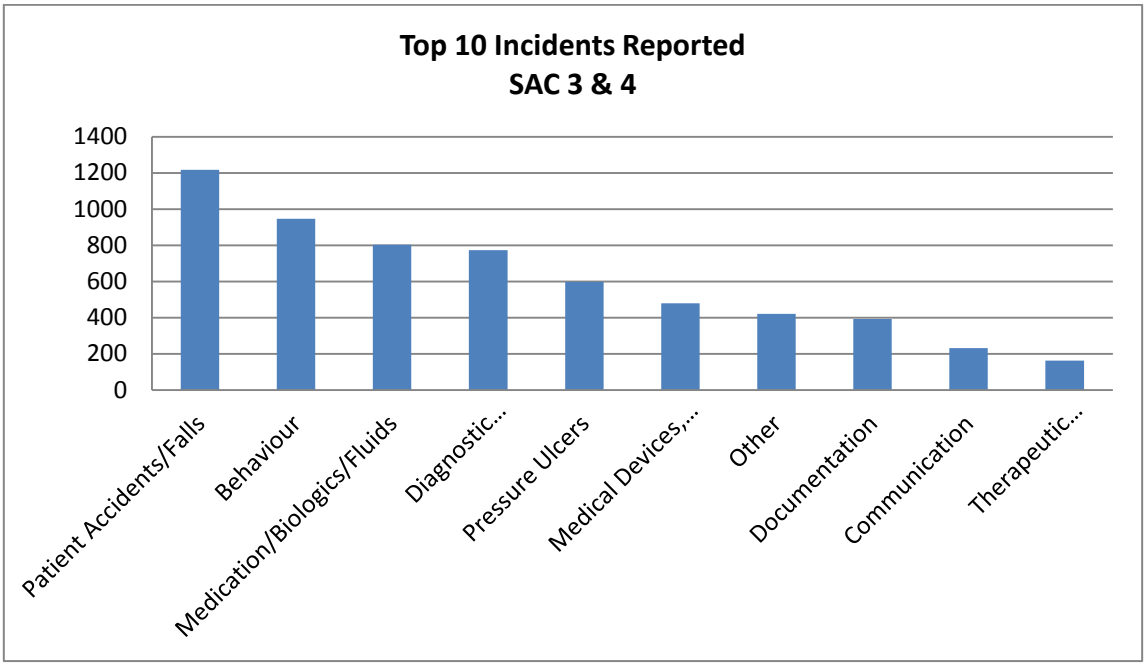
Commentary focuses on insights, lessons learned and emerging issues (rather than total numbers or year-on-year comparisons). This is consistent with the emphasis on learning, recommendations and actions taken that occur as a result of the reviews.

Table 1: Waikato DHB reported adverse events by World Health Organisation category, 2017-18

Adverse event category	Event code	Reported adverse events 2017-18
Clinical process/ procedure	02	17 (27%)
Healthcare associated infections	04	17 (27%)
Medication/IV fluids	05	3 (5%)
Behaviour	10	14 (22%)
Patient falls	12	10 (16%)
Patient accidents	11	1 (1.5%)
Medical device / equipment	09	1(1.5%)

Of note, over the same period a further 6788 incidents were reported and assessed as moderate (SAC 3 - 1570) or minor / minimal (SAC 4 - 5208). Refer Chart 1 below for the top ten classifications for these incidents.

Chart 1



The peak occurrence time for these incidents was between 10:00 - 12:00 hours i.e. immediately prior to and during the first hour of morning visiting hours.

N.B. Ongoing efforts are underway to reduce the number of incidents classified as 'other' and thus improve analysis of incident date. Over the last six months the use of 'other' as a classification has seen it move from the second highest category to the seventh.

Overview

This part of the report is designed to provide an anonymised overview of events reported in the last financial year, these include the findings from the review of events and the changes that have been made with the aim of preventing the event happening to another patient.

This section has been split into five sections,

- Clinical management (17)
- Healthcare associated infections (17)
- Patient falls resulting in harm (10)
- Other clinical events (5)
- Behaviour (Mental Health & Addiction Services) (14)

1. Clinical management events

Clinical management event	No. of events	Description
Retained item	2	Item left in wound beyond expected time A missing component of another instrument became dislodged and was left in wound.
Wrong side/site	2	Technically challenging procedure attempted but abandoned, then recognised it had been attempted on wrong side Referral not clear and site not obvious due to previous surgery
Pressure injury	1	Pressure injury from insufficient position change and delayed access to pressure relieving devices
Deterioration	3	Patient deterioration not recognised or managed in expected timeframe
Complication	1	Complication of treatment / procedure
Transfer	1	Harm related to transfer of care between providers
Assessment and diagnosis	2	Initial assessment did not find key issue
Delayed diagnosis or treatment	2	Delays in referral process
Resources/organisation/management	1	Insufficient staff/appointments to meet demand
Other	2	Reviews not completed at the time of this report

Reviews of clinical management events identified the following themes:

Patient factors:

- Patients also had other medical conditions
- Physiological factors typically indicating significant blood loss not present
- The baby's presentation meant the labour was less effective

Staff factors:

- Surgeon was reluctant to move the patient post procedure for an X-ray due to the very long surgery
- Process / procedure issues with replacement of missing items in theatre trays, communication of missing clamp, findings from X-rays not escalated due to assumptions that object seen was external to the chest.
- Anaesthetist working alone without usual support
- Inconsistent compliance with policy / procedure / skills deficit
- Confusion between staff regarding responsibilities

Communication factors:

- Documentation not clear e.g. clarity, comprehensiveness, rationale for decisions, treatment plans, responsibilities / handover of care
- Unable to contact service regarding results
- Escalation process not activated within expected timeframe
- Ineffective communication between departments / staff
- Inadequate communication with family

Work / environment factors:

- Resources: no assistant available so procedure started late, high acuity (number of nursing hours required to care for patients that shift) and workload, demand exceeded capacity / resources
- Equipment related: no magnifier stand to assist with site identification, delayed access to pressure relieving devices equipment as none on ward, clocks not aligned (different rooms, electronic monitoring equipment, etc) making accurate time keeping difficult, current equipment does not facilitate easy monitoring of maternal and fetal pulse simultaneously
- Inappropriate transfer of patient

What did we do?

- We informed patients / whānau of the outcome of the reviews.
- Event socialised at various forums, staff education given
- Policy / procedural: processes reviewed / updated, need for compliance with policy, national early warning signs chart implemented
- Equipment related: purchase of new equipment expedited, improved access to equipment in the ward, alignment of clocks investigated for greater clarity with time keeping
- Audit related: sepsis audit programme rolled out to other services, documentation audits
- Further review undertaken regarding theatre access
- Communication related: reviewing and standardising key clinical information to improve transfer of information and handover, review of communication system with other services,
- Reviewing scheduling

2. Healthcare associated infections

Healthcare acquired infections made up 27% of the total reportable adverse events this year (compared to 14% last year).

The initial focus of the HQSC Surgical Site Infection Improvement (SSI) Programme was on reporting infections in orthopaedic and cardiac procedures: Waikato DHB has extended this to include all serious infection such as HA *Staphylococcus aureus* bacteraemia.

Improvements have been focused on addressing / decreasing infection rates and achieving the Quality Safety Markers

Quality Safety Markers (QSM)

Quality Safety Marker	*Target*
QSM 1: Timing of antibiotic prophylaxis for primary procedures is 100% "on time" i.e. before knife to skin	*100%*
QSM 2: Choice of prophylaxis is 2g of Cefazolin in >95% of procedures	*95%*
QSM 3: Skin antisepsis is use of an alcohol based preparation for 100% of procedures	*100*

Refer to the following charts for the Orthopaedic & Cardiac Infection Rates and achievement against QSMs

Chart 2 Waikato DHB Orthopaedic Surgery Infection Rates by %

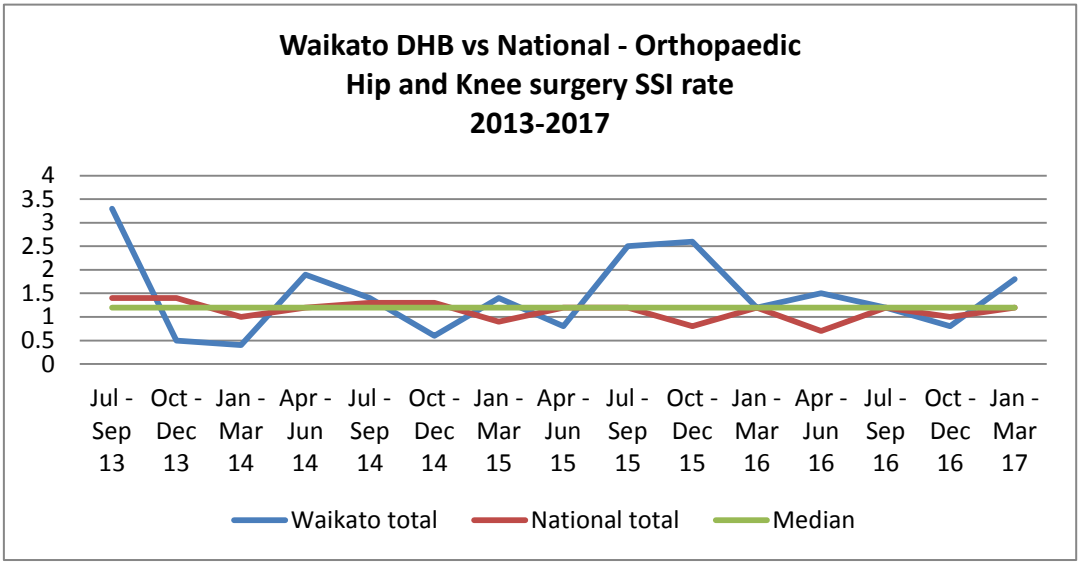


Chart 3 Orthopaedic Surgery Quality Safety Markers 2016 – 2017

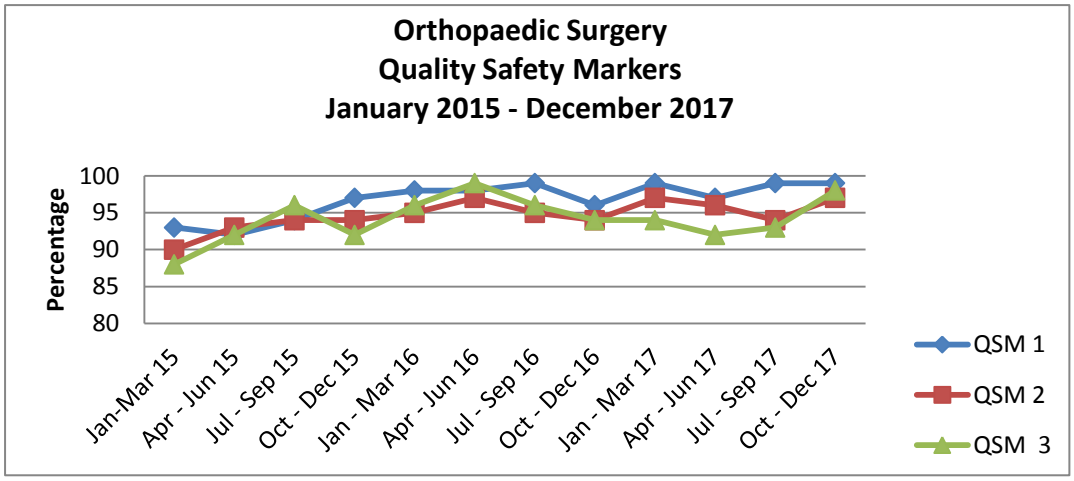


Chart 4 Cardiac Surgery Infection Rate comparison to National Infection Rates

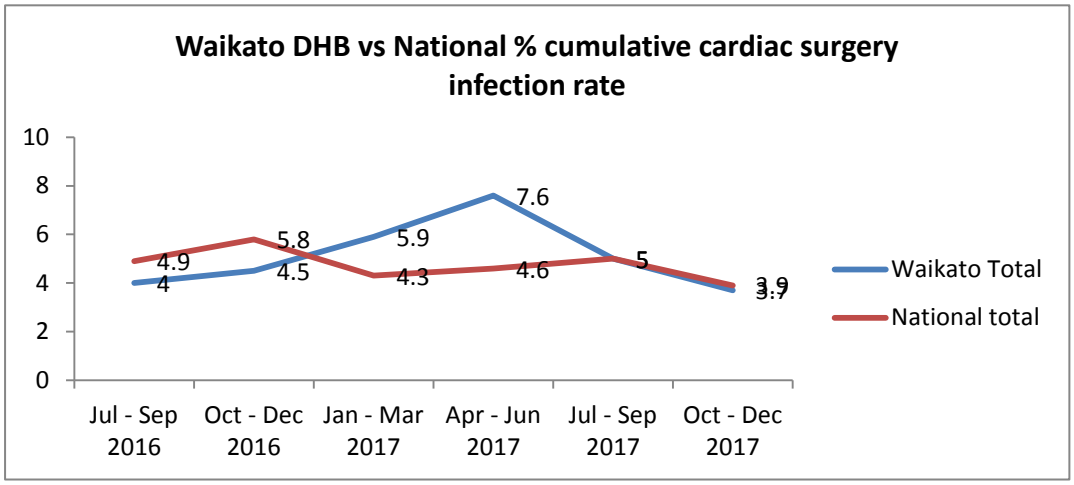
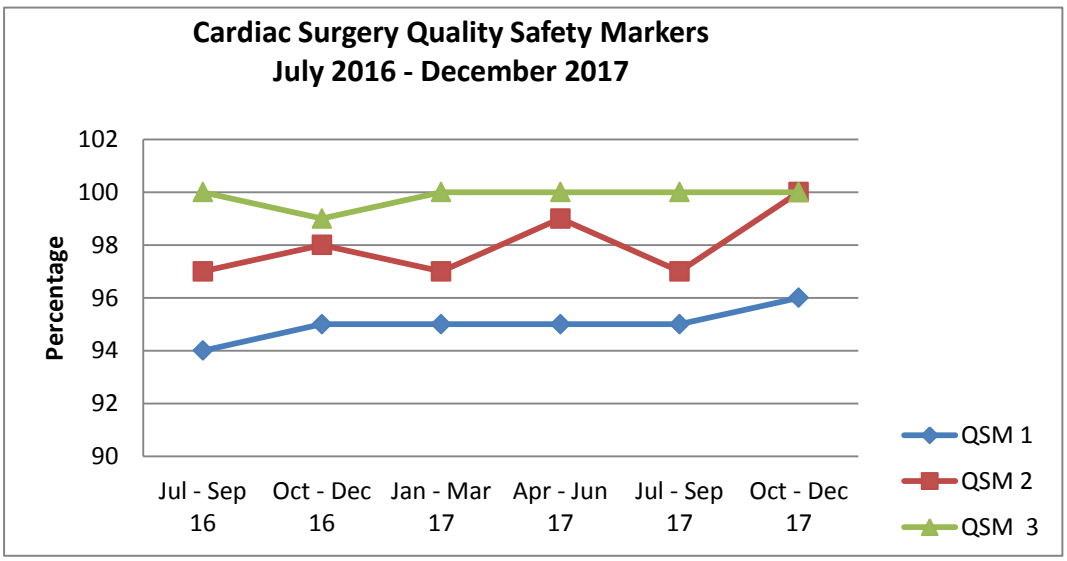


Chart 5 Cardiac Surgery Quality Safety Markers July 2016 – December 2017



Hospital Acquired *Staphylococcus aur*eus Bacteraemia (SAB)

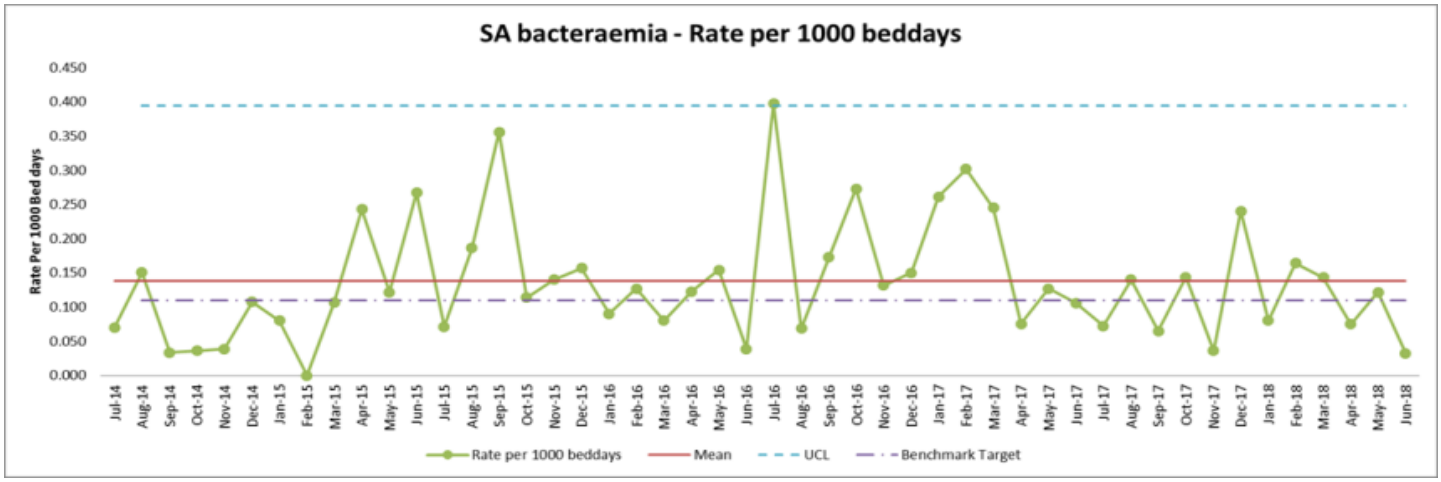
In 2015 Waikato DHB identified there was a 100% increase in rate of hospital acquired SAB and 50% of these were caused by infected peripheral intravenous lines.

A two pronged approach to address this issue was implemented;

1. Implementation of monthly intravenous (IV) peripheral line audits
2. Monthly reviews of hospital acquired SAB's at ward level to determine any breaches in practice, improvements and learnings.

Hospital acquired SAB is monitored monthly by the Infection Prevention and Control (IPC) team and is reported to the Infection Prevention and Control Committee. The Health Quality & Safety Commission and Hand Hygiene NZ also monitor SAB rates as a quality measure for the Hand Hygiene Programme.

Chart 6 Hospital Acquired *Staphylococcus aureus* Bacteraemia – Rate per 1000 bed days



Reviews of the healthcare associated infections identified the following themes:

Patient factors:

- Noted risk factors were:
  - Diabetes
  - High ASA score prior to surgery (anaesthetic risk assessment)
  - Increased Body Mass Index (obesity)
  - Other medical conditions

- Regular daily doses of a steroid (increases vulnerability to infection)

Staff factors:

- Inconsistent knowledge of and compliance with policy / procedure

Work / environment factors:

- One patient had only one pre-operative wash instead of two
- One patient received only one dose of cephazolin

What did we do?

- Continued monitoring of compliance with the anti-staphylococcal bundle for skin and nasal decolonisation.
- Anaesthetists reminded of the national SSII guideline and the requirement of an additional dose of vancomycin for patients with methicillin resistant staph aureus (MRSA)
- Ensure all patients undergoing knee and hip surgery receive two preoperative washes and use chlorhexidine wash cloths.
- Implementation of the anti-staphylococcal bundle for skin and nasal decolonisation for joint replacements by June 2018
- Monthly cleaning audits
- Ongoing discussion with theatre, ward personnel and SSI collaborative team related to identification of areas for improvement in practice and assistance with establishing practice changes
- Continued to monitor hand hygiene compliance rates against 80% national target – we achieved 85%

3. Other clinical events

Other clinical event	No. of events	Description
Patient accident	1	Patient drove wheelchair into solid object and suffered an injury
Medication event	3	Another patient's medication given Incorrect dose of medication given Inadvertent overdose of medication
Equipment-related	1	Surgery abandoned due to equipment failure following administration of anaesthetic

Reviews of the above events have identified the following themes:

Patient factors:

- Co-morbidities (other medical conditions present) and cognition led to reduced reaction time

Staff factors:

- Staff not familiar with the medication as not commonly used in this ward
- Prescribing different from what staff were accustomed to
- All patient folders had been collected and taken to the medication room
- Medication checking process not followed
- Staff not familiar with equipment or its error messages
- Patient had previously been safely mobilising in her electric wheelchair – this was a miscalculation

Communication factors:

- No instructions 'in use' instructions with equipment
- Description of equipment fault, connections and outlet were unclear / ambiguous

Work / environment factors:

- Workload pressures and fatigue
- No med-dispense machine on the ward
- Staff member distracted when preparing the medications
- Only one machine available on site i.e. no replacement handy
- Equipment delivery did not follow required process

What did we do?

- Patient and whānau advised of the outcome of the review
- Staff member has shared the experience with the team
- Staff reminded of medication room etiquette e.g. taking only one chart to the room at a time, not being disturbed when preparing medications,
- Staff attended medication safety workshop
- Medication administration audit undertaken
- Review Partnership nursing model
- Staff training for use of equipment, written instructions developed to guide staff
- Patient given manual wheelchair only rather than electric one following the accident

4. Patient falls resulting in harm

Background

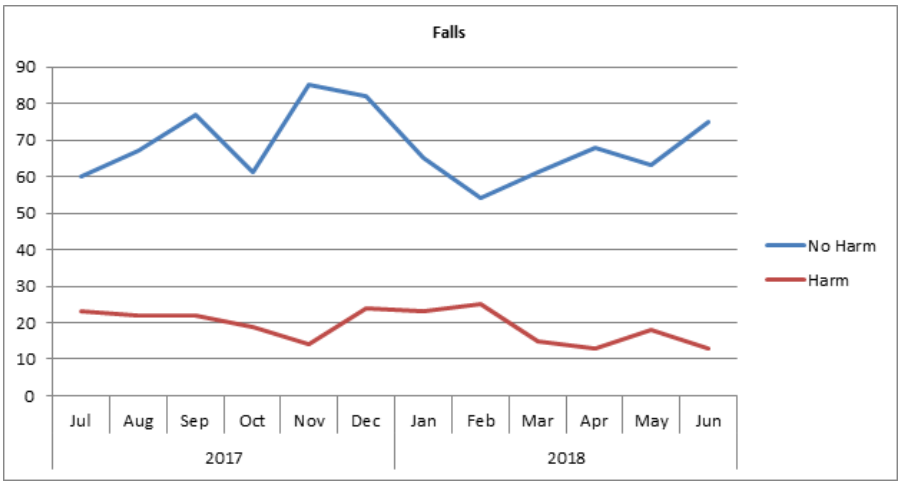
Falls can occur at any age but are more common, with more serious consequences, in our older patients. A fall after the age of 55 is more likely to cause injury and around 1 in 3 people aged 65 or over will fall in any one year. Patients admitted to hospital are particularly vulnerable due to their illness or the medications they are taking. The harm a patient may sustain following a fall whilst under the care of Waikato DHB may range from minor cuts or bruises through to falls with serious harm. Falls with serious harm such as a fracture result in additional treatment and longer inpatient stays.

Waikato DHB has an active Falls Committee which has representation from nursing, allied health, medical and pharmacy. Nursing staff attend and present their improvement work and progress to the committee on a regular basis. This provides an excellent avenue for supporting quality improvement work, sharing ideas and celebrating successes.

We have a wide range of equipment to use where patients are at risk of falling, as well as making sure care plans are personalised and appropriate to individual needs. One of the Quality & Safety markers for Waikato DHB is that "90% of older patients are given a falls risk assessment and an individualised care plan where indicated" – we have achieved 98% against this measure.

Over the past year there have been 231 patient falls with harm which is 22% of all our reported falls (the same percentage as last year). Chart 7 shows the number of falls with harm and without harm per month for the last financial year.

Chart 7



Patient falls made up 10 (16%) of the total reportable adverse events this year (compared to 30% 2016-17) and half of these patients suffered a fractured neck of femur.

The below two graphs show the number of falls and the number of falls with harm 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).

Chart 8

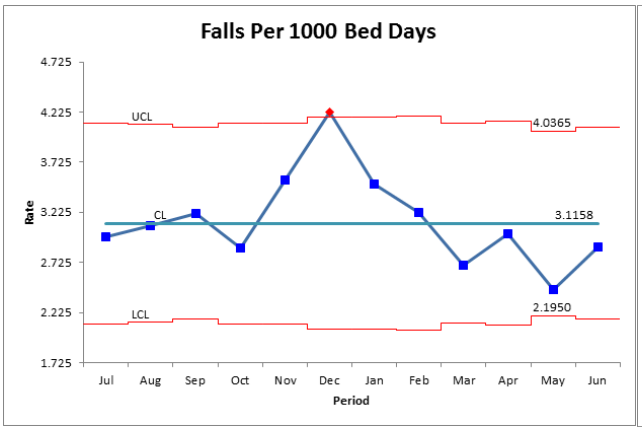
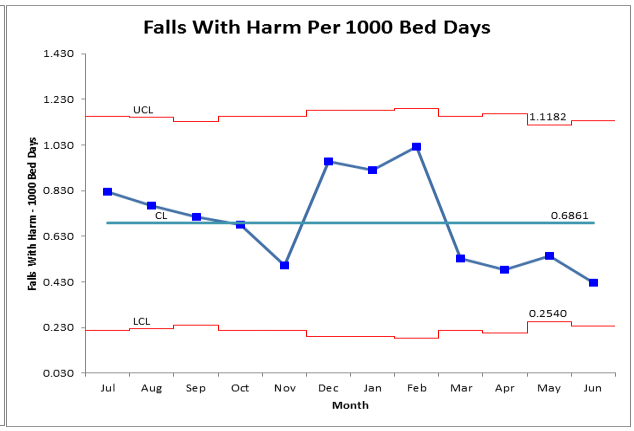


Chart 9



<u>Reviews of reportable falls with serious harm (usually fracture) have identified the following themes:</u>

Patient factors:

- Cognition e.g. dementia, delirium, confusion, impulsivity
- Previous falls
- On multiple medications
- Hearing and/or visual impairment
- Toileting issues e.g. urgency, incontinence
- Altered manner of walking
- Desire to be independent and be discharged
- Had several medical conditions

Staff factors:

- Staffing mix and workload
- High acuity (number of nursing hours per patient per shift)
- Poor compliance with policy

Communication factors:

- Delay in confirming fracture
- Lack of information on care plan about previous falls or prevention strategies
- Handover not completed at the bedside

Work / environment factors:

- Safety alarm not in use
- Inappropriate use of bedrails
- Bed location

<u>What did we do?</u>

- We informed all patients / whānau of the outcome of the reviews.
- Policy / procedural: releasing time to care handover, fall prevention modules, handover sheets to include falls assessment and strategies, teamwork at night, handover done at the bedside, intentional rounding, ward meetings that focus on falls risks.
- Education: the Stand up to Falls How to use bedrails safely poster displayed and discussed to improve staff knowledge of appropriate use of bedrails, involve patient / family with

education around falls risk status, prevention strategies and rationale, completion of module focussing on falls and vulnerable patients, focus board in place on the ward,

- Organisational: assisting family to stay with patients in a single room, rooms closer to staff to increase visibility / monitoring.
- Each fall which results in serious harm is reviewed with the Charge Nurse Manager from the ward presenting the findings from the review to the Falls Committee and reports of progress with actions to reduce the likelihood of recurrence. This practice has provided a forum for raising awareness, education and sharing of learnings and strategies amongst the Charge Nurse Managers and other nursing staff.

Patient story

Harry (not his real name), aged in his nineties, was admitted with a history of falls, impaired balance and dementia; he had been managing at home with assistance from family.

When assessed Harry was alert and pleasantly confused - a presumptive diagnosis of urinary tract infection was made and an indwelling urinary catheter was inserted. Following admission he was orientated to the ward and placed in a room that facilitated close monitoring. Overnight it was noted that Harry was confused; he was regularly re orientated and reassured. The next day Harry's catheter was removed and an extra staff member was allocated to provide increased supervision and keep Harry safe.

The increased supervision remained in place for the next 3 days – during this period Harry's behaviour went from being very agitated and verbally aggressive, to settled but confused. It was unclear at this stage whether Harry's cognitive decline was secondary to his urinary tract infection or a progression of his dementia. The plan was for Harry to be transferred to a rest home once a bed became available.

That night the ward had high acuity with high needs patients; additional staff were rostered for the shift. Harry slept intermittently, was restless, engaging in conversation and wandering at times but easily redirected. At 06:00 Harry was assisted to the toilet. At 07:15 (time of handover from one shift to the next) a loud bang was heard and Harry was found on the floor; he was able to stand up with the assistance of two staff members. Harry told staff he was going to the toilet.

An x-ray indicated a fractured neck of femur (hip): Harry underwent surgery and was later discharged to a rest home.

Since this fall, the ward has completed a module on focussing on falls and vulnerable patients, they have a focus board in place on the ward, their focusses have been on family staying with patients in a single room if they are able to, high vigilance rooms, intentional rounding and handover is now done at the bedside. There are also ward meetings that focus on falls risks.

5. Behaviour

This is the first year mental health adverse events (other than falls with fracture) have been included in the Waikato DHB Learning from adverse events report.

Reviews of mental health adverse events (excluding falls with fracture) have identified the following themes:

Patient factors:

- Polysubstance dependence e.g. alcohol, illicit drug use, etc.
- Recurrent depression / anxiety disorders
- Other concurrent mental health conditions
- Previous behaviour e.g. risk to self (suicidal thoughts, self-harm) and to others (threatening e.g. physical / verbal), poor coping strategies, addiction (gambling / alcoholism)
- Past abuse (physical and /or sexual)
- Non-compliance e.g. medications, did not keep appointments

Staff factors:

- Inadequate engagement with family / inclusion of family in rehabilitation
- Use of GP rather than DHB staff to monitor and prescribe, despite significant risk issues
- Focus on addictions rather than mental health issues
- Inadequate integration of care e.g. different services / multidisciplinary team members
- Staff resource issues / large, complex caseloads

Communication factors:

- Family support / education / involvement

Environment factors:

- Social stressors e.g. accommodation / relationship / financial issues, family bereavement
- Changing location of residence e.g. different geographical areas
- Level of family support
- Legislative e.g. prescribing requirements, Mental Health Act,
- Unemployed – long-term / recent
- No regular GP

Recommendations:

1. Clear co-existing disorders pathway to facilitate shared care between teams
2. Improve family focused care to be included in current review of acute care pathways
3. Whānau support, engagement, education
4. Support, clinical supervision and oversight of community mental health staff
5. Education and support for primary care and community care partners on medication management and risks

What are we doing?

- Waikato DHB Mental Health and Addictions Services has embarked on a significant programme of change – Creating our Futures. The programme of change focuses not just on the building of a new inpatient facility, but on a future proofed model of care that informs the way services are delivered across the full continuum of mental health care services. Engagement and consultation to inform the development of the model has occurred across the Waikato region and communities with over 700 individuals and groups participating. The model of care development includes communities, other social sector agencies, primary and secondary health care services and is following a co-design methodology with service users and whanau at the heart of its formation.
- Waikato DHB Mental Health and Addictions services has identified the need for specific focus and improvement in the area of family/whanau engagement and support in service delivery. We are currently working to develop a dedicated Family/Whanau advisor role that will support this focus on a permanent basis.
- The Mental Health and Addictions Service has worked with the two largest providers of primary health care services in the Waikato region to support the appointment of dedicated psychiatrist roles within these organisations. This will provide access to dedicated support and education for local GPs and improve the interface between primary and secondary services involved in the provision of mental health care and treatment.
- A dedicated workforce development role has been developed and appointed to, to support and enhance learning and development opportunities for mental health and addictions staff across the service, including areas of supervision, risk management, whanau engagement and person centric care.
- A one-year trial of a smartphone app to support people recovering from alcohol or drug addictions at Waikato DHB is proving successful and is likely to be extended. The Recovery in Hand app connects service users to their clinical team, recovery community, peers and other resources 24/7. There is a good evidence base for digital and e-support for people with addictions; for people going through alcohol and drug recovery, one of the significant issues is not feeling connected and part of wider support.

  The programme has gone well and the DHB is looking to extend it beyond the initial year-long pilot. Feedback indicates Recovery in Hand is improving patient care and outcomes and the service is looking to build its outcome measurement tool into the app as well as integrating it with the clinical records system.

- The Waikato DHB has recently completed the Waikato Suicide Prevention and Postvention (SPP) Plan 2018-21 which covers the next three financial years' major actions. The plan's actions and initiatives have been developed following consultation with range of stakeholders through focus groups, individual discussions, information provided by key informants, written submissions and an online survey.

  The major premise of the plan is that suicide prevention is much wider than health. The plan's actions have been developed to address some of the psychosocial factors which have been shown to be contributors to extreme emotional distress associated with suicides in our region. A number of activities are already underway and more planned.