Auckland District Health Board Summary

1 July 2016 to 30 June 2017

Serious Adverse Events

In the year 1 July 2016 to 30 June 2017, a total of 79 adverse events occurred at Auckland DHB and were reported to HQSC. An additional 16 adverse events that had occurred prior to 1 July 2016 were also reported during this period.

These 95 reported adverse events included 34 falls with serious harm and 15 serious pressure injuries. 13 cases have been withdrawn as detailed below:

- Three cases have been withdrawn as a review of the events demonstrated that the care was appropriate and there were no healthcare processes that caused harm to the patients; and
- Ten out of 15 reported events relating to the loss of vision due to delays in appointments were withdrawn as on further review it was established that in these 10 cases the patients affected either experienced minimal vision loss or temporary deterioration in their sight.

Adverse events identified as serious receive an in-depth investigation by a team of clinicians and quality department staff who are independent from the event. The reports are reviewed by a committee of senior management and senior clinical staff for robustness and for issues which may need to be addressed at an organisational level. The recommendations from the reports are tracked to ensure that follow-up and implementation occurs.

The table and report below outlines a summary of events, findings and recommendations of the events which have occurred. The events have been classified into eight specific themes:

- Delay in escalation of treatment
- Wrong or unnecessary procedure
- Procedural injury
- Medication error
- Delay to/failure in follow up or treatment
- Other clinical events
- Falls
- Pressure injuries

Delay in escalation or treatment

Description of Event	Review Findings	Recommendations/Actions
Delay in recognition of deteriorating patient following surgery	Review underway	Review underway
Delay in recognition of respiratory deterioration	Review underway	Review underway
Delayed diagnosis and escalation of care	Review underway	Review underway
Delay in escalation of deteriorating patient	Review underway	Review underway
Spontaneous vaginal delivery with unexpected early neonatal death	Review underway	Review underway

Wrong or unnecessary procedure

Description of Event	Review Findings	Recommendations/Actions
Incorrect patient anaesthetised for a procedure. Diagnostic procedure performed but no intervention performed.	Event occurred as a result of incorrect patient label being put on from booking list. Sequential NHI numbering on clinic patient labels Language barrier. Lack of process for confirmation of patient in the patient's homeland	Revision of outreach clinic processes, equipment and list of patients. Random number generation for NHIs Review process for identifying need for interpreters and sourcing and use of qualified interpreters and disseminate to all staff
Patient underwent avoidable procedure	Review underway	Review underway
Cardiac arrest due to inappropriate sensing settings on temporary pacemaker. Patient recovered.	Under appreciation of risk involved when pacing sensitivity is low Lack of guidelines to address what to do when the sensitivity threshold is very low	Develop documented procedure for temporary epicardial pacing for post-surgery patients. Revise pacemaker policy and staff education to include advice about what to do when the sensing of heart rhythm is poor.

Procedural injury

Description of Event	Review Findings	Recommendations/Actions
Patient deteriorated and died following procedure.	Review underway	Review underway
Incorrect placement of nasogastric tube resulting in emergency re-admission.	Signs of possible incorrect placement of nasogastric not recognised by staff	Provide additional education sessions to staff regarding tube placement. Improve documentation of discharge process in particular around carer education and resources provided. Development of process for ongoing competence assessment for carers who are administering fluids via nasogastric tube
Delay in procurement of updated intravenous product and use of existing product led to avoidable harm.	Delay in product evaluation Supply chain lead time delays	Develop framework and mechanism for evaluation of IV products using existing product review structures. Develop a risk matrix to guide decision making when allocating priority to new clinical products requests. Share risk matrix across the region.
Retained swab found post-surgery.	A lost small swab was found incidentally. There has been a previous report of a missing surgical swab in this patient which was investigated but not found on further exploration or x-ray.	Adjustment of post-operative x-ray request to include information on retained items and education for staff on same. Radiology protocols revision to include area being x-rayed includes full operated area when looking for retained items. Implementation of flag system when items intentionally left in
Retained item identified following patient discharge after surgery. Patient recalled.	Review underway	Review underway
Vaginal pack not removed after gynaecological surgery.	Handover and communication issues within team. Tail of pack not visible to staff discharging patient.	Practice surrounding packing to be reviewed to ensure that where possible packing is avoided, where possible single pack is used and if two or more packs are used, these are tied together.
Retained product found in skin graft wound.	Review underway	Review underway

Medication incident

Description of Event	Review Findings	Recommendations/Actions
Adverse medication reaction not recognised	Review underway	Review underway
Patient took drug overdose while in hospital	Review underway	Review underway
Over-anticoagulation in a post-surgical patient	Review underway	Review underway

Delay/failure in follow up or treatment

Description of Event	Review Findings	Recommendations/Actions
Five patients experienced loss of vision as a result of delay to follow up.	Issues leading to delayed follow up are multifactorial including limited capacity for high volume of patients; scheduling and prioritisation processes. There has been a nationwide issue of overdue follow up appointments in Ophthalmology due to a continual increase in demand over time. This has caused capacity issues.	Auckland DHB has recognised that the capacity of the Ophthalmology service has not kept up with demand and has put measures in place to address the increased volume of patients. This has included increasing staffing and facility resources, and conducting continuing quality improvement initiatives.
Suboptimal care coordination after discharge and deterioration and readmission to hospital	Review underway	Review underway
Delayed diagnosis of cancer after diagnostic test not performed	Review underway	Review in progress
Early diagnostic features and symptoms of cancer not detected	Review underway	Review underway
Endometrial carcinoma after failed polypectomy	No documentation available regarding discussion with patient about treatment options. Multidisciplinary team not involved in discharge decision	Develop and implement a formal process to document shared decision making within the patient clinical record. Develop and implement criteria for cases needing multidisciplinary discussion and develop pathway of care.

Advanced cervical cancer diagnosed in a patient on follow-up post stem cell transplant (SCT)	Status of cervical screening not checked and predisposition to secondary cancers not recognised prior to SCT.	Pre-stem cell transplant work-up protocols updated to include full gynaecological assessment. Develop and implement post-stem cell transplant programme that enables follow-up based on recipients' predisposition to secondary cancers and other long-term effects of SCT.

Other clinical events

Description of Event	Review Findings	Recommendations/Actions
Potential harm to bladder during trial removal of catheter	Review underway	Review underway
Two patients suffered allergic reaction after eating meals containing known allergen.	Review underway	Review underway
Death of two patients after falls in hospital	Reviews underway	Reviews underway
Immunocompromised patient developed Vancomycin Resistant Enterococcus (VRE) infection.	Patient had high risk of infection due to immunocompromised status. Opportunities identified to improve outbreak management and isolation policies, and escalation of concern processes.	Outbreak management policy reviewed to formalise the roles and responsibilities Develop and implement education regarding infection risks to patients and escalation of concerns. Service involved to participate in trial of new early warning score form.
Unexpected death after diagnostic procedure	Review underway	Review underway

Patient falls

Any patient who dies, or sustains a serious head injury, fracture, or laceration requiring suturing from a fall while in hospital or attending a clinic is considered to have had a serious harm fall at Auckland District Health Board.

In 2016-2017 thirty-four patients had SAC2 falls with serious harm compared with 42 in 2015-2016. Two patients died following falls (SAC1) and are included in the table above. The following summary describes the SAC2 falls. 27 patients suffered other fractures, three patients suffered serious head injuries, and three patients suffered lacerations that required suturing. The 27 patients with fractures suffered a wide variety of fractures (4 facial and skull, 1 clavicle, 5 arm including fingers, and 17 lower limb including toes). Thirteen patients had a neck of femur fractures (an increase from nine in 2015-2016). Almost all falls occurred with inpatients in a hospital (32 compared with 35 in 2016-2017), however, two falls occurred with outpatients within Auckland DHB facilities.

The total number of patients with serious harm after a fall in Auckland DHB facilities continues downwards (34 in 2016-2017, 42 in 2015-2016, 57 in 2014-2015). Auckland DHB has a reporting system for patient injuries, but does not rely solely on clinical areas self-reporting serious harm falls. We triangulate these reports with a coding query and we identify serious harm falls that would otherwise have been missed. We believe that such accuracy and transparency is necessary if Auckland DHB is to learn from adverse events.

For each serious harm fall, a multidisciplinary team investigates and reports on their findings to a sub-committee of the Adverse Events Review Committee. A draft new approach to these investigations was adopted last year. This approach uses a large set of questions to highlight contributing factors for the investigating team when they write their report. As we accumulate these new reports, the answers to the large number of questions for each event will become the data for a network analysis to identify future targets for improvement work at Auckland DHB.

In response to the number of falls that happened in outpatient clinics at the Greenlane Clinical Centre in 2015-2016, Auckland DHB facilities management made a number of changes to the environment around a café. We are pleased to report that there have been no serious harm falls at the Greenlane Clinical Centre this year.

In previous years reports we outlined the work of the CONCEPT Ward, an initiative to test-bed improvements in a ward that had a number serious harm falls. The initiatives developed in the CONCEPT Ward have since been integrated into Auckland DHB's Accelerated Releasing Time to Care programme. This adaptation has been rolled out to 20 out of 44 adult areas.

We have also been working to revise the way in which we assess and plan care for patients regarding falls. We are developing a tool use the Health Quality & Safety Commission's Ask, Assess, Act strategy. This approach will mean a move to assessing patients' needs, rather than risk, and planning to address their individual needs. The initial tool has been piloted on three wards, but requires further development before roll out for the adult hospital.

Pressure injuries

Auckland District Health Board has had a sustained focus on reducing hospital-acquired pressure injuries since 2011. Pressure injuries result from unrelieved pressure or shearing forces, often over bony prominences. They are also called pressure sores, bed sores, and pressure ulcers. A pressure injury can range from Stage 1 (reddened skin) to Stage 2 (blistered skin or partial thickness skin loss) to more serious pressure injuries are those that are complete breaks in the skin that expose underlying tissues (Stage 3) or deeper structures such as tendons or bone (Stage 4).

Auckland District Health Board has run a monthly random audit to identify how many patients develop a pressure injury (Stages 1-4) in our hospitals since March 2012. We started with a baseline prevalence of hospital-acquired pressure injuries in 8.4% of our patients. In the last year, we audited 2886 patients with skin checks during the

monthly audit. We have continued the downward drive on pressure injuries with the rate falling again in FY 2016 to 2.9% from 4.0% in FY 2015. Most (99%) of the pressure injuries were the least serious types of injury (87% reddened or 12% blistered skin or partial thickness pressure injury).

Serious harm pressure injuries are undesirable events that increase patient discomfort, length of stay, and treatment. Mostly, pressure injuries are avoidable, although sometimes patients can be so unwell that pressure injuries occur despite preventive efforts.

We identify patients with such harms through our patient injury reporting system and a coding query we run each month. Fifteen patients developed serious harm pressure injuries in 2016-2017 while in an Auckland DHB facility compared to 8 the previous year. Two events occurred in older people's health, two in medical services, two in surgical services, four in child health, and five in cardiovascular services. Most pressure injuries happened in our hospitals, but two patients suffered pressure injuries in the community, one as a consequence of a tight plaster cast applied in hospital. We are undertaking an in-depth analysis of all these cases to identify improvements we need to act upon in the future.

Critically ill cardiac patients are especially vulnerable to pressure injuries. Three patients in the cardiovascular services developed serious pressure injuries despite staff efforts. In response, the intensive care unit has developed a bundle of care specific to their patients to be used in conjunction with the current organisation–wide care plan. The unit bundle has adaptations for equipment–related injuries and those patients unable to be moved due to severe instability and low blood flow. Since these changes, there have been no new serious pressure injuries reported.

There have been similar problems in critically unwell children and we have implemented a range of initiatives in Starship Hospital over the last year to further mitigate risks for children. All cot mattresses have been upgraded to high specification foam mattresses and we are in the process of purchasing a low airflow mattress to use with high risk children who weigh less than 25 kg (alternating pressure mattresses are contraindicated in this group). We are continuing to work on embedding the pressure injury bundles of care into practice, using a standardised care plan for children, ensured that each ward has a pressure injury champion to support coaching, and developed a complex wound care guideline to support nursing staff in best practice when if a child does develop a pressure injury.

We are still working with a CONCEPT Ward in the adult services to test pressure injury prevention initiatives but have identified a suitable heel offloading device that allows the patients to walk without having to remove the device. We have also developed a pressure injury alert to better identify when patients have a problem. We are still working to better develop our assessment and care planning processes to incorporate into an accelerated releasing time to care module. This approach will incorporate a similar approach to the Falls work by using the Health Quality & Safety Commission's acronym Ask, Assess, Act, to assess patient need and plan their care.