Auckland District Health Board Summary

1 July 2015 to 30 June 2016

Serious Adverse Events

There were 80 serious adverse events (including 42 falls with serious harm and 8 serious pressure injuries) reported by ADHB in the July 2015 to June 2016 year.

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
- Patient misidentification
- Procedural injury
- Medication error
- Delay/failure in follow up or treatment
- Pressure injuries
- Falls
- Other

Delay in escalation of treatment

Description of Event	Review Findings	Recommendations/Actions
Delay in escalation of treatment of deteriorating patient resulting in delay in admission to ICU	Review in progress	Review in progress
Delay in caesarean section (CS) delivery contributing to baby's death.	The single after-hours obstetric operating room (OR) was occupied Availability of a general operating room was not considered Deterioration in condition did not modify plan Baby had some congenital abnormalities which contributed to death	Improve orientation and education of staff regarding CS priority categories and the options for escalation Revise booking forms and data systems Consider increasing staffed OR capacity between obstetric and general ORs
Delay of transfer of patient with septic shock to higher level of care.	Review in progress	Review in progress

Wrong or unnecessary procedure

Description of Event	Review Findings	Recommendations/Actions
Vaginal pack not removed after gynaecological surgery	Language and cultural barriers to communication Pack was not externally visible Ward staff were unfamiliar with post-operative care requirements Poor handover processes	Vaginal packing to always have a "tail" remain externally visible Additional training for ward staff who are infrequently involved in gynaecological post-operative care Develop structured handover processes for ward
Removal of incorrect tooth	Appropriate X-rays were used Clinical records were adequate	Staff education reinforcing the steps that minimize the risk of incorrect tooth extraction
Retained swab during operative procedure requiring re-operation on day of index procedure	Review in progress	Review in progress
Ureteric stent placed on wrong side requiring re-operation	Review in progress	Review in progress

Patient misidentification

Description of Event	Review Findings	Recommendations/Actions
Incorrect patient underwent unnecessary MRI scan	Electronic order intended for one patient was made for another Review in progress	Review in progress

Procedural injury

Description of Event	Review Findings	Recommendations/Actions
Failed surgical termination of pregnancy probably causing major fetal abnormality due to medication used during procedure	Rare complication (~1:10,000) Possible "less than expected tissue" did not lead to further assessments Misoprostol use is associated with the abnormality	Update patient information sheet regarding teratogenic risk of Misoprostol Review policy on less than expected tissue in pregnancies >7 weeks gestation
Cardiac arrest during change-out of extra-corporeal membrane oxygenation (ECMO) circuit which may have been contributed to by significant loss of patient blood volume during change-out process.	Critically ill, unstable patient Complex ECMO circuit was required Priming bag tap was left open allowing blood volume loss when pump restarted Distracting alarms delayed recognition of issue	Recommendations under review
Accidental oesophageal rupture during gastric bypass surgery	Review in progress	Review in progress
Delayed wound healing associated with retained dressing component	Retained part of dressing found 5 weeks after initial query; not detected at earlier examination Delayed escalation of slow healing wound for further investigation	Recommendations under review
Air entrainment into IV line leading to cardiac arrest probably due to air embolism	Review in progress	Review in progress

Medication error

Description of Event	Review Findings	Recommendations/Actions
Anti-microbial prophylaxis not administered after transplant procedure resulting in toxoplasma myocarditis	Review in progress	Review in progress
Failure to administer penicillin prophylaxis to patients at high risk of rheumatic fever	Review in progress	Review in progress

Delay/failure in follow up or treatment

Description of Event	Review Findings	Recommendations/Actions
Delayed diagnosis of ovarian cancer	Ultrasound test requested by inpatient team was done as an outpatient Abnormal results were reported and signed off by the inpatient team but no further action was taken as it was assumed this had already been arranged Results were not communicated to GP or patient	Copies of radiology test results to be sent to GP and patients Consider adding an "urgent report" flag and/or "summary of significant findings" to radiology reports Inform patients to follow-up with referring team or GP if they have not received test results within 2 weeks
Delayed diagnosis of thyroid cancer	Failure to implement planned follow-up after initial assessment Review in progress	Review in progress
Delayed treatment for spinal cord compression causing paraplegia	Review in progress	Review in progress
Delay to surgery contributing to postoperative death	Review in progress	Review in progress

Delay in diagnosis of oral cancer due to lost referral	Referral sent to incorrect email address Dentist not aware of correct referral process	Establish "e-referrals" as the sole pathway Communication with all potential referrers Automatic replies from generic email accounts with instructions on correct pathway New staff orientation on dealing with patient-related emails received in error
Delay in treatment for diabetic eye disease leading to loss of vision in affected eye	Initial assessment of sight-threatening disease and need for urgent follow-up visit The clinical urgency was not appreciated by clerical staff, and applied routine follow-up priority	Recommendations under review
Delay in diagnosis of endometrial cancer	Initial prioritisation score did not reflect clinical urgency; over-ride process unclear Second referral from GP did not alter prioritisation Delays added to by Christmas/New Year and patient availability for procedure	Recommend review of CPAC scoring system. Improve ability to add "special circumstances" Audit "High Suspicion of Cancer" pathway
Delayed diagnosis of incidental X-Ray finding of lung cancer	Review in progress	Review in progress
Delayed diagnosis of cancer due to lost referral letter to another DHB	Incorrect letter template used Incorrect recipient address	Recommendations under review
Stillbirth due to congenital heart disease and unrecognised reduced fetal growth	Delayed transfer due to lack of clinic availability Recent ultrasound scans performed at the referring centre outside Auckland were not available for comparison	Recommendations under review

Other

Description of Event	Review Findings	Recommendations/Actions
Suicide attempt after leaving hospital against medical advice	Competent patient left hospital against medical advice. No evidence of suicidal ideation.	Recommendations under review

Dislodgement of central venous line providing blood pressure support medication causing severe hypotension requiring emergency treatment	Review in progress	Review in progress
Fatal bleeding at home from an arterio-venous fistula used for haemodialysis access	Patient was receiving anticoagulants for previous stroke Recent infection; scab noted on wound was awaiting surgical review Recent prolonged bleeding after dialysis	Recommendations under review
Post-operative pulmonary aspiration complicating severe underlying disease	Review in progress	Review in progress
Lack of appropriate lens implant at time of emergency eye surgery l requiring a second surgery to the affected eye.	Low stock levels Re-stocking system inconsistent and not well understood by staff	Recommendations under review

Inpatient 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.

Forty-two patients had falls with serious harm in 2015-2016. One patient died as a consequence of the fall, 32 patients suffered fractures, two patients suffered serious head injuries, six patients suffered lacerations that required suturing, and one patient suffered a joint dislocation. The 32 patients with fractures suffered a wide variety of fractures (nose, rib, wrist, upper arm, pubic rami and lower limb). Nine patients had a neck of femur fractures (same as in 2014-2015).
Most falls occurred within the hospital (35 compared with 50 in 2014-2015), but seven falls occurred with outpatients within ADHB facilities. The total number of patients with serious harm after a fall in ADHB facilities was lower in the 2015-2016 year than that reported in 2014-2015 (42 versus 57).
ADHB 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 discharge coding query and we identify serious harm falls that would otherwise have been missed. We believe that such accuracy and transparency is necessary if ADHB is to learn from these adverse events.
For each serious harm fall, a multidisciplinary investigates and reports on their findings to a sub-committee of the Adverse Events Review Committee. While findings from each of these events is useful for the area involved, ADHB has had limited ability to extract value from each of the reports to sum what should be organizational priorities. Consequently we have tested a new approach to these investigations that uses a large set of questions to highlight contributing factors for the investigating team when they write their report. Initial testing has shown the investigating team values the new approach. 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 ADHB.

In the 2013-14 Quality Account, we outlined 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 ADHB's Accelerated Releasing Time to Care programme. The Falls Tool Shed has been rolled out into Older People's Health, general medical wards, and now surgical wards.

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. Serious harm 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).

We have run a monthly random audit to identify how many patients develop a pressure injury in one of our hospitals since March 2012. In that time the number of patients that have pressure injuries have more than halved, from 8.4% to 4.0% in the 2015 financial year. Most of the pressure injuries were the least serious types of injury (reddened or blistered skin).

Serious harm pressure injuries are uncommon events. We identify patients with such harms through our patient injury reporting system and a discharge coding query we

run each month. Eight patients developed serious harm pressure injuries in 2015-2016 while in an Auckland DHB facility compared to 12 the previous year. Two events occurred in older people's health, two in medical services, and one in each of children's, orthopaedic outpatients, cardiovascular, and surgical services.

We are undertaking an in-depth analysis of all these cases to identify improvements we need to act upon in the future. Previous analyses have identified the need for high specification foam mattresses for cots, low air loss mattresses for extremely unwell children, a standardised care plan incorporating a bundle of care for children, revision of the assessment and care planning forms in adult services, and development of a care bundle specific to adults on Extracorporeal Membrane Oxygenation.

We are currently working with a Concept Ward to test other pressure injury prevention initiatives in including improved heel lifts, turning schedules, seating solutions, and pressure injury alerts.