



Counties Manukau Health Serious Adverse Events Report 2014-2015

Summary

This report is released in conjunction with the Health Quality & Safety Commission (HQSC) National Report on Serious and Sentinel Events. Health Quality & Safety Commission | Serious Adverse Events Reports

In the 2014-2015 year, Counties Manukau Health (CM Health) reported 66* events that caused or had the potential to cause serious harm or death. Of these 66 events, 48 events related to falls.

Because of the complex nature of health care, adverse events causing serious unintended harm to patients do occur and are truly regrettable. In reviewing each of these events, the focus is always on what we can learn and how we can improve care to prevent similar events recurring.

Injuries suffered by patients when they fall are the commonest ones in the hospital. Falls cause more minor, moderate and severe injuries than any other type of reported incident. In this year's report, 48 patients were injured after a fall. These injuries included significant head injuries, broken bones, and skin lacerations that required stitches. Each of the 48 incidents was reviewed to ensure that the comprehensive programme of falls prevention in place at CM Health had been followed. Understanding where improvements to the programme need to be made and how to better help staff keep patients safe are the main drivers for the review. Over the last year, there has been a focus on the early detection and treatment of delirium (confusion) and developing a consistent approach to providing supervision for patients with delirium.

There were 18 other incidents leading to actual or potential serious patient injury. A patient receiving treatment for cancer died of liver failure brought on by anti-cancer medication. Earlier detection of the liver problems may have prevented this deterioration. Steps have been taken in the clinic to ensure at risk patients are flagged early. Three incidents relate to delays in escalating the care for critically unwell patients and lost opportunities to intervene. The hospital is redoubling its efforts to consistently identify and respond to the early signs of deterioration. In four incidents, referrals and assessments did not happen in the expected manner. Because of these cases, processes have been reviewed with the aim to simplify and standardise. Equipment issues were implicated in three reports. Two cases involved medication prescribing, administration and review of side effects. In one incident a baby was abducted from the maternity ward; extensive changes to security were made subsequently.

^{*} The HQSC has reported that CM Health had 69 events in 2014/2015. Following investigation, three reports were recalled as they did not meet criteria for SAC 1 or 2.

What is a serious adverse event?

A serious adverse event is an incident where a patient is seriously harmed during medical treatment. CM Health has worked hard to develop a culture in which staff feel safe to report adverse events. What we report and investigate has changed over time and CM Health is now also reporting events that have caused no long-lasting harm and events that are significant near misses, that is, where no actual patient harm was identified but the potential for future harm from recurrences was apparent.

As part of CM Health's commitment to providing safer care for patients, we have a process in place for reviewing serious adverse events that occur in our organisation. The purpose of reviewing these is to determine the underlying causes of the event so that improvements can be made to the systems of care to reduce the likelihood of such events occurring again.

Serious adverse event reviews at CM Health are undertaken according to the following principles:

- To establish the facts: what happened, to whom, when, where, how and why
- To look for improvements in the system of care rather than apportion blame to individuals
- To establish how recurrence may be reduced or eliminated
- To formulate recommendations and an action plan
- To provide a report as a record of the review process
- To provide a means of sharing lessons from the incident

Description	Findings	Recommendations	Follow up
Obstructed airway due to retained bite block	 During surgery, a patient's soft bite block was not attached to the endotracheal (breathing) tube and was placed on the opposite side of mouth due to a number of missing teeth. The breathing tube was removed at end of the operation. In the recovery room, the patient had trouble breathing and their mouth was suctioned blindly. Soft bite block was found to be obstructing the patient's airway and was removed. 	 Standardise the use of bite blocks by anaesthetists (use of taped tail) and ensure alerts are evident when a bite block is in place. Where possible suction to be under direct vision. 	 Bite blocks have been standardised through use of a visible taped tail and alerts have been mandated. All suctioning in the recovery area is under direct vision whenever possible.
Wrong site surgery (finger)	 In preparation for surgery on a finger, the surgical site marking was placed on the arm. Once draped, the marking was not visible and the doctor made a small incision in the wrong finger. The handbook for junior doctors which covers 'pre-operative preparation of patients' does not clearly state how to mark digits (fingers). 	 Update procedure 'Pre-operative Preparation of Patients' to include the requirement for marking individual digits when it is the surgical site. Review the handbook for junior doctors regarding marking of digits and discuss incident in the hand registrar teaching sessions and service audit meeting. 	 The handbook has been updated to include a section on surgical marking of digits. Procedure was updated, and is in the process of being reviewed again. The incident was discussed at the service meeting and at hand registrar teaching sessions.

Description	Findings	Recommendations	Follow up
Injury to eye caused by magnetised item inadvertently allowed into an magnetic resonance imaging (MRI) scanner	 An inpatient, sent for MRI scan, was allowed to wear trousers during the scan. The patient was not aware that there was a pocket knife in a trouser pocket. The magnetism of the scanner was strong enough to pull the knife towards the scanner at speed and the knife struck the patient's right eye. The patient sustained a fracture to the orbital roof and a retinal tear requiring ongoing operations. Variations in processes meant inpatients were allowed to wear their own clothing during MRI scans. Checking for metallic object(s) both physical and verbal was not consistent. 	 All MRI patients to change into hospital gowns prior to MRI scans. Update processes for screening patients prior to MRI scans e.g. layout of consent forms for patients and staff, consistent questions asked by staff prior to scan. Signage in patient areas around risks of metallic objects to be available in common languages including text and pictures. Investigate options for metal detection systems. 	 Change in practice has occurred. The MRI patient screening process has been revised and improved. This is reflected and updated in MRI policies, procedures and the screening checklist. Signage reminding patients to remove all metallic objects from their person has been placed in patient areas in several common languages. Medical Radiation Technologists also have copies of this reminder that they present to patients during the screening process. Procurement of a metal detection system is in progress.

Description	Findings	Recommendations	Follow up
Delay in ophthalmology (eye services) first specialist appointment leading to permanent deterioration in eyesight	 The patient was medically assessed at clinic and referral was marked as Priority 2 (to be seen within 4 weeks). Clinical demand on the service meant that Priority 2 actual waiting times were 15 weeks. Communication between managers and specialists meant they were not aware of actual waiting times which missed an opportunity to accelerate access for confirmed diagnosis and treatment in a possible preventable deterioration in eyesight. It was not possible to retrieve the messages sent to general practitioners (GPs) as these had been overwritten. An opportunity was missed for clinical staff to review the case when the patient phoned to express concerns about deteriorating eyesight. Demand for eye services in CM Health has grown to the point that there are critical workforce shortages that impact on the ability of the service to respond. 	 Letters generated need to reflect actual information sent to patients and GPs with actual waiting times. Any changes to waiting times need to be clearly communicated to all clinical staff involved through letters, regional eReferral system or computer generated messages to GPs. Any changes to templates should only affect new letters generated. Call centre pathways need to be reviewed to ensure important clinical information is passed to relevant staff. CM Health to consider expanded roles for Allied Health staff (optometrists) in the eye service. CM Health to consider funding expanded access to training for optometrists. 	 Letter templates have been reviewed to include actual waiting times. All clinical staff are given up to date information of the priority wait times in the bi-monthly service meetings. The process of updating letter templates has been changed to stop overwriting of original template. Call paths have been reviewed to improve communication between call centre and clinical staff. Training opportunities are currently being explored for optometrists to monitor chronic eye problems.

Description	Findings	Recommendations	Follow up
Abduction of a baby from Maternity Ward	 A woman posing as pregnant and about to give birth presented to Maternity Ward after official visiting hours with her partner. The couple was let into the ward by another visitor holding the door open as they were leaving. The woman and her partner were found in the patients' lounge and were left there to wait while a staff member went to check the woman's records on the computer system. During this time the woman took a baby from the bedroom next door and left the hospital whilst the mother was having a shower in the ensuite. 	 Remove the ability for patients and visitors to gain access to the Maternity Ward via more than one entry point. Change internal layout of Maternity Ward e.g. allow line of sight to the visitor/patient entry point to the ward. Initially appoint an external security guard to control access and number of visitors on the ward. All patients and visitors must be let in and out of Maternity Ward by a staff member. Review and make changes to processes for when a parent needs to leave their baby unattended. Implement a baby identification device which can inform staff that a baby is leaving the ward. Review signage within the hospital as expectant mothers present to Maternity Ward instead of Birthing and Assessment. Internal Security service to review access to the hospital after visiting hours. 	 Security guard remains in place until implementation of a baby alert system is complete. Review of ward clerks' scope and shift hours with Human Resources and Union to extend role to checking identification of all visitors has been completed. All swipe card work has been completed. Internal layout – installation of window to Staff Hub completed to provide visibility to the only door with push button exit. Visitor policy review and discussions with security and NZ Police on prevention measures have been completed. 'Never Leave Your Baby Alone' posters have been produced and are situated in each after birth (postnatal) room and common areas in all maternity areas. These posters have also been adopted by Auckland and Waitemata District Health Boards.

Description	Findings	Recommendations	Follow up
Resuscitation equipment failure during urgent procedure	 A patient's airway became obstructed during a procedure; a breathing bag and mask was used and failed. Further emergency interventions were successful. Further investigation revealed the bag and mask had been put together incorrectly. The incorrect set up was not detected in the pre-event testing. Leadership and communication issues were identified on review of the emergency. 	 Review training program and step by step picture guide for staff on the correct set up and testing of the bag and mask. The team will work on communication pathways in emergency situations and include back up plans and identification of team leader. Review where such procedures are performed to ensure the environment is suitable. 	 Training program has been reviewed and step by step picture guide completed. Team resilience training is being rolled out within the service. Review of procedures is underway.

Description	Findings	Recommendations	Follow up
Medication error leading to low blood pressure and dehydration	 A medication error was discovered after patient developed low blood pressure and dehydration. Review of the patient's medication by a pharmacist discovered that the patient had been prescribed and given the daughter's medication after relying on the online repository TestSafe for information. 	 TestSafe to reassess system processes to reduce human errors. TestSafe to reassess methodology used to send a dispensing message in pharmacies. 	Further investigation with Pharmacy TestSafe vendor on the issue lead to the development of a 'deletion message' for patients who have been incorrectly dispensed medication, which in turn gets subsequently transferred to the correct patient.
	TestSafe reviewed the records to trace the dispensing history between the two NHI (national health index) numbers. The review discovered the error between the two NHIs; it had been rectified at one level of their system leaving part of the		 Pharmacy TestSafe vendor developed a fix and testing for the deletion message which was released to community pharmacy sites. Release of software fix to
	record unaffected.		community pharmacy test sites occurred mid-April 2015.
			Wider rollout to pharmacy sites in late April 2015.

Description	Findings	Recommendations	Follow up
Patient death following reactivation of Hepatitis B during chemotherapy	 The patient was receiving standard chemotherapy regimen and developed an infection that was later identified as the reactivation of Hepatitis B. Practices around recording of clinical information such as previous Hepatitis B status were inconsistent which meant this information was not readily available to other treating clinicians. Planned regular testing of liver function tests was incomplete. Extra testing for Hepatitis B was not ordered and therefore direct monitoring for possible reactivation did not occur. Consultant review after treatment cycles did not occur. During chemotherapy treatments medical assessments were often done without an interpreter and English was a second language. There were missed opportunities to identify the reactivation of Hepatitis B at an earlier stage. 	 Develop processes and checklists around testing, monitoring and recording patient's information through their chemotherapy treatments and make it accessible to clinical staff. Ensure that patients identified with a previous history of hepatitis receiving chemotherapy are routinely referred to a gastroenterology clinic. Review the process for patients receiving chemotherapy to be seen by a consultant haematologist at outpatient clinics. 	 Changes have been made to the clinical record to capture Hepatitis B status and document required blood testing and results. Chemotherapy checklist is in development. Work has started looking at resource implications for the Gastroenterology Department in establishing a clinic for all patients with evidence of previous hepatitis who are receiving chemotherapy. Chemotherapy scheduling has been reviewed and strengthened to ensure patients are reviewed by senior doctors as planned.

Description	Findings	Recommendations	Follow up
Delay in response to patient deterioration	 The patient was admitted to High Dependency Unit (HDU) after deteriorating during a night shift and a delay in initiating an emergency call out. Patient was later diagnosed with a serious infection and a heart attack. Investigation showed that the patient should have received observations every four hours but these were not done due to: multiple shift and staff changes during the 24 hours leading up to patient's admission to HDU. staff sickness meant changes to the roster. lack of adequate handover between staff from shift to shift and during evening and night shift. a nurse on the night shift was called away twice from the ward for a significant amount of time to escort patient, leaving two registered nurses to care for 30 patients on the ward. 	 Review incident with staff regarding handovers and delegation of duties between all staff on the shift. Review the use of ward nurses to escort patients on night shift. Software upgrade of One Staff (roster management tool) will introduce workload management tool on wards to help identify higher patient care needs and allocate staff accordingly. 	 Charge Nurse has reviewed this incident with the team. The number of after-hours escorts required is currently being reviewed by Middlemore Central. The roster management and workload management tool is currently being rolled out across the organisation.

Description	Findings	Recommendations	Follow up
Serious hospital acquired pressure injury	 A patient diagnosed with peripheral vascular disease was fitted with graduated compression stockings (GCS) which resulted in a serious hospital acquired pressure injury. Stockings were not removed every shift so patient's heels were not assessed or visualised as part of routine skin assessments. Initial Waterlow (pressure injury risk) assessment score was not correct which resulted in the appropriate intervention bundle not being utilised. Patient's mobility was compromised due to inadequate pain relief which was not communicated to medical teams. 	 Request to VTE (blood clot) Prevention Committee to review wording in policy. For example 'only use GCS if they can be removed every shift'. Education session for staff to include heels in routine skin assessments. Education session for staff regarding escalation pathway if patient's current pain management plan is not adequate. Present and discuss this case at Nursing Grand Round and consider for wider in- hospital publication newsletter. 	 The policy is under review. Education sessions on the use of 'skin integrity sticker' have been completed in two areas and will continue to be held across all areas. Nursing Grand Round is no longer held however this case will be highlighted in internal Our Open Book for organisational learning.

Description	Findings	Recommendations	Follow up
Retained vaginal swab after delivery of a baby	 Small gauze swabs were used to stop blood ooze instead of a sponge or a vaginal pack with a tape which is attached to a sponge forceps. No formal count process was in place for vaginal swabs in the Birthing Unit. Although written in the clinical notes, there was no verbal handover regarding the removal of the vaginal swab after the procedure. There are multiple places for clinical information to be recorded which potentially led to this information being overlooked as the clinical notes did contain the information about the removal of the swab. Visual examination of the area was not completed in a timely manner resulting in missed opportunities to discover the vaginal swab until 24 days after the birth. Maternal Postnatal Daily Assessment Record (MPAR) was not completed for this patient. 	 Review contents of birthing pack and remove small gauze swabs. Develop a formal count process for the use of swabs in the Birthing Unit. Develop a standard process around information handed over between clinical staff. Communication to Lead Maternity Carers, core midwives, patient's General Practitioner and Midwifery Council around the potential issues of not inspecting the perineum after birth. Educate midwives and doctors on completing the MPAR document. 	 Small gauze swabs have been removed from birthing packs. Formal count process is in development. Lessons learned from incident have been disseminated widely through midwives, specialists and GPs. Standardisation of use of MPAR is underway to ensure that CM Health and non-CM Health clinicians use the record consistently.

Description	Findings	Recommendations	Follow up
Opioid overdose with over-sedation	 A patient with abdominal pain presented to Emergency Care (EC). Patient received repeated doses of opioids (intravenous (IV) morphine, oral morphine and Tramadol) over a 12 hour period resulting over-sedation requiring temporary support for breathing and administration of reversal medication. The hospital's IV opioid protocol does not clearly identify pathways when oral opioid is given in conjunction with IV morphine to manage pain. Patient Controlled Analgesia (PCA) pump was not considered when patient transferred to ward for IV opioid pain management. Documentation was unclear when surgical reviews were completed. 	 Review IV opioid (adult) protocol for the consideration of using oral and IV opioids in conjunction and their cumulative effects. EC to commence the use of PCA pumps at a lower pain level. Share learnings from the case through internal <i>Our Open Book</i> case reviews. 	 Medication Safety Service have been consulted. Emergency Care are reviewing their protocol on opioids and pain relief. New opioid protocol is under development. Case will be presented in the internal Our Open Book.

Description	Findings	Recommendations	Follow up
Neonatal death at 22+4 weeks	 The patient had a complex obstetric history. Untreated urine infection was a risk factor which may have contributed to the premature labour. Multiple opportunities were missed to refer the patient to the Obstetric Medical Clinic where the patient would have received the multidisciplinary coordinated care indicated by complex obstetric history. There was a delay in removing cervical suture when presenting in preterm labour possibly causing damage to the cervix. There was a delay in acknowledgement of preterm labour which meant that the patient was not psychologically prepared for the birth of a baby too premature to survive. 	 Develop a system for Women's Health clinical staff to ensure that all investigations ordered are checked, accepted, acted and commented on. Review the current system for grading of GP referrals to identify high risk women. Share key findings of the investigation report with Early Pregnancy Assessment Clinic (EPAC) nurses to emphasise the importance of taking a full history and undertaking an appropriate referral. Develop a best practice guideline for the management of women with a previous second trimester loss which includes the insertion and management of a cervical suture, including indications for removal. Review relevant guidelines to ensure that when there is the possibility of birth at such an early stage of pregnancy that the baby will not survive, a full discussion about what is likely to happen is undertaken so that the parents are fully informed. 	 All Women's Health investigation results are now reviewed and signed off within seven days. Grading system for referrals is currently under review. Lessons learned from this incident have been shared with EPAC nurses. Guideline development and review are in progress.

Description	Findings	Recommendations	Follow up
Stillborn baby at full term (40 weeks)	 Baby identified as developing on or just below 10th customised centile graph at 26 weeks. Growth continued on same pattern at 35 and 38 weeks and results interpreted as 'normal'. Baby should have been identified as Intrauterine Growth Restriction initiating a different plan of care including booking for induction of labour between 38 – 40 weeks. Telephone contact was made at 40 week +3 days advising of contractions but screening form did not facilitate identification of risk and patient notes were not accessed so referral to Birthing Unit was not made. Documentation/history was not completed in full on presentation which led to non-prioritisation for urgent induction of labour. Missed opportunities during the pregnancy for investigations, treatment and follow-up. 	 Develop mandatory training for all obstetric doctors and midwives on the Gestation Network Growth Chart and the Australasian Society for Ultrasound in Medicine Fetal Growth Chart. Review the following to ensure information is available, consistent, accurate and prioritised: referral and grading processes; handover; induction of labour bookings; phone calls of women to Birthing and Assessment; and viewing and responding to results. Review availability of scan appointments in the community to prevent delays between scan appointments. 	 Education on the use of the growth chart to be provided in the compulsory registered midwife patient safety study days. Reviews are underway of referral and grading, handover and induction bookings. All Women's Health investigation results are now reviewed and signed within seven days.

Description	Findings	Recommendations	Follow up
Delay in response to patient deterioration following elective surgery	 The patient's progress after surgery did not follow the expected recovery pathway. There were multiple reviews by medical staff however communication failures meant the patient's care was not reviewed by the operating surgeon. There was a failure to recognise the patient's deterioration and developing infection and this led to a delay in definitive treatment. There was an inadequate response to concerns raised by the patient's family. 	 The service will consider how the routine after surgery review of patients is undertaken so that there is consistent escalation of concerns to the operating surgeon. Standardise the approach to the early recognition and treatment of infection. Introduce a patient and family/whaanau escalation service for those concerned about delays in treatment in hospital. Share lessons learned from this incident across the hospital. Establish a committee to review all deaths following surgery at CM Health. 	 Review of after surgery round is underway. A bundle of interventions to detect and treat serious infection has been rolled out in Emergency Care and will be spread to the rest of the hospital. 'Call for Concern' escalation service is being trialled in two wards at Middlemore Hospital. The lessons learned from this incident will be discussed at a Grand Round in early 2016. The review committee has been established.

Description	Findings	Recommendations	Follow up
Delay in response to patient deterioration following urgent surgery	 Signs of physical deterioration were recorded but not acted on as they were interpreted as normal for the patient. The early warning score for physical deterioration was not consistently used on the ward. Handover practices between nursing shifts were inconsistent and opportunities to intervene early may have been missed. 	 The early warning score for physical deterioration will be implemented consistently across nursing and medical staff in the service. Routine audit of the use of the early warning score will be implemented. Handover practices will be reviewed and standardised. 	• In progress

Description	Findings	Recommendations	Follow up
Foam dressing inadvertently left in wound causing an infection	 Clear instructions were not given to community staff regarding wound care. The size and number of foam pieces in the wound were not documented clearly. Despite concerns being raised and multiple examinations, the foam remained in place for five months. Foam is not visible on x-ray and therefore difficult to identify when wound closed. 	 Clear instructions for wound care are to be provided by ward staff to community nurses for all negative wound pressure therapy (NWPT) dressings. All patients discharged with NWPT to have a wound care chart that identifies the number of pieces of foam in a wound. Review guidelines on NWPT dressings. Training to be provided on best practice use of NWPT particularly for complex wounds. Investigate availability of x-ray visible foam dressing. 	 Referral processes have been reviewed and referrals are not accepted by community staff if relevant details are not provided. NWPT guideline has been updated to prompt a count and to document the number of foam pieces at each wound dressing. Education has been provided to all district nurses regarding wound mapping and necessary documentation requirements. Enquiries regarding x-ray visible foam continues.

Description	Findings	Recommendations	Follow up
Delay in diagnosing scar ectopic pregnancy (where the embryo implants into a scar in the uterus from a previous caesarian section)	 There was lack of clarity regarding overall clinical responsibility for the patient. There was a lack of coordination of care resulting in a delay in clinical decision making and timely management of the scar ectopic pregnancy. There was a lack of formal multidisciplinary review of ultrasound investigation findings that led to a delay in making the diagnosis of a scar ectopic pregnancy. 	 Clarify the escalation pathways for complex early pregnancy patients. Communicate the roles and responsibilities of the on-call specialist gynaecologist, obstetrician and OGUS (Obstetrics and Gynaecology Ultrasound Service). Formalise the review process between Radiology and Women's Health regarding differing ultrasound findings. 	• In progress.

Summary of falls causing patient harm

Of the 66 serious adverse events reported to the Health Quality & Safety Commission for the 2014-2015 year, 48 were related to falls.

This year CM Health has reported a higher number of falls than for the 2013-2014 year but this does not equal an increased rate of falls when the total number of patients in the hospital over the year are taken into account. There has been a significant focus on identifying all harm from falls.

The falls which resulted in harm included:

- 14 patients had a fractured hip or thigh
- 12 patients had skin tears or lacerations
- 7 patients had brain haemorrhages
- 6 patients had fractures involving the lower leg
- 3 patients had fractures involving the upper limb or collar bone
- 2 patients had fractures involving the ribs or breastbone
- 2 patients had fractures involving the spine

The falls prevention programme is continuing with strategies to reduce the risk of serious harm from a fall. Over the next year the continued focus will be on testing and improving the reliability of the following interventions across the whole organisation:

- All patients to have a falls risk assessment completed within six hours of admission to the ward
- Ensuring every patient is reassessed regularly or when their condition changes
- Ensuring appropriate interventions are put in place according to the assessed risk, including:
 - Provision of non-slip socks
 - Falls alert on room door
 - Frequent nurse rounds (up to hourly)
 - Nursed on low bed
 - Walking frames and other stability supports
 - Medication review to decrease use of medications likely to increase risk of falling
 - Hip-protectors
 - Developing an organisational clinical equipment management system that allows wards to quickly and efficiently access falls prevention equipment (example alarms, invisi-beams, high low beds as required by patients)

Over recent years, Delirium (confusion) has been increasingly recognised as a significant cause of falls in the hospital. In the last year the Confusion Assessment Measure (CAM) has been developed and is being rolled out across the hospital. The assessment aims to identify patients who are confused at an early stage and intervene to address the cause of confusion and provide supervision to prevent falls. The aim of the next 12 months is to ensure that the CAM is performed on high risk patients in a reliable manner and that the identified appropriate interventions are in place.