



# Counties Manukau Health

## Serious Adverse Events Report 2016-2017

# ***What is a serious adverse event?***

A serious adverse event is an incident where a patient is seriously harmed during medical treatment. Counties Manukau Health (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

Title	Findings	Recommendations	Follow up
<p>Delayed diagnosis of pneumonia leading to new-born death</p>	<ul style="list-style-type: none"> <li>• There is no new-born observation guideline or observation chart to record vital signs and determine an action pathway. This would have provided evidence to identify the baby’s deteriorating condition and escalate concerns.</li> <li>• There was high acuity on both Birthing &amp; Assessment and Maternity Wards with twice the number of recommended inductions booked. There was no escalation plan to manage the high acuity.</li> <li>• There were major issues with communication and documentation. There is currently a confusing mix of hard copy and electronic MCIS (Maternity Clinical Information System) clinical records.</li> <li>• There was no computer in the resuscitation bay (important if MCIS is the new-born record).</li> <li>• There is no easily identifiable new-born problem list in MCIS or the hard copy clinical record.</li> <li>• Equipment for the monitoring and care of new-borns in Birthing &amp; Assessment and the Maternity Ward was not easily locatable.</li> <li>• No formal debriefing session was arranged for all caregivers involved in providing care to the mother and the baby following this serious event.</li> </ul>	<ul style="list-style-type: none"> <li>• Develop and implement a guideline for observations and detection of early warning signs in new-borns.</li> <li>• Review the escalation plan and ensure staff are familiar with this plan.</li> <li>• Audit the assignment of workload and develop a plan so that individual workloads reflect staff skill mix and experience.</li> <li>• Develop a system to ensure new-borns have their own clinical record, separate from the maternal record, with a readily visible problem list and care plan.</li> <li>• Implement structured safety huddles across Women’s Health.</li> <li>• Develop a system and processes so that staff receive adequate training to ensure proficiency with MCIS.</li> <li>• Provide dedicated new-born observation carts with all necessary equipment stored in clearly marked areas.</li> <li>• Review the current staff debriefing process following a serious incident and make recommendations for service improvement.</li> </ul>	<ul style="list-style-type: none"> <li>• The New-born Observation Guideline was finalised in April and is available on CM Health’s document directory.</li> <li>• A draft Neonatal Early Warning Score (NEWS) has been developed.</li> <li>• The NEWS will be implemented in late October 2017 following roll-out of an education programme to all maternity staff and Lead Maternity Carer (LMC) midwives.</li> <li>• A MCIS Reducing Variation project is establishing consistency in the use of MCIS. This work will include providing training sessions for all staff.</li> <li>• The process for new-borns to have their own clinical record is being reviewed.</li> <li>• The organisational escalation plan has been reviewed and feedback obtained. Education on the updated plan will occur when it is finalised.</li> <li>• Maternity Ward 11.00am huddles continue. A Communication work stream as part of Living Our Values Maternity Ward Project is developing a process to establish structured safety huddles on every shift.</li> <li>• Four dedicated equipment stands have been introduced for easy ‘grab and go’ to the bedside.</li> <li>• The current staff debriefing process draft is ready for discussion at Divisional level.</li> </ul>

Title	Findings	Recommendations	Follow up
CT <sup>1</sup> scan of head performed in error	<ul style="list-style-type: none"> <li>• There was no formal 'time out' process in place to ensure the correct patient received the correct procedure.</li> <li>• Multiple patients' documents were assembled in the same place increasing the risk of the incorrect documentation being picked up and subsequent misidentification.</li> <li>• There was no patient identification label printer in the Acute CT area (patient labels are effectively used in other areas of the service as an identification check to cross-reference the patient).</li> <li>• The number of patients that attend for acute CT during the evening shift has increased but staffing levels have remained the same.</li> </ul>	<ul style="list-style-type: none"> <li>• Identify opportunities in the process where identification of the patient could be improved.</li> <li>• Implement a final patient identification timeout type check.</li> <li>• Install a patient identification label printer into acute CT area.</li> <li>• Radiology Department to consider roster changes to match workload, particularly during evening shifts.</li> </ul>	<ul style="list-style-type: none"> <li>• Forms handled just prior to the patients' examination and utilised during the identification process are now placed into a centrally located document holder rather than on the scanning desk. This process is being trialled and will be reviewed frequently to ensure the change is not creating other problems.</li> <li>• The CT Service is currently trialling a 'time out' process whereby staff make an extra final check of the patient's identification just prior to pushing the scan button.</li> <li>• A patient identification label printer was installed into the Acute CT area in August 2016.</li> <li>• A review and analysis of Radiology patient volumes and levels of staffing during evening shifts in Acute CT has commenced.</li> </ul>

<sup>1</sup> A CT (computerised tomography) is an X-ray examination that allows viewing of the body in cross section. Using the CT scanner and a powerful computer, images of the whole body are built showing both soft tissue and bone and other parts of the body which can sometimes be difficult to see.

Title	Findings	Recommendations	Follow up
<p>Extensive severe pressure injury leading to serious bloodstream infection and death</p>	<ul style="list-style-type: none"> <li>• The patient developed a severe pressure injury during a number of hospital admissions following a serious stroke that the patient was not initially expected to survive.</li> <li>• There was poor communication with the family about those cares being carried out by the family and those done by nursing staff.</li> <li>• Pressure injury assessments and interventions were poorly documented, inadequately implemented, and inconsistent with the severity of the developing pressure injury.</li> <li>• The patient’s nutritional status was not well monitored or responded to, leading to further loss of physical condition over the admissions.</li> <li>• There were missed opportunities to respond to spreading infection when the patient attended the Emergency Department (ED) to correct problems with feeding tubes.</li> </ul>	<ul style="list-style-type: none"> <li>• Strong message to all staff that the assessment that a patient may be close to the end of their life does not exclude the patient from pressure injury assessment and other fundamentals of care. Director of Patient Care to explore a programme of fundamental standards of care.</li> <li>• CM Health will develop a guideline on partnership engagement with patient and family/whaanau that identifies shared care expectations.</li> <li>• The ward concerned will improve the accuracy and reliability of its pressure injury risk assessments and will undertake a period of intensive monitoring of its pressure injury assessment and package of care.</li> <li>• Consider interventions that will improve the monitoring of nutritional status.</li> <li>• Feedback to ED regarding missed opportunities.</li> <li>• Presentation on pressure injuries at joint Medical / Surgical meeting.</li> </ul>	<ul style="list-style-type: none"> <li>• In progress – recently completed investigation.</li> </ul>

Title	Findings	Recommendations	Follow up
<p>Burn to nasal cavity from accidental application of hazardous substance (phenol)</p>	<ul style="list-style-type: none"> <li>• CM Health had no management plan for the use and storage of phenol (a hazardous substance), resulting in the lack of awareness of CM Health staff to the hazardous nature of phenol use. This resulted in no personal protective equipment, hazardous material data sheets or spill kits being available at Middlemore or Manukau sites where phenol is used.</li> <li>• It was not standard practice for medical staff in this area to double-check solutions before use. Phenol was rarely used in the clinic so infrequently available on a clinic trolley. This unexpected availability, combined with the culture of not checking solutions before use, resulted in the solution being used in error.</li> <li>• The ORL (ear, nose and throat) Service showed a lack of appreciation that the injury sustained constituted a serious event and required open disclosure, notification via the incident system and completion of an ACC treatment injury claim form.</li> <li>• This review was initiated six months after the incident and came to light by chance during a hazardous substances audit in the area.</li> </ul>	<ul style="list-style-type: none"> <li>• ORL Service to work with pharmacy and CM Health Hazardous Substance and Compliance Advisor on the best practice management for phenol use if this solution is required for clinical practice.</li> <li>• Explore other safer options such as single use applicators.</li> <li>• If retained for use, all the relevant ORL Module staff to receive education on the hazardous nature of phenol and ensure the phenol solution is returned to safe storage immediately after use.</li> <li>• ORL Head of Department to debrief all ORL medical staff on this incident and develop a plan to change the culture of non-checking of medications and solutions before use to bring in line with CM Health best practice.</li> </ul>	<ul style="list-style-type: none"> <li>• In progress – delay in identifying incident.</li> </ul>

Quarter 2 (October – December 2016) Falls cases: 3

Title	Findings	Recommendations	Follow up
Hospital acquired stage four pressure injury	<ul style="list-style-type: none"> <li>• Patient did not have appropriate interventions or monitoring in place to prevent a stage one<sup>2</sup> pressure injury developing to a stage four injury on the left heel.</li> </ul>	<ul style="list-style-type: none"> <li>• Provide refresher sessions on pressure injury care, documentation and staff responsibilities once pressure injuries are identified.</li> <li>• Ward to increase frequency of pressure injury audits in order to focus on improving accuracy of assessment and bundle of care provision.</li> </ul>	<ul style="list-style-type: none"> <li>• Education sessions have been provided.</li> </ul>
Central line <sup>3</sup> -associated bloodstream infection (CLAB)	<ul style="list-style-type: none"> <li>• A step in the central line maintenance checklist was not completed (scrub the hub).</li> <li>• The patient was high risk and was known to disconnect central lines.</li> <li>• The current CLAB form does not guide staff in the use of a chlorhexidine dressing in high risk intervention cases.</li> </ul>	<ul style="list-style-type: none"> <li>• Create CLAB champions within the ward and fully engage with the CLAB program including maintaining the CLAB database.</li> </ul>	<ul style="list-style-type: none"> <li>• Training on the use of the CLAB form and database was completed with the Intravenous Resource Nurses in the week of 7 February 2017.</li> </ul>

<sup>2</sup> Stage1 pressure injury: Intact skin with non-blanchable redness of a localized area usually over a bony prominence, darkly pigmented skin may not have visible blanching; its colour may differ from the surrounding area, the area may be painful, firm, soft, warmer or cooler as compared to adjacent tissue. May be difficult to detect in individuals with dark skin tones. May indicate "at risk" persons (a heralding sign of risk).

<sup>3</sup> A central line, also called a central venous catheter, is a long, thin, flexible tube used to give medicines, fluids, nutrients, or blood products over a long period of time, usually several weeks or more. A catheter is often inserted in the arm or chest through the skin into a large vein.

Title	Findings	Recommendations	Follow up
Hospital acquired unstageable sacral pressure injury	<ul style="list-style-type: none"> <li>• Patient was in poor physical condition, had reduced mobility, poorly controlled diabetes and gout in their knees resulting in prolonged immobility and time in bed. This, together with the patient’s reluctance to mobilise and change position in bed, led to the increased risk of developing the pressure injury.</li> <li>• Despite the high risk being identified on admission and the patient’s immobility and reluctance to move, a pressure relieving mattress was not ordered for five days.</li> <li>• No incident form was completed at the time the pressure injury was identified.</li> </ul>	<ul style="list-style-type: none"> <li>• Multiple ward education on pressure area cares and documentation of cares given on each shift and pressure injury prevention to be delivered.</li> <li>• The education sessions to include staff responsibilities when a pressure injury is identified and the subsequent management of this – including an incident report to be completed, reassessments as per care bundle, and use of a skin integrity sticker.</li> <li>• Pressure injury assessment form to be reconsidered with a view to changing “consideration of an air mattress” to “use an air mattress or give the reason that an air mattress has not been used”.</li> <li>• Intensive monitoring of pressure injury assessments for accuracy and implementation of interventions.</li> </ul>	<ul style="list-style-type: none"> <li>• In progress – delay in notifying incident.</li> </ul>



Title	Findings	Recommendations	Follow up
Potentially avoidable death of a new-born baby	<ul style="list-style-type: none"> <li>• Aspects of independent Lead Maternity Carer's (LMC) care were considered to be outside recommended guidelines of the organisation.</li> <li>• Three internal guidelines identified for improvement in small for gestational age labour and birthing procedures.</li> <li>• Review of birthing room at primary birthing unit (PBU) indicated it was difficult to access the emergency phone.</li> <li>• Emergency escalation of care process was not followed resulting in a delay in contacting the on-call specialist doctor.</li> </ul>	<ul style="list-style-type: none"> <li>• Professional follow-up for the LMC.</li> <li>• Enhance communication pathways between independent LMCs and CM Health midwives at primary birthing units.</li> <li>• Review and update three internal guidelines to provide a clear and robust process for all LMCs and CM Health midwives to follow.</li> <li>• Review layout of birthing room at PBU including location of emergency phone and call bells.</li> <li>• Review PBU emergency process for contacting on-call specialist doctor to ensure all LMCs and CM Health midwives are aware of the process.</li> </ul>	<ul style="list-style-type: none"> <li>• Letter sent to Midwifery Council regarding care provided by LMC.</li> <li>• LMC is no longer working with CM Health.</li> <li>• Identified guidelines for small for gestational age; reduced fetal movements and labour and birthing procedures have been reviewed and updated/developed.</li> <li>• Birthing rooms at PBU have been reviewed and the emergency phones (with hands free option) have been positioned next to the resuscitaires for ease of access.</li> <li>• Communication sent reminding staff and LMCs of the process for contacting the on-call specialist doctor.</li> </ul>

Title	Findings	Recommendations	Follow up
<p>Pack left in patient's vagina longer than planned</p>	<ul style="list-style-type: none"> <li>• The pack tail was not left outside the vagina or secured to the patient's leg.</li> <li>• Lack of recognition by staff of the documentation in the patient's records regarding the insertion of the vaginal pack and the plan for removal.</li> <li>• Complete examination of the perineum and vagina was not done.</li> <li>• Risk management section on Maternity Clinical Information System (MCIS) is not routinely used for inpatients.</li> <li>• The Operating Count Sheet did not include a count record of packs as part of its checklist.</li> </ul>	<ul style="list-style-type: none"> <li>• Educate staff that a tail of the pack should be left outside the vagina and secured to the patient's leg.</li> <li>• Develop a standardised postnatal care pathway that includes the inspection of the perineum.</li> <li>• Communicate to staff that documentation of the perineum examination should be done daily.</li> <li>• Provide education to staff and LMCs on creating and reviewing a postnatal management plan on the risk management section of MCIS.</li> <li>• Review the Operating Count Sheet to make it clearer if a pack is in place.</li> </ul>	<ul style="list-style-type: none"> <li>• A work stream has been established to develop the standardised postnatal care pathway that will incorporate inspection of the perineum.</li> <li>• Communication to staff on the importance of documenting the examination of the perineum daily has been included as part of the further roll-out of education for MCIS.</li> <li>• Education to staff and LMCs on creating and reviewing a postnatal management plan on MCIS has been completed.</li> <li>• Count sheet revised to include vaginal packs.</li> <li>• A process for identifying when a vaginal (PV) pack is in place has been developed and widely communicated. This includes a pink 'PV in situ' sticker for the clinical notes and a pink wrist band if patient consents to wear.</li> </ul>

Title	Findings	Recommendations	Follow up
Loss of vision due to drug calculation error	<ul style="list-style-type: none"> <li>• A dose calculation error was made using a drug (Cefuroxime) that is known to be high risk when used in eye surgery at a higher than intended concentration. Use of Cefuroxime during eye surgery was new to practice at CM Health.</li> <li>• Not all of the five safety rights of medication preparation and administration were checked prior to administration of the medication resulting in the overdose and subsequent irreversible loss of vision.</li> <li>• There is no process for introducing new drugs/procedures within the Ophthalmology Service and theatres.</li> <li>• The theatre charge nurses are not routinely part of business planning meetings.</li> </ul>	<ul style="list-style-type: none"> <li>• Cefuroxime not to be used in eye surgery until pre-mixed single use vials are available.</li> <li>• Clinical practice in the context of a serious incident to be reviewed by the Clinical Director and Clinical Head.</li> <li>• Staff to complete a refresh of the medication safety e-learning package.</li> <li>• Documentation of any new procedure or new use of medication to be completed before procedure/new medication use initiated.</li> <li>• Any proposed new drug or technique is discussed and agreed formally in the business meeting with all key staff, including theatre charge nurses.</li> </ul>	<ul style="list-style-type: none"> <li>• Decision that Cefuroxime is not to be used in eye surgery until pre-mixed single use vials are available has been shared widely in the department.</li> <li>• Organisational Policy 'Assessing, approving and introducing new clinical techniques and procedures into CM Health facilities' has been circulated for reference in the department.</li> </ul>

Quarter 3 (January – March 2017) Falls cases: 7

Title	Findings	Recommendations	Follow up
<p>Failure to report a significant finding on computed tomography (CT)</p>	<ul style="list-style-type: none"> <li>• The patient presented with a severe headache and a head CT and x-ray of head and neck blood vessels (carotid angiogram) was conducted. Images were reviewed and reported as normal.</li> <li>• Five months later the patient re-presented to hospital. A neck CT was performed and compared with previous images. A mass was identified that was present on the previous admission but not mentioned in the report.</li> <li>• At the time of first presentation, the Radiology Department was undergoing changes in CT angiogram processes and a significantly higher number of images were generated (defined as thin unreconstructed images or thick images).</li> <li>• At the time of the initial scan a decision had been made by the Radiology Department to only review thick images and the mass was not visible in the thick image.</li> </ul>	<ul style="list-style-type: none"> <li>• Radiologists will review and report on all images taken in CT carotid angiograms.</li> </ul>	<ul style="list-style-type: none"> <li>• Radiologists now review all images (thick and thin) when reporting on CT carotid angiograms.</li> </ul>

Title	Findings	Recommendations	Follow up
Contaminated equipment	<ul style="list-style-type: none"> <li>• Small cannula<sup>4</sup> with a fine bore meant that the cannula could not be cleaned with a brush, dry heat or steam sterilisation techniques.</li> <li>• Miscommunication between Operating Theatre and Central Sterile Supply Department (CSSD) led to insufficient cleaning sets available for the number of cases.</li> <li>• Staff rosters in CSSD were not matched to workload meaning that these small cannulas were Fast Tracked<sup>5</sup> which was an inappropriate sterilising procedure for this piece of equipment.</li> </ul>	<ul style="list-style-type: none"> <li>• Remove reusable cannulas from use and replace with single use items only.</li> <li>• Review other fine cannulas or surgical implements which might not be decontaminated correctly.</li> <li>• CSSD staff to be included in the process of purchasing all reusable theatre equipment to ensure decontamination techniques will be achieved.</li> </ul>	<ul style="list-style-type: none"> <li>• Reusable cannulas have been removed from use and single use cannulas are in place.</li> <li>• Theatre charge nurses have reviewed all surgical sets for 'at risk' items.</li> <li>• CSSD staff have joined the Product Safety Infrastructure Group (PSIG) purchasing process.</li> </ul>

<sup>4</sup> A cannula is a thin tube inserted into a vein or body cavity to administer medication, drain off fluid, or insert a surgical instrument.

<sup>5</sup> Fast tracking means that the item is processed first in line – first in decontamination, first in packing and first in sterilising. Items being fast tracked are processed in the order that the request is made.

Title	Findings	Recommendations	Follow up
<p>Unexplained collapse resulting in new-born baby's death at nine hours of age (cause of death not yet known)</p>	<ul style="list-style-type: none"> <li>• There was no vital signs assessment done from the time the baby was born to collapse at 65 minutes of age and no health professional in the room immediately prior to the baby's collapse.</li> <li>• Heart rate monitoring in the first and second stage of labour was not in accordance with recommended best practice.</li> <li>• The birthing room was dimly lit which may have contributed to not being able to accurately assess the status of the baby.</li> <li>• The water temperature of the birthing pool was 38°C which is 0.5-1°C higher than recommended.</li> <li>• Emergency call information displayed on the wall at the Primary Birthing Unit (PBU) was an 0800 number which led to a non-urgent phone number at St John Ambulance Service being used for a critically ill baby which may have led to the delay in ambulance arriving (26 minutes from first phone call).</li> <li>• Miscommunication between the health professional and St John Ambulance handler regarding the type of priority call and ambulance required to transport the baby.</li> <li>• Staff found it difficult to establish whether the baby had an adequate airway during the resuscitation before and during transfer.</li> <li>• Baby had a low temperature of 35.5°C when transferred to the resuscitation area in the PBU and 30.5°C on admission to Neonatal Unit at Middlemore Hospital.</li> </ul>	<ul style="list-style-type: none"> <li>• Review the Neonatal Observation Guideline regarding the observation of a baby and the frequency, documentation and environmental requirements of vital signs in the period immediately after birth.</li> <li>• Discuss with senior doctors the strategies for acute advice before and during the transport of a critically unwell baby.</li> <li>• Review St John Ambulance Services' standard responses for urgent transfers from PBUs to hospital including a sustainable regional baby/child transport system.</li> <li>• Develop criteria for the use of a thermal wrap when transferring babies requiring resuscitation. If practical, to teach laryngeal mask airway insertion for transfers from PBUs to hospital.</li> <li>• Circulate current guidelines for Fetal Heart Rate Monitoring in Labour, Water Immersion during Labour and Birth, Inter Facility/Hospital patient Transfers flowchart to DHB and Lead Maternity Carer (LMC) midwives.</li> <li>• Ensure that the primary birthing units have the St John Ambulance Services' 'Inter Facility/Hospital Patient Transfers' flowchart displayed, and midwives and LMC's use the 111 system for urgent transfer requests.</li> </ul>	<ul style="list-style-type: none"> <li>• The Neonatal Observation Guideline is being reviewed to ensure that it aligns with the proposed Neonatal Early Warning Score (NEWS). This review will include further information on the observation and documentation of vital signs.</li> <li>• The fetal heart rate monitoring guideline has been updated and circulated to CM Health and LMC midwives and is available on the document directory.</li> <li>• St John Ambulance Services' 'Inter Facility/Hospital Patient Transfers' flowcharts have been displayed in all of the PBUs and socialised with staff.</li> </ul>

Title	Findings	Recommendations	Follow up
Hospital acquired unstageable pressure injury	<ul style="list-style-type: none"> <li>The patient’s skin graft had not been reviewed by day 5 after surgery and an updated dressing plan was not requested from the surgical team.</li> <li>Patient’s medical history of peripheral vascular disease was not taken into consideration for the dressing plan. The patient was at high risk of developing a pressure injury if not monitored daily.</li> <li>The external dressing over the skin graft was not removed to check the condition of the surrounding skin.</li> </ul>	<ul style="list-style-type: none"> <li>Clarify any pre-admission wound care plans, transfer and update information to a current wound care chart and set goals.</li> <li>Continue documentation during admission and update the plan with guidance from the surgical team if review dates are not met.</li> <li>All bandaged wounds to be assessed on admission by the ward nurse to expose the dressing underneath and review skin condition as part of daily cares.</li> </ul>	<ul style="list-style-type: none"> <li>Case presented to nursing staff by Charge Nurse Manager.</li> <li>Discussions underway with Bed Manager Clinical Nurse Specialist to ensure wound care assessment is completed prior to transfer to the ward.</li> <li>Handover assessment tool has been reviewed.</li> </ul>
Non accidental injury (NAI) pathway not followed resulting in delay in child being removed from family violence situation, further NAI and infected repair of fractured jaw needing further surgery	<ul style="list-style-type: none"> <li>Documentation either written or electronic did not reflect the discussions that indicated concern for the child and the need for the NAI pathway to be activated.</li> <li>The current Abuse and Neglect Policy, Procedure and Guideline was not followed by staff.</li> <li>Documentation of the case was not made in the usual books as neither were readily available at the time of admission.</li> <li>On the first admission the child should not have been returned to the family member.</li> </ul>	<ul style="list-style-type: none"> <li>Present case at Morbidity &amp; Mortality Review meeting.</li> <li>Facilitate a case review inviting all agencies concerned to participate.</li> <li>Ensure multi-agency centre body diagram and physical injury booklet are available in the Emergency Department (ED).</li> <li>Update ED new staff orientation programme to include an overview of the child protection process.</li> </ul>	<ul style="list-style-type: none"> <li>Case presented at Kidz First Mortality and Morbidity meeting on 28 June 2017.</li> <li>Physical Injury Booklets have been ordered and are now available in ED. The leaflet holder has been highlighted with red tape for better visibility for all.</li> <li>‘Drop-in’ sessions have commenced in both Kidz First ED and KidzFirst wards to update and familiarise staff with the guideline.</li> <li>Orientation of paediatric house officers and registrars on child protection process is in progress. Awaiting Paediatric ED arranging this as part of medical staff orientation.</li> <li>Case review (Inter-agency) to be arranged before the end of the year.</li> </ul>

Title	Findings	Recommendations	Follow up
Swab left in patient's vagina for longer than planned	<ul style="list-style-type: none"> <li>Following a day-stay gynaecological procedure, the patient was discharged home and two days later passed a gauze swab vaginally. The patient attended their GP and the gauze swab was checked and found to be intact.</li> <li>Due to swabs being easily accessible after the final swab count, a swab was taken from one of the packs on the trolley and used after the final count was completed and this was not communicated to the theatre team.</li> </ul>	<ul style="list-style-type: none"> <li>Develop a process so the swabs remaining after the final swab count has been completed are secured on the trolley so they can be directly monitored.</li> <li>If a swab is needed after the final count, the nursing team are to be informed and an additional final swab count is to be completed.</li> <li>Update relevant policies and procedures with the change in practice.</li> </ul>	<ul style="list-style-type: none"> <li>The case was presented at Women's Health Adverse Event Mortality and Morbidity meeting on 7 June 2017.</li> <li>A communication plan for the change in practice is underway.</li> <li>The count sheet has been revised to include vaginal packs.</li> <li>A process for identifying when a vaginal (PV) pack is in place has been developed and widely communicated. This includes a pink 'PV in situ' sticker for the clinical notes and a pink wrist band if the patient consents to wear.</li> </ul>
Overdose of a strong pain killer (Fentanyl) in operating theatre	<ul style="list-style-type: none"> <li>A syringe was labelled with the drug name 'Fentanyl' but not the concentration of the drug.</li> <li>Clarification and confirmation of the drug dose was not done prior to administration of the drug.</li> <li>Fentanyl was used when testing for cannula patency.</li> <li>The patient received the drug whilst sedated and there was no harm to the patient.</li> </ul>	<ul style="list-style-type: none"> <li>Present case to Anaesthetic Mortality and Morbidity meeting.</li> <li>Anaesthetic Department to consider standardising practice for dilution of paediatric drugs.</li> <li>Anaesthetists must ensure that any syringe containing medication is clearly labelled with the name and concentration of the medication contained.</li> <li>Closed loop communication<sup>6</sup> to be used for clarification between Anaesthetists and any other staff member who has been asked to give a high risk drug prior to administration of the drug.</li> </ul>	<ul style="list-style-type: none"> <li>Case was discussed at Anaesthetic Mortality and Morbidity meeting.</li> </ul>

<sup>6</sup> Closed loop communication is a communication technique used to avoid misunderstandings. When the sender gives a message, the receiver repeats this back. The sender then confirms the message using the word "yes". When the receiver incorrectly repeats the message back, the sender will say "negative" (or something similar) and then repeat the correct message. If the sender (person giving the message) does not get a reply back, the sender must repeat it until the receiver starts closing the loop.



Title	Findings	Recommendations	Follow up
<p>Inappropriate antibiotic prescription</p>	<ul style="list-style-type: none"> <li>• High patient acuity and workload resulted in variation to usual standard clinical practice and a prescription was handwritten instead of using the usual electronic discharge summary (EDS).</li> <li>• The patient’s allergy status was not checked by the prescriber as part of the prescribing process which meant an opportunity to identify a potential harmful outcome was missed (the allergy was documented in the clinical notes and on the medication chart).</li> <li>• The pharmacist in the community pharmacy did not verbally confirm the patient’s allergy status with the patient after checking the patient’s allergy status on the computer and finding no alerts.</li> <li>• The pharmacist in the outpatient pharmacy dispensed medication from an unsigned prescription.</li> <li>• The dispensing of medication from a prescription with a prescriber signature is a legal requirement under the Medicines Regulations. In this case when the unsigned prescription was provided to the outpatient pharmacy for dispensing, the community pharmacist immediately tried to contact the prescriber to come and sign the prescription, but was unsuccessful. The medication was nevertheless provided to the patient so that the patient would be able to start taking the antibiotics immediately. It subsequently took several attempts over several days for the community pharmacist to reach the prescriber because the prescriber was off-duty and on night duty.</li> </ul>	<ul style="list-style-type: none"> <li>• A coaching session was held with the clinician involved regarding the correct processes for prescribers to check, document and report patient allergy and adverse drug reaction (ADR) status at the time of prescribing medications, as per the CM Health Medication Allergies and Adverse Drug Reactions Procedure.</li> <li>• Reminder to prescribers regarding the importance of using electronic discharge summary-generated prescriptions whenever possible.</li> <li>• To include the allergy and ADR checking and documentation procedure in the outpatient pharmacy’s Standard Operating Procedure: ‘Dispensing New Prescriptions’.</li> <li>• To include the management of non-signed prescriptions in the outpatient pharmacy’s Standard Operating Procedure: ‘Dispensing New Prescriptions’, to ensure the outpatient pharmacy team will take all reasonable steps to contact the prescriber to come and sign a prescription so that it can be dispensed. If the pharmacy is not successful, then the prescription cannot be dispensed and the patient will be ask to return to the source to have the prescription signed.</li> </ul>	<ul style="list-style-type: none"> <li>• A coaching session was held with the clinician.</li> <li>• The allergy and ADR checking and documentation procedure was added to the outpatient pharmacy’s Standard Operating Procedure ‘Dispensing New Prescriptions’ on 31 July 2017.</li> <li>• The procedure for management of non-signed prescriptions was added to the outpatient pharmacy’s Standard Operating Procedure ‘Dispensing New Prescriptions’ on 31 July 2017.</li> </ul>

Title	Findings	Recommendations	Follow up
<p>Delay in transfer of an unstable baby</p>	<ul style="list-style-type: none"> <li>• The information displayed for calling St John Ambulance Services at Botany Downs Primary Birthing Unit (PBU) advised calling a 0800 number. This led to the non-urgent phone number being used to request the ambulance for a baby requiring ongoing resuscitation.</li> <li>• The extension number provided for the specialist doctor to answer the paged call was the unattended midwives' station instead of the resuscitation room phone extension.</li> <li>• There was no 'secure kids in properly' (SKIP) harness available to allow immediate transfer of a critically ill baby.</li> <li>• Currently there is no other method (other than a Perspex cot) available to transfer critically ill babies requiring resuscitation from a CM Health PBU to Middlemore Hospital (MMH).</li> <li>• The time the baby was born requiring resuscitation until the time of the ambulance call was 19 minutes. During this time the baby received resuscitation in line with NZ Resuscitation Council's Newborn Life Support Guidelines.</li> <li>• There was miscommunication between the midwives and St John Ambulance Service call handler regarding the type of ambulance required for the urgent transfer of the baby to MMH.</li> </ul>	<ul style="list-style-type: none"> <li>• Ensure that the PBUs display the St John Ambulance Services 'Inter Facility/Hospital Patient Transfers' flowchart.</li> <li>• Provide education and orientation to CM Health midwives and lead maternity carers (LMCs) to ensure that urgent requests for ambulance transfers are made utilising the 111 system to ensure the appropriate ambulance response.</li> <li>• Provide orientation and education to CM Health midwives and LMCs to ensure that the phone in the resuscitation bay is used.</li> <li>• Consider having SKIP harnesses (or alternative) available on site at the three CM Health PBUs.</li> <li>• Check progress of the regional baby/child transport system.</li> </ul>	<ul style="list-style-type: none"> <li>• All of the PBUs have displayed the St John Ambulance Services 'Inter Facility/Hospital Patient Transfers' flowchart.</li> <li>• Education has been provided to the PBU midwives to ensure that urgent requests for ambulance transfers are made utilising the 111 system to ensure the appropriate ambulance response.</li> <li>• Communication and education has been provided to CM Health midwives and LMCs to ensure that the phone in the resuscitation bay is used.</li> <li>• A meeting has been scheduled with St John Ambulance Services and the charge midwife managers to discuss the transfer process and use of SKIP harnesses.</li> <li>• St John Ambulance Service has rolled out the Neonate SKIP harnesses to all of their South Auckland Emergency Ambulances.</li> </ul>

Title	Findings	Recommendations	Follow up
<p>Management of the transfer of care of a patient seen in private practice to Middlemore Hospital following complications after a procedure</p>	<ul style="list-style-type: none"> <li>• Standard urgent review and admission process was not followed which resulted in an incomplete workup prior to surgery and without the specialist doctor looking after urgent cases being aware.</li> <li>• The process for non-booked bedside scans is unclear and resulted in poor documentation.</li> <li>• The current guideline on admission of patients from private hospitals covers the urgent hospital to hospital transfers. The existing guidelines do not specifically include the outpatient presentations.</li> <li>• One specialised (lithotomy) bed in the hospital for examination purposes guided the doctor's decision to see patient in a particular room.</li> <li>• Lack of a variety of surgical equipment available in Operating Theatre to suit all patient circumstances.</li> <li>• Patient's husband was not phoned at the time of the surgery.</li> </ul>	<ul style="list-style-type: none"> <li>• Review current guidelines for the admission process of a patient seen in private practice then presenting urgently at Middlemore Hospital.</li> <li>• Refresh the requirement to document any conversations and/or findings relating to patients (for example non-booked bedside scans) in clinical notes.</li> <li>• Establish a private space in the Emergency Department (ED) with the required examination bed to see women who require an urgent gynaecological examination.</li> <li>• Review the requirement for increasing the range of surgical instruments and gynaecological equipment in Operating Theatre.</li> <li>• When there is an exploratory procedure and it is found that something significant is to be done, a patient's significant other to be informed beforehand regardless of the time of day/night. Information for significant other to include expected length of time of surgery, what might be done, what will be done if there are complications, and to ask the patient's significant other if they want to be called again at any other time.</li> </ul>	<ul style="list-style-type: none"> <li>• Guidelines have been reviewed and recommendations made. Awaiting input from Surgical Services.</li> <li>• The need for consistent documentation of clinical discussions or bedside scans has been communicated widely in the department.</li> <li>• Review of ED spaces has been undertaken and consideration is being given to the need for a specialised lithotomy bed in ED.</li> <li>• Specialised equipment needed in this incident is now available in operating theatres.</li> <li>• Issue regarding the role of significant others to be addressed in a departmental meeting.</li> </ul>

Title	Findings	Recommendations	Follow up
<p>Ten times overdose of paracetamol contributing to temporary liver damage in a one month old baby</p>	<ul style="list-style-type: none"> <li>• Incorrect dose of paracetamol was prescribed, despite the dose calculation documentation being correct.</li> <li>• Failure to recognise incorrect dose calculation by nursing staff and subsequent administration.</li> <li>• There was a lack of recognition that the dose was a very large volume for such a small baby.</li> <li>• Medication was administered via a nasogastric tube and this may have been a factor in not recognising the volume error.</li> <li>• Doctor who was asked to chart paracetamol was involved in resuscitation but not the on-going care of the baby.</li> <li>• The staff member who administered the medication had limited experience in managing small unwell babies.</li> </ul>	<ul style="list-style-type: none"> <li>• On-going education for staff regarding the five rights of medication prescribing and administration. This would include checking that calculations and doses are correct.</li> <li>• On-going discussion with nursing group regarding double checking especially in baby resuscitation area. Current practice at Middlemore Hospital Emergency Department (ED) is to double check all IV medications but not oral medicines.</li> <li>• Use case as a learning case within ED, paediatrics and Intensive Care Unit (ICU).</li> <li>• In the longer term, electronic prescribing with built in weight/age checking would reduce the risk of this prescribing error.</li> <li>• Non-urgent medications should be charted by the doctor involved in the patient's on-going care to ensure prescribing is indicated.</li> <li>• Review rosters within ED to ensure staff maintain exposure to caring for babies.</li> </ul>	<ul style="list-style-type: none"> <li>• In progress – recently completed investigation.</li> </ul>

Title	Findings	Recommendations	Follow up
Broken arm sustained during restraint	<ul style="list-style-type: none"> <li>• Delay to an effective intervention to address an escalating manic episode.</li> <li>• Conflicting message within mental health guideline used in the Emergency Department (ED), with regard to administering sedating medication versus use of non-medication interventions.</li> <li>• Possible concern that combination of medications could cause excessive sedation. Mental Health team believed they were required to wait an hour between medications however this did not apply to oral doses.</li> <li>• The ED health care assistant (HCA) who was observing the patient was in a vulnerable position and had no clear plan to escalate concerns.</li> <li>• During the restraint process, the patient fell and the focus of security was to protect the patient's head. It was unclear what type of hold was used during the fall.</li> </ul>	<ul style="list-style-type: none"> <li>• Review 'Management of Adults with Severe Behavioural Disturbance' guideline and make an emergency box of medication used in rapid tranquilisation readily available.</li> <li>• Opportunity for joint in-service learning around guideline between ED, Mental Health, security and pharmacy.</li> <li>• Review content of security restraint training to ensure that in a similar scenario the correct hold would be used.</li> <li>• Personal alarm for ED HCAs who are observing potentially agitated patients to be introduced.</li> <li>• ED medical staff should be involved if a patient's behaviour begins to escalate.</li> </ul>	<ul style="list-style-type: none"> <li>• A medication box for emergency use for patients who are severely behaviourally disturbed is now available.</li> <li>• Process in place for ED HCAs to be provided with an alarm to escalate their concern. These alarms have proven to be very effective on multiple occasions.</li> </ul>

### Summary of falls causing patient harm:

Injuries suffered by patients when they fall are the most common ones in the hospital. Falls cause more minor, moderate and severe injuries than any other type of reported incident. In this year's report, 27 patients were seriously injured after a fall. These injuries included significant head injuries, broken bones and skin lacerations that required stitches. Each of the 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 ongoing work to ensure accurate and timely assessment of falls risk and reliable implementation of falls prevention interventions.

Over the last two years, there has been a large reduction in the number of falls leading to broken hips. Prior to November 2015, in-hospital falls leading to broken hips were occurring once per month, this has reduced to an average of once every three months.