Wairarapa, Hutt Valley and Capital & Coast District Health Boards
Serious and Sentinel Events Report: 2013-2014

Wairarapa, Hutt Valley and Capital and Coast District Health Boards (DHBs) have been working closely to improve the quality of care that we provide to our three communities. During the period 1 July 2013 to 30 June 2014 Wairarapa and Hutt Valley DHBs reported 15 Serious and Sentinel events (SSEs) and Capital and Coast DHB 21. These SSEs occurred in our hospitals and health services and were reported to the Health Quality and Safety Commission as required by national Reportable Events policy requirements.

Each of the reported events involves a patient suffering harm or death while in our care. We consider one event of this nature one too many, and apologise unreservedly to the patients and family/whanau involved in these cases. We acknowledge the distress and grief that occurs for patients and their families/whanau when things go wrong in healthcare.

We always seek to learn from these events and improve safety. Working together as a sub-region provides an opportunity to learn from each other and utilise our different areas of expertise to best support quality and safety issues. In order for this to happen, we depend on events being reported by the people involved. A strong safety culture means that patients and their family/whanau, other health providers such as family doctors and primary health nurses, and our own staff tell us when an incident has occurred and raise concerns, so that we can look into what has happened.

Continually strengthening our culture of patient safety and quality is a top priority for the three DHB’s. We are all committed to working with patients and family/whanau when things go wrong ensure that their concerns and needs are addressed and supported, that they are included in the process of the review.

Our practice is to communicate openly with patients and family/whanau at all times, including when adverse events occur, to acknowledge what has happened and to apologise. We will listen to concerns, provide support, involve patients and family/whanau to the degree they prefer, and where possible answer their questions and address any concerns that they have.

When reviews result in recommendations for changes and action, we ensure that these are followed up and implemented. In this way we aim to achieve our priority of Zero Patient Harm which forms part of our overall quality improvement and patient safety programme of work. This is one of six priorities linked directly to our Sub-Regional vision of “quality hospital care and complex care for those who need it”, the Triple Aim outcome of “Improved quality, safety and experience of care” and the Government goal of “New Zealanders living longer, healthier more independent lives.

The top 3 SSE themes reported to the Health Quality and Safety Commission across the three DHB’s are:

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NB: 3 additional reviews for WDHB/HVDHB under separate categories.

**Clinical Processes** events reported this year include unexpected deterioration where the patient became suddenly and unexpectedly unwell, missed diagnoses where the patient’s health condition had not been correctly recognised and treated, and a retained surgical item where a piece of surgical equipment was left in the patient and this was not identified immediately.
Patient Falls events include falls in hospital involving a fracture or other serious harm. We know that falls have a social, psychological, physical and economic impact on our patients and their family/whanau.

While it is not possible to stop every patient from falling when in hospital, many falls can be prevented. Our Falls Prevention Groups are actively working to reduce the number of patient falls and prevent the harm that can occur from a fall. Our ongoing work to prevent falls and harm from falls is aligned closely to the Health Quality and Safety Commission’s national patient safety campaign “Open for Better Care”. One focus of the campaign has been the prevention of harm from falls. The six Central Region DHBs trialled a falls signalling system and this is now part of an overall standardised falls prevention strategy in use across all adult inpatient areas.

Medication is very often an important part of a patient’s therapy. However all medications carry risks and some have significant risk of patient harm, and must be prescribed, given, monitored and taken very carefully. Some of the events reported in this period relate to Warfarin, Fentanyl and Ketamine. We have a range of improvement work related to high risk medications and day to day medication safety in progress including; Warfarin safety, Opioid safety, Insulin safety and Safe prescribing. All of this improvement work is aimed at increasing the safe use of medications for our patients.
Category: Clinical process  Deceased: Y  SAC Rating: 1

Event Summary: Cardiac patient – concerns that observations were not completed or were incomplete and that clinical review was indicated, however same was not initiated. Sudden patient deterioration. Despite transfer to the Intensive Care Unit, the patient suffered a cardiac arrest and deceased.

REVIEW

Key findings:
The review team identified that Early Warning Score (EWS) observations were not completed regularly or calculated well and consider that, if this had been done, an earlier review of the patient should have been initiated. It is not possible to determine if the outcome for the patient would have been different however the opportunity for earlier interventions was missed. The review team consider that the failure to detect the patient’s deterioration was multifactorial and included: non-appreciation as to the significance of (new) acute renal (kidney) failure, a hyperkalaemia (high potassium) put down to haemolysis (break down of cells in the blood sample) but this was still treated, a failure to record regular vital signs, calculate the EWS and initiate the indicated medical review as per protocol (CCDHB Essential Vital Signs, the Early Warning Score and Escalation protocol), and no documentation of urine output as a response to a diuretic or as a marker of illness. The review team identified concerns about nursing practice and documentation including failures to record vital signs and calculate and action the EWS, failure to document fluid balance and failure to complete the Patient Admission to Discharge Planner (PADP). The review team’s opinion is that had they been used; the EWS would have resulted in earlier medical review and intervention, the PADP would have improved handover and several factors, including the acute renal failure, would have been highlighted to the evening & night nursing staff. The review team were concerned that staff interviewed had completed the CCDHB ALERT (Acute Life Threatening Events – Recognition and Treatment) course and yet indicated that they were not aware of the EWS protocol.

Recommendations:
The review team recommended that CCDHB officially apologise to the patient’s family. The review team further recommended:

- The DHB revise the EWS protocol to require a complete set of vital signs (including an EWS calculation) to be obtained 4 - 6 hourly for the first 24 hours of all acute admissions unless documented otherwise by the admitting medical officer.
- The DHB revise the PADP policy to require the PADP pathway to be completed within 8 hours (rather than 24) and compliance with this should be audited monthly for 6 months.
- The ALERT course be reviewed to ensure it aligns with current teaching on the use of EWS within CCDHB and the escalation pathway for deteriorating patients.
- Fluid Balance Chart should be initiated as a default whenever a stat (non-regular) diuretic (medication that increases urine output) or any intravenous fluid bolus is administered, with associated audit and education.
- A practice change protocol be developed to require manual sphygmomanometers (blood pressure machines) to be used in all patients with known atrial fibrillation (AF), or, if automated oscillometric blood pressure devices are used, three sequential readings should be obtained and the mean of these three results documented.
- That the use of serial blood laboratory charts is reviewed where they are in use, so that there is a clear standard process as to who completes them and how they are set out such as to include normal values beside each parameter and to change the order to match that of the hospital laboratory system to minimise the risk of transcription error.

Recommendations progress (i.e. action plan):
The DHB formally apologised to the family. The EWS protocol and PADP protocols were amended as recommended. The ALERT course now incorporates EWS training. The Fluid Balance Chart project, practice change for recording of blood pressure and revision of serial blood laboratory charts project are in progress.
Category: Clinical process  Deceased: Y  SAC Rating: 1

Event Summary: Patient admitted to ward with diarrhoea thought to be secondary to radiotherapy. Patient passed away unexpectedly on the ward. Complaint to DHB prompted review of event.

REVIEW

Key findings:
The review indicated areas of concern regarding the severity of the patient’s condition not being realised. Potential treatment opportunities may have been missed although they may not have changed the ultimate outcome. It appeared patient experience at minimum could have been improved and communication with the patient and the family was sub-optimal.
The review team consider that the factors that contributed to this event were:

- When the patient’s clinical condition and observations indicated escalation for more senior medical review to be initiated, this did not occur,
- There was a lack of routine Senior Medical Officer (consultant doctor) review of patients over weekends,
- Small bowel obstruction was not recognised on an abdominal x-ray image. The x-ray had been reported, identifying findings in keeping with small bowel obstruction, but this report was not available to the clinical team until after the patient’s death,
- Requests by the patient’s family for discussion with medical staff were not communicated.

The combination of the above factors led to missed opportunities for earlier detection of the patient’s clinical problem. While it is not possible to conclude that the outcome (i.e. the patient’s death) could have been averted, the opportunity to intervene, manage the bowel obstruction, and improve the patient’s comfort was missed.

Recommendations:
The review team recommended that CCDHB officially apologise to the patient’s family. The review team further recommended:

- Review of Radiation Oncology Senior Medical Officer (SMO) duties when on call including weekends (including RMO cover).
- Ward to implement regular audit of Early Warning Score (EWS) and other chart compliance and report same.
- Ward to develop plan to develop and strengthen staff communication skills.
- Radiology to improve guidance to RMOs (Resident Medical Officers aka junior doctors) on how to access service after hours.
- Learning from the case to be shared with DHB staff.

Recommendations progress (i.e. action plan):
The DHB formally apologised to the family. The directorate is currently reviewing Radiation Oncology SMO duties when on call to ensure appropriate senior oversight of patients occurs. The ward has implemented regular audits and these are reported through normal reporting lines. The ward has actioned a plan to develop staff communication skills. Radiology has updated guidance for RMOs and included this in their orientation.
Category: Patient falls  
Deceased: N (has subsequently deceased)  
SAC Rating: 2

Event Summary: Inpatient fall on ward resulting in fractured rib.

REVIEW

Key findings:

Preliminary event review identified that nursing staff completed a reportable event at the time of the event and rated it severity 4 (lowest severity). This was subsequently changed to severity 2 once the fracture was diagnosed. The review identified that:

- The patient was transferred from a medical ward to a rehabilitation ward after diagnosis of and treatment for pneumonia.
- The Patient Admission to Discharge Planner (PADP) falls risk assessment and interventions were commenced on the medical ward. The patient was identified as a falls risk with factors such as age and being unwell however there had been no history of previous falls.
- PADP updates were documented; the patient was initially able to transfer to the commode with assistance when acutely unwell. After physiotherapy input on the rehabilitation ward the patient was able to mobilise with a frame independently.
- The patient had a falls risk assessment completed on the day of transfer and a reassessment 15 days later. Fall minimisation strategies were in place, e.g. orientation to the environment, bed and chair at appropriate height, patient used mobility aid, call bell in reach, brakes on the bed at all times.
- The patient was found by a health care assistant lying on the floor beside the bed. The patient had blacked out after standing up from the bed (vasovagal episode or faint). The episode was investigated by medical team.

Recommendations:

The preliminary event review recommended that the findings be tabled at the appropriate directorate quality forums, that the event be notified to the Health Quality and Safety Commission (HQSC) as a SAC 2 event, and that the DHB continue the ongoing improvement work related to reducing the incidence of falls and audit of PADP completion.

Recommendations progress (i.e. action plan):

The findings were tabled at the directorate quality forums, the event was notified to HQSC and the DHB Falls Prevention Group’s improvement work continues as does audit of PADP completion.
Category: Patient falls  
Deceased: N  
SAC Rating: 2

Event Summary: Inpatient fall on ward resulting in an intertrochanteric hip fracture, a skin tear to the elbow and a head injury.

REVIEW

Key findings:

Preliminary event review identified that nursing staff completed a reportable event at the time of the event. X-Ray imaging on day of fall confirmed a right intertrochanteric hip fracture.

- The patient was admitted with previous falls at home, a urinary infection and a right subdural (brain) bleed and later transferred to a rehabilitation ward.
- The Patient Admission to Discharge Planner (PADP) falls risk assessment and interventions were commenced on admission and reassessed and continued in rehabilitation ward.
- The patient was identified as being a falls risk and the following interventions were in place.
  - Patient watch (cohorting [keeping together] three other patients in the same room)
  - Green wrist band
  - High visibility room adjacent to the nurses’ station and adequate night lighting.
  - Bed rails.
  - Bed and chair at an appropriated height.
  - Call bell within reach at all times.

The Health Care Assistant had just repositioned the patient and was returning to sit down when the patient climbed out of bed and slipped, landing on her right side.

Recommendations:

The preliminary event review recommended that the findings be tabled at the directorate quality forums, the Assistant Director of Nursing meet with the Charge Nurse Managers to discuss the current processes in place when using Health Care Assistants as a watch, all senior nursing staff to observe and utilise guidelines in the revised Observation and Engagement Patient Watch policy, that the event be notified to the Health Quality and Safety Commission (HQSC) as a SAC 2 event, and that the DHB continue the ongoing improvement work related to reducing the incidence of falls.

Recommendations progress (i.e. action plan):

The findings were tabled at the directorate quality forums, the processes for use of HCAs as a watch were followed up, education was completed with staff regarding guidelines, the event was notified to HQSC and the DHB Falls Prevention Group’s improvement work continues.
Category: Patient falls  Deceased: N  SAC Rating: 2

Event Summary: Inpatient fall on ward resulting in a fractured distal radius (one of the bones between wrist and elbow).

REVIEW

Key findings:
Preliminary event review identified that nursing staff completed a reportable event form at the time of the event and rated it severity 4. This was subsequently changed to severity 2 once the fracture was diagnosed. X-Ray imaging confirmed a fractured left distal radius.

- The patient was transferred from a medical ward to a rehabilitation ward following a surgical repair of a hip fracture, with a likely stroke with residual one sided weakness.
- The Patient Admission to Discharge Planner (PADP) falls risk assessment and interventions were documented on admission. The patient was identified as a falls risk and fall prevention strategies were in place.
- PADP updates were documented; the patient had been reassessed by the physiotherapist as able to mobilise with a walker and the assistance of one person, these guidelines were also documented on the daily ward list.
- The patient mobilised with walking frame and one person assisting to the toilet. The patient turned suddenly and the weak foot caught behind the other foot. The patient fell backwards and sideways and landed on her left hand.

Recommendations:
The preliminary event review recommended that the findings be tabled at the directorate quality forums, that the event be notified to the Health Quality and Safety Commission (HQSC) as a SAC 2 event, and that the DHB continue the ongoing improvement work related to reducing the incidence of falls and completion of PADP.

Recommendations progress (i.e. action plan):
The findings were tabled at the directorate quality forums, the event was notified to HQSC and the DHB Falls Prevention Group’s improvement work continues as does audit of PADP completion.
Category: Patient falls  Deceased: N  SAC Rating: 2

Event Summary: Inpatient fall on ward resulting in hip fracture.

REVIEW

Key findings:

Preliminary event review identified that the elderly patient was an acute medical admission. Five days after admission the patient had been moved to a monitored bed in the safe care bay after being found getting out of bed. The fall occurred the following day. Just before the fall the patient was seen on the nursing station monitor standing at the end of the bed then falling to the ground. The patient complained of severe pain in right hip and leg. Medical review was undertaken – x-ray ordered and fracture diagnosed. Nursing staff recorded a reportable event - Severity 2.

The preliminary event review showed that the falls risk assessment and risk controls were in place for the patient from the day of admission and these had been reviewed and updated during the Inpatient stay. The patient was in a high visibility bed with a camera. The falls assessment and PADP plan had been completed and updated. Fall mitigation strategies were in place. Appropriate actions were taken when the fall occurred.

Recommendations:

The preliminary event review recommended that the findings be tabled at the directorate quality forums, that the event be notified to the Health Quality and Safety Commission (HQSC) as a SAC 2 event, that the Associate Director of Nursing and ward Charge Nurse Manager revise the use of the camera monitored bed and that the DHB continue the ongoing improvement work related to reducing the incidence of falls.

Recommendations progress (i.e. action plan):

The findings were tabled at the directorate quality forums, the event was notified to HQSC, the use of the camera monitored bed was reviewed and the DHB Falls Prevention Group’s improvement work continues.
Event Summary: Patient on immuno-suppressants attended Clinic complaining of a painful, red eye. The patient was assessed and discharged with a diagnosis of conjunctivitis. The patient re-attended two days later with no improvement in that eye and development of headache. Diagnosed with endophthalmitis and urgent referral made to Ophthalmology (eye specialist).

REVIEW
Key findings:
The review team’s overall conclusion, recognising that this is made with a degree of hindsight and with knowledge of the outcome, is that on the first presentation, the patient’s loss of vision indicated an urgent referral to Ophthalmology was required. The patient’s loss of eyesight was not noted or fully reviewed by the examining doctor and if this had occurred it is more likely the diagnosis and referral to eye specialists would have resulted on the first attendance. As a result there was a two day delay in referral and treatment. A contributing factor was that while the loss of eyesight was detected and documented during triage (initial assessment on arrival by a nurse); this was not verbally communicated to the examining doctor. The review team did not identify any concerns with the patient’s care on the second presentation. The referral was prompt and without barriers on the detection of blindness.

Recommendations:
The review team recommended that the DHB apologise to the patient and family for the delay in diagnosis, referral and treatment. Further recommendations were:

- Emergency Eye Examination education for relevant nursing and medical staff be completed.
- The creation of an Eye Examination Checklist that can be used to standardise the emergent eye examination be considered. The checklist should also include a process for escalation and referral of critical eye conditions.
- The Clinic develops a system in order to ‘red flag’ major concerns found at triage to the attending doctor (separate to the accorded triage status).

Recommendations progress (i.e. action plan):
The DHB provided a formal apology to the patient and family. Education regarding the Emergency Eye Examination is ongoing. The Eye Examination Checklist was considered by the clinical and service leads. Awareness of the emergent eye condition was shown to be high and the practitioner who assessed the patient on first presentation has attended a conference with a focus on acute eye presentations. The Clinic has implemented the red flag system.
### Category: Patient falls  
**Deceased:** Y  
**SAC Rating:** 2

**Event Summary:** Inpatient fall on ward resulting in displaced fracture of the humeral head (upper arm).

**REVIEW**

**Key findings:**

Preliminary event review identified that the patient had a complex history with multiple medical comorbidities and was an acutely unwell medical admission presenting with onset shortness of breath, a possible chest infection and congestive heart failure. The patient spoke another language and had little understanding of English. Family and interpreters were used to communicate with a chart of key words in the patient’s language and in English. The patient was admitted under general medicine to the Assessment Unit then transferred to a medical ward with full multidisciplinary team review including social needs. Five days later the patient was transferred to a rehabilitation ward with deteriorating cognitive (brain) function, urinary control and mobility. In relation to falls risk:

- On admission identified as a falls risk and fall prevention strategies put in place. The care plan included fall strategies and was updated on days 5 and 7 post admission.
- One person assistance with mobilisation was in place.
- The fall was witnessed. The patient stood up from bed and tripped over a foot stool, landing on the floor on her shoulder. Medical review requested x-ray which showed displaced fracture of left humeral head.
- A collar and cuff was put in place and analgesia given. Referred to Orthopaedics.
- A reportable event was recorded by nursing staff the same day – Severity 2.

The falls risk assessment was completed and updated three times, falls risk controls were in place. Risk factors such as language were managed to try to minimise the risk of the patient not understanding/not complying with safety controls. Concerns about the patient’s condition were notified and responded to appropriately. All appropriate actions were taken when the fall occurred.

**Recommendations:**

The preliminary event review recommended that the findings be incorporated into the ward, Directorate and DHB “Preventing Harm from Falls” programme. No further review indicated.

**Recommendations progress (i.e. action plan):**

The findings were tabled at the directorate quality forums, and the DHB Falls Prevention Group’s improvement work continues.
Event Summary: Patient with chronic renal failure admitted after a fall at home, nil fractures but unable to mobilise. Developed urinary infection and pneumonia, treated with antibiotics. Acute on chronic renal failure - developed hyperkalaemia (high potassium). Treated with calcium and dextrose/insulin infusions (x 2). Patient found asystolic (no heart rate). Resuscitation attempted. Blood glucose levels found to be low. Patient deceased. Review of blood glucose monitoring indicated.

Key findings:

The review team consider that blood glucose levels were not taken during the second dextrose-insulin infusion and did not follow exact guidelines for during the first infusion. The review team identified that there were extenuating reasons for this including short staffing on the ward over the night duty, inexperience of the primary nurse with medical conditions and the medical ward, limited orientation to the ward and its processes both in general and for night duty, and high patient acuity and numbers. This resulted in the primary nurse being unfamiliar with ward processes such as options for obtaining assistance from outside the ward environment and not being aware of the guideline for management of hyperkalaemia on the ward. The review team also consider that the primary nurse overall looked after the patient well and to the best of her ability given the above issues. The review team also noted there was limited communication between the night House Officer (junior doctor) and primary nurse and that if issues of understaffing and low blood sugar levels had been communicated, escalation to a senior medical officer (consultant doctor) may have been considered. The review team additionally note that since this event there have been significant improvements in the ward staffing model and model of care.

Recommendations:

The review team recommended that the DHB formally apologise to the family of the patient. The review team also recommended:

- The DHB review the orientation of staff to wards, especially in regard to inexperienced staff versus new but experienced ward staff for both general orientation and night duty.
- The Ward orientation book be updated to reflect:
  - Resource folder of medical conditions and its location
  - Patient at Risk (PAR) Team
  - Duty Manager and hospital resource nurse availability
- Education on the management of hyperkalaemia continues to be incorporated into the ward programme of education.

Recommendations progress (i.e. action plan):

The DHB provided a formal apology to the family of the patient. Review of orientation of staff to wards is being led by the Director of Nursing and Midwifery and is in progress. Update of the ward orientation book is in progress, and education of staff on management of hyperkalaemia has been completed.
**Category:** Patient falls  
**Deceased:** N (has subsequently deceased)  
**SAC Rating:** 2

**Event Summary:** Inpatient fall on ward two days post medical admission whilst mobilising to the toilet independently. Fractured acetabulum (hip) resulted.

**REVIEW**

**Key findings:**

Preliminary event review identified that:

- The Patient Admission to Discharge Plan (PADP) falls risk assessment was completed on the night the patient was admitted to the ward.
- Falls prevention strategies were not documented despite the patient being identified as a falls risk and clinical notes indicating that the patient required supervision when mobilising especially to the toilet.
- The patient was nursed in a negative pressure single room secondary to isolation precautions.
- Falls prevention strategies were in place (but not documented). The primary nurse completed hourly rounds to monitor the patient’s urinary output and the call bell was given to the patient with advice to call for assistance if requiring the toilet.
- Use of a ‘special’ to watch the patient was not considered indicated due to the patient being settled and no indication that she had been trying to get out of bed.

**Recommendations:**

The preliminary event review recommended that the findings be incorporated into the ward, Directorate and DHB “Preventing Harm from Falls” programme. It was noted that there was currently falls education in progress on the ward and this would incorporate the findings of the review including the importance of documenting falls prevention strategies in place. The review further noted that the PADP had been recently updated with education regarding same. The review endorsed ongoing audit of PADP completion.

**Recommendations progress (i.e. action plan):**

The findings were tabled at the directorate quality forums, and the DHB Falls Prevention Group’s improvement work continues. Education incorporated the learning including the need for documentation of falls prevention strategies. Audit of PADP completion continues.
Category: Patient falls  
Deceased: N (has subsequently deceased)  
SAC Rating: 2

Event Summary: Inpatient fall on ward two days post medical admission whilst mobilising independently. Fractured ribs resulted.

REVIEW

Key findings:

Preliminary event review identified that:

- The patient was identified as falls risk. No falls prevention strategies were noted on the Patient Admission to Discharge Plan (PADP).
- Local policy states that the patient plan regarding falls risk and mobility be updated daily or if the patient’s condition changes. The plan had not been updated on the day the patient fell.
- The patient plan indicated a requirement for a patient watch for two consecutive days, two days before the patient fell. No completed watch request form was found in patient’s notes.
- The patient was moved to a 4 bedded room with increased supervision (a recently implemented process in the ward to reduce patient risk).
- It appears that the falls risk prevention strategy of “increased supervision” was documented as a “watch”, i.e. there was a lack of familiarity with the change in terminology and process.
- The patient plan noted that the patient required assistance with mobilising. However it was also noted that the patient was found to be wandering the halls and appeared confused.
- Eight nurses are on duty on the ward overnight. Two nurses were allocated to the 4 bedded room. In addition there was a “float” nurse to provide additional assistance when required.
- The ward Charge Nurse Manager confirmed that a nurse is expected to be present in the 4 bedded room at all times (to provide the increased supervision), but may have been attending to another patient at the time the patient fell.
- There was a discrepancy in notes as to whether the fall was witnessed. The House Officer noted that it was witnessed, the Nurse that it was not witnessed but heard.

Recommendations:

The preliminary event review recommended that the findings be incorporated into the ward, Directorate and DHB “Preventing Harm from Falls” programme. The review endorsed current work on the ward by senior nurses to develop a falls action plan, and the DHB’s ongoing audit of PADP completion. The Charge Nurse Manager has confirmed that patients in need of high level supervision are cared for in a 4 bedded room with a high nurse patient ratio, rather than requesting a patient watch. Monitoring by the senior nurse on duty, that this is occurring is part of the falls action plan.

Recommendations progress (i.e. action plan):

The ward falls action plan is complete and includes monitoring by the senior nurse on duty. Review findings were tabled at the directorate quality forums, and the DHB Falls Prevention Group’s improvement work continues. Audit of PADP completion continues.
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Category: Medication  Deceased: N  SAC Rating: 2

Event Summary: Patient post cardiothoracic surgery. Post operative epidural (bupivacaine and fentanyl) for pain relief. Patient Controlled Analgesia infusion (ketamine and fentanyl) was later prepared due to ongoing pain concerns. PCA infusion attached to epidural in error. Infused overnight until error discovered the following morning.

REVIEW IN PROGRESS

Review nearly completed at time of writing this report.

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Category: Medication  Deceased: Y  SAC Rating: 1

Event Summary: Patient prescribed and given 4 mg warfarin daily for a total of three days when dosage was supposed to be 2 mg warfarin daily. The patient deteriorated and despite stopping the warfarin and later reversing it, the patient suffered a large haemorrhagic stroke and subsequently deceased.

REVIEW IN PROGRESS

Key findings:
The patient was admitted with a fractured right humerus (upper arm) following a fall. The patient was treated medically and transferred to a rehabilitation ward the following day. Patient was on warfarin for atrial fibrillation (a heart condition). The review team identified that the patient received double the normal prescribed dose of warfarin for three days. A number of factors contributed to this error and to it not being subsequently detected sooner. Warfarin was not prescribed on admission when the patient's spouse, who managed the patient's medication, may have provided hospital staff with correct dosage information. The patient appeared competent and confirmed the (wrong) dose of 4mg daily to both a doctor and pharmacist when discussing and reconciling (cross checking) medication. Daily INR blood tests (International Normalised Ratio - a test of blood clotting time based on prothrombin time) were not done - these would have likely shown an elevated INR (increasing risk of the patient bleeding) sooner. The patient's warfarin bottle was used to reconcile (cross check) the medication but, for warfarin, the dose is not specified on the bottle and the effects of antibiotic interaction with warfarin were not taken into account.

When the error was identified the patient had become increasingly confused and, despite stopping the warfarin and later reversing it, the patient suffered a large haemorrhagic stroke and subsequently deceased.

Recommendations:
The review team recommended the DHB apologise to the patient's family. The review team noted that the DHB is in the process of developing and implementing a new warfarin medication chart, with a requirement for daily testing of patient's INR for all patients on warfarin unless directed not to do so by the patient's consultant. The review team endorsed the earliest completion of this work. The review team recommended the DHB investigate options to allow hospital clinicians to view primary care warfarin records, amend the preferred medicines list to reflect antibiotic interaction with warfarin and complete associated education of prescribers, and amendment of the Medicines Reconciliation policy to ensure medical staff are notified of difficulty reconciling medications, and that for warfarin use of the patient's medication bottle is not sufficient cross check, with associated education of pharmacy staff.

Recommendations progress (i.e. action plan):
The DHB has formally apologised to the patient’s family. The Medicine Reconciliation form has been amended to include the questions “Who manages your medications?” and “Who manages your warfarin?” Other recommendations work is ongoing.
Category: Patient falls  Deceased: N  SAC Rating: 2

Event Summary: Fall with serious harm – intertrochanteric fracture of left hip.

REVIEW

Key findings:
The review team considered that this fall was difficult to prevent. The patient’s falls risk was assessed and, while controls were in place, the planning for patients who urinate on the floor, the hourly visual checking of patients and review of patients with postural hypotension could be improved. Earlier medical review could have occurred and the patient should not have been returned to bed as an injury was suspected.

Recommendations:
The review team has made recommendations relating to:

- Standardised care plan for all clients who urinate in inappropriate places.
- Implementation of a urinary void chart.
- Referral of all clients identified as high falls risk or having an unsteady gait to a physiotherapist as standard on admission.
- Weekly physiotherapy team liaison.
- Provision of strengthening exercises to clients following physiotherapy recommendations.
- Implement postural hypotension monitoring for all clients who take medications causing this side effect.
- All nursing and allied staff required to read the CCDHB Falls policy.
- Clinical Nurse Specialist to provide regular staff education sessions on the CCDHB Falls policy.
- Extension of sleep monitoring charts to include visual checking of patients at 0700hrs by night staff.

Recommendations progress (i.e. action plan):
The care plan directing two hourly toileting, urinary void chart and extension of sleep monitoring charts have been implemented. Input from Physiotherapy and Occupational Therapy is now in place. Staff education regarding the Falls policy has been completed.
Category: Patient falls  Deceased: Y  SAC Rating: 2

Event Summary: Patient fall. Neurological deterioration. CT showed large brain bleed and undisplaced skull fracture. Consulted with neurosurgery; decision made with family for palliative treatment with comfort cares. Patient deceased.

REVIEW

Key findings:
The elderly patient had a history of metastatic melanoma and had prostate surgery. The patient suffered a fall during the evening of the second day after surgery. The fall resulted in cerebral bleeds and the patient died subsequently.
The review identified that from admission to ward, following the surgical procedure, compliance with existing DHB policies to assess the patient’s risk of falling and associated screening were either not completed or poorly completed. The review team also identified that escalation to a senior nurse and/or doctor may have identified the patient’s injury earlier and may have provided an alternative management plan. Communication with the patient’s family regarding the fall should have occurred in a more timely way. The review team were unable to determine if the bleed (haematomas) in the brain led to the fall or the fall led to a bleed.

Recommendations:
The review recommended:
• Monthly auditing of ward Patient Admission to Discharge Plan (PADP) compliance to be completed and supplied directly to the Directorate Associate Director of Nursing for review and follow up
• Notification to the Early Warning Score (EWS) policy group to identify all variations of the EWS forms, and how staff can locate them for use.
• Removal of historic neurological observation charts from circulation and practice.
• Audit of all inpatient areas to identify and remove all hard copies of expired policies.
• The DHB remind staff to use CapitalDocs (electronic document management system) to ensure accessing current controlled documents only.
• Notification to the Registrar on-call of all falls resulting in an increased level of monitoring.
• Reinforcing with staff the importance of notifying a patient’s family at the earliest opportunity when an adverse event occurs. The review team noted that this issue had recently been brought to the attention of staff by the Patient Safety Officer newsletter.
• Organisation wide communications to occur when organisation wide policy is removed from central policy portal CapitalDocs.
• All new House Officers (junior doctors) are orientated to the DHB escalation pathways.

Recommendations progress (i.e. action plan):
Action plan is in progress. The ward completes monthly audits of the Patient Admission to Discharge Plan compliance. Results are provided to the Directorate’s Associate Director of Nursing for review and follow up. The “Early Warning Score Escalation-Adult Inpatient” policy 1.3091 has been amended. The historic neurological observation charts have been removed from circulation. Direct electronic access to specific policies by service is being undertaken and hard copied policies removed as completed. CCDHB staff instructed to use CapitalDocs to ensure they are accessing current controlled documents only (statement on policy document as well). CCDHB ensures processes are in place to improve the frequency of review aiming to keep policies up to date. Introduced “policy moves” to ensure clear communication of policy changes, removal etc. CCDHB ensures that all House Officers receive the same standard of baseline orientation regardless of whether they start during the group intake or mid year. This should include key escalation pathways such as PAR service, Duty Nurse Managers and Shift coordinators within the organisation. Lessons from this case to be included in the House Officer Orientation. The family have been contacted and a formal written apology and offer to meet with them has been extended, along with the report.
Event Summary: Child presented to the Emergency Department on consecutive days. Diagnosed with viral illness. Four days later the child presented in septic shock and with seizures. Diagnosed with meningitis and admitted to the Intensive Care Unit. Subsequently transferred to Starship Children's Hospital with cerebral empyema (collection of pus and fluid). The child suffered significant brain injuries and has been left with permanent disabilities.

REVIEW

Key findings:

The review team extended their sincere sympathies to the child’s family and recognise the long term impact that this child’s disabilities will have on the child and family. The review team recommend CCDHB apologise formally to the patient’s family, provide a copy of the review report (translated) and give them an opportunity to meet to discuss as desired.

The review team considered that in children less than three months of age there should be a very low threshold for a septic work-up. This child was at the cusp of the age at which some more senior clinical consultation should have been obtained regarding further investigations. The review team consider that as a consequence of more senior clinical consultation not being engaged in this sequence of events, the opportunity for earlier intensive diagnostics, diagnosis and treatment was missed. The review team did not consider individual clinicians directly responsible for the lack of more senior clinical engagement. Rather the review team consider the main contributing factor to this incident was a lack of formal DHB processes regarding paediatric senior medical staff oversight of paediatric junior medical staff, clinical assessments and discharge planning. The review team considered a requirement for children representing within 72 hours to be assessed by a more senior medical staff member is indicated.

Recommendations:

The review recommended:

- Development of a Paediatric guideline setting out the role and responsibilities of the House Officers and Registrars regarding assessment and discharge responsibilities, and requiring all House Officers to have discussed their plan of care with a Registrar prior to discharge.
- The Paediatric Clinical Leader requires all Paediatric medical staff to read and sign off on or complete a test on the "NICE Guideline: feverish illness in children- assessment and initial management in children younger than 5 years" (UK National Institute for Clinical Excellence).
- Adherence and modifications to the DHB Children’s Acute Assessment Guideline and to now state that any child who represents within 72 hours must be assessed by the Paediatric Registrar or senior Emergency Department (ED) Registrar/Consultant, prior to discharge from either ED or Children's Acute Assessment Unit.

Recommendations progress (i.e. action plan):

All recommendations have been actioned and completed. Family have been contacted and a formal written apology and offer to meet has been extended along with the translated report.
Event Summary: Retained item. Patient required emergency surgery for obstructing bowel cancer. Eight days after the surgery an X-ray confirmed that the anvil part of the End to End Anastomosis stapler (EEA Stapler) used during the surgery was still in the pelvis.

REVIEW
Key findings:
A patient required surgery for bowel obstruction. During surgery (which occurred outside of usual working hours) a piece of instrumentation – the EEA Stapler - became separated into two parts. One part was inadvertently retained in the patient. The incident was not realised post procedure or when the instrument was visible on an X-ray taken four days after surgery. The incident was identified eight days after surgery when found incidentally on X-ray whilst determining the cause of the patient’s abdominal pain. Surgery was scheduled to remove the instrument however the patient passed it spontaneously before the surgery. The instrument is a stapler comprising two parts - anvil and handle. The anvil compresses when the stapler is fired and an anastomosis is formed. Firing produces two donut-shaped pieces of tissue.

The review team found:
- The instrument count sheet did not include recording donuts, anvil or handle.
- On the firing of the second stapler the second set of donuts were not checked or counted and it was not realised that the anvil had separated from the handle. The handle was removed but the anvil remained and was, as a result, retained.
- To check the donuts, the anvil needs to be sighted.
- There was no check that the stapler components were accounted for at the end of the procedure.
- A radiology report four days post op showed and described the metallic object in the body of the report but this was not also reported in the “impression” section of the report. This did not result in identifying the incident.
- Surgical Registrar review of the radiology report was of only the impression prior to sign-off.

Recommendations:
The review recommended:
- The instrument count is to be amended to include all staplers and all their parts.
- National learning report to be developed and circulated
- Donuts are to be sighted and recorded in the operation record for each anastomosis.
- Whenever possible the Surgical Registrar (or SMO) operates the EEA stapler.
- In relation to radiology reports, Radiology identification of all metal objects is formally noted in the impression part of radiology reporting and Doctors should sight the entire radiology report, and preferably image/s, and not just the summary of the report before sign off.

Recommendations progress (i.e. action plan):
The instrument count has been amended to include staplers and their parts. A national learning report was sent to all DHBs and via Health Quality and Safety Commission to private surgical providers to share the learning from this event and reduce the chances of a similar event occurring in New Zealand. As far as reasonably practicable, surgical registrars should operate staplers during acute surgery. Doctors are to sight the entire radiology report, and preferably view radiology image/s, and not just the impression (summary) of the report prior to signing off the report. Radiology identification of all metal objects should ideally be noted in the impression part of radiology reporting, remembering that this isn’t necessarily practical in every patient and indeed could be counterproductive as it would lead to very lengthy impressions which are meant to be summaries. Patient has been contacted and a formal written apology and offer to meet has been extended along with a copy of the report.
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**Event Summary:** Patient with a history of anti-phospholipid syndrome (a condition that results in a high risk of the patient forming blood clots) required elective urology surgery. After pre-assessment, a plan was developed for warfarin and clexane management (medications that reduce the chances of blood clots). The plan was not actioned. The patient was readmitted after surgery with catastrophic anti-phospholipid syndrome (widespread clotting) resulting in permanent adrenal insufficiency and possible brain injury. The event review process was initiated as a result of a complaint received four months later.

**REVIEW**
Review is in progress.

**Event Summary:** Patient fall including hitting head. Medical review and observations after the fall indicated no change in condition. Subsequent deterioration 5.5 hours later. CT scan confirmed a subdural haemorrhage (brain bleed). The patient later deceased.

**REVIEW**
Review is in progress.

**Event Summary:** Post partum haemorrhage (bleed after birth of a baby) >1500mls of blood, requiring urgent transfer from primary birthing unit to a tertiary unit.

**REVIEW**
Review is in progress.

**Event Summary:** Booked delivery (birth) for Wellington Hospital (WRH) diverted to primary birthing unit at Kenepuru Hospital as WRH Obstetric Service workload has reached capacity. Baby needed resuscitation at birth, was attended by the Neonatal Intensive Care Unit (NICU) retrieval team and transferred to WRH NICU. The woman was transferred to WRH post delivery by ambulance and required repair of episiotomies in theatre under spinal anaesthetic.

**REVIEW**
Review is in progress.