

## Waikato DHB Serious and Sentinel Events occurring between July 2005 and June 2006

Event Severity	Description	Review Findings	Recommendations / Actions	Follow-up
<b>Sentinel</b>	<p><b>Delayed Treatment</b> Patient admitted for acute symptoms. On discharge patient was referred to hospital specialty service for follow up but the referral was not received. Patient re-presented 11 months later with cancer.</p>	<ul style="list-style-type: none"> <li>• Doctor who viewed patient's abnormal blood results on the first admission signed off the results but did not action them.</li> </ul>	<ul style="list-style-type: none"> <li>• All faxed referrals to be stamped "Faxed" and signed and dated by the sender</li> <li>• All referrals to be followed up by the referrer or delegated staff member</li> <li>• Staff to ensure patients are advised to inform hospital if appointments are not received in a timely manner</li> <li>• Staff to clearly documented in the clinical record information given to patient</li> <li>• Audit to be completed 3 monthly to monitor compliance with these actions</li> <li>• To discuss with medical staff the responsibility for follow up of blood results and importance of clear documentation of the same</li> </ul>	<ul style="list-style-type: none"> <li>• Meeting with Medical staff confirmed that relevant information is being provided to patients.</li> <li>• Discharge documentation audited.</li> <li>• Doctors stamp all results and document action taken to be taken. Results are returned to requesting doctor to ensure follow up.</li> </ul>
<b>Sentinel</b>	<p><b>Thames Hospital Power Outage</b> Extreme weather caused power outage to town and surrounds. Hospital on emergency power. Generator failure resulted in extended electricity and communications outage.</p>	<ul style="list-style-type: none"> <li>• Power provider did not prioritise reinstatement of power to hospital</li> <li>• Thames Hospital did not have emergency contact numbers for, or primary relationship with, the lines network</li> <li>• No direct communication between the power provider and Thames Hospital Incident Controller, resulting in the Incident Controller being unaware of the estimated duration of the power failure</li> <li>• Patients referrals from other hospitals and GPs continued</li> </ul>	<ul style="list-style-type: none"> <li>• Contact power company requesting written priority arrangements</li> <li>• Document contact tree for emergency events</li> <li>• Update emergency plans to notify GPs and other hospitals, and include extended power outage scenarios</li> <li>• Plan for installation of uninterrupted power supply (UPS) for critical items in priority areas across the DHB as appropriate</li> <li>• External agency to conduct an appraisal of the electrical reticulation at Thames Hospital and provide a report</li> </ul>	<ul style="list-style-type: none"> <li>• All actions completed</li> </ul>

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		<p>when hospital on emergency power</p> <ul style="list-style-type: none"> <li>Emergency Plans did not include plans for extended power outage scenarios</li> <li>Staff were not aware of which equipment needed to be on Uninterrupted Power Supply (UPS)</li> </ul>		
<b>Sentinel</b>	<p><b>Inadequate Standard of Care</b>  Patient presented to hospital with chest pain radiating to neck and left arm. Admitted to ward and put on Lifepack equipment to monitor patient's heart rate. Patient went into full cardiac arrest. Lifepack did not alarm. Patient deceased.</p>	<ul style="list-style-type: none"> <li>Lifepack not plugged in and battery low</li> <li>Staff member unfamiliar with Lifepack equipment</li> <li>No written parameters for complexity of patient that designated levels of nurses are authorised to look after.</li> <li>Cardiac arrest managed as per protocol</li> </ul>	<ul style="list-style-type: none"> <li>To ensure all staff members have clearly documented scopes of practice</li> <li>To ensure all ward staff trained to use all equipment correctly</li> <li>Staff orientation to include sign-off of competency in using all equipment.</li> <li>Staff education sessions to be held at regular intervals re use of equipment</li> <li>Equipment to be checked at initial set up of equipment and at the beginning of each shift</li> </ul>	<ul style="list-style-type: none"> <li>Scopes of practice documented for all clinical staff</li> <li>Inservice education held on lifepack equipment</li> <li>Equipment checks implemented</li> <li>Staff orientation includes use of equipment</li> </ul>
<b>Serious</b>	<p><b>Patient Fall</b>  Patient slipped on lino and fell to the floor sustaining skin tears, injury to right shoulder and fractured right hip. Went to theatre for plating and screwing of fracture. Patient deteriorated after the operation and died 3 days later.</p>	<ul style="list-style-type: none"> <li>Falls assessment and care plan not updated following patient's fall the previous day.</li> <li>Non-slip socks worn by the patient had twisted around and the non-slip area was not positioned on the sole.</li> </ul>	<ul style="list-style-type: none"> <li>Education on ensuring that when patient's condition changes, that all assessments and care plans are updated to reflect this.</li> <li>Different assessments and care plans should be filed together in the clinical record so that the staff member is aware that there is more than one assessment/care plan.</li> <li>Procedure be developed to outline the documentation requirements and timeframes for reviewing of assessments and care plans.</li> <li>Investigate possibility of non-slip socks with a non-slip surface over the whole area.</li> <li>Educate staff to check non-slip sock positioning during night checks.</li> </ul>	<ul style="list-style-type: none"> <li>A primary nurse has been allocated to each patient to ensure responsibility for updating care plans.</li> <li>Falls Protocol developed across the DHB.</li> <li>Alternative flooring not available.</li> <li>Discussions held around non-slip socks – generally socks stay on well. Not practical to check all patients with socks every night. Outcome - risk of falls has been reduced with the introduction of non-slip socks</li> </ul>

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				<ul style="list-style-type: none"> <li>– accept small risk of socks twisting.</li> <li>• One area with high numbers of patients at risk of falls has purchased two sensor mats that alert staff to patients when they get out of bed at night. This has helped to reduce the risk of patients moving about unassisted.</li> </ul>
<b>Serious</b>	<p><b>Equipment related</b> Patient sustained a full thickness burn of lower colon during colonoscopy. Required surgical repair. Patient made a full recovery.</p>	<ul style="list-style-type: none"> <li>• Diathermy machine settings were incorrectly calibrated by manufacturer.</li> <li>• No documented process in place to ensure staff are appropriately trained before they are authorised to use equipment.</li> <li>• No diathermy procedure documented</li> <li>• There is a known risk of perforation of the colon during a diagnostic colonoscopy.</li> </ul>	<ul style="list-style-type: none"> <li>• Memo to be sent to Service Managers to remind them that the Biomedical Service must test calibration of all new clinical equipment to ensure it is fit for purpose.</li> <li>• To ensure all staff have appropriate training with new equipment prior to use and that this is documented. <ul style="list-style-type: none"> <li>• To conduct an audit of staff equipment training records.</li> <li>• To ensure Diathermy procedure is developed for use DHB wide</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Memo sent to managers.</li> <li>• New Asset and Equipment Policy includes requirements for staff training.</li> <li>• Audit of staff training records completed.</li> <li>• Diathermy Procedure has been developed for use DHB wide.</li> </ul>
<b>Serious</b>	<p><b>Equipment related</b> Colonoscopy performed. Patient re-presented to GP with abdominal pain. Readmitted to hospital with infection, and additional surgery required to repair perforated colon.</p>	<ul style="list-style-type: none"> <li>• No documented process in place to ensure staff are appropriately trained before they are authorised to use equipment.</li> <li>• No diathermy procedure documented</li> <li>• There is a known risk of perforation of the colon during a diagnostic</li> </ul>	<ul style="list-style-type: none"> <li>• To ensure all staff have appropriate training with new equipment prior to use and that this is documented. <ul style="list-style-type: none"> <li>• To conduct an audit of staff equipment training records.</li> <li>• To ensure Diathermy procedure is developed for use DHB wide</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Memo sent to managers.</li> <li>• New Asset and Equipment Policy includes requirements for staff training.</li> <li>• Audit of staff training records completed.</li> <li>• Diathermy Procedure has been developed for use DHB wide.</li> </ul>

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		colonoscopy.		
Serious	<p><b>Medication Event – wrong route</b>  Baby was administered drug overdose via slow push instead of burette. Baby arrested but was revived.</p>	<ul style="list-style-type: none"> <li>• Prescription unclear/incorrect</li> <li>• Correct administration method not used</li> <li>• Negative interaction between nursing and medical staff may have contributed to error</li> <li>• Unit protocols for checking medication administration line placement not complied with</li> </ul>	<ul style="list-style-type: none"> <li>• To advise all authorised prescribers that all prescribed medications must include key requirements –where a drug protocol exists, medication needs to be prescribed ‘as per protocol’.</li> <li>• To review the unit’s protocol for this medication</li> <li>• To ensure staff have been educated in regard to the revised protocol</li> <li>• To ensure nursing staff know when to hand over to medical staff</li> <li>• To raise awareness of staff of what to do when negative interactions arise i.e. stop –get advice/support from a colleague.</li> <li>• Orientation to include this.</li> <li>• Event included as part of the scenario training provided to nursing and medical staff in dept.</li> </ul>	<ul style="list-style-type: none"> <li>• All of the recommended actions have been completed</li> </ul>
Serious	<p><b>Misdiagnosis</b>  Baby presented three times within 24 hours at rural hospital Emergency Department before being transferred to base hospital</p>	<ul style="list-style-type: none"> <li>• No documented protocol re when to call medical staff. Baby’s first presentation attended by nursing staff only.</li> <li>• Patient observations not fully completed</li> <li>• Failure to admit or observe for a longer period in ED in spite of several presentations</li> <li>• Gastroenteritis Guidelines not followed</li> </ul>	<ul style="list-style-type: none"> <li>• Document protocol on when to notify Medical Staff</li> <li>• Implement guideline for post-treatment observations</li> </ul>	<ul style="list-style-type: none"> <li>• Protocol on when to call the medical staff to review a patient has been developed.</li> </ul>
Serious	<p><b>Medication administration</b>  26 week gestation baby</p>	<ul style="list-style-type: none"> <li>• Nurse distracted by family distress arising from baby’s</li> </ul>	<ul style="list-style-type: none"> <li>• To ensure staff support/assistance provided when a baby’s death is imminent</li> </ul>	<ul style="list-style-type: none"> <li>• All actions completed.</li> </ul>

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	retrieved from regional hospital. Baby in poor condition when born. Multiple infusions in place. 3-way tap for inotropic infusion discovered to be closed at shift handover. Baby died.	<p>deteriorating condition, and need to concentrate on compliance with new medication administration configuration of infusion line</p> <ul style="list-style-type: none"> <li>• Medfusion pumps take 20-30 minutes to alarm as volumes of fluid administered to neonates are so minute.</li> <li>• Infusion being turned off is not thought to have had a material difference to the baby's outcome as baby was dying from cardiac problems.</li> </ul>	<ul style="list-style-type: none"> <li>• To ensure staff are informed of new clinical practice methods in a planned manner</li> <li>• Drug Infusion protocols to include double checking requirements for ensuring that 3-way taps are positioned and working correctly.</li> </ul>	
Serious	<p><b>Retained foreign body</b> Small amount of foreign material present in wound following surgery. Not able to identify what this was or how it got there. Could have been mesh trimming; portion of suture; filament of gauze swab; other material of unknown origin.</p>	<ul style="list-style-type: none"> <li>• Surgical count procedure does not include accounting for trimmed material or some pieces of equipment used during surgery</li> </ul>	<ul style="list-style-type: none"> <li>• Revise Waikato DHB Surgical Count Procedure to include these</li> </ul>	<ul style="list-style-type: none"> <li>• Completed</li> </ul>
Serious	<p><b>Delayed Treatment</b> Nursing staff tried for approximately one and a half hours to get patient reviewed by surgical team. Patient transferred to Intensive Care Unit and subsequently died. Coroner's case.</p>	<ul style="list-style-type: none"> <li>• Staff did not communicate the seriousness of the patient's condition to the team.</li> <li>• Patient had co-morbidities and was acutely ill prior to this event.</li> </ul>	<ul style="list-style-type: none"> <li>• Develop Guidelines for when to call the consultant</li> </ul>	<ul style="list-style-type: none"> <li>• Guideline for When to Call the Consultant has been completed</li> <li>• SBARR (Situation, Background, Assessment, Recommendation, Response) Guideline has been developed to provide guidance for clinical staff when</li> </ul>

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				communicating about patients in their care
<b>Serious</b>	<p><b>Blood transfusion - Wrong Rate</b> Hospital patient given three units of blood in one day, not over two days as prescribed. Patient suffered pulmonary oedema and subsequent myocardial infarction and cardiogenic shock.</p>	<ul style="list-style-type: none"> <li>• Junior nurse left in charge of ward due to sick leave of more senior nurse</li> <li>• Lack of concentration of nurse administering blood due to lack of sleep</li> <li>• Junior nurse's lack of knowledge of blood transfusion overload</li> <li>• Inadequate checking of blood by two nurses</li> <li>• Poor communication between staff</li> </ul>	<ul style="list-style-type: none"> <li>• Roster changes to be approved by the Clinical Nurse Leader</li> <li>• Clarify coordinator role after hours</li> </ul>	<ul style="list-style-type: none"> <li>• Actions completed</li> </ul>
<b>Serious</b>	<p><b>Inadequate standard of care</b> Patient presented at rural hospital. Seen by nurse. Observations were taken. No further pain. Patient discharged with Panadol by nursing staff and advised to see GP the next day. Patient re-presented next day, seen by doctor and transferred to tertiary hospital. 7 days later, patient deceased. Cause of death Multiorgan Failure and infection.</p>	<ul style="list-style-type: none"> <li>• No documented protocol re when nursing staff are to call medical staff.</li> </ul>	<ul style="list-style-type: none"> <li>• Documented protocol on when to notify medical staff to be developed</li> </ul>	<ul style="list-style-type: none"> <li>• Protocol on when to call the medical staff to see a patient has been developed.</li> </ul>
<b>Serious</b>	<p><b>Unexpected Death</b> Patient death following operation for cancer. During technically difficult</p>	<ul style="list-style-type: none"> <li>• Consultation with vascular surgeon did not occur prior to surgery</li> </ul>	<ul style="list-style-type: none"> <li>• Service to develop and implement a policy of peri-operative consultation with other relevant clinical services</li> </ul>	<ul style="list-style-type: none"> <li>• Completed</li> </ul>

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	operation patient developed clots in legs, arrested and died when taken to theatre for removal of clots. Reviewed by Coroner.			
<b>Serious</b>	<b>Medication event – Wrong Dose</b> Baby administered incorrect dose of medication.	<ul style="list-style-type: none"> <li>Reviewed by service</li> </ul>		<ul style="list-style-type: none"> <li>Recommendations actioned</li> </ul>
<b>Serious</b>	<b>Medication Event</b> Patient with low Blood Pressure (and several other illnesses) was administered anti-hypertensive medication. Patient died later due to cardiac condition rather than medication error.	<ul style="list-style-type: none"> <li>Nurse was distracted due to ward management processes and not feeling well</li> <li>Appropriate monitoring of patient did not occur</li> </ul>	<ul style="list-style-type: none"> <li>Ward medication round process to be reviewed</li> <li>Local nursing education to include this scenario for nurses to prioritise workloads when commencing shifts.</li> <li>Key responsibilities for workloads and clinical tasks are identified</li> <li>Team Leader Role to be documented and made known to staff</li> </ul>	<ul style="list-style-type: none"> <li>Project reviewed the way nurses administered medications, and changes were made to ensure that nurses administered medications to their own patients.</li> <li>Medication storage improved.</li> <li>Named nurse now responsible for individual patients.</li> <li>Nurse Coordinator Procedure has been drafted to document roles and responsibilities of Nurse Coordinator.</li> </ul>
<b>Serious</b>	<b>Patient Fall</b> Patient climbed out of bed and fell. Hit head and required suturing by medical staff. Patient subsequently died, unclear if related to fall .	Reviewed by service	<ul style="list-style-type: none"> <li>Develop and implement DHB-wide Falls Protocol</li> </ul>	<ul style="list-style-type: none"> <li>Falls Protocol developed and implemented</li> </ul>
<b>Serious</b>	<b>Medication Event</b> Patient was administered medication for cardiac	<ul style="list-style-type: none"> <li>Incorrect treatment due to delayed diagnosis</li> <li>CT request form not</li> </ul>	<ul style="list-style-type: none"> <li>To document protocol which specifies that verbal notifications must be made to the ward / consultant of all serious abnormal results</li> </ul>	<ul style="list-style-type: none"> <li>Protocol not documented, but standard practice of Radiology Service is to verbally inform</li> </ul>

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	condition prior to diagnosis of cerebral haemorrhage (if this had been known earlier, the medication would not have been given). CT scan occurred 48 hours after admission. Extension of haemorrhage leading to paralysis on one side of the body and unconsciousness. Patient died.	<ul style="list-style-type: none"> <li>completed fully and urgency not indicated</li> <li>Ward not verbally informed of CT result</li> </ul>	<ul style="list-style-type: none"> <li>To ensure the process for ordering urgent scans is documented and made known to relevant staff</li> </ul>	ward / consultant of all serious abnormal results.
<b>Serious</b>	<b>Retained Swab</b> Patient readmitted post surgical procedure (for pacemaker box and arterial lead replacement) with retained swab.	<ul style="list-style-type: none"> <li>No surgical count procedure in place in this service</li> </ul>	<ul style="list-style-type: none"> <li>To develop a service specific procedure for counting all items used during surgical procedures.</li> </ul>	<ul style="list-style-type: none"> <li>Completed</li> </ul>
<b>Serious</b>	<b>Death of Mental Health Inpatient</b> Sudden unexpected death.	<ul style="list-style-type: none"> <li>Patient had an extensive history with Mental Health Services.</li> <li>Possibility that historical patient information could be lost due to repeated admissions and multiple volumes of clinical notes.</li> </ul>	<ul style="list-style-type: none"> <li>The red alert page in the clinical record to include details of any serious medical conditions in the space provided. This page is carried forward from one volume to the next. Memo to be sent to staff to alert them to this tool.</li> <li>Clinical Directors forum to be asked to advise their admitting doctors to routinely record the physical examination of a client and update the medical history. This information should be reported to the Multi Disciplinary Team.</li> </ul>	<ul style="list-style-type: none"> <li>All actions completed.</li> </ul>
<b>Serious</b>	<b>Incorrect medication administered</b> Patient administered incorrect Controlled Drug dose. Patient unharmed.	<ul style="list-style-type: none"> <li>When staff pre-checked tablets there was an insufficient dose so not administered.</li> <li>Upon confirmation that lower dose satisfactory, staff did not re-check and administered wrong</li> </ul>	<ul style="list-style-type: none"> <li>Ensure nursing staff comply with Waikato DHB Medicines Management Policy, section 4.1 General Principles.</li> <li>Ensure ED and agency staff aware that current exemption to checking Controlled Drugs is for IV Narcotics only.</li> <li>Ensure IV Narcotic Guideline is updated and available across the Waikato DHB in areas such as</li> </ul>	<ul style="list-style-type: none"> <li>Orientation and education sessions are provided to staff re IV medicine Management policy. Also questions are asked in the workbook that is compulsory to complete to gain their certification.</li> <li>ED and agency staff are aware</li> </ul>

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		medication.	Delivery Suite, Post-Anaesthetic Care Unit	<p>of the DHB's requirements when administering Controlled Drugs.</p> <ul style="list-style-type: none"> <li>IV Narcotic Guideline has been updated and made available across the relevant areas of the DHB.</li> </ul>
Serious	<p><b>Incorrect blood product administered</b> Patient administered Fresh Frozen Plasma instead of the prescribed Albumin infusion.</p>	<ul style="list-style-type: none"> <li>Reviewed by Blood Transfusion Nurse New Zealand Blood Service</li> </ul>	<ul style="list-style-type: none"> <li>Staff member informed of policy requirements regarding checking of products against the prescription</li> <li>Investigate appropriateness of the blood collection form</li> <li>Investigate the appropriateness of the practice of transcribing prescriptions onto blood collection form</li> </ul>	<ul style="list-style-type: none"> <li>Policy requirements discussed with staff member</li> </ul>
Serious	<p><b>Patient Fall</b> Patient had night sedation, then got out of bed and fell, fracturing left hip.</p>			<ul style="list-style-type: none"> <li>Waikato DHB Falls Protocol developed. This specifies requirements for a falls risk assessment to be completed, and actions taken to minimise the risk of a fall.</li> </ul>
Serious	<p><b>Medication Event – Wrong Medication</b> Patient administered a medication which was specifically contraindicated while receiving a particular medication which was also prescribed. Patient subsequently suffered severe reaction.</p>			<ul style="list-style-type: none"> <li>Education package for medication staff re Safe Prescribing of Medicines has been developed and shared widely with medical staff.</li> </ul>
Serious	<p><b>AWOL Incident</b> Forensic Services patient absent without leave.</p>	<ul style="list-style-type: none"> <li>Patient subject to section 24 (2)(a) of the Criminal Procedure( Mentally Impaired Persons) Act 2003</li> </ul>	<ul style="list-style-type: none"> <li>Develop process to ensure that all Special Patients on escorted leave are formally signed over to the care of another party, such that there is a clear documented hand-over of responsibility to an</li> </ul>	

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		<ul style="list-style-type: none"> <li>Staff had “forgotten” or ignored patient’s extensive history of non-compliance, failure to attend psychiatric care and AWOL/breach of legal sanctions, prior to his admission to Forensic services.</li> </ul>	<p>appropriate individual/s, and signed back on their return to Waikato DHB staff.</p> <ul style="list-style-type: none"> <li>Members of the clinical team to routinely and explicitly review individuals who are going through changes in their pathway of care more actively as this is an increased period of risk.</li> <li>All members of the clinical team to be reminded about the particular issues of risk management in the forensic setting and avoid complacency in risk assessment.</li> </ul>	
<b>Serious</b>	<b>Mental Health Services – Patient injury sustained during Calming and Restraint Event</b>	<ul style="list-style-type: none"> <li>Absence of clear leadership during the personal restraint episode by Restraint team</li> <li>Lack of de-escalation and calming interventions utilised during the incident</li> <li>Radio battery failure</li> <li>Employment of Enrolled Nurse in an acute forensic mental health unit</li> </ul>	<ul style="list-style-type: none"> <li>All staff involved in restraint episode to complete a one-day Calming and Restraint refresher together as a team</li> <li>Staff orientation to include use of radios, cell phones and radios (such training to include instruction on what to say in an emergency).</li> <li>Record to be maintained of which staff are competent to use radios/cell phones as a baseline prior to training.</li> <li>Reminder to staff to utilise duress alarms in High care secure lounge and / or seclusion areas as soon as possible when potential or actual risk occurs</li> <li>To implement the recommendations of the change management process that is currently underway regarding the employment of enrolled nurses in acute mental health settings.</li> </ul>	<ul style="list-style-type: none"> <li>Actions completed</li> </ul>