**Contents**

Executive summary 1  
What is the Sentinel Event Program? 2  
What is a Sentinel Event? 2  
What is a Root Cause Analysis? 3  
What Does The Department Do With The Sentinel Event Reports? 3  
The Consultative Councils 3  
What Are The Sentinel Event Categories And How Many Events Occurred In 2002-03? 4  
What Were The Types Of Events Reported In The ‘Other Catastrophic Events’ Category And How Many Occurred In 2002-03? 4  
What Were The System Factors That Enabled The Events To Occur? 5  
What Were The System Factors That Contributed To The Occurrence Of Sentinel Events? 6  
Procedures and Guidelines 7  
Behavioural Assessment 7  
Patient observation process 7  
Clinical Guidelines 7  
Identification process 7  
Coordination of care 7  
Human Resources 8  
Staff allocation 8  
Staff training 8  
Staff supervision 8  
Staff appraisals 8  
Recruitment 8  
Communication 9  
Communication between staff 9  
Communication between staff and patients/family members 9  
Health information 9  
Equipment 9  
Physical Environment 10  
External Factors 10  
Other Factors 10  
What Were The Most Common Factors Contributing To Different Types Of Events? 11  
Procedure involving the wrong patient or body part 11  
Suicide in an inpatient unit 11  
Retained instruments or other material after surgery requiring re-operation or further surgical procedure 11  
Medication error leading to the death of patient reasonably believed to be due to incorrect administration of drugs 11  
Maternal death or serious morbidity associated with labour or delivery 12  
Other catastrophic event 12
Patient absconding from inpatient unit with adverse outcome 12
Foetal complication of delivery 12
Complication of emergency/resuscitation management 12
Complication of inpatient fall 13
Complication of surgery 13
Hospital process issues 13
Infection control breach 13
Other – unspecified 13

**What Are The Themes, Issues And Opportunities For Learning Identified By The Sentinel Event Program?** 14

Trends in contributing system issues identified in sentinel events reported in 2002-03 14
Increased mortality from an invasive procedure 14
Wrong patient/body part in the outpatient setting 14
Platelet contamination 15
Infection control breach – colonoscopies 15
Sentinel events involving more than one organisation 15
Education 15
Reporting framework 16
Reportable events 16

**What Did We Learn From The Risk Reduction Strategies?** 17

Future Recommendations 30
Conclusion 31
References 32
Appendixes 33
Foreword

The Victorian Sentinel Event Program commenced during 2001-02 as part of the Department’s comprehensive clinical risk management strategy. The aim of the program is to identify events, which occur from time to time in hospitals, which are “...relatively infrequent, clean-cut events that occur independently of a patient’s condition; commonly reflect hospital system and process deficiencies; and result in unnecessary outcomes for patients...”.

The program pulls together and analyses contributing factors to ensure system changes are put in place to help mitigate further occurrence. The strategies are communicated via the Department’s monthly newsletter “Risk Watch” and under pinned by an expert advisory committee.

This is the first annual report of the program to be released.

Dr Jenny Bartlett
Chief Clinical Advisor
Metropolitan Health and Aged Care Services
Executive summary

The purpose of the Victorian Sentinel Event Program is to facilitate a safe environment for patients by reducing the frequency of serious adverse events. The system aims to promote self-reporting of medical errors and encourage a close examination of root causes. In addition to creating a database and disseminating information about sentinel events, and how they can be prevented in all public health services. All information is de-identified to preserve the privacy of patient, practitioner and organisation.

Eighty-two sentinel events were reported in 2002-03 with seventy-nine events analysed. Three events were not included in the analysis due to two events resulting from patient or procedural factors, not system issues. The third event was reported twice. Forty-two events were reported in the ‘Other catastrophic events’ category, a new category introduced this year. Sixteen events involved a procedure performed on the wrong patient or body part, and nine events involved a retained instrument or other material after surgery, requiring re-operation or further surgical procedure.

Reporting trends emerged from the ‘Other catastrophic events’ category, including events involving complications of surgery, complications of emergency/resuscitation management, infection control breaches or events involving a hospital process issue.

The analysis showed a total of 210 contributing factors. This demonstrated 67 procedures/guidelines’ contributing factors, 37 human resource-contributing factors, and 34 communication issues contributed to the occurrence of sentinel events. Table two on page twelve of report provides a more thorough analysis of these categories.

Through analysing aggregated reports, the sentinel event program was able to identify statewide issues requiring intervention. Such issues included the emergency management of cervical spine injuries, identification processes for patient/body part in the outpatient setting, platelet contamination and infection control breaches. It also emerged that no formal process existed to review events that involved more than one organisation.

The following recommendations have resulted from the review of individual reported events, and reflection of the process utilised for event reporting:

- Further education on root cause analysis training is required to provide a sustainable method of pro-active risk management in the clinical setting for health services in Victoria.
- A system needs to be developed to ensure that any sentinel event that involves one or more organisation is reviewed in a coordinated approach to ensure that system factors are determined effectively.
- ‘Near misses’ are to be included in the list of reportable events.
- The Clinical Risk Management program reiterates the importance of timely submission of root cause analysis.
- The Sentinel Event Program continues as a statewide Clinical Risk Management initiative for the 2003-04 year with a comprehensive review of the program’s first three years to be undertaken in consultation with key stakeholders.
- The Australian Council for Safety & Quality in Health Care’s Open Disclosure Standard be incorporated into the root cause analysis framework.

This sentinel event report for 2002-03 provides a summary of the program and outlines the identified system issues. It also provides examples of sentinel events that have occurred and the ‘Risk Reduction Strategies’ developed to support changes to system issues.
What is the Sentinel Event Program?
The Victorian Sentinel Event Program was introduced in July 2001 and is part of the Department of Human Services’ (the department) Clinical Risk Management Strategy. It is recognised that the program was in its infancy and as such there was not a publicly released document for the 2001-02 period.

The program requires all Victorian public hospitals to report sentinel events to the department’s Office of the Chief Clinical Advisor’s Clinical Governance Unit. A notification of the event is required within 15 working days of the event occurring and is followed by an analysis of the event which is conducted by the relevant health service, commonly referred to as a root cause analysis (RCA). Health services are also required to develop a Risk Reduction Action Plan (RRAP) and submit with the RCA to the department within 45 working days.

The sentinel event program aims to promote self-reporting of medical errors and encourage a close examination of root causes, in addition to creating a database and disseminating information about sentinel events and how they can be prevented.

The advantages of the program are that:

• The focus is on serious outcome events.
• It requires hospitals to provide results of their root cause analysis. This enables the department to have access to extensive details about the background to each event.
• It has established an effective mechanism for reviewing reports and providing feedback to all public hospitals.

What is a Sentinel Event?
Sentinel events are defined by the department as:

“...relatively infrequent, clear-cut events that occur independently of a patient’s condition; commonly reflect hospital system and process deficiencies; and result in unnecessary outcomes for patients.”

The sentinel event program receives reports of individual events from public hospitals, compares the events for similarities and examines them to determine if there are similar system issues occurring in more than one health service. The program focuses on the organisation of health care and how it can be improved to prevent future sentinel events, rather than the assignment of individual blame.
What is a Root Cause Analysis?
A root cause analysis is a structured investigation that aims to identify the true cause of a sentinel event, and the action necessary to eliminate it. The RCA should:

- Focus on systems and processes, not individual performance
- Progress from specific causes in clinical processes to common causes in organisational processes
- Repeatedly dig deeper and
- Identify potential changes in the systems and processes that would reduce the risk of such events occurring in the future.

What Does The Department Do With The Sentinel Event Reports?
The department’s involvement with sentinel events commences when a health service notifies the department that a sentinel event has occurred. The health service also advises the department of the type of sentinel event. The department provides a due date to the health service which identifies when the root cause analysis and Risk Reduction Action Plan is due. The RCA is undertaken by the health service and then sent to the department for review and analysis. It is at this stage that the department determines what advice is required to support the health service in its Risk Reduction Action Plan.

The Office of Chief Clinical Advisor has established a Clinical Risk Management Committee to address current issues in clinical risk management throughout Victoria, including the sentinel event program. The Committee consists of clinicians, health professionals, quality managers, hospital board members and consumers. The Committee is actively involved in the sentinel event program. It provides advice to health services regarding the analysis of their sentinel event. It also analyses events that have similar issues and recommends strategies for managing these issues. It also provides advice on educational requirements. An example of this is a root cause analysis training framework that is currently being developed in Victoria. This will enhance previous education provided by the department.

The Consultative Councils
The Clinical Risk Management Committee also works closely with a range of Consultative Councils and other relevant clinical bodies to provide recommendations to hospitals on specific sentinel events. These include the following:

- Consultative Committee on Obstetric and Paediatric Mortality and Morbidity.
- Victorian Surgical Consultative Council.

Other clinically relevant bodies that review sentinel events include:

- Australian Red Cross Blood Service Victoria.
- Chief Psychiatrist.
- Principal Nurse Advisor, Department of Human Services.
- State Trauma Committee.
- Victorian Advisory Committee on Infection Control.
What Are The Sentinel Event Categories And How Many Events Occurred In 2002-03?

Seventy-nine sentinel events were analysed in 2002-03. A breakdown of these events is outlined in Table 1.

Table 1: Events reported from 1 July 2002 to 30 June 2003.

<table>
<thead>
<tr>
<th>Event</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procedures involving the wrong patient or body part</td>
<td>16</td>
</tr>
<tr>
<td>Suicide in an inpatient unit</td>
<td>5</td>
</tr>
<tr>
<td>Retained instruments or other material after surgery requiring re-operation or further surgical procedure</td>
<td>9</td>
</tr>
<tr>
<td>Intravascular gas embolism resulting in death or neurological damage</td>
<td>0</td>
</tr>
<tr>
<td>Haemolytic blood transfusion reaction resulting from ABO incompatibility</td>
<td>0</td>
</tr>
<tr>
<td>Medication error leading to the death of patient reasonably believed to be due to incorrect administration of drugs</td>
<td>3</td>
</tr>
<tr>
<td>Maternal death or serious morbidity associated with labour or delivery</td>
<td>4</td>
</tr>
<tr>
<td>Infant discharged to wrong family</td>
<td>0</td>
</tr>
<tr>
<td>Other catastrophic event</td>
<td>42</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>79</strong></td>
</tr>
</tbody>
</table>

What Were The Types Of Events Reported In The ‘Other Catastrophic Events’ Category And How Many Occurred In 2002-03?

Table 2: Classifications for ‘other catastrophic events’ category:

<table>
<thead>
<tr>
<th>‘Other catastrophic event category classifications</th>
<th>Number of events</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complication of emergency / resuscitation management</td>
<td>9</td>
</tr>
<tr>
<td>Complication of surgery</td>
<td>9</td>
</tr>
<tr>
<td>Foetal complication of delivery</td>
<td>3</td>
</tr>
<tr>
<td>Complication of inpatient fall</td>
<td>2</td>
</tr>
<tr>
<td>Patient absconding from inpatient unit with adverse outcome</td>
<td>2</td>
</tr>
<tr>
<td>Infection control breach</td>
<td>6</td>
</tr>
<tr>
<td>Hospital process issue</td>
<td>9</td>
</tr>
<tr>
<td>Other – unspecified</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>42</strong></td>
</tr>
</tbody>
</table>
What Were The System Factors That Enabled The Events To Occur?

Each event has been analysed to look at the factors that contributed to the event. These factors are outlined in Table 2.

Table 3: Contributing factors to sentinel events

<table>
<thead>
<tr>
<th>Contributing factor</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procedures/Guidelines</td>
<td>67</td>
</tr>
<tr>
<td>Behavioural assessment</td>
<td>5</td>
</tr>
<tr>
<td>Physical assessment</td>
<td>7</td>
</tr>
<tr>
<td>Patient observation process</td>
<td>1</td>
</tr>
<tr>
<td>Clinical Guidelines</td>
<td>10</td>
</tr>
<tr>
<td>Patient/site identification</td>
<td>11</td>
</tr>
<tr>
<td>Coordination of care</td>
<td>33</td>
</tr>
<tr>
<td>Human Resources</td>
<td>37</td>
</tr>
<tr>
<td>Staff allocation</td>
<td>15</td>
</tr>
<tr>
<td>Staff training</td>
<td>17</td>
</tr>
<tr>
<td>Staff supervision</td>
<td>3</td>
</tr>
<tr>
<td>Appraisals</td>
<td>1</td>
</tr>
<tr>
<td>Recruitment</td>
<td>1</td>
</tr>
<tr>
<td>Communication</td>
<td>34</td>
</tr>
<tr>
<td>Between staff</td>
<td>27</td>
</tr>
<tr>
<td>Between staff and patient/family</td>
<td>7</td>
</tr>
<tr>
<td>Health information</td>
<td>14</td>
</tr>
<tr>
<td>Equipment</td>
<td>15</td>
</tr>
<tr>
<td>Physical Environment</td>
<td>19</td>
</tr>
<tr>
<td>Environment (distraction etc)</td>
<td>11</td>
</tr>
<tr>
<td>Security/Design</td>
<td>8</td>
</tr>
<tr>
<td>External Factors</td>
<td>12</td>
</tr>
<tr>
<td>Other</td>
<td>12</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>210</strong></td>
</tr>
</tbody>
</table>

Seven events were considered not preventable with analyses not identifying any system issues.
What Were The System Factors That Contributed To The Occurrence Of Sentinel Events?

The most commonly identified system factor related to procedures and guidelines. This included procedures that involved coordination of patient care (for example, admission and discharge processes, and infection control guidelines). Another frequently identified system factor was human resources, particularly the allocation of resources. This includes inappropriate staffing levels in both medical and nursing professions, as well as allied health. Staff training was also a factor, highlighting possible inadequacies in both nursing and medical training. Communication, particularly between staff, was the third most frequent factor contributing to the sentinel events.

The following are examples of factors that contributed to the occurrence of sentinel events.
Procedures and Guidelines

Behavioural Assessment
This sub-category involves any policy/procedure or guidelines surrounding the processes involved in the assessment of a patient’s behaviour. This category reflects a patient’s suicidal/self-harm intent and is a contributing factor of ‘suicide in an inpatient unit’ sentinel event.

Patient observation process
Examples of factors that are included in this subcategory:
• Policies involving operative or post-operative clinical observation.
• Policies/procedures involving neurological observations following a head injury.
• Policies/procedures involving observation of patients at risk of harm or absconding from their hospital unit or ward.

Clinical Guidelines
Examples of factors that are included in this subcategory:
• Clinical pathways on the management of stroke patients.
• Clinical pathways on the pre-operative management of patients for bowel surgery.
• Clinical guidelines on the management of patients following myocardial infarction.
• Clinical pathways on the post-operative management of laminectomy.

Identification process
Examples of factors that are included in this subcategory:
• Policies that involved confirming a patient’s identity prior to an operation.
• Policies that involved identification of the correct side prior to surgery (an example is confirmation that knee surgery will occur on the right, not the left).
• Policies involving identification of the correct patient and site for radiotherapy.

Coordination of care
The processing involved in coordinating patient care can overlap between departments, inpatient and outpatient departments, clinical and non-clinical units, administrative units, and external organisations (such as rehabilitation organisations, general practitioners and Royal District Nursing Service).
Examples of factors that are included in this subcategory:
• Procedures to ensure outpatient follow-up on discharge.
• Procedures to ensure communication of test results.
• Health services’ policies relating to infection control.
• Operating theatre procedures to ensure pathology specimens obtained in theatre are transported to the pathology department.
Human Resources

Staff allocation
Examples of factors that are included in this subcategory:
• Inappropriate medical staffing levels and workload allocation.
• Inappropriate nursing staffing levels and workload allocation.
• Replacement (or lack of) for medical/nursing staff on sick leave.
• Replacement of staff on leave with less than adequate experience.

Staff training
Examples of factors that are included in this subcategory:
• Medical/nursing training inadequacies in clinical procedures.
• Inexperienced staff in positions at a level greater than their experience.

Staff supervision
Examples of factors that are included in this subcategory:
• Junior medical officers’ supervision requirements.
• New graduate nurses’ supervision requirements.
• Supervision required for newly graduated Surgical Fellows in operating theatres.
• Supervision required for clinical nurse specialists in intensive care units.

Staff appraisals
This subcategory includes all issues surrounding staff appraisals of performance, whether medical nursing or allied health. The factors include a lack of, or under-appraisal than that expected by the profession involved.

Recruitment
This subcategory includes any issue regarding medical, nursing or allied health recruitment.
Communication
This category includes all contributing factors that are found to be a result of communication issues.

Communication between staff
This subcategory involves all factors that arise from a miss or lack of communication that has occurred between staff members. Examples of factors that are included in this subcategory:

- Lack of communication between junior and senior medical staff.
- Miss or lack of communication between medical and nursing staff.
- Miss or lack of communication between departments within the hospital.
- Miss or lack of communication between hospitals and external service providers.

Communication between staff and patients/family members
This subcategory involves all issues that arise from a miss or lack of communication that occurs between staff members and patients/families. Such issues may involve cultural/language barriers or ‘medical/technical language’ barriers. Examples of factors that are included in this subcategory:

- A staff member’s explanation of a procedure in a manner that the patient could not comprehend.
- Failure to communicate the results of a test to a patient/family member.
- Explanations to family members regarding the patient’s condition.
- Lack of understanding due to language barriers.

Health information
This category includes all contributing factors that are a result of an issue with health information of a patient. Such issues include:

- Documentation (or lack of) in the medical record
- Communication of electronic health information
- Communication of health information between the health service and external organisations

Equipment
This category includes all contributing factors that are a result of an issue with equipment. These issues involve faulty equipment, or lack or equipment provision, but also may include incorrect use of equipment for a given purpose.
**Physical Environment**

This category includes all contributing factors that are a result of an issue with the physical environment of the health service. Examples of factors that are included in this subcategory:

- Design of security systems in the health services to prevent at-risk patients from absconding.
- Design of seclusion rooms for psychiatric patients to avoid self-harm.
- Design of rooms to allow observation of at-risk patients.

**External Factors**

This category includes all contributing factors that are a result of an issue external to the organisation. Examples of such issues include:

- Co-ordination of retrieval services between health services.
- Services provided from the Australian Red Cross Blood Service.
- Services provided from external diagnostic services.
- Lack of availability of beds at an external organisation for an at-risk psychiatric patient, requiring the patient to be cared for in a health service not designed for such patients.

**Other Factors**

This category includes contributing factors that arise from issues other than those discussed above. An example of such factors involves the impact from a busy/stressful environment.

Other examples of such contributing factors include:

- Miscommunication between staff may have contributed to performing a CT scan on the wrong patient.
- Lack of communication between staff concerning building works may be contributed to an infection control breach.
- Lack of communication between staff may have contributed to the misplacement of a surgical biopsy specimen.
- Miscommunication between staff may have contributed to poor foetal outcomes due to delayed labour.
- Miscommunication between staff may have contributed to radiotherapy being performed on the wrong patient.
What Were The Most Common Factors Contributing To Different Types Of Events?

On review of the events reported in each of the individual categories, trends appeared which can assist with the understanding of the root causes underlying such events. A summary of the trends that have emerged is outline below.

**Procedure involving the wrong patient or body part**

The trends in factors that appeared to contribute to procedures involving the wrong patient or body part include:

- Procedures and Guidelines
- Communication
- Human Resources

**Suicide in an inpatient unit**

The trends in factors that appeared to contribute to events involving suicide of an inpatient include:

- Procedures and Guidelines
- Physical environment
- External factors

**Retained instruments or other material after surgery requiring re-operation or further surgical procedure**

- Procedures and Guidelines
- Equipment
- External factors
- Human resource issues

**Medication error leading to the death of patient reasonably believed to be due to incorrect administration of drugs**

The trends in factors that appeared to contribute to events involving a medication error leading to the death of a patient, reasonably believed to be due to incorrect administration of drugs include:

- Procedures and guidelines
- Human resource issues
- Health information
- Communication
Maternal death or serious morbidity associated with labour or delivery

The trend in factors that appeared to contribute to events involving a maternal death or serious morbidity associated with labour or delivery include:

- Communication
- Health information
- Equipment
- Procedures and guidelines

Other catastrophic event

The trends in factors that appeared to contribute to other catastrophic events, in descending order of frequency reported, include:

- Procedures and guidelines
- Human resources
- Communication
- Health information
- Equipment
- Physical Environment
- External factors

Patient absconding from inpatient unit with adverse outcome

The trends in factors that appeared to contribute to a patient absconding from inpatient unit with an adverse outcome, include:

- Procedures and guidelines
- Communication
- Physical Environment

Foetal complication of delivery

The trends in factors that appeared to contributed to foetal complications from delivery include:

- Human Resources
- Communication
- External environment

Complication of emergency/resuscitation management

The trends in factors that appeared to contribute to complications of emergency/resuscitation management include:

- Procedures and Guidelines
- Human Resources
- Communication
Complication of inpatient fall
The trends in factors that appeared to contribute to complications of an inpatient fall include:
• Procedures and Guidelines
• Communication

Complication of surgery
The trends in factors that appeared to contribute to complications of surgery include:
• Procedures and Guidelines
• Human Resources
• Communication
• Staff allocation
• Staff supervision

Hospital process issues
The trends in factors that appeared to contribute to Hospital process issues include:
• Procedures and Guidelines
• Human Resources
• Communication
• Health information
• Physical environment

Infection control breach
The trends in factors that appeared to contribute to an infection control breach include:
• Procedures and Guidelines
• Human Resources
• Communication
• Equipment

Other – unspecified
As this category contains events that have occurred in isolation, little meaning is derived from drawing trends and summary conclusions.
What Are The Themes, Issues And Opportunities For Learning Identified By The Sentinel Event Program?

Trends in contributing system issues identified in sentinel events reported in 2002-03

Multiple system issues have been identified through the root cause analyses of the reported sentinel events during 2002-03. Such issues confirm the general understanding in the literature of the underlying root causes for error in the health system\(^4\)\(^5\). In particular, the sentinel event reporting process has allowed the department to identify areas of particular concern, and develop strategies to correct such issues. Examples of such proactive approaches to clinical risk management are outlined below.

Increased mortality from an invasive procedure

Throughout the collation of sentinel event reports, it was noted that a certain invasive procedure was involved in a higher number of adverse patient outcomes that would be usually expected. In each isolated case, it would be understandable if each health service took the view that the event was a ‘one off’, a known complication of the procedure, and although regrettable, such a complication was not preventable.

However, through the reporting of such events to a central data collection, it became apparent that such a complication was occurring at a greater rate than is generally expected for the procedure. As a result of this event being repeated at more than one hospital site, the Office of Chief Clinical Advisor was able to approach the health services involved to undertake a review of their policies and procedures in relation to the procedure identified, to establish whether there were other systems’ issues contributing to such a higher than expected adverse event rate.

Wrong patient/body part in the outpatient setting

Performing a procedure on the wrong patient or body part arose as a particular issue in the outpatient setting. Policies and guidelines surrounding the wrong patient/body part are an ongoing concern for hospitals throughout the state, nationally and internationally. The department’s Clinical Risk Management Committee sought advice from the Surgical Consultative Council regarding this issue. The Council recommended that hospitals adopt the ‘Correct Side and Correct Site’ Surgery Guidelines recently released by the Royal College of Surgeons. The department’s ‘Risk Watch’ newsletter has since circulated this advice to all public hospitals across the state. The Safety & Quality Council has also released a patient information pamphlet ‘Understanding Your Procedures’ along with the development of a protocol fact sheet supporting the ‘Correct Patient, Correct Site, Correct Procedure’ approach. These documents are appendices to the Sentinel Event Report.

The sentinel event program identified that procedures performed on the wrong patient/body part occurred in the outpatient setting, which provided unique issues compared to the inpatient setting. The health services involved were approached to review their policies and procedures surrounding the identification of outpatients for procedures. Feedback from the hospitals has so far been very positive, and strategies are being implemented to prevent such events occurring in the future. The learnings from the hospitals’ reviews are disseminated as appropriate.
Platelet contamination

Two events reported in the 2002-03 financial year raised concerns regarding patients receiving platelet transfusions with infected platelets. The risk of platelet-related sepsis is known to be 1 in 12,000, related to the requirements for platelets to be stored at 20 to 24°C. Through collaboration with the Australian Red Cross Blood Service, Victoria, an alert was distributed to all health services of the potential for platelet bacterial contamination, via the Clinical Risk Management Newsletter ‘Risk Watch’.

Infection control breach – colonoscopies

Earlier in the reporting year, it emerged that infection control breaches were occurring with a particular type of equipment. It appeared that incorrect sterilisation techniques were being used on replacement equipment from the manufacturer. The root causes highlighted a miscommunication between the manufacturer and health service staff regarding an additional piece of the equipment, not usually patent in the standard equipment. As a result, the additional piece of equipment was not being sterilised as required. Through liaising with the health services involved, and subsequently the manufacturer, the issue was resolved.

Sentinel events involving more than one organisation

Through analysing the root cause analyses reported to the Department, it became evident that no formal process existed for events that occurred involving more than one organisation. Each individual health service is required to report events that occur within their own health service, however the guidelines are less clear regarding events that involve two different health services. Such examples where this may be an issue:

- Health services that experience issues arising from transferring a patient to another organisation.
- Health services that experience issues arising from receiving patients from another organisation.
- Events that involve the coordination of inter-hospital transfers.
- Events that span patient care between acute and sub-acute facilities (such as acute health services and rehabilitation organisations).
- Events that entail external organisations involved in health care (e.g. Australian Red Cross Blood Service, Australian Organ Donor Register)

Education

The department has undertaken a number of root cause analysis training initiatives in 2000-03. In 2002, root cause analysis training workshops were conducted by Monash University’s Department of Preventive Medicine, and were attended by approximately 500 participants. Following these workshops, the Victorian Quality Council sponsored 23 Victorian clinical risk managers to attend workshops in Queensland to learn about the United States of America’s Veterans Affairs Program. In 2003 the department collaborated with the Australian Council for Safety and Quality in Health Care and the New South Wales department of Health, to sponsor a workshop on root cause analysis for approximately
60 Victorian and interstate participants. Hospitals have also accessed root cause analysis training through sources such as conferences and workshops, private consultants and insurers.

Health services however are still identifying root cause analysis training as an ongoing requirement. Some hospitals feel that more education is required to provide an organisation-wide system that has ongoing sustainability, and ultimately will create a more open and transparent health care reporting culture.

The department has responded to this identified need with the Clinical Risk Management Committee, in collaboration with the Victorian Quality Council, implementing a plan for further root cause analysis training in Victorian health services. The training program will provide each hospital with an education package including a manual. It will be rolled out across the state in 2004-05.

**Reporting framework**

The various approaches to sentinel event reporting and education have led to variations in root cause analysis investigation and documentation by Victorian public hospitals. Whilst allowing for individual variation in approaches to root cause analysis, the inconsistency of documentation has limited the ability to classify and aggregate some of the events. The current reporting framework requires review to incorporate improvements identified in other programs, and to ensure consistency of reported information. Consultation with key stakeholders is planned for June 2004 to evaluate the sentinel event program and its current reporting framework. The consultation will be auspiced by the Clinical Risk Management Committee. The inclusion of ‘Australian Council on Safety & Quality in Health Care’s Open Disclosure Standard’ application will also be part of the review.

**Reportable events**

Given the high frequency of reporting under the category ‘other catastrophic events’, an increased focus on this broader category of reportable events will be required, including refinement to definitions.

‘Near misses’ or ‘close calls’ are to be incorporated into the Victorian Sentinel Event Program. ‘Close calls’ are defined as “…an event or situation that could have resulted in an adverse event but did not, either by chance or through timely intervention”\(^7\). The analysis of close calls is considered critical in any prevention strategy\(^8\). Overseas studies identify that ‘Near misses’ are included as reportable sentinel events\(^5\). Close calls make up over 90% of all events reported\(^8,9\).
What Did We Learn From The Risk Reduction Strategies?

Through the process of a root cause analysis, the underlying factors that contributed to the occurrence of the sentinel events are identified. Once such a factor is identified, the hospital develops risk reduction strategies to prevent any further incidences occurring in the future.

Examples of risk reduction strategies have been included in this report. The examples cover a range of types of incidents, including procedures performed on the wrong patient, retained instruments, and infection control breaches. The descriptions of the cases are brief, and de-identified, to protect individual and hospital confidentiality. However, the examples provided of the risk reduction strategies are faithful to the hospital strategies as much as possible, whilst still preserving confidentiality.
**Risk Reduction Strategies – Case 1**

**Description of event**
Inadequate cleaning of endoscopy equipment between patients.

**Contributing factors to event**

**Human Resources – Training**
Theatre staff not trained or credentialed in the cleaning of endoscopy equipment in correct manner.

**Human Resources – Allocation**
Staff members allocated to the operating theatre were temporary staff, and were covering for absent permanent staff.

**Policy and procedures**
Staff consulted the policy and procedure manual, however the manual was out-dated. Efforts to find an updated policy were unsuccessful.

**Communication – between staff**
A delay occurred in raising the issue with permanent theatre staff, resulting in the identification of the incident occurring on the following day.

**Risk reduction strategies**
A Clinical Review Panel consisting of 12 senior medical and nursing staff reviewed the incident and its outcome and made recommendations for system change. These recommendations were then approved by the Chief Medical and Nursing Officers and communicated to the relevant clinical areas for implementation.

The following risk reduction strategies were implemented:

1. Updated policy and procedure manual.
2. Unit based policy and procedure manual to be reviewed at regular intervals to ensure they are up to date and accurate.
3. Equipment to be stored in sealed bags with tag. Tag to have date when equipment was last cleaned. Equipment will not be used unless tag present.
4. A training and competency program should be established for staff rotating to the Endoscopy unit. This should be documented.
5. Manager of the operating theatre will ensure availability of adequate skill level within the unit during senior staff absence.
6. Future planning for endoscopy should address standardisation of equipment and cleaning processes.
Risk Reduction Strategies – Case 2

Description of event
Surgery was performed on the wrong knee.

Contributing factors to event

Policies and procedures

No final checking process immediately prior to incision
The lack of a final check immediately prior to incision in a side-specific surgery resulted in failure to recognise that the incorrect limb had been prepared for surgery by staff who had been influenced by visual clues in selecting which limb to prepare, this contributed to the wrong side surgery.

No policy for the surgeon actually performing the procedure to mark the site
The lack of a policy requiring the person actually doing the surgery to mark the side (or site), and place the tourniquet on to the appropriate limb, contributed to the marking of the wrong side. This process was undertaken by staff other than the surgeon.

Communication – between staff
No formalised system for triaging communication pagers. The lack of a formalised system for triaging doctor’s pagers contributed to the doctor feeling obliged to answer all the pagers he/she received before he/she scrubbed for theatre. This contributed to the doctor and other staff involved in the actual surgery not realising that the wrong knee had been prepared for surgery and the wrong side was operated on.

Human Resources – allocation
No policy for dealing with task assignment when short-staffed – The lack of a policy to deal with task assignment in operating theatre when there was unexpected staff shortage, contributed to the nursing staff feeling obliged to take on additional tasks while the leg was being prepared for surgery. This contributed to the staff who were involved in the actual surgery not realising that the wrong knee had been prepared for surgery and the wrong side being operated on.

Risk reduction strategies
The following risk reduction strategies were implemented:

1. A system of ‘time-out’ be implemented in the Operating Theatres to ensure appropriate checks are done prior to incision. A time-out poster has been developed and is prominently displayed in Operating Theatres.

2. Unit based policy and procedure manual to be reviewed at regular intervals to ensure they are up to date and accurate.

3. That a policy be implemented that the person who is doing the surgery be responsible for marking the site and side in side-specific surgery.

4. That a system to allow triaging of pagers be implemented – Procedure developed in collaboration with Engineering department.

5. That a policy be formulated that specifies staff assignment in theatres and addresses issues of task assignment in times of staff shortage. A policy was developed in collaboration with the senior nurse managers.
Risk Reduction Strategies – Case 3

Description of event
Radiotherapy performed on wrong patient.

Contributing factors to event

Policies and procedures:
The use of passive identification methods.

Human resources – allocation:
New staff unfamiliar with both patients.

Equipment:
Immobilisation mask fitted “satisfactorily” (masks are customised to the patient but can fit on another patient on occasions).

Other:
Patient responding to wrong name and was expecting to be called (similar names involved).
A similar type of procedure involving patients’ head.
A similarity of the patient who responded to the name, to the identification photograph.

Risk reduction strategies
The following risk reduction strategies were implemented:
1. Development of an active patient identification policy and procedure (refer to Policy and Procedure example on next page).
2. Education of all staff in new policy.
3. Development of a patient brochure explaining the need for the patient identification process.
4. Identification card to be produced for all patients at the time of the first visit and presented by patients at subsequent visits.

The implementation was conducted by discussion with all Radiotherapy Charge staff and a memo sent to all staff within the department. Radiotherapy Charge staff are responsible for ensuring that all staff reporting to them are aware of the change to the checking procedure and for ensuring compliance.
Patient Identification Policy and Procedure

Scope
To describe the policy and procedure for identifying patients attending the centre

Responsibility
Director

Other Relevant Documentation
• Patient Information Brochure – Patient Identification (to be written and handed to patients at registration)

Policy
• It is the responsibility of all staff members to correctly identify the patient they are providing a service to, particularly where a service is potentially harmful or a breach of privacy could occur.
• Patient identification shall be based on active processes (defined below).
• For the purposes of this document:
  - “patient” may also refer to the patient’s legal guardian or carer
  - “records” implies any document normally filed in the patient’s legal guardian or carer
  - “working documents” refers to other documents that are not intended to filed in the medical record but may nevertheless be used in the provision of care
  - “item (s)” refers to any patient specific accessory or device
  - “full name” refers to first and last names as a minimum

Procedure

Identification of the patient
• Patients shall be given the brochure “Patient identification at XXXX” at the first presentation for a course of care at XXXX. An explanation shall be provided if necessary.
• A Cared (ID Card) shall be produced by clerical/reception staff at the first presentation of the patient at XXXX. The card shall be affixed with a computer generated patient label or a handwritten label indicating as a minimum the patient’s full name and date of birth. Patients shall be requested to bring the card every time they attend XXXX.
• Staff shall identify patients using an active method of identification before providing any potentially harmful service or procedure.
• An “active” identification process is defined as one in which at least two patient specific/unique identification criteria are obtained directly from the patient. Acceptable criteria are:-
  - Full name
  - Date of birth (DOB)
  - Address & telephone number
- Medicare number
- Any other patient specific identifier that can be checked against valid records

- Assigned patient ID cards and wristbands would normally be considered to contain two criteria, usually full name and DOB at a minimum. Where they are not, additional criteria would need to be sought.
- It is sufficient where staff are working in pairs for one to ask the other whether the patient has been identified correctly for that episode of care.
- Active identification shall be undertaken by equipment operators in terms of matching the patient to electronic files when acquiring patient specific data from the equipment (images, treatment parameters for example).

Patient identification contained on documents and patient specific items
- In accordance with XXXX policy all documents intended to be included in the medical record must contain the patient's last name, unique record (UR) number and the date the document was created.
- In addition to the above, XXX radiation therapy treatment sheets shall record full name, date of birth and UR number on the prescription page.
- Working documents and patient-specific items shall contain as a minimum, patient last name, UR number and the date the document or item was created.

Patient ID photographs
- Patient ID photographs should only be considered an adjunct to the patient identification process and are not considered an active identification criterion.
- ID photos shall be obtained of consenting patients at presentation (unless previously taken photos exist) and their purpose explained to the patient.
- Three copies of the photograph shall be printed onto stickers. One will be stuck on the inside back cover of the XXXX history and two copies retained in the history for later use. Clerical staff are responsible for these photos.
- All photos shall be labelled with full name and DOB at a minimum (label or handwritten directly onto the sticker at the time of the photo is generated).
- One of the previously taken photos may be used for attachment to the back page of the treatment sheet or a new photo taken and labelled as above.

Inpatients without wristband
- Where an inpatient arrives at XXX without a wristband and they are unable to provide name and date of birth the ward should be contacted to come to the centre and identify the patient before any further care associated with significant risk is undertaken for that patient.
- If ward staff are unable to respond within a reasonable time the patient should be returned to the ward and the ward contacted.
Patient pamphlet information

- To ensure that we provide the correct care and treatment as planned for you on all occasions when you attend The Centre please read the following information.

- When you are registered as a patient you will be given a small appointment card with a sticker on it containing identification details about you. Please bring this card with you every time you come to the centre. The purpose of this card is to assist staff to correctly identify you every time you attend the centre.

- Staff will at times ask to see that card when they are providing a service to you. This is to make sure that we have identified you correctly and the records we use to provide your treatment and care are also correct.

- If you forget to bring your card staff will ask you your first name, last name and your date of birth to check your identity before proceeding with your care or treatment.

- At registration staff will also ask your consent to take a photograph of your face to attach inside your patient record and your radiotherapy treatment sheet (the sheet that staff use each day to deliver radiation therapy treatment). The photo is used as an additional check for staff.
**Risk Reduction Strategies – Case 4**

**Description of Event**
Retained gauze pack following minor surgical procedure during delivery.

**Contributing Factors to Event**

**Policies and Procedures**
Current protocol exists for checking of packs and sutures during procedure – protocol was followed for counting of swabs, but missing swab was not reported.

**Equipment**
Swabs without ties were being used. Bucket for disposal of swabs had been used for all general waste, making counting of Swabs more difficult.

**Risk Reduction Strategies**
The following risk reduction strategies were implemented:

1. Protocol to be revised to reinforce the importance of accounting for all packs.
2. Copy of the revised protocol to be given to all theatre staff, with a covering letter stating the importance of this protocol and the adverse events that can occur when it is not complied with. Any non-compliance will require performance management for that person.
3. Supplies of non-tape packs to be discontinued, and only packs with tapes to be used in suite.
4. If any pack count is incorrect, an examination is to be made, documented and signed to verify that there is no pack in-situ.
5. No person, procedure trolley or bin is to leave the suite until the count is correct.
Risk Reduction Strategies – Case 5

Description of event
Transfusion of infected platelets.

Contributing Factors to Event

Policies and Procedures – storage guidelines (coordination of care)
Inadequate platelet storage in the laboratory blood bank, unable to maintain consistent temperatures within defined parameters, increased the potential for contamination of platelets to occur.

Human Resources – training
Although there were no deficiencies identified in the management of the patient upon discovering the transfusion reaction, it was felt that the level of knowledge and expertise demonstrated in this instance might not be consistent throughout the Hospital.

Other
The nature of bacterially contaminated cellular products to visually appear no different from uncontaminated products increased the likelihood that concerns with the appearance of the product were discounted as evidence of contamination.

Risk Reduction Strategies
The following risk reduction strategies were implemented:

1. Nursing staff to be encouraged to continue reporting concerns and to return suspicious products to the hospital Blood Bank for culture – An Alert Memo will be distributed to all clinicians regarding the potential of bacterial contamination not cellular blood products, particularly platelets, and outlining the recommendations.

2. That the laboratory on-call haematologist be notified immediately of the ‘unusual’ appearance of any blood product received from the Australian Red Cross Blood Service (ARCBS) or to be issued from the hospital Blood Bank.

3. That the on-call laboratory haematologist is contacted regarding any products received back from the ward of concern to clinical staff (especially those experienced in administering blood and blood products for transfusion).

4. That any blood product with changes as mentioned above, NOT be issued for the hospital Blood Bank for transfusion.

5. That any blood product of concern should be sent back to the ARCBS for further analysis.

6. That the unit registrar the consultant immediately when an unusual or clinically serious transfusion reaction has occurred (as in a possible septic reaction).

7. Guidelines for the ‘Management of Febrile Transfusion Reactions’ be developed and be made available on the intranet. Regular hospital-wide education program for all clinical staff be provided in relation to the recognition and management of the more common and also rare transfusion reactions.

8. That adequate temperature-controlled storage of platelets (including potentially a new platelet shaker) be considered.
Risk Reduction Strategies – Case 6

Description of Event
Pathology specimen misplaced in theatre.

Contributing Factors to Event

Policies and Procedures – (coordination of care)
- An unwritten procedure of omitting visual/verbal checking of labelling of pathology specimen made it more likely that an unlabelled specimen could be placed on the multiuse table.
- An unwritten procedure existed that allowed count and pathology specimen data to be entered on the equipment database prior to theatre. The procedure included changing the data afterwards if a problem was found in-operatively.
- No single place was designated for pathology samples once they left the scrub table. The most common location for them was to be left on a multiuse side table.

Human Resources – allocation
- Staff were stressed, as only two of three rostered staff were present. One staff member had called in sick and a replacement could not be found. Staff not only had to carry out large counts, but also had to fit in a meal break and set up for next case.

Risk Reduction Strategies
The following risk reduction strategies were implemented:
- That staff be made aware of the requirement of visual/verbal handover of pathology specimens leaving the scrub table.
- That audits of specimen handling procedures be added to the newly introduced count audit to reinforce the importance of this step.
- That count and specimen date not be entered on until the procedure is completed.
- That a purpose specific receptacle be introduced to all theatres for all specimens leaving the scrub table, but not immediately going to pathology.
- That the process of staffing when a surgical nurse designated to a procedure calls in sick be reviewed.
Risk Reduction Strategies – Case 7

Description of Event
Radiology investigation performed on wrong patient.

Contributing Factors to Event

Policies and Procedures – (coordination of case)
The lack of a consistent process for ensuring the ‘Correct Side/Correct Site’ increased the likelihood of an error occurring.

Environment – busy
Staff were under pressure as there was an increased demand for fluoroscopic services requiring staff to undertake more cases, and work longer days. They were also in an unfamiliar environment when extra cases needed to be undertaken in the multi-purpose angiogram room. This resulted in the omission of confirmation of the specific radiology request prior to commencement of the procedure.

Risk Reduction Strategies
The following risk reduction strategies were implemented:
• That the Victorian Surgical Consultative Correct Side and Site Surgery Policy being adopted by the Division of Surgery and be adapted for use by the Radiology Department.
• That the Combined Audit Committee sponsors a cluster analysis of events with a suspected correlation to work schedules.
Risk Reduction Strategies – Case 8

Description of Event
Medication error reasonably believed to contribute to the death of a patient – administration of a pre-operative medication that was contraindicated in the patients’ condition.

Contributing Factors to Event

Policies and Procedures – (coordination of care)
The absence of a documented pre-operative plan led nursing staff to follow prompts on the hospital’s clinical pathway, designed for patients going to theatre for bowel surgery. The pathway questioned whether the patient required a certain preoperative medication. Nursing staff contacted unit the Registrar who had gone home by this time. It was suggested that nursing staff contact the covering medical officer. The nursing staff advised the covering medical officer that, according to the clinical pathway, this patient required a certain medication. There was no clear distinction between elective and emergency preparation.

Human Resources – allocation
There was an increased workload on the after hours medical officer, which resulted in a rushed assessment of this particular patient, and the decision to order the bowel preparation.

Human Resources – training and credentialing
The nurse in charge of the shift had limited experience in this role, and was acting in this position due to unforeseen sick leave. The medical officer covering that shift was on a medical rotation and was not familiar with the surgical ward.

Communication – between staff
Due to a failure in communication systems between medical and nursing staff at several levels, there was no communication of the pre-operative management plan for this patient. This resulted in the patient being given the medication.

Environment – busy

Risk Reduction Strategies
A copy of the RCA and the action plan were sent for review and comment to the members of the Hospital executives and senior clinicians.
The following risk reduction strategies were implemented:
Improve communication systems between medical & nursing staff through:

• A focus group with senior medical officers regarding improving communication with ward staff.
• Focus groups with surgical unit staff to identify methods to improve communication.
• Reviewing the junior medical officers orientation program and ensure importance of communication is emphasised.
• Reviewing nursing and medical handover processes.
• The development of a ‘check list’ for ward rounds, and a system for ensuring follow up of plans is completed before completion of duty where possible.

Revise clinical pathway to ensure that consideration of preoperative medication is specific with indications and contraindications prompted

• Consider a pathway that commences when the patient is admitted and then allows for the choice of surgery if indicated, rather than commencing a new paper trail at this point.
• Review clinical pathways and determine if a specific pathway should be developed for the particular medical condition that the patient experienced.
• Review present clinical pathway and reword statement to “discuss pre-operative medication” to ensure that all nursing and medical staff understand what is required including highlighting contraindications.

Nursing staff allocation guidelines

• Explore the feasibility of providing ‘in charge’ guidelines for nursing staff when required to act in this post.
• Investigate a ‘credentialing’ process for the Nurse In Charge, Associate Charge Nurse and Clinical Nurse Specialists.

Review workload of each surgical team

• Consider the allocation of senior medical officers if disproportionate workload.
• Review current theatre timetabling and prioritising for surgical registrar and junior medical officer duties, to ensure all unit responsibilities and required tasks are addressed in-hours.
• Implement a medical handover process between day and after hours – Refer to current ICU handover practice.
• Inform senior medical officers that registrars need to take a proactive role in ensuring that junior medical officers feel comfortable asking for help and support.
Future Recommendations

Through the review of the events reporting in 2002-03 to the Victorian Sentinel Event Program, and through reviewing the processes involved in reporting sentinel events, the following recommendations are outlined:

Recommendation 1

Further and ongoing education on root cause analysis training is required to provide a sustainable method of pro-active risk management in the clinical setting for hospitals in Victoria.

Recommendation 2

A system needs to be developed to ensure that any sentinel event that involve one or more organisations is reviewed to ensure all aspects of the sentinel event are investigated and the lessons learned are shared.

Recommendation 3

‘Near misses’ are included in the list of reportable events.

Recommendation 4

The Clinical Risk Management Unit reiterates the importance of timely submission of root cause analysis.

Recommendation 5

The Sentinel Event Program continue as a statewide Clinical Risk Management initiative, for the 2003-04 year with a comprehensive review of the program’s first three years to be undertaken in consultation with key stakeholders.

Recommendation 6

That the Australian Council on Safety & Quality in Health Care’s Open Disclosure Standard be incorporated into the root cause analysis framework.
The Sentinel Event Program has provided Victorian public hospitals with a system to report adverse events in a transparent, just and ‘no-blame’ culture. The identification of the contributing factors underlying such events has provided health services with the opportunity to improve safety and quality practices in their organisations, with the aim of delivering safe, high quality care for all Victorians.

The Sentinel Event Program has strongly endeavoured to protect the privacy of patients, staff and organisations, to develop a safe reporting culture for staff without fear of recrimination. This reiterates the current understanding that adverse events in health are most often the result of system issues, rather than individual omission or negligence.

The Program has disseminated lessons learned from the events, to assist Victorian hospitals to prevent such events from occurring in their own organisations. The increased bilateral communication with clinically relevant bodies, such as the Victorian Surgical Consultative Council, Consultative Committee on Obstetric and Paediatric Mortality and Morbidity (CCAMM) and the State Trauma Committee have assisted with formulating statewide initiatives for health services to improve patient safety. Monthly updates in the Clinical Risk Management Newsletter, ‘Risk Watch’, have provided an avenue to communicate effectively in a timely manner to Victorian health sector, including the Division of General Practice across the state.

System issues have been identified through aggregate review of the sentinel events, and strategies to improve such issues have been instituted on a statewide level. The process involved with root cause analysis has also provided health services with a quality framework for internal reviews of adverse events.

The Program has also allowed health services to understand their internal capabilities for Clinical Risk Management, with many organisations highlighting a need for further root cause analysis training. The Department is currently establishing an education framework for further root cause analysis training throughout the state.

Although many areas for further improvement have been raised, the Sentinel Event Program has advance significantly in its aim to promote self-reporting of medical errors and encourage a close examination of root causes, and how they can be prevented. It is hoped that such advances will continue, and fulfil the overall goal of creating a safe environment for patients by reducing the frequency of serious adverse events.
References

4. To Err is Human – Building a Safer Health System. Committee on Quality of Health Care in America, Institute of Medicine, National Academy press, Washington DC 1999

Appendixes

3. ‘If time is money, following these steps to ensure correct procedure is a sound investment.’ Safety & Quality Council, Royal Australasian College of Surgeons, and Department of Human Services, 2004.
Appendix 1
Ensuring Correct Patient, Correct Site, Correct Procedure

The Australian Council for Safety and Quality in Health Care (the Council) has developed a protocol for the prevention of procedures performed on the wrong patient or part of the body.

Why do we need a Protocol for Ensuring Correct Patient, Correct Site, Correct Procedures?

A large number of surgical, medical, radiology and oncology procedures are carried out in Australia every year. The standard of health services in Australia is very high and in the majority of cases, these procedures are carried out without any problems. But sometimes things can go wrong.

Planned procedures are occasionally carried out on the wrong patient or part of the body. These are known as patient safety incidents and are events that can cause serious harm and distress to patients, their families and the health professionals involved in their care. They can be costly to the patient who may require further treatment or medications, as well as to the health provider who has to spend time and resources fixing mistakes.

But with good planning, procedures carried out on the wrong patient or part of the body can be avoided.

Does it happen in Australia?

The Council has developed an agreed National Core Set of Sentinel Adverse Events, which includes procedures carried out on the wrong patient or body part. These types of infrequent, but alarming patient safety incidents occur in all health care systems, including those in Australia.

One Australian state has started to publicly report their patient safety incident data and the Council is working towards national reporting of these events. In one Australian State, 9 procedures were reported as being carried out on the wrong patient or body part in the year 2001/02. While only one state is publicly reporting their incidents, it has been found to happen in others. This number is small but is still considered too high, especially when better ways of doing things can reduce the likelihood of something going wrong.
What is being done to prevent this occurring?

When a procedure is carried out on the wrong patient or body part, an investigation may be conducted to determine why it happened. Results from these types of investigations in one Australian state identified 5 main causes of procedures being carried out on the wrong patient or part of the body:

- Poor checking of patients’ identification wristbands;
- Inadequate communication between staff members, including inaccurate recording of a patient’s treatment in their medical record;
- Not involving the patient well enough when identifying the correct site for a procedure;
- Having poor procedures in place for patients transferring between hospitals or health centres and health care staff; and
- Insufficient assessment of a patient before a procedure was carried out following a transfer from one hospital or health service to another.

There are a number of reasons why things go wrong. Health care, like any complex industry such as aviation and mining, can be risky. This is because there are so many steps involved in providing care that outcomes cannot be precisely controlled. However, with standardised procedures and protocols in place, unintended and unforeseen effects may be reduced. There is evidence from both the health system and other high-risk industries that having standardised procedures and protocols in place can reduce the likelihood of an error.

Addressing the problem

The Council has produced the *Ensuring Correct Patient, Correct Site, Correct Procedure* Protocol to help prevent procedures being carried out on the wrong patient or body part. These have been adapted from those produced by the Veterans Affairs National Centre for Patient Safety (VA NCPS) in the United States.

The *Ensuring Correct Patient, Correct Site, Correct Procedure* Protocol consists of 5 steps:

**Step 1:** Checking the consent form or procedure request form is correct

**Step 2:** Marking the site for the surgery or other invasive procedure

**Step 3:** Confirming identification with the patient

**Step 4:** Taking a “team time out” in the operating theatre, treatment or examination area

**Step 5:** Ensuring appropriate and available diagnostic images.

Performing some of these steps may feel awkward at first but will become second nature, similar to pilots and co-pilots using a pre-flight checklist and protocol.

The VA NCPS has examined cases of surgery being conducted on the wrong patient or body part and found that a large proportion of these cases could have been prevented if the steps in the protocol were carried out.

Joe Short

Joe Short* was called from the waiting room in a radiotherapy suite to receive his treatment. Unfortunately, Joe Smart*, who had a mild hearing impairment, answered the call and entered the treatment room, where the radiation therapist administered Mr Short’s treatment. The error was only later discovered when Mr Short asked the receptionist how much longer he would have to wait until he could be seen after waiting for some time.

The *Ensuring Correct Patient, Correct Site, Correct Procedure* Protocol requires staff to ask a patient to state their name and date of birth before a procedure is commenced. If this step of the Protocol was completed, staff would have realised they were about to treat Mr Smart instead of Mr Short, and ensured the correct treatment was then given to both patients. This would have saved both patients time, and for Mr Smart, the worry of receiving the wrong treatment. Many procedures are costly and this error meant that resources were used inefficiently.
What can I do?

Consumers of health services, managers and other staff in many areas of the health care system can contribute to ensuring procedures are not carried out on the wrong patient or body part.

Consumers:
A patient brochure is available that can be given to patients who are about to undergo surgery or other type of procedure, to show them ways they can be involved to ensure they get the best care possible.

Health Professionals:
All health professionals can help prevent procedures being conducted on the wrong patient or body part. The protocol can be put in place wherever procedures are conducted, such as surgeries, chemotherapy and radiotherapy clinics and medical imaging departments, to reduce the likelihood of procedures occurring on the wrong patient or body part.

Managers:
Make sure the Ensuring Correct Patient, Correct Site, Correct Procedure Protocol is implemented in your work area.

The Ensuring Correct Patient, Correct Site, Correct Procedure Protocol kit contains workplace posters, and patient brochures. For further information please contact the Office of the Safety and Quality Council on (02) 6289 4244 or see our website www.safetyandquality.org. The Protocol, as well as other useful resources may be downloaded free from our website.

After many months of waiting, Kylie* was admitted to hospital for an adenoidectomy. Kylie’s mother Jan* was asked to sign the consent form prior to the operation, but unfortunately a staff member misread the title and had Jan sign a consent form for adeno-tonsillectomy instead of adenoidectomy. Jan did not realise the error as she assumed that adeno-tonsillectomy was the name of the operation her daughter was to undergo.

The operating theatre had an extremely busy day, however Kylie’s identification band was checked against the consent form in the theatre and she had both her tonsils and adenoids removed during the operation. Jan was extremely distressed when she was told about the error and demanded explanations as to why this had been allowed to happen.

The Ensuring Correct Patient, Correct Site, Correct Procedure Protocol requires the patient, or their guardian (Jan in this case) to state their name, date of birth and type of procedure they are about to undergo just before they enter the operating theatre or treatment room. If this step had been carried out, both Jan and the staff would have realised the error, ensured the correct consent form was signed, and Kylie’s tonsils would not have been removed.
Robert was admitted to a day surgery unit for a knee arthroscopy and repair of a posterior horn tear. He signed his consent form, spoke to staff about the procedure and arranged for his wife Angela to collect him later that day. He was taken to theatre, the right-side knee was prepared for surgery and the arthroscopy was started on the right-side knee.

No tear was discovered in the right knee, so the surgical team reviewed Robert’s medical record and recognised that the arthroscopy should have been performed on the left knee. The surgeon proceeded to perform the arthroscopy and repair on the left-side knee.

Robert was angry at the team who allowed this to happen, especially as it was likely to delay his return to his work as a courier by several days, and he would have to rely on Angela to drive him places until he fully recovered. Angela had left work early to collect Robert and was annoyed at having to wait for several hours in the hospital until he could see his doctors about the mistake before he went home.

The Ensuring Correct Patient, Correct Site, Correct Procedure Protocol requires the patient’s surgical site, or other site for an invasive procedure to be marked with a pen that will not easily wash or rub off. If the site had been correctly marked in this case, the patient’s right knee would not have been operated on, and additional pain and inconvenience would not have been caused to Robert and Angela.

* Names have been changed to ensure confidentiality

TheEnsuring Correct Patient, Correct Site, Correct Procedure Protocol requires the patient’s surgical site, or other site for an invasive procedure to be marked with a pen that will not easily wash or rub off. If the site had been correctly marked in this case, the patient’s right knee would not have been operated on, and additional pain and inconvenience would not have been caused to Robert and Angela.

* Names have been changed to ensure confidentiality

This Protocol has been adapted with kind permission from the Department of Veterans Affairs National Center for Patient Safety (USA) Directive on Ensuring Correct Surgery.
Appendix 2
Ensuring Correct Patient, Correct Site, Correct Procedure

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**Step 1:** Consent form or procedure request form
The consent form must include:
- patient’s full name
- procedure site
- name of procedure
- reason for procedure

**Step 2:** Mark site of invasive procedure
The operative site for an invasive procedure must be marked by the person in charge of the procedure or another senior team member who has been fully briefed about the operation or procedure.

**Step 3:** Patient identification
Staff must ask the patient to state (NOT confirm):
- their full name
- date of birth
- site for, or type of procedure

**Step 4:** “Team time out”
Within the operating theatre or treatment room when the patient is present and prior to beginning the procedure, staff must verbally confirm through a “team time out”, when all other activity in the operating room is stopped:
- presence of the correct patient
- the correct site has been marked
- procedure to be performed
- availability of the correct implant where required

**Step 5:** Imaging data
If imaging data are used to confirm the site or procedure, two or more members of the team must confirm the images are correct and properly labelled.

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This Protocol has been adapted with kind permission from the Department of Veterans Affairs National Center for Patient Safety (USA) Directive on Ensuring Correct Surgery.
Appendix 3
If time is money, following these steps to ensure correct procedures is a sound investment.

Step 1:  
Time needed to fill out the consent form: 5 minutes

Step 2:  
Time needed to mark the site: 1 minute

Step 3:  
Time needed to identify the correct patient: 1 minute

Step 4:  
Time needed for a pre-surgery “team time out”: 2 minutes

Step 5:  
Time needed to verify imaging data is correct: 3 minutes

Time you didn’t spend telling a patient that you fixed something that wasn’t broken: invaluable!
Appendix 4
It is very important for you to tell your doctor about the medicines that you are taking and any allergies that you may have. Write down this information and show it to your doctor.

<table>
<thead>
<tr>
<th>Medicine</th>
<th>What is it for?</th>
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Understanding Your Procedures

It is very important for you to tell your doctor about the medicines that you are taking and any allergies that you may have. Write down this information and show it to your doctor.

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<th>Allergies</th>
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References:

Department of Veterans Affairs National Center for Patient Safety. *Understanding your surgery: Ensuring correct surgery.* 2003


Further Information

Copies of Council publications or further information on the work of the Council including upcoming events and consultations is available at

www.safetyandquality.org

or by contacting:

The Australian Council for Safety and Quality in Health Care (MDP 46)

GPO Box 9848

Canberra ACT 2601

Phone: 61 2 6289 4244

Fax: 61 2 6289 8470

Email: safetyandquality@health.gov.au

This Protocol has been adapted with kind permission from the Department of Veterans Affairs National Center for Patient Safety (USA) Directive on Ensuring Correct Surgery.
Ensuring Correct Procedures

This pamphlet will help you to understand what will happen before your procedure and how your doctors and nurses are taking steps to make sure that everything goes as planned.

Days to a couple of hours before your procedure......

Review all of the information on the Consent Form before you sign it. If you are not sure about anything, ask the staff.

You, or your guardian, must sign a consent form before many procedures can take place. It should be written in words that you can understand.

Many of your questions will be answered by reading the consent form. Here are some good questions to ask in order to better understand your procedure:

1. What is the name of the procedure that will be done?

2. Where or what body part will be treated or examined? (Write down if it is the left or right side, if needed.)

3. Are there any alternatives to the procedure?

4. What are the risks of this procedure?

5. What is likely to happen if I don’t have the procedure?

6. Who is in charge of the treatment team? (Write the name here.)

7. About how long will it take to recover after the procedure?

8. Will there be any side-effects?

The doctor or another member of the team may need to make a mark with a pen on the part of your body where the procedure will happen. This should be done BEFORE you go into the treatment room.

Some doctors will sign their name or initials. Some doctors will make an “X” or “Yes” mark on the correct body part.

Check that the mark does not rub off. It will be very important for the doctors and nurses to see the mark before the procedure commences. Tell your doctor or nurse if the mark rubs or washes off before the procedure.

An hour, or less, before the procedure...

Before the procedure, a doctor or nurse will ask you to say your name, date of birth and the part of your body that will be treated or examined.

Don’t be alarmed by these questions; the staff know who you are. This is how they make sure they have everything right.

Just before the procedure begins...

Just before the procedure begins, everyone in the treatment room will take a short “time out” and check for the last time that they have the right patient and are doing the right procedure on the right body part.

The doctors and nurses are taking these important steps to make sure that everything goes as planned for your care.
Appendix 5
It is very important for you to tell your doctor about the medicines that you are taking and any allergies that you may have. Write down this information and show it to your doctor.

<table>
<thead>
<tr>
<th>Medicine</th>
<th>What is it for?</th>
<th>When do you take it?</th>
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Allergies

References:
Department of Veterans Affairs National Center for Patient Safety. Understanding your surgery: Ensuring correct surgery. 2003
Australian Council for Safety and Quality in Health Care. 10 tips for safer health care: What everyone needs to know. 2003

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Ensuring Correct Surgery

This pamphlet will help you to understand what will happen before your surgery and how your doctors and nurses are taking steps to make sure that everything goes as planned.

Days to a couple of hours before your surgery......

Review all of the information on the Consent Form before you sign it. If you are not sure about anything, ask the staff.

You, or your guardian, must sign a consent form before any surgery can take place. It should be written in words that you can understand.

Many of your questions will be answered by reading the consent form. Here are some good questions to ask in order to better understand your procedure:

1. What is the name of the procedure that will be done?

2. Where or what body part will be operated on? (Write down if it is the left or right side, if needed.)

3. Are there any alternatives to surgery?

4. What are the risks of this surgery?

5. What is likely to happen if I don’t have the surgery?

6. Who is in charge of the surgical team? (Write the name here.)

7. About how long will it take to recover after the surgery?

8. Will there be any side-effects?

An hour, or less, before the surgery...

Before the surgery, a doctor or nurse will ask you to say your name, date of birth and the part of your body that will be operated on.

Don’t be alarmed by these questions; the staff know who you are. This is how they make sure they have everything right.

Just before the surgery begins...

Just before the surgery begins, everyone in the treatment room will take a short “team time out” and check for the last time that they have the right patient and are doing the right operation on the right body part. You may be asleep for this part.

The doctors and nurses are taking these important steps to make sure that everything goes as planned for your surgery.

Some doctors will sign their name or initials. Some doctors will make an “X” or “Yes” mark on the correct body part.

Check that the mark does not rub off. It will be very important for the doctors and nurses to see the mark before the surgery commences. Tell your doctor or nurse if the mark rubs or washes off before the surgery.