

Patient Safety and Clinical Quality Program

First report on incident management in the
NSW public health system 2003–2004



NSW DEPARTMENT OF HEALTH

73 Miller Street
NORTH SYDNEY NSW 2060
Tel. (02) 9391 9000
Fax. (02) 9391 9101
TTY. (02) 9391 9900

www.health.nsw.gov.au

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Foreword

In 2004, the NSW Government made available \$60 million over five years to establish the NSW *Patient Safety and Clinical Quality Program*. Among its key elements are the safety improvement initiatives reported on in this document.

This report presents the results of the first year during which all NSW public hospitals have been asked to report to the NSW Department of Health all serious incidents, mishaps or events resulting in preventable patient harm. The information has been collated for the first time with a number of lessons already learned and improvements made.

This kind of system-wide and honest examination of errors can generate the improvements necessary to stop them being repeated. This process will allow health professionals to design systems, policies and procedures that can help avoid such incidents in the future.

In healthcare, as in any industry, sometimes things go wrong. Equipment can fail, systems can prove inadequate, errors of judgment are made. In relatively very few cases, serious incidents occur that might have been prevented and some of these result in harm to patients. The majority of these incidents are not the result of a single action by an individual. More commonly, they are generated by a chain of events.

Preventing error depends on identifying the deficiencies in the sequence of events and fixing any identified problems. It is crucial to capture all the relevant information about an incident, investigate all of its causes and to take decisive action to protect patients from a recurrence of that kind of event.

This first year of the Program lays the groundwork for what is potentially one of the greatest ever systemic improvements to clinical quality in our public health system. Future success will depend on a culture of openness in which errors are acknowledged and reported so as to reduce the chance that others will make the same mistakes.

This shift in thinking about how we deal with error, combined with the roll-out of a new system for electronic reporting of incidents, will lead to an increasing number of events being reported. Somewhat paradoxically, a rising number of events reported will be one measure of success for the program.

The aim of the Program is that all significant adverse incidents are reported and reviewed, so that education and remedial action can be applied across the whole health system.

Foreword

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Everyone working in the health system is encouraged to contribute their knowledge of how and when mistakes are made in this constructive spirit, free of anxiety that the response will be unnecessarily punitive. The lessons from each localised incident can then be used to inform safety improvements in every health facility throughout NSW.

This report is dedicated to the late Ian O'Rourke AM, who was Chief Executive Officer of the Institute for Clinical Excellence, and integral to the establishment of the NSW Safety Improvement Program, which formed the foundation for the broader program.

I commend this report to those who share an interest in improving quality in the health system.



Robyn Kruk
Director-General

Executive summary

This report is unique in Australia. It is the first time a state or territory health department has attempted to gather systematically and report to the public the information about the most serious clinical incidents within its facilities – known in the health industry as ‘adverse events’.

This process depends on the goodwill of around 100,000 staff who work in NSW Health facilities. It is they who provide the individual incident reports that combine to form this valuable information. Reporting is an indication of their commitment to the continuing improvement of patient care.

In his *Report of Special Commission of Inquiry into Campbelltown and Camden Hospitals, July, 2004*, Mr Bret Walker, SC, remarked on the necessity to balance “the need for effective quality assurance activities, and thereby the real participation of clinicians, with the patients’ right to knowledge...” [page 139].

The clinicians and staff who provide this vital information do so in good faith that it will be used for the purpose of effecting systemic improvements to reduce error. Any attempt to interpret the data to infer comparisons between clinicians or facilities could be a powerful disincentive to open reporting.

For these reasons, this report does not identify individual clinicians, staff or facilities. Rather, the number and types of incidents and the measures taken in response are reported on since it is this information that can generate the improvements that will reduce the chances of such incidents being repeated.

The only similar reporting in Australia is that to be provided to the **Australian Council for Safety and Quality in Health Care** of so-called ‘core sentinel events’. These sentinel events are a list of eight rigorously defined incident types agreed by all States and Territories to be key indicators of systemic problems. They are listed on page 13.

A national report on these events will be published in 2005. As an indication, NSW recorded 31 and Victoria 30 such events in 2003/04 [see Table 1].

However, there are many other types of adverse events that can occur in a modern hospital environment with its complex and proliferating medical and surgical procedures, drug treatments and diagnostic machinery.

In NSW, all incidents that result in detriment to a patient are ‘reportable’ – they must be reported to management and, depending on their severity, to the Area Health Service and the NSW Department of Health for analysis and remedial action.

Executive summary

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Incidents are assessed against a matrix taking account of the seriousness of an event's consequences and its likelihood or frequency of occurrence. This generates a numerical rating which guides the appropriate action.

All incidents (including those that don't involve patients) are classified into four levels: **Severity Assessment Code (SAC)** 1 to 4.

The NSW Department of Health set out to collect information on **all** events reported in the most serious category: SAC 1. These incidents are very serious, but should be seen in the context of a health system of 206 hospitals and other facilities and more than 100,000 personnel.

In the 12 months covered by this report, more than 1.5 million people were admitted to NSW public hospitals. For the reporting year statewide, there were 452 events reported as SAC 1. An analysis of the categories of these events and their relative frequency is at page 14.

Already this important work has led to significant changes that are expected to reduce incidents with potential for patient harm. A new specialist bulletin for health professionals – *The Safety Advocate* – has published issues on a wide range of safety and quality topics and the *Correct Site, Correct Patient, Correct Procedure* policy has been promulgated to thousands of clinicians and operating theatre staff across NSW.

The **Clinical Excellence Commission (CEC)** was established in 2004 as a vital component of the *Patient Safety and Clinical Quality Program* – a major concerted attempt to bear down on health system errors and systematically foster excellence in clinical care in NSW. The Commission is charged with identifying and analysing all systemic issues that could reduce patient safety or the quality of care.

The Commission will visit all Area Health Services (AHS) in 2005 to ensure the adequacy of their systems to detect, analyse and prevent incidents.

Aside from this reinvigorated systemic approach to reducing error, there are cases where complaints are warranted against individuals or facilities. The **Health Care Complaints Commission (HCCC)** is the statutory body set up to receive and act upon such complaints. Where a complaint or pattern of complaints points to systemic flaws, the HCCC will advise the NSW Department of Health, the CEC and relevant healthcare organisations accordingly. These information flows and working relationships are important elements in the drive to improve the quality of care in the whole NSW health system.

Definition of terms

- Adverse event** Any event or circumstance leading to avoidable patient harm which results in admission to hospital, prolonged hospital stay, significant disability at discharge or death.
- AHS** Area Health Service.
- CEC** **Clinical Excellence Commission** – a statutory health corporation established under the Health Services Act to promote and support improvement in clinical quality and safety in NSW health services.
- IIMS** **Incident Information Management System** – a statewide electronic reporting and incident management system designed to underpin the NSW Safety Improvement Program.
- Incident** An unplanned event resulting in, or having the potential for, injury, damage or other loss.
- Sentinel event** Incidents agreed as key indicators of system failure by all States and Territories and defined by The Australian Council for Safety and Quality as ‘events in which death or serious harm to a patient has occurred’.
- RCA** **Root Cause Analysis** – a process used to review and analyse an incident seeking to identify as far as possible all causal and contributing factors leading to the incident and to identify corrective actions to minimise risk of recurrence
- SAC** **Severity Assessment Code** – a risk matrix used to stratify the consequence and likelihood of an incident to generate a numerical rating from 1 to 4. SAC 1 events always require investigation and notification to the Area Health Service Executive and the NSW Department of Health. SAC 2 events require notification to the Area Executive and local assessment as to the level of investigation required. Incidents rated 3 or 4 will be managed locally.
- SIP** **Safety Improvement Program** – a statewide component of the *Patient Safety and Clinical Quality Program* comprising training for healthcare personnel in incident management, the reporting system and the IIMS.

Overview of NSW Health Patient Safety and Clinical Quality Program

Background to quality and safety in healthcare

There is a growing body of international and Australian knowledge that has contributed to the evolving concept of quality improvement in healthcare.

Borrowing from other high-risk industries where safety is paramount, the health industry is developing techniques to better identify risks, investigate and analyse incidents and to improve practice. These techniques allow health services to manage known risks actively and develop systems to identify new or emerging risks.

A quality improvement framework requires routine examination of all incidents that cause patient harm. Most adverse events are not caused by a single, individual action. They usually result from a chain of events where inadequate safeguards and other systemic vulnerabilities erode patient safety. Preventing them depends on identifying the deficiencies that allowed the event to occur and fixing those problems.

In the past, information about adverse events was generally derived from single studies. Information collected was often specific to a hospital or clinician. Area Health Services have not been well placed to provide information continuously because much of it was not systematically collected in a consistent manner. A major thrust of the *Patient Safety and Clinical Quality Program* has been to establish the necessary collection, reporting and analysis tools.

The importance of clinical governance is now internationally recognised, as is the crucial need for strong relationships between nursing, medical and allied health staff and management to build a 'safety culture'. In such a culture the quality of healthcare is monitored closely, routinely and systematically.

In 1995, the *Quality in Australian Health Care Study* was commissioned as part of the Commonwealth Government's *Review of Professional Indemnity Arrangements for Health Care Professionals*. This research focused public attention on the incidence of adverse events in the health system.

The Study found that around half of adverse events experienced by patients were determined to be preventable. It showed that interventions, care and treatment intended to provide diagnostic information or improve patient health can inadvertently cause harm and this risk is particularly high in the acute hospital environment.

In 1999, the NSW Department of Health issued *A Framework for Managing the Quality of Health Services in NSW*.

Overview of NSW Health Patient Safety and Clinical Quality Program

The Quality and Safety Branch of the Department has developed policy and programs designed to:

- develop skills of individuals in the health system to recognise and analyse adverse events
- build organisational capacity to improve care
- increase accountability for safety and quality
- help implement these initiatives in the Area Health Services.

The NSW **Institute for Clinical Excellence** was established in 2001 to foster quality and safety programs and better clinical practice across NSW.

In July 2004, it was given additional powers and functions, and became the Clinical Excellence Commission, charged with system-wide monitoring and assessment of quality and safety programs and expert clinical support to health services.

The NSW Government made available \$60 million to establish the *Patient Safety and Clinical Quality Program* in July 2004. The program builds on the experience of the Safety Improvement Program, begun in 2002.

The *Patient Safety and Clinical Quality Program* has five major elements:

1. A Clinical Excellence Commission to promote and support better clinical quality and to advise the Minister for Health on where systemic improvements can be made.
2. Clinical Governance Units (CGUs) in each Area Health Service to oversee the management of patient safety.
3. A program to manage incidents and risks both locally and statewide to identify remedial action and systemic reforms.
4. A new electronic Incident Information Management System (IIMS) to facilitate centralised reporting and recording of incident information.
5. A Quality Assessment Program for all public health organisations, undertaken by an external agency, to determine whether the above components are in place and working well. The focus of the assessments is on Area Health Service quality and safety systems.

This report presents the incident information collected in the first year (2003/04).

Overview of NSW Health Patient Safety and Clinical Quality Program

Healthcare Associated Infections

In addition to the work mentioned above, for the past two years information on the rates of Healthcare Associated Infections (HAI) has been collected and analysed by the NSW Department of Health. HAI is the term used to describe any infection acquired while in hospital. Many such infections can be prevented by effective control programs, but not all HAIs are preventable. The data shows the incidence of these infections to be generally steady currently.

The NSW Department of Health collates this data in six-monthly reports and publishes them on its website. The latest HAI information can be found at: www.health.nsw.gov.au/health_pr/infect.html

Safety data collection and incident management

In late 2002, a comprehensive, system-wide approach known as the Safety Improvement Program (SIP) was introduced in NSW to manage information on safety and quality. Under this program simultaneous action is required at:

- the clinical interface where care is provided to patients
- the facility or service level
- the Area Health Service level
- State level.

The main focus is to make healthcare safer by constantly correcting system weaknesses through understanding why errors occur.

It has several key components:

- Severity Assessment Coding of incidents (SAC)
- reporting to the NSW Department of Health
- Incident Information Management System (IIMS)
- Root Cause Analysis (RCA)
- training of health personnel in all of the above.

Severity assessment of incidents

All healthcare incidents are assessed against a matrix taking account of the seriousness of an event's consequences and its likelihood or frequency.

This generates a numerical rating (Severity Assessment Code or SAC) which guides the appropriate action.

- **SAC 1** incidents are very high risk, can result in serious patient harm and must be followed by immediate action including reporting to the NSW Department of Health eg surgical instrument left inside a patient.
- **SAC 2** incidents are high risk and must be notified to senior managers who will assess whether further reporting is required eg a patient falls from bed fracturing hip.
- **SAC 3** incidents are medium risk and can be dealt with locally eg a patient spills hot tea on his hand sustaining a mild scald requiring a dressing, but with no long-term injury.
- **SAC 4** incidents are low risk and managed by routine procedures eg a patient slips on a wet floor but has no injury or bruising.

Safety data collection and incident management

Standard reporting

Since mid 2003, incidents within NSW Health facilities are reported to management using a standard format, which captures as much as possible of the pertinent information about the event, its causes and consequences.

Reports given a SAC rating of 1 must be sent to the Area Health Service executive and to the NSW Department of Health, where they are collated and reviewed for systemic problems.

The Incident Information Management System

The Incident Information Management System is an electronic system that:

- records all healthcare incidents – both adverse events and incidents that did not result in adverse events, but might have – in four categories: clinical; complaints; property security and hazards; and staff visitor and contractor
- assists managers to deal with incidents in their areas
- records the results of reviews and investigations of incidents
- provides reports on all incidents recorded in the system.

There are 100,000 potential users of this system in NSW ie all NSW Health system employees and contractors.

A comprehensive training program has been developed. It uses 'e-learning modules', CD-ROM, DVD and video to ensure all potential users have consistent training in the use of the IIMS.

The system was activated in all Area Health Services in early December 2004. Full deployment across the whole of NSW is planned by May 2005.

Root Cause Analysis

Error is intrinsic to human behaviour. In the past it was common for organisational responses to focus on an individual, often a clinician. This 'person' approach seeks chiefly to apportion blame for an incident. It is frequently unhelpful in tracing causes, contributing factors and suitable action to prevent a recurrence.

High-risk/high-reliability industries such as aviation and nuclear power generation have long established that the 'person' approach does little to prevent future, similar errors. A person found to be at fault may be replaced only for the replacement person to fall into the same error due to contributing factors that have not been rectified.

A 'systems' approach, which aims to identify systemic problems which underlie most errors, is more effective.

Safety data collection and incident management

Root Cause Analysis is an investigation technique developed for health by the USA Veterans' Health Administration. It explores the chain of events responsible for adverse events and 'near misses'. RCA identifies 'weak links' in the chain. By examining these, effective barriers or 'fixes' can be developed to reduce or prevent new instances of the same type of error.

The aim of a RCA is to understand how and why an event occurred. The process interrogates all stages leading up to an incident with the key questions:

- What happened?
- Why did it happen?
- What are the underlying causes?

Since 2003, NSW health services are required to subject all SAC 1 incidents to Root Cause Analysis.

When an adverse event involves a single clinician's practice, the issue of individual competence cannot be ignored. The RCA process outlined above must therefore work in parallel to performance review and management processes.

The goal of the *Patient Safety and Clinical Quality Program* is to foster a 'reporting culture' characterised by open disclosure to patients and their relatives and fair responses to human error. This does not, however, mean a completely 'blameless' culture or a system that does not assign personal responsibility when it is due, for example in cases of negligence or criminality. Where required, incidents will be reported to relevant professional registration boards and other authorities.

The principles of open disclosure endorsed by the NSW Department of Health are set out in Appendix 1.

Progress

A great deal of progress has been made during the first year of the Program:

- All Area Health Services have received education in conducting Root Cause Analysis.
- More than 2,500 staff (clinicians and managers) have completed the two and a half-day workshop on safety improvement (including how to conduct RCA).
- More than 1,000 staff have attended seminars outlining the principles and core components of the safety improvement initiatives.
- Follow-up visits have been undertaken to each AHS during 2004 to evaluate the effectiveness of the Program.
- A train-the-trainer program is currently under development to ensure the Program is sustained through a decentralised model. This training will be delivered to AHSs during April and May 2005.

Safety data collection and incident management

The Health Care Complaints Commission

In addition to the systemic framework presented in this report, there are sometimes grounds for investigation of individual clinicians. The NSW Health Care Complaints Commission is an independent statutory body established in 1993 which acts in the public interest by receiving, reviewing and investigating complaints about individual practitioners and facilities.

In April 2004, the Government announced a package of administrative changes designed to improve the operation of the Commission. These included:

- appointment of Judge Kenneth Taylor as Acting Commissioner
- 15 additional investigators
- \$5.7 million additional funding over 15 months.

The HCCC may also identify systemic issues which it may communicate to the Clinical Excellence Commission via the NSW Department of Health. While the NSW Department of Health has statutory responsibility for patient safety and clinical quality, the close working relationships between Health, the AHSs, the CEC, HCCC and healthcare organisations aim to promote consistently safe and high quality services.

National reporting

The Australian Council for Safety and Quality in Health Care has gained agreement from all States and Territories to a common set of 'core sentinel events'. These eight event categories are agreed indicators of system problems that will be reported nationally from 2005 and analysed in future years. There are many other types of incidents in healthcare not included in the 'sentinel events' list.

Health Ministers of all States, Territories and the Commonwealth have agreed that a national report on sentinel events will be published in 2005. The **Australian Institute of Health and Welfare (AIHW)** is working with the Australian Council for Safety and Quality in Health Care to prepare this report.

To date, Victoria is the only state to have published data on sentinel events. The table below compares reported figures in NSW and Victoria in the agreed categories.

Table 1. National sentinel events

Sentinel event	NSW (2003/04)	VIC (2003/04)
Procedure involving the wrong patient or body part	13	14
Suicide in hospital	4	1
Retained instrument or other material after surgery requiring further surgical procedure	9	8
Medication error resulting in death of a patient	2	4
Intravascular gas embolism resulting in death or neurological damage	0	0
Haemolytic blood transfusion reaction resulting from ABO incompatibility	0	1
Maternal death or serious morbidity associated with labour or delivery	3	2
Infant discharged to wrong family	0	0
Total	31	30

Serious incidents in NSW 2003–2004

The data collected under NSW Health's *Patient Safety and Clinical Quality Program* is far more comprehensive than just the agreed eight categories of sentinel events. All incidents in the most serious category are collected.

The table below details by type the 452 SAC 1 incidents reported during the first complete year of data collection. They include the 31 national sentinel events reported for NSW and referred to in Table 1.

Table 2. NSW public hospitals – SAC 1 reportable incidents 2003/04

Clinical management problems	157
*Suspected suicide – in hospital	4
– in the community	128
Patient at risk absent against medical advice	27
Labour or delivery problems	26
Falls	22
Wrong patient/body part/site/procedure	13
Medical devices, equipment failure	11
Retained instruments/materials	9
Attempted suicide in hospital	8
Medication or intravenous fluids problems	7
Blood and blood products problems	5
**Other	35
Total	452

Notes:

* Suspected suicides – four were in hospital, the remainder were in the community at time of death. All mental health services in NSW collect information about suspected suicides by people in the community that are known to have been a mental health patient. These statistics are collected before the specific cause or factors effecting death are determined.

** Other – the majority of reports in this category are deaths subject to statutory reporting (eg deaths in custody, people under guardianship or in long-term accommodation etc). The remainder are related to alleged assaults including sexual assaults, faulty building fixtures and fires lit by patients.

Clinical management

Events categorised as 'clinical management' were the most frequently reported type with 157 such incidents were notified in this reporting year. This represents 35 per cent of all SAC 1 reports.

Clinical Management incidents occurred in all types of healthcare settings and all specialty patient groupings. As a consequence, the incidents within this category vary considerably and this is reflected in the RCAs performed during the incident investigations. The incidents have in common an unexpected deterioration in a patient's clinical condition.

Examples of events reported in this category include:

- complications such as significant haemorrhage and/or compromised blood circulation during an operation procedure.
- post-operative complications such as wound infections.
- misdiagnosis or misinterpretation of results of diagnostic investigations including x-rays and pathology reports.
- incorrect diagnostic investigations and actions and/or misinterpretation of symptoms.
- incorrect judgement of the degree of physical deterioration, resulting in a patient being sent home when they required admission, closer observation and additional investigations.
- complications associated with immobility during prolonged bed rest, such as pulmonary embolus, chest infections and skin lesions.

Analysis has shown communication problems are the most common causal factor in these incidents. These include:

- failure to pass on information, both routine and non-routine
- incorrect assumption that information has been conveyed and understood
- failure to share information among teams
- staff unaware that specific communication channels or recipients have been neglected
- input from cross-disciplinary health providers not sought or encouraged.

In conjunction with the Clinical Excellence Commission, a statewide communication training program is being developed for roll-out in 2005.

Falls

Twenty two falls producing a serious consequence were reported to the NSW Department of Health in the year, approximately five per cent of SAC 1 events. These incidents occurred in various healthcare settings including acute care settings, rehabilitation units, residential aged care facilities and multipurpose services.

The reports do not give precise patient age information but descriptive terms such as 'frail' and 'elderly' suggest it is predominately older patients who experience falls. A small number of these patients are described as confused or suffering dementia.

Many falls occurred in bathrooms or moving between bathroom and bed. Falls also occurred while patients were getting into or out of bed. A smaller number fell from a bed.

Serious incidents in NSW 2003–2004

Injuries from falls included fractured hips, head injuries, various other fractures, cuts, bruises and abrasions.

A range of initiatives has been introduced in response to these findings. In NSW the *Management Policy to Reduce Fall Injury Among Older People 2003–2007* was published in 2004. The Australian Government, Department of Health and Ageing and the National Ageing Research Unit published *An analysis of research on preventing falls and falls injury in older people: Community, residential and acute care* the same year.

Using the above guidelines, clinicians are encouraged to perform falls risk assessments – accompanied by increased training in these assessments.

Falls risk assessment tools have been refined. Protocols, policies and guidelines, addressing the management of at risk patients and patients who have fallen, have been introduced. Special equipment to decrease the likelihood of falls or reduce serious complications is being trialled.

An example of systemic improvements generated by these processes are the multi-faceted falls prevention initiatives at Lithgow, Coffs Harbour, Queanbeyan, St George and Orange Base Hospitals.

They include the setting up of on-site teams to ‘champion’ falls prevention, coloured identifiers (such as arm-bands) for high risk patients, eliminating environmental hazards such as poor lighting and wet floors and lowered beds and bed-rails. These have achieved significant reductions in the incidence of falls and have been adopted by other hospitals.

Retained instruments or material

Closing a surgical incision when instruments or other material remain inside a patient’s body is an error that should not happen. Nine such events were reported during the year. Responsibility for ensuring all items are accounted for rests with all team members involved in surgery.

Investigation showed four of these events involved the same type of item. A replacement item designed to reduce this error has now been recommended throughout all AHSs.

Additionally, in response to these incidents the NSW Department of Health has strengthened its policy for *Standard Procedures for the Handling of Accountable Items in the Operating Suite*. The policy applies to all public hospitals where surgery is performed and is based on best practice principles including recommendations made consequent to Coronial inquiries.

Wrong Patient/Wrong Site/Wrong Procedure

This category captures incidents where surgery or other procedures have been performed on the wrong patient, the wrong side of the body or wrong body part or where the wrong procedure was performed. There were 13 reports – around three per cent of SAC 1 incidents.

Examples include:

- operation on the left eye instead of the right
- incorrect procedure because of a mix-up between patients
- assigning of pathology findings to the wrong patient
- extraction of an incorrect tooth.

These incidents are preventable. The Australian Council for Safety and Quality in Health Care in conjunction with Royal Australasian College of Surgeons, proposed changes to the way clinicians verify 'correct patient, correct procedure and correct site', later developed into a five-step plan endorsed by Australian Health Ministers in April 2004.

This model policy was disseminated throughout the NSW health system in November 2004. It outlines five steps that have proven effective in preventing these serious errors:

- **Step 1:** Completion of the procedure consent form including patient's full name, procedure site, name of procedure and reason for the procedure.
- **Step 2:** Patient identification – patient states their full name, date of birth, the site for and/or type of procedure to be performed.
- **Step 3:** Marking the site of any invasive procedure.
- **Step 4:** Where applicable, two team members review imaging data to confirm site and/or procedure.
- **Step 5:** Team 'time out' – immediately before beginning the procedure, team members are required to halt all other activity and verbally confer, confirming they have the correct patient, the correct site is marked, they are about to perform the correct procedure and, where applicable, the correct implant is available.

Serious incidents in NSW 2003–2004

Suspected suicide

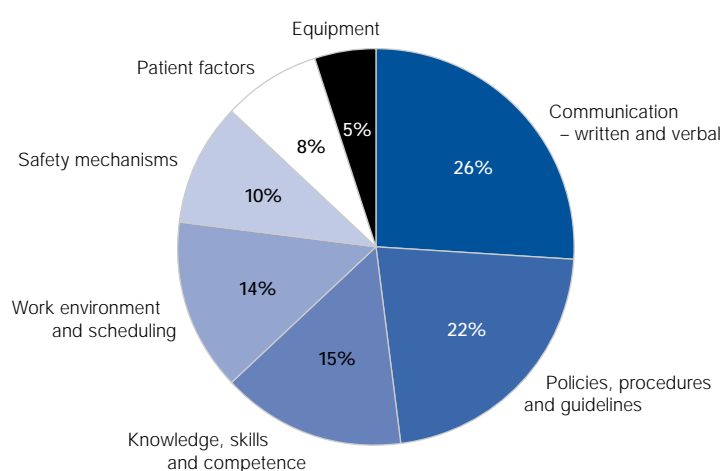
A total of 132 suspected suicide deaths were included in the reported SAC 1 incidents – 29 per cent. These include four people who died in hospital. The remainder were in the community at the time of death, but had been mental health clients previously. They are classified 'suspected' until an official determination of suicide as cause of death can only be made by the Coroner.

Examination of a suspected suicide using RCA methodology is required if the deceased had contact with the mental health service in the month preceding death. This process is managed by the AHS and usually includes expert clinicians from outside the facility or service team in question.

The NSW Department of Health has developed a new *Framework for Suicide Risk Assessment and Management* to be released in early 2005. It will be accompanied by two other key documents to improve mental health service delivery: *Discharge and Follow-up Protocols for NSW Mental Health Services* and *Post Intervention Guidelines Surrounding a Suicide Death*. The **Centre for Mental Health** will oversee implementation across NSW.

Causes of healthcare incidents

Root Cause Analysis reports of reported SAC 1 events examined by the NSW Department of Health yield the following preliminary breakdown of causes. Most events have more than one contributing cause so the data are presented as percentages only.



Causal factors identified from analysis of Root Cause Analysis

The reports show some of the causes of serious incidents to be:

- communication between healthcare workers, patients and their families
- availability of policies procedures and guidelines
- the work environment (including scheduling and staffing issues)
- supervision of junior staff.

During 2005 a comprehensive knowledge management strategy will be activated to ensure that the lessons learned from the RCAs are shared across the whole system and generate statewide quality improvements.

Serious incidents in NSW 2003–2004

Program-generated improvements: Early results

The reporting system has been in place since May 2003. In this period a range of actions to improve patient safety have been generated. These include:

- the *Correct Site, Correct Patient and Correct Procedure* policy, now circulated to more than 1,500 surgeons, 1,200 anaesthetists and 1,000 operating and procedure rooms across the state
- development and circulation of *Safety Advocates*, a bulletin for health professionals and the community to highlight risks and provide guidelines to manage them. *Safety Advocates* have been developed and issued on:
 - sterilisation and disinfection
 - medication safety
 - falls in health services
 - improving the safety of bed rails
 - the safe use of infusion pumps
 - self-inflating resuscitation bags
 - the safe management of breast milk
 - eliminating retained instruments – abdominal visceral retractor.

Copies of these publications are available at www.health.nsw.gov.au/quality

Lessons from a year of safety improvement

NSW Health's *Patient Safety and Clinical Quality Program* may be regarded as a preliminary success during its first year. A great deal of groundwork has been laid for the program to build upon in future years. In particular, the full roll-out of the Incident Information Management System during 2005 will increase reporting of incidents in a useful and timely fashion.

Key lessons for any 21st century health service include:

- **Having a safe reporting culture** – there are fundamental principles in setting up a robust incident reporting system that captures all incidents and 'near misses':
 - **Trust and honesty must exist between the clinical staff and the management** of the health service. Staff must feel safe to report incidents and know that they will be dealt with consistently, fairly and that individuals will not be unjustly treated for either reporting or being involved in an incident.

Serious incidents in NSW 2003–2004

- **Potentially blameworthy conduct must be dealt with differently to blameless error.** If an incident involves:

- criminal conduct
- a purposefully unsafe act
- alcohol or substance abuse by a health professional
- alleged or suspected patient abuse of any kind

it will be dealt with by individual performance management and, where appropriate, reporting to the relevant Registration Board, as well as by review of possible system failures.

- **Continuous improvement of the systems for care of patients** is the purpose of the incident reporting system.
- **Increasing numbers of incident reports are expected.** This will indicate a crucial shift in attitude to reporting. In the US Veterans Affairs health service, which has led the international development of safety focused culture in healthcare, increasing numbers of incidents both recognised and notified are seen as an indicator of success. Services with high levels of reporting are generally safer for consumers and staff than those that report less.
- **One incident is enough to warrant review, action and change.** One incident that has a high severity assessment rating must be enough to generate an immediate response to investigate the causes and introduce strategies to eliminate the risk of recurrence.
- **Feedback on progress and action to those reporting and involved in an incident is vital.** This becomes more critical the higher Severity Assessment Code rating.
- **Open disclosure of adverse events to health consumers.** Fear of litigation or disciplinary action and strong views that an apology or admission is an admission of liability have been traditional impediments to disclosure.
- **The Open Disclosure Project** and the development of the national *Open Disclosure Standard* was a national initiative of Commonwealth, State and Territory governments, (through the Australian Council for Safety and Quality in Health Care) to address this problem. The standard is being implemented throughout NSW Health. Its principles are set out in Appendix 1.

Other elements of the Patient Safety and Clinical Quality Program

The Clinical Excellence Commission

The Clinical Excellence Commission is a statutory health corporation established in August 2004 under the *Health Services Act* to:

- promote and support improvement in clinical quality and safety in public and private health services
- monitor clinical quality and safety processes and performance of public health organisations and to report to the Minister for Health thereon
- identify, develop and disseminate information about safe practices in healthcare on a statewide basis, including (but not limited to):
 - developing, providing and promoting training and education programs
 - identifying priorities for and promoting the conduct of research about better practices in healthcare
- consult broadly with health professionals and members of the community in performing its functions
- provide advice to the Minister for Health and Director-General of Health on issues arising out of its functions.

To fulfil these functions, the Clinical Excellence Commission will:

- provide advice to the Minister for Health and the NSW Department of Health on the status of safety and quality of healthcare in the NSW health system.
- notify NSW Health of any specific system-wide safety concerns it identifies that require immediate or urgent action.
- conduct quality system assessments of public health organisations and utilising available information, evidence, expert analysis and evaluation, recommend improvements to the NSW health system. To then work with the public health organisations, where appropriate, to facilitate implementation of these improvements
- provide a source of expert advice and assistance to private healthcare organisations and other interested parties
- develop and promote a statewide approach to improve the safety and quality of health services in NSW
- engage clinicians, managers and the community in the development of this statewide approach to safety and quality improvement
- lead a statewide program for the transfer of knowledge essential for improving safety and quality, through the identification and development of training and education strategies as well as clinical tools that can be widely applied

Other elements of the Patient Safety and Clinical Quality Program

- lead the development and system-wide dissemination of evidence-based guidelines for improving safety and clinical quality
- focus on system issues for improvement across NSW and any matters relating to the conduct of individuals will be dealt with in accordance with the existing policy and procedures of the public health organisation.

Clinical governance units

Clinical governance units have been established in every Area Health Service. They have responsibility to oversight and monitor safety and quality work and initiatives in the Area Health Service. In addition to building on existing incident management systems, a key role of these units is to ensure the Area has properly functioning systems to receive and manage serious complaints.

Other key functions of the clinical governance units include:

- supporting implementation of the Incident Information Management System
- ensuring all deaths are reviewed and untimely deaths are referred to the Coroner and other appropriate committees
- supporting staff in implementing quality policies and procedures
- improving communication between clinicians and patients and their families
- developing policies.

The quality framework

The *Framework for Managing the Quality of Health Services in NSW* established the principles for managing and improving the quality of care in NSW health services.

A committee and reporting structure is functioning in each AHS to identify risks and improvements needed. The Framework distilled the notion of 'quality' into six dimensions to assist health professionals and the community alike to grasp its practicalities. The dimensions of quality are:

- **safety** – preventing harm to health consumers
- **effectiveness** – achieving a good outcome and doing this well
- **appropriateness** – providing the right treatment and care in the right way at the right time
- **consumer participation** – individual community involvement in care and policy and planning decision making
- **access** – health consumers being able to receive services when and where they are needed

Other elements of the Patient Safety and Clinical Quality Program

- **efficiency** – providing the highest quality care for the lowest cost and allocating resources to programs that will achieve the greatest benefit for the largest number of people.

The *Quality Framework* has been implemented in all AHSs and all have an Area Health Service level Quality Council.

The Clinicians Toolkit for improving patient care

The Clinician's Toolkit was developed and published in 2001 to provide clinicians and managers with the tools to monitor and continually improve their quality of care. This is in addition to the responsibility they have for maintaining individual clinical and managerial skills and competence which are basic obligations for any health professional.

The Toolkit is the NSW Health guide to clinical risk management for all clinicians and managers. It outlines three fundamental requirements for clinical improvement:

- understanding human performance
- identifying, measuring and analysing problems with care
- acting on that information using a scientific method to improve care.

A formal obligation is now included in the indemnity contracts for all Visiting Medical Officers (VMOs) working in the NSW public health system that they utilise *The Clinician's Toolkit* to guide their quality monitoring, review and improvement activities.

The Area Health Service Chief Executive Performance Agreements with the Director-General have also mandated that AHSs assist clinicians with this.

End note

This is the first report by the NSW Department of Health on serious adverse events and safety improvement initiatives in the NSW health system in response to them. The coordinated Safety Improvement Program began in late 2002 and formed the foundation of what was to become the *Patient Safety and Clinical Quality Program* in 2004.

It is planned that similar reports will be published in future providing valuable information to both the clinical workforce and the community on statewide efforts to eliminate error and reduce misadventure in our health system.

Future reports will be refined and greatly augmented by the introduction of the Incident Information Management System in late 2004. As noted above, the number of incidents appearing in future reports can be expected to increase as the IIMS is fully rolled-out and the 'reporting culture' at the heart of this program develops further.

These expected increases in events reported will be a measure of success for the program. In order to assist that process, your feedback and comments are welcome via quality@health.nsw.gov.au

This report was prepared by the NSW Department of Health Quality and Safety Branch with the assistance of Enduring Solutions Canberra. It is the culmination of an enormous amount of work by many people throughout the health system in NSW. Their common purpose has been to contribute to helping our health system meet quality standards as high as any in the world and providing the NSW public with ever-safer hospitals and healthcare.

APPENDIX 1

Open disclosure definitions and principles

Open disclosure is the free discussion of incidents that result in patient harm. The elements of open disclosure are an expression of regret, a factual explanation of what happened, the potential consequences and the steps being taken to manage the event and prevent any recurrence.

Principles for open disclosure

- **Openness and timeliness of communication** – When things go wrong, patients and their family and friends should be given as much information as practicable about what happened in an open and honest manner.
- **Acknowledgment** – All adverse events should be acknowledged to the patient and their support people as soon as possible. Healthcare organisations should acknowledge when an adverse event has occurred.
- **Expression of regret** – As early as possible, the patient and their support people should receive an expression of regret for any harm that resulted from an adverse event.
- **Recognition of the reasonable expectations of patients and supporters** – The patient may reasonably expect to be fully informed of the facts about an adverse event and its consequences, treated with empathy, respect and consideration and given appropriate support.
- **Staff support** – Healthcare organisations should create an environment in which all staff encouraged to recognise and report adverse events and are supported through the open disclosure process.
- **Integrated risk management and systems improvement** – Investigation of adverse events is to be conducted and should focus on improving systems of care.
- **Good governance** – Open disclosure requires clinical risk and quality improvement processes through governance frameworks. It involves a system of accountability through an organisation's Chief Executive or governing body to ensure changes are implemented and their effectiveness reviewed.
- **Confidentiality** – Policies and procedures should fully consider patients', carers' and staff's privacy and confidentiality, in compliance with relevant law, including Commonwealth and State/Territory privacy and health records legislation.

