



The AIMS form has changed

Many health professionals will know that the AIMS form has changed. The changes have been made to reflect the new qualified privilege protection. The Advanced Incident Management System (AIMS) is a declared quality assurance activity under the Commonwealth's *Health Insurance Act 1973*. The previous application under the *Act* expired on 06 June 2006.

The creators of AIMS, the Australian Patient Safety Foundation (APSF) applied to the Commonwealth to renew the declaration for another 5 years. In the renewal application, they requested two significant changes to the AIMS process:

1. In previous declarations of AIMS, only incident reporters, managers, and (occasionally) third parties were allowed to utilise the information on the AIMS form (i.e. risk managers, RCA teams) for their investigations. In response to suggestions from AIMS users, the APSF changed the AIMS process to allow incident investigation teams to access AIMS forms. People directly involved in the investigation and analysis and are now covered by the same qualified privilege as reporters and managers.
2. Qualified privilege prohibits the disclosure of identified information acquired or created solely for the purpose of the AIMS process. The APSF has also requested that certain information acquired/generated in



the AIMS process is NOT protected. In the interests of open disclosure, it was requested that *factual* information about the incident (i.e. details that can be obtained from other places, such as the medical record) is not protected by qualified privilege. Information that was acquired during the *investigation* and *analysis* phase remains protected.

These changes are reflected in the new AIMS forms. The front page of the form has a white background, and contains factual information about the incident and is NOT protected. It should be noted that patient information, while not covered by qualified privilege, is still protected by patient privacy legislation. The rest of the AIMS form has a yellow/gold background, and is PROTECTED by qualified privilege. Therefore, no information outside the incident management and investigation process can be disclosed.

For more information: www.health.wa.gov.au/safetyandquality/programs/AIMSQP.cfm

Air emboli follows wound cleaning using H₂O₂

An incident recently occurred in one of the Western Australian health services involving the use of hydrogen peroxide (H₂O₂) under pressure to clean a surgical wound.

A patient was given a general anaesthetic to clean the wound. H₂O₂ was applied under pressure into the wound to clean the site. Shortly after commencement, the anaesthetist noticed that the End-Tidal Carbon Dioxide (ETCO₂) concentration in the expired air was low. The patient's oxygen saturation levels and blood pressure dropped, and the patient was noted to be cyanosed and pulseless. The patient was re-intubated, manually ventilated and given cardiac massage. The patient survived, but sustained permanent damage.

Hydrogen peroxide (H₂O₂) is a powerful oxidizer used to clean surgical wounds and remove dead tissue. Introduction of H₂O₂ to the body combines with the catalase produced by body cells, and decomposes into oxygen and water. The resulting effervescence is thought to loosen foreign particles embedded in the

wound. The release of oxygen is also believed to kill some forms of bacteria.

The risks of air embolus when using H₂O₂ are well documented in the literature (e.g. Haller, Faltin-Traub, Faltin, & Kern, 2002; Jones, & Segal, 2004; Sun, Lin, & Chan, 2004). For this reason, investigators in this case decided that the safest course of action was to remove H₂O₂ completely from all areas in the hospital. There are many other safe alternative methods to clean surgical wounds, such as normal saline, chlorhexidene and antibiotic prophylaxis if necessary.

References:

- Haller, G., Faltin-Traub, E., Faltin, D. & Kern, C. (2002). Oxygen embolism after hydrogen peroxide irrigation of a vulvar abscess. *British Journal of Anaesthesia*, 88(4), 597-599.
- Jones, P. M. & Segal, S. H. (2005). Venous oxygen embolism produced by injection of hydrogen peroxide into an enterocutaneous fistula. *Anesthesia and Analgesia*, 99(6), 1861-1863.
- Henley, N., Carlson, D. A., Kaehr, D. M., & Celements, B. (2004). Air embolism associated with irrigation of external fixator pin sites with hydrogen peroxide: A report of two cases. *Journal of Bone and Joint Surgery-American Volume*, 86-A(4), 821-822.

If you wish to subscribe to the SNIPtS newsletter, or if you wish to submit an article for publication, please contact Ngaere Stewart on 9222 2238 or email: Ngaere.Stewart@health.wa.gov.au

4th Australasian Conference on Safety and Quality in Health Care



21-23 August 2006 at the Melbourne Exhibition Centre

The Australasian Association for Quality in Health Care (AAQHC) and the Australian Council on Healthcare Standards (ACHS) present the 4th Australasian Conference on Safety and Quality in Health Care.

This conference provides an opportunity to showcase strategies, processes and system redesigns, information management innovations, new technologies and education initiatives that have led to improvements in safety and quality in health care.

Find out more about the conference at:
<http://www.health.nsw.gov.au/quality/pdf/aaqhc06.pdf>.

NOTICE:

The Western Australian Incident Reporting and Management Seminar has been deferred to await the arrival of one of our guest speakers.

Contaminated instruments 'near miss' was not reported



A recent consumer complaint received at a WA hospital has highlighted the importance of reporting 'near misses'.

The consumer identified an issue related to contaminated instruments. Staff had not reported the incident through the AIMS process because it did not eventuate in an actual adverse event. This type of incident is a 'near miss,' which refers to potential incidents that are caught and corrected before any harm to the patient can occur.

Near misses were not being reported to AIMS because staff were worried about negative responses from their colleagues. Staff erroneously believed that incidents occur because of failures to do their job properly.

However, investigation of incidents often reveals that these errors are not the fault of the individual.

Rather, the fault lies with the system. In this example, the increasing complexity of instrumentation, time demands, understaffing and equipment

shortages resulted in staff being unable to check for errors. Reporting 'near misses' can help to identify potential problems with the system, and can result in the development of processes designed to prevent similar errors from occurring next time. We learn from our mistakes, we can also learn from 'close calls' or 'near misses.'

In order to address this issue, the following action has been implemented at this site:

- staff were educated about the AIMS system;
- safety briefings were held to highlight high risk instruments;
- staff were educated on the value of reporting near misses;
- a risk management plan was developed;
- training officer was introduced for sterilising staff; and
- the reporting of 'difficult to clean instrumentation' to the Therapeutic Goods Administration.

The unit's target is to report 100% of

all near miss contaminations and other sterilising incidents via AIMS.

The next step is to review the types of near misses that occur, and use this information to improve systems. Other hospitals could also learn from this by:

- using AIMS as a monitoring system in their area; and
- promoting staff reporting of 'difficult to clean instruments.'



Did you know?

One of the most common reasons for failing to report incidents is because people don't believe that the incident is worth reporting.

Many people erroneously believe that 'near misses' are not worth reporting, because the incident was corrected before affecting the patient.

'Near misses' can provide very valuable information about potential problem areas BEFORE an adverse event occurs.

Improving reporting rates improves the quality of the data that is collected about incidents.

Did you miss the last edition of SNIPTs? SNIPTs is now available on the OSQHC website. If you have missed an edition, you can download it from: www.health.wa.gov.au/safetyandquality

The 2006 Surgical Mortality Audit Report

The Western Australian Audit of Surgical Mortality (WAASM) released the 2006 WA Audit of Surgical Mortality Report on 17th May 2006.

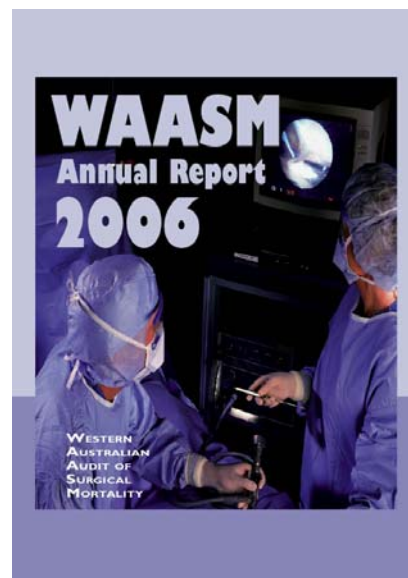
The report covers the audit of patient deaths that occurred whilst under the care of a surgeon, whether or not a procedure or operation took place. The purpose of the audit is to provide feedback to surgeons and hospitals, and to identify deficiencies in care. The ultimate goal of the process is to improve clinical practise.

During the period January 2002 to December 2005, 4% of deaths reviewed were considered to be associated with an adverse event. The adverse event was deemed to be preventable in 1% of cases.

The Audit found that elective admissions were associated with a higher proportion of adverse events (mostly technical errors). Emergency admissions were generally associated with delays in care.

delays in care. A number of positive changes to clinical practise can be attributed to the Audit:

- There has been a steady decrease in the proportion of cases associated with deficiency of care (25% in 2002 compared to 19% in 2005).
- There has been an increase in the reported use of prophylaxis for Deep Vein Thrombosis (61% in 2002 compared to 69% in 2005).
- There has been a reduction in the number of futile or unnecessary operations.
- There has been an increase in the proportion of consultant surgeons operating on patients who are returned to theatre.
- Most (73%) participating surgeons indicated that they had changed their practise in at least one way as a result of the Audit.
- There was no surgical team whose performance was significantly different from the overall average performance of all the surgical teams.



The WA Audit of Surgical Mortality Audit Report is an excellent audit with high participation rates. The results demonstrate many positive changes to clinical practise.

Thankyou to everyone who has taken the time to write in and share their lessons. Sharing lessons is extremely valuable to everyone who works in clinical settings. If you have implemented anything in your workplace as a result of analysis of your own AIMS data, or if you have a lesson that you would like to share, please let us know and we will publish your lesson in the next edition of SNIPtS. Contact Ngaere Stewart to share your lessons: 9222 2238 or Ngaere.Stewart@health.wa.gov.au

Medication incidents: they're enough to make you sick

Lesson 2

Local analysis of Australian Incident Management System (AIMS) trends alerted Western Australian Country Health Service (WACHS) to the large number of reported medication incidents that they were experiencing in the South West.

WACHS is not the only health service area with a large number of reported medication incidents. Medication incidents are one of the most common incidents reported for **all** health services areas in Western Australia.

Content analysis of AIMS narratives has enabled WACHS to identify and address contributing factors to medication incidents. WACHS has identified that one of the most frequent contributing factors to medication incidents was misinterpretation of an order due to unclear or illegible handwriting.

A review of the literature and available audit tools resulted in the development of a risk based medication safety audit tool. This audit tool focused on both systems and human factors. Risks were identified in the following areas:

- Legibility of prescriptions;
- Compliance with policy in relation to documentation of medication prescriptions;
- Reporting rates of medication errors through AIMS;
- Patient medication reconciliation processes at transfer through service;
- Policy for epidural medication/management;
- Competency based education for clinicians;
- Patient education processes
- Online access to reference systems.

In order to address some of these issues, a Medication Safety Audit Risk Treatment Action Plan was developed.

Some of the recommendations detailed in the action plan include:

- Establishment of routine audits of legibility and compliance with policies in relation to Medication Management/Orders.
- Ongoing education and promotion of the importance of reporting incidents through AIMS.
- Use of crosses or lines to highlight cease dates/times on medication charts.
- Trial of computerized prescription processes at selected sites to assess positive impacts on legibility.
- Distribution of a list of unacceptable abbreviations.
- Distribution of '10 tips for safer health care' to all patients on admission.
- Development of protocols for medications with elevated potential for harm.
- Development of a self-directed learning program for enrolled nurses in the area of safety and quality.



Correct patient, correct site, correct procedure guidelines: Friend or foe?

Medical errors involving the wrong person, the wrong site, or the wrong procedure do not happen often. However, they usually result in significant human suffering. In WA, these incidents are known as wrong patient/site/procedure incidents.

In Australia, these incidents are notifiable as sentinel events. Several incidents involving the wrong patient/site/procedure have been reported in Western Australia. In order to reduce the risk of further incidents of this nature, the Office of Safety and Quality developed the Correct Patient, Correct Procedure and Correct Site Policy and Guidelines for WA Health Services, based on Royal Australasian College of Surgeons Guidelines, and policies from the Veterans Affairs National Centre for Patient Safety. The policy outlines steps that should be taken to ensure that the patient's consent is obtained, the patient identity is confirmed, the correct site is marked and operated on, and the correct procedure is performed.

A study was recently conducted in the United States (US) to determine the effectiveness of protocols implemented to prevent these types of medical errors from occurring (Kwaan, Studdert, Zinner & Gawande, 2006).

Forty cases of wrong site surgery were identified from a liability insurer's database containing malpractice claims over a 20 year period.

The largest proportion of the incidents (62%) were non-spine surgical procedures. The remainder of cases involved surgery on the wrong vertebral level or wrong side laminectomy of the spine.

Of the non-spine wrong site surgical procedures, most incidents (69%) involved error that had occurred prior to patient's arrival into the operating room, i.e. scheduling errors.

In 38% of the non-spine wrong site surgery incidents, it was considered unlikely that the protocols in place to prevent wrong patient/site/procedure

errors would have prevented them from occurring. For example, in one case the wrong magnetic resonance images were sent from a referring hospital. The records were for a patient who had the same name as another patient.

It was considered that 62% of non-spine wrong site incidents could have been prevented if the correct site/patient/procedure protocols had been implemented and followed. For example, in a wrong-toe surgery case, the correct foot was marked, but the intended toe was not.

Overall, protocols such as WA's Correct Patient, Correct Procedure, Correct Site Policy, if fully implemented, might have prevented nearly two thirds of incidents.

Reference:

Kwaan, M. R., Studdert, D. M., Zinner, M. J., Gawande, A. A. (2006). Incidence, Patterns, and Prevention of Wrong-site surgery. *Archives of Surgery*, 141, 353-358.

Patient tracking system prevents wrong site surgery errors: United Kingdom

A UK hospital is piloting a radical new radio tracking system that claims to prevent mix ups in patient identity. Mix-ups in patient identity are one of the leading causes of wrong site surgery.

A state-of-the-art tracking system developed by a partnership between Intelligent Medical Micro Systems, and Daconi, has been installed in the ear, nose and throat ward of Birmingham Heartlands Hospital. Patients are tagged with a slim plastic wristband on admission to the hospital. Each wristband is embedded with a radiofrequency identification (RFID) tag. A wireless network tracks the patient's progress through the hospital.

A digital photograph is taken of the patient on admission, and attached to the patient's digital medical record. The patient's digital medical record (and photograph) can be retrieved using handheld digital assistants at the bedside, or at other key locations, such as the operating theatre. The digital photograph verifies that the surgeon is operating on the correct patient in the right place, and the digital medical record confirms that the correct procedure is being performed.

The new system has been so successful that Birmingham Heartlands Hospital is considering installing the technology in other wards and theatres within the hospital. A contract for £300,000 is out to tender.

Messy handwriting led to medication incidents

Lesson 3

Analysis of Australian Incident Management System (AIMS) data has alerted a Western Australian health service to the high number of medication incidents that have been occurring due to messy handwriting.

In a number of reported incidents, poor handwriting on insulin charts has resulted in the misinterpretation of the dosage to be administered.

The number of units of medication is usually handwritten onto the insulin chart, and the letter 'u' (short for unit) is sometimes written after the number. The problem was that the letter 'u'

was sometimes written in an unclear or messy fashion, and occasionally mistaken for a number when administering the medication. As a result, some patients received an overdosage of insulin.

In order to address this problem, a review of the insulin administration chart was undertaken at this site.

A new insulin chart was created, on which the word 'unit' is pre-printed after each order. This allows the clinician to simply write the number of units required, eliminating the risk of misinterpretation.



Did you know?

The National Inpatient Medication Chart is being implemented into all public hospitals in WA. In addition, changes to prescribing practice are also being implemented to reduce the potential for medication errors:

- Only generic drug names are to be used.
- Doctors must now write the frequency and enter the administration time for each drug.
- 'U' is identified as a dangerous abbreviation; prescribers are now to write 'Unit' or 'Units.' A full list of acceptable abbreviation is available in the NIMC guidelines.
- For PRN ('as required') medications, doctors now enter the maximum dose per 24 hr period.
- For variable dose medications, test results need to be written on the chart prior to administration.
- Inserting NIMC into the AIMS report will allow tracking of incidents related to the new chart.

For more information about the NIMC and new prescribing practices, visit www.health.wa.gov.au/nimc