

2005 Limited Adverse Occurrence Screening (LAOS) program review

Evaluation report October 2005

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(LAOS) program review
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West Vic Division of General Practice

Murray Plains Division of General Practice

Goulburn Valley Division of General Practice

Otway Division of General Practice

North East Victoria Division of General Practice

South Gippsland Division of General Practice

Reference panel chairs of the divisions of general practice

General Practice Divisions Victoria Ltd

Gippsland Southern Health Service

Djerriwarrh Health Service

Nathalia and District Hospital

Kyabram and District Memorial Hospital

Boort District Hospital

Cohuna District Hospital

Rochester and Elmore District Health Service

Omeo District Health

Yarram and District Health Service

Yea and District Memorial Hospital

Alpine Health

Yarrawonga District Health Service

Benalla and District Memorial Hospital

Lorne Community Hospital

Colac Area Health

Stawell Regional Health

East Grampians Health Service

Maryborough District Health Service

Hepburn Health Service

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Definitions

The following terms are commonly used in this report:

*Department of Human Services,
September 2000,
Improving Patient Safety
in Victorian Hospitals*

*Walsh, K, Dineen, M, 1998,
Clinical risk management:
making a difference? The NHS
Confederation, London*

Adverse event	An unintended injury or complication, which results in disability, death or prolonged hospital stay, and is caused by health care management, rather than the patient's disease. ¹
Clinical risk management	An approach to improving quality in health care which places special emphasis on identifying circumstances which put patients at risk of harm, and then acting to prevent or control those risks. The aim is to improve quality of care for patients and to reduce the cost of risk for health care providers. ²
Reviewing GP	A general practitioner who has agreed to participate and attend training sessions to review medical records in the LAOS program.
Treating GP	A general practitioner who has had a medical record of a patient they have treated reviewed by the LAOS program.
Reference panel	A group of reviewing general practitioners who represent a specific division of general practice.
Statutory immunity	Section 139 of the <i>Small Rural Hospitals Act 1988</i> in Victoria enables quality assurance bodies of registered funded agencies to promote full and open discussions of quality issues. The term 'statutory immunity' refers to the devices in section 139 that aim to ensure that confidential information generated by approved quality assurance bodies cannot be disclosed to persons outside quality assurance committees and is not admissible in court proceedings.

Executive summary

Patients expect to receive quality health care regardless of the size of the hospital. Although the complexity of a patient's illness, and the medical treatment received, may increase the risk of adverse patient events dramatically, the underlying system issues that contribute to preventable adverse events can often be independent of the size of a hospital. For example, the risk of a patient experiencing an injury from a fall may be as prevalent in a small rural hospital as it is in a large metropolitan hospital. What does vary considerably, however, may be the availability of resources to identify and address these system issues.

The literature identifies that adverse patient outcomes, (where a series of adverse events or one significant event results in an outcome for the patient that was not intended), are the major clinical risks that hospitals currently face (Monash University, *Improving Patient Safety in Victorian Hospitals*, 2000).

The Department of Human Services introduced the Limited Adverse Occurrence Screening (LAOS) program in 2001 for Victoria's small rural hospitals. This followed the development of Victoria's Clinical Risk Management (CRM) Strategy. The LAOS program has endeavoured to improve patient safety in small rural hospitals by identifying preventable adverse events in acute patient episodes of care, and the subsequent underlying systemic issues, thereby influencing changes in clinical practice and organisational systems as required. Four years after the implementation of the LAOS program, the department has undertaken an evaluation of the program to determine its acceptance and progress by stakeholders.

The objectives of the review are to determine whether the LAOS process leads to recommendations and actions that improve patient safety in small rural hospitals.

The three key areas of review are:

- evaluation of the implementation of LAOS recommendations in small rural hospitals
- identification of the contribution that the LAOS program makes to the existing clinical risk management (CRM) framework in small rural hospitals
- identification of the benefits of the LAOS program to Victorian small rural hospitals.

The methodology for this evaluation included:

1. interviews with staff from Victorian small rural hospitals
2. interviews with the LAOS reference panel chairs in the six lead rural divisions of general practice
3. interviews with the six lead rural divisions of general practice LAOS project officers
4. interviews with other stakeholders, including general practice divisions of Victoria
5. review of the LAOS process in each division of general practice
6. review of a number of recommendations submitted to the department.

Key findings

The following points are key findings from the consultation process:

- The LAOS program is embedded in Victorian small rural hospitals.
- Over 90 per cent of stakeholders interviewed believe that the LAOS program should continue.
- Clinical risk management varies in its activities across Victoria's small rural hospitals. The LAOS program's value is stronger in the smaller rural hospitals than in the larger, more complex rural hospitals.
- The LAOS program can complement the clinical risk management strategies used in Victorian small rural hospitals.
- The general practitioners participating in the LAOS program have ownership of the peer review process in the LAOS program and value its contribution to their clinical practice.
- Recommendations from the LAOS program are used to inform clinical practice in small rural hospitals.
- There was a lack of a standardised approach to the application of LAOS within the divisions of general practice.
- There is considerable replication of work across Victoria, with no established methodology for identifying specific case studies for review.
- There is a need to review the medical records selection criteria (Wolff criteria) to ensure that it meets the needs of the small rural hospitals.

LAOS review recommendations

Table 1: Summary of recommendations from the 2005 LAOS program review

Recommendation 1	That the Department of Human Services (the department) enter into a triennial contract with each division of general practice to continue the LAOS program with strict key performance indicators.
Recommendation 2	That a state-wide coordinating role be established through General Practice Division Victoria Ltd (GPDV) to achieve standardisation and consistency in the LAOS program processes and improve efficiency and effectiveness.
Recommendation 3	That GPDV develops a governance structure for the LAOS program with agreed performance measures, in partnership with the department.
Recommendation 4	That the current divisions of practice funding be reviewed to enable better utilisation of resources and management of the LAOS program, and enable funding to GPDV to undertake the coordination role, within the current program budget.
Recommendation 5	That the LAOS program recommendations be developed in a standard format and submitted to the department's Clinical Risk Management Reference Group for review and subsequent statewide dissemination.
Recommendation 6	That GP reviewers to receive education which includes; <ul style="list-style-type: none"> • A standardised education and training package related to the LAOS program across Victoria. • Detailed education regarding privacy and statutory immunity legislation • Increase education opportunities for LAOS reviewers that are provided locally.
Recommendation 7	That general practitioners provide a pivotal link between the small rural hospitals and the divisions with the dissemination of the recommendations.
Recommendation 8	That medical records be de-identified by the project officers before entering the LAOS process.
Recommendation 9	Modification of the number of records screened – each division to screen 2 criteria each quarter, and plan advanced screening schedule for a 12-month period.
Recommendation 10	That there should be changes to the LAOS Wolff selection criteria. These changes should be to reflect: <ul style="list-style-type: none"> • unexpected patient death • unplanned return to theatre within seven days • unplanned readmission within 35 days for patients under 65 years of age • unexpected transfer to another health service • patient lengths of stay greater than 35 days • obstetric patients birthing episode of care • any record which that has been recommended by a doctor or other health professional for review.

Background

In 2000–01 the Department of Human Services established the Clinical Risk Management (CRM) Strategy for Victorian public hospitals to assist organisations in identifying major areas of clinical risk and to develop strategies to manage these risks effectively.

In 1995 the department sponsored a number of CRM pilot projects to assess ways of identifying, monitoring and preventing adverse medical events. The publication released in September 2000, *Improving Patient Safety in Victorian Hospitals* (Monash University) provided an overview of the evaluation of these projects and included a number of recommendations that led to the development of the CRM Strategy.

Through this strategy, funding has been provided to large regional and metropolitan hospitals to assist with the development of CRM structures in the areas of adverse event screening and incident reporting. The strategy for improving patient safety in small rural hospitals focused on the statewide implementation of the West Vic Division of General Practice (WVDGP) Limited Adverse Occurrence Screening (LAOS) program. The LAOS program, a system of peer review for rural general practitioners (GPs), was an adaptation of the LAOS program developed by the Wimmera Health Care Group.

In September 2001 the department engaged WVDGP to implement the division's model of CRM throughout rural Victoria through six lead divisions of general practice. All participating divisions of general practice applied for and secured statutory immunity under cover Section 139 of the Small Rural Hospitals Act.

The six lead rural divisions involved in the LAOS program are;

- South Gippsland Division of General Practice
- Goulburn Valley Division of General Practice
- Murray Plains Division of General Practice
- North East Division of General Practice
- Otway Division of General Practice
- West Vic Division of General Practice.

The WVDGP LAOS model is based on the Wimmera Health Care Group's adverse event screening model, developed by Dr Alan Wolff in the early 1990s. A summary of the model is provided in Figure 1.

During the discharge coding process health information managers (HIMs) screen the medical records of patients at each of the participating small rural hospitals. The following outcome criteria are used to identify records for review:

1. patient death
2. returning to theatre within seven days
3. unplanned readmission within 28 days
4. transfer to another acute care facility
5. patient lengths of stay greater than 21 days
6. unexpected readmission after discharge from another hospital
7. any record that has been recommended by a doctor for peer review.

Relevant medical records are photocopied and forwarded to a LAOS project officer located at the lead division of general practice in their region. The record is then forwarded to a general practitioner 'reviewer'. The reviewing GP screens the medical record for adverse events, and any learning opportunities.

Medical records containing potential adverse events are summarised and sent to the treating GP for comment.

A reference panel (a group of reviewing GPs) meeting is held, and the medical record and case summary with findings are discussed. Possible adverse events requiring recommendations are identified along with educational opportunities for GPs.

Recommendations are sent to all GPs within the division and the chief executive officers of the participating hospitals.

As this program is a significant part of small rural hospitals' CRM strategy, a formal evaluation of the implementation was required to assist future policy and funding directions. The focus of the 2005 LAOS program review is on the progress of the implementation of the LAOS program in Victorian small rural hospitals since its inception in 2001.

Overview of the review

Aim

The aim of this review is to evaluate the LAOS program implemented in Victorian small rural hospitals by the six lead divisions of general practice.

Objective

The objectives of the review are:

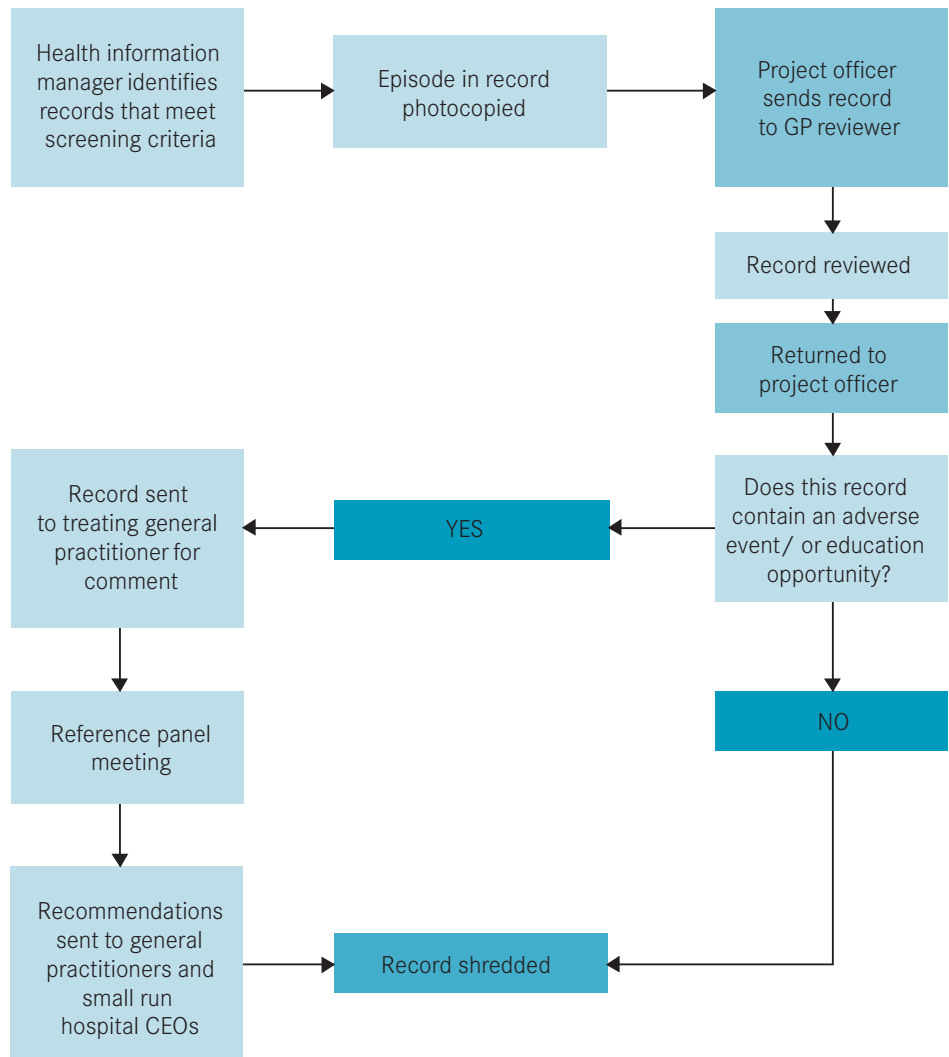
- evaluation of the implementation of LAOS recommendations in small rural hospitals.
- identification of the contribution the LAOS program makes to the existing clinical risk management (CRM) framework in small rural hospitals
- identification of the benefits of the LAOS program to Victorian small rural hospitals

Expected outcomes

It is anticipated that the review will provide:

- evidence of stakeholder experiences through participation in the LAOS program
- information to assist the department with future strategies for the LAOS program.

Figure 1: WVDGP LAOS process



Project methodology

Project methodology included:

a) Small rural hospital interviews

Interviews were conducted in ten Victorian small rural hospitals. Telephone interviews were held with nine small rural hospitals. Participants included Chief Executive Officers (CEO's), Directors of Nursing (DON), Quality/Risk Managers and Health Information Managers (HIM).

Structured questions were provided to each group to ensure consistency with the interview process (Appendix 2).

b) Reference panels' chair telephone interviews

Teleconference interviews were held with the reference panel chairs. The six participating rural divisions of general practice were represented.

Structured questions were provided to ensure consistency between each group (Appendix 3).

c) Rural directors of medical services group discussion

A review of the LAOS program was held at a rural directors of medical services forum. The strengths and weaknesses of the LAOS program and opportunities for improvement were discussed.

d) LAOS project officer interviews

A focus group was held with the LAOS project officers from the six rural divisions of general practice. Each LAOS project officer was also individually interviewed by telephone. The aim was to provide the project officers, who have had the most experience with the implementation of the LAOS program, the opportunity to discuss in detail the successes of the program and to identify opportunities for improvement (Appendix 4).

e) General Practice Divisions of Victoria Ltd (GPDV)

The CEO and project officer of GPDV were interviewed. Structured questions were provided to each group to ensure consistency with the interview process (Appendix 2).

The project identified six themes during the review process, and the review has been summarised using these themes, they are;

1. LAOS program model
2. Communication
3. General practitioners
4. Medical record management
5. Medical record selection criteria
6. LAOS program recommendations
7. Clinical risk management

LAOS program model

The following themes emerged from interviews and data analysis in relation to the LAOS process with the divisions' project officers, reference panel members and general practitioners:

- Ninety-five per cent of participants in the LAOS review wanted the LAOS program to continue.
- More than 85 per cent of Victoria's small rural hospitals have provided the divisions of general practice with documentation relating to a specific episode of care for review through the LAOS program.
- After a patient's discharge from hospital, it can take between one and three months for the documentation to be forwarded by the small rural hospital to the LAOS project officer.
- This may extend to six months if the small rural hospital had limited staff to code and photocopy the medical record.
- GP reviewers may take on average six to eight weeks to return their reports to the LAOS project officer.
- Comments from the treating GP may also take six to eight weeks to return.
- There are currently 145 Victorian GPs trained as reviewers. This represents approximately 38 per cent of eligible visiting medical officers (VMOs) working in the small rural hospitals.
- There were 5,500 records forwarded to the LAOS project officers from participating hospitals.
- There were 184 recommendations written and circulated to stakeholders.
- Reference panel meetings are scheduled every three months. In the past three years, the total number of reference panel meetings that were held in all divisions was an average of 58 per cent of those scheduled.
- The time taken from the reference panel meeting to the distribution of a recommendation was between two and six months.
- On average, 10 records are reviewed at each reference panel meeting.
- The reference panels develop the recommendations. The LAOS project officers undertake research to provide evidence in clinical practice that supports the recommendations, a process that can also take months.
- The length of period the LAOS process takes from the time a medical record is forwarded from a small rural hospital to the final recommendation being sent to participating hospitals can be longer than 12 months.
- There is an excessive length of time for the LAOS process from receipt of episode of care documentation to the circulation of a recommendation.
- There is a lack of regular reference panel meetings.
- The number of records submitted to project officers varies significantly between the participating divisions.
- There was a lack of governance structure for the program, resulting in unresolved issues becoming obstacles for implementation.

- There are further requirements for ongoing funding to ensure program viability limits any long-term strategic plans for further developing the program.
- Not all participating hospitals provide feedback to the division on the implementation of recommendations, and therefore any system issues identified through the detection of an adverse event may not be addressed.
- Other small rural hospitals have indicated that they believe that their internal processes are adequate, and participating in LAOS would be duplicating effort.
- Hospitals that undertake clinical audits of medical records routinely view the LAOS program as duplication to their existing processes.
- Rural hospitals have a greater number of low-level and high-level residential aged care (RAC) beds as part of services offered to their community. The LAOS program's focus does not necessarily support RAC residents' care.

Communication

The following themes emerged from interviews in relation to communication between small rural hospitals and the divisions of general practice, small rural hospitals and the LAOS program, and general practitioners and the LAOS program:

- In some areas, small rural hospitals and divisions have a well-established relationship and work closely together on issues such as recruitment and retention of workforce. Where a relationship had previously been established, the LAOS program enhanced communication. Where there had been no relationship between the small rural hospital and the division, the LAOS program had created one. However, there was one exception to this finding, where a group of general practitioners did not have links with their allocated division and did not participate in the LAOS program because of the lack of an established relationship.
- General practitioners who worked in small rural hospitals in isolated communities valued peer review from colleagues who worked in similar environments and understood rural and remote practice. Therefore, the LAOS recommendations reported from the reference panel are perceived as an important communication tool.
- The divisions' project officers provided a link between the small rural hospitals and the LAOS program and periodically meet with a nominated staff member at participating health services. Some health services provide feedback reports to the project officers regarding the implementation of the recommendations.
- There is no consistent approach within the hospitals regarding the dissemination of the recommendations for the general practitioners and other hospital staff.
- General practitioners who participate in the LAOS program as reviewers, reference panel members or as treating GPs are not broadly integrated into the clinical risk management process at their local hospitals to promote the LAOS panel recommendations.
- There was limited evidence of the LAOS process linking to the clinical governance framework of small rural hospitals, although a small number of hospitals have processes in place to review the LAOS panel recommendations.

General practitioners

The following themes emerged from interviews with general practitioners in relation to their role in the LAOS program:

- General practitioners participate in the LAOS program through a number of roles. These include reviewers, reference panel members and reference panel chairs. They also provide input into the LAOS program in their role as treating GP responding to queries raised by reviewing general practitioners.
- General practitioners are provided with training to support the reviewer, reference panel member and reference panel chair roles.
- Currently there is no specific training for treating general practitioners to assist them in understanding the LAOS program or responding to the reviewing general practitioner comments.
- Over 85 per cent of general practitioners interviewed were positive about the LAOS program and its impact on their care of patients in acute and primary health settings.
- The LAOS program provided a peer review network for rural general practitioners that had previously not existed.
- Orientation and training is difficult for general practitioners who work and live in isolated communities, due to distances and time needed to travel to larger centres.
- General practitioners involved in the LAOS program identified that they would generally prefer to participate in the program through the division in which they have established links.
- General practitioners who are not supportive of the LAOS program identified that workforce pressures contribute to a lack of time to participate in the process, along with a lack of information and access to education about the LAOS program
- There is a lack of understanding about statutory immunity regarding the LAOS program.
- The LAOS program provides an opportunity for general practitioners from different practices to meet and work together.
- The LAOS program has assisted international medical graduates to discuss clinical issues in a supportive environment.
- Orientation and training of general practitioners who become reviewers is currently provided on an individual and ad hoc basis.
- The review highlighted the need for general practitioner reviewers who comment on medical records from remote small rural hospitals to understand rural and remote general practice.

Medical record management

The following themes emerged from interviews with the divisions' project officers and hospital staff, including CEO's, DON's, HIM's and clerical staff, in relation to medical records management in the LAOS program:

- The smaller rural hospitals advised that coding of records occurs on a monthly or bimonthly basis by a visiting health information manager. This impedes submission of appropriate records on a regular basis.
- Photocopying and mailing of the medical records was onerous and resource intensive. Providing a staff member to undertake this activity was a significant impost on the organisation.
- Medical records were generally refiled and not reviewed by the LAOS program if a staff member was not available to photocopy the record.
- In one hospital the records were photocopied by nursing staff to ensure confidentiality.
- Some hospitals advised that the medical records were often initially selected according to the Wolff criteria and subsequently reviewed prior to determining whether the record would be copied and sent to the division's LAOS project officer.
- The review highlighted that a culling process involving the original medical records selected utilising the Wolff criteria, occurred at any stage of the LAOS process. The hospital staff and the divisions' project officers may choose not to submit records for a range of reasons regardless of the criteria being met.
- One hospital reviewed records selected utilising the Wolff criteria, but their records were reviewed internally and not sent to the division.
- Project officers selected medical records for review, rather than sending all records with potential adverse events to reviewing GPs. This was often due to the fluctuation of the number of medical records received from health services and the availability of reviewing GPs.
- Several hospitals had concerns regarding privacy. One hospital refused to forward any records to the LAOS program due to privacy concerns relating to the medical record once it had left the organisation.
- Not all files were de-identified when sent to the reviewing GP for comment. The lack of de-identification proved a barrier for some small rural hospitals in their decision to participate in the LAOS program.
- Privacy of health records in very small communities was raised by the small rural hospitals as an issue. They report that photocopying of medical records needed to be done by the nursing or medical staff.

Medical records selection criteria

The following themes emerged from interviews with chief executive officers, directors of nursing, health information managers, project officers and nursing staff in relation to the medical records selection criteria:

1. Patient death

- This criterion should be changed to 'unexpected patient death'.
- There was a general consensus that there is always benefit from reviewing palliative care treatment, although some deaths are expected, and not all deaths require review.
- If a 'not for resuscitation' (NFR) order was in place, the file should not be reviewed.

2. Returning to theatre within seven days

- The criterion should remain, but be modified to 'unexpected return to theatre within seven days'.
- This criterion was not relevant to hospitals that do not have theatres.
- There are patients who have a planned return to theatre as a part of their episode of care, which does not reflect an adverse event.

3. Unplanned readmission within 28 days

- This criterion should be changed to 'unplanned readmission within 35 days for patients under 65 years'.
- Changing the timeframe to 35 days would be consistent with acute admissions policy.
- Many nursing home-type patients fall into this criterion, which makes this category irrelevant.
- Elderly patients are at times sent home for a 'trial of home'. If they are readmitted it is not unexpected. This criterion currently requires their medical record to be reviewed.

4. Transfer to another acute care facility

- Smaller small rural hospitals with limited medical resources transfer many patients to larger health services. Review of all of these cases would be of limited value.
- The criterion to be changed to 'unplanned transfer to another acute care facility'.

5. Patient lengths of stay greater than 21 days

- Many patients awaiting nursing home placement fit this criteria. It was recommended that this criterion be amended or removed.

6. Unexpected readmission following discharge from another hospital

- This criterion is difficult, due to lack of information from the original hospital regarding previous care management of patient.

7. Any record that has been recommended by a doctor for peer review

- Any health care team member should be able to put forward a record to be reviewed by the LAOS process. A process to ensure anonymity of reporting may be required to protect staff.
- The LAOS program should be extended to include review of all maternity patients' records due to the small number of patients birthing in small rural hospitals.
- The LAOS program should involve the review of records from residential aged care and outpatient departments.

LAOS program recommendations

The impact of the LAOS program on patient outcomes could not be measured directly in this review. Comments relating to the value of the recommendations have been included.

The following themes emerged from interviews with general practitioners, reference panel members, chief executive officers, and directors of nursing, health information managers and nursing staff in relation to the LAOS recommendations:

- The LAOS recommendations are of an acceptable standard.
- The recommendations are generally relevant to clinical practice in small rural hospitals and of value to stakeholders.
- The recommendation format (a single-page case summary with recommendations) was appropriate and met the needs of the doctors.
- While the general practitioners preferred the single-page format, small rural hospitals found great value in the reference materials sent with the recommendation.
- The attachments, which vary in size, and the website addresses were also useful.
- The small rural hospitals utilise the attachments as appropriate.
- The reference panel members indicated that the opportunity for open and frank discussion under the protection of statutory immunity is valuable.
- There was support for recommendations to be formulated by a multidisciplinary team, because it was felt that a multidisciplinary approach might increase the lessons learned from a single case.
- There needed to be a set standard for the recommendations that would provide greater consistency across all divisions of general practice.
- Some divisions have used recommendations as the basis for educational events.
- Recommendations have been circulated within the division that generated them, and are widely available.
- There was considerable interest by each division and a number of hospitals in accessing all recommendations.
- Small rural hospitals and general practitioners preferred to receive a regular supply of recommendations rather than the ad hoc approach that occurs in some divisions.
- An example of a recommendation is attached (Appendix 6).

Clinical risk management

The following themes emerged from interviews with general practitioners, reference panel members, chief executive officers, directors of nursing, health information managers and nursing staff in relation to LAOS's links with the clinical risk management (CRM) strategy in small rural hospitals:

- The LAOS program provides a component of clinical risk management through a GP peer review process.
- In some small rural hospitals the LAOS program complemented their internal medical record audit programs.
- A number of larger rural hospitals that participate in the LAOS program preferred their own internal medical record audit programs and did not believe that LAOS contributed to their clinical risk management program.
- The smaller rural hospitals were very enthusiastic about LAOS as a method of clinical risk management in a blame-free and non-confrontational environment.
- The program is providing assistance to rural hospitals in identifying and reviewing adverse events.
- The program provides beneficial support structures and networks for rural GPs and is, in some instances, improving the relationship between hospitals and GPs.
- Some small rural hospitals identified that the LAOS program is a significant component of their CRM program.
- The ability for hospitals to provide support for GPs is limited. The visiting medical directors often have limited time each month at their hospital. Therefore, the hospitals' access to a peer review process that incorporates clinical leadership and direction can be limited.
- The directors of medical services were generally enthusiastic about the LAOS program and its benefits to rural GPs.
- The clinical governance framework varies significantly across the state.
- Upon receipt of the LAOS recommendations, they are forwarded to a variety of safety and quality committees or reviewed by individuals, rather than committees.
- Some small rural hospitals have visiting medical officer committees that meet on a regular basis and include the LAOS recommendations as part of their agenda.
- Some small rural hospitals do not have GP representation on their quality/safety committee, and therefore have no GP voice to support LAOS recommendations.
- There was a range of medical record review undertaken by small rural hospitals. The LAOS program stimulates the medical record audit review process.
- There was evidence that appropriate medical records selected for review at some hospitals by the LAOS program were not submitted as the hospital's director of medical service reviewed them. This process could potentially deny the rural GPs opportunities for lessons shared and learned from the recommendations.

In summary it is considered the implementation of the above recommendations and findings will further enhance and support the ongoing development of the LAOS program, which is seen as an integral component of clinical risk management in rural health care settings.

There now needs to be wide discussion of this report with the key stakeholders to address how these findings may be actioned in the future planning and development of the LAOS program.

References

Auditor-General's report 2005: *Managing patient safety in public hospitals*, Victoria, Australia, March 2005

Department of Human Services, 2000, *Improving Patient Safety in Victorian Hospitals*, September 2000

Department of Human Services, September 2000, *Improving Patient Safety in Victorian Hospitals*

Walsh, K, Dineen, M, 1998, *Clinical risk management: making a difference?* The NHS Confederation, London

Wolff, AM and Burke J, 2000, 'Reducing medical errors: a practical guide' in *Med J Aust* 2000; 173:247–251

Wolff, AM, 1992, 'Limited adverse occurrence screening, a medical quality control system for medium sized hospitals' in *Med J Aust* 1992; 156:449–452

Wolff, AM, 1996, 'Limited adverse occurrence screening: using medical record review to reduce hospital adverse patient events' in *Med J Aust* 1996; 164:458–461

Wolff, AM, Bourke, J, Campbell, IA, Leembruggen, DW, 2001, 'Detecting and reducing hospital adverse events: outcomes of the Wimmera clinical risk management program' in *Med J Aust* 2001; 174:621–625

Websites of interest

www.aast.org/01abstracts/01absPoster_120.html

Management of Suspected Cervical Spine Injury: Impact of The Implementation of The East Guidelines at a Level I Trauma Center

www.tsGED.com/Newsletters/Cervical_Spine_Trauma.htm

Cervical Spine Trauma

www.aafp.org/afp/20000215/tips/35.html

The Role of MRI in Evaluating Acute Cervical Spine Injuries

www.ucch.org/sections/neurosurg/NeuroReview/08-CNSTrauma/SpinalCordInjury.html

Management of Spinal Cord Injury

Appendix 1: Letter to the chief executive officers of small rural hospitals and chief executive officers of lead divisions of general practice

17 June 2005

Dear

I am writing to advise you that a review is being undertaken of the Limited Adverse Occurrence Screening (LAOS) program. The consultation process will commence in June 2005 and will be completed by September 2005.

The objectives of the review are to determine whether the LAOS process leads to recommendations and actions that improve patient safety in small rural hospitals. The three key areas of review are:

- evaluation of the implementation of LAOS recommendations in small rural hospitals
- identification of the contribution the LAOS program makes to the existing clinical risk management (CRM) framework in small rural hospitals
- identification of the benefits of the LAOS program to Victorian small rural hospitals.

A sample of rural hospitals will be selected to participate in the review. Dr Meredith Arcus, Fellow in Medical Management with the Office of Chief Clinical Advisor, will contact small rural hospitals shortly requesting participation in the review process.

Should you require any further information or would like to contribute to the LAOS review process, please contact Dr Arcus, on 9616 9034 or email meredith.arcus@dhs.vic.gov.au

Small rural hospitals may also email Dr Arcus with feedback on the LAOS program.

Yours sincerely

Dr Jenny Bartlett

Chief Clinical Advisor

Metropolitan Health and Aged Care Services

Appendix 2: Divisions of general practice and their small rural hospitals

Allocation of small rural hospitals in rural divisions

Lead division	Small rural hospitals
Goulburn Valley	Cobram Numurkah Nathalia Kyabram Seymour Kilmore Kyneton Bacchus Marsh Heathcote (Mclvor)
Murray Plains	Manangatang Robinvale Sea Lake Mallee Track (Ouyen) Cohuna Kerang Inglewood Boort East Wimmera Rochester
South Gippsland	Kooweerup Gippsland Southern incorporating Korumburra & Leongatha South Gippsland Bass Coast Regional Health Yarram District Health Maffra Orbost Regional Health Omeo

North East Victorian	Alexandra and District Hospital Yea and District Memorial Hospital Alpine Health Yarrawonga District Upper Murray Community Tallangatta Mansfield and District Hospital Benalla and District Memorial Hospital Beechworth
Otway	Colac Area health Heywood Rural Health Hesse Rural health Lorne Community Health Moyne Health Services Otway Health & Community Services Portland & District Hospital South West Health Care - Camperdown Terang & Mortlake Health Service Timboon & District Health Care Service
West Victorian	Stawell Regional Health West Wimmera East Grampians East Wimmera Edenhope and District Memorial Hospital Rural North West Health Beaufort and Skipton Casterton Memorial Hospital Coleraine District Hospital Maryborough District Hepburn Health Service

Appendix 3: Interview questions for small rural hospitals

Communication

Has the LAOS program improved communication between rural hospitals, divisions of general practice and GPs?

General practitioners

Are the VMOs at your small rural hospital positive about the LAOS program and its recommendations?

Medical records management

Are there any challenges when forwarding hospital records to the LAOS project officers?

Medical records selection criteria

Do you have any comments on the selection criteria used in the LAOS program? Would you suggest any changes to the selection criteria?

- patient death
- returning to theatre within seven days
- unplanned readmission within 28 days
- transfer to another acute care facility
- patient lengths of stay greater than 21 days
- unexpected readmission following discharge from another hospital
- any record which has been recommended by a doctor for peer review.

LAOS recommendations

Do you receive recommendations from the LAOS program? If yes, please comment on their standard, value and relevance to your small rural hospital/hospital.

Do you give feedback on the recommendations to the LAOS project officer?

Clinical risk management

How does your small rural hospital incorporate the LAOS recommendations into the hospital CRM framework?

Have you been able to identify an improvement in patient outcomes as a result of implementation of LAOS recommendations?

General comments

What would you keep in the LAOS program?

What would you change in the LAOS program?

Further comments:

Appendix 4: Telephone interview questions for reference panel chairs

1. Please comment on the strengths of the LAOS program.
2. Please comment on the weaknesses of the LAOS program.
3. Do you contribute to writing the recommendations?
4. Please comment on the recommendations, including standard, relevance and value.
5. Have there been noticeable positive patient outcomes as a result of implementation of LAOS recommendations?
6. Do the GPs in your area support LAOS and its recommendations?
7. Has the LAOS program improved communication between GPs, divisions of general practice and rural hospitals? If it has, what evidence supports this?
8. Please comment on the role of reference panel chairs.
9. Do you believe GPs feel they have ownership of the LAOS process?
10. Other comments:

Appendix 5: Interview questions for LAOS project officers

Communication

Please comment on your relationship with the following and its development over the past two years:

- the Department of Human Services
- the regional office of the Department of Human Services
- the general practitioners
- your division of general practice
- the small rural hospitals in your catchment.

Has the LAOS program improved communication between general practitioners, divisions and small rural hospitals? If it has, what evidence supports this?

Record management

After patient discharge, how long does it take for the record to be sent to the project officer?

How many small rural hospitals sent records?

On average, how many episodes of care resulted in recommendations?

Were there any problems accessing medical records from the participating hospitals?

Have there been any difficulties forwarding records to GP reviewers?

Have all records that have been submitted been reviewed?

General practitioners

How many GP reviewers do you have currently?

How long does it take for the GP reviewers to return their reports?

How many records are not returned to the treating GP for comment?

How long does it take to receive comments from treating GPs on average?

Reference panels

How many GPs are on the reference panel?

How often do you recruit GPs to the reference panel?

What qualifications are required to be on a reference panel?

What are the challenges/positives with the reference panels?

How often are reference panels scheduled? (for example, every three months).

How many recommendations have you received?

Hospitals and small rural hospitals

Have all the recommendations been sent to hospital CEOs?

How soon after a reference panel meeting do the CEOs receive the most recent recommendation?

What evidence do you have of LAOS being incorporated into the hospitals CRM framework?

Has any GP education has been provided on adverse outcomes?

How many reports from hospitals have you received on implementation of the recommendations in their small rural hospital?

Appendix 6: Example of a recommendation from a reference panel

Reference panel date: XX/XX/XX

Form number: XXX

Screening criteria: Transfer to another acute care facility

Case summary:

Young male involved in MCA, complained of lower neck pain and treated as spinal patient by ambulance service. Initial X-rays reported by LMO as normal and hard collar replaced with soft collar and analgesic overnight. CT scan next day revealed #/dislocation C6.

Summary of issues raised by reviewer:

Lack of availability of radiologists and equipment after hours impacts on assessment of spinal injuries. If there is clinical doubt patient should be transferred or treated as spinal patient until appropriate investigations are complete.

Summary of treating GP comments:

In retrospect hard collar should have been maintained, rather than changed to a soft collar.

Summary of reference panel discussion:

Current practice of neck injuries and suspected fractures.

Recommendations:

Arrange continuing professional development session on neck injuries.

Current practice on neck injuries– leave hard collar until CT scan attended.

