The Clinician's Toolkit

FOR IMPROVING PATIENT CARE

FIRST EDITION

NSW HEALTH
Better Health *Good Health Care*

Health
Working as a Team
The Way Forward

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November 2001

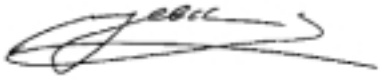
Foreword

Quality in health care has received significant impetus in recent years, initiated by the concerns expressed not only by clinicians, but also by consumers and the press. In NSW the Minister of Health has established the NSW Council on Quality in Health Care to provide advice on and to address these concerns. One initiative of this Council, in conjunction with the Committee of College Chairmen and the Quality Branch of New South Wales Health, has been this *Clinician's Toolkit*.

All doctors must undertake some form of peer review and continuing medical education and it is now a condition of registration by the Medical Board of New South Wales. The Colleges supervise this education and have in place different programmes to suit their Fellows requirements.

The aim of this booklet is to provide clinicians with information about the tools available to review and improve the quality of their practice and how to report the findings of any review. Not all tools will be appropriate for all clinicians, or all types of practice. We would emphasise that this *Toolkit* is intended as an educational document, aimed at informing clinicians about the variety of instruments which they can employ to improve their practice. However, Area Health Services will be required to ensure that clinicians actively participate in the processes described in this *Toolkit*, where it is appropriate to do so. All the recognised Medical Colleges have had the opportunity to review, and frequently to make substantial alterations to, the text of this booklet. It is a collaborative effort.

We would commend *The Clinician's Toolkit for Improving Patient Care* to you as a valuable resource.



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Introduction

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All clinicians need to be vigilant to ensure they are providing the best possible care for their patients. The advances that have taken place in scientific understanding, therapeutics and technology in the last twenty years have been extraordinary. These changes undoubtedly result in better care, but there is a danger that these improvements may be undermined by preventable human and system failures. Clinicians need to pay attention to the every-day and the mundane as well as to the new and interesting aspects of clinical care. They need to apply methods that measure, analyse and deliver effective responses to all deficient aspects of the care given to their patients.

There are three key components of clinician action required to improve the quality of care they provide.

1. **Developing the knowledge and skills** for understanding human performance, the systems of care and for minimising and dealing with error.

2. The **application of methods** to identify, measure and analyse problems with care delivery.

3. **Action** upon that information to improve both the individual and the systemic aspects of care delivery.

The **first** of these components requires a better understanding by clinicians, of the 'human factors' of work. Human factors research is the scientific study of how humans perform in the workplace, both individually and in teams. Good performance of tasks at work is determined by factors within individuals and factors inherent in the system in which those individuals work. A better understanding of those factors is applied to better design of work systems and environments and an ongoing systematic process for reducing human error and improving reliability and safety.[1] It is essential that health care practitioners and students are trained in dealing with error and adapting the systems of care in order that the risk of error is minimised. Many clinicians still believe that humans are 'perfectible' and that the 'blame and train' approach is the optimal route to improving patient care.[2] This is no longer an acceptable approach to human error.[3] Further information on this component of health care quality improvement can be found in *Lessons for Health Care: Applied Human Factors Research. Report of a Special Medical Seminar.*[4]

The **second** of these key components can be achieved by engaging in activities such as incident monitoring, the effective use of clinical indicators and peer review for example, to identify the problems associated with clinical care. Such activities, if conducted in an open, just and non-punitive environment, can be very effective.

There are many different approaches that clinicians can use to achieve this. This *Toolkit* presents, in Section 2, the recognised techniques, but emphasises that no one method is complete in itself. Clinicians in each discipline need to choose, implement and maintain a number of these to adequately fulfil their commitment to improve patient care.

The **third** key component of quality improvement requires clinicians to act, in a scientific way, upon the data and information gleaned from the previous activities, in order that care is continually improved. Section 3 of this *Toolkit* provides an overview of the proven scientific method that is recommended for use by clinicians and managers for improving care.

The purpose of this *Toolkit* is therefore, to provide clinicians with a guide about the various strategies that are available to them for identifying problems with systems of care and with an individual clinician's practice, and to give clinicians an overview of the 'pragmatic' scientific methodology that can be used to act upon the information that those methods provide, in order that care is continually improved.

Clinical Governance is defined as *"the framework through which health organisations are accountable for continuously improving the quality of their services and safeguarding high standards of care by creating an environment in which excellence in clinical care will flourish"*.[5]

The concept of clinical governance was formalised in the NSW health system in February 1999 with the introduction of *The Framework for Managing the Quality of Health Services in NSW* (the Quality Framework). The concept of clinical governance in NSW is therefore relatively new; the practice of clinical governance, however, is not. In the NSW health system, clinical governance has two main elements:

1. Area Boards (through the Area's CEO and managers) having a responsibility for the standards of care delivered in the Area and for providing the structures and environment in which the delivery of high quality care can be facilitated, and
2. Clinicians being enabled to accept responsibility not only for the quality of their individual clinical performance, but more significantly for the performance of systems established by the Area Health Service.

The successful implementation of clinical governance requires the development of strong partnerships between clinicians and managers for the safe and appropriate provision of health care. Effective clinical governance will require both clinicians and managers to work together to develop an Area Health Service wide plan that focuses on the components of this *Toolkit*. The implementation of this plan should be overseen by the Area Quality Council.

NSW Health is committed to the continuous implementation and improvement of the Quality Framework, which provides the structure for Area Health Services and clinicians to effectively govern the quality of care, and ensure that clinical care is safe, effective, appropriate, consumer focussed, accessible and efficient.[6] Use of the several different methods described in this *Toolkit* provide the practical means by which the NSW Quality Framework can be implemented at the clinical level.

This *Toolkit* is to be a companion document to *The Framework for Managing the Quality of Health Services in NSW.*

Methods for providing information on the quality of clinical care

2

This section of the *Toolkit* describes the activities that should be undertaken by clinicians to gather information about the quality of clinical care they provide to patients. It is not an exhaustive list but it includes the most common activities undertaken by clinicians. These activities have developed in an hoc fashion over many years and there is a degree of overlap in their application.

These activities inherently provide information about the quality of care being delivered, but do not compel clinicians to act on that information to improve the quality of that care in the clinical setting. Section 3 of this *Toolkit* describes the steps that must then be taken to improve care.

The activities described in this *Toolkit* are:

1. ***Facilitated incident monitoring***
2. ***Sentinel event management***
3. ***The effective use of clinical indicators***
4. ***Peer review meetings***
5. ***Morbidity and mortality meetings***
6. ***Ad hoc audits/reviews***
7. ***Retrospective chart audit***

This *Toolkit* has attempted to synthesise the evidence available on each of these activities in order to provide a better practice guide for each. The bibliography contained in Section 5 provides further information on each of the activities described.

The activities described in this section should be used in the following context:

- Whenever possible, a **multidisciplinary** approach should be taken in applying concepts and strategies.
- The processes undertaken by clinicians in applying the concepts in this *Toolkit* must be **transparent** and **accountable** not only to other clinicians but also to health service managers and patients.
- Clinicians should be encouraged to use **de-identified information** to ensure confidentiality of the patient and the clinician and to enable open and frank discussions of the issues raised around specific events.
- Evaluation or criticisms of events should **look at system issues** in the first instance, rather than seeking to blame the individual for errors or perceived errors that may have occurred.
- Involvement of **junior staff and students** should be facilitated and supported.

1 Facilitated incident monitoring

Introduction

Research studies[7] have validated an epidemic of grossly under reported, preventable injuries due to medical management. Recent policy documents have placed high priority on improving incident reporting as the first step in addressing patient injuries, and have called for translation of lessons from other high risk industries.[8] Complex non-medical industries have evolved incident reporting systems that focus on near misses, provide incentives for voluntary reporting, ensure confidentiality (as distinct from anonymity) and emphasise perspectives of systems in data collection, analysis and improvement.

Definitions

An **incident** is an unplanned event resulting in or having the potential for injury, ill health, damage or other loss.[9] Any event that could have had adverse consequences but did not, and is indistinguishable from fully fledged adverse events in all but outcome[10] should also be considered to be an incident. These are known as **'near misses'**.

Incident monitoring is a system for identifying, processing, analysing and reporting incidents with a view to preventing their recurrence.[11]

The process of incident monitoring has, in the past, been criticised because of the limited ability it has to identify the systemic problems underlying adverse event occurrence. Some important categories of incidents are unlikely to be identified using this system (eg. incidents involving errors of omission rather than comission) unless the process for identification is facilitated.

Incident monitoring has also been criticised for its unidisciplinary nature, having become the domain of nursing staff. If incident monitoring and management is to be effective, it must be team based, multidisciplinary and involve both senior and junior staff.

Effective incident monitoring is also dependent on a commitment to act upon the information that arises from the process for improvements in the systems of care. This also involves the reporting of incidents or processes that require action at the facility level. Such action is the responsibility of the peak quality of care committee in that facility.

Facilitated incident monitoring is the use of current incident reporting mechanisms, enhanced by the opportunistic identification of a greater range of incidents than can be expected from the current voluntary methodology.

Objective

The objective of facilitated incident monitoring is to strengthen the current incident reporting system, to facilitate the identification of a greater proportion of incidents that occur in clinical practice and to act upon the information derived from these reports to improve care.

Method

1. Each clinical team or ward-based unit will identify an appropriate time to discuss the incidents occurring in their clinical area in the previous time period, eg. the past week. This should not be a separate 'incident meeting' but should instead be the 'normal' clinical team meeting.
2. The team will take those incidents which have been voluntarily reported using the current reporting forms and add to them any other incidents identified by asking a set of (approximately eight) appropriate questions. The questions should be based on local knowledge of incidents which could occur in that clinical setting and should be based on the six dimensions of quality: safety, effectiveness, appropriateness, consumer participation, access and efficiency.[12] The questions will be different for each clinical team and the incidents being considered.

For example an acute clinical care team may ask the following questions. *"In the past week, have there been…*

- any drug errors?
- any intravenous line infections?
- any unanticipated admissions to ICU?
- any falls?
- any wound infections?
- non-compliance with (identified) guidelines?
- inappropriate admissions/treatments?
- unreported results?
- reports not acted upon in a timely fashion?
- delayed, premature or inadequate discharges/transfers?
- complaints?
- any pressure ulcers? or
- any gaps in care?"

A community care team would ask a different set of questions more relevant to their practices and expected incidents.

Such incidents should be identified prior to the ward/team meeting and an appropriate person nominated to follow up on the relevant details of the incident prior to discussion at the meeting.

3. The facts about the incidents should be presented by a team member and discussed:
   - Patient and provider information should, when possible, be de-identified
   - Discussion should be robust, but the approach should always be educational rather than fault-finding
   - Discussion should be focussed around identifying the system issues in the care delivered.
4. To assist the discussions the following questions should then be asked.
   - What did we do or what did we forget to do that contributed to these incidents? (It should be recognised that errors of omission are far more common than errors of commission.)
   - What needs to be done at this level to prevent this incident from occurring again?
   - Who is responsible for follow-up action?
   - Who else needs to know about this? For example, does it need to be reported to the facility's quality committee, either for action or information?
5. Possible actions/outcomes:
   - If insufficient information is available regarding an incident, a person should be assigned to follow up and re-present the issue at the following meeting.
   - If a deficiency in the system is identified, any of the following may be appropriate:
     – a new or revised practice
     – a new or revised protocol
     – improved lines of communication.
   - If there are concerns about an event in another department/grouping
     – a letter could be written
     – a meeting could be arranged
   - If a broader system/facility issue is identified it should be reported to the facility's peak quality committee.

In conclusion

Facilitated incident monitoring should be a continuous, ongoing fundamental activity for every clinician and clinical team. Incidents and near misses will always occur. Non-punitive, voluntary incident reporting systems in high risk non-medical domains have grown to produce large amounts of essential process information that is unobtainable by other means. Health care professionals need also to report and examine incidents and near misses in the same way.

2 Sentinel event management[13]

Definition

"A sentinel event is an unexpected occurrence involving death or serious physical or psychological injury and includes any process variation for which a recurrence would carry a significant chance of a serious adverse outcome."[14]

A sentinel event can be further defined as an event that happens rarely or one which represents an adverse event of such significance that it warrants individual investigation. Such events are called 'sentinel' because they signal the need for investigation and response.

Objectives

The objectives of sentinel event monitoring are to:

1. Have a positive impact in improving patient care.
2. Focus the attention of a team/facility that has experienced a sentinel event on understanding the causes underlying the event, and on making changes in the care delivery systems and processes to reduce the probability of such an event in the future.
3. Increase the general knowledge about sentinel events, their causes, and strategies for prevention.
4. Improve the safety of health care for the consumer and to maintain the confidence of the public in the care provided.

When a sentinel event occurs in a health care organisation, it is necessary that appropriate individuals within the organisation are made aware of the event; investigate and understand the causes that underlie the event; and make changes in the organisation's systems and processes to reduce the probability of such an event occurring in the future.

Identification of sentinel events

Sentinel events can occur and be identified in three ways:

1. There are sentinel events that can be identified by teams **prospectively**, that is, anticipated. It will be known, that if certain outcomes eventuate, they will constitute sentinel events. If such an event does occur, it could flag a major quality of care issue. These events will be different for each clinical area. **Examples** of sentinel events that can be identified prospectively are:
   - an unexpected neonatal death
   - surgery on the wrong patient or the wrong limb
   - haemolytic transfusion reaction involving administration of blood or blood products having major blood group incompatibilities
   - cannulation of a peripheral artery for administration of IV drugs
   - loss of digits or limbs as a result of health care management
   - infection of children who suffer from cystic fibrosis and who are Pseudomonas cepacia negative by children who are Pseudomonas cepacia positive
   - significant adverse drug reactions
   - significant medication errors
   - death of a renal transplant patient within three months of transplant
   - renal transplant graft failure within 3 months, including unsuccessful intraoperative completion of transplantation.
2. Other sentinel events will only be recognised **at the time they occur**, as the event could not be anticipated. For example:
   - death of a conscious, previously fit, 19 year old male, admitted to ICU overnight for observation of a possible head injury, following an MVA.

3. Other events may initially *appear* as a series of incidents, which may only be **retrospectively** identified as a sentinel event. Staff must be taught to recognise the appearance, or development of, a sentinel event. For example:
   - the prolonged length of stay (LOS) of one patient following an endoscopic retrograde cholangeo pancreatography (ERCP) because of unexpected pancreatitis and followed soon after by the prolonged LOS of another patient and then perhaps another patient, following ERCP, all of whom have suffered unexpected pancreatitis.

   Each event in itself would not constitute a sentinel event, but the cluster of events should alert clinicians and managers to the possibility of a significant problem.

Method

When a clinical team detects or suspects significant undesirable performance or variation, which has, or could result in, a sentinel event, an intense analysis must be initiated to determine where best to focus changes for achieving improvement.

All sentinel events require investigation and analysis and such analysis should be conducted under the six dimensions of quality of care.

The investigation should focus primarily on systems and processes, not individual performance. It should progress from special causes in clinical processes to common causes in organisational processes. The analysis should identify potential improvements in processes or systems that would tend to decrease the likelihood of such events in the future, or it may be determined after analysis, that no such improvement opportunities exist. Such an investigation is referred to as a **Root-Cause Analysis**.

Action required

The product of the investigation and analysis of a sentinel event is an action plan that identifies the strategies that the clinical team intends to implement to reduce the risk of similar events occurring in the future. The plan should address responsibility for implementation, mechanisms for oversight, time lines, and strategies for measuring the effectiveness of the actions.

Reporting

The investigating team leader should report sentinel events to both the clinical director and the peak quality committee in the facility in which the event occurred. That committee is responsible for undertaking the actions required at the facility level to ensure that the risk of a repeat event is reduced. Area Health Services need to clearly define the lines for reporting sentinel events to the Area Executive, the Area Quality Council and beyond.

Such reports should include:

- a brief summary of the event
- a brief summary of the investigation and analysis that has taken place
- actions (to be) taken
- recommendations for other teams, other facilities and/or the Area Health Service and/or the health system as a whole.

A statewide Quality Improvement Incident Management Strategy for the NSW health system has identified the need for mandatory reporting of sentinel events and selected frequent incidents at the State level to ensure that lessons learned from each event are communicated to the entire health system. Managers will be required to report, investigate and analyse such events in the future.

3 The effective use of clinical indicators

Definition

Clinical indicators are indicators or measures that relate to specific clinical conditions, or measures of function that have particular significance for particular conditions.[15] A clinical indicator is also defined by the Australian Council on Healthcare Standards (ACHS) as a measure of the clinical management and outcome of care. It is an objective measure of either the process or outcome of patient care in quantitative terms.

Objectives

Clinical indicators are not exact standards; rather, they are designed to be 'flags' which, through the collection and analysis of data, can alert clinicians to possible problems and/or opportunities for improvement in patient care. These areas can then be further investigated within the clinical team or referred to the peak quality committee within that facility for action at the organisational level.

The benefits to be gained from the use of clinical indicators **do not** lie in the collection of the data, but in how those data are used; that is, in the data analysis and the actions taken to achieve sustained improvements in clinical practice. Clinical indicators do not 'work' unless used effectively by clinicians and managers to bring about improvements.

The following should be considered when selecting indicators:

- Identify those indicators which need to be monitored and reported.
- Indicators should be chosen for the value they have in providing the information required by clinicians to measure and improve the quality of care, not simply for the purposes of reporting.
- The indicators may be based on ACHS or other established and validated indicators.
- The list of indicators collected and reported does not necessarily need to be lengthy. A smaller number of indicators, that provide useful and relevant information about the quality of clinical care and upon which action can be taken, is far better than a large number of indicators that do not fulfil these needs.
- The identification of appropriate indicators should be an iterative process and should involve an assessment of issues such as the usefulness of the data, availability of existing collection mechanisms and resources required for collection.
- These indicators may be ACHS, State, national, College, or locally developed indicators. It should be noted that the ACHS clinical indicators are developed and endorsed by the medical colleges and the use of national or State based clinical indicators there is the added advantage of gaining aggregated comparative values.

Method

- The indicator data collected will give clinical teams information about the care that is delivered.
- Teams should discuss the data collected on each indicator chosen and identify those areas of practice variation that require further investigation. Teams should incorporate these discussions into other team/clinical unit meetings.
- Such data should be used to 'flag' areas for possible investigation. The absolute numbers collected may not give teams a great deal of information initially. Graphed trends in the data will give teams more valuable information and will alert teams to the need for investigation.
- These investigations should be undertaken using the scientific, clinical practice improvement method described in Section 3 of this *Toolkit*.

Variations in the data collected can be found in almost every indicator, whether they be clinical, facility or Area level data. There will almost always be a range in the levels of performance identified. There are many reasons for these variations. It is not always possible to immediately identify the cause(s) of variations in data and therefore what needs to be done to reduce it. If variation is found however, it is essential that health services thoroughly examine the cause and institute action when such an examination reveals opportunities for improvement.

It is recommended to initially identify the following information:

- the reason for collecting the data
- the definition of the numerator, denominator and standard/benchmark (if available)
- the reporting period
- the numbers
- the action required to improve the quality of care as a result of the data collection
- comments on the data, eg. an explanation of any unusual results.

A model collection and action format can be found at Appendix 2.

4 Peer review meetings

Definitions

Peer review is the process of reviewing one's peers. The difficulty arises in defining 'one's peers'. The term 'peer' will therefore be deliberately left undefined, but medical practitioners are encouraged to include nurses and allied health professionals in peer review where possible and appropriate.

Peer review is accepted as an important part of the quality improvement processes intrinsic to health care, and the practice of peer review is as diverse as medicine itself. Peer review is not necessarily a distinct entity, but can and does form a major part of a number of quality improvement strategies, as described in this *Toolkit*.

A Peer Review meeting is but one way of undertaking peer review. It is a meeting in which clinicians seek to improve their treatment of patients, and to maintain the currency of their practice by focussing on recent events and outcomes (individual or collected) of the patients under the care of the group forming the meeting.

The benefits of peer review, in its most narrow definition (ie. a meeting of senior medical practitioners only), are not easily able to be quantified, but it still plays an important role in the quality improvement efforts of a number of clinicians, particularly in some disciplines.

Objective

The primary role of peer review is to inform those present about the status of their own practices against their peers.

Guidelines

Clinicians who engage in peer review **meetings** need to establish guidelines about the form, content and documentation of meetings, with respect for the existing diversity across health disciplines. A recent report[16] on peer review suggests the following guidelines for effective peer review meetings.

1. A Peer Review meeting should be held at least four times per year in most disciplines, and should be constituted so that the minimum quorum is three participants. There should be an elected Chair, and a member should be nominated to take note of key findings.
2. The report that results from a Peer Review meeting will depend upon the discipline involved and whether the meeting has been granted Qualified Privilege under the *NSW Health Administration Act 1982* (as amended).[17] This legislation itself is being reviewed, and it is hoped that any changes will make the process for obtaining privilege clearer. Most current peer review committees are not privileged, and may not need to be.

   The report needs to be in a form that recognises the essential components of Peer Review. These are:

   - discussion of adverse events
   - quantitative indices of the clinical unit's performance
   - identification of systemic deficiencies
   - follow up of previously identified matters
   - (rarely) the recognition of serious concern about an individual's performance.

   A suggested template can be found at Appendix 3.[18] It should be noted that no patient or clinician should be identified in any part of the report.

   Each unit's peer review reports need to be collected by the unit, so that their own performance can be collated over time. The report also needs to be passed on for action within the health facility. The following are suggested as guidelines for further discussion.

- The report is of limited value unless it is forwarded to an appropriate authority within the institution concerned. It should be forwarded to (for example) the Head of Division, the Director of Clinical Services or a senior clinician delegated by them, or the Chair of the committee which forms the next tier in the Quality Framework of the health facility involved. The reporting route needs to be established locally.
- The person who takes on the role of receiving the reports and therefore of overseeing the facility's clinical peer review processes needs to have some well defined and important responsibilities. These include acknowledgment of each report (preferably in writing), collating each clinical unit's peer review activity over time, noting and acting upon identified system problems and following up any unresolved matters with the Chair of the Peer Review meeting. He/she would also need to be able to report to the Facility or Area Quality Council. Resources will be required for this activity.

3. Issues may arise within a peer review meeting that require the triggering of one of the other activities described in this *Toolkit*. For example it may be necessary to report and investigate a sentinel event, or to undertake an ad hoc audit to properly assess the problem.
4. Matters which touch upon serious and repeated under-performance on the part of an individual may arise at a peer review meeting. This type of issue may come to light as a result of individual adverse events or because one of the quantitative tools indicates less than acceptable results and a confidential analysis of the data reveals that one of the clinicians involved has clearly worse results. A closed peer review meeting may give the opportunity to address this type of issue effectively, but the members of the meeting should be wary of keeping a serious matter 'in house' and must consider immediate referral to those who are responsible for managing the performance of that individual.

   It must be stressed that the vast majority of mistakes that occur in health care are the result of inadequate systems that do not assist clinicians to minimise the risk of expected human error. However, if clinicians are engaging in egregious unsafe or inappropriate acts, this must be brought to the attention of the health service manager, who has responsibility for action.[19]

In conclusion

Peer review, in its strictest definition has a limited role in the institutional quality improvement process, and should not be regarded as a substitute for the other activities described in this *Toolkit*. Regular peer review meeting should complement these strategies for quality improvement rather than replace them.

5 Morbidity and Mortality meetings (M&Ms)

Definition

A meeting held on a regular basis to review deaths and adverse outcomes in patients of a specified clinical group or specialty.

Objectives

1. To critically analyse the circumstances that surrounded the outcomes of care provided by a multidisciplinary group of clinicians. These outcomes should include all deaths, serious morbidity and significant aspects of regular clinical practice.[20]
2. To make recommendations for improving the processes of care given to this group of patients.
3. To initiate **action** on these recommendations and to **oversee the progress** of these actions.

Principles for conduction M&Ms[21]

- Morbidity and mortality meetings should be considered to be a 'core' activity for all clinicians.
- All meetings should be multidisciplinary and should include all clinicians, technicians and managers who are involved in the care of that group of patients.
- All levels of staff involved in the care of these patients – both junior and senior – should be involved.
- Meetings should be held on a regular basis and at least once a month.
- All deaths should be identified and if appropriate should include deaths that occurred outside of the acute care setting.
- Focus should be placed on identifying the issues related to the processes or systems of care that lead to the death or incident and not on the individuals who provided the care.
- Discussions should be used for educative purposes and not for apportioning blame to individuals.
- Discussions should focus on measures that can be recommended or implemented to prevent a similar incident or adverse outcome.
- A brief report should be compiled after each meeting which identifies the actions that must be taken as a result of the discussions and review. If there are no recommendations for action, that should be so recorded.
- If action cannot be taken at the clinical level, a report should be sent to the facility or Area Quality Council identifying the issues that should be addressed at that level.
- All action items should be placed on the agenda for the next meeting.
- Feedback must always occur.
- M&Ms should not be used only to review the 'exotic' cases that may be of greater interest to clinicians. M&Ms provide an ideal forum for the regular review of the clinical indicators that are relevant to that specialty or field of practice.
- Everyone who is associated with the care that is being reviewed should have the opportunity to report.
- Case review should be conducted in a timely manner so that it is within recent memory of the people involved in the case.

6 Ad hoc audits/reviews

Definition

An **ad hoc audit** involves the opportunistic survey of some specific practice prompted by the development of a related hypothesis by an observant clinician.

A potential problem is identified and investigated and if necessary, changes in practice that are designed to improve patient care are implemented. These audits occur over a finite period and contrast with retrospective chart audits and the use of clinical indicators which are ongoing and continuous processes.

Such an audit should involve more than just a review of case notes. An effective ad hoc audit will involve the first two stages of the clinical practice improvement methodology that is described in Section 3 and Appendix 1 of this *Toolkit*.[22 23 24] Such a process requires that all sources of information are explored to ensure that all aspects of the problem are identified and a correct 'diagnosis' can be made. A comprehensive review/audit may involve:

- reviewing case notes
- undertaking a literature review
- conducting surveys and/or questionnaires
- running customer focus groups
- developing a cause and effect diagram
- constructing a process flow chart
- collecting data about the process under review

Objective

The objective of an ad hoc audit is to investigate **fully** the nature, extent and causes of a problem associated with clinical care and to identify possible strategies for improvement.

Method

1. A problem is identified or suspected.

   Once the nature of the project has been decided the next important step is to gather the appropriate people to work on and solve the problem that has been identified.

   The review/audit process should be undertaken by a **team** of people who have an interest in the process being reviewed. It should be led by a person who has the authority and skills to do so.

   - Such a team must have a **fundamental knowledge** of the process and therefore should consist of people who work with the process.
   - They must represent all parts of the process. It is very easy to omit those people who are considered to be external to a process, eg. the pathology department or allied health professionals.
   - Careful consideration should be given here to including **consumers** on the project team. They are able to bring a very different perspective on the process and to identify areas for improvement.

   The team should decide exactly what process is being reviewed or audited and how that review is to be undertaken.

2. The second part of the audit/review process is to collect all the information that is available about the issue of concern in order to establish correctly, the full scope, nature and extent of the problem and to determine what other clinicians are doing to manage this issue.

   This part of the review requires a fair degree of planning. No one person should be expected to undertake all aspects of the review. At this point, those activities (as listed above) that are to comprise the review should be allocated to team members. This part of the review process can take a number of months if conducted correctly, but the importance of gathering this information should not be understated.

3. When all the information about the problem is gathered, the team will need to determine the principle causes for the problem and based on the evidence presented, the team should determine the interventions that should be trialed to bring about improvement.

In conclusion

An audit or review should aim at producing an improvement in the way that services or interventions are delivered. An audit or review should not be undertaken primarily for the purpose of identifying poorly performing practitioners or for interest sake. As with all of the activities described in this *Toolkit*, clinicians must commit to act upon the information obtained in an audit/review process, to improve the systems of care.

7 Retrospective chart review

Definition

Retrospective chart review is a **continuous** process of patient medical record review which involves the use of selected outcome criteria for screening purposes followed by some form of peer review to determine, whether an adverse event occurred and the level of preventability of the event.

Purpose

The purpose of a retrospective chart review system is to continuously monitor medical records to detect deviations in an appropriate standard of care, provide objective information about the consequences of that deviation and to assist in understanding its causation.

Health services should develop an appropriate system of chart review for that service which utilises the resources available to do so. Some systems, as described below, require significant levels of resource, but capture a larger number of adverse events. Other systems require fewer resources, but may be less effective in identifying adverse events. Medical record review does not have to occur retrospectively and often occurs during a hospital admission.

Method

There have been a number of different methods developed over the past ten years for conducting retrospective chart reviews.[25 26 27] The Quality in Australian Health Care Study (1995) was based on this method. Each method has its advantages and disadvantages,[28] but each relies on the same basic steps, as described below.

1. All medical records are screened after discharge using several general patient outcome criteria. These patient's records are chosen for review because it has been shown that patients who screen positive for these criteria have a high probability of having experienced an adverse event.[29] Most systems utilise a limited list, similar to the following list, as a first 'flag' to a possible event.

The Limited Occurrence[30] Screening developed by Wolff et al uses the following flags:

1. Death
2. Patient returning to theatre within 7 days
3. Transfer of patients from the general ward to the ICU
4. Patients whose length of stay exceeds 35 days
5. The unplanned readmission of a patient within 28 days of discharge
6. Cardiac arrest
7. Transfer of a patient to another acute care facility
8. Patients booked for theatre and cancelled.

The number of screening criteria was reduced from the 23 used for a (previous) more extensive occurrence screening program, to 8. Wolff states that the criteria chosen allow records to be screened by non-clinical staff. Each one of the criteria individually may or may not have independent meaning, but they function as a trigger to an increased likelihood of an adverse patient event.

The screening criteria used by Wilson et al in the *Quality in Australian Health Care Study.*

1. Unplanned admission before index admission
2. Unplanned readmission after discharge from index admission
3. Hospital incurred patient injury
4. Adverse drug reaction
5. Unplanned transfer from general care to intensive care
6. Unplanned transfer to another acute care hospital
7. Unplanned removal, injury or repair of organ during surgery
8. Unplanned return to the operating room
9. Other patient complications (AMI, CAV, PE, etc)
10. Development of neurological deficit not present on admission
11. Unexpected death
12. Inappropriate discharge to home
13. Cardiac or respiratory arrest, low Apgar score
14. Injury related to abortion or delivery
15. Hospital acquired infection/sepsis
16. Dissatisfaction with care documented in the medical record
17. Documentation or correspondence indicating litigation
18. Any other undesirable outcomes not covered above.

The QaRNS program uses a flagging system to identify approximately 10% of admissions which have a high risk profile for adverse event, and then uses a two stage medical record review of these records (by registered nurses and medical officers). This is the source material for the peer review meetings of clinical departments. Education and accountability of that peer review constitutes the role of the Medical Review Committee of QaRNS, and is where this information leads to clinical improvement. Issues that are best dealt with in an aggregated manner are reported in that way to hospital executive for system wide action if required, and for ongoing monitoring. The QAHCS has shown that, despite the highly variable quality of medical records, they can still be used to reliably and validly capture adverse events.

If an adverse event is noted in the medical records, the events that are regarded as serious breaches in the standard of care, or events that could reasonably be regarded as preventable, are forwarded to an appropriate peer group. In some systems this is the department in which the patient was initially treated.

The most important aspect of the review process is to identify a possible 'issue' of clinical management that has, (or may in a future recurrence) lead to an adverse event. It is therefore necessary to create a brief case summary illustrating the 'issue'. [31]

The summary must be non-identifiable in terms of the name of the patient (or MRN), nurse, doctor or others, or by the date of admission or discharge. The peer review is then triggered by this specific question or identified 'issue', framed by the reviewing medical practitioners. The peer group is then required to provide a structured response addressing whether the appropriate standard of care has been met, an evaluation of the care and what steps are being taken to prevent recurrence. If the response from the department (or peers) suggests that there is a need for a change in procedure, management, policy, protocol or other change, a change mechanism should be included in the response.

In conclusion

The medical record review process should be one important part of any health facility's (or Area Health Service's) quality assurance program. Chart review alone, however, is not able to capture all incidents and adverse events that occur in the course of the health care process; it should be used with a number of other strategies as described in this *Toolkit*.

Clinical practice improvement method[32 33] – the next step

3

Introduction

Section 2 of this *Toolkit* described a number of methods that clinicians can use to derive information about the quality of care they are providing to their patients. In most circumstances, simply being aware of this information does not lead to improvements in clinical practice and/or care delivery. Clinicians therefore need to progress beyond the identification of problems and levels of performance to engage in the following pragmatic, scientific process for achieving clinical practice improvement.

The model for improvement

The model, which is described below for improving the processes of care, has much in common with prudent clinical work.

It involves the identification and diagnosis of a problem, measurement of the scope and size of the problem, the identification of a number of interventions that may reduce the problem, implementation of the intervention(s), and re-measurement to ascertain whether the interventions have been effective. The difference for clinicians is that the method is being applied to improve the system of care and not (in this instance) the health of a patient.

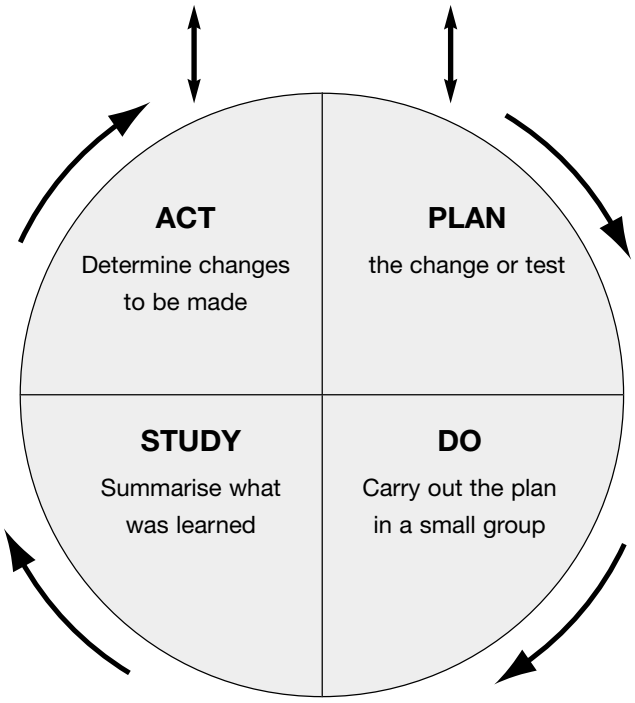
The model has **two** central components:

1. Three fundamental questions, which can be addressed in any order
2. The application of a number of tests to determine what changes are going to result in improvement.

Combined, the three questions and the PDSA Cycle form the basis of the Model for Improvement. The model is an improvement framework that is both widely applicable and easy to learn and use.[34]

The three questions which need to be answered are:

1. What are we trying to accomplish?
2. How will we know that a change is an improvement?
3. What changes can we make that will result in an improvement?



The small tests are performed using a number of these PDSA cycles.[34]

Improvement begins with setting **aims**. A clinical team will not improve without a clear and firm intention to do so. The aim should be expressed in specific terms, eg. 30% reduction in Caesarean section rates within 6 months, 50% reduction in delays in surgery within 3 months. Agreement on the aim is crucial; so is allocation of the people and resources necessary to accomplish the aim.

Measurement is an important part of testing and implementing changes. Measures need to be identified to indicate whether a change that is made actually leads to an improvement. Measures are used for learning. For example: Did infection rates decrease after changes were made to surgical scrub technique or the introduction of prophylactic antibiotics?

All improvement requires making a **change** but not all changes result in improvement. Since achieving new goals requires changing the system, it is important to be able to identify promising changes.

Many sources can contribute good ideas for changes; critical thinking about the current system, creative thinking, watching the process, a hunch, getting insight from a completely different situation, and more. CPI methodology refers to good, general ideas for change as 'change concepts.' A change concept is a general idea – with proven merit and a sound scientific or logical foundation – that can stimulate specific ideas for change that lead to improvement. Using change concepts and combining them creatively can stimulate new ways of thinking about the problem at hand.

The Model for Improvement is based on a 'trial-and-learning' approach to improvement. The PDSA cycle is shorthand for testing a change – by trying it, observing the consequences, and then learning from those consequences.

The completion of each PDSA cycle leads directly into the start of the next cycle. A clinical team learns from the test, what worked and what did not work, what should be kept, changed, or thrown out, and the team uses the new knowledge to plan the next test. The team continues linking PDSA cycles in this way, refining the change until it is ready for broader implementation. Many interventions/changes may need to be tested to achieve the best practice possible.

A change in thinking – pragmatic science

To embrace PDSA learning in the service of improvement, most clinicians need to make changes in their own views of the nature of science and study. A number of issues may be particularly troublesome.[35]

Firstly, clinicians may have to adjust their ideas about the nature of 'rigour' in making changes in their practice. Indeed, routine use of the PDSA cycle in the practice of medicine is a far more rigorous approach than most clinicians have actually used in the past to justify changes in their own practices, allowing their individual styles to migrate far apart.

Secondly, embracing PDSA cycles as a core approach requires a new attitude towards 'failure'; that is, failure of a test to achieve its aim. In the world of PDSA thinking, a failure can be far more valuable in building knowledge than a whole series of successes.

Finally, PDSA cycles take time; improvement takes investment. In a stressed work environment, it is easy for clinicians and others to claim that they do not have the energy or resources to support or participate in, let alone initiate tests of change. One important way to reduce resources required for each set of cycles is to establish and maintain measurements of important performance variables over time. If clinical groups keep track of such measurements, the effects of deliberate changes can easily be assessed.

The PDSA cycles, small-scale tests, linked to reflection are powerful tools for learning in complex systems when the aim is to improve systems. The simplicity of the design is very appealing. However, the inculcation of the small-scale test of change as part of the daily routine and as essential steps in the continuous search for improvement is not easy. The alternative however, can be worse; to accept an inadequate status quo or to take blind stabs at change in complex, non-linear systems where consequences can be dire and hard to predict.[36]

In trying to improve the process of care, wisdom often lies not in accumulating all of the information that could be used to prove a point, but in acquiring only that amount of information necessary to support taking the next steps.[37]

This section of the *Toolkit* has provided the reader with an overview of the Clinical Practice Improvement method. A flow of steps for this model can be found at Appendix 1. More detailed information on the practical application of the model can be found in the guide entitled *Clinical Practice Improvement Made Easy: A Guide for Health Care Professionals* which is available from NSW Health.[38]

Aids to improve the quality of clinical care

4

This section of the *Clinician's Toolkit* provides a brief description of four other 'tools' which may assist clinicians and managers, in a variety of ways, in their efforts to continuously improve the quality of clinical care provided to consumers in the NSW health system.

Qualified privilege

The *Health Administration Act 1982* (NSW) (the *Act*) protects health professionals by prohibiting the disclosure of documentary or verbal evidence obtained or created for the purposes of **approved** quality improvement committees (Division 6B).[39]

The underlying aim of the legislation is to provide an atmosphere of confidence and security, that will encourage health care providers and managers to communicate openly and honestly with their colleagues in assessing the management, processes and outcome of health care practices.

The legislation does this by rendering absolutely confidential, in specified circumstances, the documents and proceedings of approved quality committees, such that information and discussion arising from the formal quality improvement process cannot be used in legal actions under those specified circumstances.

The legislation also provides protection from liability, and indemnity, for present and former members of approved quality committees who are or were acting in good faith in carrying out their responsibilities.

The legislative provisions should encourage candid, critical discussion and frank exchange of views and opinions amongst health practitioners and managers. Application of the legislation should have significant educational benefits for health care personnel, and important implications for the quality of the health care system. Improvements in the knowledge and skills of the practitioners and managers should flow from the quality improvement process. And should lead to improvements in the standards of care provided to patients, and thus to improvements in patient outcomes.

Further information about the application process, the benefits provided, and the restrictions and obligations imposed by the legislation, is available on request from NSW Health or from any NSW Area Health Service.

Credentialling and clinical privileges

The delineation of clinical privileges by Boards on the recommendation of Credentials Committees in public hospitals and Area Health Services is a process which is related to quality assurance, risk management and the improvement of health outcomes. All Hospitals and Area Health Services should ensure they have a properly constituted Credentials Committee that comprehensively reviews and recommends to the Board the clinical privileges for all medical staff, other than Junior Resident Medical Officers, who are working in the public hospital system in New South Wales.

The purpose of delineating the privileges of medical staff is to allow the matching of work that a practitioner wishes to perform in a hospital with demonstrated competence and professional skill, as assessed by a Credentials Committee. The privileges designated must also take into consideration the delineated role of the hospital, the designated service provided by the hospital and its support capabilities.

It is essential that formal credentialling processes are in place to ensure that appropriate services of a high quality are maintained for patient safety and as an effective risk management tool for medico-legal purposes. The granting of clinical privileges to individual practitioners should always be made subject to the express conditions that they may be reviewed, varied or revoked in accordance with the relevant by-laws.

Delineation of clinical privileges should occur at the time of appointment/re-appointment of Senior Medical Staff and should be regularly reviewed with the aid of their peers through the Credentials Committee structure. The by-laws should also allow for review of clinical privileges where particular circumstances deem it necessary. The credentialling process should also apply to Academic Medical Staff in relation to clinical duties and should not be based solely on the tenure of academic appointments if such tenure is greater than five years.

Clinical supervision

Introduction

Supervision of **junior** clinicians is a normal aspect of clinical practice and maintenance of practice standards. In many health professions a period of supervised clinical practice, following formal education, is required for registration as a fully qualified practitioner.

Clinical supervision has been included in this *Toolkit* to be considered not only by junior clinicians as an adjunct to and a facilitator of quality improvement, but also by senior and experienced clinicians. This latter form of 'supervision' of one clinician by a peer could also be seen as a form of peer review.

Definition

Supervision is defined as:

An intervention that is provided by a senior member of a profession to a junior member or members of that same profession. This relationship is evaluative, extends over time, and has the simultaneous purposes of enhancing the professional functioning of the junior member(s), monitoring the quality of professional services offered to the clients she, he or they see(s), and serves as a gatekeeper for those who are to enter the particular profession.[40]

Objectives

The goals of supervision are to:

1. promote ethical and professional standards of conduct and to educate the supervisee about them
2. protect clients/patients, employers, and supervisees themselves, during their initial professional development
3. assist supervisees to apply their professional knowledge to their current and future work
4. increase the effectiveness of supervisees as clinicians.

Supervision model

A preferred supervision model is based upon developmental principles. Such a model assumes that learning involves a staged sequence of developmental tasks, that these tasks may be defined, and that the learning taking place results in professional competence as deemed essential for qualified clinicians.

Suggestions for supervision by a peer (Peer Model)

The practice of supervision by a peer, though not common in the medical profession is relatively common in both the nursing and allied health professions and not unheard of in the medical profession. It can take a number of forms. These include:

- Supervisory meeting akin to a peer review meeting discussed in the previous section of this *Toolkit* on Peer Review.
- The oversight of one clinician by another of the performance of a particular procedure or assessment task. Once a general practitioner has graduated from University he/she is rarely required ever again to undertake an assessment or procedure whilst being observed or assessed by a peer. It is recommended that this be requested by clinicians of their peers, on a regular basis. The same applies to medical specialists. Once qualified, supervision ceases. Enlightened clinicians are also able to seek comment on their performance from nursing and junior staff with whom they work. This can provide the clinician with many opportunities for improvement.
- A further form of supervision can be requested by clinicians when a difficult situation arises. For example, it has been found, by a group of cardio-thoracic surgeons that if, whilst operating, a surgeon encounters extreme difficulties it is best to call a colleague into the operating theatre, and stand back and have the second surgeon independently assess the situation. This action serves a number of purposes. If a chain of errors is taking place it will most likely break the chain thereby minimising the risk of a major adverse event occurring. The supervisory action will also provide education for both surgeons and the input from the second surgeon provides both a physical and intellectual break for the operating surgeon. Such action can only improve the quality of care and benefit the patient.
- Such forms of supervision need not be formal processes but if undertaken in the correct manner and spirit can prove to be an important component of an individual's quality management processes.

The effective use of complaints

Introduction

The appropriate handling of complaints can help to facilitate the improvement and maintenance of high quality care. Complaints can cover a wide range of situations and services and the gravity of the issues involved may also vary considerably.[41] It is therefore not necessary for clinicians to deal with all complaints, but all complaints that relate to the quality of care provided by a clinical team or individual clinician should be referred to that team or person for review. Complaints data also provide useful information to be fed into a facility's/unit's quality processes.

Definition

A complaint is defined as an 'expression of dissatisfaction by a complainant'.[42]

Objectives

An effective complaints handling process results in being a key component of the provision of a quality service as it may identify the area for which improvement may be required by:

- addressing patterns of practice
- highlighting deficiencies in protocols, guidelines and procedure
- highlighting areas requiring further training and development
- providing critical clinical information
- providing an objective mechanism for monitoring clinical outcomes as an alternative to reliance on peer review and self-regulation
- providing the opportunity for complainants to achieve satisfaction by:
  - demonstrating the services commitment to providing a quality service
  - recognising and acknowledging the consumers right to complain
  - restoring trust and support for the service provider
  - legitimatising the value of consumer input into quality improvement
  - improving communication in patient care.

General principles for acting on complaints

The fundamental principle in dealing with complaints is that it should be viewed as an opportunity for improvement.

Quite often, the service or clinician about which/whom the complaint is made, may disagree with the complainant about the circumstances that lead to the complaint being made, or may not feel that the complaint was justified. The important point is that the complainant perceived that the quality of the care or service provided was problematic or substandard. The incident should therefore be investigated and considered for its value in improving the quality of the care or service provided.

- The principles of natural justice must be followed.
- The complaint should be acknowledged and both parties advised of the status of the process if the resolution has extended over a considerable period of time.
- Attempts should be made to mediate between the complainant and the person against whom the complaint is lodged to resolve the complaint.
- Both parties must be allowed to put forward the issues as they see them relating to the complaint. This means that both the complainant and the person against whom the complaint is lodged must be allowed to freely and openly express their views of the complaint.
- Timely and appropriate information on the complaints process should be provided to the complainant and the person complained about.
- Complaints should be assessed to identify the most appropriate resolution approach to take, including formal investigation.
- An investigation should seek to clarify what occurred and to identify systems involvement as well as any competence or conduct issue.
- Actions should mainly focus on the corrective action/s to be implemented in the system to avoid the event or perceived event recurring.
- The resolution process should identify whether or not the issues in the complaint were substantiated.

Definitions & bibliography

5

Term	Definition
Adverse event	An unintended injury or complication that results in disability, death or prolonged hospital stay and is caused by health care management
ACHS	Australian Council of Health Care Standards
Area Health Service	Refers to the 17 Area Health Services in the state and the 3 statewide health services (The New Children's Hospital, the Ambulance Service and the Corrections Health Service)
Clinician	Medical practitioner, nurse or allied health professional
Consumer	Any person or group of persons who use or have the potential to use health services
Health system	A conceptual system that consists of the totality of entities (and their interrelationships) that intend to maintain or improve people's health
Risk	The exposure to the possibility of such things as economic or financial loss, physical damage, injury or delay, as a consequence of pursuing or not pursuing a particular course of action (draft Guidelines of managing risk in Healthcare, Standards Australia, A/NZ)
The six dimensions of *Quality*	
Safety	The extent to which potential risks are avoided and inadvertent harm is minimised in care delivery processes
Effectiveness	The extent to which a treatment or intervention has achieved the desired outcome
Appropriateness	The selection of the intervention that is most likely to produce the desired outcome
Consumer participation	The process of establishing a partnership with the consumer/patient/carers
Access	The extent to which an individual (or population) can obtain the interventions they need
Efficiency	The extent to which the highest quality is able to be produced at the lowest cost

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Appendices

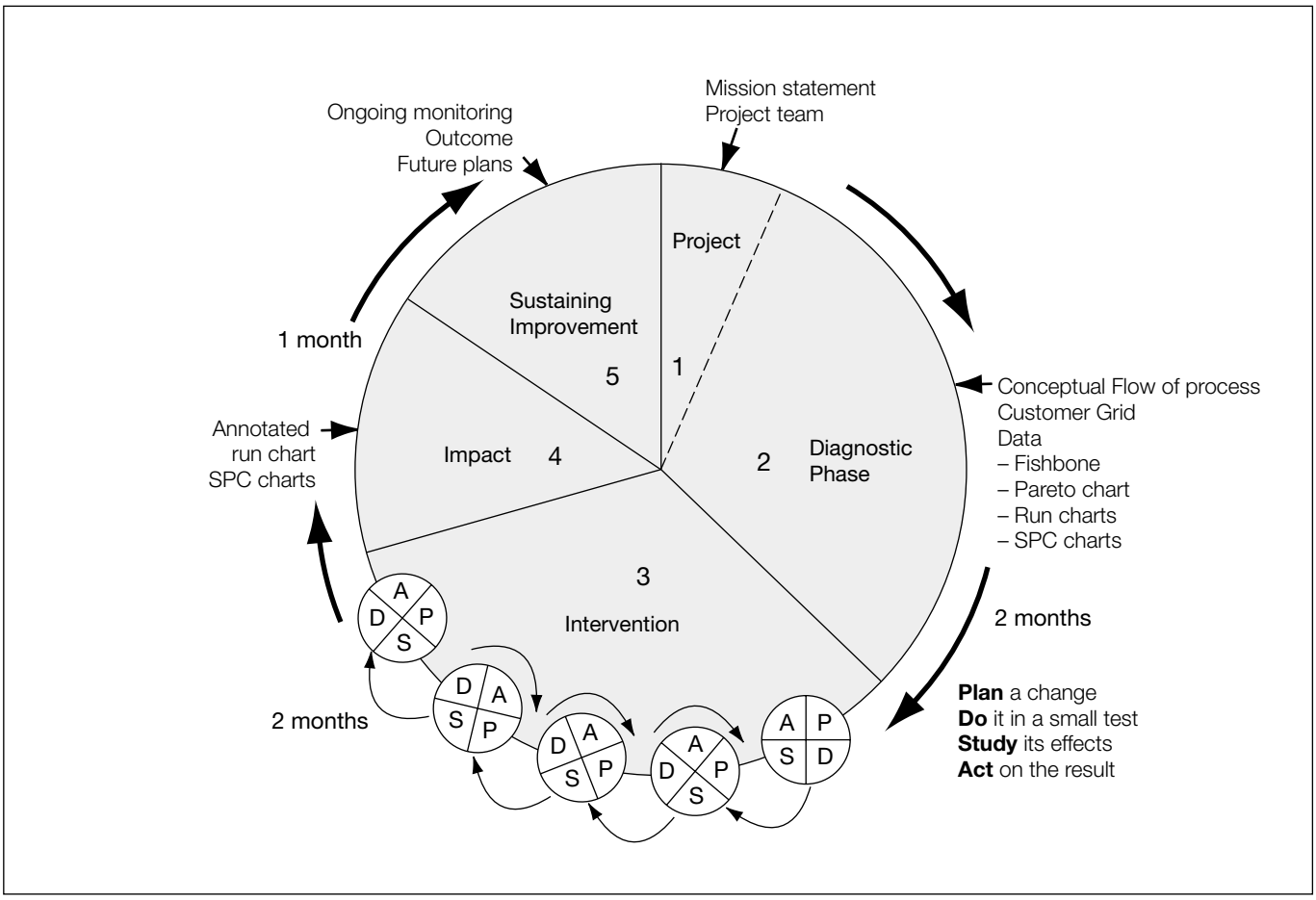
A

Appendix 1 – Clinical practice improvement model

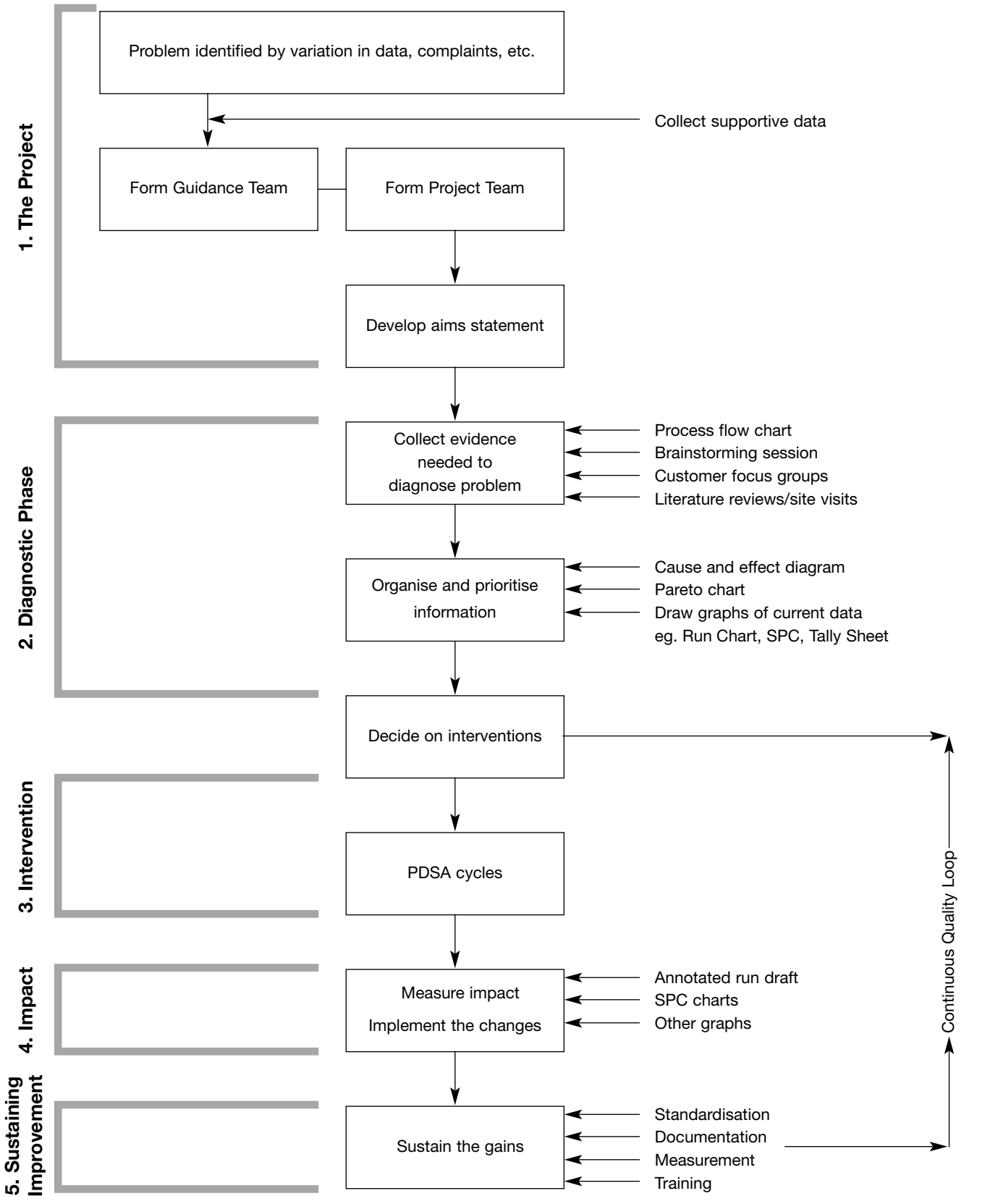
The following diagram[43] represents the five stages in the improvement process. They are:

1. **The project** - Identifying what you are trying to accomplish and who should be involved.
2. **The diagnostic phase** - Establishing the full extent of the problem, what changes can be made that will result in an improvement and how to measure that.
3. **The intervention** – Actually implementing the changes that were identified in the Diagnostic phase.
4. **The impact** – Measuring and recording the effect of the changes.
5. **Sustaining the improvement** – Ongoing monitoring and planning for future improvement.

This cycle is ongoing.



The following flow chart identifies the essential steps to be taken when using the model to successfully improve clinical practice.



Appendix 2 – Clinical indicator report template

Area Health Service Quality Council

Clinical Indicator Report

Date of Report

Clinical Grouping

Clinical Department

Indicator Description

Origin of Indicator (eg. ACHS, RACP or locally developed)

Rationale

Definition of Numerator

Definition of Denominator

Standard or Benchmark

Data

Reporting period

Numerator

Denominator

Summary of analysis and action recommended to improve quality

Person responsible for action

Comments

Appendix 3 – Peer review meeting report template

(Health Facility)

(Clinical Department)

Departmental Peer Review Meeting

This meeting (has / has not) been granted qualified privilege under the *Hospitals Administration Act 1982*.

Date Chaired by

Present

Adverse events

As a result of certain incidents discussed, the meeting found cause for concern about *(list circumstances causing concern, without features which would identify individuals)*

The following internal actions resulted *(eg. change in practice, call for an audit to be conducted or for a literature review to be presented)*

or

☐ There were no causes for concern as a result of adverse events.

Quantitative indices

(a) ☐ An **audit** had been performed over the period / / to / /
(eg. audit of infection rates, cancer survival, drug related complications etc)

☐ No audits were presented at this meeting.

(b) The **Clinical Indicators** for the period / / to / / were reported as follows

Hospital wide indicators *(for units with inpatients – other to be defined)*

Pulmonary embolus _____ events from _____ at risk _____

Wound infection _____ events from _____ at risk _____

Unexpected return to OT _____ events from _____ at risk _____

Specific indicators *(appropriate for the discipline – eg. RACS / ACHS agreed indicators for each specialty)*

_____

_____

_____

☐ Clinical indicators were not reported at this meeting.

There (was / was not) concern arising from one or more of these measures. The following internal actions resulted.

_____

_____

_____

System issues

1. As a result of one of the above processes, there was concern about

_____

_____

_____

and it was felt that an appropriate action was beyond the capacity of this group.

The matter was referred to (individual or committee)

_____

_____

OR

☐ No such matters arose at this meeting

2. ☐ During discussions, a serious matter was raised which reflected upon an individual's patterns of treatment or behaviour.

   ☐ This committee was not capable of the resolution of this matter.

   ☐ No such matters arose at this meeting.

   OR

   ☐ The committee is dealing with the matter in the following way

   _____

   _____

3. ☐ Issues raised at previous meetings were discussed, and noted as resolved or current according to the attached list.

   ☐ There were conflicting views expressed about section 1, 2 or 3 above *(circle appropriate number)* and these conflicts were not resolved by the close of the meeting.

   ☐ A minority dissenting view was recorded.

   OR

   ☐ No such matters arose at this meeting.

Signed (Chairman) _____

Copies of this report to be sent to _____

_____

_____

_____

_____

(eg. Director of Clinical Services, Head of Division – as agreed locally)

Endnotes

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11 *Op cit*

12 Refer to Definitions section for more details about the six dimensions of quality.

13 This guideline is based on the work being undertaken by the Joint Commission on Accreditation of Healthcare Organizations.

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16 Committee of Chairmen of NSW State Chairs of Medical Colleges 2000, *Review of Peer Review.* Prepared for NSW Health.

17 Refer to section 4 of this *Toolkit* for further information.

18 Note that there is space for the report to document if there was an unresolved minority view to be recorded.

19 Refer to the *NSW Health Guideline for the Management of a Complaint or Concern about a Clinician* (2001), for further information.

20 It is recommended that not only the 'exotic' aspect of care be reviewed, but that regular clinical practice should also be discussed and reviewed on a regular basis.

21 These principles were established in consultation with a group of senior clinicians in the NSW health system.

22 A more detailed guide entitled *Clinical Practice Improvement Made Easy: A Guide for Health Care Professionals* is available from the NSW Health Quality Branch on Tel. (02) 9391 9200.

23 Other excellent references include Langley, G. Nolan, K. Nolan, T. Norman, C. Provost, P. 1996, *The Improvement Guide. A practical Approach to Enhancing Organizational Performance.* Jossey Bass Publishers. San Francisco.

24 Scholtes, P. Joiner, B. Streibel, B. 1996, *The Team Handbook*. 2nd Edition Oriel Publishing.

25 Wolff, A. & Dooling, C. 1992, *Limited Adverse Occurrence Screening: A Program with Significant Benefits for the Medical Record Department*. AMR Journal Vol2 N0 3. This system is used at (among others) Wimmera Base Hospital, Vic.

26 Wilson, Runciman et al. 1995, *The Quality in Australian Health Care Study,* MJA 163(9): 458-471. This system is used at (among others) Royal North Shore and the Sydney Adventist Hospitals, NSW.

27 The Quality Assurance Royal North Shore (QARNS) program is also based on this method. This program is the longest running such medical record review program and has provided the basis for the development of a number of similar systems in other hospitals.

28 Smith, I. 1997, *Safety in Health Care: Working Paper.* Prepared for the NSW Ministerial Advisory Committee on Quality in Health Care.

29 An 'adverse event' is defined in the Quality in Australian Health Care Study as *"an unintended injury or complication that results in disability, death or prolonged hospital stay and is caused by health care management."*

30 Wolff, A. & Dooling, C. 1992, *Limited Adverse Occurance Screening: A Program with Significant Benefits for the Medical Records Department*. AMR Journal Vol 2.

31 Allman J. 2000, *Quality Maintenance and Improvement in Clinical Health Care in the Hospital Environment*. Unpublished manuscript The Sydney Adventist Hospital, NSW.

32 This guideline is based on the work of the Institute for Healthcare Improvement, Boston and of Brent James from Intermountain Health Care in Salt Lake City, Utah. Further information on IHI can be found at their website: www.ihi.org and on Intermountain Health Care at www.ihc.com.org

33 This methodology is taught to clinicians and managers in the Clinical Practice Improvement Program that is being conducted by NSW Health and the NSW Council on Quality in Health Care. For further information please contact the Quality Branch or NSW Institute for Clinical Excellence.

34 The model identified in this guide is based on the work of Nolan, James, Berwick, Shewhart and many other proponents of quality improvement. The three questions, followed by the Shewhart cycles is specific to the Institute for Healthcare Improvement, Boston USA.

35 Berwick, D. 1998, *Developing and Testing Changes in Delivery of Care.* Annals of Internal Medicine 128 (8) pp. 651-656.

36 *op cit*

37 Berwick, D. and Nolan, T. 1998, *Physicians as Leaders in Improving Health Care: A New Series in the Annals of Internal Medicine.* Annals of Internal Medicine 128(4) pp 289-292.

38 NSW Health Better Health Centre Tel. (02) 9816 0452.

39 The NSW legislation was assented to in December 1989 but commenced in 1990.

40 Bernard, J.M. & Goodyear, R.K. 1992, *Fundamentals of Clinical Supervision*. Boston: Allyn and Bacon.

41 Response to *The Clinician's Toolkit draft* by The Australasian College of Dermatologists April 2001 NSW Regional Faculty.

42 NSW Health, (1998) *Frontline Complaints Handling Better Practice Guide.*

43 The model identified in this guide is based on the work of Nolan, James, Berwick, Shewhart and many other proponents of quality improvement. The diagrammatic representation of the process was developed by G. Rubin and B. Harrison for NSW Health (for the NSW Clinical Practice Improvement Steering Group) 2000.

Acknowledgments

This *Toolkit* has been developed by the NSW Health Quality Branch in consultation and collaboration with the NSW Medical Colleges, the NSW Council on Quality in Health Care, the Australian Council on Healthcare Standards and the NSW College of Nursing.

SHPN: (HPA) 010183