





ISBN:

Print: 978-1-921983-43-6 Electronic: 978-1-921983-44-3

Suggested citation: Australian Commission on Safety and Quality in Health Care. Safety and Quality Improvement Guide Standard 9: Recognising and Responding to Clinical Deterioration in Acute Health Care (October 2012). Sydney. ACSQHC, 2012.

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#### **Acknowledgements**

This document was prepared by the Australian Commission on Safety and Quality in Health Care in collaboration with numerous expert working groups, members of the Commission's standing committees and individuals who generously gave of their time and expertise.

The Commission wishes to acknowledge the work of its staff in the development of this document.

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# The National Safety and Quality **Health Service Standards**

The National Safety and Quality Health Service (NSQHS) Standards<sup>1</sup> were developed by the Australian Commission on Safety and Quality in Health Care (the Commission) in consultation and collaboration with jurisdictions, technical experts and a wide range of other organisations and individuals, including health professionals and patients.

The primary aims of the NSQHS Standards are to protect the public from harm and to improve the quality of care provided by health service organisations. These Standards provide:

- a quality assurance mechanism that tests whether relevant systems are in place to ensure minimum standards of safety and quality are met
- a quality improvement mechanism that allows health service organisations to realise developmental goals.

# Safety and Quality **Improvement Guides**

The Commission has developed Safety and Quality Improvement Guides (the Guides) for each of the 10 NSQHS Standards. These Guides are designed to assist health service organisations to align their quality improvement programs using the framework of the NSQHS Standards.

The Guides are primarily intended for use by people who are responsible for a part or whole of a health service organisation. The structure of the Guides includes:

- introductory information about what is required to achieve each criterion of the Standard
- tables describing each action required and listing:
  - key tasks
  - implementation strategies
  - examples of the outputs of improvement processes
- additional supporting resources (with links to Australian and international resources and tools, where relevant).

Direct links to these and other useful resources are available on the Commission's web site:

www.safetyandquality.gov.au

The Guides present **suggestions** for meeting the criteria of the Standards, which should not be interpreted as being mandatory. The examples of suggested strategies and outputs of improvement processes are **examples only**. In other words, health service organisations can choose improvement actions that are specific to their local context in order to achieve the criteria. The extent to which improvement is required in your organisation will heavily influence the actions, processes and projects you undertake.

You may choose to demonstrate how you meet the criteria in the Standards using the example outputs of improvement processes, or alternative examples that are more relevant to your own quality improvement processes.

## Additional resources

The Commission has developed a range of resources to assist health service organisations to implement the NSQHS Standards. These include:

- a list of available resources for each of the NSQHS Standards
- an Accreditation Workbook for Hospitals and an Accreditation Workbook for Day Procedure Services
- · A Guide for Dental Practices (relevant only to Standards 1–6)
- a series of fact sheets on the NSQHS Standards
- frequently asked questions
- a list of approved accrediting agencies
- slide presentations on the NSQHS Standards.



## **Overarching NSQHS Standards**

Standard 1: Governance for Safety and Quality in Health Service Organisations, and Standard 2: Partnering with Consumers set the overarching requirements for the effective application of the other eight NSQHS Standards which address specific clinical areas of patient care.

Standard 1 outlines the broad criteria to achieve the creation of an integrated governance system to maintain and improve the reliability and quality of patient care, and improve patient outcomes.

**Standard 2** requires leaders of a health service organisation to implement systems to support partnering with patients, carers and other consumers to improve the safety and quality of care. Patients, carers, consumers, clinicians and other members of the workforce should use the systems for partnering with consumers.

## Core and developmental actions

The NSQHS Standards apply to a wide variety of health service organisations. Due to the variable size, structure and complexity of health service delivery models, a degree of flexibility is required in the application of the standards.

To achieve this flexibility, each action within a Standard is designated as either:

#### CORE

- considered fundamental to safe practice

OR

## **DEVELOPMENTAL**

- areas where health service organisations can focus activities or investments that improve patient safety and quality.

Information about which actions have been designated as core or developmental is available on the Commission's web site.

# Quality improvement approaches in health care

Approaches to improving healthcare quality and safety are well documented and firmly established. Examples of common approaches include Clinical Practice Improvement or Continuous Quality Improvement. The Guides are designed for use in the context of an overall organisational approach to quality improvement, but are not aligned to any particular approach.

Further information on adopting an appropriate quality improvement methodology can be found in the:

NSW Health Easy Guide to Clinical Practice Improvement<sup>2</sup>

CEC Enhancing Project Spread and Sustainability3

Institute for Healthcare Improvement (US)4

# The National Safety and Quality Health Service Standards (continued)

## Roles for safety and quality in health care

A range of participants are involved in ensuring the safe and effective delivery of healthcare services. These include the following:

- Patients and carers, in partnership with health service organisations and their healthcare providers, are involved in:
  - making decisions for service planning
  - developing models of care
  - measuring service and evaluating systems of care.

They should participate in making decisions about their own health care. They need to know and exercise their healthcare rights, be engaged in their healthcare, and participate in treatment decisions.

Patients and carers need to have access to information about options and agreed treatment plans. Health care can be improved when patients and carers share (with their healthcare provider) issues that may have an impact on their ability to comply with treatment plans.

- The role of **clinicians** is essential. Improvements to the system can be achieved when clinicians actively participate in organisational processes, safety systems, and improvement initiatives. Clinicians should be trained in the roles and services for which they are accountable. Clinicians make health systems safer and more effective if they:
  - have a broad understanding of their responsibility for safety and quality in healthcare
  - follow safety and quality procedures
  - supervise and educate other members of the workforce
  - participate in the review of performance procedures individually, or as part of a team.

When clinicians form partnerships with patients and carers, not only can a patient's experience of care be improved, but the design and planning of organisational processes, safety systems, quality initiatives and training can also be more effective.

- The role of the non-clinical workforce is important to the delivery of quality health care. This group may include administrative, clerical, cleaning, catering and other critical clinical support staff or volunteers. By actively participating in organisational processes - including the development and implementation of safety systems, improvement initiatives and related training - this group can help to identify and address the limitations of safety systems. A key role for the non-clinical workforce is to notify clinicians when they have concerns about a patient's condition.
- The role of managers in health service organisations is to implement and maintain systems, resources, education and training to ensure that clinicians deliver safe, effective and reliable health care. They should support the establishment of partnerships with patients and carers when designing, implementing and maintaining systems. Managing performance and facilitating compliance across the organisation is a key role. This includes oversight of individual areas with responsibility for the governance of safety and quality systems. Managers should be leaders who can model behaviours that optimise safe and high quality care. Safer systems can be achieved when managers in health service organisations consider safety and quality implications in their decision making processes.
- The role of health service senior executives and owners is to plan and review integrated governance systems that promote patient safety and quality, and to clearly articulate organisational and individual safety and quality roles and responsibilities throughout the organisation. Explicit support for the principles of consumer centred care is key to ensuring the establishment of effective partnerships between consumer, managers, and clinicians. As organisational leaders, health service executives and owners should model the behaviours that are necessary to implement safe and high quality healthcare systems.



# Terms and definitions

Advance care directive: A set of documents containing instructions that consent to, or refuse, specified medical treatments and that articulate care and lifestyle preferences in anticipating future events or scenarios. They become effective in situations where the person is no longer able to make decisions. For this reason, advance care directives are also referred to as living wills. An advance care directive has legal status and is part of the separate legislative arrangements in each State and Territory in Australia.<sup>5</sup>

Advance care plan: Instructions that communicate the wishes and goals of patients for their care at the end of life.<sup>5</sup> Advance care plans do not carry legal status though they may include a person's preferences for the future use of specified medical treatments such as cardiopulmonary resuscitation.

Advance care planning: The process of preparing for likely scenarios near the end of life. This includes discussion of a person's understanding of their medical condition and prognosis, values, preferences and personal and family resources.<sup>5</sup> It may or may not include the development of documents such as advance care directives.

Advanced life support: The preservation or restoration of life by the establishment and/or maintenance of airway, breathing and circulation using invasive techniques such as defibrillation, advanced airway management, intravenous access and drug therapy.<sup>1</sup>

Governance: The set of relationships and responsibilities established by a health service organisation between its executive, workforce, and stakeholders (including consumers). Governance incorporates the set of processes, customs, policy directives, laws, and conventions affecting the way an organisation is directed, administered, or controlled. Governance arrangements provide the structure through which the objectives (clinical, social, fiscal, legal, human resources) of the organisation are set, and the means by which the objectives are to be achieved. They also specify the mechanisms for monitoring performance. Effective governance provides a clear statement of individual accountabilities within the organisation to help in aligning the roles, interests, and actions of different participants in the organisation in order to achieve the organisation's

objectives. In these Standards, governance includes both corporate and clinical governance.

**Escalation policy:** A document outlining the principles and processes for escalating care for patients whose condition is deteriorating.

**Escalation protocol:** A document that describes the actions required for different levels of abnormal physiological measurements or other observed deterioration. The escalation protocol contains details of a health service organisation's chosen track and trigger system and is linked to the escalation policy.

**Evaluation:** A systematic analysis of the merit, worth or significance of an object, system or program.<sup>6</sup>

Flexible standardisation: Flexible standardisation recognises the importance of standardisation of processes to improve patient safety across a variety of contexts. The standardisation of any process and related data sets must be designed and integrated to fit the context of health service organisations, including varying patient and workforce profiles. These vary widely as health service organisations have differing functions, size, locations, structure and service delivery modes. Tools, processes and protocols should be based on best available evidence and the requirements of jurisdictions, external policy and legislation and adapted to the local context.

**Human factors:** The environmental, organisational, and job factors of humans interacting with systems, as well as the physiological and psychological characteristics which influence behaviour at work.<sup>7</sup>

Monitoring plan: A plan outlining the minimum observation and assessment requirements for a patient in an acute care setting. May be an individualised plan documented in the patient record or a standardised policy or pathway applying to a group of patients. This includes the frequency (times per day) and duration (number of days) of physiological observation monitoring.

**Observations:** The core physiological observations required to identify clinical deterioration (blood pressure, heart rate, level of consciousness, oxygen saturation, respiratory rate and temperature).



## Standard 9: Recognising and Responding to Clinical Deterioration in Acute Health Care

# Terms and definitions (continued)

Observation and response charts: Documents that allow the recording of patient observations and specify the actions to be taken in response to deterioration from the norm. The purpose of these charts is to support accurate and timely recognition of clinical deterioration, and prompt action when deterioration is observed.

Outputs: The results of your safety and quality improvement actions and processes. Examples of outputs are provided in this guide. They are examples only and should not be read as being checklists of evidence required to demonstrate achievement of the criterion. Outputs will be specific to the actions, processes and projects undertaken in your organisation. These will be influenced by your existing level of attainment against the criterion and the extent to which improvement is required.

Rapid response system: The system for providing emergency assistance to patients whose condition is deteriorating.

Rapid response provider: The clinical team or individual responsible for providing emergency assistance to patients whose condition is deteriorating. Track and trigger systems: Systems designed to provide clinicians with an objective decision making process for recognising and responding to altered physiological observations.8 Tracking refers to the graphing and monitoring of observations. A trigger is a predetermined observation threshold or clinical assessment finding which triggers action.

Treatment-limiting decisions: Orders, instructions or decisions that involve the reduction, withdrawal or withholding of specified medical treatments.

Triggers: Abnormalities in physiological observation measurements, aggregated scores or other clinical assessments that require an escalation of care according to the escalation protocol.



# Standard 9: Recognising and Responding to Clinical Deterioration in Acute Health Care

Health service organisations establish and maintain systems for recognising and responding to clinical deterioration. Clinicians and other members of the workforce use the recognition and response systems.

#### The intention of this Standard is to:

Ensure a patient's deterioration is recognised promptly, and appropriate action is taken.#

#### Context:

It is expected that this Standard will be applied in conjunction with Standard 1: Governance for Safety and Quality in Health Service Organisations and Standard 2: Partnering with Consumers.

# This Standard does not apply to deterioration of a patient's mental state.

## Introduction

Standard 9 supports the provision of appropriate and timely care to patients whose condition is deteriorating. The National Consensus Statement: Essential Elements for Recognising and Responding to Clinical Deterioration (the consensus statement) was developed by the Commission and has been endorsed by Australian Health Ministers as the national approach for recognising and responding to clinical deterioration in Australia. Standard 9 builds on the consensus statement to drive implementation in acute care health service organisations.

This Safety and Quality Improvement Guide has been developed to help people complete each action and achieve the criteria in Standard 9. Much of the information contained within this guide is drawn from the comprehensive *Guide to Support Implementation of the National Consensus Statement*, which was published by the Commission in 2011. In the following pages, relevant sections of the *Guide to Support Implementation of the National Consensus Statement* are listed under each of the actions required to meet the criteria of Standard 9.

The Guide to Support Implementation of the National Consensus Statement is available on the Commission's web site together with a range of other practical tools and fact sheets. These resources will support health service organisations to implement robust recognition and response systems and meet the requirements of this Standard.

**Note:** Please note a previous version of this Safety and Quality Improvement Guide was released by the Commission in May 2012, with the title *Quick-start Guide to Implementing National Safety and Quality Health Service Standard 9: Recognising and Responding to Clinical Deterioration in Acute Health Care.* 

## Implementing systems to recognise and respond to clinical deterioration in acute health care

Standard 9 requires acute healthcare services to establish and maintain systems for recognising and responding to clinical deterioration. The intention of the Standard is to ensure that a patient's deterioration is recognised promptly and appropriate action is taken. This Standard applies to all patients in acute healthcare services including adults, adolescents, children and babies, and to all types of patients including medical, surgical, maternity and mental health patients. Acute healthcare services include large tertiary referral centres through to small district and community hospitals. This Standard does not apply to deterioration of a patient's mental state.

Links to resources to support the implementation of systems to meet Standard 9 are available in Appendix A.



## Standard 9: Recognising and Responding to Clinical Deterioration in Acute Health Care

## Criteria to achieve the Recognising and Responding to Clinical Deterioration in Acute Health Care Standard:

#### **Establishing recognition and response systems**

Organisation-wide systems consistent with the National Consensus Statement<sup>9</sup> are used to support and promote recognition of, and response to, patients whose condition deteriorates in an acute health care facility.

#### Recognising clinical deterioration and escalating care

Patients whose condition is deteriorating are recognised and appropriate action is taken to escalate care.

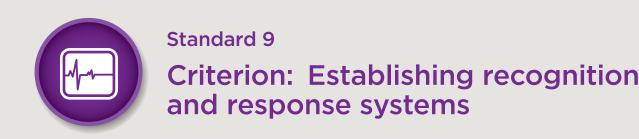
## Responding to clinical deterioration

Appropriate and timely care is provided to patients whose condition is deteriorating.

#### **Communicating with patients and carers**

Patients, families and carers are informed of recognition and response systems and can contribute to the process of escalating care.

For the purposes of accreditation, please check the Commission's web site regarding actions within these criteria that have been designated as core or developmental.



# Organisation-wide systems consistent with the National Consensus Statement are used to support and promote recognition of, and response to, patients whose condition deteriorates in an acute health care facility

Recognition and response systems aim to ensure that all patients whose condition deteriorates receive a timely and appropriate treatment response. A range of clinicians share the responsibility for establishing and maintaining recognition and response systems. These include health service senior executives and owners, health service managers, clinicians, educators and people with responsibility for policy and quality improvement. The system should be developed considering local circumstances. Consideration needs to be given to the individual roles and resources of each health service organisation, and each clinical area within a health service organisation, during the implementation process. Health service organisations may need additional resources such as equipment, personnel, education and training to ensure patients receive appropriate and timely care.

Whether systems are developed on a state-wide or local basis, health service organisations may need to establish local project teams to oversee, plan and coordinate implementation and evaluation of recognition and response systems. Project teams should include representation from the range of clinicians responsible for recognition and response systems. In addition, involving patients, families and carers as partners in these processes brings benefits in terms of improved services and higher satisfaction.<sup>10</sup> Recognition and response systems include processes for:

## 1. Measurement and documentation of observations

- measuring and documenting core physiological observations with appropriate frequency and for the appropriate duration of the patient's admission
- documenting a monitoring plan for each patient
- using observation charts designed using human factors principles that incorporate track and trigger systems

## 2. Escalation of care

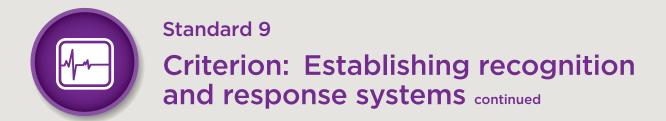
- providing an escalation policy tailored to the role and characteristics of the health service organisation
- developing an escalation protocol that provides a graded response to abnormal physiological observations and include it in the escalation policy
- considering advance care plans and treatment-limiting decisions when escalating care
- providing a process to enable patients, families and carers to escalate care

## 3. Rapid response systems

- providing a rapid response system capable of delivering specialised, timely emergency assistance to patients whose condition is deteriorating
- ensuring rapid response systems operate in partnership with, and as an extension of, the healthcare team

#### 4. Clinical communication

- developing agreed communication processes (written and verbal) to support recognition and response systems
- developing systems for communicating with patients, families and carers about possible deterioration



## 5. Organisational supports

providing a clinical governance framework to support systems for recognising and responding to clinical deterioration

#### 6. Education

providing education to the clinical and nonclinical workforce to support recognition and response systems

## 7. Evaluation, audit and feedback

· developing evaluation, audit and feedback processes for recognition and response systems

## 8. Technological systems and solutions

considering the use of technological systems and solutions to improve recognition and response systems.

Robust clinical governance frameworks and processes for evaluation, audit and feedback are important for the establishment of recognition and response systems. Each health service organisation in Australia is responsible for ensuring that their systems for recognising and responding to clinical deterioration are operational and effective. Including recognition and response systems in clinical governance frameworks allows a coordinated and systematic approach to evaluation, education, policy development and system improvements.

Evaluation helps identify and drive system improvements; prioritise the allocation of resources; identify educational needs; and develop future policy.<sup>11-13</sup> Evaluation of new systems is important to establish their efficacy and determine the changes needed to optimise performance.9 Ongoing monitoring of recognition and response systems is also necessary to track changes over time, to ensure that systems continue to operate effectively<sup>9</sup> and to identify areas for improvement. Data obtained from evaluating recognition and response systems should be communicated to the clinical workforce. This may help to inform clinicians of areas that need improvement, and motivate them to change practice and participate in improvement activities.14-16 These feedback processes also contribute to a culture of transparency and accountability.

An important part of evaluating systems for recognising and responding to clinical deterioration is engaging frontline clinicians to obtain information on any barriers to utilising the system. Similarly, evaluating patient and carer perspectives and experiences provides valuable information on the personal aspects of care, identifies areas requiring improvement, and may provide solutions to system problems. 13,17

## Implementation strategies

- 9.1 Developing, implementing and regularly reviewing the effectiveness of governance arrangements and the polices, procedures and/or protocols that are consistent with the requirements of the National Consensus Statement
- 9.1.1 Governance arrangements are in place to support the development, implementation, and maintenance of organisation-wide recognition and response systems

## Key task:

· Identify a suitable individual, group or committee to take responsibility for governance of recognition and response systems and ensure responsibilities are clearly documented

#### Suggested strategies:

You are required to ensure that recognition and response systems are developed, implemented and operating as planned within your health service organisation. Your clinical governance framework provides the mechanism for this.

You need to identify suitable advisory committees or individuals and form clinical governance frameworks that enable recognition and response systems to be developed, monitored and continuously improved.

Map key requirements and responsibilities for the governance of recognition and response systems against existing committees or individuals with clinical governance responsibilities. This mapping will ensure that all components of recognition and response systems are included in the clinical governance framework. If no suitable advisory clinical governance process can be identified, you should establish new structures or redefine roles and responsibilities within existing governance frameworks.

#### Outputs of improvement processes may include:

- clinical or organisational governance arrangements that identify the individual or committee with oversight of recognition and response systems
- clear roles and responsibilities at each level of the organisation for implementation and maintenance of the recognition and response systems
- agendas, minutes and/or reports from meetings of relevant committees.

## Further reading and resources:

Relevant sections of the Guide to Support Implementation of the National Consensus Statement:

• Essential element 5: Organisational supports

#### Implementation strategies

9.1 Developing, implementing and regularly reviewing the effectiveness of governance arrangements and the polices, procedures and/or protocols that are consistent with the requirements of the National Consensus Statement (continued)

## 9.1.2 Policies. procedures and/ or protocols for the organisation are implemented in areas such as:

- measurement and documentation of observations
- escalation of care
- establishment of a rapid response system
- communication about clinical deterioration

## Key task:

Develop or adapt and implement policies, procedures and/or protocols on recognising and responding to clinical deterioration for use across the organisation

#### Suggested strategies:

One of the key roles of those with responsibility for clinical governance of recognition and response systems is to develop, implement, evaluate and revise policies. These policies are required to meet current legislative requirements, be based on clinical evidence (where available), and outline the expected operation and performance of recognition and response systems. They should include a statement about how they apply to all members of the workforce, including casual, agency and locum clinicians.

Comprehensive policies to support recognition and response systems capture:9

- governance arrangements
- specific roles, responsibilities and accountabilities
- communication processes
- resources for the rapid response system, such as workforce and equipment
- orientation, training and education requirements
- evaluation, audit and feedback processes
- arrangements with external organisations that may be part of the rapid response system.

#### Outputs of improvement processes may include:

- policies, procedures and protocols that are consistent with the requirements of the National Consensus Statement and that cover the items listed in Action 9.1.2 of this Standard
- clinical handover procedure that corresponds with the requirements of Standard 6
- examples of actions taken to implement policies throughout the organisation
- audit of compliance with policies, procedures and protocols with corresponding action planning.

#### Further reading and resources:

Relevant sections of the Guide to Support Implementation of the National

- Essential element 1: Measurement and documentation of observations
- Essential element 2: Escalation of care
- Essential element 3: Rapid response system
- Essential element 4: Clinical communication

## Implementation strategies

9.2 Collecting information about the recognition and response systems, providing feedback to the clinical workforce, and tracking outcomes and changes in performance over time

9.2.1 Feedback is actively sought from the clinical workforce on the responsiveness of the recognition and response systems

#### Key task:

Develop and implement processes for collecting, analysing and reporting feedback from the workforce about the recognition and response system

#### Suggested strategies:

You should engage frontline clinicians as their views are an important part of evaluating systems for recognising and responding to clinical deterioration. This is a useful way to obtain information on any barriers to utilising the system.

You should gather information about awareness and perceptions of recognition and response systems and levels of knowledge about how they operate. This could be done using surveys and/or focus group interviews. This information can also assist in the identification of barriers to change and strategies for improvement.

#### Outputs of improvement processes may include:

- evidence that feedback mechanisms are in place for clinicians who use recognition and response systems. This might include agendas, meeting minutes and/or reports from clinical review committees, or evidence of debriefing on individual events and peer review processes such as mortality and morbidity meetings.
- reports on surveys, focus group interviews or other processes to obtain clinicians' perspectives on the recognition and response system.

#### Further reading and resources:

See Appendix C for a summary of data collection and audit requirements.

Relevant sections of the Guide to Support Implementation of the National Consensus Statement:

- Essential element 3: Rapid response systems
- Essential element 7: Evaluation, audit and feedback

An example of a workforce knowledge and satisfaction survey about rapid response systems is available from the Commission's web site:

www.safetyandquality.gov.au/wp-content/uploads/2012/02/Rapid-Response-Survey-Low-Res.pdf

**9.2.2** Deaths or cardiac arrests for a patient without an agreed treatmentlimiting order (such as not for resuscitation or do not resuscitate) are reviewed to identify the use of the recognition and response systems, and any failures in these systems

#### Key task:

Develop and implement data collection systems to ensure that deaths and cardiopulmonary arrest in patients without treatment-limiting orders are reviewed to identify any failures in the recognition and response system

## Suggested strategies:

You should systematically review the records of all patients who suffer an unexpected cardiopulmonary arrest or die unexpectedly. This can enable the identification of system problems such as delays in accessing the rapid response team, or issues with documentation and communication.

## Outputs of improvement processes may include:

- policies, procedures and protocols describe processes for collecting data on death and cardiopulmonary arrest
- records of reviews of death and cardiopulmonary arrests.

#### Implementation strategies

9.2 Collecting information about the recognition and response systems, providing feedback to the clinical workforce, and tracking outcomes and changes in performance over time

(continued)

#### (continued)

**9.2.2** Deaths or cardiac arrests for a patient without an agreed treatmentlimiting order (such as not for resuscitation or do not resuscitate) are reviewed to identify the use of the recognition and response systems, and any failures in these systems

#### Further reading and resources:

See Appendix C for a summary of data collection and audit requirements.

Relevant sections of the Guide to Support Implementation of the National Consensus Statement:

Essential element 7: Evaluation, audit and feedback

Quality measures for recognition and response systems have been developed which include measures for failed escalation with mortality, unexpected death and cardiopulmonary arrest rates. These are available from the Commission's web site:

www.safetyandquality.gov.au/our-work/recognition-and-response-to-clinicaldeterioration/evaluating-recognition-and-response-systems/quality-measures-forrecognition-and-response-systems/

9.2.3 Data collected about recognition and response systems are provided to the clinical workforce as soon as practicable

#### Key task:

Develop and implement mechanisms to routinely provide relevant data about recognition and response systems to the clinical workforce in a timely way

#### Suggested strategies:

You should ensure data obtained from evaluating recognition and response systems is communicated to the workforce. This may help to inform clinicians of areas that need improvement and motivate them to change practice and participate in improvement activities.14-16 The feedback process also contributes to a culture of transparency and accountability.

You should consider feedback processes such as:

- displaying data on quality boards, in safety bulletins or newsletters
- reporting evaluation results during team meetings, morbidity and mortality meetings, and other workforce forums
- providing direct feedback to clinicians who were responsible for patients for whom rapid response calls were received
- incorporating evaluation data into education and training programs for recognising and responding to clinical deterioration.

## Outputs of improvement processes may include:

- policies, procedures and protocols that describe how data about recognition and response systems is disseminated
- reports containing routinely collected performance data from the recognition and response system.

## Further reading and resources:

Relevant sections of the Guide to Support Implementation of the National Consensus Statement:

- Essential element 3: Rapid response systems
- Essential element 7: Evaluation, audit and feedback

## Implementation strategies

9.2 Collecting information about the recognition and response systems, providing feedback to the clinical workforce, and tracking outcomes and changes in performance over time

(continued)

## **9.2.4** Action is taken to improve the responsiveness and effectiveness of the recognition and response systems

## Key task:

· Use the data from evaluation of recognition and response systems to inform quality improvement activities

#### Suggested strategies:

It has been consistently demonstrated that escalation and rapid response systems require intensive, recurring education to operate effectively.<sup>18-20</sup> You should ensure all clinicians have access to continuing orientation, training and education to help them identify the observations and assessments needed to detect clinical deterioration, the physiology associated with abnormalities, and the importance of timely intervention.

Health service organisations may need to undertake qualitative and quantitative data analysis for recognition and response systems to identify barriers to their effective use and to develop strategies to improve them.

When variance from acceptable practice is identified, improvement methodologies such as the 'plan, do, study, act' approach can be used to improve the effectiveness of recognition and response systems.

#### Outputs of improvement processes may include:

- · orientation, training and education resources that incorporate data from the evaluation of the recognition and response system
- agendas, minutes and/or reports of relevant committees and meetings that detail improvement actions taken
- · examples of improvement activities that have been implemented and evaluated
- records of workforce attendance at training on recognising and responding to clinical deterioration
- risk register or log that includes actions to address identified risks
- quality improvement plan that includes actions to address issues identified
- orientation processes and resources for casual, agency and locum clinicians.

## Further reading and resources:

Relevant sections of the Guide to Support Implementation of the National Consensus Statement

- Essential element 3: Rapid response systems
- Essential element 5: Organisational supports
- Essential element 6: Education
- Essential element 7: Evaluation, audit and feedback



# Patients whose condition is deteriorating are recognised and appropriate action is taken to escalate care

Measurement of physiological observations plays a significant role in detecting clinical deterioration. Abnormal observations may occur at any time during a patient's admission. Multiple studies and adverse events have shown that patients in acute care settings often go for prolonged periods without having appropriate physiological observations measured.<sup>19</sup> When this occurs it can mean that clinical deterioration may not be recognised, and treatment may be delayed.

Frequency of observation measurements often varies, due to differences in an individual clinician's judgement, poor communication among teams, varying views on the importance of observations and a lack of guidelines to inform practice. 19,21-23 It is therefore necessary to develop systems to ensure that physiological observations are being measured and documented at the appropriate frequency (number of times per day) and duration (number of days or weeks) for all patients in acute health service organisations.

Observation charts document, monitor and communicate changes in physiological observations, and play a key role in recognising and responding to clinical deterioration. Poorly designed observation charts reduce clinicians' ability to recognise abnormal physiological observations and understand the significance of altered physiological observations. Human factors research demonstrates that charts identified as having a better design tend to yield fewer errors and shorter decision times in simulation experiments.<sup>24-25</sup>

Understanding when and how to respond to abnormal physiological measurements is a complex process. It requires knowledge of:

- what measurements indicate abnormality for a patient
- appropriate treatment for the abnormality
- which clinicians have the skills to provide this treatment
- who is available to provide this treatment, considering the time of day or day of the week
- how to contact the appropriate clinicians
- the appropriate timeframe for clinicians to respond
- alternative or backup options for obtaining a response.

Track and trigger systems help with this process by specifying different levels of abnormal physiological parameters, or combinations of parameters that indicate abnormality, and outlining the response or action required when abnormality thresholds are reached or deterioration is identified.9 A graded response to abnormal physiological parameters aims to provide clinical care and treatments to patients during the early stages of clinical deterioration, before the onset of critical illness and serious adverse events.

An appropriate and timely response to clinical deterioration relies on clinicians' knowledge of the treatment patients need, and the availability and location of services to provide the treatment.

Clinical deterioration can mean that new care and new treatments are needed, which may not be available in the clinical area or health service organisation in which the patient is located.

Patients may experience delays in receiving the care they need if clinicians are unsure of:

- the types of clinical conditions a health service organisation has the capacity to manage
- where to locate the services needed to provide care (internal and external)
- how to access each service.

Information such as this should be included in the health service organisation's escalation policy, procedures and protocols.

#### Implementation strategies

9.3 Implementing mechanism(s) for recording physiological observations that incorporates triggers to escalate care when deterioration occurs

## 9.3.1 When using a general observation chart, ensure that it:

- is designed according to human factors principles
- includes the capacity to record information about respiratory rate, oxygen saturation, heart rate, blood pressure, temperature and level of consciousness graphically over time
- includes thresholds for each physiological parameter or combination of parameters that indicate abnormality
- specifies the physiological abnormalities and other factors that trigger the escalation of care
- includes actions required when care is escalated

#### Key task:

· Implement a general observation chart that meets the specified criteria

#### Suggested strategies:

Some states, territories and private hospital groups have developed and implemented general observation charts for use in their health service organisations. These should be used as required by the state, territory or private hospital group.

If your health service organisation needs to develop a general observation chart for local use, you should use one of the four observation and response charts that have been developed by the Commission according to human factors principles. Examples of two of the available charts are included in Appendix B of this guide. An example of a chart that has been developed for day procedure services is also available on the Commission's web site.

If your health service organisation is not using either a general observation chart that is required by your state, territory or private hospital group, or one developed by the Commission, then you must demonstrate that your chart has been formally tested to assess potential human factors risks that may affect the performance of the chart in supporting accurate and timely identification of deterioration.

The Commission's observation and response charts include the core physiological observations that are required for the detection of physiological deterioration in a general adult population. Some states and territories (such as the Australian Capital Territory, Queensland and New South Wales) have developed charts that are suitable for use in paediatric and maternity settings. More information about these can be found on page 59 of the Guide to Support Implementation of the National Consensus Statement.

Thresholds in a track and trigger system are a single physiological parameter, observation or assessment, or a group of parameters, that triggers an escalation of care and a clinical response. Response actions need to specify what is required when a trigger threshold is reached. These should be documented on your observation chart.

When developing response actions, you should consider the treatment and monitoring needs of the patient, the level of physiological abnormality each threshold represents, and locally available resources. This includes consideration of:

- the treatments and timeframe that may be required in response to trigger thresholds
- the skill level of the responder to safely manage the clinical deterioration
- the resources available to safely manage the clinical deterioration and possible treatment.

There should be capacity to modify escalation parameters for individual patients on the observation and response chart. Some specialist units within a health service organisation - those providing palliative care or day surgery for example - may also need to modify response actions to reflect the particular needs of their patient population.

## Outputs of improvement processes may include:

- general observation charts that meet the specifications listed in Action 9.3.1
- policies, procedures and/or protocols that describe how to use the observation and response chart.

#### Implementation strategies

9.3 Implementing mechanism(s) for recording physiological observations that incorporates triggers to escalate care when deterioration occurs

(continued)

#### (continued)

## 9.3.1 When using a general observation chart, ensure that it:

- is designed according to human factors principles
- includes the capacity to record information about respiratory rate, oxygen saturation, heart rate, blood pressure, temperature and level of consciousness graphically over time
- includes thresholds for each physiological parameter or combination of parameters that indicate abnormality
- specifies the physiological abnormalities and other factors that trigger the escalation of care
- includes actions required when care is escalated

#### Further reading and resources:

Relevant sections of the Guide to Support Implementation of the National Consensus Statement:

- Essential element 1: Measurement and documentation of observations
- Essential element 2: Escalation of care

More information about choosing and implementing an observation and response chart is available from the Commission's web site:

www.safetyandguality.gov.au/our-work/recognition-and-response-to-clinicaldeterioration/observation-and-response-charts/

An escalation mapping tool that will assist you to match trigger thresholds and escalation responses is available from the Commission's web site:

www.safetyandquality.gov.au/our-work/recognition-and-response-to-clinicaldeterioration/tools-and-resources-to-support-implementation-of-the-nationalconsensus-statement/planning-tools/

Examples of observation and response charts that have been developed for use in maternity and paediatric populations (by Eastern Health in Victoria) are available from the Commission's web site:

www.safetyandquality.gov.au/our-work/recognition-and-response-to-clinicaldeterioration/tools-and-resources-to-support-implementation-of-the-nationalconsensus-statement/examples-from-the-real-world/

## Implementation strategies

9.3 Implementing mechanism(s) for recording physiological observations that incorporates triggers to escalate care when deterioration occurs

(continued)

## 9.3.2 Mechanisms for recording physiological observations are regularly audited to determine the proportion of patients that have complete sets of observations recorded in agreement with their monitoring plan

## Key task:

· Conduct regular audits of completed observation charts to evaluate compliance with policy and/or the monitoring plan

#### Suggested strategies:

Audits should occur as part of the health service organisation's audit program or through quality improvement activities in individual clinical areas. Continuous audits of observation charts are not required. Intermittent audits of a sample of observation charts allow 'snapshots' of compliance which can be tracked over time. A standardised audit tool should be used throughout the organisation so that data can be collated centrally.

Two types of audit are useful. Observational audit can provide information about clinicians' practices regarding the techniques of physiological observation measurement. Documentation audit measures compliance with policy regarding minimum frequency (number of times per day) and duration (number of days or weeks) of core physiological observations.

Audits should be based on the area's observation policy or policies, and should evaluate whether:

- core physiological observations are being measured accurately
- they are measured according to the minimum frequency and duration specified in the monitoring plan.

#### Outputs of improvement processes may include:

- policies, procedures and protocols regarding audits of observation charts
- evaluation plans and audit schedules that describe the frequency and processes for auditing observation charts
- reports on the evaluation of observation chart audit results.

#### Further reading and resources:

See Appendix C for a summary of data collection and audit requirements.

Relevant sections of the Guide to Support Implementation of the National Consensus Statement:

• Essential element 1: Measurement and documentation of observations

Quality measures for recognition and response systems have been developed which include documentation of core physiological observations and compliance with monitoring plans. These are available from the Commission's web site:

www.safetyandquality.gov.au/our-work/recognition-and-response-to-clinicaldeterioration/evaluating-recognition-and-response-systems/quality-measures-forrecognition-and-response-systems/

An audit tool for the collection of data from documentation about observations, monitoring and escalation is available from the Commission's web site:

www.safetyandquality.gov.au/wp-content/uploads/2012/02/Editable-Observations-Monitoring-Escalation-audit-tool.pdf

Queensland Health have also developed an audit tool for the collection of data about observations, monitoring and escalation:

www.health.qld.gov.au/psq/safetyandquality/docs/cd-audit-patient.pdf

## Implementation strategies

9.3 Implementing mechanism(s) for recording physiological observations that incorporates triggers to escalate care when deterioration occurs

(continued)

**9.3.3** Action is taken to increase the proportion of patients with complete sets of recorded observations, as specified in the patient's monitoring plan

#### Key task:

Use data from observation chart and clinical practice audits to inform and prioritise required improvements.

#### Suggested strategies:

You should ensure that providing feedback on audit results, and education on the significance of physiological observations and measurement practices, is a priority for every area. This should include information on:

- core physiological observations and their role in identifying clinical deterioration
- the need for policies on monitoring practices and escalation of care
- the specific policy requirements relating to each clinical area.

You should ensure that adequate resources are available for clinicians to undertake and interpret the appropriate observations with the appropriate frequency. This includes both adequate numbers of appropriately skilled clinicians and adequate equipment.

Clinicians need education and training about how to develop monitoring plans that realistically reflect the needs of individual patients. In a palliative care facility, for example, some patients may be at risk of deterioration from reversible complications that should be treated. For these patients routine measurement of the core physiological observations will be necessary, whereas for those who are actively dying, monitoring should focus on measures of comfort.

#### Outputs of improvement processes may include:

- documentation from quality improvement processes detailing actions taken to address issues identified from audits and evaluation of practices related to observation monitoring and documentation
- examples of improvement activities that have been implemented to increase the proportion of patients with complete sets of recorded observations, and evaluation of the impact of these activities
- orientation, training and education resources about developing monitoring plans and monitoring and documenting observations
- attendance records and/or results of competency based training.

#### Further reading and resources:

Relevant sections of the Guide to Support Implementation of the National Consensus Statement:

- Essential element 1: Measurement and documentation of observations
- Essential element 5: Organisational supports
- Essential element 6: Education
- Essential element 7: Evaluation, audit and feedback

## Implementation strategies

9.4 Developing and implementing mechanisms to escalate care and call for emergency assistance where there are concerns that a patient's condition is deteriorating

## **9.4.1** Mechanisms are in place to escalate care and call for emergency assistance

## Key task:

 Develop and implement a process for escalating care and calling for emergency assistance

#### Suggested strategies:

Delays in treatment can occur in the absence of clear criteria for escalating care. You are required to develop escalation policies with consideration of the size and role of each health service organisation, its location and available resources. These policies should also specify when a patient's care needs to be escalated to another health service organisation.

Most tertiary hospitals can provide access to specialist services and higher levels of care, such as high-dependency and intensive care units. However, rural and metropolitan hospitals, stand-alone mental health units, and day procedure services are likely to need systems to escalate care to external service providers, for example, to ambulance services or general practitioners. In some cases it may also be appropriate for emergencies to be escalated to a specialist medical officer rather than to the rapid response provider - for example to the anaesthetist in a day procedure unit or the palliative care physician in a palliative care unit. Such exceptions should be clearly documented in escalation policies, procedures and protocols.

Early detection of, and response to, clinical deterioration is ideal as it offers an opportunity to prevent further deterioration or ensure that the patient is receiving optimal care. You should map trigger thresholds and mechanisms for provision of appropriate clinical responses together, while considering the different patient groups and the various responses from each clinical area. Escalation processes should include a trigger to call the attending medical officer or team to review the patient before deterioration becomes severe.

When severe clinical deterioration occurs, it is important to ensure that appropriate emergency assistance or advice is available before an adverse event, such as a cardiac arrest, occurs.9 Rapid response systems provide this emergency response, and have been shown to reduce in-hospital cardiac arrests, unplanned intensive care unit admissions, morbidity and mortality. 23,26-31

Patients may show signs of clinical deterioration other than the observations and assessments commonly included in track and trigger systems. A trigger to escalate care based only on a clinician's concern should therefore be included.

#### Outputs of improvement processes may include:

- policies, procedures and protocols that describe the process for escalation of care
- information resources such as signs, posters, stickers or similar material, detailing how to call for assistance.

## Further reading and resources:

Relevant sections of the Guide to Support Implementation of the National Consensus Statement:

- Essential element 1: Measurement and documentation of observations
- Essential element 2: Escalation of care
- Essential element 3: Rapid response systems

## Implementation strategies

9.4 Developing and implementing mechanisms to escalate care and call for emergency assistance where there are concerns that a patient's condition is deteriorating

(continued)

**9.4.2** Use of escalation processes, including failure to act on triggers for seeking emergency assistance, are regularly audited

#### Key task:

Develop and implement data collection systems to evaluate escalation processes

#### Suggested strategies:

You should evaluate escalation responses to ensure that response times, equipment, clinicians with specific skills and other resources are appropriate for each level of abnormal observations.

Continuous auditing of escalation processes is not required. You should carry out intermittent audits of a sample of completed observation charts and patient records and case notes (see Action 9.3.3) to identify any cases where trigger thresholds for escalation were breached and action was not taken. These cases should be reviewed and analysed to identify areas for improvement.

Evaluation may also include collecting and reviewing cases identified from complaints, unplanned admissions to intensive care, cardiac arrest calls and unexpected deaths. Clinicians should ask:

- how successfully the triggers identified the presence or absence of clinical deterioration
- how appropriately the responders managed the level of abnormality
- if the escalation protocol was used correctly
- if the escalation protocol operated as planned (i.e. were there any practical difficulties).

#### Outputs of improvement processes may include:

- policies, procedures and protocols regarding audits of occurrence of escalation of care
- evaluation plans and audit schedules that describe the frequency and processes for auditing occurrences of escalation of care
- evaluation and audit data and reports from incident reviews.

#### Further reading and resources:

See Appendix C for a summary of data collection and audit requirements.

Relevant sections of the Guide to Support Implementation of the National Consensus Statement:

Essential element 7: Evaluation, audit and feedback

Quality measures for recognition and response systems have been developed which include measures for escalation of care and failed escalation with mortality. These are available from the Commission's web site:

www.safetyandquality.gov.au/our-work/recognition-and-response-to-clinicaldeterioration/evaluating-recognition-and-response-systems/quality-measures-forrecognition-and-response-systems/

A case report tool that will assist in the collection of data about escalation to the rapid response team has been developed and is available from the Commission's web site:

www.safetyandquality.gov.au/wp-content/uploads/2012/02/Rapid-Response-System-Case-Report-Low-Res.pdf

## Implementation strategies

9.4 Developing and implementing mechanisms to escalate care and call for emergency assistance where there are concerns that a patient's condition is deteriorating

(continued)

9.4.3 Action is taken to maximise the appropriate use of escalation processes

#### Key task:

· Use data from audits of occurrences of escalation of care to review, inform and prioritise required improvement activities

#### Suggested strategies:

You should ensure that clinicians (including those who are casual, from an agency or locums, as well as those who are new and permanent) receive orientation, education and training to understand the escalation protocol and their individual roles, responsibilities and accountabilities. Education topics include:

- the levels of abnormality
- trigger thresholds and the 'clinician concern' criterion
- · processes for escalating care until satisfied
- the care that each clinician is expected to provide
- professional behaviours in successfully operating recognition and response systems.

Escalation protocols can be complex, involving multiple steps and a variety of different communication pathways. A flow diagram summarising this process provides clinicians with a quick reference tool that should be kept in clinical areas to support correct use of the escalation protocol.

When reviewing the effectiveness of trigger thresholds and response actions, you should consider if the recognition and response system is accurately and consistently identifying and responding to patients who are deteriorating.

You may need to refine trigger thresholds and responses over time, based on evaluation results and changes in resources.

#### Outputs of improvement processes may include:

- · documented quality improvement processes detailing actions taken to address issues identified through evaluation of escalation of care processes
- examples of improvement activities that have been implemented to maximise the appropriate use of escalation processes, and evaluation of their impact
- orientation, training and education resources about escalating care
- attendance records and/or results of competency based training.

## Further reading and resources:

Relevant sections of the Guide to Support Implementation of the National Consensus Statement:

- Essential element 2: Escalation of care
- Essential element 3: Rapid response systems
- Essential element 5: Organisational supports
- Essential element 6: Education
- Essential element 7: Evaluation, audit and feedback



## Appropriate and timely care is provided to patients whose condition is deteriorating

In addition to ensuring that observation monitoring, track and trigger, and escalation systems are in place and working well, it is crucial to ensure that appropriate emergency assistance or advice is provided for patients who are deteriorating. Rapid response systems form part of a health service organisation's graded escalation response, and should therefore be developed as part of the overall escalation policy. The purpose of rapid response systems is to ensure that all patients who deteriorate receive a timely and appropriate response.

Health service organisations may find it useful to review existing rapid response systems to identify one that suits the size, role, resources and workforce mix of their own health service organisations. Several models for the provision of rapid emergency assistance to deteriorating patients are used in Australia and internationally. These include medical emergency teams, rapid response teams, critical care outreach teams and intensive care liaison nurses. In a day procedure unit this response might be provided by the anaesthetist with responsibility for the patient, and a senior nurse.

Additional resources may be needed to ensure that the chosen system is effective. Regardless of the type of model implemented, health service organisations need to ensure that rapid response systems provide access to a clinician who can provide advanced life support.

Once a rapid response system has been chosen, health service organisations should identify and outline the roles and responsibilities of the care providers, considering their scope of practice, and include this information in each health service organisation's policy, and education and training programs.

As a minimum, the outline of the roles and responsibilities of rapid response providers should identify:

- who is responsible for ensuring that the equipment for providing emergency assistance will reach the patient
- who is responsible for directing and coordinating the multiple activities and treatments needed when providing emergency assistance

- · who is responsible for communicating the outcome of the call to the healthcare team
- who has authority to make transfer decisions and access other clinicians as required
- who is responsible for making treatment-limiting decisions, and how to contact this person
- who is responsible for documenting the care provided
- who is responsible for contacting and discussing clinical deterioration with the patient, family and carers.

It is also important for health service organisations to identify the roles and responsibilities of ward nurses and the attending medical officer or team when developing rapid response systems. These roles should be described in escalation policies or similar documents. They may include:9

- remaining with the patient and starting further assessments, basic life support and other therapies while waiting for the rapid response team to arrive
- providing a structured handover of information on the clinical condition of the patient and reasons for activating the system to the clinicians providing emergency assistance
- ensuring the attending medical officer or team attends, where possible, to assist and to learn from the rapid response team.

Information on roles, responsibilities and accountabilities should be incorporated into education programs and orientation sessions for rapid response systems.

## Implementation strategies

9.5 Using the system in place to ensure that specialised and timely care is available to patients whose condition is deteriorating

## 9.5.1 Criteria for triggering a call for emergency assistance are included in the escalation policies. procedures and/or protocols

## Key task:

· Agree on criteria used to trigger a call for emergency assistance and include in the policies, procedures and protocols for recognition and response systems

#### Suggested strategies:

You are required to develop policies, procedures and protocols for escalation of care that clearly describe the mechanisms that are in place for escalating care for all patients at all times. Both the clinical and non-clinical workforce need to know how to call for emergency assistance and should receive ongoing orientation, education and training regarding the recognition and response system.

Rapid response systems form part of a health service organisation's escalation protocol. You should also include details of how the system operates in the health service organisation's escalation policy. This information should include the:

- triggers for emergency assistance
- method for activating the rapid response system
- · responses, including who should attend and in what time frame
- roles, responsibilities and accountabilities of each clinician
- evaluation and governance arrangements.

#### Outputs of improvement processes may include:

· escalation policies, procedures and/or protocols which describe the criteria that trigger a call for emergency assistance.

#### Further reading and resources:

Relevant sections of the Guide to Support Implementation of the National Consensus Statement:

- Essential element 2: Escalation of care
- Essential element 3: Rapid response systems
- Essential element 5: Organisational supports

An escalation mapping tool (including a worked example) that can be used to assist you to develop policies, procedures and protocols is available from the Commission's web site:

www.safetyandquality.gov.au/our-work/recognition-and-response-to-clinicaldeterioration/tools-and-resources-to-support-implementation-of-the-nationalconsensus-statement/planning-tools/

Examples of policies in use by some Australian hospitals are available from the Commission's web site:

www.safetyandquality.gov.au/our-work/recognition-and-response-to-clinicaldeterioration/tools-and-resources-to-support-implementation-of-the-nationalconsensus-statement/examples-from-the-real-world/

## Implementation strategies

9.5 Using the system in place to ensure that specialised and timely care is available to patients whose condition is deteriorating

(continued)

## 9.5.2 The circumstances and outcome of calls for emergency assistance are regularly reviewed

#### Key task:

Develop and implement data collection systems to review calls for emergency assistance

#### Suggested strategies:

It is not necessary to continuously review all calls for emergency assistance. Choose a selected sample of cases to routinely review. For example, you might review all cases where a patient is unexpectedly transferred to higher level care, suffers a cardiac arrest or dies unexpectedly. This will provide snapshots of how the system is functioning which can be tracked over time. Additionally, provide a process where any clinician can nominate a case for review if they are concerned about the circumstances or outcome of the call for emergency assistance.

Many studies have identified that rapid response systems are often underused by clinicians, delaying patients' access to emergency assistance. 32 Therefore, you should ensure that evaluation includes process measures (i.e. is the system performing as expected or desired?) and outcome measures (i.e. did the system have an impact on patient outcomes?).33

Process measures may include:

- appropriateness of the trigger thresholds for activating the rapid response system (i.e. do the trigger thresholds activate the right response at the right time?)
- reasons for triggering activation (this may identify use of the system for purposes other than what it is designed for)
- failures or delays in activating the rapid response system (e.g. number of cardiac arrests and unplanned transfers to higher levels of care where the system should have been activated, but was either not activated or activation was delayed)
- time from activation of the rapid response system to response (this will be particularly useful during early implementation of the system)
- transfer times to higher-level care
- team performance and clinician satisfaction with the rapid response system
- daily variations in calls to the rapid response system (e.g. time of day and day of the week that calls are made).

Outcome measures may include:

- number of rapid response system calls
- adverse events and clinical incidents or near misses
- number of rapid response system calls to patients within 24 hours of admission
- cardiac arrest rates
- number of deaths in patients who do not have a 'not for resuscitation' order
- number of unplanned transfers to higher-level care
- number of intensive care unit readmissions
- number of repeat rapid response system calls for the same patient.

## Outputs of improvement processes may include:

- policies, procedures and protocols regarding reviews of calls for emergency assistance
- evaluation plans and audit schedules that describe the frequency and processes for reviewing calls for emergency assistance
- reports on the results of reviews of calls for emergency assistance.

## **Implementation strategies**

9.5 Using the system in place to ensure that specialised and timely care is available to patients whose condition is deteriorating

(continued)

#### (continued)

## **9.5.2** The circumstances and outcome of calls for emergency assistance are regularly reviewed

#### Further reading and resources:

See Appendix C for a summary of data collection and audit requirements.

Relevant sections of the Guide to Support Implementation of the National Consensus Statement:

- Essential element 3: Rapid response systems
- Essential element 7: Evaluation, audit and feedback

Quality measures for recognition and response systems have been developed which include measures for rapid response activation rates, clinical documentation after rapid response calls, and unexpected death and cardiopulmonary arrest rates. These are available from the Commission's web site:

www.safetyandquality.gov.au/our-work/recognition-and-response-to-clinicaldeterioration/evaluating-recognition-and-response-systems/quality-measures-forrecognition-and-response-systems/

#### Implementation strategies

9.6 Having a clinical workforce that is able to respond appropriately when a patient's condition is deteriorating

9.6.1 The clinical workforce is trained and proficient in basic life support

#### Key task:

Develop, adapt or provide access to basic life support training for the clinical workforce, including mechanisms for monitoring participation and assessing competence

#### Suggested strategies:

You should ensure that all clinicians, including those who are casual, from an agency or locums, are capable of implementing basic life support measures while awaiting emergency assistance. Poor-quality resuscitation has been reported both in and out of hospital.<sup>34-36</sup> If internal training is not available, use external training agencies who offer certification in basic life support skills.

Improving non-technical skills such as leadership, teamwork, task management and structured communication should help improve patient care and the performance of resuscitation providers.<sup>36</sup> Simulation training can assist in improving both technical and non-technical skills, which may help to improve patient survival and reduce potential for error.34

#### Outputs of improvement processes may include:

- orientation, education and training resources
- education calendars, evaluation survey reports on training programs, attendance records and/or results of competency based training
- records of achievement of competency in basic life support
- records verifying basic life support certification for clinicians from agency and locum providers.

#### Further reading and resources:

Relevant sections of the Guide to Support Implementation of the National Consensus Statement

Essential element 6: Education

## Implementation strategies

9.6 Having a clinical workforce that is able to respond appropriately when a patient's (continued) condition is deteriorating

**9.6.2** A system is in place for ensuring access at all times to at least one clinician. either on-site or in close proximity, who can practise advanced life support

## Key task:

Develop and implement a mechanism for accessing at least one clinician with advanced life support skills at all times

#### Suggested strategies:

Health service organisations should ensure that rapid response systems give access to a clinician who can provide advanced life support. All acute health service organisations should develop and maintain rosters or systems to enable access to this clinician at all times. The clinician should be either on-site or in close proximity. Where clinicians with advanced life support skills are located off-site, response times need to be rapid so that patient safety and care is not compromised. This may require early contact of the clinician during patient episodes of deterioration, or if response times are prolonged, the capacity to have the clinician on-site.

Additional nurses and doctors may require training in advanced life support in order to ensure rapid response systems can provide this level of care 24 hours per day and when key clinicians are absent. You should consider accessing external training programs if training in advanced life support skills cannot be provided locally. Advanced life support competency must be maintained with regular updates and training should be compliant with the Australian Resuscitation Council Guidelines.

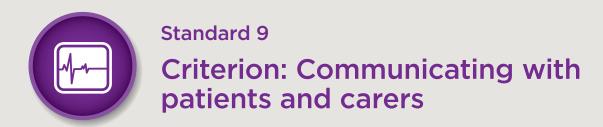
#### Outputs of improvement processes may include:

- delegation of roles and responsibilities to clinicians who can practise advance life support
- attendance records and/or results of competency based training in advanced life support for those clinicians who provide the rapid response
- records verifying advanced life support certification for clinicians from agency and locum providers whose roles and responsibilities include providing a rapid response
- rosters or evidence that demonstrates 24 hour access to at least one clinician with advanced life support skills (this may include ambulance services for small rural health service organisations where access to a suitably qualified clinician is limited).

#### Further reading and resources:

Relevant sections of the Guide to Support Implementation of the National Consensus Statement

- Essential element 3: Rapid response systems
- Essential element 6: Education



# Patients, families and carers are informed of recognition and response systems and can contribute to the processes of escalating care

In Australia and internationally, investigations into adverse events have shown that appropriate treatment has been delayed even when carers have identified and reported concerns about clinical deterioration to the healthcare team. 37-38 Patients and carers may also identify signs of clinical deterioration, including in other patients, but not have immediate access to the healthcare team, which delays treatment.

Families and carers are ideally placed to identify signs of clinical deterioration because:

- the patient is well known to them, allowing subtle changes or signs of clinical deterioration to be identified by the family before being identified by the healthcare team
- they spend time with the patient, providing additional surveillance to that provided by the healthcare team.

Clinicians should be educated about the skills that patients and carers display in identifying signs of clinical deterioration. Case studies are powerful tools for illustrating this skill. To support the development of partnerships between patients and clinicians, the Commission also recommends involving patients and carers as teachers, rather than solely as cases to be studied.39

Escalation policies and protocols should enable patients and carers to trigger escalation of care in a similar way to escalation protocols triggered by clinicians. These systems are more than the existing processes for patients to call for assistance using call bells or similar. They should be built onto your escalation protocol and rapid response system with the same governance and evaluation structures in place.

When patients and carers identify deterioration, have concerns, or if there is confusion about what is happening with care, they should be able to trigger a call that brings members of the healthcare team to the patient's bedside. The healthcare team can then assess the situation, provide emergency assistance and resolve any concerns. This concept is relatively new in Australia. However, many hospitals in the United States have implemented processes to ensure that patients and carers can escalate care when they recognise clinical deterioration. 40-41

Providing a process for patients or carers to escalate care provides an additional layer of safety, and recognises the role of patients and carers as part of the wider healthcare team.

Advance care plans provide patients with a way to communicate their end-of-life wishes to families, carers and healthcare teams. Health service organisations should encourage the development and documentation of advance care plans, as this ensures patient's preferences are identified and reduces the likelihood of communication breakdown and inappropriate healthcare treatment.

Escalation policies should include processes to identify patients who have advance care plans or who have made treatment-limiting decisions when they present to the healthcare service. This is particularly important for emergency departments, where treatments for clinical deterioration often begin, and where there is likely to be access to family to obtain information about a patient's treatment preferences. Once a patient's advance care or treatment-limiting plan has been identified, an individualised escalation protocol can be developed.

Establishing processes for identifying advance care and treatment-limiting plans may require changes to admission procedures and education for the clinical and non-clinical workforce on individual roles and responsibilities. Clinical governance systems for recognition and response systems play a key role in developing these processes.

## Implementation strategies

9.7 Ensuring patients, families and carers are informed about, and are supported so that they can participate in, recognition and response systems and processes

- **9.7.1** Information is provided to patients, families and carers in a format that is understood and meaningful. The information should include:
- the importance of communicating concerns and signs/symptoms of deterioration, which are relevant to the patient's condition, to the clinical workforce
- local systems for responding to clinical deterioration, including how they can raise concerns about potential deterioration

## Key task:

Develop or adapt mechanisms for informing patients, families and carers about how to access assistance if they have concerns about clinical deterioration

#### Suggested strategies:

You should identify opportunities to improve communication between clinicians, and patients and carers, about possible deterioration. This proactive and patient-centred approach to care may help confirm physical assessment findings or obtain additional information about a patient's clinical presentation or problem. Opportunities for communication may include:

- on presentation to an acute care area
- at regularly scheduled intervals throughout a patient's hospital admission
- daily, during healthcare team rounds
- · at bedside handover
- at any time, by establishing agreed communication processes for patients or carers to escalate care.

Health service organisations should develop resources on agreed communication processes and provide them to patients and carers. Resources may include brochures, fact sheets, newsletters and posters, online resources and information broadcast on internal hospital media systems.

Information should include:

- the important role that patients and carers play in providing information to the healthcare team
- when agreed communication processes occur (times, locations)
- which clinicians participate in these processes
- alternative methods for communicating concerns to the healthcare team
- ways of providing feedback on these communication processes.

Patients and carers should be involved in developing information and resources about communication processes.

## Outputs of improvement processes may include:

 information resources for patients and carers about how to raise concerns about potential deterioration and the importance of doing so.

#### Further reading and resources:

Relevant sections of the Guide to Support Implementation of the National Consensus Statement:

• Essential element 4: Clinical communication

See the Safety and Quality Improvement Guide for Standard 2: Partnering with Consumers for links to resources about developing information materials for patients and carers.

## Implementation strategies

9.8 Ensuring that information about advance care plans and treatment-limiting orders is in the patient clinical record, where appropriate

**9.8.1** A system is in place for preparing and/or receiving advance care plans in partnership with patients, families and carers

#### Key task:

Develop and implement a mechanism for receiving and preparing advance care plans in partnership with patients and carers

#### Suggested strategies:

You should encourage the development and documentation of advance care plans, as this ensures patient's preferences are identified and reduces the likelihood of communication breakdown and inappropriate healthcare treatments.

You should develop tools and processes for documenting advance care plans according to your organisation's usual clinical governance processes.

Advance care directives differ from advance care plans because they are legal documents. There are variations in the legislation and policy governing the development and documentation of advance care directives in each state and territory. You should refer to the relevant legislation as part of the process of developing systems for receiving and documenting advance care directives.

#### Outputs of improvement processes may include:

- policies, procedures and protocols that describe the processes for receiving advance care plans and advance care directives
- policies, procedures and protocols that describe the processes for preparing advance care plans with patients, families and carers
- forms and templates that guide the preparation and documentation of advance care plans.

#### Further reading and resources:

Relevant sections of the Guide to Support Implementation of the National Consensus Statement:

- Essential element 2: Escalation of care
- Essential element 4: Clinical communication

Some examples of relevant policies and forms that are in use in some Australian hospitals can be found on the Commission's web site. These include the 'Limitation of Treatment' policy and resuscitation plan form from the Austin Hospital in Victoria, and the 'Allow Natural Death' policy from Westmead Children's Hospital in NSW. They can be found at:

www.safetyandquality.gov.au/our-work/recognition-and-response-to-clinicaldeterioration/tools-and-resources-to-support-implementation-of-the-nationalconsensus-statement/examples-from-the-real-world/

## Implementation strategies

9.8 Ensuring that information about advance care plans and treatment-limiting orders is in the patient clinical record, where appropriate

(continued)

**9.8.2** Advance care plans and other treatmentlimiting orders are documented in the patient clinical record

#### Key task:

· Develop protocols and tools to facilitate the documentation of advance care plans and other treatment-limiting orders in the clinical record

#### Suggested strategies:

You should implement standardised tools for documenting treatment-limiting decisions. This helps to ensure that patients receive appropriate treatments and responses if clinical deterioration occurs. Individualised escalation protocols should be documented in healthcare records using a tool specially designed to capture this information. Information should be updated with changes in a patient's condition or preferences.

You are required to ensure that tools include any state or territory legislation or policy requirements for documentation of treatment-limiting plans, which may include:42

- proof that treatment options were discussed
- the people involved in the discussion
- the patient's wishes (if known)
- the specific goals of therapy
- any agreed treatment limitations
- any modified triggers needed to escalate care
- appropriate treatments to be provided, considering possible causes of deterioration (reversible and non-reversible)
- the clinicians or healthcare teams to contact when thresholds are reached
- the frequency of physiological observations and other assessments
- a review date for treatment-limiting plans (if appropriate).

#### Outputs of improvement processes may include:

- templates and forms for recording advance care plans and individualised escalation protocols in the patient clinical record
- policies, procedures and/or protocols that describe how to use the advance care planning forms and templates.

#### Further reading and resources:

Relevant sections of the Guide to Support Implementation of the National Consensus Statement:

- Essential element 2: Escalation of care
- Essential element 4: Clinical communication

#### Implementation strategies

#### 9.9 Enabling patients, families and carers to initiate an escalation of care response

**9.9.1** Mechanisms are in place for a patient, family member or carer to initiate an escalation of care response

#### Key task:

Develop or adapt, and implement, as part of the recognition and response systems, a mechanism to enable patients to independently initiate an escalation of care

## Suggested strategies:

You should provide patient and carer escalation systems which enable patients and carers to access help independently of the team who are providing care directly to the patient. It is important that patients and carers do not need to request information or assistance to obtain help.

As part of this process, you must decide on the triggers for patients and carers to escalate care. As a minimum, this should allow escalation to occur:

- if there is a belief that a patient is not receiving the medical attention they feel is necessary
- if there is concern with what is happening
- when there is confusion over what needs to be done in a critical situation.<sup>37</sup>

In addition, health service organisations may develop other processes that enable patients or carers to talk to the attending medical officer or team responsible for the patient.

You should ensure the system can be activated by a number of different mechanisms. Methods for activating the system may include calling an emergency number from the patient's bedside telephone or any internal hospital telephone, or by using the emergency call button or similar mechanism located in the clinical area. In some cases, a designated phone that is only used for patient and carer escalation calls has been established.<sup>43</sup>

#### Outputs of improvement processes may include:

policies, procedures and/or protocols that describe the process for patient and carer escalation.

#### Further reading and resources:

Relevant sections of the Guide to Support Implementation of the National Consensus Statement:

Essential element 2: Escalation of care

The Clinical Excellence Commission in New South Wales has developed the Patient and Family Escalation Network to enable health service organisations to collaborate and share information and resources. More information can be found at:

www.cec.health.nsw.gov.au/programs/partnering-with-patients#PFAE\_Network

# **Actions required**

# Implementation strategies

# 9.9 Enabling patients, families and carers to initiate an escalation of care response

(continued)

**9.9.2** Information about the system for family escalation of care is provided to patients, families and carers

# Key task:

· Develop and distribute information about how and when to activate family escalation of care

#### Suggested strategies:

For the system to work effectively, you should ensure patients and carers receive information on how to use the escalation process. This information should be provided on admission to the health service organisation and reinforced throughout the patient's stay.

Strategies for informing patients and carers of escalation processes include:

- educating all patients and carers about the escalation process on admission, and providing a brochure that outlines how care is escalated
- reinforcing the message during daily healthcare team rounds
- displaying signs or posters that describe how to escalate care in all patients' rooms
- displaying signs or posters in public areas to remind patients and visitors about the process
- displaying stickers that show the phone number to call on telephones (if this method is used to call the responders)
- broadcasting information about the system on patient television and audio services.

### Outputs of improvement processes may include:

• information resources including signs, posters, stickers, brochures or other material for patients and carers about how and when to activate escalation processes, including information about how to call for assistance.

# Further reading and resources:

Relevant sections of the Guide to Support Implementation of the National Consensus Statement:

- Essential element 2: Escalation of care
- Essential element 4: Clinical communication

# **Actions required**

### Implementation strategies

# 9.9 Enabling patients, families and carers to initiate an escalation of care response

(continued)

**9.9.3** The performance and effectiveness of the system for family escalation of care is periodically reviewed

#### Key task:

Develop and implement data collection systems to review the processes for patient and carer escalation of care

### Suggested strategies:

You should consider these key points when evaluating systems for patient and carer escalation of care:

- the level of awareness that patients and carers demonstrate about how to use the escalation process
- satisfaction of the patient and carer with the mechanism for escalation and responses provided
- satisfaction of clinicians in relation to the escalation system (process, roles and responsibilities)
- the number of times patient or carer escalation of care events occurs
- reasons for triggering escalation of care
- patient outcomes following an escalation of care response.

Methods for obtaining this information may include:

- surveys or semi-structured interviews of patients and carers to determine the level of awareness of the escalation system
- focus groups
- audits of medical records.

# Outputs of improvement processes may include:

- policies, procedures and protocols regarding reviews of the process for family escalation of care
- evaluation plans and audit schedules that describe the frequency and processes for reviewing the process for family escalation of care
- evaluation, audit and feedback reports about the process and outcomes of patient and carer escalation of care
- feedback from patients and carers about the process of escalating care including qualitative information and survey results.

#### Further reading and resources:

See Appendix C for a summary of data collection and audit requirements.

Relevant sections of the Guide to Support Implementation of the National Consensus Statement:

- Essential element 2: Escalation of care
- Essential element 7: Evaluation, audit and feedback

Quality measures for recognition and response systems have been developed which include measures for activation and awareness of patient, family and carer escalation systems. These are available from the Commission's web site at:

www.safetyandquality.gov.au/our-work/recognition-and-response-to-clinicaldeterioration/evaluating-recognition-and-response-systems/quality-measures-forrecognition-and-response-systems/

# **Actions required**

# Implementation strategies

# 9.9 Enabling patients, families and carers to initiate an escalation of care response

(continued)

**9.9.4** Action is taken to improve the system performance for family escalation of care

# Key task:

· Use information from the process of patient and carer escalation to review, inform and prioritise required improvement activities

### Suggested strategies:

To enable patient and carer escalation systems to improve and develop, you should ensure clinicians have access to education about the purpose behind such initiatives, as well as information on their roles and responsibilities when a patient or carer triggers escalation of care.

You should consider developing scripted information for orientation, training and education resources. These scripts describe how to introduce and explain the escalation system to a patient, family member or carer.

Evaluating patient and carer escalation processes will help to identify any barriers to using the system, and to ensure that strategies are developed and implemented to promote successful use of the system.

#### Outputs of improvement processes may include:

- documentation of quality improvement processes detailing actions taken to address issues identified through review of patient and carer escalation process
- examples of improvement activities that have been implemented to maximise the appropriate use of patient and carer escalation processes, and evaluation of their impact
- · communication material or education and training resources developed for clinicians and/or patients and carers.

# Further reading and resources:

Relevant sections of the Guide to Support Implementation of the National Consensus Statement:

- Essential element 2: Escalation of care
- Essential element 4: Clinical communication
- Essential element 5: Organisational supports
- Essential element 6: Education
- Essential element 7: Evaluation, audit and feedback

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# **Appendix A: Links to resources**

# **Key Resources**

A Guide to Support Implementation of the National Consensus Statement

www.safetyandquality.gov.au/our-work/ recognition-and-response-to-clinical-deterioration/ implementing-r-and-r-systems/implementationquide/

The National Consensus Statement: Essential Elements for Recognising and Responding to Clinical Deterioration

www.safetyandquality.gov.au/our-work/recognisingand-responding-to-clinical-deterioration/ implementing-r-and-r-systems/the-nationalconsensus-statement/

Further supporting tools and resources are available from the Commission's web site

www.safetyandquality.gov.au/our-work/recognitionand-response-to-clinical-deterioration/

# **International Organisations**

Agency for Healthcare Research and Quality www.ahrq.gov

Canadian Patient Safety Institute www.patientsafetyinstitute.ca

Institute for Healthcare Improvement www.ihi.org

**National Patient Safety Agency** www.npsa.nhs.uk

National Institute for Health and Clinical Excellence www.nice.org.uk

**Patient Safety First** www.patientsafetyfirst.nhs.uk

**Picker Institute** www.pickerinstitute.org

# **National Organisations**

Australian Commission on Safety and Quality in Healthcare www.safetyandquality.gov.au

Department of Health and Ageing www.health.gov.au

# **State and Territory Organisations**

**ACT Health** 

www.health.act.gov.au

Department of Health and Human Services, Tasmania www.dhhs.tas.gov.au

Department of Health, Victoria www.health.vic.gov.au

Northern Territory Department of Health and Families www.health.nt.gov.au

**NSW Ministry of Health** www.health.nsw.gov.au

**NSW Clinical Excellence Commission** www.cec.health.nsw.gov.au

Office of Quality and Safety www.safetyandquality.health.wa.gov.au

Patient Safety and Quality Improvement Service www.health.qld.gov.au/psq/

Queensland Health www.health.qld.gov.au

SA Health

www.sahealth.sa.gov.au

Victorian Quality Council www.health.vic.gov.au/qualitycouncil/index.htm

Western Australian Department of Health www.health.wa.gov.au

# Change Improvement

Australian Resource Centre for **Healthcare Innovations** 

www.archi.net.au/resources/moc/making-change

#### Institute for Healthcare Improvement:

Register at www.ihi.org (free), then log in so that you can access resources on the IHI website

- Change improvement white paper
- Engaging physicians in quality improvement

National Health and Medical Research Council, barriers to using evidence

www.nhmrc.gov.au/nics/materials-and-resources/ materials-and-resources-subject/-subject-barriersusing-evidence

National Health and Medical Research Council, assessing the implementability of guidelines www.nhmrc.gov.au/nics/materials-and-resources/ materials-and-resources-subject/-subject-guidelineimplementation



# Clinical Governance

Department of Health, Victoria, Clinical governance policy framework www.health.vic.gov.au/clinrisk/publications/clinical\_ gov\_policy.htm

National Health Service (UK), Patient involvement and public accountability: a report from the NHS future forum www.dh.gov.uk/prod\_consum\_dh/groups/dh digitalassets/documents/digitalasset/dh 127544.pdf

### Queensland Health,

Clinical governance framework and resources www.health.qld.gov.au/psq/governance/webpages/ gov\_frame.asp

Victorian Healthcare Association, Clinical governance resources www.vha.org.au/clinicalgovernanceresources.html

# **Audit and Data Collection**

Australian Commission on Safety and Quality in Health Care, Evaluation agreement tool www.safetyandquality.gov.au/wp-content/ uploads/2012/02/Evaluation-agreement-tooleditable-PDF.pdf

Australian Commission on Safety and Quality in Health Care, Quality measures for recognition and response systems

www.safetyandquality.gov.au/our-work/recognitionand-response-to-clinical-deterioration/evaluatingrecognition-and-response-systems/qualitymeasures-for-recognition-and-response-systems/

Australian Council on Healthcare Standards, Intensive Care indicators user's manual www.anzics.com.au/safety-quality/achs-indicators

Healthcare Quality Improvement Partnership, Resources for engaging clinicians in audit and quality improvement

www.hqip.org.uk/engaging-clinicians-a-programmeto-improve-clinical-engagement-in-audit/

International Liaison Committee on Resuscitation, Consensus statement on core rapid response system data collection

circ.ahajournals.org/content/116/21/2481.full

Queensland Health Audit tools for the National Safety and Quality Health Service Standards www.health.qld.gov.au/psq/safetyandquality/ nsghss-audit-tools.asp

# Track and Trigger Observation and **Response Charts**

Australian Commission on Safety and Quality in Health Care, Adult deterioration detection system observation charts

www.safetyandquality.gov.au/our-work/recognitionand-response-to-clinical-deterioration/observationand-response-charts/

A series of six fact sheets about selecting, modifying, implementing and testing observation and response charts has been developed by the Australian Commission on Safety and Quality in Health Care. These are listed below:

# EE1 ORC1 fact sheet: Introducing an observation and response chart

http://www.safetyandquality.gov.au/wp-content/ uploads/2012/08/ee1-orc-1-fact-sheet.pdf

EE1 ORC2 fact sheet: Modifying the observation and response chart for local use

http://www.safetyandquality.gov.au/wp-content/ uploads/2012/08/ee1-orc-2-fact-sheet.pdf

EE1 ORC3 fact sheet: Potential practice changes associated with implementing an observation and response chart

http://www.safetyandquality.gov.au/wp-content/ uploads/2012/08/ee1-orc-3-fact-sheet.pdf

EE1 ORC4 fact sheet: Training clinicians to use the observation and response charts http://www.safetyandquality.gov.au/wp-content/ uploads/2012/08/ee1-orc-4-fact-sheet1.pdf

EE1 ORC5 fact sheet: Why is it crucial to test any non-approved ORC modifications http://www.safetyandquality.gov.au/wp-content/ uploads/2012/08/ee1-orc-5-fact-sheet.pdf

EE1 ORC6 fact sheet: How to conduct a behavioural study to test chart modifications http://www.safetyandquality.gov.au/wp-content/ uploads/2012/08/EE1-ORC6-Fact-sheet.pdf

Between the Flags, New South Wales Health nswhealth.moodle.com.au/DOH/DETECT/ content/00\_worry/when\_to\_worry\_07.htm

Compass, Australian Capital Territory Health Register (free) at:

health.act.gov.au/professionals/general-information/ compass/registration

Then log in to access observation charts for general adult, maternity and paediatric settings.

# Appendix A: Links to resources (continued)

#### **Human Factors**

The Australian Commission on Safety and Quality in Health Care commissioned report on human factors regarding observation charts www.safetyandquality.gov.au/wp-content/ uploads/2012/01/35986-HumanFactors.pdf

World Health Organisation, Human Factors in Patient Safety

www.who.int/patientsafety/research/methods measures/human factors/human factors review.pdf

# **Track and Trigger Systems**

Between the Flags, New South Wales http://www.cec.health.nsw.gov.au/programs/ between-the-flags

Compass, Australian Capital Territory

Register (free) at:

health.act.gov.au/professionals/general-information/ compass/registration

Then log in so that you can access information, tools and resources for the Compass program.

#### Institute of Healthcare Improvement:

Register at www.ihi.org (free), then log in to access resources on the IHI website

- Rapid Response Teams
- Rapid Response Systems

# **Education Programs**

## ACT Health, Compass

Register (free) at:

health.act.gov.au/professionals/general-information/ compass/registration

Then log in to access information about the Compass education program

NSW Between the Flags, DETECT nswhealth.moodle.com.au/DOH/DETECT/content/

**Basic and Advanced Life Support** Guidelines

**Australian Resuscitation Council** www.resus.org.au

International Liaison Committee on Resuscitation www.ilcor.org/en/home

# **Advanced Life Support Training**

Advanced Paediatric Life Support www.apls.org.au

Australian and New Zealand College of Anaesthetists www.anzca.edu.au/training

Australian College of Critical Care Nurses www.acccn.com.au

Australian College of Rural and Remote Medicine www.acrrm.org.au

Australian Resuscitation Council www.resus.org.au

Queensland Ambulance Service www.ambulance.qld.gov.au/firstaid/medical.asp

Royal Australasian College of Surgeons www.surgeons.org/racs/education--trainees/skillstraining

The College of Nursing www.nursing.edu.au/

**Patient and Family Escalation** Information, Tools and Resources

**Clinical Excellence Commission Patient** and Family Escalation Network www.cec.health.nsw.gov.au/programs/partneringwith-patients#PFAE\_Network

Institute for Family and Patient Centered Care www.ipfcc.org

Institute of Healthcare Improvement: Register at www.ihi.org (free), then log in to access resources on the IHI website

- Resources related to Family Activated Safety Team (FAST)
- Resources related to Condition H (Help) programs

The Josie King Foundation www.josieking.org

The Lewis Blackman story www.lewisblackman.net



# **Advance Care Planning**

Australian Health Ministers Advisory Council, National Framework for Advance Care Directives in Australia

www.ahmac.gov.au/cms\_documents/ AdvanceCareDirectives2011.pdf

Respecting Patient Choices program (Australia) www.respectingpatientchoices.org.au

Respecting Choices program (United States of America) respectingchoices.org

Palliative Care Australia, Advance care planning in aged care agedcare.palliativecare.org.au/Default. aspx?tabid=1178

Palliative Care Australia, Position statement on advance care planning www.palliativecare.org.au/Portals/46/PCA%20 Advance%20Care%20Planning%20Position%20 Statement.pdf

National Health Service, Advance care planning national guidelines (developed by the Royal College of Physicians) www.endoflifecareforadults.nhs.uk/publications/ advance-care-planning-national-guideline

# **Appendix B:** Observation and response charts

Four track and trigger observation and response charts designed using human factors principles are available from the Australian Commission on Safety and Quality in Health Care. These charts use the same design principles, each with a different track and trigger system. Track and trigger systems, also known as early warning systems, provide an objective decision making process for recognising and responding to abnormal physiological observations. These systems are incorporated into observation charts to standardise and streamline the process of tracking changes in physiological observations. When physiological observations reach predetermined thresholds of abnormality, an appropriate clinical response is triggered.

The four observation and response charts reflect the main types of track and trigger systems that are currently in use in Australia.

- The R2 chart uses a single parameter system with two graded response categories.
- The R4 chart uses a single parameter system with four graded response categories.
- ADDS+ uses an aggregate scoring system with a blood pressure table for variation in abnormal triggers based on the patient's usual blood pressure.
- ADDS- uses an aggregate scoring system without variation to the scores assigned to blood pressure.

All of these charts are designed to be printed on A3 paper, and folded to fit an A4 folder and patient record.

The following pages present examples of two of the Commission's charts. The inside spreads of the R2 and ADDS- charts are presented in a reduced size to fit on an A4 page. All of the available charts can be viewed in full on the Commission's web site:

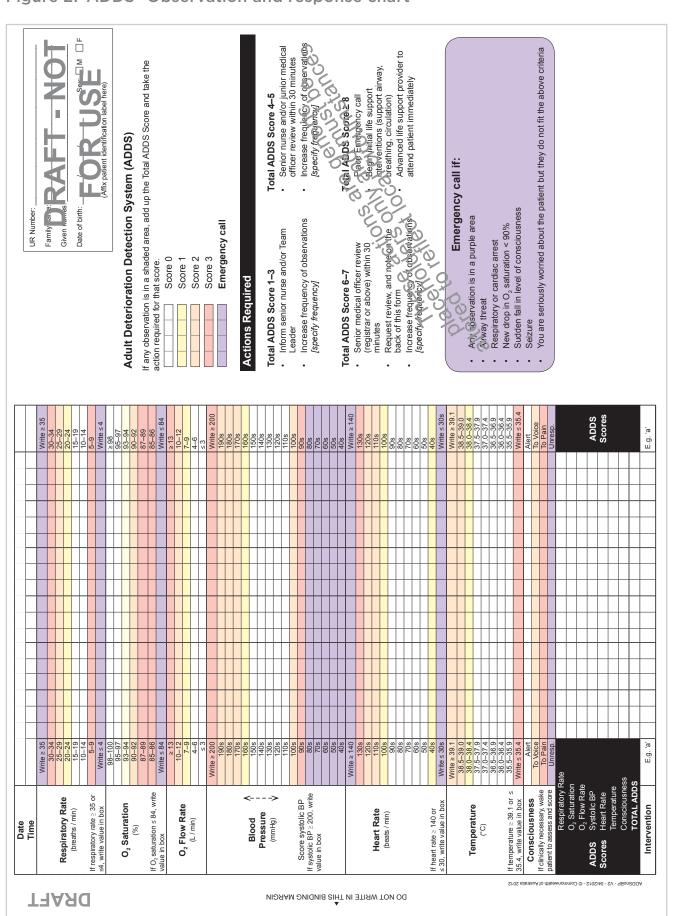
www.safetyandguality.gov.au/our-work/recognitionand-response-to-clinical-deterioration/observationand-response-charts/

Figure 1: R2 Observation and response chart

:ie	TAFI - NOT	rth: FOR' US & M F (Affix patient identification label here)	Emergency Call	Actions Required  Place Emergency call		<ul> <li>Advanced life support provider to attend patient immediately ^</li> </ul>	APROPULATION	2000	and linstal	2000	Cal	Clinical Review	Actions Required	Senior medical officer review (registrar or			this form	/ Increase nequency of observations // // // // // // // // // // // // //								30	<u> </u>	مندية المانينات مانيدات	מניכוונט פוו ווכמן סומוכי.	S:	bservation is in a shaded area	the patient.		When graphing observations, place a dot (•) in the centre of the box which includes	the current observation in its range of values and connect it to the previous dot with a	symbol indicated on the chart.	Whenever an observation falls within a shaded area you must initiate the actions	ation has been made (see overleaf)	audi ilas been lilade (see Overleal).	If observations fall within both purple and orange coloured areas for the same time	e al ea appiy.
UR Number	Family nan	Given names  Date of birth:	T Spread	Response Criteria	Any observation is in a purple area     You are worried about the patient but	they do not fit the above criteria			COLIC	10 300 00	TUCOLUCIO	けいう	Response Criterian Co.	• Any of the Mation is in an orange area	Solution are worried about the patient but	they do not fit the above criteria									General Instructions	Vol. must record appropriate observations:			שנים והלמפונס מלמים ומים ליים ליים ליים ליים ליים ליים ליים ל	» You must record a full set of observations:	lf the patient is deteriorating or an observation is in a shaded area	- Whenever vou are concerned about the patient.		<ul> <li>When graphing observations, place a do</li> </ul>	the current observation in its range of va	straight line. For blood pressure, use the symbol indicated on the chart.	. Whenever an observation falls within a s			If observations fall within both purple and orange colo	period, the actions required to the purple
		Write ≥ 35 30–34 25–29 20–24 15–19 16–19	\$ 400 \$ 400 \$ 600 \$ 600	90-97 90-92 87-89	85–86 Write ≤ 84	≥13 10–12	7-9	< 3 Write > 200	1908	170s	160s	150s 140s	1308	120s	1008	808 808	708	50s 20s	40s	Write ≥ 140	130s	110s	100s	808 80s	70s	809 50s	408	308	38 5-39.1	38.0–38.4	37.5–37.9	37.0–37.4	36.5-36.9	35.5-35.9	Write ≤ 35.4	Alert	To Voice	To Pain	O E espo.	Write	
		Write ≥ 35 30–34 25–29 20–24 15–19	\$4 88-100	93–94 90–92 87–89	85–86 Write ≤ 84	> 13 10–12	7–9	< 3 Write > 200	1908	180s 170s	160s	150s 140s	130s	120s 110s	100s	808 80s	70s	50s 20s	40s 30s	Write ≥ 140	130s	110s	100s	808 808	20 <i>x</i>	60s 50s	408	308	38 5-39 0	38.0–38.4	37.5–37.9	37.0–37.4	36.5–36.9	35 5-35 9	Write ≤ 35.4	Alert	To Voice	To Pain	O.E.e.sp.	Write	-
	Time	Respiratory Rate (breaths / min)		O <sub>2</sub> Saturation	(2)	O Flow Rate	(L/min)				Blood A	Ф	(mmHg)		Score systolic BP	,		:	If systolic BP ≥ 200, write value in box			Heart Rate	(beats / min)				If heart rate ≥ 140, write	xog ui e			Tomporating	Selature (S)	)			Consciousness	If clinically necessary wake	patient to assess and score	Dain Score	None (0) – Worst (10)	

# Appendix B: Observation and response charts

Figure 2: ADDS- Observation and response chart



# Appendix C: Summary of data collection and audit requirements in Standard 9



All of the quality measures and other resources listed in this summary can be downloaded from the Commission's web site:

www.safetyandquality.gov.au/our-work/recognition-and-response-to-clinical-deterioration/evaluatingrecognition-and-response-systems/

An evaluation agreement tool is also available to assist individual clinical areas or whole health service organisations to develop robust evaluation plans for recognition and response systems.

www.safetyandquality.gov.au/wp-content/uploads/2012/02/Evaluation-agreement-tool-editable-PDF.pdf

Item	Description	Possible methods	Commission resource						
9.2.1	Feedback is actively sought from the clinical workforce on the responsiveness of the recognition and response systems	Surveys Focus groups Peer review processes Morbidity and mortality meetings	Rapid response system staff knowledge and satisfaction survey						
9.2.2	Deaths or cardiac arrests for a patient without an agreed treatment-limiting order are reviewed to identify the use of the recognition and response systems and any failures in these systems	Routine reviews of in-hospital cardiac arrests Reviews of unexpected deaths Reviews of cardiac arrests, deaths	Quality measures:  • Failed escalation with mortality  • Unexpected cardiopulmonary arrest  • In-hospital deaths  • Unexpected in-hospital deaths						
9.3.2	Mechanisms for recording physiological observations are regularly audited to determine the proportion of patients that have complete sets of observations recorded in agreement with their monitoring plan	Audits of observation charts against local policy and monitoring plan	Observations, monitoring and escalation of care audit tool Quality measures:  Documentation of core physiological observations  Compliance with monitoring plans or policies						
9.4.2	Use of escalation processes, including failure to act on triggers for seeking emergency assistance, are regularly audited	Audits of observation charts to identify triggers for escalation and action taken  Number and circumstances for rapid response calls  Reviews of cardiac arrests, deaths, unplanned admissions to ICU	Observations, monitoring and escalation of care audit tool Rapid response case report Quality measures: • Failed escalation with mortality • Unexpected cardiopulmonary arrest • In-hospital deaths • Unexpected in-hospital deaths • Rapid response system activation						

(Table continued next page)

# Appendix C: Summary of data collection and audit requirements in Standard 9 (continued)

Item	Description	Possible methods	Commission resource
9.5.2	The circumstances and outcomes of calls for emergency assistance are regularly reviewed	As above	As above
9.9.3	The performance and effectiveness of the system for family escalation of care is periodically reviewed	Surveys, interviews or focus groups with patients and families  Surveys, interviews or focus groups with clinicians  Reviews of records of family escalation calls and clinical circumstances	Quality measures:  Activation of patient, family and carer escalation  Awareness of patient, family and carer escalation



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