

The measurement and documentation of physiological observations is one essential element of a broader system for recognising and responding to clinical deterioration. Observation and response charts (ORCs) are tools for documenting, monitoring and communicating changes in physiological observations. Their design and use can have a significant impact on chart users' ability to recognise deterioration and take appropriate action.

This fact sheet is one of a series that provides specific information about the process of selecting, implementing and using an observation and response chart. The other fact sheets in this series are:

- EE1 ORC2 Modifying the observation and response chart for local use
- EE1 ORC3 Potential practice changes associated with implementing an observation and response chart
- EE1 ORC4 Training clinicians to use the observation and response charts
- EE1 ORC5 Why is it crucial to test any non-approved ORC modifications?
- EE1 ORC6 How to run a behavioural study to test chart modifications



Choosing a chart

The observation and response charts (ORCs) available from the Australian Commission on Safety and Quality in Health Care (the Commission) were designed for the specific purpose of optimising the detection of clinical deterioration. They are variations of the ADDS charts, which have undergone human factors testing. They incorporate track and trigger systems and have been piloted in clinical practice. For those hospitals that are not required to use a statewide chart, use of one of the ORCs disseminated by the Commission is strongly encouraged.

The Commission has made four ORCs available that 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 ORCs 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.

More information about choosing a track and trigger system for your organisation can be found in the *Guide to Support Implementation of the National Consensus Statement*.¹ Pages 50-61 (Essential element 1) and pages 86-108 (Essential element 2) are particularly pertinent. The guide can be downloaded from the [Commission web site](#) in parts or as a whole.

Implementing an ORC is only one part of a robust recognition and response system

The National Consensus Statement² specifies eight essential elements which are required for effective recognition and response systems. It should be remembered that the measurement and documentation of patient vital signs is only one of these elements. A broader change management framework may need to be employed to ensure that all of the essential elements are in place.

More information on implementing recognition and response systems can be obtained from the *Guide to Support Implementation of the National Consensus Statement* and the accompanying resources and tools.

Strategies for implementing an ORC

Implementing an ORC is a big project, particularly if the track and trigger concept is new to your organisation. You may find initial resistance from some staff because of the practice changes that can be required with the introduction of a new chart. You need to be prepared to spend time planning, engaging with clinical staff about the reasons for the project, providing training and education about using the charts, auditing and providing feedback, and troubleshooting. Issues to consider when planning the implementation of a new ORC include the following:

- Consider how you will engage with and provide training to all of the different groups of health professionals who will be affected by the change. You may need alternative strategies to reach groups such as permanent and casual nursing staff, night staff, junior doctors, and consultants.
- Many clinicians have been 'doing obs' for years and changing this fundamental aspect of clinical practice can be very challenging. Make sure that clinicians understand that the system is there to empower them to take action, not to undermine their clinical judgement. That is, the chart should be regarded as a tool to aid decision-making rather than something to replace clinicians' decision-making.
- Identify champions in each area and support them to help lead the change and reinforce the message – peers often have powerful influence.
- It is often helpful to implement the charts in one or two areas at a time during the initial roll-out so that you can target your resources intensively.
- Use local stories and local data to demonstrate the importance of what you are doing. Audit current practice and teach using de-identified cases where recognition of deterioration was delayed or the response was inadequate.
- Plan ways to ensure that education, training and evaluation can be sustained over the long term. For example, include training about ORCs and the response system in orientation sessions; develop information resources for temporary or relief staff; and ensure evaluation and feedback systems are embedded into the quality and risk management structures of the organisation.
- Audit use of the charts and provide feedback to individual areas. If problems are identified, then discuss these with the staff who are involved and ask them to analyse the issues and identify how improvements might be made.

Links to other helpful resources

[Quality measure: documentation of core physiological observations](#)

[Audit tool: observations, monitoring and escalation of care audit tool](#)

[Tips from the real world fact sheets](#)

References

1. Australian Commission on Safety and Quality in Health Care. A Guide to Implementation of the National Consensus Statement: Essential Elements for Recognising and Responding to Clinical Deterioration. Sydney. ACSQHC, 2011.
2. Australian Commission on Safety and Quality in Health Care. National Consensus Statement: Essential Elements for Recognising and Responding to Clinical Deterioration. Sydney. ACSQHC, 2010.

Further information

Further information about implementing recognition and response systems can be found in the Australian Commission on Safety and Quality in Health Care publication *A Guide to Implementation of the National Consensus Statement: Essential Elements for Recognising and Responding to Clinical Deterioration* (2011).

Australian Commission on Safety and Quality in Health Care
GPO Box 5480
Sydney NSW 2001
Telephone: (02) 91263600
Email: mail@safetyandquality.gov.au

This can be downloaded from: www.safetyandquality.gov.au