

Recognition and Management of Patients who are Deteriorating

Implementation Guide – Ministry of Health PD2020_018

Policy Number 1.322

Policy Function Continuum of Care

Issue Date 15 January 2021

Summary This policy describes the standards and principles of the Deteriorating Patient Safety Net System for the recognition, response to and the appropriate management of the physiological and mental state deterioration of patients in accordance with NSW Ministry of Health (MoH) Policy Directive (PD) PD2020_018 *Recognition and management of patients who are deteriorating*.

Responsible Officer Executive Director Performance and Planning

Applicable Sites

- Administration Centres
- Community Sites (e.g. Court Liaison Service, Community Integration Team, etc.)
- Health Centres (Adult Correctional Centres or Police Cells)
- Health Centres (Youth Justice NSW)
- Long Bay Hospital
- Forensic Hospital

Previous Issue(s) Policy 1.322 (20 April 2017, December 2014)

Change Summary

- The policy title has changed from Recognition and Management of Patients who are Clinically Deteriorating to Recognition and Management of Patients who are Deteriorating
- Deterioration in this policy includes both physical and mental deterioration changes rather than just physical changes.
- Between the Flags remains the foundation for the Deteriorating Patient Safety Net System but is now strengthened by the integration of other programs and frameworks that includes, Sepsis Kills, End of Life, Patient, carer and family escalation and Take 2, Think, Do framework for diagnostic error
- The new policy has emphasis on a comprehensive assessment of deterioration rather than doing a set of observations

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- In the policy, a completion of a comprehensive assessment is done every 6 hours for acute patients rather than 8 hours.
 - CERS protocol includes all services not just acute care services
 - Deteriorating patient measurement strategy includes a selection of outcome, process and balancing measures to assess performance and effectiveness

HPRM Reference POLJH/1322

Authorised by Chief Executive, Justice Health and Forensic Mental Health Network

1. Preface

Failure to recognise and appropriately manage patient physiological and mental state deterioration is a contributing factor in many adverse events in hospitals and health care organisations around the world.

Justice Health and Forensic Mental Health Network (the Network) has adopted the principles of the Between the Flags (BTF) developed by the Clinical Excellence Commission (CEC) in collaboration with clinical experts. Between the Flags provides the foundation for the NSW Deteriorating Patient Safety Net System, which is strengthened by the integration of other programs and frameworks, such as:

- Sepsis Kills
- End of Life Care
- Patient, carer and family escalation, known as R.E.A.C.H, and
- Take 2, Think, Do framework for diagnostic error.

The Deteriorating Patient Safety Net System's five components are implemented at Long Bay Hospital, Forensic Hospital and all the Adult and Adolescent Health Centres.

2. Policy Content

JH&FMHN staff from Long Bay Hospital, Forensic Hospital, Ambulatory Custodial sites and the Adult and Adolescent Health Centres must comply with requirements in this policy.

2.1. Governance

The Network Clinical and Corporate governance should:

- Review regular reports and monitor performance of the Deteriorating Patient Safety Net System from the Forensic Hospital, Long Bay Hospital and all Correctional Health Centres
- The Recognition and Management of Patients who are Deteriorating Committee supports and review development of Network policies and procedures relevant to the Deteriorating Patient Safety Net System

The Long Bay Hospital, Forensic Hospital, Ambulatory Custodial sites and the Adult and Adolescent Health Centres *must*:

- Ensure clinicians with delegated roles, responsibilities and accountabilities under the Network's Deteriorating Patient Safety Net System are oriented to the system and demonstrate a clear understanding of their roles, responsibilities and accountabilities, including contracted staff, locums and clinicians on rotating rosters.

- Provide opportunities for clinicians to complete the required education and training relevant to their delegated role in the Network's Deteriorating Patient Safety Net System and maintain records of completion.
- Ensure clinicians with delegated responsibilities under the Network's Deteriorating Patient Safety Net System are appropriately credentialed.
- Support use of appropriate standard clinical tools/approved Network clinical management guidelines or pathways as part of the Network's Deteriorating Patient Safety Net System, including approved NSW Health standard observation charts.
- Ensure adequate resources (personnel and equipment), are allocated, available and fit-for-purpose to support the delivery of high-quality care as part of the Network's Deteriorating Patient Safety Net System.
- Collect and report data and information on the performance and effectiveness of the Network's Deteriorating Patient Safety Net system.
- Monitor variation in practice against expected outcomes and provide feedback to clinicians on variation in practice and health outcomes to inform improvements in the Network's Deteriorating Patient Safety Net System.
- Regularly test the Network's Deteriorating Patient Safety Net System and/or processes through mock drills or simulated exercises where these events are infrequent or when there are significant changes to the context of service delivery.
- Allied Health staff are required to complete the Managing Deterioration – Deteriorating Patient Learning Pathway – Adult patient (Allied Health). This includes the HETI Online programs: Managing Deterioration – Tier 1: Awareness, Charts and escalation; Managing Deterioration – Tier 2: Communication, Teamwork and Documentation.
- Nursing staff are required to complete the Managing Deterioration – Deteriorating Patient Learning Pathway – Adult patient (Nursing). This includes the HETI Online programs: Managing Deterioration – Tier 1: Awareness, Charts and Escalation; Managing Deterioration – Tier 2: Communication, Teamwork and Documentation; Managing Deterioration – Tier 2.

2.2. Implementation - Roles & Responsibilities

2.2.1 Clinical and Corporate Governance

- The Director of Clinical and Corporate Governance shall form the Recognition and Management of Patients who are Deteriorating Committee to review implementation and development of Network policies and procedures and strategic matters relevant to the Deteriorating Patient Safety Net System

- The Network Recognition and Management of Patients who are Deteriorating Committee shall ensure that local Clinical Emergency Response System (CERS) are developed and implemented at *The Forensic Hospital, Long Bay Hospital and Correctional Health Centres*
- Provide support to clinicians, managers and directors to implement, monitor and improve the Deteriorating Patient Safety Net System across the Network.
- Monitor and evaluate the implementation of local Deteriorating Patient Safety Net Systems at *The Forensic Hospital, Long Bay Hospital and Correctional Health Centres* and provide advice to Clinical Governance Committee to make changes, as required.

2.2.2 Education and Training

- Develop education programs to support the local Deteriorating Patient Safety Net as outlined in the Deteriorating Patient Education Strategy.
- Work in collaboration with the Network Clinical and Corporate Governance to develop the Deteriorating Patient Safety Net System education content.
- Provides Clinical Governance Committee reports on mandatory training and quality improvement measures on Deteriorating Patient Safety Net System
- Provide reports from My Health Learning regarding Network compliance

2.2.3 The Long Bay Hospital, Forensic Hospital, Ambulatory Custodial sites, the Adult and Adolescent Health Centres

- Managers and Directors should assign personnel and appropriate resources to implement all the requirements of this Policy as per local CERS protocols.
- Managers must ensure that all clinicians who provide direct patient care have completed the mandatory BTF Tier one and Tier two education and training prior to or during their induction to the Network
- Managers must ensure that all staff are made aware of the local Deteriorating Patient Safety Net System (including how to activate their local CERS), and their roles and responsibilities under the system during orientation and/or ward induction.
- Managers and/or Directors must ensure that procedures are developed that systematically and proactively identify patients at increased risk of deterioration, with appropriate mitigation strategies
- Managers and or Directors must ensure the requirements of this Policy are effectively implemented, including system governance, standard clinical tools, CERS, education and evaluation.

- Responsible Managers/or Directors must ensure a structured clinical handover tool, such as ISBAR, is used to communicate critical information, outcomes, alerts and risks during the escalation of care between the clinicians.

All Clinical Staff

- Actively take part in the design, implementation, monitoring and improvement of the Networks Deteriorating Patient Safety Net System.
- Understand and perform their delegated roles and responsibilities, as per the Network's Deteriorating Patient Safety Net System.
- Participate in education and training related to the Network's Deteriorating Patient Safety Net System, including education and training that focuses on culturally appropriate engagement of patients and shared decision making.
- Review their clinical practice and performance of their roles, responsibilities and accountabilities under the Network's Deteriorating Patient Safety Net System and use the information to implement improvements to the system and changes to practice.

3. Procedure Content

3.1. Assessment of Deterioration

3.1.1 Assessment

Assessment of a patient needs to, at a minimum, include a systematic A-G assessment and be documented in the patient's health care record, as per the requirements outlined in NSW Health Policy Health Care Records – Documentation and Management (PD2012_069).

To establish the patient's baseline and agree on other patient-specific signs of deterioration initially, assessment needs to:

- Include a comprehensive systematic physical and mental state assessment
- Consider any pre-morbid conditions and where accessible, medical or clinical history documented in health care records.
- Engage patients, carers, families and where appropriate, the patient's general practitioner, case manager or other clinicians familiar with their care.
- Mental state assessment of patients to be completed in line with Engagement and Observation in Mental Health Inpatient Units PD2017_025
- The frequency of assessment is to be increased above the minimum requirements in accordance with local Clinical Emergency Response System (CERS) protocol of the *Long Bay*

Hospital, Forensic Hospital, Ambulatory Custodial sites, the Adult and Adolescent Health Centres and consideration of the patient's clinical need and medication protocol requirements.

- Clinicians must comply with their local Clinical Emergency Response System (including Clinical Review and Rapid Response) when referring patients to higher levels of care (refer to JHFMHN policy 1.252 Access to Local Public Hospitals, JHFMHN policy 1.174 End of Life Care, Resuscitation Plans and Advance Care Directive, NSW MoH PD2014_030 CPR – Decisions Relating to No CPR Orders).

3.1.2 Standard Clinical Tools

The Network staff must use the approved NSW Ministry of Health standardised clinical observation charts which incorporate colour-coded calling criteria and a 'track and trigger' format to alert clinicians to patients who are deteriorating. The observations charts graphically 'track' vital sign observations over time and 'trigger' an appropriate escalation of care based on the coloured calling criteria. The network staff must use Standard observations charts including the following to record observations:

- Adult General Observation Chart (SAGO), SMR110010, and Standard Paediatric Observation Chart (SPOC), SMR110019, must be used for children aged between 12 years to 16 years except for pregnant women.
- In the Hospitals and Ambulatory Custodial sites, the Standard Adult General Observation Chart (SAGO) and Clinical Emergency Response Systems (CERS) and the Standard Maternity Observation Chart (SMOC) are used. In Adolescent Health Centres the SAGO chart and the Standard Paediatric Observation Chart (SPOC - 12 – 16 years of age) are to be used.
- The SMOC is to be used to record general observations for all pregnant women in custody. The JHFMHN Midwives must use the NSW Health mandated 'Yellow Card' to record the routine antenatal general observations. Should the pregnant women's general observations deviate from the norm, the Midwives must commence recording them on the SMOC.
- The Network clinicians must align other standard clinical tools, such as the sepsis pathways or Resuscitation Plan with colour-coded calling criteria used on the standard observation charts as part of the local CERS.
- If a patient's observations are documented in either the blue, yellow or red zone on the SAGO chart, care must be escalated as per the local Clinical Emergency Response System (CERS) protocol. When a CERS is activated this must be fully documented in the patient medical record.

3.1.3 Minimum Requirements for Vital Sign Monitoring

The minimum set of vital signs and frequency of observations for different patient groups are outlined in Table below. In addition to the minimum requirements, a full set of vital sign

observations must be taken and documented in the patient’s health care record at the time of admission or initial assessment.

Patient group	Min required frequency of assessment	Min set of vital sign observations
Adult inpatient	Four (4) times per day at six (6) hourly intervals.	Respiratory rate, oxygen saturation, heart rate, blood pressure, temperature, level of consciousness, new onset confusion or behaviour change*, pain score
Mental health acute and subacute	Three (3) times per day at eight (8) hourly intervals for a minimum of 48 hours. Then daily thereafter.	Respiratory rate, oxygen saturation, heart rate, blood pressure, temperature, level of consciousness, pain score
Mental health non-acute	Three (3) times per day at eight (8) hourly intervals for a minimum of 48 hours. Then monthly thereafter.	Respiratory rate, oxygen saturation, heart rate, blood pressure, temperature, level of consciousness, pain score
Inpatient palliative care	Twice a day at a maximum interval of 12 hours apart	Respiratory rate, oxygen saturation, heart rate, blood pressure, temperature, level of consciousness, new onset confusion or behaviour change*, pain score
Community sites	At least once during each consultation/visit	To be determined locally based on the models of care and assessment of risk. However if the patient’s observations are outside the normal parameters then an increased frequency must be adhered to until the observations return to normal parameters. This should be done in consultation with a Medical Officer and documented.

3.1.4 Individualised Monitoring and Assessment Plans

Patients with clinical needs which differ from approved clinical management guidelines should have an individualised monitoring and assessment plan in place that takes into account the patient’s clinical situation, including their diagnosis, clinical risks, goals of care and proposed treatment, and specifies the vital signs and other relevant physiological/mental state observations to be monitored, and the frequency of monitoring.

Individualised monitoring and assessment plans, along with the rationale for the plan, are to be documented in the patient's health care record.

If a patient with an individualised monitoring and assessment plan has observations within the blue, yellow or red zone, care must be escalated according to the appropriate zone response unless an alternative response is stipulated in their Resuscitation Plan.

Following the initiation of a CERS call, the individualised monitoring and assessment plan need to be reviewed and the frequency of observations increased.

3.1.5 Alterations to Calling Criteria

Altered calling criteria are to only be used to align the calling criteria with the patient's baseline vital sign observation parameters when they are above or below the standard calling criteria.

Acute alterations are set for a defined period of time, not longer than 8 hours, before reverting back to the standard calling criteria on the appropriate standard observation chart.

A medical officer or a registered nurse in consultation with a medical officer may alter the standard calling criteria following assessment of the patient.

Network Medical Officer/Psychiatrist/Registrars must document any altered calling criteria (the observation range that triggers an escalation of care to a Clinical Review or Rapid Response or increasing frequency of observations), as necessary and formally review any altered calling criteria for their patient/s at a minimum weekly.

If the AMO/delegated clinician responsible is not available onsite, a registered nurse/midwife or allied health professional responsible for vital sign observation monitoring may alter calling criteria when prescribed by the AMO/delegated clinician responsible and following assessment of the patient.

This process needs to be outlined in the local CERS protocol, along with defined processes for altering calling criteria including:

- Documentation of the rationale for the new calling criteria in the patient's health care record
- Authorisation of the alterations by the AMO/delegated clinician responsible, including when the delegated clinician responsible is not employed or contracted by the Network
- The minimum timeframe for review of the altered calling criteria.

3.1.6 Palliative Care and Last Days of Life

Patients receiving palliative care are to have an individualised monitoring and assessment plan and Resuscitation Plan that aligns with their goals of care. When it is identified that a patient is dying or in their last days of life, the use of standard observation charts is not appropriate. The patient's individual monitoring and assessment plan and Resuscitation Plan are to be reviewed in

consultation with the patient, carers and family to ensure comfort is observed and, where required, concerns escalated via the local CERS.

Clinicians are to refer to the CEC Last Days of Life Toolkit for appropriate resources to:

- Ensure comfort is observed in patients whose death is expected, such as the
- Comfort Observation and Symptom Assessment Chart; and
- Facilitate the accelerated transfer for the patient who wishes to die at home.

3.2 Clinical Emergency Response Systems

A Clinical Emergency Response System (CERS) is a formalised system for obtaining prompt assistance from appropriately skilled and knowledgeable clinicians when a patient has signs and symptoms of physiological or mental state deterioration.

The Long Bay Hospital, Forensic Hospital, Ambulatory Custodial sites, the Adult and Adolescent Health Centres must develop and implement local CERS which include:

- Defined roles and responsibilities for team leaders and members of the rapid response team (RRT)
- An agreed set of minimum core emergency equipment and medication consistent with best practice guidelines that is readily available throughout the facility or clinical unit
- Procedures for orientation and training of staff on how to access and use equipment for advanced resuscitation
- A structured clinical handover tool, such as ISBAR, to communicate critical information, outcomes, alerts and risks during the escalation of care between the clinicians involved
- Requirements for documenting a CERS call, including the outcome of the call, the subsequent medical management and monitoring plan, and a provisional and/or differential diagnosis in the patient's health care record
- Prompt communication with the patient, carers and families as per local CERs about the response to and outcome of any CERS calls.
- The Network staff must comply with their local Clinical Emergency Response System (including Clinical Review and Rapid Response) for prompt review and treatment of patients who are deteriorating with referral to higher levels of care where necessary (refer to Network Policy 1.252 Access to Local Public Hospitals).

3.2.1 Clinical Review Process

Prompt and effective clinical review is essential in managing patients who are deteriorating and is to be undertaken (or supervised) by experienced staff. If a patient's observations enter the yellow zone (based on vital sign observations and/or additional criteria), the yellow zone response

instructions on the appropriate standard observation chart, standard clinical tool or Emergency Response Guideline are to be followed. The decision to call a clinical review (or other CERS call) is to be made in consultation with the nurse in-charge or relevant clinical supervisor. The decision to escalate (or not) is to be documented in the patient's health care record.

3.2.2 Rapid Response Process

If a patient's observations enter the red zone (based on vital sign observations and/or additional criteria), the red zone response instructions on the appropriate standard observation chart, standard clinical tool or approved clinical management guideline are to be followed, and a rapid response is to be activated as per the local CERS protocol.

The nurse unit manager/nurse-in-charge or Afterhours nurse manager must be informed that a rapid response call has been made and the instructions outlined on the appropriate standard observation chart, standard clinical tool and/or approved local clinical management guideline/pathway need to be followed.

3.2.3 Patient Transfer Process

The Network staff are to refer to and follow their locally determined procedure for escalating care. Staff must support the transfer process by communicating relevant clinical information to the receiving health care professional or facility through written documentation in the patient's health care record or verbally during clinical handover refer to [PD2018_011 – Critical Care Tertiary Referral Networks & Transfer of Care \(ADULTS\)](#) and [PD2019_020 – Clinical Handover](#).

3.3 Education

The Network Education and training unit shall develop and implement education program which aligns with the CEC Deteriorating Patient Education Strategy with set minimum training requirements for clinicians who provide direct patient care. It is mandatory for all Network Medical, Nursing and Allied Health staff to complete Tier 1 and Tier 2 between the Flags training. Tier 3 Responder Training includes team training and non-technical skills and is implemented in line with recommendations set out in the CEC Deteriorating Patient Education Strategy. The training program content will include:

- the minimum skills, knowledge, education and training requirements on the recognition and management of the deteriorating patient for all clinicians providing direct patient care, including completion of basic life support training
- BTF Tier Three Framework
- Incorporates the components of the BTF education into other educational activities/opportunities, including: signs of physiological and mental state deterioration;

systematic A-G assessment, synthesising assessment findings and observations to guide clinical decision making; expected trajectory of illness; appropriate escalation of care and the appropriate management of the deteriorating patient; structured communication, handover and team work

- Outlines processes to reinforce structured communication techniques and systematic patient assessment in daily clinical practice

3.4 Evaluation

The Clinical and Corporate Governance Unit and Education and Training Unit shall, collect, monitor and report the performance and effectiveness of local Deteriorating Patient Safety Net Systems. The measurement strategy shall include outcome, process and balancing measures, on mandatory quality improvement measures including:

- Rapid response call rate per 1,000 acute separations
- Cardio-respiratory arrest rate per 1,000 acute separations.

Recognition and Management of Patients who are Deteriorating Committee will oversee the compliance of the policy.

3.4 Key Terms

Acute alterations to calling criteria	Alterations made to calling criteria for a condition where the patient’s observations will fall outside the standard parameters for a defined period of time, while treatment is taking effect. Acute alterations to calling criteria are set for a defined period (not longer than 8 hours), after which they revert back to standard calling criteria. Patients with acute alterations to calling criteria must have daily medical reviews to ensure their clinical progress aligns with the patient’s treatment plan.
Additional criteria	Signs or symptoms of deterioration depicted on the standard observation chart that a patient may exhibit outside of, or in addition to, the standard calling criteria for vital sign observations.
Altered calling criteria	Changes made to the standard calling criteria by the AMO/delegated clinician responsible, to take account of a patient’s unique physiological circumstances and/or medical condition. Alterations may be ‘acute’ or ‘chronic’.
Clinical Emergency	A formalised system for staff, patients, carers and families to obtain timely clinical assistance when a patient deteriorates (physiological

Response System (CERS)	and/or mental state). The CERS includes the facility-based and specialty unit-based responses (clinical review and rapid response), as well as the formalised referral and escalation steps to seek expert clinical assistance and/or request for transfer to other levels of care within the facility (intra-facility) or to another facility (inter-facility).
Chronic alteration to calling criteria	Alterations to calling criteria where a patient has a chronic (lasting >3 months) health condition which causes their normal observations to fall outside standard parameters. Chronic alterations are set for the duration of the patient's episode of care and are reviewed during routine medical review and assessment of the patient.
Deteriorating Patient Safety Net System	The NSW Health Deteriorating Patient Safety Net System refers collectively to the various individual programs and frameworks implemented by NSW Health facilities/clinical services or clinical units to support the recognition and appropriate management of patients who deteriorate.
Individualised monitoring and assessment plan	A plan for assessing and monitoring the patient's clinical situation that considers their diagnosis, clinical risks, goals of care and proposed treatment, and specifies the vital signs and other relevant physiological and behavioural observations to be monitored and the frequency of monitoring(
Rapid response	An urgent review of a deteriorating patient by a rapid response team (RRT), or designated responder/s, as defined in the local CERS protocol.
Standard calling criteria	Signs and symptoms that a patient is deteriorating and may require review of their monitoring plan or escalation of care through the Clinical Emergency Response System to appropriately manage the deterioration. Standard calling criteria are depicted on standard observation charts as blue, yellow and red zones.
Standard observation chart	Standardised observation chart approved for use by the NSW Ministry of Health. These have been developed for a variety of clinical settings.

4. Definitions

Must

Indicates a mandatory action to be complied with.

Should

Indicates a recommended action to be complied with unless there are sound reasons for taking a different course of action.

5. Legislation and Related Documents

A list of related documents, including procedure manuals, should be included in policies where procedures, standards, international best practice relate to the preface of the policy. Where appropriate, a literature search must be performed to ensure the information in the policy is supported by evidence or best practice.

The Network Policies and Procedures	1.120 Management of Death 1.252 Access to Local Public Health Services 1.174 End of Life Care, Resuscitation Plans and Advance Care Directives 1.300 Remote Off-site After Hours Medical Services and After Hours 1.075 Clinical handover
NSW Health Policy Directives, and Guidelines	PD2020_018 Recognition and Management of Patients who are Deteriorating PD2014_030 CPR – Using Resuscitation Plans in End of Life Decisions PD2018_011 – Critical Care Tertiary Referral Networks & Transfer of Care (ADULTS) PD2019_020 – Clinical Handover