IN THE MATTER of the Coroner's Act 2008

and

the death of **BARRY BROWN – COR 2013 1298**

RESPONSE BY WESTERN HEALTH

Pursuant to section 72(3) of the *Coroner's Act 2008* (Vic), Western Health hereby responds to the following recommendations made by Coroner Darren J Bracken on 20 July 2021.

Recommendation a (i)

Provide specific periodic training to nursing staff reinforcing the significance of strict compliance with the 'escalation algorithm' first referred to in paragraph 58 above and the circumstances under which various 'codes' including 'code blue' ought to be 'called'.

Western Health Response

1. The escalation algorithm referred to in paragraph 58 of the Coroner's findings is no longer in place at Western Health. In her final submissions on behalf of Western Health, Counsel for Western Health Ms Ellis described the system changes made since March 2013. A copy of the Western Health procedure "Recognition and Management of the Deteriorating Adult Patient (inclusive of Peripartum Women)" last reviewed in June 2018 was attached to her submission. This procedure was again reviewed in December 2020 and retitled "Recognition and Management of the Deteriorating Adult Patient (inclusive of Pregnant or Early Post-Partum Women)" (**Procedure**). A copy of the Procedure is attached to this response. The Procedure describes the identification of the deteriorating patient and ensures rapid review by the Medical Emergency Response Team (MET) and is provided with this response. The current process as outlined in section 7.1.1 of the Procedure is:

a. Urgent Clinical Review by any doctor from the home unit or covering the home unit, including Fellows or Consultants, Registrars, HMOs and Interns, within 30 minutes of call.
b. MET call and review by the MET team within 10 minutes.
c. Adult Code Blue for immediate review by the resuscitation team (refer to Western Health procedure: OP-CC2.1.25 Adult Code Blue). A copy of this procedure is attached to this response.

2. Western Health confirms all nursing staff receive education regarding this procedure at initial orientation and annually during reaccreditation for basic life support (BLS) skills. During this training the importance of compliance and the circumstances under which various codes including code blue ought to be called are described.

Recommendation a (ii)

To the extent that it is not currently explicitly part of Hospital procedure and protocols, explicitly include in relevant procedure and protocols the requirement that a surgeon who has operated on a patient be immediately notified if that patient experiences post-operative hypotension and that in such circumstances the surgeon (or a nominee) be required to go to the Hospital and assess the patient as soon as is possible.

Western Health Response

3. The Procedure also requires following a MET call communication with the consultant responsible for the patient. Section 7.5.2 states:

> *"Consultant responsible for the patient is to be notified of the MET call by the clinical unit or covering Medical Officer at completion of the MET call."*

4. The Procedure defines hypotension as a systolic blood pressure ≤90mmHg (Table 3).
5. Western Health confirms that the Procedure requires if a post-operative patient experiences hypotension that activates the MET system the responsible surgeon is notified and in such circumstances the surgeon or their nominee attends the patient as soon as possible.

Recommendation a (iii)

Formulate and promulgate written policy setting-out when 'on-call' physicians, consultant physicians, specialist physicians, admitting physicians and otherwise relevant physicians, or other senior treating physicians, or all or any of a combination of them, are treating one patient they should;

a. *Speak directly to each other, rather than managing a patient's treatment indirectly through more junior physicians, or remotely by technology For example, if one or other of such medical specialists proposes treatment or a management plan with which another has reservations, or if the patient's condition precipitously changes and there is uncertainty about aetiology or treatment.*
b. *Themselves go onto the hospital and assess a patient.*

Western Health Response

6. Western Health holds the following expectations for responsible on-call specialists:
    a. The medical practitioner is, unless otherwise advised, not required while on-call to remain on the health service premises.
    b. The medical practitioner must remain available by telephone, text, or pager.
    c. If physical attendance of the on-call medical practitioner is requested or required, they should arrive within a timely fashion.
    d. If there is a disagreement between the medical practitioner placing the call and the on-call physician about the need to attend, the on-call practitioner must come to the Hospital and attend to the patient irrespective of the disagreement.
    e. If there is disagreement regarding a patient's management, it is resolved by deferring to the medical judgment of the physician who has personally examined and is currently treating the patient.
    f. If an on-call medical practitioner has concern regarding the proposed management of a patient by another specialist medical practitioner, they should:
        i. Speak directly with the practitioner; and
        ii. Consider attending the patient and conducting an independent assessment.

7. The above expectations are to be considered by the Western Health Deteriorating Patient Committee for inclusion in the Procedure. The Western Health Deteriorating Patient Committee convenes monthly.

Adult Rapid Response System: Adult MET and Code Blue Activation and Response

Procedure code: OP-GC4	Current version: December 2020
Previous version: new document	Next review date: December 2023
Section: Growing & Improving Care	Sub-section: Deteriorating Patient

1. Overview

The Western Health (WH) adult Rapid Response System (RRS) is designed to ensure fast, reliable and effective detection and response to any adult who is experiencing a medical emergency, respiratory or cardiac arrest on the WH Campuses: **Footscray Hospital, Williamstown Hospital and the Sunshine Hospital Precinct (Inclusive of Joan Kirner Women's and Children's).**

The system includes the following vital components:

- Appropriate recognition and placement of patients considered to be "at risk".
- A system for early recognition of clinical deterioration (facilitated by continual monitoring and track and trigger observation charts).
- A well-developed and advertised process for family identification of deterioration (Call for Help).
- High quality initial management by first responders (i.e. staff activating MET or Code Blue response).
- A reliable process for MET & Code Blue team activation and response.
- High quality MET or Code Blue team management (including stabilisation and transfer if required to definitive point of care).

This procedure outlines:

- Adult MET & CODE BLUE activation criteria;
- Adult MET & CODE BLUE activation and response process;
- Adult MET & CODE BLUE team composition;
- Medical Emergency Equipment requirements and location;
- Medical emergency documentation requirements;
- RRS education and training program expectations.

See also *OP-GC4 Recognition and Management of the Deteriorating Adult Patient (inclusive of Pregnant and Post-partum Women).*

1.1 RRS Teams - Campus Specific Information

The RRS team composition will depend upon the type of activation and is detailed below. Of note, due to varying WH Campus patient cohorts and complexity, for the same tier response, the team composition differs at Williamstown Hospital to that of Footscray Hospital and the Sunshine Hospital precinct (inclusive of Joan Kirner Women's and Children's). Further, Hazeldean and Sunbury Day Hospital remain a 000 response for medical emergencies

See also: OP-GC4 Medical Emergencies/Cardiac Arrest Management: Hazeldean Transition Care and Sunbury Day Hospital.

2. Applicability

This procedure relates to all staff throughout Footscray Hospital, Williamstown Hospital and the Sunshine Hospital Precinct (inclusive of Joan Kirner Women's and Children's).

3. Responsibility

Deteriorating Patient Committee
Resuscitation Coordinator
Clinical Managers and Departmental Heads

4. Authority

Deteriorating Patient Committee

5. Associated Documentation

In support of this procedure, the following Manuals, Policies, Instructions, Guidelines, and/or Forms apply:

Code	Name
P-CC5	Hospital Patient Transfers
P-GC4	Recognising and Responding to Acute Deterioration
OP-CC5	Urgent Inter-hospital Transfer and/or Intensive Care Access
OP-EP2	Mandatory Training
OP-EP4	Transfer from Floor (Patient Not Able to Assist)
OP-GC2	Safe Handling of Bariatric Patients
OP-GC4	Adult Cardiopulmonary Resuscitation (Adult CPR)
OP-GC4	Call for HELP - Patient, Family and Carer initiated Escalation
OP-GC4	Code Green (Emergency Caesarean Section)
OP-GC4	Code Pink (Obstetric Emergency)
OP-GC4	Neonatal (including Newly Born) Resuscitation
OP-GC4	Neonatal Rapid Response Systems: Neonatal MET and Code Blue Activation and Response
OP-GC4	Paediatric Rapid Response System: Paediatric MET and Code Blue Activation and Response
OP-GC4	Paediatric Cardiopulmonary Resuscitation
OP-GC4	Recognition and Management of the Deteriorating Adult Patient (inclusive of Pregnant and Post-partum Women)
OP-GC4	Resuscitation Planning
OP-GC4	Medications in Code Response (including Medical Emergency Response) Resuscitation Trolleys (Adults and Paediatrics)
OP-GC4	Medical Emergencies/Cardiac Arrest Management: Hazeldean Transition Care and Sunbury Day Hospital
OP-GC4	Escalation criteria for Adult MET team responders at Footscray Hospital and Sunshine Hospital Precinct (inclusive of Joan Kiriner Womens and Childrens)
OP-GC5	Personal Protective Equipment
OP-GC6	Medication Prescription, Supply, Storage and Administration.
Children's Services DP-CC4	Newborn Victorian Children's Tool for Observation and Response
Children's Services DP-CC4	Victorian Children's Tool for Observation and Response (ViCTOR) Chart
	Western Health COVID-19 PPE Guideline
	Western Health PPE Guidance poster for all Adult Code Blue activations during COVID-19 period
	Western Health COVID-19 PPE QRGs
	CLINICAL GUIDELINE Adult Cardiopulmonary Resuscitation During the COVID-19 Pandemic
	CLINICAL GUIDELINE Paediatric Cardiopulmonary Resuscitation During the COVID-19 Pandemic
	Western Health Deteriorating Patient Intranet Site
AD299	Code Blue Record

6. Credentialing Requirements

Refer to *OP-EP2 Mandatory Training* for specifics of training requirements.

7. Definitions and Abbreviations

7.1 Definitions

For purposes of this procedure, unless otherwise stated, the following definitions shall apply:

Adult	Person 18 years old and over.

7.2 Abbreviations

For purposes of this procedure, unless otherwise stated, the following abbreviations shall apply:

AC	Alternating Current
AED	Automated External Defibrillator
AHA	After Hours Administrator
ALS	Advanced Life Support
AV	Ambulance Victoria
BLS	Basic Life Support
BLSD	Basic Life Support and Defibrillation
CCU	Coronary Care Unit

CSSD	Central Sterile Supply Department
CHRE	Centre for Health Research and Education
CPR	Cardiopulmonary Resuscitation
ECG	Electrocardiogram
ED	Emergency Department
FR2 AED	FR2 Automated External Defibrillator
ICU	Intensive Care Unit
IV	Intravenous
JKWC	Joan Kirner Women's and Children's
MET	Medical Emergency Team
mmHg	Millimetres of Mercury
OR	Operating Room/Theatre
PSA	Patient Service Attendants
PIPER	Paediatric Infant Perinatal Emergency Retrieval team
RRS	Rapid Response System
SAED	Semi-Automatic External Defibrillator
UCR	Urgent Clinical Review
WH	Western Health

8. Procedure Detail

The WH Adult RRS supports a 24-hour service and responds to activations at Williamstown Hospital, Footscray Hospital, and the Sunshine Hospital precinct (inclusive of JKWC).

The RRS is comprised of three tiers:

- Urgent Clinical Review (UCR);
- Medical Emergency Team (MET); and
- Code Blue.

The escalation process is:

a) **Urgent Clinical Review** by any doctor from the home unit or covering the home unit, including Fellows or Consultants, Registrars, HMOs and Interns, within 30 minutes of call.

b) **MET call** review by the MET team within 10minutes.

c) **Adult / Maternal Code Blue** for immediate review by the resuscitation team

8.1 Indications for Adult Urgent Clinical Review

An observation falling into the Urgent Clinical Review criteria requires a doctor from the home unit or covering the home unit, including Registrars, HMOs, and Interns to review the patient within 30 minutes of the escalation.

UCR activation should occur if the adult meets any of the following criteria:

- An inpatient with:
  - Any observation falling into the UCR criteria yellow zone.
  - Staff concern.

See also *OP-GC4 Recognition and Management of the Deteriorating Adult Patient (inclusive of Pregnant and Post-partum Women).*

8.2 Indications for Adult MET or Code Blue Activation

Indications for adult MET or Code Blue activation are based upon clinical assessment of Airway, Breathing, Circulation and Disability (neurological) compromise and staff concern. The track and trigger method for recording observations guide staff in patient assessment and escalation of care

MET activation **should occur if the adult meets any of the following criteria:**

- An inpatient where there is:
  - Any observation falling into the MET criteria red zone.
  - Failure to respond to an Urgent Clinical Review within 30 minutes.
  - Staff concern.
  - Outpatients, staff and visitors requiring immediate medical attention.

ALERT: In circumstances where staff members are clinically concerned about the adult's condition, an activation of the Medical Emergency Team is warranted, regardless of the documented observations.

CODE BLUE activation should occur if the adult meets any of the following broad criteria:

- Airway Threat;
- Unresponsive ;
- Not breathing normally;
- Severe respiratory distress;
- Respiratory arrest;
- Cardiac arrest.

Any other circumstance when attending MET responders require extra medical/nursing assistance urgently, this includes simultaneous MET activations

8.2.1 Indications for Maternal Code Blue Activation- SH Precinct Only

MATERNAL CODE BLUE activation should occur if the pregnant woman meets any of the following broad criteria:

- Obviously pregnant woman or if known, gestation 20 weeks or greater with:
    - Airway threat;
    - Unresponsive;
    - Not breathing normally;
    - Severe respiratory distress;
    - Respiratory arrest;
    - Cardiac arrest.

Any other circumstance when attending MET responders require extra medical/nursing assistance urgently, this includes simultaneous MET activations.

Maternal Code Blue is **ONLY applicable at the Sunshine Hospital Precinct** (incl. of JKWC).

8.3 First Responder Management – MET or Code Blue Activation

First responder management while waiting for MET responders includes assessment and intervention using an ABCDE approach. Provision of basic first line interventions e.g. optimising patient position and oxygen therapy.

First responder management while waiting for Code Blue responders includes: Basic Life Support (BLS) to help maintain myocardial and cerebral oxygenation until the Code Blue team arrives to provide advanced life support management.

The Australian and New Zealand Council on Resuscitation (ANZCOR) algorithm of D R S A B C D provides the framework to guide staff in initial management upon finding a person in need of medical emergency assistance and/or cardiopulmonary resuscitation.

Please refer to the algorithms for CPR found in the following procedure: *OP-GC4 Adult Cardiopulmonary Resuscitation (Adult CPR).*

Also see: *OP-GC4 Recognition and Management of the Deteriorating Adult Patient (inclusive of Pregnant and Post-partum Women)*

8.4 Adult MET and Code Blue Activation (including Maternal Code Blue)

PRESS BUZZER

A medical emergency button system is installed in all clinical areas for staff to obtain immediate local response assistance. This emergency buzzer will not activate the MET or Code Response teams.

CALLING AN ADULT MET OR CODE BLUE:

All medical emergencies must be called by using the following process:

Call "**2222**" and **STATE:**

TYPE OF PATIENT: ***ADULT***

TYPE OF CODE: *ADULT MET, ADULT CODE BLUE or (MATERNAL CODE BLUE (SH precinct only))*

EXACT LOCATION OF EMERGENCY: CAMPUS, BUILDING, LEVEL, EXACT LOCATION: BED / ROOM NUMBER

TREATING TEAM: treating team (e.g. ENT, Orthopaedics, or no Treating Team if outpatient, visitor or staff)

The switchboard operator will then send this information to the Code Responders via communication devices followed by an announcement of the MET or Code Blue via overhead speakers stating: activation code, patient type & location details.

Please note: Switchboard operators need calling staff to speak clearly and to, stay on the phone to confirm details of code. Switchboard operators can only relay the information that calling staff provide.

If the red emergency buzzer is pressed accidentally it is classified as a false activation. The false activation will be notified to a senior staff member and local teams can then return to business as usual.

If a 2222 call is accidentally activated, immediately call back switchboard via 2222 and note the error and ask for the code to be stood down or correct the code type for reactivation by the switchboard operator. The switchboard services operator will send a subsequent message to the assigned group of MET/Code Blue communication devices "XX Code Sent in Error *(at location XX)".*

8.5 Adult MET or Code Blue Activations to Locations Outside of Adult Inpatient Locations

To activate a MET/ Code Blue response for adults who are outside of inpatient locations, the staff member (or nominated person) should:

CALLING AN ADULT MET OR CODE BLUE: Outside of Adult inpatient locations

All medical emergencies must be called by using the following process:

Call "**2222**" and **STATE:**

TYPE OF PATIENT: ***ADULT***
TYPE OF CODE: *ADULT MET, ADULT CODE BLUE or (MATERNAL CODE BLUE (SH precinct only))*
EXACT LOCATION OF EMERGENCY: CAMPUS, BUILDING, LEVEL, EXACT LOCATION: ROOM /**INSIDE BULIDING / OUTSIDE BUILDING**
TREATING TEAM: treating team (e.g. ENT, Orthopaedics, or no Treating Team if outpatient, visitor or staff)

The switchboard operator will then send this information to the Code Responders via communication devices followed by an announcement of the MET or Code Blue via overhead speakers stating: activation code, patient type & location details.

If a Security Point is nearby, the caller should provide details of the incident to Security staff who will activate an ADULT MET/ Code Blue via Switchboard.

First responder staff should continue with basic first line management until the arrival of the MET/ Code Blue responders.
If First Responders or attending MET responders wish to escalate to a full CODE BLUE activation, staff should reactivate for an Adult Code Blue response.

If responders are unclear as to whether to call a MET call or an Adult Code Blue, the default activation is:
"**ADULT CODE BLUE**"

8.5.1 Footscray Hospital and Sunshine Hospital Precinct Areas of Code Blue Response

2222 Response		
	Internal – TAKE CODE TROLLEY	**External- TAKE CODE BAG**
Sunshine Precinct	All areas within the hospital Buildings including Melbourne Health Psychiatric Wards (Code Blue Only)	Outside areas within the hospital boundary e.g. car parks and driveways
	Sunshine Radiotherapy Centre	Sunshine Chronic or "Satellite" Haemodialysis Unit. *Proceeded with 000 AV Response for transport to ED*
Footscray Campus	Orygen Youth Health (Code Blue Only) *Access via link corridor, Ground floor north Footscray Hospital.*	Outside areas within the hospital boundary e.g. car parks and driveways within the hospital grounds and portables.
	Banksia and Rushford Annex (Code Blue Only) *Access via link corridor, Ground floor north Footscray Hospital.*	
	Ursula Freyne Centre (Werribee Mercy Psychiatric Unit) (Code Blue Only) *Access via link corridor, Ground floor north Footscray Hospital.*	
000 AV Response		
	Internal	**External**
Sunshine Precinct	n/a	Westside Lodge *Across the road from the WCHRE bldg.*

Footscray Campus	n/a	Eleanor Street Drug Health Services

8.5.2 Williamstown Areas of Code Blue Response

2222 Response		
	Internal – TAKE CODE TROLLEY	**External- TAKE CODE BAG**
Williamstown Hospital	All areas within the hospital Buildings	Outside areas within the hospital boundary e.g. car parks and driveways

8.6 Composition of Adult MET and Code Blue Response Teams

The Adult MET/Code Blue responders will consist of a 24/7 core team of medical and nursing staff who will be notified simultaneously of the location of the medical emergency via dedicated communication devices.

MET/ Code Blue communication devices will be passed from members from one shift to the next to maintain 24 hours a day, 7 days a week cover. Composition of the response team varies according to the type of code (MET/Code Blue) and campus, refer to *Tables A to D*.

The Pool PSA will also be notified as a part of the group notification and is expected to attend with a transport Stryker trolley for activations where there is "*no treating team*".

8.7 Role Allocation and MET/Code Huddles

Early role allocation including medical and nursing team leaders can facilitate improved clinical coordination, efficiency and team interaction.

Local MET huddles at key handover times are for MET and Code Blue responders to engage in a rapid team brief to introduce team members, pre-assign roles, responsibilities and meeting place and deliver key messages and note any patients of concern. It is understood some Code Response members are part of multiple teams and attendance will depend on workload and availability.

Table A: Footscray Hospital & Sunshine Hospital Precinct (inclusive of JKWC) Adult MET & Code Blue Teams Role Definition

TEAM ROLE DEFINITIONS AT FOOTSCRAY HOSPITAL AND THE SUNSHINE PRECINCT	
Adult MET	**Adult Code Blue**
Home Unit Registrar ± Home Unit Consultant: • Works collaboratively with the ICU Liaison / ICU nurse. • Initiates clinical care with view to prevent further deterioration. • Documents assessment and management plan • Discusses plan with nursing team and family. • Escalates to senior medical clinician as required. • Discusses and provides handover of clinical interventions and plans with patient's treating team.	**Intensive Care Registrar ± ICU Consultant** - Team leader: • Identifies self and role to team as the Code Blue team leader. • Conducts the resuscitation using the ALS algorithms. • Escalates to senior / specialised medical clinician's as required. • Transfers patient to higher acuity area as required, or delegates this task appropriately. • Authorises Adult Code Blue stand down when safe to do so and Code responders can then return to their normal duties.
CCOR ICU Liaisons / Intensive Care Nurses: • Works collaboratively with the Home unit medical team. • Provides advanced physical assessment skills. • Supervises drawing up and administration of emergency intravenous (IV) medications, if required. • Assists with any advanced / critical care interventions. • Assists with establishing safe disposition for patient. • Completes the MET Rapid Response form and enters data in MET register.	**Anaesthetic Registrar**: • Provides Airway management. • Supports team leader in managing ALS algorithm. • Coordinates transfer to Operating theatres if required. • Escalates to Anaesthetist in Charge where required.
	Medical Registrar: • Assists team leader with all aspects of ALS.

	• E.g.: Patient IV access, review of patient notes, review resuscitation status.
	Critical Care Code Response Nurses: • Bring Code responder Trolley. • Supports ALS. • Manages the use of the defibrillator. • Supervises drawing up and administration of emergency intravenous (IV) medications. • Assists with airway management as required. • Completes the Adult Code Blue audit tool.
ADDITIONAL RESPONDERS	
Bedside Nurse Responders: • Ensures ongoing assessment, appropriate monitoring and implement clinical care plan. • Communicates with responding teams about patient's prior condition.	**Bedside Nurse/s:** • Initiates BLSD, activates Code, supports ALS Team, ensures adequate documentation, provides care of family.
Nurse in Charge: • Provides clinical support and review of deteriorating patients where required. • Coordinates bed and nursing resources. • Ensures entire ward is cared for and ensures appropriate allocations.	**Bed Manager/AHA**: • Facilitate patient transfer if required.
Junior Medical Officers: • Provides support to MET Team.	**Patient Support Assistant:** • Assist team as required for transfer or obtaining equipment.
Patient Support Assistant: • Assists team as required for transfer or obtaining equipment.	**Junior Medical Officers:** • Provides support to Code Blue Team.

Table B: Footscray Hospital & Sunshine Hospital Precinct (inclusive of JKWC) Adult MET No Treating Team Response and Role Definition

MET CALL *No Treating Team*
CCOR ICU Liaison / Intensive Care Nurse: • Provides advanced physical assessment skills. • Upscale response to a Code Blue if medical attendance is required. • Assists with any advanced / critical care interventions. • Transports adult to ED triage. • Provides handover to ED triage nurse. • Completes the MET Rapid Response form in the EMR and enters data in MET register.
Patient Support Assistant: • Assists team as required for transfer of patient to ED, brings Stryker trolley from the following locations to the MET location: ○ **Sunshine Hospital (excluding JKWC):** ▪ Equipment nook located left side of Ground Floor GEM/GC Entrance. ○ **Joan Kirner Womens and Children's:** ▪ Ground Floor, front of Staff/Emergency Lifts. ○ **Footscray Hospital:** ▪ Ground Floor, behind security office. • Makes 2222 call if directed by ICU Liaison to scale up to a Code Blue.
Immediate Escalation to CODE BLUE if ICU Registrar attendance required

Table C: Sunshine Hospital Precinct (inclusive of JKWC) MATERNAL Code Blue Teams and Role Definition

MATERNAL CODE BLUE TEAM		
NEONATAL CODE BLUE TEAM	**ADULT CODE BLUE TEAM**	**CODE PINK TEAM**
NBS Deliveries Registrar: • Identifies self and role to team as the Code Blue team leader. • Conducts resuscitation using the neonatal ALS algorithms. • Escalates to senior / specialised medical clinicians as required. • Transfers patient to higher acuity area as required, or delegates task appropriately. • Authorises Neonatal Code Blue stand down when safe to do so. Code responders can then return to their normal duties.	**Intensive Care Registrar ± ICU Consultant - *Team leader:*** • Identifies self and leadership role within the team. • Conducts the resuscitation using the ALS algorithms. • Escalates to senior / specialised medical clinician's as required. • Transfers patient to higher acuity area as required, or delegates this task appropriately. • Authorises Adult Code Blue stand down when safe to do so and Code responders can then return to their normal duties.	**Obstetric Registrar ± Consultant**: • Proceed immediately to the location. • Coordinate response. • Liaise with AHA/AC. • Coordinate simultaneous activations of Code Pink.
Newborn Services Admissions Nurse: • Support newborn life support. • Supervise drawing up and administration of emergency intravenous (IV) medications. • Assist with airway management as required. • Complete the Neonatal MET/Code Blue audit tool.	**Anaesthetic Registrar:** • Provides Airway management. • Supports team leader in managing ALS algorithm. • Coordinates transfer to Operating theatres if required. • Escalates to Anaesthetist in Charge where required.	**JKWC Anaesthetic Registrar:** • Provides Airway management. • Supports team leader in managing ALS algorithm. • Coordinates transfer to Operating theatres if required. • Escalates to Anaesthetist in Charge where required.
	Critical Care Code Response Nurse: • Support ALS. • Bring Code Responder Trolley. • Manage the use of the defibrillator. • Supervise drawing up and administration of emergency intravenous (IV) medications. • Assist with airway management as required. • Complete the Adult Code Blue audit tool.	**Clinical Response and Support Midwife (CRSM):** • Bring Code Pink trolley. • Proceed immediately to location. • Assist with immediate care of the woman. • Assume role of scribe.
		Additional Staff Notified
		Midwife in Charge: • Proceed immediately to the location. • Coordinate response with CRSM. • Liaise with AHA/AC..

8.7.1 Composition of Williamstown Hospital Adult MET and Code Blue Response Teams

There is no ICU at Williamstown hospital. The ED provides the senior medical and nursing responders during operating hours of 0800 – 2300 hrs. In hours a stretcher trolley is brought by a PSA from the ED and the person transferred to ED for further assessment.

After-hours from 2300- 0800hrs, Code Blue and MET response is attended by the Hospital Medical Officer (HMO) and Nursing After Hours Administrator (AHA) if deemed necessary by the HMO Ambulance Victoria will be called to take the person elsewhere.

Williamstown Hospital Areas of Code Blue Response:

- All areas within the hospital building.

Outside areas within the hospital boundary; i.e. car parks and driveways.

WTN Code Blue activation triggers a response from the Emergency Department, Home Medical Units, and After Hours Nursing Administration & Patient Support Assistants.

Please refer to Table D Williamstown Hospital response team.

Table D: Williamston Hospital Adult MET/Code Blue Team Role Definition

ADULT MET CALL TEAM	
In Hours 0800 - 2300	**After Hours 2300 - 0800**
Home Unit Registrar ± Home unit Consultant: • Works collaboratively with the ED nurse. • Initiates clinical care with view to prevent further deterioration. • Documents assessment and management plan. • Discusses plan with nursing team and family. • Escalates to senior medical clinician as required. • Discusses and provides handover of clinical interventions and plans with patient's treating team.	**Junior Medical Officer/HMO:** • Works collaboratively with the After Hours Coordinator. • Initiates clinical care with view to prevent further deterioration. • Documents assessment and management plan. • Discusses plan with nursing team and family. • Escalates to senior medical clinician as required. • Discusses and provides handover of clinical interventions and plans with nursing team.
Senior Emergency Department Nurse: • Works collaboratively with the Home unit medical team. • Provided advanced physical assessment skills. • Supervised drawing up and administration of emergency intravenous (IV) medications, if required. • Assists with any advanced / critical care interventions. • Assists with establishing safe disposition for patient • Completes the MET Rapid Response form and enters data in MET register.	**After Hours Coordinator:** • Works collaboratively with the HMO. • Provides advanced physical assessment skills. • Supervises drawing up and administration of emergency intravenous (IV) medications, if required. • Assists with any advanced / critical care interventions. • Assists with establishing safe disposition for patient. • Completes the MET Rapid Response form and enters data in MET register.
Patient Support Assistant: • Sources ED Stretcher Trolley to facilitate transfer of non-admitted person for no treating team activations: ○ **Williamstown Hospital:** ▪ ED trolley at the Ground Floor Emergency Department.	**Security:** • Sources ED Stretcher Trolley to facilitate transfer of non-admitted person for no treating team activations: ○ **Williamstown Hospital:** ▪ ED trolley at the Ground Floor Emergency Department.
Additional Responders	
Bedside Nurse: • Ensures ongoing assessment, appropriate monitoring and implement clinical care plan. • Communicates with responding teams about patient's prior condition.	**Bedside Nurse:** • Ensures ongoing assessment, appropriate monitoring and implement clinical care plan. • Communicates with responding teams about patient's prior condition.
Nurse in Charge: • Provides clinical support and review of deteriorating patients where required. • Coordinates bed and nursing resources. • Ensures entire ward is cared for and ensures appropriate allocations.	**Nurse in Charge:** • Provides clinical support and review of deteriorating patients where required. • Coordinates bed and nursing resources. • Ensures entire ward is cared for and ensures appropriate allocations.

ADULT CODE BLUE TEAM	
In Hours 0800 - 2300	**After Hours 2300 - 0800**
Emergency Department Registrar ± ED Consultant - Team Leader: • Identifies self and leadership role within the team. • Conducts the resuscitation using the ALS algorithms. • Escalates to senior / specialised medical clinician's as required.	**Junior Medical Officer/HMO:** • Works collaboratively with the After Hours Coordinator. • Provide advanced life support management skills in line with ANCOR. • Conducts the resuscitation using the ALS algorithm.

• Transfers patient to higher acuity area as required, or delegates this task appropriately. • Authorises Adult Code Blue stand down when safe to do so and code responders can then return to their normal duties.	• Establish safe disposition for patient. • Ensures documentation of drugs, interventions, etc. • Communicates with family. • Identifies leadership role within the team. • Facilitate Ambulance Victoria 000 call out and hands over to AV team.
Senior Emergency Department Nurse: • Bring Code Responder Trolley. • Support ALS. • Manage the use of the defibrillator. • Supervise drawing up and administration of emergency intravenous (IV) medications. • Assist with airway management as required. • Complete the Adult Code Blue audit tool.	**After Hours Coordinator:** • Bring Code Responder Trolley. • Support ALS. • Manage the use of the defibrillator. • Supervise drawing up and administration of emergency intravenous (IV) medications. • Assist with airway management as required. • Complete the Adult Code Blue audit tool.
Patient Support Assistant: • Assist team as required for transfer or obtaining equipment.	**Security:** • Assist team as required for transfer or obtaining equipment.
Additional Responders	
Bed Manager/AHA: • Facilitate patient transfer if required. (From 1400hrs).	
Medical or Home unit Registrar/ HMO: • Assist team leader with all aspects of ALS.	
Bedside Nurse/s: • Initiates BLSD, activates Code. • supports ALS team. • ensures adequate documentation. • Provides care of family.	

8.7.2 Management of Simultaneous Multiple Adult MET and Code Blue Activations Williamstown Footscray and Sunshine Hospital Precinct (inclusive of JKWC)

The initial triaging and management of multiple and simultaneous rapid response activations (MET and Code Blue) is to be undertaken by the members of each discipline of the rapid response teams (i.e. Medical and Nursing).
Consideration to utilise additional resources to support multiple activations can be sourced from the rapid response teams supporting critical care areas.

On the rare occasion the rapid response team is unable to source additional resources from their critical care area to support multiple activations the AHA / bed manger should be contacted to obtain further support from other areas.

In the situation of simultaneous MET calls it may be necessary to upscale to a code blue if extra medical and nursing responders are urgently required.

8.8 Expectations of team members – Adult MET / Code Blue Conduct

It is expected that professional and respectful behaviour and communication is demonstrated by all team members (first responder and code response teams) during all MET / Code Blue calls.

All staff must operate under the assumption that the MET/Code Blue has been activated based on genuine clinical concerns and there should be respectful collaboration between the local treating staff and code responders for ongoing care of the patient. Any concerns regarding the behaviour of team members should be escalated directly through line managers, log a concern via Employee Positive Workplace Issue Resolution Strategy (EMPOWIR) (register via email: pwic@wh.org.au) or if there is a clinical incident associated with the behaviour make a submission via Riskman.

8.9 Patient Disposition Following a MET or Code Blue Activation

Decisions for ongoing management of the deteriorating adult patient will be a collaborative discussion between home medical units, the ICU team and anaesthetic medical staff. The decision will be made with regard to the safest location for ongoing or further care (these locations may include: Emergency Departments, Operating Theatres, Other specialty areas, and Intensive Care Units). Transfer to any of these locations will be with both medical and nursing escort. Resuscitation equipment must be readily accessible to maintain airway, ventilation and circulation should the patient deteriorate during transit.

Where adult patients need to be escorted to the Footscray Hospital, Sunshine Hospital and Williamstown Hospital Emergency Department, the ED nurse in charge and the adult ED emergency consultant need to be made aware of imminent transfer to the department:

Sunshine Precinct ED Nurse in Charge:	03 834**51595**
Sunshine Precinct ED Consultant in Charge:	03 834**51599**
Sunshine Precinct ED Reception:	03 834**51596**
Footscray Hospital ED Nurse in Charge:	03 834**56335**
Footscray Hospital ED Consultant in Charge:	03 834**56077**
Footscray Hospital ED Reception:	03 834**56598**
Williamstown Hospital ED Nurse in Charge:	03 93930101
Williamstown Hospital ED Consultant in Charge:	03 93930170
Williamstown Hospital ED Reception:	03 93930109

8.10 Standing Down the Emergency Team (MET or Code Blue)

Prior to the Code Blue and MET responders returning to their clinical units, it is essential that a number of tasks are completed at the end of a MET or Code Blue response. The MET & Code Blue stand down includes completion of the following tasks:

- The MET / Code Blue Team Leader should provide a verbal summary of the event and the action plan to bedside and response clinician's (in an ISBAR format):

Handover	Description
I = Identify:	• Who you are, your role, where you are and why you are communicating
S = Situation:	• What is happening at the moment
B = Background:	• What are the issues that led up to this situation
A = Assessment:	• What do you believe the problem is?
R = Request:	• What should be done to correct this situation

- The Team Leader should check with all members (MET/Code Blue and First Responders) for questions or concerns about the plan;
- Check that the lead Medical Specialist (or Delegate) of the patient's Treating Team has been notified (if not already involved in care and decision making during activation);
- The Team Leader should ensure that event documentation (see section below) is completed by assigned personnel:
- Medical Emergency Record complete with all medications/fluid orders co-signed:
    - Post Code Blue event reconcile medications (prescriber and administer) into the EMR;
    - Entry in patient's Medical Record;
    - Completion of Adult MET/Code Blue Audit tool by Responders: Code Blue Record (AD 299) for adult patients.
- The Team Leader should ask for feedback from staff regarding system issues, team issues or any latent safety threats uncovered during the activation to be communicated either via the Adult MET/ Code Blue Audit tool , MET register or Risk Man, dependent on the severity of the risk/ concern.
- The Team Leader should then clearly authorise to STAND DOWN the team.

STAND DOWN implies that:

- The situation is now under control.
- If another Code Blue occurred, the team would be free and able to respond.

The Code Blue responders will notify switchboard services of the stand down by calling "2222". The Switchboard operator will then send out a message to the assigned group of Code Blue responders' communication devices stating *"ADULT CODE BLUE STAND DOWN (at location XX)"*.

8.11 Emergency Response Equipment and Processes

First Responder Response trolleys are stocked with equipment and emergency medications likely to be required for initial response to adult medical emergencies. Local unit staff members are responsible for ensuring they are familiar with the layout and that equipment, consumables and medications on the trolley are regularly checked.

After regular checking or after the use of trolley contents during an emergency response, staff members from the local unit are responsible for replacing used items. Items that cannot be sourced locally can be acquired from Central Equipment Library Service (CELS) or CCU, ICU, ED or Operating Theatres.

The resuscitation trolley checklist checking requirements and restocking process can be accessed via the Western Health Deteriorating Patient Intranet Site. Specific information such as defibrillator locations can be sourced from the WH Resuscitation Coordinators.

8.11.1 MET/Code Response Equipment

Equipment:

- Adult Code Responder trolleys are stocked with advanced/specialised resuscitation equipment and emergency medications likely to be required for advanced life support response to adult medical emergencies. Code Response staff members are

responsible for ensuring they are familiar with the layout and that equipment, consumables and medications on the trolley are regularly checked.
- A Philips DFM100 manual defibrillator is available on all code responder trolleys for manual defibrillation, synchronised cardioversion and pacing capability. This must not be removed from the trolley.
- Adult Code response bags are also available for emergencies outside of the hospital building.

8.11.2 MET/Code Blue Access & Use of Emergency Lifts

8.11.2.1 JKWC Building

- All WH nursing and medical staff are provided with medical emergency lift override access for lifts within the JKWC building. Code Blue Priority Service (for MET/Code Blue) has been installed in the back of house **JKWC lifts: 28, 29 and 30.**
- **Instructions for Use:**
    - Medical Emergency lift system is initiated via a scan access reader.
    - The next available lift will travel to the call floor and an announcement in the lift will alert any travelling passengers to disembark.
    - Once all Code Responders are inside lift select destination level on the panel.
    - The lift will travel non-stop to the selected level.
    - On arrival at the selected destination the lift will wait for 30 seconds before resuming normal operation.
    - If required, turn the fixed medical emergency key inside the lift to retain the lift location and to keep the doors open for transfer of the patient. Turn the key to off position when patient/team inside the lift and select the destination level.

8.11.2.2 Sunshine Hospital Precinct Not Including JKWC

- The code blue responder trolley is equipped with lift override keys, in particular for the **Sunshine Hospital lifts 1/2, and 14/15.**
- **Instructions for Use:**
    - Insert code blue override key to recall lift to responder location.
    - Turn the fixed medical emergency key inside the lift to retain the lift location and to keep the doors open for transfer of the patient. Turn the key to off position when patient/team inside the lift and select the destination level.
    - The lift will travel non-stop to the selected level.

8.11.2.3 Footscray Hospital

- The code blue responder trolley is equipped with lift override keys, in particular for the **Footscray Hospital lifts J/K.**
- **Instructions for Use:**
    - Insert T10 Key to recall lift to responder location.
    - On entry, initiate independent service override function.
    - The lift will travel non-stop to the selected level.

8.11.2.3 Williamstown Hospital

- Williamstown Hospital only has a two levelled building at most in its campus, as such, lift override keys are not in the code responder trolley.

8.12 UCR, MET or Code Blue Documentation

Accurate and complete documentation during and after MET or Code Blue activation enables an accurate record of events and also facilitates identification of process issues for ongoing quality improvement.

Documentation to be completed following any MET or Code Blue activation includes:
- A code blue response form (WH AD 299) by allocated scribe during event.
- Entry into the patient's EMR documenting the events - completed by the Medical Team Leader or delegate.
- For a MET, the EMR rapid response record is completed by ICU liaison/ICU nurse proceeded by entry into the Riskman MET register after the event.
- MET No Treating Team activations only require a Riskman record.

8.12.1 Medical Emergency Record

Accurate data from all medical emergencies must be kept for medico-legal purposes, auditing and recognition of gaps for continuous improvement. The Medical Emergency Record (WH AD 299) is found on all clinical area Resuscitation Trolleys and the Code Blue Responder Trolleys. This form is designed to allow for documentation of events in chronological order and serves as a mechanism for review.

The form records:
- Patient demographics such as age, weight, clinical condition and reason for admission.
- Vital signs on initial patient assessment and throughout the medical emergency event.
- Interventions made during the resuscitation.
- Medications and fluids administered.
- MET or Code Blue activation and team arrival time.
- Names of staff present (MET members and local unit staff).

8.12.2 Medications/Fluid Administration

Administration:

- During a medical emergency, drugs and fluids should be verbally ordered using closed-loop communication.
- The type of drug/fluid, dose, route and time must be documented on the medical record by the allocated scribe.
- All medication orders and administration processes must be double-checked by two legally qualified persons and signed for by the prescribing Medical Officer and administering staff on the Medical Emergency Record and EMR as soon as practicable following administration as outlined in procedure.
- A guide for delivery of resuscitation medications is available on all resuscitation trolleys.

The Nurse in Charge and allocated scribe during the Code Blue are responsible for ensuring the Medical Emergency Record is accurately completed.

In the event the patient is transferred to another area, all documentation must be collated and completed to facilitate an efficient ISBAR handover and continuity of care.

8.12.3 Adult MET/Code Blue Data

It is a requirement for National Safety Quality Health Services Standards accreditation that MET and Code Blue activation and response data be collected at all events.

8.14 Quality Assurance and the Adult Rapid Response System

MET and Code Blue data is reported monthly to the Deteriorating Patient Committee (DPC).

MET and Code Blue activation numbers should be reviewed as part of departmental multidisciplinary Morbidity and Mortality Reviews looking for trends and opportunities for proactive interventions. Recommendations from these reviews may be communicated either by direct liaison with local area staff and treating teams and should be reported back to the Deteriorating Patient Committee to support ongoing quality improvement initiatives facility wide.

8.15 Adult MET and Code Blue Response System Maintenance and Testing

The MET/ Code communication devices require regular testing to ensure reliability

- MET / Code communication device testing will occur weekly on Friday mornings by switchboard operation services.
- All MET/ Code communication devices will be activated during testing.
- The test message will display “Test only. Please call back to confirm receipt, change battery, handover phone.”

Note: Some responders are part of multiple Code Response teams. It is the expectation that Code Responders **respond to each test** for each Code activation for testing and system safety purposes.

MET / Code Blue communication devices should have their batteries swapped regularly or be routinely charged. If Code Responders have a designated smart phone, this phone **must be continually charged**. Utilise Battery Charging Cases by swapping cases routinely. Always place the unused battery case on charge when not in use. All phones have key contacts which can be utilised during Code events.

If there is any problem with the MET communication device, the WH Switchboard Operation Services should be contacted immediately to arrange a replacement communication device while awaiting repair.

8.16 First Responder, MET and CODE BLUE Team Training

All staff members who respond as part of the Rapid Response System (first responders, MET and Code Blue response teams) should maintain an awareness of the broad range of adult resuscitation knowledge and skills required to manage a resuscitation event.

It is the responsibility of clinical staff who have contact with adult inpatients and outpatients to maintain competence in adult medical emergency management, including basic and advanced life support, as relevant to their role.
The training & education component of the WH Adult RRS will support a standardised approach to the orientation and skills maintenance of staff taking a role in the RRS. Training and education will be informed by RRS Activation & Response data and will include:

- Education of all WH staff regarding methods and indications for Adult MET or Code Blue activation;
- Adult BLSD training of all clinical staff who are in direct care of Adult patients;
- Regular MET and Code Blue simulation exercises to evaluate RRS processes and facilitate individual, team and institutional learning.

8.17 Emergency Retrieval or Transfer Adult Patients

Ambulance Victoria (AV) may be required to both assist with the management of an arrested patient and to transport the patient to another acute hospital (usually Sunshine or Footscray Hospital).

After hours response for critically unwell patients requiring on-going resuscitation (e.g. Intubation and mechanical ventilation). The Bed Manager/AHA will call AV to assist with the management of the patient, and facilitate transport to another acute hospital ICU (usually Sunshine or Footscray).

8.18 Emergency Retrieval or Transfer Paediatric Patients

For any critically unwell paediatric patient, the Paediatric Infant Perinatal Emergency Retrieval (PIPER) service should be called. **Phone PIPER: 1300 173 650**. PIPER will consult with the WH Emergency Department team to determine the best management of the paediatric patient. This may include the PIPER team coming to retrieve the patient.

Note: PIPER can be contacted to provide immediate perinatal and neonatal advice for a compromised neonate requiring resuscitation +/- retrieval.

PIPER will depart within 15 mins to come and retrieve in these circumstances.

This is also outlined in *OP-GC4 Paediatric Rapid Response System: Paediatric MET and Code Blue Activation and Response*.

8.19 Occupational Health and Safety Issues During a Code Blue/MET

In a Code Blue / MET situation where the person may be on the floor or in a chair, and urgently requires moving to a bed or trolley, a team of six handlers is required to lift the patient. An inflatable hover mat and hover lifter are available rapidly on request. A spinal board should be used if available. If the team leader is present, staff should seek direction from the team leader first, to ensure the person may be moved. The bed or trolley should be in the lowest position possible prior to commencing the transfer, and one person should be responsible for controlling the lift, ensuring a coordinated approach is used.

In a situation where CPR is in progress, the team leader should decide whether it is appropriate to move the person, and ensure the transfer is managed to limit time off the chest.

Where staff have to respond to a Code Blue outside of any building, staff should be aware of potential hazards to ensure their own safety. For example, during hazardous weather conditions, extra care may need to be taken to avoid potential injuries. If weather conditions are dire, then it may be more appropriate to call an ambulance rather than expose staff to hazards. This decision should be made after an initial assessment of the situation by the Bed Manager/ AHA, in conjunction with the team leader. Defibrillation must not be attempted in a wet environment. If a person is in a wet environment, they must be moved to a dry area and dried prior to attempting defibrillation.

If staff are having extreme difficulties in moving a person, for example, a bariatric patient in a non-clinical area such as the gym, then a decision will need to be made whether it is appropriate to call for external assistance from Ambulance Victoria or Melbourne Fire Brigade. This decision should be made only after consultation with the team leader in conjunction with the Bed Manager/AHA.

8.20 Personal Protective Equipment During a Rapid Response Event

Personal Protective Equipment use during emergencies are tailored to the latest directives and can be accessed on the following links:

- *Western Health COVID-19 PPE Guideline.*
- *Western Health PPE Guidance poster for all Adult Code Blue activations during COVID-19 period.*

Further, a set of quick reference guides can also be accessed below:

- *Western Health COVID-19 PPE QRGs.*

9. Document History

Number of previous revisions: new document

Previous issue dates: not applicable this version

Minor amendment: July 2021

Documents superseded or combined:

Code	Name
OP-GC4	Adult Code Blue

10. References

Emergency Situations-Patients Not Able to Assist, Western Health Occupational and Safety Unit, November 2006
Australian Resuscitation Council Guidelines

Agilent M4735A Heartstream XL Defibrillator/Monitor User's Guide, 2001 Edition, Hewlett Packard

Heartstart FR2+ Defibrillator, Instructions for use, Edition 10, 2003, Philips

11. Sponsor

Deteriorating Patient Committee

12. Authorisation Authority

Chief Medical Officer

Recognition and Management of the Deteriorating Adult Patient (inclusive of Pregnant or Early Post-Partum Women)

Procedure code: OP-GC4	Current version: December 2020
Previous version: June 2018	Next review date: December 2023
Section: Growing & Improving Care	Sub-section: Deteriorating Patient

1. Overview

This procedure provides information for health care professionals to recognise the deteriorating patient/ pregnant or early post-partum women and initiate appropriate and timely intervention.

2. Applicability

This procedure relates to all clinical staff involved with the care and management of adult inpatients including pregnant or early post-partum women at Western Health (WH) with the exception of patients in the ICU, neonates and paediatrics.

3. Responsibility

Nursing, midwifery and medical staff are responsible for ensuring physiological observations are assessed and documented at intervals determined by patient/woman's condition.

An escalation is required for any observation that falls into a shaded area within any of the vital sign entry components of the Electronic Medical Record (EMR), or within any shaded area of the observation chart on the *Adult Observation and Response Chart (ORC) WH AD 315)*, the *Maternity Observation and Response Chart (MORC) WHAD 333.1*:

- An observation falling into the Urgent Clinical Review shaded area requires a doctor from the home unit or covering the home unit, including Registrars, HMOs, and Interns to review the patient within 30 minutes of the escalation.
- An observation falling into the MET response (Medical Emergency Team) shaded area requires the MET team to review the patient/woman within 10 minutes of the escalation.

If urgent attention is required within 5 minutes call Adult Code Blue 2222.

4. Authority

If abnormal observations are to be tolerated for the patient's clinical condition, the acceptable ranges are to be documented as modifications within the vital sign entry components of the Electronic Medical Record (EMR), or on *ORC or MORC Charts* by a Registrar or Consultant.

5. Associated Documentation

In support of this procedure, the following Manuals, Policies, Instructions, Guidelines, and/or Forms apply:

Code	Name
P-CC5	Hospital Patient Transfers
P-GC4	Recognising and Responding to Clinical Deterioration
OG-GC2	Delirium Guidelines
OP-CC5	Advance Care Planning and End of Life Care
OP-CC5	Urgent Inter-hospital Transfer and/or Intensive Care Access
OP-EP2	Mandatory Training
OP-EP4	Transfer from Floor (Patient Not Able to Assist)
OP-GC1	Clinical Handover
OP-GC4	Adult Cardiopulmonary Resuscitation (Adult CPR)
OP-GC4	Adult Rapid Response System: Adult MET and Code Blue Activation and Response
OP-GC4	Call for HELP - Patient, Family and Carer initiated Escalation

OP-GC4	Code Green (Emergency Caesarean Section)
OP-GC4	Code Pink (Obstetric Emergency)
OP-GC4	Escalation criteria for Adult MET team responders at Footscray Hospital and Sunshine Hospital Precinct (inclusive of Joan Kirner Women's and Children's)
OP-GC4	Medical Emergencies/Cardiac Arrest Management: Hazeldean Transition Care and Sunbury Day Hospital
OP-GC4	Medications in Code Response (including Medical Emergency Response)
OP-GC4	Neonatal (including Newly Born) Resuscitation
OP-GC4	Neonatal Rapid Response System - Neonatal MET and Code Blue Activation and Response
OP-GC4	Paediatric Cardiopulmonary Resuscitation)
OP-GC4	Paediatric Rapid Response System: Paediatric MET and Code Blue Activation and Response
OP-GC4	Resuscitation Planning
OP-GC4	Resuscitation Trolleys (Adults and Paediatrics)
OP-GC5	Personal Protective Equipment
OP-GC6	Hyperacute Stroke Management
OP-GC6	Medication Prescription, Supply, Storage and Administration.
Children's Services DP-CC4	Newborn Victorian Children's Tool for Observation and Response
Children's Services DP-CC4	Victorian Children's Tool for Observation and Response (ViCTOR) Chart
PACU DG-GC4	Post Anaesthetic Care Unit (PACU) Patient Observation Charts
	Western Health COVID-19 PPE Guideline
	Western Health PPE Guidance poster for all Adult Code Blue activations during COVID-19 period
	CLINICAL GUIDELINE Adult Cardiopulmonary Resuscitation During the COVID-19 Pandemic
	CLINICAL GUIDELINE Paediatric Cardiopulmonary Resuscitation During the COVID-19 Pandemic
	Western Health COVID-19 PPE QRGs
	Western Health Deteriorating Patient Intranet Site
AD299	Code Blue Record
AD 315	Adult Observation and Response Charts
WH AD 333.1	Maternity Observation and Response Chart (MORC)
AD259.3	Post Anaesthetic Care Record (Adult)
	Code Blue Form
	Rapid Response Record Form
	Resuscitation Plan Form
	Observation Graph of the Managing Deterioration tab of the Electronic Medical Record (EMR)
	Vital signs tab of the Electronic Medical Record (EMR)

6. Definitions and Abbreviations

For purposes of this procedure, unless otherwise stated, the following definitions/abbreviations shall apply:

ACD	Advanced Care Directive
AR	Resuscitation Plan
AV	Ambulance Victoria
BOC	Behaviours of Concern
Childbearing	Any peri partum woman in from pregnancy up until 6 weeks post-partum.
ED	Emergency Department
EMR	Electronic Medical Record
EOU	Emergency Observation Unit
GEM	Geriatric Evaluation Medicine

HMO	Hospital Medical Officer
ICU	Intensive Care Unit
MAC	Maternity Assessment Centre
MET	Medical Emergency Team
mmHg	Millimetres of Mercury
MO	Medical Officer
MORC	Maternity Observation and Response Chart (AD 333.1)
ORC	Adult Observation and Response Chart (AD315)
PPH	Post-Partum Haemorrhage
SpO2	Peripheral Capillary Oxygen Saturation
TDS	Three Times a Day
UCR	Urgent Clinical Review
WH	Western Health

7. Procedure Detail

7.1 Introduction

The purpose of this procedure is to improve patient outcomes by recognising and responding to early signs of clinical deterioration in patients/ childbearing women. A key component will be the use of the *Adult Observation and Response Charts (AD 315),* and *the Maternity Observation and Response Chart (AD 333.1)* chart and the WH Electronic Medical Record that:

a) Identifies trends in patient's observations and allows for early recognition of abnormal physiological observations.
b) Provides clear triggers for when care should be escalated.
c) Provides clear actions for escalation of care to ensure timely patient review and appropriate treatment occurs.

This procedure outlines the escalation of care response required at 3 levels of abnormal physiological observations and clinical situations for patients.

7.1.1 Footscray Hospital, Sunshine Hospital Precinct (inclusive of Joan Kirner Women's and Children's) and the Williamstown Hospital

The escalation process is:

a) **Urgent Clinical Review** by any doctor from the home unit or covering the home unit, including Fellows or Consultants, Registrars, HMOs and Interns, within 30 minutes of call.
b) **MET call** review by the MET team within 10minutes.
c) **Adult Code Blue** for immediate review by the resuscitation team (refer to Western Health procedures: *OP-GC4 Adult Rapid Response System: Adult MET and Code Blue Activation and Response and.OP-GC4 Medical Emergencies/Cardiac Arrest Management: Hazeldean Transition Care and Sunbury Day Hospital).*

7.1.2 Hazeldean

At Hazeldean there is no MET or Code Blue team response.

The escalation process is:

a) **Patient observation in Urgent Clinical Review criteria:** review by any doctor from the home unit or covering the home unit, including Fellows or Consultants, Registrars, HMOs and Interns when on site.
b) **Patient observation in MET call criteria:** review by Registrar, Fellow or Consultant when on site.
c) Call Ambulance Victoria (AV) (000) for significant deterioration or if no medical officer on site and patient's condition is deteriorating (AV will provide clinical support and transfer to acute facility).

7.1.3 Sunbury Day Hospital

At Sunbury Day Hospital there is no MET or Code Blue team response.

The escalation process is:

a) **Patient observation in Urgent Clinical Review criteria:** review by any doctor from the home unit or covering the home unit, including Fellows or Consultants, Registrars, HMOs and Interns when on site.
b) **Patient observation in MET call criteria:** review by Registrar, Fellow or Consultant when on site.
c) Call Ambulance Victoria (AV) (000) for significant deterioration or if no medical officer on site and patient's condition is deteriorating (AV will provide clinical support and transfer to acute facility).

7.1.4 Westside lodge & Western Health Drug and Health Services Buildings

At these locations there is no MET or Code Blue team response.
The escalation process is:

a) **Patient observation in Urgent Clinical Review criteria:** review by any doctor from the home unit or covering the home unit, including Fellows or Consultants, Registrars, HMOs and Interns when on site.
b) **Patient observation in MET call criteria:** review by Registrar, Fellow or Consultant when on site.
c) Call Ambulance Victoria (AV) (000) for significant deterioration or if no medical officer on site and patient's condition is deteriorating (AV will provide clinical support and transfer to acute facility).

7.2 The 'At Risk' Patient

Staff should be aware of the potential 'at risk' patients:

- Patients admitted as emergencies;
- Elderly patients;
- Patients whose acute illness is particularly severe;
- Patients with multiple co morbidities;
- Patients who fail to progress after treatment;
- The shocked patient (septic, hypovolemic or cardiogenic);
- Patients recovering from anaesthesia;
- Patients re-bleeding after surgery;
- Patients requiring a massive blood transfusion;
- Patients being discharged /transferred from critical care units to the general wards; and
- A pregnant or early post-partum woman.

7.3 Consideration of an Advanced Care Directive (ACD) and/ or Resuscitation Plan Form

Adult patients admitted to Western Health may have an Advance Care Plan or an Acute Resuscitation Plan completed that outlines preferences for care and plans of any treatment limitations. All staff involved in patient care should be familiar with any existing Advance Care Plan (as per procedure: *OP-CC5 Advance Care Planning and End of Life Care*) or *Resuscitation Plan Form* (as per procedure: *OP-GC4 Resuscitation Planning*) for the patient. Consideration of documented treatment limitations should be considered by clinical staff prior to the escalation of care through the WH Rapid Response System.

The existence of a resuscitation plan form or ACD should be identified and included in all clinical handover and documentation should be available during an UCR or MET call.

7.4 Urgent Clinical Review (UCR)

Adult:

- All members of clinical staff should call an Urgent Clinical **R**eview for a patient if the patient has one of the clinical markers in the yellow shaded area within any of the Urgent Clinical Review criteria shaded zones of the WH Electronic Medical Record (EMR), or on the General Adult Observation and Response Chart, or the patient has a urine output of less than 50ml for 4 hours, or **if they are worried about the patient**.
- Refer to *Table 1* for the list of response criteria for triggering an Urgent Clinical Review in adult patients, and *Table 2* for the list of response criteria for triggering an Urgent Clinical Review in childbearing women. **If a pregnant woman is being cared for on a non-maternity ward, A MORC chart should be used in non-obstetric care for women who are >20 weeks gestation.**

Pregnant and Early Post-partum Women:

- All members of clinical staff should call an Urgent Clinical Review for a woman if she has one of the clinical markers in the yellow shaded area on the Maternity Observation and Response Chart (WH AD 333.1), or if urine output is less than 30ml/hr over 2 hours, **or they are worried about the woman.**

Note: Clinicians caring for pregnant women should be aware of the physiological adaptions of pregnancy, particularly in the setting of unwell women with an undifferentiated diagnosis.

Table 1: Urgent Clinical Review Criteria General Adult Observation and Response Chart, and the WH Electronic Medical Record Adult Observation and Response Chart

System	Urgent Clinical Review criteria
Nervous	Consciousness score To Voice
Cardiovascular	Systolic blood pressure > 180mmHg

	Systolic blood pressure 90 - 100mmHg Heart rate in 40 to 60 bpm range Heart rate ≥ 110 bpm
Respiratory	Oxygen flow rate ≥ 13L/min Oxygen Saturation 90 to 92% Respiratory rate 25 to 29 breaths per minute Respiratory rate 8 -10 breaths per minute
Metabolic	Temperature >38 or ≤ 35.4
Renal	Urine output < 50ml in 4 hours
Other	Patient has a reportable parameter set by clinical unit You are worried about patient but they do not fit the specified criteria

Table 2: Urgent Clinical Review Criteria Maternity Observation and Response Chart and the WH Electronic Medical Record Maternity Observation and Response Chart

System	Urgent Clinical Review criteria
Nervous	Consciousness score To Voice
Cardiovascular	Systolic blood pressure > 160mmHg Systolic blood pressure – 80 - 90mmHg Diastolic blood pressure 90 -100 mmHg Diastolic blood pressure 50 mmHg Heart rate in 50 bpm range Heart rate in 100 to 110 bpm range
Respiratory	Oxygen flow rate ≥ 6 L/min Oxygen Saturation 92 to 95% Respiratory rate 21 to 30 breaths per minute Respiratory rate 8 -10 breaths per minute
Metabolic	Temperature >37.5 or ≤ 35.9
Renal	Urine output < 30ml in 2 hours
Other	Patient has a reportable parameter set by clinical unit Fundus (if applicable) either deviated, Atonic or > 2cm above umbilicus PV loss (if applicable) either moderate or heavy loss You are worried about patient but they do not fit the specified criteria

7.4.1 To Call an Urgent Clinical Review

To call UCR:

- To obtain an Urgent Clinical Review staff should call any doctor from the patient / woman's clinical unit in hours or any doctor covering the home unit out of hours.
- An urgent clinical Review is not activated until the Medical Officer has been spoken to (Paging is not sufficient notification of the need for the Urgent Clinical Review).
- The person making the call should ensure clear identification that the call is an **Urgent Clinical Review Request**.
- Handover should be given in the ISBAR format to the Medical Officer.

7.4.2 Actions Required for a Patient Meeting Urgent Clinical Review Criteria

Actions required:

- Inform Nurse/Midwife in Charge.
- Any Doctor or covering Doctor from the home unit to attend patient within 30 minutes for review. An Urgent Clinical Review cannot be a telephone order without a visual review of the patient.
- Use ISBAR format to communicate handover to Medical Officer.
- Increase frequency of observations to **minimum** ½ hourly until reviewed, then hourly for 4 hours, then 4 hourly for 24hrs.
- Document the Urgent Clinical Review request with the EMR, or on the back of the *ORC (AD315),* or the back of the *MORC (AD333.1)*
- Management of the patient during an Urgent Clinical Review should consider instigating plan of care with investigations and treatments, modifications to the clinical marker calling for that patient (refer to *Section 7.14 Modifications to Observations*) or treatment limitation discussions and decisions (refer to procedure: *OP-GC4*

Resuscitation Planning).

- Medical Officer to complete documentation on assessment and management plan in the patient's medical record.

If the Doctor (or covering Doctor) is unable to review the patient within 30 minutes, or the patient continues to deteriorate, or you are worried, the call must be escalated to a MET call.

7.5 MET Call

All members of clinical staff should call a MET call if a patient / woman has one of the clinical markers in the red shaded area within any of the MET criteria shaded zones of the WH Electronic Medical Record (EMR), or on either the General Adult Observation and Response Chart (WH AD 315) or the Maternity Observation and Response Chart (WH AD 333.1), or if:

- They are worried about the patient/ woman; or
- There has been no attendance to an Urgent Clinical Review within 30minutes of the call; or
- The patient's / woman's condition has not responded to treatment from the Urgent Clinical Review.

Refer to *Table 3 and 4* for a list of response criteria for triggering a MET call.

See also:

- *OP- GC4 Adult Rapid Response System: Adult MET and Code Blue Activation and Response* and *OP- GC4 Medical Emergencies / Cardiac Arrest Management: Hazeldean Transition Care and Sunbury Day Hospital.*

Table 3: MET Call Criteria General Adult Observation and Response Chart, and the WH Electronic Medical Record Adult Observation and Response Chart

System	MET Call Criteria
Nervous	Consciousness score to pain
Cardiovascular	Systolic blood pressure ≤ 90mmHg Heart rate ≥ 140bpm Heart rate < 40bpm
Respiratory	Respiratory rate ≥ 30 breaths/min Respiratory rate < 8 breaths/min SaO_2 ≤ 89% Difficulty in breathing
Other	Any patient you are seriously worried about Failure to respond to treatment No response to Urgent Clinical Review call within 30 minutes

Table 4: MET Call Criteria Maternity Observation and Response Chart, and the WH Electronic Medical Record Maternity Observation and Response Chart

System	MET Call Criteria
Nervous	Consciousness score to pain
Cardiovascular	Systolic blood pressure ≥ 170mmHg Systolic blood pressure ≤ 80mmHg Diastolic blood pressure ≥ 110mmHg Diastolic blood pressure ≤ 40mmHg Heart rate ≥ 120bpm Heart rate < 40bpm
Respiratory	Respiratory rate ≥ 30 breaths/min Respiratory rate < 8 breaths/min SaO_2 ≤ 92% Difficulty in breathing
Other	Any patient you are seriously worried about Failure to respond to treatment No response to Urgent Clinical Review call within 30 minutes

7.5.1 MET Call and Code Blue Activation and Response Team Composition

For MET Call and Code Blue Activation and Response Team Composition for **Footscray Hospital, Sunshine Hospital Precinct (Inclusive of Joan Kirner Women's and Children's) and Williamstown Hospital** Refer to: *OP-GC4 Adult Rapid*

Response System: Adult MET and Code Blue Activation and Response.

To activate an adult Code Blue call dial 2222 from any internal phone and state campus, state Adult or Paediatric, Ward/Department, bed number if known or appropriate.

To activate the Code Blue team in the car park or hospital surrounds (within the fence line) the phone number to dial is 9055 2222 (this process is the same 24 hours per day, 7 day a week for Footscray Hospital, Sunshine Hospital and Williamstown Hospital):

- **Additional medical support and advice** can be sourced through referral to ICU registrar or Specialty and General Medical and Surgical Units at either Footscray or Sunshine Hospitals as required.
- **Additional staff support for the MET /Code Blue** can be sourced by the Access Manager / Bed Manager at either Footscray, Sunshine or Williamstown Hospital /After Hours Coordinator.

For Medical Emergency and Cardiac Arrest Response for **Sunbury Day Hospital** , and **Hazeldean** Refer to: *OP-GC4 Medical Emergencies / Cardiac Arrest Management: Hazeldean Transition Care and Sunbury Day Hospital*

7.5.2 Actions Required for Patient with MET Call Criteria Footscray Hospital, Sunshine Hospital Predict (Inclusive of Joan Kirner Women's and Children's) and Williamstown Hospital

Actions required:

- Inform Nurse/Midwife in Charge.
- **Nurse/ Midwife in charge** to ensure notification of MET Call to patient/ woman's Clinical unit Registrar or Covering Registrar/ HMO has occurred.
- Begin initial patient support interventions.
- **Handover to the MET team responders** should be given in the ISBAR format.
- Increase frequency of observations to **minimum** of ½ hourly.
- **MET team management** of the patient should consider instigating plan of care with investigations and treatments, any consultation referrals required, modifications to the clinical marker calling criteria (refer to *7.9.2 Modifications to Observations*) or treatment limitation discussions and decisions (refer to procedure: *OP-GC4 Resuscitation Planning*).
- **Medical officer** in charge of the MET to complete documentation on patient assessment and management plan in the patient's medical record and Critical Care Nurse Responder (Or Nurse in charge at Williamstown) will complete Rapid Response Record Form.
- **Consultant** responsible for the patient is to be notified of the MET call by the clinical unit or covering Medical Officer at completion of the MET call.
- **Following the MET call,** the patient observations should be increased in frequency to (minimum):
    - Every 30 minutes for 1 hour;
    - Every 1 hour for 4 hours;
    - Every 4 hours for 24 hours.

7.6.2 Actions Required when Calling a Code Blue

Actions required:

- **Check area for any immediate danger** to yourself or the patient. If necessary, and safe to do so, remove patient from immediate danger.
- **First responder** remains with the patient, commences Basic Life Support if appropriate.
- **Supporting staff** locate nearest resuscitation trolley (if in clinical area), take it to patient and assist with Basic Life Support until Code Blue Team arrives.
- **Code Blue Team** receives handover of event on arrival and begin Advanced Life Support as indicated by the situation.
- **Extra supporting staff** are allocated to assist with the event as needed by area warden/AHA.

7.7 Special Considerations for UCR, MET and Adult Code Blue for Pregnant or Early Post-Partum Women

UCR:

- Escalate according to *MORC/modified Adult ORC*, or within any of the UCR criteria shaded zones of the WH Electronic Medical Record (EMR) (if outside maternity):
    - Observations to be increased to 5 minutely until review.
    - If no response to UCR request in 15 minutes, escalate to the Registrar or higher. **If no medical review in 30 minutes escalate to MET call.**

MET:

- Escalate according to *MORC/modified Adult ORC* or within any of the MET criteria shaded zones of the WH Electronic Medical Record (EMR). (If outside maternity).

- Note: consider need for concurrent Code Pink call to summon emergency obstetric/ midwifery support if the event occurs in non-maternity area (**Sunshine Hospital precinct only**).

MATERNAL CODE BLUE activation should occur if the pregnant woman meets any of the following broad criteria:

- Obviously pregnant woman or if known, gestation 20 weeks or greater with:
  - Airway threat;
  - Unresponsive or not breathing normally;
  - Severe respiratory distress;
  - Respiratory arrest;
  - Cardiac arrest.

Maternal Code Blue is **ONLY applicable at the Sunshine Hospital Precinct** (incl. of JKWC)

Code Pink: Sunshine Hospital Precinct only: Refer to procedure: *OP-GC4 Code Pink (Obstetric Emergency).*

In the unusual situation that a baby is delivered unexpectedly at any campus without maternity services, (other than Sunshine Hospital precinct):

- A Paediatric Code Blue should be called and immediate transfer to ED at Footscray and Williamstown Hospitals. At Sunbury and Hazeldean call 000.
- Contact the on call Obstetrician/Neonatologist for telephone support.
- Arrange suitable urgent transfer via Ambulance Victoria. (AV) and PIPER.
- PIPER emergency line 1300 137 650. PIPER can be contacted to provide perinatal and neonatal advice. In the case of a compromised neonate born at one of the other WH campuses PIPER should be notified and retrieval will be activated.
- Also see Adult Code Blue procedure *OP-GC4*: *Adult Rapid Response System: Adult MET and Code Blue Activation and Response*.

Code Green Sunshine Hospital precinct only: Refer to procedure: *OP-GC4 Code Green (Emergency Caesarean Section).*

7.8 Communication of the Deteriorating Patient

All communication of deterioration is to be conducted using the ISBAR format (see *Table 5*) as per the Western Health organisational Clinical Handover Procedure to ensure safe and effective care (refer to Western Heath procedure: *OP-GC1 Clinical Handover*).

Table 5: ISBAR Handover

Handover	Description
I = Identify:	• Who you are, your role, where you are and why you are communicating; identify the patient with 3 approved identifiers.
S = Situation:	• What is happening at the moment? What is the Patient current status, do they have a resuscitation plan or ACD?
B = Background:	• What are the issues that led up to this situation? Past Medical History, admission reason, summary of relevant treatment and progress.
A = Assessment:	• What do you believe the problem is? Patient assessment, criteria reached for calling
R = Request:	• Request for Patient review (UCR or MET call) to be clearly stated

7.9 Documentation of the Deteriorating Patient

The Medical Officer (MO) or MET team responders **must** document in the progress notes / EMR after they have assessed or re-assessed the patient, spoken with the patient's relatives, carer, nurses, midwives, consultant or any other healthcare worker about the patient.

Documentation by the MET responders should include the following:

- Name and contact details (pager, extension);
- A brief summary of the past and present events relevant to the patients current problem;
- Current clinical findings;
- Differential diagnosis of current problem;
- Actions taken by you – assessment, investigations, opinions, treatments;
- Patients response to treatment given by you;

- Communication with patient, relatives and staff etc.;
- Arrangements for review – by you or others; and
- Parameters/modifications for further escalation of care.

7.10 Post Anaesthetic Care Unit (PACU)

Observations and escalation process for Adult patients in PACU at Operating Theatres and Day Procedure Units will follow:

- Guideline: *PACU DG-GC4 Post Anaesthetic Care Unit (PACU) Patient Observation Charts.*
- Form: *Post Anaesthetic Care Record (Adult) AD259.3.*

7.11 Clinical Observation Requirements

Observations assist in detecting early signs of clinical deterioration. All clinicians are expected to be familiar with the 6 core physiological observations required for patients, and how to escalate abnormal physiological observations/clinical deterioration according to Western Health policy.

Core observations include:

- Respiratory rate;
- Oxygen saturation;
- Heart Rate;
- Blood Pressure (BP) for adults (lying and standing BP may be required for some patients, a postural (standing) BP should be recorded as such and should not trigger a MET, but should be handed over to and managed by the treating team. BP escalation for MET should only be on a BP recorded in a supine position (lying).
- Temperature;
- Conscious state (using the AVPU scoring scale):
    - A: the patient is Alert;
    - V: the patient responds to Verbal stimulation;
    - P: the patient responds to Painful stimulation;
    - U: the patient is Unresponsive.

Additional Observations may include:

- Weight;
- Pain Scale;
- Bowels;
- Urinalysis;
- More detailed neurological observations:
    - Stroke patients: for timeframes for observation monitoring, please refer to:
        - *OP-GC6 Hyperacute Stroke Management* (only for patients that have received thrombolysis.
- More detailed cognitive assessment as per OG-GC2 *Delirium Guidelines*;
- More detailed vascular observations;
- More detailed neuro-vascular observations;
- More details maternal observations;
- Pain Observations (please refer to *Section 5. Associated Documentation* of this procedure to reference the procedures related to pain observations).

Observations (appropriate to clinical needs) must be documented:

- On admission.
- At a frequency determined by the clinical state determined by the Unit Doctors or the Nurse/Midwife in Charge (refer to *Section 7.12*).
- If there is deterioration, as evident in the observations documented in the *Adult Observation and Response Chart. (ORC)* or the *Maternity Observation Response Chart (MORC),* or in the WH Electronic Record.
- All observations MUST be charted at the time they are measured.
- If a Code Blue is activated, observations must be continued to be recorded on the *Code Blue Form* (WH AD 299)
- If a post-partum haemorrhage is declared observations must be continued to be recoded on the PPH preform.

7.12 Frequency of Observations

A complete set of vital signs must be undertaken for all admitted acute patients and recorded under the following situations:

- **At the commencement of each 8 hour shift,** at least three (3) times per day (in the absence of a documented monitoring plan).
- **On admission or transfer** to a new clinical area:

- **From ED:** a minimum of 4/24 for 24/24 unless otherwise documented by medical staff (notable exception would be palliative patients).
- **From ICU:** a minimum of 4/24 for 48/24 unless otherwise documented by medical staff.
- **To Sub-Acute**: minimum TDS vital signs for 24/24 hours, then minimum daily.

- **Neutropenic patients:** vital signs completed at a minimum of 4/24 unless otherwise documented by the medical unit.
- Each patient must have a documented vital signs and observation frequency recorded in the nursing care plan. This should be reviewed at least once a shift.
- Frequency of vitals and observation sign recording must comply with the frequency stated in the nursing care plan.
- All patients must have observations recorded if there is any sign of deterioration or they have had an adverse event
- A set of observations are documented prior to discharge.

  Palliative patients: do not require vital sign monitoring unless deemed necessary by the nurse caring for the patient.

In some clinical conditions, events / clinical areas further specific observations may be required. These will be documented on the appropriate forms. All clinical staff working in these areas must be aware of, and observe the minimal standard of observation and procedures for their areas, including:

- **Emergency Department:** Emergency Department nurses and medical staff must be aware of and observe the minimal standard of observation appropriate for the variety of clinical condition. See Table 6. Guide to the minimum required observations required in Western Health Emergency Departments.
- **Table 6: Guide to the Minimum Required Observations required in Western Health Emergency Departments:**

Minimum required frequency of observations in Emergency Departments	Minimum set of vital signs	Comments
Upon entering the ED: • ½ hourly observations until reviewed by a Medical Officer. • 1/24 after review by a Medical Officer. **Admitted patients:** • 2/24 observations with admission notes from admitting team (not an interim order), if stable. This includes medically cleared psychiatric patients. Patients who refuse or decline vital signs must: • Have this documented in nursing notes • Be reported to Medical Officer/ Nurse In Charge (NIC). • Have hourly visual observation documented (respiratory rate, BOC, level of consciousness, appearance of patient).	Respiratory rate, oxygen saturation, heart rate, blood pressure, temperature, level of consciousness, pain score & Behaviours of Concern (BOC) observations. Hourly rounding is to be conducted on all patients in the ED.	**Assessment at triage:** • HR, RR & level of consciousness on all patients. • Temp, SpO2, neurovascular & BP as clinically indicated. Full set of observations must be documented prior to discharge from the ED..

- **Birthing/ MAC/ Women's Wards :** Midwifery and obstetric medical staff must be aware of and observe the minimal standard of observation appropriate for the specific clinical condition associated with maternity care.
- **Sub-Acute areas:** Patients who are admitted to a Sub-Acute unit e.g. GEM, Rehabilitation etc. are to have their vital signs recorded and documented upon admission and discharge to/from the unit. It is recommended that daily observations are to be measured between 0800 and 1400 hours. If patients develop an acute medical problem the required frequency of observations reverts to a minimum of three (3) times per day at the commencement of each eight hour shift.
- **Hazeldean patients (classified as non-admitted c):** Patients at Hazeldean are to have their vital signs recorded and documented upon admission and discharge to/from the unit. These patients may routinely have the observations measured and recorded twice weekly when appropriate, and this should be documented in the patient's plan of care. Observations should also be measured when there is any clinical deterioration or after an adverse event. If patients develop an acute medical problem the required frequency of observations reverts to a minimum of three (3) times per day (once per shift).

7.13 Alteration to Frequency of Vital Signs

Changes in the patient's clinical condition may require an increase in frequency of recording vital signs and observations. Any alteration to the frequency of the vital signs will be in discussion with the medical officer and primary nurse or midwife, and documented in the clinical notes.

Additional observations and/or frequency related to clinical circumstances will include:

- According to medically authorised patient management plan.
- Post clinical emergency response call: i.e. Call for Help, UCR, MET, Code Pinks; and Code Blues. For specific

frequency refer to item *Section 7.4.2* and *7.5.2* in this procedure and *OP-GC4 Call for HELP - Patient, Family and Carer initiated Escalation* and *OP-GC4 Adult Rapid Response System: Adult MET and Code Blue Activation and Response.*

- On expiry of Altered Calling Criteria timeframe on modifications.
- Post-operative/post procedure as indicated by the surgeon/anaesthetist/proceduralist.
- During specific drug or blood therapies.
- Post any adverse event occurring to the patient, for e.g. fall or reaction to medication administered (anaphylactic etc.)
- Patients on narcotic analgesia
- If the staff member is concerned.
- As required according to clinical judgement.

7.14 Modifications to Observations

If observations outside of the shaded zones are to be tolerated for a specific patient's clinical condition, (where an Urgent Clinical Review or MET call will not be triggered); the modifications must be documented on that patient's Observation and Response chart, or on the WH Electronic Medical Record by the Registrar, Fellow or Consultant. When there is a covering HMO/Intern attending the patient review after consultation with a senior doctor, the name of the registrar, Fellow or consultant who has approved the modification needs to be documented in the medical record or on the WH Electronic Medical Record.

7.15 Evaluation

All MET calls are to be entered into the MET register by the members of the WH Critical Care Outreach ICU Liaison Nurse Service.

The data will be reviewed by the Deteriorating Patient Committee monthly.

8. Document History

Number of previous revisions: 5

Previous issue dates: November 2002, December 2009, December 2013 May 2016 and June 2018

Minor amendment: July 2021

Documents superseded:

Code	Name
OP-CC2.1.22	Recognition and Management of the Deteriorating Adult Patient (inclusive of Peri-partum Women)
OP-CC2.1.22	Clinical Markers – Criteria for Calling Medical Staff and/or Intensive Care Unit Liaison Service
OP-CC1.1.2	Minimum Required Timeframes and Measurements for Standards for Performing and Documenting Adult Patient Observations
OP-GC4	Recognition and Management of the Deteriorating Adult Patient (inclusive of Peri-partum Women)

9. References

ACT Health - Compass Program

ALERT (Acute life-threatening events recognition and treatment) Course – Dr Gary Smith, Portsmouth Institute of Medicine, Health and Social Care Faculty of Science

ACSQHC – Consensus statement: Essential elements for recognising and responding to clinical deterioration

Australian Commission on Safety and quality in Health Care. Standard 9 recognising and Responding to clinical deterioration in acute Health Care, Safety and Quality improvement Guide. Oct 2012

Australian Commission on Safety and quality in Health Care. National Safety and Quality Health service Standards second edition 2017

NSW Department of Health (2013) Recognition and Management of Patients who are Clinically Deteriorating, policy PPD 2013_049 December http://www1.health.nsw.gov.au/pds/ActivePDSDocuments/PD2013_049.pdf

10. Sponsor

Deteriorating Patient Committee

11. Authorisation Authority

Chief Medical Officer