1. INTRODUCTION

1.1 The Rapid Response Team (RRT) under Department of Intensive Care Services, is a group of specially trained ICU physicians, nurses, respiratory therapist and other hospital staff, which can call upon at any time to provide critical care expertise at the bedside (or wherever it is needed) of a patient whose condition is deteriorating, or when a staff member needs consultation for a patient who "just doesn't seem right".

1.2 Prince Sultan Military Medical City (PSMMC) is committed in improving quality of care for patients by reducing cardiac arrests, maternal death and other acute life-threatening events, decreasing lengths of stay and reducing patient morbidity and mortality rates through the use of rapid response teams.

2. PURPOSE

The purpose of the Rapid Response Team (Adult) is to support hospital personnel outside the Intensive Care Services and Emergency Department care with early intervention in Adult patients who demonstrate acute changes and / or are progressively deteriorating.

3. APPLICABILITY

To all the medical and nursing staff of PSMMC

4. POLICY

4.1 Any staff member who provides patient care at PSMMC may activate Rapid Response Team, except patients in Operating Rooms (OR) and those patients who are under Emergency Department Consultant care, when rapid assessment is deemed necessary for a deteriorating patient.

4.2 RRT activation does not require a physician's order or permission.

4.3 **NO calls** to the Rapid Response Team shall be considered inappropriate. There shall be effective communication between the patient care unit nurses and the RRT.

4.4 The Rapid Response Team shall be available, by hospital mobile 24 hours a day, seven (7) days a week.

4.5 The Director of Intensive Care Services has the authority and responsibility over this policy and its implementation. However the Executive Director of Nursing Affairs has an overlook on the nursing part of the policy.

4.6 Members of the Rapid response Team will include but are not limited to:

4.6.1 ICS Physician and ICS Consultant Intensivist

4.6.2 ICS Nurse.

4.6.3 Respiratory Therapist.

4.7 Patient's bedside nurse to remain with the patient to assist the RRT and provide patient's information.

4.8 The presence of Physician from the Primary Team is required.

4.9 The Consultant in charge of the RRT will supervise it.

4.10 **General Principle**

4.10.1 The Rapid Response Team is not intended to bypass regular communication with the patient's primary physician or remove the role of the primary care provider.

4.10.2 The RRT will assists ward staff in assessing and stabilizing the patient's condition and organizing information to be communicated to the physician.

4.10.3 The Team member takes on the role of educator and support staff at the time of the call.

4.10.4 If the circumstances warrant, the team assists with the patient transfer to a higher level of care.

4.10.5 The role of the Rapid Response Team is not to assume the responsibilities of the Cardiac Call Team.

4.10.6 If upon arrival, the RRT determines that the patient is in imminent cardiopulmonary failure they are to call a CARDIAC CALL.

4.11 **Physician Role**: The patient's Senior Resident (or the On-Call Team Senior Resident after hours), will assist the RRT upon arrival, if required he will call the Primary Consultant or on-call Consultant.

4.12 Upon activation, RRT will arrive within 10 minutes.

4.13 Head of RRT will be ICS Consultant appointed by the Director of ICS.

5. PROCEDURES

5.1. Any medical staff and / or nurse may activate Rapid Response Team (Adult) when rapid assessment is necessary for a deteriorating patient based on any of the following:

- 5.1.1. Staff member is worried about the patient.
- 5.1.2. Acute changes in heart rate <50 or >100 bpm.
- 5.1.3. Acute change in systolic BP $\leq$ 90mmHg + MAP $\leq$ 60mmHg.
- 5.1.4. Acute change in RR <10 or >30 breaths per minute.
- 5.1.5. Acute change in oxygen saturation <90% despite oxygen delivered.
- 5.1.6. Acute change in level of consciousness.
- 5.1.7. Acute change in urinary output to $\leq$ 30 ml for 2 hours.
- 5.1.8. Significant bleeding.
- 5.1.9. Seizures.
- 5.1.10. Acute agitation or delirium.

5.2. RRT can also be activated based on the "Early Warning Scoring System." This can be done by filling the form and if the score reach the trigger point activate the RRT. (Appendix 1).

5.3. Activate the Rapid Response Team using the Prince Sultan Military Medical City Alert System (TARI) using the Code Green "444". In case of failure through this system, RRT can be activated using following hospital mobile numbers:

- 5.3.1. **Building 9:** 055 067 6615 or **Obi:** 60175 or Bleep: 1075.
- 5.3.2. **Building 4, 5, 7 & 8:** 050 896 8426 or **Obi:** 60174.
- 5.3.3. **Building 1, 2, 3, 10 & 11:** 050 897 8627 or **Obi:** 60173.
- 5.3.4. **Team Leader:** 053 384 8603 or **Obi:** 60176.

5.3.5. **RRT Extensions:** 40937 / 40938.

5.4. The RT covering :

5.4.1. **Staff Building 2:** will cover any code in building 1, 2, 3, 10 & 11 and the nearest area.

5.4.2. **Staff Building 4:** will cover the code in building 4.

5.4.3. **Staff Building 9:** will cover any code in building 8 GC, 9, 13 & 14 and the nearest area.

5.4.4. **Staff Building 5**: will cover any code in all building not covering by other teams.

5.4.5. **Note**: Staff in Building 5 will be backup team for all buildings.

5.4.6. **The most senior staff in each area he/she is responsible to assure one of the team responds the codes.**

5.5. Bedside Nurse will provide / relay:

5.5.1. Patient Status.

5.5.2. Current Medication Administration Record.

5.5.3. Current vital signs.

5.5.4. Intake & Output records.

5.5.5. Code status.

5.5.6. What indication prompted the call?

5.5.7. Interventions already attempted and results.

5.5.8. Pertinent history.

5.5.9. Other pertinent information regarding labs and diagnostic tests.

5.5.10. Assist in the resuscitation of the patient.

5.6. RRT Physician will do the following:

5.6.1. Meet with the other team members during the beginning of the shift to plan activities.

5.6.2. Respond with the team to the new RRT consultation.

5.6.3. Assess the patient and categorize according to ICS admission policy.

5.6.4. After assessment, Physician will update MRP about the patient condition and convey RRT recommendations.

5.6.5. If patient is unstable, RRT Physician will take appropriate measures to stabilize the patient.

5.6.6. If patient needs care at higher level, RRT Physician will arrange the transfer.

5.6.7. Provide feedback and teaching to the other team members.

5.7. Rapid Response Team nurse:

5.7.1. Respond to all the RRT activation calls and follow up rounds on the patients already in the RRT service.

5.7.2. While obtaining information from the patient's nurse, always use an acceptable hand-off communication tool, such as Introduction, Situation, Background, Assessment, Recommendation (ISBAR) tool.

5.7.3. Bring Rapid Response Team record.

5.7.4. Perform comprehensive assessment.

5.7.5. Initiate Rapid Response Team standardized procedure based on assessment.

5.7.6. Collaborate assessment findings and make recommendations for intervention with the RRT.

5.7.7. Assist in the resuscitation and any necessary procedure required in the management of the patient.

5.7.8. Collect the standard data for RRT.

5.7.9. Document and submits data for every patient to RRT Charge Nurse.

5.7.10. RRT nurse will not assume the responsibility of the patient in the ward will help and supervise in dealing with the critically ill patients.

5.7.11. Narcotics will be handed as per PSMMC policy of "Handling of controlled substances" vide Policy No: 1-1-8062-05-007. Version No: 3.

5.7.12. Assist bedside nurse with the following:

5.5.6.1 Physician notification.

5.5.6.2 Obtaining appropriate orders.

5.5.6.3 Initiation of orders.

5.7.13. **RRT Charge Nurse/designee** will coordinates data collection and responsible for archiving the data and presenting the data on monthly basis to RRT Head.

5.8. Respiratory Therapist.

5.8.1. Upon activation, RT will arrive within 10 minutes.

5.8.2. Perform Respiratory Assessment.

5.8.3. Provide ventilation, oxygenation, airway management and blood gas analysis as indicated.

5.8.4. Suction machine and line connection should be checked and make sure that all accessories are available such as: (suction line , suction catheter and yankur)

5.8.5. If the RT arrive and patient does not required high oxygen i.e. ≤ 40% and not having critical blood gas results, ask ICU doctor if he/she needs RT service:

5.8.6. If there is no need for RT service, the documentation in Cerner (assessment, check and SOAP) should be done.

5.8.7. If patient required high oxygen > 40% and/or critical blood gas or ICU doctor asked for RT service, RT should follow as per (In-Patient Assessment and Reassessment for Respiratory Care policy 1-2-9451-03-010)

5.8.8. For DKA patient, the RT should be following until the discharge from mobile ICU service.

5.8.9. **If the code in clinical area**: the RT will attend directly and will use the equipment from the clinical area such as (resuscitation bag, oxygen device, intubation equipment) then if need will bring other devices or machines such as ventilator, BiPAP, or HFNC.

5.8.10. **If the code in non-clinical area** such as (garden, parking lot, ground floor or office buildings): the RT will attend with oxygen cylinder, flowmeter, oxygen delivery devices, functional resuscitation bag with appropriate size mask, intubation bag which contains: different sizes of (Blades 3 & 4, ETT, LMA, Oral airway & Trach tube) elastic Bougie, Stylet, KY jelly, ETT tie.

6. REFERENCES

6.1 Institute for Healthcare Improvement (IHI), Establish a Rapid Response Team, http://www.ihi.org/knowledge/Pages/Changes/EstablishaRapidResponseTeam.aspx, last accessed March 2012.

6.2 JCIA Standards, 6th edition , COP 3.1

6.3 Rapid Response Teams, Challenges, Solutions, Benefits, Thomas, Kim; Force, Mary VanOyen; Rasmussen, Debbie; Dodd, Dee; Whildin, Susan, Critical Care Nurse, Vol. 27, No. 1, February 2007.

6.4 The 100,000 Lives Campaign: A Scientific and Policy Review, Wachter, Robert M.; Pronovost, Peter J., Joint Commission Journal on Quality and Patient Safety, Volume 32, Number 11, November 2006, pp. 621-627(7).

7. APPENDICES

7.1 Appendix 1 Early Warning Scoring Sheet 7540-760-5131

7.2 Appendix 2 RRT I-SBAR Form 7540-760-5151

8. CONTRIBUTING DEPARTMENTS

8.1 Department of Intensive Care Services.

8.2 Executive Nursing Affairs.

Compiled by: **Dr. Muhammad Kashif Malik** **Consultant & Head, CQI&PS Division.** **Department of Intensive Care Services**	**Signature:**	**Date:** 2023/9/5
Reviewed by: **Dr. Turki Al Mutairi** **Executive Director of Nursing Affairs**	**Signature:**	**Date:** 2 5 SEP 2023
Reviewed by: **Brig. Gen. Dr. Abdulelah Mohammed Hummadi** **Director, Continuous Quality Improvement & Patient Safety (CQI&PS)**	**Signature:**	**Date:** 27/9/2023
Authorized by: **Brig. Gen. Dr. Adnan Al Ghamdi** **Director of Intensive Care Services**	**Signature:**	**Date:** 5-9-2023
Authorized by: **Brig. Gen. Dr. Abdulrahman Al Robayyan** **Director of Medical Administration**	**Signature:**	**Date:** 1/10/2023
Authorized by: **Brig. Gen. Dr. Rashed Bin Ayed Al Otaibi** **Executive Director for Health Affairs** **Chairman, Senior Medical Management Team (SMMT)**	**Signature:**	**Date:** 2/10/2023
Approved by: **Maj. Gen. Khalid Abdullah Al Hudaithi** **General Executive Director of Prince Sultan Military Medical City**	**Signature:**	**Date:** 4/10/2023

INTENSIVE CARE SERICES
RAPID RESPONSE TEAM
I-SBAR FORM

RRT PHYSICIAN	RESPIRATORY THERAPY CONTACT NO.
TEAM LEADER: 60805	RT CHARGE B5: 60497, 60498
BLDG 9: 60803	BLDG 5 & 7: 60492, 60493
BLDG 5: 60853	BLDG 8: 60492
BLDG 2: 60801/60802	BLDG 9: 60513, 60514,60491

INTRODUCTION	SITUATION	BACKGROUND	
WARD:	DIAGNOSIS:	HISTORY:	
NAME:			
MRN:	ALLERGIES:	CHIEF COMPLAIN:	
AGE/SEX:	ICU REFERRAL DATE/TIME:	DATE:	PROCEDURES:
NATIONALITY:	RRT DOCTOR/NURSE:		
CONSULTANT:	REASON OF REFERRAL:		
SPECIALTY:			
ELIGIBILITY:	ICU DIAGNOSIS:		
HOS. ADMISSION:			

ASSESSMENT							RECOMMENDATION
CNS	GIT			V/ABG	MEDICATIONS		
GCS:	MODE:			DATE:			
SEDATIONS:	FEEDING:			TIME:			
	WATER:			PH:			
				PCO2:			
CVS	GUT			PO2:			
BP:	MODE:			HCO3:			
HR:	SKIN:			SO2:			
TEMP:	PRESSURE SORE:			NA:			
RR:	LINES:			K:			
VASOPRESSORS:				HGB:			
				LAC:			
	FLUID STATUS X 24HRS			CL:			
INFUSIONS:	INTAKE:			GLUC:			
	OUTPUT:						
RESPIRATORY	FLUID BALANCE:						
MODE:	MAX TEMP:				PRN/STAT MEDICATIONS	DISCONTINUED MEDICATIONS	
FIO2:	BM						
RATE:	2 DAYS SUMMARY						
TV/IPAP/PC:	DATE:						
PEEP/EPAP:	FB:						
S02:	TMAX:						

Stock No.: 7540-760-5151
MSD-MedAdmin.F69

M.S.D. Printing Press

PATIENT I.D

Ministry of Defense
Medical Services General Directorate

Adult Vital Signs Chart

	Date: / Time (24 hour):													EWS score
Respiratory rate (breaths/min) IF >50, write value in box	> 35													RRT
	25 to 35													3
	21 to 24													2
	12 to 20													0
	09 to 11													1
	05 to 08													3
	< 5													RRT
Suplemmental O2	Write value L/min													
O2 L/min Write Value in Box	≥ 96													0
	95 - 94													1
	93 - 92													2
	≤ 91													3
Temperature (°C)	≥ 39													2
	38													1
	37													0
	36													0
	35													1
	≤ 34													2
Blood Pressure (mmHg) Score systolic ONLY	≥ 220													3
	210													0
	200													0
	190													0
	180													0
	170													0
	160													0
	150													0
	140													0
	130													0
	120													0
	110													0
	100													1
	90													2
	80													3
	70													3
	≤ 60													RRT
	50													1
Heart rate (beats/min) If heart rate >180 or <50 write value in box	Write ≥ 140													RRT
	130													3
	120													2
	110													2
	100													1
	90													1
	80													0
	70													0
	60													0
	50													0
	40													2
	≤ 30													RRT
Level of Consciousness	Alert													0
	Voice													1
	Pain													3
	Unresponsive													CODE BLUE
EARLY WARNING SCORE TOTAL														
Urine Output — with Catheter	> 100 mls / 4hrs													
	< 100 mls / 4hrs													
Urine Output — No Catheter	Last Eight (8) Hours													
	Not PU Last Eight (8) Hours													
Nurse Initials														

Adult Vital Signs Chart

Medical Staff Modification to Early Warning Score (EWS) Trigger

Any modification to the PEWS must be made by a Consultant or Registrar and regularly reviewed by the primary team. Ignore any modification that is not signed & dated.

VITAL SIGN	ACCEPTED VALUES & MODIFIED EWS	DATE AND TIME	DOCTOR'S NAME, DESIGNATION AND BLEEP
		__/__/__ | __:__	
		__/__/__ | __:__	
		__/__/__ | __:__	
		__/__/__ | __:__	
☐ NOT FOR CPR	☐ NOT FOR PRRT	__/__/__ | __:__	

All limitations must be documented in the patient's clinical record.

Mandatory Early Warning Score Escalation Pathway

EWS 5-1 or any vital sign in yellow zone	• Manage pain, fever or distress • Increase frequency of vital sign monitoring	
PEWS 7-6 or any vital sign in red zone	• Resident review within 60 minutes	• Inform nurse in charge
Acute illness or unstable chronic disease		• Increase frequency of vital signs
EWS 9-8 or any vital sign in red zone	• Registrar review within 20 minutes & suggest ICU referral	• Document plan including intervention, escalation & review timeframe
Likely to deteriorate rapidly		
EWS +10 or any vital sign in blue zone	• ACTIVATE RRT CALL	
Immediately life threatening critical illness	• STATE CALLER'S NAME, DEPARTMENT, LOCATION, ROOM #, BED # *(If necessary)* • Support Airway, Breathing & Circulation	

ACTIVATE RAPID RESPONSE TEAM (RRT) FOR ANY PATIENT YOU ARE WORRIED ABOUT REGARDLESS OF VITAL SIGNS or EWS

A full set of vital signs with corresponding EWS must be taken and calculated each time at the frequency stated in the Early Warning Signs Policy. If there is no timely response to your request for patient review, escalate to the next coloured zone.

Each vital sign is scored according to the coloured zone that falls within (see key below)

Any patient receiving supplemental oxygen automatically scored two (2) regardless of rate

EARLY WARDNING SCORE COLOUR KEY				
0	1	2	3	RRT: Rapid Response Team