

Nicholas De Luca

Diagnosis: Deteriorating Patient in Cardiac Rehabilitation

Student Guide

Simulated Learning Environment Rules

General Rules

1. Students will be issued with nametags at the commencement of the learning activity. These should be worn at all times.
2. Participating students must wear their clinical uniform.
3. Students are not to bring food or drink into the simulation laboratories.
4. To prevent tripping hazards, all bags and coats must be stored in the bag racks/lockers provided.
5. For your safety we recommend that you wear protective clothing (lab coat, gown, goggles, mask and/or gloves) relevant to the task being undertaken.
6. Wash your hands upon entering and leaving the simulation laboratories.
7. Immediately report any injury or near miss to a member of staff.
8. In the event of damage to or malfunction of equipment, immediately stop using it and advise staff.
9. Do not remove equipment or models from the laboratories without prior approval of staff.
10. Be considerate: keep noise to a minimum; there is often more than one group working in the labs.
11. Consult staff about any lost or found property.
12. Any deliberate damage, defacing or theft of University property must be dealt with as outlined in the Incident Reporting and Investigation policy; <http://policy.unimelb.edu.au/UOM0364>
13. You may be asked to leave the laboratories if your behaviour is inappropriate.
14. Mobile phones must be placed on silent and conversations with external parties during laboratory lessons are to be avoided.
15. If you are unsure of something, please ask staff.

Dress Code

An appropriate code of dress applies to the simulated learning environment. This is to encourage students to reflect upon their own professional image, practice the implementation of Infection Control principles and Occupational Health and Safety (OH&S) standards as well as facilitating best practice.

- **Shoes** must be clean and in good repair. Sensible, flat-soled and comfortable shoes are encouraged to promote safety and prevent trauma. Open toed or slip-on backless shoes are not suitable.
- **Jewellery** should be plain and restricted to minimum usage. The following items of jewellery are permitted: wrist or fob watch, wedding ring, stud earrings (earrings of any other description are not permitted). Facial rings are not permitted for Occupational Health and Safety reasons. If necessary they may be replaced by studs. Nail rings are not permitted.
- **Nails** are to be kept short (less than $\frac{1}{4}$ cm), natural fingernails with fresh clear nail polish or none at all. Please note that artificial / acrylic nails harbour pathogens, especially gram-negative bacilli and yeasts and are not suitable for clinical practice.
- **Hair** should be clean, neat and tidy. It should be kept off the face and secured as to not interfere with patient care procedures. To facilitate this, hair should be tied back once it is collar-length. Hair accessories should be plain / neutral and in keeping with a professional image.

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Overview

Target Audience: Master of Nursing Science / Doctor of Physiotherapy / Master of Social Work/Doctor of Medicine

Groups of no more than three nursing students, three physiotherapy students, two Social Work students and three Medical students

Estimated pre briefing time: 15 minutes pre brief

Estimated simulation time: 40 minutes scenario

Estimated debriefing time: 30 – 40 minutes

Setting: Ritz Medical Centre Rehabilitation Unit, Ground round floor.

Simulation method: Full immersed.

Brief summary of scenario

Cardiac rehabilitation programs are designed to limit the physiological and psychological effects of cardiac illness, reduce the risks for sudden death or reinfarction, control cardiac symptoms, stabilise the atherosclerotic process, and enhance the psychosocial and vocational status of selected patients (Woods et al. 2010). A key responsibility of cardiac rehabilitation staff is to anticipate, recognise and react to adverse responses to exercise activity (Moser & Riegel, 2008).

It is recommended that direct staff supervision of exercise programs should occur for at least 6 to 8 exercise sessions or 30 days after the cardiac event or procedure (in a low risk individual)(Woods et al. 2010). Typically, this may involve continuous ECG monitoring and then decrease to polar monitoring as appropriate (Moser & Riegel, 2008: Brown & Edwards, 2012). Thus, a thorough understanding of the normal physiological responses to exercise is required of the Registered Nurse and the Physiotherapist supervising cardiac rehabilitation. Early recognition of clinical deterioration, followed by prompt and effective action, can minimise the occurrence of adverse events such as cardiac arrest, and may mean that a lower level of intervention is required to stabilise a patient (ACSQHC, 2010).

During this simulation activity, a low risk patient (Mr De Luca) attends the Cardiac Rehabilitation program at the Ritz Medical Centre. Mr De Luca rapidly deteriorates during the exercise class.

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Learning objectives

Interprofessional

- ☐ **Interpersonal and Communication Skills:** Communicates sensitively in a responsive and responsible manner demonstrating the interpersonal skills necessary for interprofessional collaboration
- ☐ **Patient-Centred and/or Family-Focused Care:** Through working with others negotiates and provides optimal integrated care by being respectful of and responsive to patient/client and/or family perspectives, needs and values
- ☐ **Collaborative Decision Making:** Establishes and maintains effective and healthy working partnerships with other professionals whether or not a formalised team exists
- ☐ **Roles and Responsibilities:** Consults, seeks advice and confers with other team members based on an understanding of everyone's capabilities, expertise and culture
- ☐ **Team Functioning:** Uses team building skills to negotiate, manage conflict, mediate between different interests and facilitate building of partnerships within a formalised team setting

(Source: The British Columbia Competency Framework for Interprofessional Collaboration, 2008)

Ritz Medical Centre MET Call Criteria (Adults) Emergency Number 55020

Airway	Threatened
Breathing	Respiratory rate < 5 breaths per minute Respiratory rate > 36 breaths per minute
Circulation	Pulse rate < 40 beats per minute Pulse rate > 140 beats per minute Systolic blood pressure < 90
Neurology	Sudden decrease in level of consciousness Decrease in GCS of > 2 points Repeated or prolonged seizures
Other	Any patient causing concern who does not fit the above criteria

*Source ARC Advanced Life Support Level 2 (6th ed), p 13

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Patient Information

Clinical Setting – Ritz Medical Centre

The Ritz Medical centre is the oldest hospital in Victoria, having been built just prior to the gold rush era. The Ritz Medical Centre is the main provider of health services to people living in the inner suburbs of Melbourne and a major provider of specialist statewide services to the people of Victoria. The Ritz Medical Centre is world-renowned for its research and specialist work in burns, trauma management, cancer, liver transplantation, spinal cord injuries, neurology, endocrinology, mental health and rehabilitation. These services are provided across the continuum of care from ambulatory, to inpatient and home and community based services.

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ISBAR Handover Tool

I Identify	• Yourself: ○ name, ○ position, ○ location • Receiver: Confirm who you are talking to • Patient: name, age, sex, location
S Situation	• State purpose "The reason I am calling is....." • If urgent – SAY SO, Make it clear from the start • May represent a summary of Assessment and Requirement
B Background	• Tell the story • Relevant information only: ○ history, ○ examination, ○ test results, ○ management • If urgent: Relevant vital signs, current management
A Assessment	• State what you think is going on, your interpretation • Use ABCDE approach ○ Airway ○ Breathing ○ Circulation ○ Disability ○ Exposure • State any interventions e.g applied oxygen
R Requirement	• What you want from them – BE CLEAR • State your request or requirement ○ Urgent review (state time frame) ○ Give approval / recommendation for further course of action while awaiting attendance eg. ECG, bloods ○ Give opinion on appropriate management

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Resources

Australian Resuscitation Council (ARC) Guidelines 2010 available at <http://www.resus.org.au/>

Brown, D., & Edwards, H. (2012). *Lewis' Medical-Surgical Nursing*. (3rd ed.). Sydney: Elsevier Mosby.

Moser, D. & Riegel, B. (2008). *Cardiac Nursing: A companion to Braunwald's Heart Disease*. St Louis: Saunders Elsevier.

Curtis, K., & Ramsden, C. (2011). *Emergency & Trauma Care for Nurses & Paramedics*. Chatswood: Elsevier.

Sole, M., Klein, D. G., & Moseley, M. J. (2009). *Introduction to Critical Care Nursing*. (5th Ed.). St. Louis, Missouri: Saunders Elsevier.

Tollefson, J. (2010). *Clinical Psychomotor Skills*. (4th ed.). Australia: Cengage Learning.

Wesley, K. (2011). *Huszar's Basic Dysrhythmias & Acute Coronary Syndromes. Interpretation & Management*. (4th ed.). St Louis : Elsevier Mosby. Chapter 4, p. 53 – 78.

Woods, S. L., Sivarajan Froelicher, E. S., Halpenny, C. J., & Underhill-Motzer, S. (2010). *Cardiac Nursing*. (6th ed.), Philadelphia: JB Lippincott Company.

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Student Notes

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