

Responding to the Deteriorating Patient Online Course



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Peer Review

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Learning Outcomes

At the completion of the course the participants should be able to:

1. Describe the relationship between the clinical signs of deterioration and development of cardiac or respiratory arrest
2. Identify red flags for serious illness in the patient with deterioration
3. List the features on clinical examination that assist in airway assessment
4. Describe the immediate treatment priorities in the deteriorating patient with altered conscious state

Summary of the e-Learning Program

The e-learning is interactive and requires the clinician to consider a series of blood gases and identify key abnormalities. The mastery quiz incorporates both formative and summative assessment components. There are 4 topics with a total course time of 7.5 hours.

The four topics are:

1. Recognising Clinical Deterioration
2. Immediate Assessment Priorities
3. Initiating Resuscitation in the Deteriorating Patient
4. Differential Diagnosis: Critical Thinking

Outline of the Program

1. Recognising Clinical Deterioration

Module summary: Most in-hospital cardiac and respiratory arrests can be predicted and are preventable. Unfortunately many patients who develop signs of deterioration are not detected until late in the course of their illness. The causes for this are multifactorial. Contributing factors include the difficulty of (rotating) staff to view trends overtime, a lack of knowledge of the early features of deterioration, poor clinical communication and lack of a procedure for triggering an appropriate (early) response to deterioration.

Increasing evidence supports the need hospitals to implement systems that monitor patients for deterioration and activate early intervention. These are known as "Track and Trigger" systems and the application of these to clinical practice are explored in the readings and Clinical Simulation.

Clinical communication and handover are the topic of the second part of this module and presented in the form of a 20 minute video-eTutorial. It is very evident from review of adverse events in health that communication often plays a part in the sequence of events leading to the poor outcome and that this is an area where training and use of a structured tool to facilitate clinical handover of information may significantly improve care. In this video we introduce the ISBAR tool, a commonly used approach for structuring the handover of clinical information in Australian hospitals.

Interaction/Assessment:

- Reading: A Systems Based Approach to Deterioration
- Case Simulation: Recognising Clinical Deterioration
- Video eTutorial: Communication
- ISBAR Structured Communication Tool
- Topic Quiz – Module 1

2. Immediate Assessment Priorities

Module summary: In the first Clinical Casebook we considered the issues of how to recognise the early signs of deterioration. The discussion emphasised the importance of implementing a "track and trigger" system to monitor and respond to patient deterioration and identified the central role of the patient observation chart for assisting to identify deterioration and prompting staff caring for the patient to call for assistance from the senior nurse on the shift, duty medical officer or MET team. In this next Clinical Casebook we will explore the red flags indicating a high risk for serious illness and the procedure for the immediate assessment of the patient in whom we suspect deterioration.

It is common for nursing and medical staff to feel anxious when approaching a deteriorating patient. They may feel out of their depth, wondering where to begin and how to approach the task. With so many different possibilities it would seem an impossible task for an individual clinician to become competent in managing them all. The good news is that the approach to the deteriorating patient always begins in the same place and follows the same basic structure, no matter what the clinical circumstances of the case. This systematic approach to care of the deteriorating patient enables nurses and medical officers to identify immediate life threats and to initiate life saving intervention(s) without requiring a detailed medical knowledge. The approach is termed the "Primary Survey" and is discussed in the following Clinical Casebook.

Interaction/Assessment:

- Reading: Approach to the Deteriorating Patient
- Video eTutorial: Immediate Assessment

- Poster Summary – Primary Survey
- Clinical Simulation: Immediate Assessment
- Topic Quiz – Module 2

3. Initiating Resuscitation in the Deteriorating Patient

Module summary: "*Resuscitation*" is the term given to initiating treatment of life threatening conditions identified during the Primary Survey. As a problem is identified the clinician should take action to correct the life threatening clinical state before proceeding to the next step in the primary survey.

In the following two Clinical Casebooks we explore assessment of the deteriorating patient following the ABCDE approach taking note of the signs that indicate serious illness and discuss the immediate (life saving) management required to treat the problem. In the first Clinical Casebook we focus on "A" and "B" - the Airway and Breathing, while the second Case focuses on life threats resulting from C - Circulation

Interaction/Assessment:

- Reading: Resuscitation of the Deteriorating Patient

Section 1: Airway and Breathing

- Reading: Recognising and Managing Airway Obstruction
- Video eTutorial: Assessment and Management of the Airway
- Reading: Recognising and Treating Respiratory Distress
- Video eTutorial: Approach to Respiratory Distress
- Clinical Simulation: Resuscitation

Section 2: Circulation

- Reading: Approach to Circulatory Shock
- Clinical Simulation: Resuscitation
- Topic Quiz – Module 3

4. Differential Diagnosis: Critical Thinking

Module summary: Critical thinking refers to the intellectual reasoning process used to determine diagnosis and treatment decisions in the patient suspected of deterioration. In this topic we step through the process and identify clues to approaching this challenging and difficult area of management.

Interaction/Assessment:

- Video eTutorial: Critical Thinking
- Deteriorating Patient: Diagnostic Sieve
- Clinical Simulation: Critical Thinking
- Topic Quiz – Module 4

5. Final Post Course Assessment

Final Course Quiz – Deteriorating Patient