



# ABCD's of Resuscitation of the Critically Ill Patient Online Course

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<b>Latest Review</b>	March 2021
<b>Accreditation:</b>	RACGP (Activity Number 198945) & ACRRM (Activity Number: 20023) for the 2020-2022 triennium

How we approach the management of the seriously ill patient in the first few minutes may significantly determine their chances of survival, risk for complications, and long-term disability. In seriously ill patients, we are frequently required to commence management before we have a diagnosis or had the opportunity to complete a thorough clinical assessment. In this course we consider the process for the immediate assessment and intervention in the seriously ill adult or child and focus on initiating treatment for life threatening complications affecting the airway, breathing and/or circulation.

## Learning Outcomes

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

1. Discriminate the clinical features that indicate serious illness in an adult
2. Prioritise the immediate management of the adult with serious or life threatening illness
3. Differentiate the clinical features of life threatening airway obstruction, respiratory failure or circulatory shock
4. Structure the emergency management of with airway obstruction
5. Outline the clinical findings, differential diagnosis and immediate management of life threatening respiratory failure
6. Discriminate the clinical findings, differential diagnosis and management of circulatory shock
7. Prioritise the management of the patient presenting with altered conscious state

## Summary of the e-Learning Program

The e-learning is interactive and requires the clinician to consider a range of the clinical problems and scenarios and provide a response. At the end of each topic a summative quiz is used to evaluate learning and understanding of the topic material. There are four topics, each expected to take a total course time of 8 hours.

The four topics are

1. Immediate priorities in the assessment and treatment of the critically ill patient
2. Recognition and emergency treatment of airway obstruction
3. Immediate management of the patient with severe respiratory distress
4. Diagnosis and management of the patient with circulatory shock

# Outline of the Program

## Pre - Course Quiz

### 1. Primary Survey: Approach to the critically ill patient

**Module summary:** It is common for clinicians to feel anxious when approaching a seriously ill patient. They may feel overwhelmed, wondering where to begin and how to approach the task. With so many different emergencies 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 seriously ill patient always begins in the same place and follows the same basic structure, no matter what the emergency and no matter the age of the patient. This systematic approach to care of the critically ill enables clinicians to identify immediate life threats and to initiate life saving intervention(s) without requiring a detailed knowledge of all possible emergency presentations. This approach to the seriously ill patient is termed the “Primary Survey” and is discussed in this first module of the course.

#### Interaction/Assessment:

- Video eTutorial : Approach to the Critically Ill Patient (15 mins)
- Interactive Clinical Casebook: Assessment of the Critically ill patient (Formative assessment: 75 mins)
- Topic Quiz – Critically Ill Patient (Summative assessment: 30 mins)

### 2. Airway Compromise

**Module summary:** In the management of the acutely ill patient, the assessment and management of the airway is the first priority. As complete airway obstruction can lead to cardiac arrest in as little as 4 to 10 minutes and irreversible CNS damage within 3 to 5 minutes, the ability to manage the compromised airway is one of the most important (life-saving) skills clinicians require in managing the emergency patient.

Protecting or establishing an airway can be extremely anxiety provoking but, in the majority of cases, is relatively straight forward. The following module focuses on the assessment of the airway, identification of when intervention is required, and describes options for managing airway compromise.

#### Interaction/Assessment:

- Video eTutorial : Principles of Airway Management (14 mins)
- Interactive Clinical Casebook: Approach to Airway compromise (Formative assessment: 75 mins)
- Topic Quiz – Airway Compromise (Summative assessment: 30 mins)

### 3. Managing the Patient with Severe Respiratory Distress

**Module summary:** Respiratory distress is a common presenting symptom in emergency patients. Respiratory distress may range from a mild decrease in exercise tolerance to a feeling of increased respiratory effort at rest to severe respiratory distress associated with life threatening hypoxia and altered conscious state. Although there are a wide variety of recognised causes for respiratory distress, in practice a small number of diseases account for the majority of emergency presentations. Many are strongly associated with age narrowing the differential diagnosis. The common causes for acute respiratory distress include Upper airway obstruction, Infection, Obstructive airway disease, Acute Pulmonary oedema, Pulmonary embolism, Pneumothorax, and Trauma.

#### Interaction/Assessment:

- Video e-Tutorial : Severe Respiratory Distress (16 mins)
- Interactive Clinical Casebook : Respiratory Distress (Formative assessment: 75 mins)
- Topic Quiz – Respiratory Distress (Summative assessment: 30 mins)

### 4. Identifying and Treating Circulatory Shock

**Module summary:** Circulatory Collapse (or Shock) describes the syndrome of widespread ischaemia and cellular damage that results from the inadequate perfusion of critical organs. There are three types of Circulatory Shock depending on the part of the circulatory system most affected by the underlying disease process: the fluid, the pump or the plumbing (pipes). That is, Hypovolaemic (fluid), Cardiogenic (pump), and Vasogenic (pipes) Shock. Shock is a clinical diagnosis. The earliest signs of hypovolaemic and cardiogenic shock are symptomatic thirst, tachycardia, and cutaneous vasoconstriction. Vasoconstriction is manifest by pale, blue or mottled peripheries with decreased skin temperature and impaired capillary refill. Despite the numerous causal factors and types of shock the management involves 3 basic interventions: IV fluids, inotropic drugs and treatment of the cause.

#### Interaction/Assessment:

- Video eTutorial : Circulatory Shock (17 mins)
- Interactive Clinical Casebook : Critical bleeding (Formative assessment: 60 mins)
- Topic Quiz – Circulatory Shock (Summative assessment: 30 mins)

### 5. Final Post Course Assessment Quiz

Final Course Quiz – ABCDs of Resuscitation of the Critically Ill Patient (Summative assessment: 30 mins)