# Management of the Deteriorating Patient

## Objectives

By the end of this module you will

* Understand the approach to the unwell/unstable patient vs the stable patient
* Understand that a diagnosis is not necessary to treat a patient effectively
* Be able to follow D R S A B C D E to systematically and effectively assess and treat any patient
* Compile a system for assessing and diagnosing the reversible causes (4H4Ts)

## Background

When I commenced internship I found that managing a sick patient was very difficult and confusing. Throughout medical school I had been told I had to do a history examination and investigations, then treat a number of targeted differential diagnoses.

While this works for the stable patient in an outpatient setting it does not account for the unwell patient who needs immediate treatment.

If you look at all the acute care programs today whether ALS, ATLS, EMST – they are all about treating the problem at hand with a systematic DRSABCDE approach.

This works!

## Traditional approach to patient management

* Hx/Ex/Ix 🡪 Dx 🡪 Rx
* Med school indoctrinates us that the way to assess any patient is

***History***

***Examination*** and

***Investigation***

* This leads us to a ***differential diagnoses***
* We then ***treat*** with any number of supportive, medical, surgical and other managements.

## Approach to management of sick patient

* If your patient is unwell, do you need to follow the Hx/Ex/Ix 🡪 Dx 🡪 Rx approach?

Do you need a diagnosis before you treat?

Do you treat any less effectively without a definitive diagnosis?

**NO!**

***Don’t let a lack of diagnosis get in the way of initial treatment***

* What is vastly more important is ***assessing*** and ***treating*** the

airway, breathing, circulation, disability and exposure or the ABCDEs

## The nurse calls you to manage a patient…

1. What problem have you been called about?

* Hypoxaemia, hypotension, stridor or simply concern that patient looks unwell

1. Does the patient look sick or stable?

If patient looks stable, then do your normal Hx/Ex/Ix 🡪 Dx 🡪 Rx

If patient looks sick or you’re not sure then follow your ABCDE

1. DRSABCDE

Follow this step by step approach to assessing and optimizing ABCDE

(NB. This is my approach to any MET -medical emergency team- call. I have included just the high yield signs to look for and the most effective management steps that most experienced doctors would do)

* Ask nurse to apply monitoring and specify:

A&B -O2 sats, resp rate

Circ - BP cuff to cycle every 5mins and ECG monitoring leads+/-defib PADs

BSL (easy to do and often forgotten so ask nurse to do with obs)

Temp

* Request patient notes, drug chart and print out of recent bloods.

**Danger**

* Put on gloves +/- goggles as you arrive
* Be aware of dangers in the environment. This could be water on the floor, wires you might trip on, defibrillator, blood, needles…

**Response**

* Introduce yourself, ask patients name, and how do they feel.
* This will give much information on the patients general state, GCS, airway and you will build rapport simply because they know that a doctor has arrived.

**Send for Help?**

* Call for help early rather than later
* The easiest way is to call a MET call or Code Blue.
* Directly ask a staff member to do this and confirm it has been done
* You will never be criticized for calling for help! And likewise don’t criticize others either!

**Airway**

Assess

* Ask ‘how are you feeling?’

If patient is talking effortlessly – airway is safe.

* Check for stridor, tracheal tug, paradoxical breathing and obvious foreign bodies or visible obstructions.

Rx

* Head up at 30% is a good position for every situation
* Maneuvers: Sniffing the air position. Jaw thrust. Neck extension
* Airways: Guedel. Nasopharyngeal airway
* If these do not help its vitally important to call for an airway specialist (anaesthetist/ICU/emergency doctor)

**Breathing**

Assess

* Inspect for: accessory muscle use, paradoxical breathing, asymmetry
* Palpate for: tracheal deviation
* Auscultate: equality, symmetry, wheezes and crackles
* O2 Sats and resp rate

Rx

* Apply 15L/min O2 via Laedel bag (if patient very unwell requiring 100% FiO2) or Hudson mask (if patient looks more stable)
* Assist ventilation

**Circulation**

For arrest situations the ALS protocols are very comprehensive.

(The following is a format to quickly assess and treat more common issues - which is almost exclusively hypotension in ward patients)

Assess

* Finger on pulse 🡪 ?CPR
* BP and HR give quick indicators of stability
* ECG/ monitoring with Pads will identify a lethal rhythm.
* Other less precise signs can be identified
  + Inspect: pallor, mucous membranes, JVP
  + Palpate: cool peripheries, cap return
  + Auscultate heart sounds
  + Check Hb, urine output, fluid balance

Rx

This is best guided by the Advanced Life Support guidelines available at [www.resus.org.au](http://www.resus.org.au) (also downloadable for iPhone/iPad)

* Legs up (instantly increase venous return to improve cardiac output)
* iv access and take a full set of bloods (FBE, UEC, LFT, COAG, GH and BSL
* Give bolus fluid with an iv pump set (250-500mls is a safe initial bolus in almost every hypotensive patient)
* ECG

**Disability**

* Check GCS or AVPU
* Check pupils for reactivity, size, symmetry
* Check limbs for power.

**Exposure**

* Check patient from head to toe (secondary survey)
* Check temperature
* Cover and warm as appropriate

4) Review DRSABCDE again!

5) Hx/Ex/Ix

6) Consider the reversible causes - 4Hs and 4Ts

**H**ypovolaemia, **H**ypoxaemia, **H**ypothermia, **H**ypo/**H**yper electrolytes

**T**ension pneumothorax, **T**amponade, **T**hrombosis (cardiac or pulmonary), **T**oxins