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**Article:**

Chapman, N.R. [orcid.org/0000-0002-4853-2909](https://orcid.org/0000-0002-4853-2909) and Press, C. (2016) Immediate Care Skills for Your Elective Two simple frameworks to help you wherever you are. Student BMJ. ISSN 0966-6494

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Electives

## Immediate Care Skills for Your Elective

Two simple frameworks to help you wherever you are

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So, you're ready to go on elective. The bags are packed, your arm has just about recovered from your vaccinations, and you have your passport in hand. But how much thought have you put into what you would do if confronted with an incident or asked to offer medical assistance while on elective?

You will want to find ways you can make a difference, and in some situations your hosts may look to you for assistance. It can be difficult to strike the right balance between responding in the best way while working within your competences. This can make medical students feel uncomfortable. The BMA ethics tool kit states that when on elective you are under an obligation to maintain the standards set by the General Medical Council. The tool kit states:

“You must avoid getting involved in providing routine care that is outside your level of competence. Where a patient is at immediate risk of death or serious harm and no other qualified health professional is available, you can assist, provided you have a reasonable belief that you can improve outcomes.”<sup>[1]</sup>

The tool kit offers four questions students should ask themselves before helping a patient:

- Why am I not allowed to do this procedure at home?
- Am I capable of performing it without suitable supervision?
- Am I putting my patient or myself at risk?
- Would it be possible or practical to ask for supervision without imposing excessive burdens on other key health personnel?<sup>[1]</sup>

On the basis of this guidance, what can medical students do if confronted with an incident or emergency while on elective? In this article we offer two frameworks that you can apply to the initial management of a patient so you can make a difference and stay within your competency.

### **What you should know before you leave**

- Limitations of your own clinical competence

- Knowledge of the local healthcare system—for example, what are the population demographics? What are the common illnesses? What equipment will be available and how would you manage the immediate care of the deteriorating patient in either a prehospital environment or within a definitive healthcare setting?
- Some key introductory phrases in the language of the host country—for example, “*I’m John Smith, a medical student, can I help you?*”
- Rules governing patient consent to medical treatment in your host country
- Rules governing the legal status of any such “bystander first-aid acts” you may undertake in your host country<sup>[2]</sup>
- Procedures for requesting emergency services
- Contact details of the local British consulate/embassy

## Your SAFETy

Standard first aid courses teach that before intervening, a bystander must first give consideration to their own safety and those around them before approaching the casualty. The Mountain Rescue Casualty Care Certificate course recommends the SAFE approach to dealing with a casualty (see box 2).<sup>[3]</sup>

### The SAFE approach

- Shout for help—ensure other people are aware there is a problem needing attention
- Approach the site with care ensuring it is . . .
- Free from other dangers (don’t become the next patient)
- Establish the events leading to the incident

Would you know how to alert the local emergency services in the country of your elective? If not, now is the time to deal with that knowledge deficit.

Irrespective of where you are—in a rural or urban setting—following the SAFE approach can help you protect your own safety and that of others, as well as giving you the opportunity to positively influence how the incident is subsequently managed. It is imperative that someone takes control of the incident to ensure no further deterioration occurs to the patient, that other staff and bystanders are kept safe, and that the right help arrives in a timely manner. If the scene is not safe, get help and stop anyone else from getting involved if not qualified to do so.

## The primary survey

If the need to intervene does arise, what exactly can you do as a medical student? This depends on several factors—for example, are you in the prehospital environment with few resources or within a setting with more resources and greater clinical supervision?

The primary survey is a rapid examination of a casualty to identify and treat life threatening problems (box 3). It prioritises those injuries likely to kill the patient first and encourages the clinician to use a simple ABCD method to avoid becoming distracted by non-life threatening injuries. For example, a deformed lower leg fracture could be limb threatening but not life threatening (see case study). In simple terms, the casualty should be rapidly assessed to determine if there are time critical injuries that require urgent medical intervention. cABCDE<sup>[3]</sup> is being used increasingly (box 3), where “c” refers to catastrophic external bleeding. This term

originally derives from military conflict and focuses on massive haemorrhage which, if not treated, would kill the casualty before airway and breathing problems were rectified.<sup>[4]</sup> It is important to try to correct each element of ABCDE before moving on to the next component. For example, if the patient has an obstructed airway—they may appear to be snoring—then make sure this is remedied with either a head tilt/chin lift, or, if there is a possibility of cervical spine injury, a jaw thrust would be more appropriate. Only once the airway is clear should breathing be assessed.

### **Overview of the primary survey<sup>[3]</sup>**

- Stem catastrophic external haemorrhage<sup>[4]</sup>; then assess...
- Airway (with cervical spine immobilisation). This is a mire of compromises and questions some of which are answered in the referenced consensus statements<sup>[5,6]</sup>;
- Breathing (with supplemental oxygen)—check rate, depth, equal chest expansion
- Circulation (external haemorrhage control)—check pulse rate, character, consider internal bleeding—or, more simply, blood on the floor and four places more
- Disability—look for head or spinal injury; is the patient alert or responsive to voice, pain or unresponsive? —the so called AVPU scale
- Exposure (examination of casualty at skin level)

The primary survey entails clinical skills which every medical student should be comfortable with before their departure on elective. These include assessing an airway for patency and determining both basic respiratory and cardiac parameters, while also being familiar with the AVPU responsiveness scale (see case study). A common incident to illustrate this, relevant to both prehospital and definitive care settings, is a cardiac arrest. You must call for expert help quickly and then assess the patient's airway patency, breathing, and circulatory functions before starting cardiopulmonary resuscitation.

The primary survey can be immediately translated to resource-poor settings/countries and, within the UK, this is why mountain rescue team members are trained to undertake this examination in such austere environments. Depending upon the location of your elective, in some resource-poor settings supplemental oxygen and drugs used to assist breathing may not be available or, at best, be heavily rationed. As such, in the absence of this intervention, you have to be pragmatic and ensure you can conduct a thorough chest examination and identify problems for senior staff to be aware of. If the patient is compliant and the situation permits it, help the patient into a position that makes their breathing easier. Equally, in terms of circulation, if bleeding is external use direct pressure over the wound with whatever is at hand BUT, appreciate that bleeding may also be internal and you can do nothing for that other than recognise the signs and symptoms of this and stress the urgency of the situation to other more senior staff. Occasionally, you may get no further with the primary survey than maintaining an airway – again be pragmatic – the airway needs to be open. Once the examination is completed remain alert for changes in the patient's ABCD as they can still deteriorate.

The primary survey can be applied both in prehospital and defined care settings when dealing with acutely ill medical or trauma patients. Assessing and prioritising a multiple acutely ill patient is a skill junior doctors use regularly, so being able to conduct this rapid examination is an important competency you need to acquire. Look out for opportunities where you can gain hands-on supervision to practise these skills before your elective.

## **To conclude . . .**

Managing an acutely ill patient can be a demanding task even for experienced clinicians in well-resourced countries<sup>[7]</sup>. If you can do nothing more than make a scene safe and summon senior medical or emergency help quickly you will have made a beneficial intervention. Remember, your own safety and that of others is paramount, so remain within your clinical competence and be mindful of what could go wrong if you intervene further.

## **Case study—Broken femur and prioritisation of primary survey assessments**

### **Importance of not being distracted by other injuries of lower priority while completing the primary survey**

Two medical students on elective in Borneo were walking along a beach. They noted a commotion at a building site nearby and saw that one of the builders had fallen. The students identified themselves as medical students and offered help. As part of their SAFE approach, they called for the local emergency services to respond. The injured builder was in pain and pointing to his right thigh. The students checked to ensure there was no risk of any further building site hazards and that the area around the builder was free from any immediate danger. There was no sign of obvious bleeding except a few cuts and grazes on the man's face and arms. The casualty's airway and breathing were checked first, and as the man was verbally communicating they were sure his airway was patent. Owing to the risk of spinal injury from the fall, the patient's cervical spine was immobilised by one of the students by holding the man's neck still. His chest was expanding symmetrically and his respiratory rate was regular with a central trachea, so the students were satisfied he was breathing well. The man's hands felt warm, and although it was not possible to perform a blood pressure reading, he had a palpable radial pulse and his heart rate was slightly elevated. Although they did not speak the language it was clear the casualty was alert throughout and seemed to be understood by the locals. Examination of the affected limb showed it was shorter, with some deformity and appreciable warmth in the skin. The students maintained spinal immobilisation, continually reassessed ABCDE in case there was any deterioration or changes in the man's condition, and remained with him until the emergency services arrived.

### **Acknowledgements:**

We thank Catherine Watt and Matt Livesey for constructive criticism of this article. We also acknowledge Mike Nelson, Alexandra Fane de Salis, Mike Peirson, and Laura Harrison for proofreading the work before it was submitted.

**Author contributions:** NRC devised and wrote the manuscript. CP also devised aspects of the work and provided guidance on clinical matters discussed in the article.

**Disclaimer:** Readers are advised that reading this article is not a substitute for obtaining the required clinical skills through further relevant practical training from suitably qualified organisations.

**Competing interests:** None declared.

**Provenance and peer review:** Commissioned; externally peer reviewed.

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