Step	Reason and patient-centred care considerations
8. Continue to slowly release air from the valve, deflating the cuff. Listen carefully to the Korotkoff sounds until they disappear.	The disappearance of the Korotkoff sound is the value for the diastolic blood pressure – known as the Fifth Korotkoff sound. Again, you need to note the pressure reading on the sphygmomanometer when the Korotkoff sounds disappear.
9. Continue to slowly deflate the cuff another 20–30mmHg, until you are completely sure that all of the sounds have disappeared, then rapidly deflate the cuff.	To ensure your measurement is accurate. If the BP needs to be rechecked immediately, because the measurement is not what was expected or is too low or too high, wait for 1–2 minutes before proceeding.
10. Perform steps 9–12 of the common steps (see pp. 8–9).	To ensure that: • the patient is safe, comfortable and receiving the appropriate care; • results have been documented in the patient's records; • equipment is clean and in working order.

Evidence base: BHS (2009); Dougherty and Lister (2011); Smith and Roberts (2011)

Measuring capillary refill time (CRT)

☑ **What is normal?**

Normal range < 2 seconds (< means less than).

☑ **Before you start**

Remember the common steps for all clinical measurements.

☑ **Essential equipment**

None

☑ **Care setting considerations**

Can be measured in any care setting.

Peripheral CRT is usually measured by using the fingernail bed, but the toenail bed can also be used. If using the fingernail bed ensure the arm

is at the level of the heart and if using the toenail bed ensure the leg is horizontal.

Central CRT can be assessed by pressing at the top of the sternum, using the same technique as fingernail bed or toenail bed.

☑ What to watch out for and action to take

Ask the patient if they have any problems with their peripheral circulation, for example Raynaud's disease, as this can prolong their CRT.

A prolonged CRT of greater than 2 seconds suggests poor peripheral perfusion. This may be normal if the patient is cold due to the ambient temperature, or if they are elderly or have a disease which reduces their peripheral circulation. A prolonged CRT in a limb that is warm, or if a patient is young and normally has good circulation requires further investigation.

Poor peripheral perfusion can be due to either a fall in BP and CO as the patient compensates by increasing their systemic vascular resistance (SVR) to ensure that blood flow to the vital organs of heart, brain, lungs, kidneys and liver is maintained for as long as possible.

☑ Helpful Hints – Do I …?

Gloves and aprons must be worn if contact with blood/body fluids/excreta is anticipated or the patient is in isolation.

Hand hygiene must be performed before touching a patient, before clean/aseptic procedures, after body fluid exposure/risk, after touching a patient and after touching a patient's surroundings.

Waste should be disposed of in a clinical waste bag if it is contaminated with blood/body fluids/excreta.

Step	Reason and patient-centred care considerations
1. Perform steps 1–8 of the common steps (see pp. 8–9).	To prepare the patient and yourself to undertake the skill.
2. Assess the limb temperature as you raise the hand to the level of the heart or the leg horizontally. Do they feel cool or warm?	To determine whether it will be possible to use CRT to measure peripheral perfusion accurately. If the patient has cool limbs measuring central CRT will provide a more accurate reflection of their capillary refill time.
3. Apply sufficient pressure to cause blanching to the padded area of the fingertip or toe, or an area at the top of the sternum on the chest. Maintain this pressure for 5 seconds.	Using the padded areas of the finger is more reliable than using nails as they may be painted, acrylic, or it can be difficult to determine the change in colour.

Step	Reason and patient-centred care considerations
4. When the pressure is released assess how many seconds it takes for the skin to return to the colour of the surrounding skin.	This should occur in less than 2 seconds.
5. Perform steps 9–12 of the common steps (see pp. 8–9).	To ensure that the: • patient is safe, comfortable and receiving the appropriate care; • results have been documented in the patient's records.

Evidence base: ALS (2011); Smith (2012)

Measuring body temperature (T)

☑ **What is normal?**

Normal adult range 36.0–37.0° C.

Normal child range 36.6–37.7° C.

☑ **Before you start**

Remember the common steps for all clinical measurements (pp. 8–9).

☑ **Essential equipment**

The correct thermometer for the site you are using. A number of different types are available: oral, tympanic, temporal and axilla are the sites most often used.

☑ **Field-setting considerations**

You need to carefully consider which site is the most appropriate to use to measure your patient's temperature. For example, you would not use an oral thermometer if you were concerned that the patient might bite it, or if they had difficulty breathing through their nose. Tympanic thermometers are thought to be the most accurate and are used very frequently, but you would not use this site if a patient had wax or an infection in their ear canal or was younger than three months old.

Do not take a child's temperature immediately after they have had a bath or been wrapped in blankets, as this will not be an accurate recording.

☑ **Care-setting considerations**

Can be measured in any care setting.