

Core procedures

Guidance for assessors and foundation doctors

What are core procedures?

Core procedures are those 15 procedures set by the General Medical Council (GMC) for foundation year 1 (F1).

The GMC requires demonstration of competence in all 15 procedures in order for provisionally registered doctors with a licence to practise to be eligible for full registration.

Further information on this can be found via the GMC website:

http://www.gmc-

uk.org/Outcomes_to_be_demonstrated_by_provisionally_registered_doctors_F1.pdf_26990221. pdf

How does it work?

It is a requirement that foundation doctors provide evidence that they can satisfactorily perform each of the 15 procedures at least once during F1. Satisfactory completion should be recorded within the e-portfolio.

It is vital that patient confidentiality is maintained and patient identifiable details are not included when recording these procedures.

The foundation doctor must record and should be able to competently perform and teach undergraduates the following 15 procedures:

- Venepuncture
- IV Cannulation
- Prepare and administer IV medication and injections and fluids
- Arterial puncture in an adult
- Blood culture (peripheral)
- IV infusion including the prescription of fluids
- IV infusion of blood and blood products
- Injection of local anaesthetic to skin
- Subcutaneous injection
- Intramuscular injection
- Perform and interpret an ECG
- Perform and interpret peak flow
- Urethral catheterisation (male)
- Urethral catheterisation (female)
- Airway care including simple adjuncts.

What must foundation doctors demonstrate for satisfactory completion?

There are both generic requirements and specific procedure requirements for each procedure (detailed overleaf). Employers will also typically have protocols for the safe performance of each procedure.

The generic requirements are:

- introduce themselves
- check the patient's identity
- confirm that the procedure is required
- explain the procedure to the patient (including possible complications and risks) and gain informed consent for the procedure (under direct supervision where appropriate)
- take all necessary steps to reduce the risk of infection, including washing hands, wearing gloves and maintaining a sterile field if appropriate
- dispose of all equipment in the appropriate receptacles
- document the procedure in the notes; and
- arrange appropriate aftercare/monitoring.

REMEMBER: it is vital that foundation doctors recognise the limits of their competence and seek advice and help where appropriate.

Who can assess core procedures?

All assessors must be trained in the procedure, assessment and feedback methodology. Only the following assessors can be used:

- consultants/GPs
- specialist/specialty registrars
- staff grade/associate specialists
- trainee doctors more senior than F1
- fully qualified nurses; and
- allied healthcare professionals.

Different assessors should be used for each encounter wherever possible.

How frequently should core procedures be assessed?

F1 doctors must demonstrate that they can satisfactorily perform of each core procedure at least once during F1. It is the responsibility of the foundation doctor to choose the timing, procedure and assessor.

What are the required procedures in F2?

There are no required procedures for F2. The core procedures from F1 do not need to be repeated in F2, but evidence of the F1 sign off is required for successful completion of the Foundation Programme. It should also be recognised that with practice, the doctor will be expected to demonstrate continuing improvement of skills in whichever procedure they perform, within the spiral curriculum framework.

How is the form accessed?

Core procedure assessment forms are available within the e-portfolio. Each procedure requires an individual assessment form to be complete. If the assessor is a supervisor with access to the foundation doctor's e-portfolio, they can access the form themselves. However, if this is not the case, the foundation doctor could either send an electronic ticket or log in and complete the form with the assessor. If the form is completed using the foundation doctor's login, an automatic email will be sent to the assessor and the assessment will be flagged as self-entered.

Information overleaf provides the generic and procedure specific requirements for each of the 15 procedures. These requirements are also duplicated on the assessment forms.

Core procedure requirements

1. Venepuncture guidance

REMEMBER: always refer to local protocol where available.

Generic requirements:

- introduce themselves
- check the patient's identity
- confirm that the procedure is required
- explain the procedure to the patient (including possible complications and risks) and gain informed consent for the procedure (under direct supervision where appropriate)
- take all necessary steps to reduce the risk of infection, including washing hands, wearing gloves and maintaining a sterile field if appropriate
- dispose of all equipment in the appropriate receptacles
- document the procedure in the notes; and
- arrange appropriate aftercare/monitoring.

Procedure specific requirements:

- choose appropriate needle or cannula
- have appropriate vials to hand
- choose a suitable, palpable vein after applying tourniquet
- insert needle with bevel upwards and advance 2-3mm
- withdraw blood into syringe or allow vacuum to withdraw
- ensure bottles are correctly filled and cross matched where appropriate
- release tourniquet, remove needle and dispose
- press on site
- label bottles and forms.

2. IV Cannulation guidance

REMEMBER: always refer to local protocol where available.

Generic requirements:

- introduce themselves
- check the patient's identity
- confirm that the procedure is required
- explain the procedure to the patient (including possible complications and risks) and gain informed consent for the procedure (under direct supervision where appropriate)
- take all necessary steps to reduce the risk of infection, including washing hands, wearing gloves and maintaining a sterile field if appropriate
- dispose of all equipment in the appropriate receptacles
- document the procedure in the notes; and
- arrange appropriate aftercare/monitoring.

- choose appropriate cannula
- when inserting cannula.lower angle and advance a few mm on seeing a flashback
- withdraw needle slightly and advance the cannula in the vein

- release tourniquet, apply pressure over vein beyond the cannula's tip and remove needle
- connect cannula to interlink or cap off
- secure cannula and date/time insertion on dressing
- flush with saline.

3. Prepare and administer IV medications, injections and fluids guidance

REMEMBER: always refer to local protocol where available.

Generic requirements:

- introduce themselves
- check the patient's identity
- confirm that the procedure is required
- explain the procedure to the patient (including possible complications and risks) and gain informed consent for the procedure (under direct supervision where appropriate)
- take all necessary steps to reduce the risk of infection, including washing hands, wearing gloves and maintaining a sterile field if appropriate
- dispose of all equipment in the appropriate receptacles
- document the procedure in the notes; and
- arrange appropriate aftercare/monitoring.

Procedure specific requirements:

- check medication name, dose and expiry date
- after opening ampoule, insert needle, invert, withdraw liquid
- drying powder: clean rubber bung, allow to dry, inject checked dilutent, mix until all powder dissolved
- infusions: choose dilutent, volume and concentration
- add drug after drawing up as above, agitate bag and label with patient's details, added drug with dose, and sign. Add identifying personal contact details
- prescribe fluid, drug and infusion rate.

4. Arterial puncture in an adult guidance

REMEMBER: always refer to local protocol where available.

Generic requirements:

- introduce themselves
- check the patient's identity
- confirm that the procedure is required
- explain the procedure to the patient (including possible complications and risks) and gain informed consent for the procedure (under direct supervision where appropriate)
- take all necessary steps to reduce the risk of infection, including washing hands, wearing gloves and maintaining a sterile field if appropriate
- dispose of all equipment in the appropriate receptacles
- document the procedure in the notes; and
- arrange appropriate aftercare/monitoring.

- prepare Arterial Blood Gas (ABG) syringe, skin cleaning material
- check expiry date and expel Heparin

- clean and palpate artery with index and middle fingers
- insert needle between fingers at 45 degree angle until blood enters syringe. Arterial pressure will usually fill the syringe
- withdraw and ask assistant to apply pressure via cotton wool ball for five minutes
- apply filter to syringe, hold upright and expel air, roll to mix, confirm label and send to lab.

5. Blood culture (peripheral) guidance

REMEMBER: always refer to local protocol where available.

Generic requirements:

- introduce themselves
- check the patient's identity
- confirm that the procedure is required
- explain the procedure to the patient (including possible complications and risks) and gain informed consent for the procedure (under direct supervision where appropriate)
- take all necessary steps to reduce the risk of infection, including washing hands, wearing gloves and maintaining a sterile field if appropriate
- dispose of all equipment in the appropriate receptacles
- document the procedure in the notes; and
- arrange appropriate aftercare/monitoring.

Procedure specific requirements:

- choose fresh site(s). Do not use existing cannulae
- remove caps from culture bottles and clean surfaces of rubber seals
- discard first pair of gloves, rewash hands, use fresh gloves
- without touching skin, advance needle into vein
- withdraw blood into syringe or vacuum container
- if syringe: inoculate 5-10 ml into each bottle (start with aerobic)
- check form and despatch to microbiology laboratory.

6. IV infusion including prescription of fluids guidance

REMEMBER: always refer to local protocol where available.

Generic requirements:

- introduce themselves
- check the patient's identity
- confirm that the procedure is required
- explain the procedure to the patient (including possible complications and risks) and gain informed consent for the procedure (under direct supervision where appropriate)
- take all necessary steps to reduce the risk of infection, including washing hands, wearing gloves and maintaining a sterile field if appropriate
- dispose of all equipment in the appropriate receptacles
- document the procedure in the notes; and
- arrange appropriate aftercare/monitoring.

- review past medical history and undertake clinical assessment of cardiovascular status and state of hydration
- work in partnership with a member of the nursing staff
- check medication name, dose and expiry date
- open ampoule, insert needle, invert, withdraw liquid
- drying powder: clean rubber bung, allow to dry, inject checked dilutent, mix until all powder dissolved
- infusions: choose dilutent, volume and concentration
- add drug after drawing up as above, agitate bag and label with patient's details, added drug with dose, and sign. Add identifying personal contact details,
- choose fluid, concentration and the need for additional potassium
- prescribe with rate/ time for volume to run through.

7. IV infusion of blood and blood products guidance

REMEMBER: always refer to local protocol where available.

Generic requirements:

- introduce themselves
- check the patient's identity
- confirm that the procedure is required
- explain the procedure to the patient (including possible complications and risks) and gain informed consent for the procedure (under direct supervision where appropriate)
- take all necessary steps to reduce the risk of infection, including washing hands, wearing gloves and maintaining a sterile field if appropriate
- dispose of all equipment in the appropriate receptacles
- document the procedure in the notes; and
- arrange appropriate aftercare/monitoring.

Procedure specific requirements:

- review past medical history and undertake clinical assessment of cardiovascular status and state of hydration
- work in partnership with a member of the nursing staff
- determine need for blood product
- prescribe blood product
- support nursing staff in checking right patient, right blood, in date.

8. Injection of local anaesthetic to skin guidance

REMEMBER: always refer to local protocol where available.

Generic requirements:

- introduce themselves
- check the patient's identity
- confirm that the procedure is required
- explain the procedure to the patient (including possible complications and risks) and gain informed consent for the procedure (under direct supervision where appropriate)
- take all necessary steps to reduce the risk of infection, including washing hands, wearing gloves and maintaining a sterile field if appropriate
- dispose of all equipment in the appropriate receptacles
- document the procedure in the notes; and

• arrange appropriate aftercare/monitoring.

Procedure specific requirements:

- identify Lidocaine ampoule and check date and strength
- with appropriate sterile technique draw up correct dose
- inject at 90 degree angle and slowly pushing the plunger
- wait before withdrawing to reduce the risk of backtracking.

9. Subcutaneous injection guidance

e.g. insulin or LMW heparin

REMEMBER: always refer to local protocol where available.

Generic requirements:

- introduce themselves
- check the patient's identity
- confirm that the procedure is required
- explain the procedure to the patient (including possible complications and risks) and gain informed consent for the procedure (under direct supervision where appropriate)
- take all necessary steps to reduce the risk of infection, including washing hands, wearing gloves and maintaining a sterile field if appropriate
- dispose of all equipment in the appropriate receptacles
- document the procedure in the notes; and
- arrange appropriate aftercare/monitoring.

Procedure specific requirements:

- inject at 90 degree angle and slowly push the plunger
- wait before withdrawing to reduce the risk of backtracking.

10. Intramuscular injection guidance

REMEMBER: always refer to local protocol where available.

Generic requirements:

- introduce themselves
- check the patient's identity
- confirm that the procedure is required
- explain the procedure to the patient (including possible complications and risks) and gain informed consent for the procedure (under direct supervision where appropriate)
- take all necessary steps to reduce the risk of infection, including washing hands, wearing gloves and maintaining a sterile field if appropriate
- dispose of all equipment in the appropriate receptacles
- document the procedure in the notes; and
- arrange appropriate aftercare/monitoring.

- carefully select safe site to inject
- pull back the plunger. If no blood appears, inject by slowly pushing the plunger and wait before withdrawing to reduce the risk of backtracking
- if blood appears, completely withdraw the needle, replace the needle and start again.

11. Perform and interpret ECG guidance

REMEMBER: always refer to local protocol where available.

Generic requirements:

- introduce themselves
- check the patient's identity
- confirm that the procedure is required
- explain the procedure to the patient (including possible complications and risks) and gain informed consent for the procedure (under direct supervision where appropriate)
- take all necessary steps to reduce the risk of infection, including washing hands, wearing gloves and maintaining a sterile field if appropriate
- dispose of all equipment in the appropriate receptacles
- document the procedure in the notes; and
- arrange appropriate aftercare/monitoring.

Procedure specific requirements:

- attach monitor leads in the correct places
- run 12-lead ECG and rhythm strip.

Foundation doctors should be able to recognise and interpret ECGs showing the following:

- i) normal pattern
- ii) common QRS abnormalities: LBBB, RBBB, LVH, RVH
- iii) acute STEMI and NSTEMI
- iv) bradycardia
- v) broad and narrow complex tachyarhthmias
- vi) hyperkalaemia
- vii) VT and VF.

12. Perform and interpret peak flow guidance

REMEMBER: always refer to local protocol where available.

Generic requirements:

- introduce themselves
- check the patient's identity
- confirm that the procedure is required
- explain the procedure to the patient (including possible complications and risks) and gain informed consent for the procedure (under direct supervision where appropriate)
- take all necessary steps to reduce the risk of infection, including washing hands, wearing gloves and maintaining a sterile field if appropriate
- dispose of all equipment in the appropriate receptacles
- document the procedure in the notes; and
- arrange appropriate aftercare/monitoring.

Procedure specific requirements:

- demonstrate manoeuvre
- observe patient performance three times
- instruct patient to record best of three.

Foundation doctors should be able to recognise and interpret PEFs showing the following:

i) normal (predicted based on age, height, sex)

ii) variability.

13. Urethral catheterisation (male) guidance

REMEMBER: always refer to local protocol where available.

Generic requirements:

- introduce themselves
- check the patient's identity
- confirm that the procedure is required
- explain the procedure to the patient (including possible complications and risks) and gain informed consent for the procedure (under direct supervision where appropriate)
- take all necessary steps to reduce the risk of infection, including washing hands, wearing gloves and maintaining a sterile field if appropriate
- dispose of all equipment in the appropriate receptacles
- document the procedure in the notes; and
- arrange appropriate aftercare/monitoring.

Procedure specific requirements:

- administer lidocaine gel (or equivalent)
- insert the catheter slowly into the bladder, advancing a further 4-5 cm after urine is seen, inflate the balloon (as described on catheter cuff), drain the urine and affix a catheter valve or drainage bag.

14. Urethral catheterisation (female) guidance

REMEMBER: always refer to local protocol where available.

Generic requirements:

- introduce themselves
- check the patient's identity
- confirm that the procedure is required
- explain the procedure to the patient (including possible complications and risks) and gain informed consent for the procedure (under direct supervision where appropriate)
- take all necessary steps to reduce the risk of infection, including washing hands, wearing gloves and maintaining a sterile field if appropriate
- dispose of all equipment in the appropriate receptacles
- document the procedure in the notes; and
- arrange appropriate aftercare/monitoring.

Procedure specific requirements:

• insert the catheter slowly into the bladder, advancing a further 4-5 cm after urine is seen, inflate the balloon (as described on catheter cuff), drain the urine and affix a catheter valve or drainage bag.

15. Airway care including simple adjuncts guidance

E.g. Guedel airway or laryngeal masks REMEMBER: always refer to local protocol where available.

Generic requirements:

• introduce themselves

- check the patient's identity
- confirm that the procedure is required
- explain the procedure to the patient (including possible complications and risks) and gain informed consent for the procedure (under direct supervision where appropriate)
- take all necessary steps to reduce the risk of infection, including washing hands, wearing gloves and maintaining a sterile field if appropriate
- dispose of all equipment in the appropriate receptacles
- document the procedure in the notes; and
- arrange appropriate aftercare/monitoring.

Procedure specific requirements:

• follow principles of basic life support training including airway manoeuvres correctly uses adjuncts: oropharyngeal and nasopharyngeal.