



Practical skills and procedures

General Medical Council

Practical skills and procedures

Purpose of the practical skills and procedures

We set the standards and requirements for all stages of medical education and training in [Promoting excellence: standards for medical education and training](#) (2016, pdf) and hold a list of universities entitled to award a medical degree recognised as a UK primary medical qualification.

Our [Outcomes for graduates](#) (2018) set out what newly qualified doctors from all medical schools must know and be able to do.

The *Practical skills and procedures* outline the core set of practical skills and procedures, and minimum level of performance that newly qualified doctors must have when they start work for the first time so they can practise safely.

Provisions for encouraging diversity in medicine

We believe that equality, diversity and inclusion are integral to our work as a regulator. We are committed to supporting diversity in medicine.

We expect organisations to make supportive and pragmatic adjustments for learners to enable achievement of the practical skills and procedures, including where learners have long-term health conditions and disabilities, while also abiding by the Equality Act 2010 and the Disability Discrimination Act 1995.

Students need to be able to perform the practical skill or procedure using the specified method, but reasonable adjustments could be made to other aspects. For example, an adapted chair if the student needs to sit down while carrying out the procedure. Further detailed information can be found in our

publications [Welcomed and valued](#) (2019, pdf), [Promoting Excellence](#) (2016, pdf) and [Promoting excellence - equality and diversity considerations](#) (2017, pdf).

How the procedures relate to our other standards and guidance

Our *Outcomes for graduates* (the outcomes) set out what newly qualified doctors from all medical schools who award UK primary medical qualifications must know and be able to do. The *Practical skills and procedures* supplements the outcomes by defining the core diagnostic, therapeutic and practical skills and procedures newly qualified doctors must be able to perform safely and effectively, and identifying the level of supervision needed to ensure patient safety.

Promoting excellence sets out the standards and requirements for the management and delivery of undergraduate and postgraduate medical education and training. The outcomes and the *Practical skills and procedures* set out what we expect newly qualified doctors to be able to know and do and should be read alongside *Promoting excellence*.

We expect all newly qualified doctors to practise in accordance with the professional requirements set out in *Good medical practice* and related guidance.

Responsibility for delivering the procedures

- **Medical schools** must provide an education that allows newly qualified doctors to meet all the outcomes, including the practical skills and procedures specified in this list, and therefore to be fit to practise safely as a doctor when they graduate.

- **Local education providers**, working with medical schools, must provide and quality manage clinical placements and learning opportunities that give medical students the opportunities to build knowledge, skills and practical experience to meet the outcomes and to safely and effectively carry out the practical skills and procedures by the time they qualify.
- **Medical students** are responsible for their own learning. They should refer to the outcomes and the practical skills and procedures specified in this list during their undergraduate education to understand what we expect them to be able to know and do by the time they graduate.

What must newly qualified doctors demonstrate for satisfactory completion?

Three levels of competence

Safe to practise in simulation

The newly qualified doctor is safe to practise in a simulated setting and is ready to move to direct supervision. This means that the newly qualified doctor will not have performed the procedure on a real patient during medical school, but on a simulated patient or manikin. This means that they will have some knowledge and skill in the procedure but will require direct supervision when performing the procedure on patients.

Safe to practise under direct supervision

The newly qualified doctor is ready to perform the procedure on a patient under direct supervision. This means that the newly qualified doctor will have performed the procedure on real patients during medical school under direct supervision. By direct supervision, we mean that the medical student or newly qualified doctor will have a supervisor with them observing their practice as they perform the procedure. As the newly qualified doctor's experience and skill becomes sufficient to allow them to perform the procedure safely they will move to performing the procedure under indirect supervision.

Safe to practise under indirect supervision

The newly qualified doctor is ready to perform the procedure on a patient under indirect supervision. This means that the newly qualified doctor will have performed the procedure on real patients during medical school under direct supervision at first and, as their experience and skill became sufficient to allow them to perform the procedure safely, with indirect supervision. By indirect supervision, we mean that the newly qualified doctor is able to access support to perform the procedure if they need to – for example by locating a colleague and asking for help.

Generic requirements

There are both generic requirements and specific procedure requirements for each procedure. Newly qualified doctors should comply with local and national guidelines, and employers will also typically have protocols for the safe performance of each procedure which should be followed.

Generic requirements for each procedure

The following generic requirements apply to each procedure:

- 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)
- follow universal precautions to reduce the risk of infections, including:
 - control the risk of cross infection, and take appropriate steps for personal safety
 - follow approved processes for cleaning hands before procedures or surgical operations
 - correctly use personal protective equipment (for example gloves, gowns and masks)
 - employ safe disposal of clinical waste, needles and other sharps
 - dispose of all equipment in the appropriate receptacles

- label samples appropriately according to local guidelines
- accurately document the procedure according to local guidelines
- ensure confidentiality
- interpret any results and act appropriately on them;* and
- arrange appropriate aftercare/monitoring.

It's important to remember that newly qualified doctors who enter the Foundation Programme will work under educational and clinical supervision and in a multidisciplinary team. In accordance with the Foundation Programme Curriculum, they will need to demonstrate that they are refining their skills and that they are able to take responsibility appropriately whilst recognising and working within the limits of their competence.

Assessment of patient needs

No	Procedure	Description	Level of competence
1	Take baseline physiological observations and record appropriately	Measure temperature, respiratory rate, pulse rate, blood pressure, oxygen saturations and urine output.	Safe to practise under indirect supervision
2	Carry out peak expiratory flow respiratory function test	Explain to a patient how to perform a peak expiratory flow, assess that it is performed adequately and interpret results.	Safe to practise under indirect supervision
3	Perform direct ophthalmoscopy	Perform basic ophthalmoscopy and identify common abnormalities.	Safe to practise under indirect supervision
4	Perform otoscopy	Perform basic otoscopy and identify common abnormalities.	Safe to practise under indirect supervision

Diagnostic procedures

No	Procedure	Description	Level of competence
5	Take blood cultures	Take samples of venous blood to test for the growth of infectious organisms.	Safe to practise under direct supervision
6	Carry out arterial blood gas and acid base sampling from the radial artery in adults	Insert a needle into a patient's radial artery (in the wrist) to take a sample of arterial blood and interpret the results.	Safe to practise under direct supervision

* The newly qualified doctor must recognise the need to seek advice on unexpected or unusual results.

7	Carry out venepuncture	Insert a needle into a patient's vein to take a sample of blood for testing. Make sure that blood samples are taken in the correct order, placed in the correct containers, that these are labelled correctly and sent to the laboratory promptly.	Safe to practise under indirect supervision
8	Measure capillary blood glucose	Measure the concentration of glucose in the patient's blood at the bedside using appropriate equipment. Record and interpret the results.	Safe to practise under indirect supervision
9	Carry out a urine multi dipstick test	Explain to patient how to collect a midstream urine sample. Test a sample of urine to detect abnormalities. Perform a pregnancy test where appropriate.	Safe to practise under indirect supervision
10	Carry out a 3- and 12-lead electrocardiogram	Set up a continuous recording of the electrical activity of the heart, ensuring that all leads are correctly placed.	Safe to practise under indirect supervision
11	Take and/or instruct patients how to take a swab	Use the correct technique to apply sterile swabs to the nose, throat, skin and wounds. Make sure that samples are placed in the correct containers, that these are labelled correctly and sent to the laboratory promptly and in the correct way.	Safe to practise under indirect supervision for nose, throat, skin or wound swabs

Patient care

No	Procedure	Description	Level of competence
12	Perform surgical scrubbing up	Follow approved processes for cleaning hands and wearing appropriate personal protective equipment before procedures or surgical operations.	Safe to practise under direct supervision
13	Set up an infusion	Set up and run through an intravenous infusion. Have awareness of the different equipment and devices used.	Safe to practise under direct supervision
14	Use correct techniques for moving and handling, including patients who are frail	Use, and/or direct other team members to use, approved methods for moving, lifting and handling people or objects, in the context of clinical care, using methods that avoid injury to patients, colleagues, or oneself.	Safe to practise under indirect supervision

Prescribing

No	Procedure	Description	Level of competence
15	Instruct patients in the use of devices for inhaled medication	Explain to a patient how to use an inhaler correctly, including spacers, and check that their technique is correct.	Safe to practise under indirect supervision
16	Prescribe and administer oxygen	Prescribe and administer oxygen safely using a delivery method appropriate for the patient's needs and monitor and adjust oxygen as needed.	Safe to practise under indirect supervision
17	Prepare and administer injectable (intramuscular, subcutaneous, intravenous) drugs	Prepare and administer injectable drugs and prefilled syringes.	Safe to practise under direct supervision

Therapeutic procedures

No	Procedure	Description	Level of competence
18	Carry out intravenous cannulation	Insert a cannula into a patient's vein and apply an appropriate dressing.	Safe to practise under direct supervision
19	Carry out safe and appropriate blood transfusion	Following the correct procedures, give a transfusion of blood (including correct identification of the patient and checking blood groups). Observe the patient for possible reactions to the transfusion, and take action if they occur.	Experienced in a simulated setting; further training required before direct supervision
20	Carry out male and female urinary catheterisation	Insert a urethral catheter in both male and female patients.	Safe to practise under direct supervision
21	Carry out wound care and basic wound closure and dressing	Provide basic care of surgical or traumatic wounds and apply dressings appropriately.	Safe to practise under direct supervision
22	Carry out nasogastric tube placement	Pass a tube into the stomach through the nose and throat for feeding and administering drugs or draining the stomach's contents. Know how to ensure correct placement.	Safe to practise in simulation
23	Use local anaesthetics	Inject or topically apply a local anaesthetic. Understand maximum doses of local anaesthetic agents.	Safe to practise under direct supervision

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