



Using the *National undergraduate curriculum in surgery*

How to use this summary document

This document is intended to support students to identify and pursue their own learning needs, and to help those who train students with planning. It is summarised from the *National Undergraduate Curriculum in Surgery* and should be read in conjunction with this. This document summarises the recommended topics (with learning objectives for each) and key skills. These are relevant to all students, irrespective of their subsequent career path.

For students

Before starting in a placement, you should identify which areas to focus on. Remember the topics common to all surgical specialties. You will need to refer to the curriculum for the learning objectives of each topic. There are some topics that you will not cover easily because your placements, so you should find a way to cover these too.

For those teaching students

Please familiarise yourself with the topics that all future doctors are expected to know pertaining to your specialty and those common to all specialties. You should also consider the list of procedures and skills that are expected. You may need to run separate skills or clinical examination teaching sessions to address these. You may wish to consider where particular learning opportunities are needed for the topics that are unlikely to be covered. The conditions listed are the minimum for any future doctor. The curriculum has additional resources for those aiming to be surgeons.

For all

The RCS guide *Learning in Operating Theatres* and the section of the *National Undergraduate Curriculum in Surgery* entitled *Ways of teaching and learning in surgery* may be helpful. All are available on the website: www.rcseng.ac.uk.

| Please also refer to: | www.rcseng.ac.uk section | Link |
|---|--|---|
| <i>National Undergraduate Curriculum in Surgery</i> | Careers | www.rcseng.ac.uk/national-undergraduate-curriculum-in-surgery |
| <i>Learning in Operating Theatres</i> | Publications | www.rcseng.ac.uk/learning-in-operating-theatres |
| <i>Avoiding unconscious bias - a guide for surgeons. How to welcome people and focus on the task not the individual</i> | Publications | www.rcseng.ac.uk/avoiding-unconscious-bias |
| <i>Mentoring guide Simple practical guide – support outside the training structures.</i> | Publications | https://www.rcseng.ac.uk/library-and-publications/college-publications/docs/gsp-mentoring/ |
| <i>Careers in Surgery</i> | Careers | https://www.rcseng.ac.uk/careers-in-surgery/careers-support/careers-events-and-resources/resources-and-links/ |

Interventional procedures and practical skills

The section on interventional procedures and practical skills lists the key skills and interventional procedures that should be covered. You should review this list at every placement as most can be addressed in any specialty.

Essential interventional procedures, as mandated by the GMC (learning objectives 24-31 from *Tomorrow's Doctors*):

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| 1 | 24. Use of local anaesthetics |
| 2 | 25. Skin suturing |
| 3 | 26. Wound care and basic wound dressing |
| 4 | 28. Giving information about the procedure, obtaining and recording consent, and ensuring appropriate aftercare procedure. |
| 5 | 29. Hand washing (including surgical 'scrubbing up') |
| 6 | 30. Use of personal protective equipment (gloves, gowns, masks) |
| 7 | 31. Infection control in relation to procedures |
| 8 | 32. Safe disposal of clinical waste, needles and other 'sharps' |

Examinations and other essential practical skills:

| | |
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| 9 | Removal of stitches and staples |
| 10 | Applications of dressings and bandages |
| 11 | Examination of a lump (e.g. its size, consistency, location, mobility and whether it is tender, pulsatile or transilluminates) |
| 12 | Assessment of a wound |
| 13 | Examination for fitness for surgery (chest, heart, neck and mouth opening) |
| 14 | Examination of the abdomen |
| 15 | P.R. examination |
| 16 | Examination of the groin |
| 17 | Examination of the scrotum |
| 18 | Examination of the soft tissues of the neck |
| 19 | Examination of pulses |
| 20 | Examination of the breast |
| 21 | Examination of the hip |
| 22 | Examination of the knee |
| 23 | Examination of the back |
| 24 | Examination of the ear |
| 25 | Examination of the nose |
| 26 | Examination of the throat |

The key surgical conditions

| | | Usual surgical specialty | Also seen in | |
|----|--|--------------------------|--------------|-----|
| 1 | Abdominal pain | Gen | | |
| 2 | Abdominal swelling | Gen | | |
| 3 | Change in bowel habit / rectal bleeding | Gen | | |
| 4 | Vomiting blood | Gen | | |
| 5 | Difficulty swallowing / dyspepsia /dysphagia | Gen | | |
| 6 | Jaundice | Gen | | |
| 7 | Lumps in groin | Gen | | |
| 8 | Lumps in scrotum / scrotal pain | Urol | | |
| 9 | Pain in loin | Urol | | |
| 10 | Urinary retention or flow obstruction | Urol | | |
| 11 | Haematuria (including stones and tumours) | Urol | | |
| 12 | Leg ulceration | Vasc | Neuro | T&O |
| 13 | Painful and/or paralysed limb | Vasc | Neuro | T&O |
| 14 | Breast lumps and nipple discharge | Gen (Breast) | Plast | |
| 15 | Lumps in the neck | ENT | MaxF | |
| 16 | Nose bleeds (epistaxis) | ENT | MaxF | |
| 17 | Ear discharge / pain | ENT | MaxF | |
| 18 | Deafness | ENT | MaxF | |
| 19 | Acute airway obstruction in adults and children | ENT | MaxF | |
| 20 | Upper airway infection and rhino-sinusitis | ENT | MaxF | |
| 21 | Fractures or dislocations with displacement or wound | T&O | Plast | |
| 22 | Fractures without displacement | T&O | | |
| 23 | Swollen painful joint | T&O | | |
| 24 | Back pain and/or sciatica (including cauda equina) | Neuro | T&O | |
| 25 | Peripheral nerve injuries / palsies | Neuro | Plast | T&O |
| 26 | Raised intracranial pressure / Intracranial blood clots and intracranial mass lesions | Neuro | Gen | |
| 27 | Limping child | PaedS | T&O | |
| 28 | Groin lump in child | PaedS | | |
| 29 | Consent for surgery including mental capacity | ALL | | |
| 30 | Caring for the post-operative patient, including nutrition, enhanced recovery and the critically ill patient; advice re return to activities | ALL | | |
| 31 | Understanding wound healing | ALL | Plast | |
| 32 | Trauma including head injury | ALL | | |
| 33 | Sepsis and infection | ALL | | |
| 34 | Surgical safety (WHO checklist, minimising complications, errors, communication and team-working) | ALL | | |
| 35 | Caring for the patient before and after surgery including fitness | ALL | Cardio | |

Cardiothoracic surgery: printable one-page summary of key conditions

Common to all specialties

| | |
|----|--|
| 29 | Consent for surgery including mental capacity |
| 30 | Caring for the post-operative patient, including nutrition, enhanced recovery and the critically ill patient; advice re return to activities |
| 31 | Understanding wound healing |
| 32 | Trauma including head injury |
| 33 | Sepsis and infection |
| 34 | Surgical safety (WHO checklist, minimising complications, errors, communication and team-working) |
| 35 | Caring for the patient before and after surgery including fitness |

Cardiothoracic surgery

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| 35 | Caring for the patient before and after surgery including fitness |
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Additional points to note

- While there are many things that students can learn in a placement in cardio-thoracic surgery, there are no specific conditions that every doctor should be expected to know about.
- A number of basic surgical principles can be taught, for example: [from main curriculum]
 - Concepts of surgery: The practicalities of operations include removing tissue, releasing collections of fluid, unblocking vessels or other tubes, repairing tissue and rearranging anatomy.
 - Every doctor must be able to discuss in general terms the risks and benefits of different courses of action and understand complications.
- There is overlap with other interventional specialties, and surgery is linked with anaesthesia, interventional radiology and emergency medicine.

If you have any comments about this document or the *National Undergraduate Curriculum in Surgery*, please contact the College via careers@rcseng.ac.uk .