

Royal College of Surgeons

ADVANCING SURGICAL CARE

CAREERS in Surgery

No I want to be a surgeon!

What kind of surgeon?



How do I become a surgeon!

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Introduction

Surgery is a diverse, challenging and rewarding career. Often referred to as a craft specialty, surgery involves both the intellectual rigour of a medical career and the manual dexterity required for complex and intricate procedures. If you enjoy work that is quite literally 'hands on', surgery could be the career for you.

This booklet is perfect if you are a student or early-years trainee who wants more information on the training pathway and the opportunities available to you throughout this exciting career.

You can find more information and guidance on our website at www.rcseng.ac.uk/careers



"Operating is exciting, directly treating patients is rewarding and working with a team of surgeons, professional colleagues and patients is a privilege."

CHRIS DAVIS, SPECIALTY TRAINEE (ST6) IN PLASTIC SURGERY



Training pathway

Once you have decided that you want to pursue a surgical career, it's time to start planning. This section covers the most common pathway to becoming a consultant in the UK, although there are other options available to you.

You can become an affiliate member of the RCS before taking your MRCS exam. Membership entitles you to discounts on interview skills and portfolio workshops, access to surgeons across various specialties as well as thousands of resources.

Find out more at www.rcseng.ac.uk/join-affiliates



4 - 6 years

Entry method:

Application, admission test and interview

Prerequisites:

At least three very good A-Levels in relevant subjects, plus good GCSEs

Examination:

MBBS. MBCHB

On completion:

Provisional registration with the GMC

Foundation training

2 years

Entry method:

Online application (ranked)

Prerequisites:

Provisional registration with the GMC

Examination:

Part A of the MRCS may be taken

On completion:

Full registration with the GMC

MRCS Part A

Multiple choice question (MCQ) written exam that can be taken during foundation or first year of core training.

Always check the entry requirements for your specialty. Neurosurgery and cardiothoracics, for example, have a different entry point into specialty training.

Senior Medical appointment



Post-CCT training, consultant post etc.

Core training

2 years

Entry method:

Central recruitment with application and selection centre or interview

Prerequisites:

Full GMC registration and completion of foundation competencies

Examination:

MRCS (must complete Part A and Part B during core training)

On completion:

MRCS qualification

MRCS Part B

Clinical, practical exam that must be completed prior to starting specialist training.

The MRCS exams take place three times a year in the UK. We recommend booking in advance to ensure you can complete both Part A and Part B prior to starting your specialty training. Find out more at www.rcseng.ac.uk/exams

Specially training

Approximately 6 years

Entry method:

Application form, selection centre and interview

Prerequisites:

MRCS examination, successful completion of core training

Examination:

Intercollegiate specialty exam (FRCS)

On completion:

Full registration with the GMC

FRCS

This exam must be completed in order to gain a Certificate of Completion of Training (CCT).

Your MRCS and FRCS exams entitle you to become a member or fellow of one of the royal colleges. In addition to your post nominals, membership of the Royal College of Surgeons of England provides many benefits, including access to journals, newsletters, support, guidance and discounts on courses and events.

Find out more at www.rcseng.ac.uk/membership

Alternative career paths and working options

There are various working options available throughout a career in surgery. It is important that you understand what is available to you and that you plan accordingly no matter what career path you decide to take.

Specialty and associate specialist surgeons (SAS)

If you have entered surgical training from another country or medical field, or have decided to leave the traditional training route, you may consider becoming an SAS surgeon. Responsibilities and training among SAS surgeons vary greatly. They work in key service roles within the NHS and provide a wide range of surgical care in wards, outpatient clinics and operating theatres. The majority of SAS surgeons carry out elective and routine surgery and their contribution is important to the provision of many surgical services to achieving targets.

The minimum entry requirements for a specialty doctor post are:

- full registration with the GMC
- a minimum of four years' postgraduate training including two years in the relevant specialty.

Working abroad

There are a number of points in your career when you may wish to consider gaining some experience of working abroad. This is viewed positively by most prospective employers and many people use the time between foundation and core training, and also core and specialty training, to undertake a 'gap year' abroad. This can be a great way of boosting your portfolio as well as being an enriching life experience. Advice and information regarding working abroad as part of an approved training programme is available from the Joint Committee on Surgical Training (JCST).

SAS surgeons and members of the surgical care team are entitled to be members of the RCS.

Find out more at www.rcseng.ac.uk/membership

Academic surgery

All surgeons benefit from undertaking some research during their career and should be familiar with research methodologies. If you are particularly interested in this field, you can choose to pursue a formal academic career path. An academic surgical career combines clinical training with research or teaching in a higher education setting. To pursue this training pathway you should be committed to both the clinical and academic aspects of the profession.

Surgical care team

Throughout your surgical career, whichever pathway you choose, you will work alongside various members of the surgical care team. We have guidance, case studies and careers information about the different roles that work in surgery on our website. Find out more at www.rcseng.ac.uk/surgicalcareteam

Less than full time training (LTFT)

There are a number of opportunities to work flexibly during a surgical career. Any trainee can request to train less than full time; however, priority is usually given to those with dependants, eg. children or relatives requiring care, although many trainees also train part time to pursue sport at a national level or to undertake research.

Once you are qualified, you will be working in sessions referred to as PAs (programmed activities). With your employer's agreement, you will be able to structure your working time to meet your individual requirements. This is regularly reviewed and can allow you to work in a number of ways including school term time only, part time or full time. You can find more information on flexible working on our website.



What kind of surgeon do you want to be?

As you progress in your career, you will have the opportunity to specialise in one of the ten surgical specialties. Each specialty has sub-specialty areas, allowing you to focus your knowledge and skills on particular conditions, anatomy and procedures. You will often work with surgeons from different specialties to meet the needs of your patients and provide them with the best possible care.



Cardiothoracic surgery

This deals with illnesses of the heart, lungs, oesophagus and chest. Sub-specialties include

cardiac surgery (heart and great vessels), thoracic surgery (organs within the thorax, excluding the heart), transplantation and heart failure surgery, oesophageal surgery, and surgery to correct congenital conditions in adults and children.



General surgery

This is a large specialty containing many subspecialties including breast,

colorectal, endocrine, upper and lower gastrointestinal (GI), and transplant of kidney, liver and pancreas surgery. Laparoscopic (keyhole) surgery may also be practised as a sub-specialty and is used in many procedures across all areas of general surgery. General surgeons are often required to work with colleagues from other specialty areas, particular in emergency cases.



Neurosurgery

Neurosurgery involves the brain, central nervous system

and spine. It covers all aspects of brain surgery, from pre-operative imaging through to removal of tumours. You may focus on paediatric neurosurgery, neuro-oncology (treating cancer of the brain), functional neurosurgery (surgical management of a wide range of neurological problems such as epilepsy), head or spine injuries, neurovascular surgery, or spinal surgery. Spinal surgery is the largest sub-speciality, accounting for more than 50% of the operative workload of some departments.



Oral and maxillofacial surgery (OMFS)

This specialty involves operating on the facial

bones, face and neck. Procedures range from minor surgery to complex major head and neck surgery. Specialist areas include head and neck oncology, adult facial deformity, cleft surgery, and facial trauma management. OMFS requires dual qualifications in medicine and dentistry, which will lengthen training by an average of five years.



Otolaryngology (ENT: ear, nose and throat)

ENT includes all aspects of the head and neck region,

skull base and facial plastic surgery. Specialist areas include paediatric ENT, head and neck, voice and complex airway, otology (ear) and rhinology (nose). ENT manages surgical and medical disorders and involves many paediatric cases.



Paediatric surgery

This is the surgical treatment of diseases, trauma and malformations in children

(fetal period up to teenage years). Specialist areas include neonatal surgery (up to 28 days after birth), urological surgery, hepatobiliary surgery, gastrointestinal surgery and oncological surgery. Paediatric surgeons perform 11% of all operations on children. The remaining operations are performed mainly by surgeons from other specialties who have an interest in paediatric conditions.



Consultant Neurosurgeon

One of the most rewarding experiences I had was developing a spinal surgical service in conjunction with the local surgeons in Bangladesh over the last ten years with little technology. We also ran a basic surgical skills course in Guyana and helped with more complex neurosurgical procedures.

Surgery is and will remain a global skill and the surgeon must adapt to his or her surroundings.

I was fortunate that I came from a medical family. In 1973 my mother suffered a major brain haemorrhage and nearly died. That's probably why I went into neurosurgery. Initially I didn't get the grades at A-level and I think I ended up retaking nearly every exam at medical school, but I continued to pursue my goal and finally was appointed a consultant at the same hospital my mother and father worked at many years before. The whole journey has been a lesson to never give up on your aspirations.



Plastic surgery

Plastic surgery principally involves restoration of normal form and function.

Elective work includes reconstructing defects caused by cancer. Many plastic surgical units offer a multi-disciplinary burns service. Lower limb injuries are also a major part of a plastic surgeon's trauma workload, where patients are jointly managed with orthopaedic colleagues. Hand surgery constitutes a large part of elective work, treating congenital hand defects and acquired conditions.



Trauma and orthopaedic surgery (T&O)

Trauma and orthopaedic surgeons work on bones, joints and their associated soft tissues including tendons, nerves and muscles. Trauma work involves fractures and other injuries. Specialist areas include lower-limb joint reconstruction (hip or knee, foot and ankle), upper limb (shoulder, elbow or hands), spine, bone tumours, paediatric orthopaedics, rheumatoid surgery, and sports and exercise surgery.

Hear from Jannah



Clinical Fellow (FY3)

Surgery teaches you resilience. compassion and confidence in yourself and your abilities. Working in a multifaceted specialty where you can diagnose, plan, intervene and support patients and their families through some of the most difficult diagnoses, and the challenge of providing this all-round care is what attracted me to being a surgeon. My transformative experience came during my 'F3' surgical clinical fellow year (yes, these are allowed and enabled me to develop as a surgeon!). I volunteered as part of Project Harar, a complex surgical mission in Ethiopia providing life-changing surgery and rehabilitation. Working as a team through the highs and lows of this mission showed me the impact that global surgery has and the part we can all play in its development. My journey in surgery is supported by the most passionate colleagues and I hope to encourage others on their own paths through surgical training. It can be tough and requires self-motivation, but if a small-town, non-medical-family, exam-resitting woman can find a path in surgery, so can you!



Urology

Urological surgeons deal with the urogenital system: kidney, bladder

and urinary problems, as well as men's sexual and reproductive health. This includes diseases of the kidney, urinary tract stones, cancer (prostate, bladder, testicle and kidney), enlarged prostates, incontinence and erectile dysfunction. Some time is spent managing chronic conditions, for example, investigating and treating patients with prostate symptoms or bladder cancer takes up a large amount of a urological surgeon's time. Specialist areas include complex pelvic surgery, urogynaecology, andrology and paediatric urology.



Vascular surgery

Vascular surgeons deal with the veins and arteries. The vascular surgeon is trained

in the diagnosis and management of diseases affecting all parts of the vascular system except that of the heart and brain. Common surgical procedures include carotid endarterectomy, angioplasty and lower limb bypass surgery.

Find out more about the surgical specialties, including details of each specialty association, on our website:

www.rcseng.ac.uk/careers



Finding the right job for you

Ideally, you should start to plan your career as early as possible, although it is never too late to go in to surgery. Begin by identifying which specialty interests you, considering what you want from your career and assessing what skills you already possess. You can then start creating a portfolio of experience that demonstrates your commitment to, and aptitude for, that specialty.

There are three main points at which you should display all of the competencies you have gained from your experiences:

- in your portfolio and CV
- in your application form
- at the selection centre or interview.

Completing the application for any job involves a considerable investment of time and effort. Applying for jobs you do not really want inevitably means you are not dedicating as much effort to applying for the jobs you really do. It may be helpful to make a list of what you really want and what you are willing to compromise on before you begin applying to posts.

For training posts (including the academic training path), it is important to make sure that you keep up to date with key dates, deadlines and processes. You can find recruitment timelines and application guidelines on the Health Education England website. Training jobs become available at the same time each year and are advertised during nationally defined recruitment cycles.

Stay up to date

Stay up to date on key topics in surgery on social media.
Follow us on Facebook The Royal College of Surgeons and Twitter

@RCSnews

Portfolio

Your portfolio should show your commitment to surgery. In addition to including a record and evidence of the activities you have undertaken, you should ensure your logbook is up to date – either paper-based or in electronic format such as that provided by the Intercollegiate Surgical Curriculum Programme (ISCP). Your portfolio and the evidence it contains will support your applications, any subsequent interviews and your ongoing learning when you are in post.

To compile your portfolio you should organise relevant career information in a ring binder or similar with a contents page and index tabs to ensure it is easy for both you and the selection centre assessor to navigate. It will be useful to produce a summary table listing all the competencies required (eg. those listed on the ISCP website), how you have achieved them and where the evidence can be found in your portfolio.

You should aim to start documenting your achievements during medical school, to ensure your portfolio is as thorough as possible.

The Intercollegiate Surgical Curriculum Programme (ISCP)

The ISCP is the only training platform for trainee surgeons. It is used in conjunction with the eLogbook, an electronic logbook for all surgical career grades to record operative experience. It is compulsory for all surgical trainees to compile a logbook of their experience throughout their career.

Our top tips for your logbook:

- start early
- update regularly
- record widely.

What to include

The first section of your portfolio will be your CV. A good CV combines relevant details with clear examples of how you meet the key competencies. You should provide an overall summary of your clinical experience to show that you are suited to the wider roles of a surgeon, including:

- emergency and outpatient clinics
- day care
- work on the ward and in the operating theatre
- experience of perioperative patient care
- the list of procedures you have observed, assisted and performed (your logbook).

The main body of your portfolio should expand and extend on your CV and demonstrate your intended career path. It is important that you maintain your portfolio throughout your surgical career. There are a number of tools available to help you, such as the electronic portfolio available through the ISCP, eLogbook and personal records.

Things you can do to gain experience and make your portfolio more competitive include:

- attending courses
- attending conferences and seminars
- giving presentations at conferences and seminars
- joining or organising a journal club
- joining and participating in relevant associations
- undertaking self-directed learning
- teaching, including demonstrating anatomy
- research
- writing letters, articles and reports for publication
- audit projects
- working in alternative environments, eg. electives at medical school
- joining and participating in your medical school surgical society.

Whatever activities you decide to undertake, make sure you keep your records up to date and keep correspondence, certificates and confirmations of attendance as evidence for your portfolio. If you do not record your activities as you do them you will find it very hard to compile your portfolio and write your application forms. If you have worked with a clinician outside of the normal teaching programme, ask for a letter of support as evidence. Other types of evidence your portfolio could include are:

- a logbook of clinical activity
- trainers' reports
- audits
- written workplace assessments
- list of competencies signed by supervising consultant
- assessments such as DOPS (direct observation of procedural skills).

You will be able to get a lot of help and advice from senior colleagues. You may be allowed to observe or assist in theatre, undertake audits or research projects or sit in on clinics. Most consultants and senior staff will be happy to help as long as you are willing to commit to whatever projects you are involved with. However, they cannot help you if you do not ask!

Example portfolios are available online, like the foundation portfolio on the Medical Specialty Training England website. These can provide you with structures to use for recording but it is what you record that is important and will make the difference.

Sign up to affiliate membership to access webinars, events, volunteering opportunities and course discounts to help improve your portfolio.

www.rcseng.ac.uk/join-affiliates

Application process

The application form is the first stage in the recruitment process and you should take your time filling it in. For posts in the training pathway, you are likely to have to complete an application form that will ask you for information about your training and experience, as well as asking you to provide examples to demonstrate your competencies.

The application window for training posts is normally about two weeks. To ensure that you are able to complete the application form well within this short period you should draft some answers you think may arise before you begin the application process. Examples may include:

- describe a time when you have had to make a decision under pressure
- what experience of teaching do you have
- describe a recent time when you found it difficult to make an effective judgement in a challenging situation. How did you overcome this difficulty and how has this experience informed your subsequent practice?

Selection centre and interview

For posts in the surgical training pathway (excluding foundation posts) you are likely to be invited to a selection centre where, among other activities, you will have a face-to-face interview. The use of selection centres is becoming an increasingly popular method of candidate assessment in medicine.

There are a number of things you can do to ensure that you are as prepared as possible before attending the selection centre:

- make sure you are familiar with the person specification
- think about how you meet the competencies required
- make sure you are well presented.

Be prepared

We have an annual interview skills workshop to help you prepare for your core interview.

Find out more at www.rcseng.ac.uk/careers

Stations that you may have to complete include:

- interview
- clinical scenario
- portfolio and CV review
- management
- ethics
- self assessment
- interpretation of research
- undertaking a practical skill, such as suturing.

You should note that the lists we have provided in this section are not exhaustive. You may be asked to complete other stations and different selection centres. may go into different levels of detail in each station. Remember the selection process is designed to ensure that everyone who is capable and works hard has access to a career in surgery.

With effort and planning, you can become part of the surgical profession and enjoy an exciting and rewarding career.

Ensure you are eligible

You must honestly assess whether you are suitable for the job. The person specifications and job descriptions will help you decide which role or specialty is most suitable for you. You may not be considered if you apply for a post that you have too much or too little experience for. When you apply for any post in surgery, you will be asked to demonstrate that you have achieved appropriate competencies at both the application and selection stages. These will include not only specialty-specific knowledge and skills but also more general career-based skills.

In addition to clinical and technical skills and knowledge, you will also require more general skills, including:

- communication skills
- leadership and team involvement
- iudgement under pressure
- decision making and problem solving
- general professional integrity.

Good luck!

Commitment to the specialty is included in the person specification for core applications. Membership of the RCS and attendance at our events and courses are a great way to demonstrate your commitment. www.rcseng.ac.uk/join-affiliates

How we support you

We provide information, advice and practical support for surgeons at all stages of their career – from school students to senior consultants. Below are some of the ways we support you. You can find more information at www.rcseng.ac.uk/careers

Regional networks

We support members across the UK and internationally and have regional networks that include regional directors and outreach teams covering England, Wales and Northern Ireland. These teams are there to support you throughout your career, as well as providing local events and volunteering opportunities. Running your own local event or initiative? You may be eligible for funding.

Future Surgeons Forum

The Future Surgeons Forum aims to improve the links between medical schools, foundation doctors and the RCS. The forum has a student representative from most medical schools in the UK, who share their experiences with the RCS to help us make improvements for the future.

We have guidance on the national undergraduate curriculum, avoiding unconscious bias and more on our website.

Women in Surgery

Women in Surgery is a national initiative dedicated to encouraging, enabling and inspiring women to fulfil their surgical ambitions. Between 1991 and 2018, the number of female consultants quadrupled from 3% to 12% – we want to see this number grow even more. Joining the network is free and gives you access to a directory of other female surgeons, as well as events, news and updates.

Confidential Support and Advice for Surgeons (CSAS)

The RCS offers a confidential support and advice service in order to support surgeons in difficulty. If you are experiencing problems in your work or personal life and would like to seek confidential and impartial advice you can contact us directly.



Your top 5 checklist

- 1. Get to know the surgical specialties
- 2. Start working on your portfolio
- 3. Sign up for affiliate membership
- 4. Attend courses and events to help develop your career
- 5. Stay up to date
 - The Royal College of Surgeons
 - **y** @RCSnews

Tick here!

Useful links

Association of Surgeons in Training (ASiT)

www.asit.org

British Medical Association (BMA) www.bma.org.uk

BMJ Careers jobs.bmj.com

British Orthopaedic Trainees Association (BOTA)

www.bota.org.uk

Core Surgical Recruitment www.oriel.nhs.uk

Health Education England – Specialty Training specialtytraining.hee.nhs.uk

Intercollegiate Surgical Curriculum Programme (ISCP) www.iscp.ac.uk

Joint Committee on Surgical Training (JCST) www.jcst.org

NHS Careers www.nhscareers.nhs.uk

NHS Jobs www.jobs.nhs.uk ASiT and BOTA are both invited to sit on RCS Council. We work closely with them to ensure that trainee voices are heard, so no matter your career grade, you can have the best experience possible.

Society of Academic and Research Surgery (SARS) www.surgicalresearch.org.uk

The Foundation Programme www.foundationprogramme.nhs.uk

The Royal College of Surgeons of England www.rcseng.ac.uk

World Directory of Medical Schools www.wdoms.org