

# Cardiothoracic surgeon

Cardiothoracic surgeons specialise in operating on the heart, lungs and other thoracic (chest) organs.

They also diagnose and treat diseases of these organs.

picture of a surgeon

## Life as a cardiothoracic surgeon

You'll see the immediate and life-changing results of your work, but your role will be hugely demanding. Diseases that occur in a person's chest are common killers and you'll be managing life and death scenarios every day.

Cardiothoracic surgery is a relatively young speciality that has experienced rapid growth through the introduction of new technologies.

Before surgery you'll meet with patients and their families to discuss and explain procedures and offer reassurance. Being crystal clear, empathetic and warm is vital to the success of your role.

The main areas of cardiothoracic surgery are:

- cardiac surgery
- thoracic surgery
- congenital cardiac surgery
- heart and lung transplant surgery

Monitoring patients in intensive care [1] after surgery is a vital part of your work. Although cardiothoracic surgery is very safe, complications can occur and you'll need to be prepared to deal with a host of conditions including arrhythmias (heart-beat irregularity), post-operative bleeding, stroke [2], pleural effusion (fluid around the lungs), wound infection or thrombosis [3].

As well as performing surgery, you'll be involved in the treatment and management of many different conditions within your speciality. You'll need to attend outpatient clinics, multidisciplinary team meetings and ward rounds.

## How much can I earn?

You'll first earn a salary when you start your [foundation training](#) <sup>[4]</sup> after medical school. Find out details of current salary ranges for foundation and specialty training, [SAS doctors](#) <sup>[5]</sup> and consultants on the ['Pay for doctors'](#) <sup>[6]</sup> page.

## How about the benefits?

- make a difference
- flexible and part-time working
- high income early in your career
- work anywhere in the world
- excellent pension scheme
- good holiday entitlement
- NHS discounts in shops and restaurants

## Must-have skills

- excellent communication skills to manage a wide range of relationships with colleagues, and patients and their families
- emotional resilience, a calm temperament and the ability to work well under pressure
- teamwork and the capacity to lead multidisciplinary teams
- problem-solving and diagnostic skills
- outstanding organisational ability and effective decision-making skills
- first-class time and resource management for the benefit of patients
- a high degree of manual dexterity
- superb hand-eye co-ordination, excellent vision, and visuospatial awareness
- physical stamina to cope with the demands of surgery

## Entry requirements

Your first step is medical school. Typically, you'll need excellent GCSEs and three A or A\* passes at A level including chemistry for a five-year undergraduate degree in medicine. Many medical schools also ask for biology and others may require maths or physics.

If you already have a degree, you could study for a four-year postgraduate degree in medicine.

You'll need to pass an interview and admissions test. You'll be asked to show how you demonstrate the NHS values such as compassion and respect.

Some medical schools look to recruit a mix of students from different backgrounds and geographical areas, so your educational and economic background and family circumstances could be considered as part of your application.

**"I had some great mentors who gave me the opportunity to operate on patients with supervision, and to look after very sick patients on the [intensive care](#) <sup>[1]</sup> unit after cardiac surgery."**

**Read Omar's story** <sup>[7]</sup>.

## **What are my chances of starting a career as a cardiothoracic surgeon?**

There are currently approximately 400 cardiothoracic surgeons working in the NHS in England. In 2020, there were between 5.86 and 9.92 applications for every specialty training place.

## **How to become a cardiothoracic surgeon**

After medical school, you'll join the paid two-year foundation programme <sup>[8]</sup> where you'll work in six placements in different settings.

After your foundation programme, you can apply for paid specialty training <sup>[9]</sup> to become a cardiothoracic surgeon, which will take a minimum of six or seven years.

You may be able to train part time, for example for health reasons or if you have family or caring responsibilities.

## **Where a career as a cardiothoracic surgeon can take you**

Working as a cardiothoracic surgeon, you'll have the opportunity to specialise in cardiac, thoracic or congenital surgery.

As a cardiac surgeon, you'll perform various kinds of surgery including:

- coronary artery bypass surgery – restoring blood flow to the heart by bypassing the narrowed coronary arteries
- heart valve surgery – repairing and replacing narrowed or leaking heart valves
- aortic surgery – replacing an enlarged or damaged blood vessel leaving the heart

If you choose to specialise as a thoracic surgeon, you'll perform a wide range of surgery including:

- surgery for lung cancer, tumours and cysts
- surgery on collapsed or infected lungs
- keyhole thoracic surgery (video assisted thoracoscopic surgery (VATS))
- chest-wall deformities (pectus surgery)

If you choose congenital cardiac surgery, you'll treat babies and children with heart diseases that have been present from birth. These conditions include:

- septal defects (a hole between two of the heart's chambers)
- aortic and pulmonary valve stenosis (where the valve is narrower than normal)
- transposition of the arteries

You could specialise or conduct research, teach medical students or postgraduate students in training and get involved in research at universities, the NHS or private sector.

- **Live vacancies**

## Find a vacancy

Enter your location or postcode

Show results within

Search

- **Consultant Cardiothoracic Anaesthetist**

Liverpool, L14 3PE

Salary:

£105504.00 to £139882.00

Type:

Permanent

Employer:

Liverpool Heart and Chest Hospital

[Apply now on NHS Jobs for Consultant Cardiothoracic Anaesthetist job \(opens in a new window\)](#) <sup>[10]</sup>

- **Consultant Cardiothoracic Radiologist**

Cambridge Bio Medical Campus, CB2 0AY

Salary:

£109725.00 to £145478.00

Type:

Permanent

Employer:

Royal Papworth Hospital NHS Foundation Trust

[Apply now on NHS Jobs for Consultant Cardiothoracic Radiologist job \(opens in a new window\)](#) <sup>[11]</sup>

- **Cardiothoracic Research Nurse**

Cardiff, CF14 4XW

Salary:

£37898.00 to £45637.00

Type:

Fixed-Term

Employer:

Cardiff and Vale University Health Board

[Apply now on NHS Jobs for Cardiothoracic Research Nurse job \(opens in a new window\)](#) <sup>[12]</sup>

- **Consultant in Cardiothoracic Anaesthesia**

London, EC1A 7BE

Salary:

£105504.00 to £139882.00

Type:

Permanent

Employer:

Barts Health NHS Trust

[Apply now on NHS Jobs for Consultant in Cardiothoracic Anaesthesia job \(opens in a new window\)](#) <sup>[13]</sup>

- **Consultant in Cardiothoracic Anaesthesia**

Oxford, OX3 9DU

Salary:

£105504.00 to £139882.00

Type:

Permanent

Employer:

Oxford University Hospitals NHS Foundation Trust

[Apply now on NHS Jobs for Consultant in Cardiothoracic Anaesthesia job \(opens in a new window\)](#) <sup>[14]</sup>

- **Cardiothoracic Cardiology Staff Nurse - Ward**

City of London, EC1A 7BS

Salary:

£35000.00 to £38000.00

Type:

Permanent

Employer:

Nuffield Health

[Apply now on NHS Jobs for Cardiothoracic Cardiology Staff Nurse - Ward job \(opens in a new window\)](#) <sup>[15]</sup>

- **Trainee Advanced Clinical Practitioner - Cardiothoracic Surgery**

Hull, HU165JQ

Salary:

£46148.00 to £52809.00

Type:

Training

Employer:

Hull University Teaching Hospitals NHS Trust

[Apply now on NHS Jobs for Trainee Advanced Clinical Practitioner - Cardiothoracic Surgery job \(opens in a new window\)](#) <sup>[16]</sup>

- **Senior Clinical Fellow in Cardiothoracic Anaesthesia**

Liverpool, L14 3PE

Salary:

£61825.00 to £70425.00

Type:

Fixed-Term

Employer:

Liverpool Heart and Chest Hospital

[Apply now on NHS Jobs for Senior Clinical Fellow in Cardiothoracic Anaesthesia job \(opens in a new window\)](#) <sup>[17]</sup>

- **Cardiothoracic Audit Nurse/Physiologist/Radiographer/ODP**

Middlesbrough, TS4 3BW

Salary:

£31049.00 to £37796.00

Type:

Permanent

Employer:

South Tees Hospitals NHS Foundation Trust

[Apply now on NHS Jobs for Cardiothoracic Audit Nurse/Physiologist/Radiographer/ODP job \(opens in a new window\)](#) <sup>[18]</sup>

- **Consultant Cardiac Surgeon**

Plymouth, PL6 8DH

Salary:

Negotiable

Type:

Permanent

Employer:

University Hospitals Plymouth NHS Trust

[Apply now on NHS Jobs for Consultant Cardiac Surgeon job \(opens in a new window\)](#) <sup>[19]</sup>

- **Consultant Breast Surgeon**

Carlisle, CA2 7HY

Salary:

£105504.00 to £139882.00

Type:

Permanent

Employer:

North Cumbria Integrated Care NHS Foundation Trust

[Apply now on NHS Jobs for Consultant Breast Surgeon job \(opens in a new window\)](#) <sup>[20]</sup>

- **Consultant Hand Surgeon**

Doncaster, DN40TG

Barnsley, S71 1TH

Sheffield, S105UB

Sheffield, S80YH

Sheffield, S61GA

Rotherham, S639EH

Barnsley, S728SU

Sheffield, S56AZ

Salary:

Negotiable

Type:

Locum

Employer:

HealthHarmonie

[Apply now on NHS Jobs for Consultant Hand Surgeon job \(opens in a new window\)](#) <sup>[21]</sup>

- **Consultant Hand Surgeon**

Birmingham, B15 2TH

Salary:

£109725.00 to £145478.00

Type:

Permanent

Employer:

University Hospitals Birmingham NHS Foundation Trust

[Apply now on NHS Jobs for Consultant Hand Surgeon job \(opens in a new window\)](#) <sup>[22]</sup>

- **Consultant Paediatric Surgeon**

Bristol, BS2 8BJ

Salary:

£105504.00 to £139882.00

Type:

Fixed-Term

Employer:

University Hospitals Bristol and Weston NHS Foundation Trust (UHBW)

[Apply now on NHS Jobs for Consultant Paediatric Surgeon job \(opens in a new window\)](#) <sup>[23]</sup>

- **Consultant Spinal Surgeon**

Sheffield, S11 8UX

Salary:

Negotiable

Type:

Permanent

Employer:

One Health Group

[Apply now on NHS Jobs for Consultant Spinal Surgeon job \(opens in a new window\)](#) <sup>[24]</sup>

- **Consultant Urological Surgeon**

Watford, WD18 0HB

Salary:

£105504.00 to £139882.00

Type:

Permanent

Employer:

West Hertfordshire Teaching Hospitals NHS Trust

[Apply now on NHS Jobs for Consultant Urological Surgeon job \(opens in a new window\)](#) <sup>[25]</sup>

- **Consultant Colorectal Surgeon**

Tunbridge Wells, TN2 4QJ

Salary:

£109725.00 to £145478.00

Type:

Permanent

Employer:

Maidstone and Tunbridge Wells NHS Trust

[Apply now on NHS Jobs for Consultant Colorectal Surgeon job \(opens in a new window\)](#) <sup>[26]</sup>

- **Consultant Cardiac Surgeon**

Oxford, OX3 9DU

Salary:

£105504.00 to £139882.00



Type:

Permanent

Employer:

Oxford University Hospitals NHS Foundation Trust

[Apply now on NHS Jobs for Consultant Cardiac Surgeon job \(opens in a new window\)](#) <sup>[27]</sup>

- **Consultant Hand Surgeon**

Middlesbrough, TS4 3BW

Salary:

£105504.00 to £139882.00

Type:

Permanent

Employer:

South Tees Hospitals NHS Foundation Trust

[Apply now on NHS Jobs for Consultant Hand Surgeon job \(opens in a new window\)](#) <sup>[28]</sup>

- **Consultant Urological Surgeon**

Ashington, NE63 9JJ

Salary:

£109725.00 to £145478.00

Type:

Permanent

Employer:

Northumbria Healthcare NHS Foundation Trust

[Apply now on NHS Jobs for Consultant Urological Surgeon job \(opens in a new window\)](#) <sup>[29]</sup>

- **Consultant Radiologist with interest in Cardiothoracic Radiology**

Portsmouth, PO6 3LY

Salary:

£105504.00 to £139882.00

Type:

Permanent

Employer:

Portsmouth Hospitals University NHS Trust

[Apply now on NHS Jobs for Consultant Radiologist with interest in Cardiothoracic Radiology job \(opens in a new window\)](#) <sup>[30]</sup>

- **Consultant Colorectal Emergency Surgeon**

Headington, Oxford, OX3 9DU

Salary:

£105504.00 to £139882.00

Type:

Permanent

Employer:

Oxford University Hospitals NHS Foundation Trust

[Apply now on NHS Jobs for Consultant Colorectal Emergency Surgeon job \(opens in a new window\)](#) <sup>[31]</sup>

- **Consultant Oral & Maxillofacial Surgeon**

Lancaster, LA14RP

Salary:

£105504.00 to £139882.00

Type:

Permanent

Employer:

University Hospitals of Morecambe Bay NHS Trust

[Apply now on NHS Jobs for Consultant Oral & Maxillofacial Surgeon job \(opens in a new window\)](#) <sup>[32]</sup>

- **Consultant Oral & Maxillofacial Surgeon**

Merthyr Tydfil, CF72 9DT

Salary:

£110240.00 to £160951.00

Type:

Permanent

Employer:

Cwm Taf Morgannwg University Health Board

[Apply now on NHS Jobs for Consultant Oral & Maxillofacial Surgeon job \(opens in a new window\)](#) <sup>[33]</sup>

- **Consultant Upper GI Surgeon**

Carmarthen, SA31 2AF

Salary:

£110240.00 to £160951.00

Type:

Permanent

Employer:

Hywel Dda University Health Board

[Apply now on NHS Jobs for Consultant Upper GI Surgeon job \(opens in a new window\)](#) <sup>[34]</sup>

- **Consultant Oncoplastic Breast Surgeon**

Watford, WD18 0HB

Salary:

£105504.00 to £139882.00

Type:

Fixed-Term

Employer:

West Hertfordshire Teaching Hospitals NHS Trust

[Apply now on NHS Jobs for Consultant Oncoplastic Breast Surgeon job \(opens in a new window\)](#) <sup>[35]</sup>

- **Consultant Surgeon in ENT**

Burton on Trent, DE13 0RB

Salary:

£109725.00 to £145478.00

Type:

Permanent

Employer:

University Hospitals of Derby and Burton NHS Foundation Trust

[Apply now on NHS Jobs for Consultant Surgeon in ENT job \(opens in a new window\)](#) <sup>[36]</sup>

- **Consultant Radiologist with an interest in Chest / Cardiothoracic**

Preston, PR2 9HT

Salary:

£105504.00 to £139882.00

Type:

Permanent

Employer:

Lancashire Teaching Hospitals NHS Foundation Trust

[Apply now on NHS Jobs for Consultant Radiologist with an interest in Chest / Cardiothoracic job \(opens in a new window\)](#) <sup>[37]</sup>

- **Consultant Orthopaedic Revision Hip Surgeon**

Carlisle, CA2 7HY

Salary:

£105504.00 to £139882.00

Type:

Permanent

Employer:

North Cumbria Integrated Care NHS Foundation Trust

[Apply now on NHS Jobs for Consultant Orthopaedic Revision Hip Surgeon job \(opens in a new window\)](#) <sup>[38]</sup>

- **Consultant General Surgeon ( Lower GI )**

Sheffield, S11 8UX

Salary:

Negotiable

Type:

Permanent

Employer:

One Health Group

[Apply now on NHS Jobs for Consultant General Surgeon \( Lower GI \) job \(opens in a new window\)](#) <sup>[39]</sup>

- **Treatment Doctor / Surgeon - 7.5 hours**

Reading, RG1 4QA

Salary:

£101000.00 to £151000.00

Type:

Permanent

Employer:

British Pregnancy Advisory Service (BPAS)

[Apply now on NHS Jobs for Treatment Doctor / Surgeon - 7.5 hours job \(opens in a new window\)](#) <sup>[40]</sup>

- **Consultant General Surgeon ( Upper GI )**

Sheffield, S11 8UX

Salary:

Negotiable

Type:

Permanent

Employer:

One Health Group

[Apply now on NHS Jobs for Consultant General Surgeon \( Upper GI \) job \(opens in a new window\)](#) <sup>[41]</sup>

- **Consultant Adult & Paediatric Spinal Surgeon**

London, E1 1FR

Salary:

£105504.00 to £139882.00

Type:

Permanent

Employer:

Barts Health NHS Trust

[Apply now on NHS Jobs for Consultant Adult & Paediatric Spinal Surgeon job \(opens in a new window\)](#) <sup>[42]</sup>

- **Locum Consultant Oncoplastic Breast Surgeon**

Northampton, NN1 5BD

Salary:

£109725.00 to £145478.00

Type:

Fixed-Term

Employer:

Northampton General Hospital

[Apply now on NHS Jobs for Locum Consultant Oncoplastic Breast Surgeon job \(opens in a new window\)](#) <sup>[43]</sup>

- **Consultant Orthopaedic Surgeon - Foot and Ankle**

Shepton Mallet, BA4 4LP

Salary:

Negotiable

Type:

Permanent

Employer:

Practice Plus Group

[Apply now on NHS Jobs for Consultant Orthopaedic Surgeon - Foot and Ankle job \(opens in a new window\)](#) <sup>[44]</sup>

- **Locum Consultant Surgery - Vascular & Endovascular Surgeon**

Truro, TR1 3LJ

Salary:

£105504.00 to £139882.00

Type:

Locum

Employer:

Royal Cornwall Hospitals Trust

[Apply now on NHS Jobs for Locum Consultant Surgery - Vascular & Endovascular Surgeon job \(opens in a new window\)](#) <sup>[45]</sup>

- **Locum Consultant Oral & Maxillo Facial Surgeon**

London, E9 6SR

Salary:

£105504.00 to £139882.00

Type:

Fixed-Term

Employer:

Homerton Healthcare NHS Foundation Trust

[Apply now on NHS Jobs for Locum Consultant Oral & Maxillo Facial Surgeon job \(opens in a new window\)](#) <sup>[46]</sup>

- **Locum Consultant Burns and Plastic Surgeon**

Birmingham, B46NH

Salary:

Negotiable

Type:

Locum

Employer:

Birmingham Women's and Children's NHS Foundation Trust

[Apply now on NHS Jobs for Locum Consultant Burns and Plastic Surgeon job \(opens in a new window\)](#) <sup>[47]</sup>

- **Consultant Ophthalmic Surgeon - Oculoplastic & General Ophthalmology**

Bury St. Edmunds, IP33 2QZ

Salary:

£109725.00 to £145478.00

Type:

Permanent

Employer:

West Suffolk NHS Foundation Trust

[Apply now on NHS Jobs for Consultant Ophthalmic Surgeon - Oculoplastic & General Ophthalmology job \(opens in a new window\)](#) <sup>[48]</sup>

- **Locum Consultant in HPB Surgery/General Surgeon**

London, E1 1FR

Salary:

£105504.00 to £139882.00

Type:

Locum

Employer:

Barts Health NHS Trust

[Apply now on NHS Jobs for Locum Consultant in HPB Surgery/General Surgeon job \(opens in a new window\)](#) <sup>[49]</sup>

- **Locum Consultant Oesophago-Gastric and General Surgeon**

Nottingham, NG5 1PB

Salary:

£105504.00 to £139882.00

Type:

Locum

Employer:

Nottingham University Hospitals NHS Trusts

[Apply now on NHS Jobs for Locum Consultant Oesophago-Gastric and General Surgeon job \(opens in a new window\)](#) <sup>[50]</sup>

- **Consultant General Surgeon with SI in Benign Biliary**

Lincoln, LN2 5QY

Salary:

£105504.00 to £139882.00

Type:

Permanent

Employer:

United Lincolnshire Hospitals NHS Trust

[Apply now on NHS Jobs for Consultant General Surgeon with SI in Benign Biliary job \(opens in a new window\)](#) <sup>[51]</sup>

- **NHS Locum Lower Consultant General and Colorectal Surgeon**

Chesterfield, S44 5BL

Salary:

£109725.00 to £145478.00

Type:

Fixed-Term

Employer:

Chesterfield Royal Hospital NHS Foundation Trust

[Apply now on NHS Jobs for NHS Locum Lower Consultant General and Colorectal Surgeon job \(opens in a new window\)](#) <sup>[52]</sup>

- **Consultant in Trauma and Orthopaedic Surgeon, Knee Surgery**

Manchester, M13 9WL

Salary:

£105504.00 to £139882.00

Type:

Permanent

Employer:

Manchester University NHS Foundation Trust

[Apply now on NHS Jobs for Consultant in Trauma and Orthopaedic Surgeon, Knee Surgery job \(opens in a new window\)](#) <sup>[53]</sup>

- **Consultant Surgeon with a Special Interest in Dermatology**

Kettering, NN16 8UZ

Salary:

£105504.00 to £139882.00

Type:

Permanent

Employer:

Kettering General Hospital NHS Foundation Trust

[Apply now on NHS Jobs for Consultant Surgeon with a Special Interest in Dermatology job \(opens in a new window\)](#) <sup>[54]</sup>

- **Consultant ENT surgeon with interest in Thyroid & Parathyroid**

Romford, RM7 0AG

Salary:

£105504.00 to £139882.00

Type:

Permanent

Employer:

Barking, Havering and Redbridge University Hospitals NHS Trust

[Apply now on NHS Jobs for Consultant ENT surgeon with interest in Thyroid & Parathyroid job \(opens in a new window\)](#) <sup>[55]</sup>

- **Locum Consultant Surgeon in Oral & Maxillo Facial Surgery**

London, E9 6SR

Salary:

£105504.00 to £139882.00

Type:

Fixed-Term

Employer:

Homerton Healthcare NHS Foundation Trust

[Apply now on NHS Jobs for Locum Consultant Surgeon in Oral & Maxillo Facial Surgery job \(opens in a new window\)](#) <sup>[56]</sup>

- **Consultant General Surgeon with SI in Ab Wall Reconstruction**

Lincoln, LN2 5QY

Salary:

£105504.00 to £139882.00

Type:

Permanent

Employer:

United Lincolnshire Hospitals NHS Trust

[Apply now on NHS Jobs for Consultant General Surgeon with SI in Ab Wall Reconstruction job \(opens in a new window\)](#) <sup>[57]</sup>



- **Consultant ENT surgeon with interest in Thyroid & Benign Head & Neck**

Romford, RM7 0AG

Salary:

£105504.00 to £139882.00

Type:

Permanent

Employer:

Barking, Havering and Redbridge University Hospitals NHS Trust

[Apply now on NHS Jobs for Consultant ENT surgeon with interest in Thyroid & Benign Head & Neck job \(opens in a new window\)](#) <sup>[58]</sup>

- **Locum Consultant Surgeon in T&O (sub-specialist shoulder interest)**

London, E9 6SR

Salary:

£109725.00 to £145478.00

Type:

Fixed-Term

Employer:

Homerton Healthcare NHS Foundation Trust

[Apply now on NHS Jobs for Locum Consultant Surgeon in T&O \(sub-specialist shoulder interest\) job \(opens in a new window\)](#) <sup>[59]</sup>

- **Further information**

These organisations have further information about being a cardiothoracic surgeon, particularly as your career progresses. Take a look.

[Royal College of Surgeons](#) <sup>[60]</sup>

[Royal College of Surgeons of Edinburgh](#) <sup>[61]</sup>

[Royal College of Physicians and Surgeons of Glasgow](#) <sup>[62]</sup>

[Society for Cardiothoracic Surgery in Great Britain and Ireland](#) <sup>[63]</sup>

And hear from people working as cardiothoracic surgeons.

[A career in cardiothoracic surgery \(BMJ\)](#) <sup>[64]</sup>

[A day in the life of a thoracic surgeon \(CTSNET\)](#) <sup>[65]</sup>

## Other roles that may interest you

- Cardiologist [67]
- Emergency medicine [68]
- Respiratory medicine [69]
- Knowledge and library services [70]

---

**Source URL:**[https://www.healthcareers.nhs.uk/explore-roles/doctors/roles-doctors/surgery/cardiothoracic-surgery?field\\_field\\_role=492&page=8](https://www.healthcareers.nhs.uk/explore-roles/doctors/roles-doctors/surgery/cardiothoracic-surgery?field_field_role=492&page=8)

### Links

[1] [https://www.healthcareers.nhs.uk/glossary#Intensive\\_care](https://www.healthcareers.nhs.uk/glossary#Intensive_care) [2]  
<https://www.healthcareers.nhs.uk/glossary#Stroke> [3]  
<https://www.healthcareers.nhs.uk/glossary#Thrombosis> [4]  
[https://www.healthcareers.nhs.uk/glossary#Foundation\\_training](https://www.healthcareers.nhs.uk/glossary#Foundation_training) [5]  
<https://www.healthcareers.nhs.uk/explore-roles/doctors/career-opportunities-doctors/sas-doctors> [6]  
<https://www.healthcareers.nhs.uk/explore-roles/doctors/pay-doctors> [7]  
<https://www.healthcareers.nhs.uk/explore-roles/doctors/roles-doctors/surgery/cardiothoracic-surgery/real-life-story-omal-jarral> [8] <https://foundationprogramme.nhs.uk/> [9] <https://specialtytraining.hee.nhs.uk/> [10]  
<https://beta.jobs.nhs.uk/candidate/jobadvert/C9410-25-0114> [11]  
<https://beta.jobs.nhs.uk/candidate/jobadvert/C9175-25-0240> [12]  
<https://beta.jobs.nhs.uk/candidate/jobadvert/H9001-25-0581> [13]  
<https://beta.jobs.nhs.uk/candidate/jobadvert/C9259-25-1615> [14]  
<https://beta.jobs.nhs.uk/candidate/jobadvert/C9321-25-0904> [15]  
<https://beta.jobs.nhs.uk/candidate/jobadvert/E0302-25-0914> [16]  
<https://beta.jobs.nhs.uk/candidate/jobadvert/C9356-25-0635> [17]  
<https://beta.jobs.nhs.uk/candidate/jobadvert/C9410-25-0118> [18]  
<https://beta.jobs.nhs.uk/candidate/jobadvert/C9328-25-0754> [19]  
<https://beta.jobs.nhs.uk/candidate/jobadvert/C9216-25-0847> [20]  
<https://beta.jobs.nhs.uk/candidate/jobadvert/C9262-25-0835> [21]  
<https://beta.jobs.nhs.uk/candidate/jobadvert/U0024-25-0036SYO> [22]  
<https://beta.jobs.nhs.uk/candidate/jobadvert/C0020-25-1087> [23]  
<https://beta.jobs.nhs.uk/candidate/jobadvert/C9387-25-1274> [24]  
<https://beta.jobs.nhs.uk/candidate/jobadvert/B0103-25-0028> [25]  
<https://beta.jobs.nhs.uk/candidate/jobadvert/C9360-25-0358> [26]  
<https://beta.jobs.nhs.uk/candidate/jobadvert/C9359-25-0460> [27]  
<https://beta.jobs.nhs.uk/candidate/jobadvert/C9321-25-0905> [28]  
<https://beta.jobs.nhs.uk/candidate/jobadvert/C9328-25-0759> [29]  
<https://beta.jobs.nhs.uk/candidate/jobadvert/C9319-25-0686> [30]  
<https://beta.jobs.nhs.uk/candidate/jobadvert/C8192-25-0353> [31]  
<https://beta.jobs.nhs.uk/candidate/jobadvert/C9321-25-0853> [32]  
<https://beta.jobs.nhs.uk/candidate/jobadvert/C9331-25-0608> [33]  
<https://beta.jobs.nhs.uk/candidate/jobadvert/H9110-25-0914> [34]  
<https://beta.jobs.nhs.uk/candidate/jobadvert/H9100-25-0799> [35]  
<https://beta.jobs.nhs.uk/candidate/jobadvert/C9360-25-0398> [36]  
<https://beta.jobs.nhs.uk/candidate/jobadvert/C9320-25-0897> [37]  
<https://beta.jobs.nhs.uk/candidate/jobadvert/C9438-25-0305> [38]  
<https://beta.jobs.nhs.uk/candidate/jobadvert/C9262-25-0811> [39]  
<https://beta.jobs.nhs.uk/candidate/jobadvert/B0103-25-0032> [40]  
<https://beta.jobs.nhs.uk/candidate/jobadvert/B0201-MED-TOPS-REA-4> [41]

<https://beta.jobs.nhs.uk/candidate/jobadvert/B0103-25-0029> [42]  
<https://beta.jobs.nhs.uk/candidate/jobadvert/C9259-25-1609> [43]  
<https://beta.jobs.nhs.uk/candidate/jobadvert/C9265-25-0314> [44]  
<https://beta.jobs.nhs.uk/candidate/jobadvert/E0314-25-2223> [45]  
<https://beta.jobs.nhs.uk/candidate/jobadvert/C9156-25-0329> [46]  
<https://beta.jobs.nhs.uk/candidate/jobadvert/C9293-25-0263> [47]  
<https://beta.jobs.nhs.uk/candidate/jobadvert/C9284-25-0393> [48]  
<https://beta.jobs.nhs.uk/candidate/jobadvert/C9179-25-0325> [49]  
<https://beta.jobs.nhs.uk/candidate/jobadvert/C9259-25-1541> [50]  
<https://beta.jobs.nhs.uk/candidate/jobadvert/C9164-25-1357> [51]  
<https://beta.jobs.nhs.uk/candidate/jobadvert/C9357-25-0547> [52]  
<https://beta.jobs.nhs.uk/candidate/jobadvert/C9166-25-0386> [53]  
<https://beta.jobs.nhs.uk/candidate/jobadvert/C9349-25-2056> [54]  
<https://beta.jobs.nhs.uk/candidate/jobadvert/C9264-25-0281> [55]  
<https://beta.jobs.nhs.uk/candidate/jobadvert/C9162-25-0484> [56]  
<https://beta.jobs.nhs.uk/candidate/jobadvert/C9293-25-0266> [57]  
<https://beta.jobs.nhs.uk/candidate/jobadvert/C9357-25-0548> [58]  
<https://beta.jobs.nhs.uk/candidate/jobadvert/C9162-25-0483> [59]  
<https://beta.jobs.nhs.uk/candidate/jobadvert/C9293-25-0307> [60] <http://www.rcseng.ac.uk/> [61]  
<http://www.rcsed.ac.uk> [62] <http://www.rcpsg.ac.uk> [63] <http://www.scts.org> [64]  
<http://careers.bmj.com/careers/advice/view-article.html?id=20001067> [65]  
<http://www.ctsnet.org/article/day-life-thoracic-surgeon> [66] <http://www.ctsnet.org/article/day-heart-surgeons-life> [67] <https://www.healthcareers.nhs.uk/explore-roles/doctors/roles-doctors/medicine/cardiology> [68] <https://www.healthcareers.nhs.uk/explore-roles/doctors/roles-doctors/emergency-medicine> [69] <https://www.healthcareers.nhs.uk/explore-roles/doctors/roles-doctors/medicine/respiratory-medicine> [70] <https://www.healthcareers.nhs.uk/explore-roles/health-informatics/roles-health-informatics/knowledge-and-library-services>