Stroke medicine

Doctors working in stroke [1] medicine provide acute care and on-going rehabilitation to patients who have suffered from a stroke [1]. They provide accurate diagnosis and use investigations to provide safe and appropriate management of stroke [1].

This page provides useful information on the nature of the work, the common procedures/interventions and other roles that may interest you.

Nature of the work

A stroke [1] is caused when there is interruption to the blood supply to the brain, which is often the result of a blood clot in a cerebral (brain) artery (ischaemic stroke [1]). It may also be caused by the rupturing of a blood vessel in or near the brain (haemorrhagic stroke [1]).

Doctors in stroke [1] medicine are skilled in identifying patients who have symptoms that may mimic a stroke [1], but are due to other underlying diseases such as epilepsy.

Some patients may suffer from a transient ischaemic attack (TIA) [2], which is sometimes known as a ?mini-stroke?, because the symptoms last less than 24 hours. Other patients have symptoms that mimic a stroke,
and may also be seen by stroke physicians.

Stroke results in a range of debilitating symptoms and is the most common cause of death and disability in the UK, accounting for over 5% of NHS resources. This is likely to increase, given Britain’s growing ageing population.

Stroke medicine encompasses elements of a number of clinical skills including; cardiovascular disease, general and geriatric medicine, rehabilitation and palliative care

Consultants with training in stroke medicine contribute to and lead stroke services throughout the UK. Patients who have suffered a stroke often receive specialist care in acute and rehabilitation stroke units or via a neurovascular unit. Stroke physicians contribute to the provision of skilled acute and rehabilitation care as part of a multidisciplinary stroke service.

The specialist care and early interventions that stroke physicians provide result in better survival rates for patients with the aim of reducing disability. The knowledge and skills they provide are also vital in stroke prevention. They also provide a key role in developing hospital and community stroke services.

Helping patients to regain their strength and recover function is an important part of stroke rehabilitation. Movement and sensation on either side of the body may be affected, and patients may also have problems with breathing, swallowing, balance, vision and communication. Helping patients to adapt to the impact of their health problems following stroke and to manage their own condition are all vital aspects of the work.

Stroke physicians work very closely with vascular surgeons, referring patients for surgery where necessary; with neurosurgeons, referring patients for surgery where necessary; and increasingly with interventional neuroradiologists, referring patients for clot retrieval therapy.

The nature of the work can vary, as stroke medicine is a sub-specialty of the following areas of medicine:

- geriatric medicine
- neurology
- rehabilitation medicine
- clinical pharmacology and therapeutics
- cardiology
- general internal medicine
- acute internal medicine

For example, a neurologist with sub-specialty training in stroke medicine may contribute to the provision of an acute stroke service and TIA clinic. Within geriatric medicine, the stroke physician may focus on a rehabilitation stroke unit, though there is considerable overlap

All doctors working in this specialty develop treatment and management plans for patients living with stroke illness. This includes rehabilitation, health promotion, secondary prevention and long-term support.

**Common procedures/interventions**

Stroke medicine benefits from an exciting range of new techniques and treatments that have greatly improved recovery rates.

Common procedures and interventions include:

- **thrombolysis** – injecting a medication that dissolves blood clots with the aim of restoring blood flow to the brain
- **using a catheter** (thin flexible tube) that is inserted through an artery in the groin to remove clot, insert
a stent and/or deliver medication to the area of the brain where the stroke is occurring
- administration of drugs to lower pressure in the brain, lower blood pressure and prevent seizures
- using detailed CT/MRI scans to assess damage to the brain
- ECG, ultrasound and blood tests to aid diagnosis

New techniques are being developed all the time, such as brain-cooling techniques that can be used in the early stages of a stroke to protect the brain from further damage.

Sub-specialties

Stroke medicine is a sub-specialist branch of medicine in its own right and has only been recognised as such since 2007.

Doctors working in stroke medicine may also be consultants in another specialty. See the training and development section for more information.

Want to learn more?

Find out more about:
- the working life [3] in stroke medicine
- the entry requirements [4] and training and development [5]
- Pay and conditions

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This section provides useful information about the pay for junior doctors (doctors in training), SAS doctors (specialty doctors and associate specialists) and consultants.

Find out more about the current pay scales for doctors [6], and there's more information on the BMA website [7].

NHS employers [8] provides useful advice and guidance on all NHS pay, contracts terms and conditions.

Medical staff working in private sector hospitals, the armed services or abroad will be paid on different scales.

- Where the role can lead

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There are excellent opportunities to participate in research and stroke [1] medicine is a rapidly changing field. There are nine hyper-acute stroke [1] research centres in the UK that research new treatments to improve patient outcomes, as well as a number of other academic centres that specialise in stroke [1] research.

Examples of stroke [1] medicine research programs include:
- studies that examine the causes of stroke [1] and look at medical interventions that prevent subsequent stroke [1]
- studies that look at the different types of stroke [1] and prevention of cognitive decline
- the development of new techniques and treatments to increase blood flow to the brain after stroke [1], and to remove clots and stimulate nerves
developing robotic therapies that improve patient outcome after stroke [1]

Consultant roles

You can apply for consultant roles six months prior to achieving your Certificate of Completion of Training [9] (CCT [10]). You will receive your CCT [10] at the end of your clinical higher specialist training.

Managerial opportunities for consultants include:

- clinical lead - lead NHS consultant for the team
- clinical director - lead NHS consultant for the department
- medical director - lead NHS consultant for the Trust

Most NHS consultants will be involved with clinical and educational supervision of junior doctors.

Here are some examples of education and training opportunities:

- director of medical education - the NHS consultant appointed to the hospital board who is responsible for the postgraduate medical training in a hospital. They work with the postgraduate dean to make sure training meets GMC standards.
- training programme director - the NHS consultant overseeing the education of the local cohort of trainee doctors eg foundation training [11] programme director. This role will be working within the LETB/deanery
- associate dean - the NHS consultant responsible for management of the entirety of a training programme. This role will be also be working within the LETB/deanery

SAS doctor roles

SAS doctors (Staff, Associate Specialists and Specialty Doctors) work as career grade specialty doctors who are not in training or in consultant posts. You will need at least four postgraduate years training (two of those being in a relevant specialty) before you can apply for SAS roles.

Find out more about?the SAS doctor role [12].

Other non-training grade roles

These roles include:

- trust grade
- clinical fellows

Academic pathways

If you have trained on an academic pathway or are interested in research there are opportunities in academic medicine.
If you are interested in an academic career, consider applying for an academic clinical fellowship (ACF), particularly one that provides exposure to stroke medicine. This would enable you to develop skills in research and teaching alongside the basic competences in the foundation curriculum. However, it is not essential to take the academic foundation route if you are interested in pursuing an academic career.

Some trainees use their academic time to prepare an application for funding for a research fellowship leading to a PhD and subsequently apply for an academic clinical lecturer appointment.

Entry into an academic career would usually start with an Academic Clinical Fellowship (ACF) and may progress to a Clinical Lectureship (CL). Alternatively some trainees that begin with an ACF post then continue as an ST trainee on the clinical programme post-ST4.

Applications for entry into Academic Clinical Fellow posts are coordinated by the National Institute for Health Research Trainees Coordinating Centre (NIHRTCC). [13]

There are also numerous opportunities for trainees to undertake research outside of the ACF/CL route, as part of planned time out of their training programme. Find out more about academic medicine. [14]

The Clinical Research Network (CRN) actively encourages all doctors to take part in clinical research.

- Job market and vacancies

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**Job market information**

This page provides useful information about the availability of jobs, finding vacancies and where to find out more.

Stroke [1] medicine is a small sub-specialist area of medicine.

Stroke [1] medicine is a small sub-specialist area of medicine. There are currently 235 stroke [1] consultants in the UK. Some of these also undertake work in areas other than stroke [1] medicine. 24.9% of stroke [1] consultants are women, of whom 30.8% work less than full-time. Source: RCP 2015-6 census (UK consultants and higher specialty trainees). [16]

Demand for stroke [1] physicians across the UK is greater than supply. The high demand is partly due to the expansion stroke [1] services and corresponding advances in technology.

In 2016 the competition ratio [17] for Core Medical Training [18] (CT1), the first stage in the training (post-foundation) was 1.53 (NHS Specialty Training, 2016 [19]). There are no available competition ratios for stroke [1] medicine itself.

For information regarding Scotland, Wales and Northern Ireland please click on the links below.

NHS Scotland medical and dental workforce data [20]
NHS Wales medical and dental workforce data [21]
Department of Health, Social Services and Public Safety workforce information for Northern Ireland [22]
**Where to look for vacancies**

All candidates apply through the online application system Oriel.

Local education and training boards (LETBs) will have details of training vacancies. Not all LETBs will offer new training posts in all specialties in all years.

All jobs are advertised on the NHS Jobs website [23].

Northern Ireland has its own recruitment process. For further details please visit the Northern Ireland Medical and Dental Training Agency [24] website.

- Further information

**Organisations**

British Association of Stroke Physicians [25]

Royal College of Physicians [26]

Royal College of Physicians of Edinburgh [27]

Royal College of Physicians and Surgeons of Glasgow [28]

Joint Royal College of Physicians Training Board (JRCPTB) [29]

**Real-life stories**

Dr Hedley Emsley, consultant neurologist (RCP) [30]

**Other roles that may interest you**

- General internal medicine [31]
- Geriatric medicine [32]
- Rehabilitation medicine [33]
- Vascular surgery [34]

**Source URL:** https://www.healthcareers.nhs.uk/explore-roles/doctors/roles-doctors/medicine/stroke-medicine

**Links**

[1] https://www.healthcareers.nhs.uk/glossary#Stroke
[2] https://www.healthcareers.nhs.uk/glossary#Transient_ischaemic_attack_TIA