The Royal College of Pathologists
Pathology: the science behind the cure

Neuropathology workforce

Briefing | UK

The neuropathology workforce is small, with just 66 consultants in the UK. However, their work is essential for diagnosis, treatment and research for brain tumours, neurodegenerative diseases and rare neurological conditions. 47% of consultants plan to retire within 10 years, which will add to the pressures already facing the workforce.

EMBARGO

Key workforce challenges

- **Changes to demand** – complexity in diagnostics and treatment planning is increasing, including through integrated molecular (e.g. DNA) testing. These advances are essential for a more personalised and effective approach for patients, but the multi-step processes increase turnaround times and place additional strain on already overstretched teams.
- **Capacity for research** – neuropathology consultants are necessarily focused on meeting growing diagnostic demand, reducing time to contribute to research to develop future treatments. Investment is needed in academic components of consultant roles to ensure high-quality and sustainable neuropathology services, research and innovation for patients across the UK.
- **Service instability** – recruitment into the specialty is low, leaving succession planning vulnerable and risking service collapse in the longer term. Less well-serviced areas are particularly vulnerable. A commitment to train more consultants is needed to meet the required level across the UK and avoid service collapse.

What do neuropathologists do?

Neuropathologists are specialist medical consultants who focus on the diagnosis, treatment and research of diseases of the brain, spinal cord, skeletal muscle and nerves using tissue samples taken from biopsies. This includes neurological diseases and disorders including brain tumours, epilepsy, neuromuscular diseases, such as motor neurone disease (MND), and neurodegenerative disorders, such as Alzheimer's disease and Parkinson's disease. They guide treatment plans for cancer and inflammatory conditions, and work with multidisciplinary teams to ensure the best, tailored treatment is available for their patients. Some neuropathologists also perform post-mortem examinations in hospitals and coronial settings (procurator fiscal in Scotland).

Effect on patients and families

Patients who are waiting for diagnosis and treatment are affected. Many conditions (e.g. brain tumours, cerebral vasculitis) are time-sensitive, and delays in diagnosis can lead to clinical deterioration and increased anxiety for patients and families. There is a risk of creating regional disparities in patient outcomes as centres with fewer resources or slower molecular turnaround may provide less timely care. There is reduced time available time to contribute to research, innovation and the development of future treatments.

Key findings



There are 66 neuropathology consultants in the UK. This comprises 57 consultants in England, 5 in Scotland, 2 in Wales and 2 in Northern Ireland.

30% Consultants work 62.3 whole-time equivalents (WTE). The UK needs a 30% increase in consultant WTE to 81.1 WTE to meet estimated current demand.

10% There are 7.0 WTE vacant consultant neuropathology posts – a vacancy gap of 10%.

Over half of the consultant neuropathology workforce is over 55. 29% intend to retire within the next 5 years and 47% within the next 10. However, concerningly, some training posts remain unfilled.

In 2025, only 15% of time was dedicated to academic work – including research – compared with 23% in 2021, reducing time allocated to developing new life-saving or life-altering treatments.

4% Diagnostic neuropathology workload cases are increasing by around 4% per year. Demand and complexity related to molecular techniques are also increasing.

86% 86% of neuropathologists who work more hours than their contract do so without pay – the system is critically reliant on goodwill.

Some areas – particularly outside of London – are less well serviced and should be a priority for workforce investment.

EMBARGO

College recommendations

The neuropathology workforce requires longer term commitment to train more consultants to meet the required level across the UK to avoid service collapse. Investment is also needed in academic components of consultant roles to ensure the future of high-quality and sustainable neuropathology services, research and innovation for patients across the UK.

Train



- Services should prioritise maintaining and filling existing training posts and protect all currently funded consultant posts so that trainees can fill these vacancies once they have completed training.
- Services should consider collaborative training models between centres to support smaller departments in training and subsequently appointing their own consultants. Where local opportunities are limited, flexible approaches should be considered.
- Once the established training posts are filled, training posts across the UK should be expanded by 21.7 additional WTE training posts (26 headcount) over the next 10 years (by 2036) to provide a safe and effective service. 8.1 WTE (10 headcount) of these should be delivered by 2031 to ensure that there is adequate succession planning in place for neuropathology. This should be supported by an equivalent increase in the number of histopathology residents at ST1.
- Services should support consultants by including adequate dedicated time for teaching and mentoring in their contract – ideally 2.5 SPAs. This should include time to strengthen academic mentorship and ensure trainees gain exposure to the full breadth of neuropathology (non-neoplastic pathology, post-mortem work and clinicopathological correlation).
- The College should continue the curriculum review process to ensure consistent, high-quality training across the UK, including alignment with current practice and future demands, such as molecular diagnostics and interpretation of AI-generated data.
- The College and other professional bodies to consider opportunities to upskill histopathologists to support post-mortem work, increase use of the Portfolio Pathway and consider how non-medical scientists can be best utilised to support consultant-led services.
- Neuropathologists should promote the specialty through engagement with general pathology trainees and targeted outreach to medical students and resident doctors and emphasise that neuropathology offers diverse career opportunities beyond academia.

EMBARGO

Retain



- NHS bodies should provide dedicated administrative support to reduce non-clinical burden.
- NHS bodies should include research time as part of protected time in neuropathology roles.
- Neuropathologists, services and the College should work together to improve understanding among management of neuropathology's distinct needs, especially when integrated into larger pathology departments.
- NHS bodies should implement retention incentives for experienced consultants to remain in practice. This includes upgrading IT systems, estates and access to digital resources (e.g. WHO Blue Book, remote access), as well as promoting flexible rotas, part-time options, remote working, sabbaticals and work-life balance initiatives to reduce burnout and create attractive workplaces.

EMBARGO

Reform



- Governments in all 4 countries must invest in IT infrastructure and LIMS to support digital pathology adoption and pan-digital reporting across the 24 services. This will enable cross-cover and collaborative working across regions and support better workload capture to understand the true extent of demand increases.
- Networked services should be created linking smaller hospitals with neuroscience centres via digital pathology to share expertise and reduce geographic disparities. Services with low workforce numbers should be supported to enable their own recruitment initiatives as required.
- Governments to invest in clinical academic posts that enable joint opportunities to combine clinical and research roles. This should be done by encouraging innovative partnership models with academic and research bodies.

Contingency

- Professional bodies to continue to develop and follow clear national guidance for managing workload during periods of adversity, such as RCPath Best practice recommendations on staffing and workload for neuropathology departments. Consider ways to standardise reporting protocols to streamline diagnostic processes and integrate molecular data efficiently.
- Services to document robust prioritisation systems for urgent cases (e.g. brain tumours, inflammatory lesions) and monitor backlog size with escalation protocols (e.g. waiting list initiatives) during staff absences. Support prioritisation through collaboration with cellular pathology teams for urgent immunohistochemistry and molecular testing.
- Services to continue to refine service specifications for networked neuropathology services and strengthen mutual aid agreements between centres to provide short-term cover during consultant absences.
- Continue advocacy and best practice development by professional bodies such as the Royal College of Pathologists and the British Neuropathological Society to support systemic improvements.

EMBARGO

EMBARGO



The Royal College of Pathologists
Pathology: the science behind the cure

The Royal College of Pathologists, 6 Alie Street, London E1 8QT
Tel: +44 (0) 20 7451 6700 | Email: info@rcpath.org

A Registered Charity in England and Wales | Number 261035 | © The Royal College of Pathologists 2026