

The Royal College of Pathologists’ response to the Medical Training Review call for evidence

May 2025

1 Is postgraduate medical training meeting the needs and expectations of patients, healthcare services and doctors?

1.1 Workforce distribution

To what extent do you agree or disagree with the following statement?

'The current system of recruitment to and distribution of training posts meets the health needs of patients and the population.'

2 – Disagree

If you disagree, what changes are needed to better align the distribution of training posts with local health needs?

Robust workforce planning is needed to actively align the number and distribution of posts with local and regional need based on projected population growth, diagnostic demand and succession planning.

The pathology workforce has not increased with clinical demand – estimated as at least a 4% annual increase – over the past 10 years. Future demand is estimated to increase by



10% each year. As pathology strives to achieve improved standards and better patient outcomes, workload has absorbed increases in a variety of ways. The results are burnout, people leaving the profession and pathology becoming less attractive to trainees, particularly in the smaller specialties where these issues are much more acute.

“The pathology department will become non-viable unless something is done about recruitment. We are not getting senior trainees or any trainees sometimes and do not know how we will fill the gaps in the next couple of years” – Consultant, cellular pathology.

Coordinated and informed workforce planning is needed – particularly in smaller pathology specialties, e.g. paediatric and perinatal pathology, immunology, and neuropathology – to ensure that training posts are funded and supported before services start to struggle. Lack of succession planning can result in too few, or zero, trainees to replace retiring or departing consultants, ultimately leading to a breakdown in service provision, which for small specialties can have a national as well as a local impact.

This shortfall creates an escalating problem whereby vacancies are unfilled, workload increases, patient diagnoses are delayed and, looking ahead, there are not enough consultants available to train the next round of trainees. There must be strategies in place that both attract and retain the consultants required for the delivery of service and training, especially in underserved specialties and regions, before reaching crisis points.

Allocating training posts to areas that are underserved needs to have concurrent funding commitment by trusts. In 2023–2024, when part-fund histopathology training posts were made available, up to 20 could not be taken up due to difficulties in funding the NHS trust component of salaries. Trusts may not always view these posts as having an immediate beneficial impact on service provision, but this fails to recognise the fundamental importance of pathology within the majority of patient pathways and long-term service issues created by failures to prioritise investment in pathology at the right time.

Clear understanding of training pathways is also critical when considering post distribution. For example, training in the infection specialties has changed significantly over the last decade to provide a workforce equipped to provide the infection services of the future, combining both clinical and laboratory expertise. Any reallocation of posts must take into consideration maximum training capacity, which could be provided by training programme directors.



Supporting evidence

Walsh E, Orsi NM. The current troubled state of the global pathology workforce: a concise review. *Diagn Pathol* 2024;19:163.

NHS England Digital. *Pathology standards and implementation*. Available at: <https://digital.nhs.uk/services/pathology-standards-and-implementation>

To what extent do you agree or disagree with the following statement?

'The current distribution of training posts meets the needs of healthcare service providers in delivering healthcare and developing their future medical workforce.'

2 – Disagree

If you disagree, what changes would better align training post distribution with service and workforce needs?

As competition ratios, which represent the number of applicants per available training position, continue to escalate, there is a growing concern that many UK-trained foundational doctors are unable to secure a job that will allow them to continue their postgraduate medical training in the NHS. Across pathology, in 2024, there were 1,193 applicants for 305 training posts across all pathology specialties (competition ratio = 3.9). Competition ratios do not paint a full picture for determining reasons for bottlenecks – e.g. career breaks, increased medical graduate numbers, trainee preference, international recruitment – or why some posts remain unfilled. Out of 119 available ST1 histopathology posts in England, Wales and Scotland, 109 were accepted (fill rate of 0.92) out of 600 applications (competition ratio of 5.04). This indicates issues with the attractiveness of some posts.

Location is a major component of the decision-making process. This factor is a confounder of equitable distribution with some – mostly large, central locations – being seen as most desirable despite evidence from GMC National Training Surveys that these do not always provide the most rewarding training experience. Providing trainees with incentives, such as mentorship or career progression opportunities, could assist. Provisional data from the RCPATH 2025 Workforce Census ('Census') indicates that 68% of trainees intend to stay in the same region after completion of training – only 8% are looking to move, with 24%



undecided. This highlights the need for attractive training posts nationwide, mapped to service need and availability of career progression opportunities in the locality to secure a stable workforce for the future.

Census responses indicate that 86% of trainees intend to work in the NHS in some capacity, including public/private mix or academia, or locum work, after completion of training, with 52% of trainees intending to work purely in the NHS as a substantive consultant. While the majority are committed to the NHS, others plan to practice overseas (6%), take a career break (2%) or are not sure of their intentions (6%). This means that over 10% of the future pathology consultant workforce could be lost to the NHS, which must be factored into workforce planning.

Many trainees raised concerns about the availability of consultant posts to apply for on completion of training, particularly in areas where they had trained. Beyond the human cost of having no job to go to on successful completion of CCT, the inefficiency of a training pathway with no uptake of 'the product' is unacceptable.

"Creating new job places would solve more than 1 problem – reducing the workload per person, opening more time/space for research projects, reducing waiting lists for the patients and importantly would give security to the current trainees knowing that once they complete their training there would be an option to apply for a consultant post within the known environment where they trained" – Clinical biochemistry specialist registrar ST5.

1.2 Experience of being a resident doctor

To what extent do you agree or disagree with the following statement?

'The current model of postgraduate medical training meets the personal and professional needs of most doctors.'

2 – Disagree

If you disagree, what changes would have greater impact in supporting the personal and professional needs of doctors in training?

The Census asked pathology trainees about their experiences of training. 39% said they were always (9%) or often (30%) stressed at work. Only 38% agreed that there is sufficient



time within each working day to get through their daily workload. The top 6 factors negatively affecting wellbeing at work were poor IT functioning (12%), insufficient pay (9%), excessive workload (8%), administrative burden (7%), poor workplace morale (7%) and condition of the physical environment (7%).

Trainees indicated that they simply do not have enough time to study for exams and complete their assessments on top of their clinical workload. This has worsened in recent years by an increasing and high workload, increased demand for services, high number of consultant vacancies and lack of availability of consultant workforce to provide support. This is consistent with feedback across the wider pathology workforce.

Trainees highlight the need for increased protected time to support them, with 59% saying that they are not given sufficient time for professional development.

“My wellbeing would significantly be enhanced by more protected admin time to keep up with the significant burden of non-clinical work (ePortfolio/exams/emails/projects)” – Microbiology and infectious disease specialist registrar ST5.

Exam and training costs are frequently noted as a significant financial burden for trainees. Study leave budgets to support doctors in approved training programmes have remained unaltered for many years – approaching 2 decades in places. This also fails to recognise that costs vary in different parts of the country, and that costs increase with distance from major cities. Additionally, in small specialties, like those in pathology, many key learning opportunities require significant travel and accommodation costs with international conferences being common. Costs for these are rarely covered by available resources and are often met by the trainees. The variation in costs and availability of training in smaller specialties, or outside of major cities highlights the fact that not one size fits all when it comes to support and different solutions are needed to meet different circumstances.

Supporting evidence

RCPATH Bulletin. *Overcoming challenges in pathology training*. Available at:

<https://www.rcpath.org/resource-report/overcoming-challenges-in-pathology-training.html>



1.3 Flexibility in training

To what extent do you agree or disagree with the following statement?

'Current training processes are flexible enough to meet the needs of most doctors.'

3 – Neither agree nor disagree

If you disagree, please indicate which areas of flexibility need improvement?

There are sufficient opportunities for flexible training within pathology and this is valued by trainees. The Census indicated that 64% of trainees are training full time. Of those who intended to gain a consultant position, only 39% indicated that they intend to work full time. This indicates an increasing shift towards part-time working for many trainees and newly trained pathologists, which needs to be considered in workforce planning.

In some – if not all – areas where LTFT posts are created, this is not accompanied by an increase in the number of sessions or WTE funding. For example, if a LTFT trainee is working 0.6, there is no additional provision to backfill the 0.4 post with an additional trainee. This has significant consequences for the service, others training in the programme, as well as trainees who can feel pressure to progress through the training programme at the same pace as WTE trainees.

Training post availability and funding need to reflect headcount as well as WTE to reflect changing working practices, so that quality training posts are available for those who wish to work flexibly or part-time without reducing the overall capacity of the service. If doctors choose to train flexibly this needs to be addressed in workforce planning to ensure adequate provision of future consultant workforce supply.

2 Training capacity, delivery and quality

2.1 Preparation for future practice

To what extent do you agree or disagree with the following statement?

'The current postgraduate medical training adequately prepares doctors for the professional and clinical demands of their future roles.'

3 – Neither agree nor disagree



If you disagree, which of the areas contributing to preparedness require the most improvement?

The consequence of changes to training pathways and models over the past few decades is that doctors have had a reduced range of experiences upon entering consultant practice. Flexibility in pathways, providing out-of-programme (OOP) opportunities and reinstating some of the lost apprenticeship models may help to ensure those in training have the range of experience required to transition confidently into consultant practice.

RCPATH has evidence that the number of Portfolio Pathway applications, particularly in histopathology, has increased significantly over the last 5 years. In total, during that time 93 applicants were successful, representing approximately 74% of all applications reviewed. Those who are successful could be a real asset to the workforce, but more structured support is needed to ensure they receive the appropriate training and support and that there is better planning locally to better support both trainees and Portfolio Pathway applicants.

RCPATH agrees that LE and SAS doctors are an essential part of the medical workforce and must be provided with the appropriate educational and career support to retain their skills and expertise. The rising number of Portfolio Pathway applications highlights this need. The Census highlights a lack of career progression and support as challenges for LE or SAS doctors seeking transition into consultant roles. Clearer opportunities to gain the required experience, along with structured educational and career support are required at all stages of their careers. These opportunities should be considered as a part of overall workforce planning efforts.

“More training opportunities for specialty doctors preparing to enter specialist register are needed” – SAS doctor.

The loss of locum appointment for training (LAT) posts in England, which allowed locum training to be recognised towards CCT following appointment to a recognised training programme, is a missed training opportunity. This ensured training vacancies were maintained with long-term benefit. It was also a useful tool to backfill OOP and flexible training. These posts still exist in Scotland.



2.2 Quality of the learning environment

To what extent do you agree or disagree with the following statement?

'The current system of postgraduate medical education provides doctors with a high-quality learning environment.'

4 – Agree

Please indicate which areas of postgraduate medical education require improvement?

Pathology trainees are generally provided with a high-quality learning environment and benefit from close supervision. However, this varies depending on pressures within the system. In areas of high workload and high vacancies, learning environments will be worse. Unless significant improvements are made to address workforce shortages more generally, there is real risk to the quality of the learning environment deteriorating owing to the lack of available consultants to provide training and a poor-quality workplace environment affected by staffing shortages.

Special attention needs to be made for smaller disciplines, such as forensic pathology, immunology, neuropathology, and paediatric and perinatal pathology, to ensure these services are better supported before they begin failing. Support for the existing workforce is vital so that retention is optimised.

The current pathology workforce has been working beyond capacity for many years and staff are burnt out. This limits opportunity for effective supportive relationships between trainees and senior doctors. There needs to be a properly considered and effective retention plan to ensure that trainees are supported as trainees and then as consultants to ensure there are not further unnecessary workforce losses. Those who are training the future pathology workforce need to be properly supported and time must be protected for this vital function and their contribution recognised.

In responding to the Census, trainees highlighted variation in the quality, resources and attention given in training, and acknowledge that understaffing is a major source of stress in the system.



“The shortfalls of departmental staffing become individuals’ burdens. As a consequence, training and development opportunities, although theoretically available, are not accessible” – Haematology specialist registrar ST6.

Trainees report feelings of isolation and lack of opportunity to interact with other trainees, particularly in the smaller pathology specialties. Increasing opportunities to meet other trainees in person, and workplace allocated funding to facilitate educational opportunities are suggestions to enhance the learning environment.

2.3 Educator capacity

To what extent do you agree or disagree with the following statement?

'Trainers in postgraduate medical education have sufficient time, support and resources to deliver quality supervision and training.'

1 – Strongly disagree

If you disagree, which factors could better support medical educators?

Service demands should be balanced with providing time for training for trainers, if improving the training experience is a genuine objective. Generally, trainers are well supported by deaneries in terms of personal development but time to participate in and implement learning from educator training is restricted by service pressure and lack of protected time for these duties.

Although development programmes and training for trainers are available, these are often underutilised simply because clinical commitments leave little time to participate. As a result, there can be variability in the quality of educational supervision and an increased risk that trainer engagement may decline over time.

In the Census, only 29% of consultants agreed that they were given the time needed to participate in the development of their profession, which includes time for training.

The ability for consultants to provide the necessary training is compounded by the increasing workload and diminishing pathology workforce. The establishment of histopathology consultant whole-time-equivalents in England has grown only 1% per annum since 2014, despite a 3% increase in training posts and laboratory requests



increasing at a rate of approximately 4.5% each year. Without an increase in consultant posts, a continued increase in clinical workload will continue to severely limit the ability of consultants to provide high-quality training. Teaching can be viewed as a burden by consultants, who could consider becoming a trainer but struggle to manage their own workload. Respondents to the Census stated that they simply do not have the capacity to take on this work in a supportive and engaging manner. This reduces opportunities for teaching and day-to-day support, which are essential to good postgraduate training.

The Academy of Medical Royal Colleges guidance states that a consultant job plan should have a 7.5 direct clinical care and 2.5 supporting professional activities (SPA) split for a full-time post, allowing adequate time to engage in essential activities that ensure the long-term maintenance of the quality of the service, including training and examiner roles. In 2023, only 12% of full-time pathology consultant job plans met this recommendation.

There is an urgent need for pathologists working in the NHS to have ringfenced time for training, so that they can provide trainees with the support they deserve:

“I really struggle to understand why consultants are now routinely given only 1.5 SPAs, and that includes educational supervision of trainees” – Consultant, microbiology.

Considerations regarding the capacity for education and training must also be factored into any evaluation of skill mix or proposals to increase medical specialty training posts. This requires a stronger emphasis on embedding educational responsibilities into workforce planning at both trust and national levels. Any increase in training posts must go hand in hand with an increase in trainer support to get the best value and return out of the investment.

Supporting evidence

The Academy of Medical Royal Colleges. *Advice on supporting professional activities in consultant job planning*. 2010. Available at: https://www.aomrc.org.uk/wp-content/uploads/2024/10/Advice_on_SPA_in_job_planning_0210.pdf



2.4 Equality, diversity and inclusion

To what extent do you agree or disagree with the following statement?

'Postgraduate medical training creates an equitable and inclusive environment for doctors from diverse backgrounds, including those from minority ethnic groups and those with disabilities.'

3 – Neither agree nor disagree

If you disagree, how can things be done differently to address differential attainment, sexism and microaggressions for doctors from diverse backgrounds?

Trainees responding to the Census highlighted the need for genuinely inclusive workplaces, with some noting that requests for reasonable adjustments are not always granted leading to perceived discrimination.

“Inclusive workplace needs to be more than a slogan used. Reasonable adjustments for those with disabilities, e.g. dyslexia or other neurodiversity, need to be supported for them to be effective members of the team” – Cellular pathology specialist registrar ST5.

This is complex and variable between training environments. Inclusivity needs to be addressed top-down across whole organisations. Where problems arise in an organisation, they are not generally limited to doctors in training. Better support systems in place, such as training for staff, occupational health or HR, could assist.

The percentage of candidates seeking reasonable adjustments for RCPATH exams has increased from 3% in 2017 to 6% in 2024, during which time candidate numbers have almost doubled (including international candidates and scientifically qualified candidates). The increasing number of trainees requiring support means that considering diversity in the workplace must be taken into account in job planning, as well as occupational support.



3 Enabling and reforming postgraduate medical education to achieve the 3 NHS mission shifts

3.1 Hospital to community

To what extent do you agree or disagree with the following statement?

'Postgraduate medical training should include more opportunities in community-based settings to better align with patient and community needs.'

No response.

If you disagree, please explain why you believe postgraduate education should not provide more community-based opportunities.

No response.

3.2 Treatment to prevention

To what extent do you agree or disagree with the following statement?

'Postgraduate medical training curricula should include a stronger focus on addressing health inequalities, social determinants of health and population health.'

3 – Neither agree nor disagree

If you disagree, please give your reasons.

The RCPATH is committed to addressing health inequalities and recognises that demand for pathology services will fluctuate due to factors such as population growth and demographics including socioeconomic status.

If postgraduate medical training is to include a stronger focus on addressing health inequalities, this should be done in a meaningful way that is tied to local needs. This also requires a nuanced approach and acceptance that skills needed will vary depending on location.

This requires proper workforce planning, informed by the latest research to best address health inequalities and respond to the social determinants of health and population health.



3.3 Analogue to digital

To what extent do you agree or disagree with the following statement?

'Postgraduate medical training should incorporate more content on digital health, AI and remote care, including the use of technologies such as extended reality, AI and machine learning, to enhance learning experiences and improve training capacity.'

3 – Neither agree nor disagree

If you disagree, please give your reasons.

While supporting this approach, this needs to be realistic and proportionate to available and implementable technologies.

Many pathology departments are located in dilapidated buildings that are below the necessary standards to deliver safe and efficient services and safeguard staff wellbeing. Our members tell us they are not they suitable for developments in digital technology and automation; a lack of appropriate space for staff and facilities means that expansion of training opportunities in AI and machine learning for pathologists is not feasible. In many cases, it is the direct cause for preventing expansion. Significant investment is needed before this can be a realistic option.

In response to the Census, 62% of trainees agreed that the quality of services provided by their employer, e.g. building, digital services, enabled them to do their job effectively. However, poor IT functioning was cited as the most common factor negatively affecting trainees' wellbeing at work.

“One of my earlier rotations had scanning machines for digital pathology but the infrastructure is not good enough for the size of the slide images – this has caused massive delays in the department's ability to switch to digital. In addition, the programmes are slow, old and often crash, further adding to the delay. They are also not the most intuitive to use and are poorly designed. This makes it frustrating when I hear that departments are criticised for how slow they are (which a large part is from IT issues) but trusts are unwilling to pay for more consultants and better reporting software” – Cellular pathology trainee ST2.

Improved IT infrastructure, as well as compatible and connected digital software, is essential, including the ability to easily share data between systems across the regions



and country, before any benefits are to be realised. AI will not work without the adequate IT infrastructure to support it. There is no practical solution to the lack of investment in up-to-date IT in pathology. While AI has potential, there is a need to offset the costs on energy needed to run it and to deal with the waste heat generated by it. All of these elements need to be addressed and all of them represent significant capital investments.

It is further important to recognise that, while digital pathology will be an enabler for enhanced productivity in pathology, it will not be the panacea to solve the workforce shortfalls. Increased numbers of trainees and consultant pathologists are still required to be trained to utilise and develop emerging technologies appropriately.

4 Career expectations and system gaps/issues impacting on satisfaction

What factors are the most and least important for a rewarding and satisfying postgraduate medical training pathway?

To note: pay and conditions are not within the scope of the review.

Please select the 3 most important:

- Contributing to an effective healthcare service.
- Work–life balance and workload.
- Working conditions.

Please select the 3 least important:

- Ability to develop and/or deliver effective patient care pathways.
- Ability to train and work in one's desired location.
- Ability to train and work in one's desired specialty.
- Access to high quality mentorship and supervision.
- Being a member of an effective multidisciplinary team.
- Confidence in career progression.



- Contributing to an effective healthcare service.
- Flexible training options.
- Leadership, research, quality improvement or teaching opportunities.
- Making a difference to the wellbeing of individual patients.
- Professional identity and status.
- Professional/technical ‘mastery’ of one’s craft.
- Support for personal and professional development.
- The opportunity to improve health of a local community at a population level.
- Work–life balance and workload.
- Working conditions.
- Other(s) (please specify below).

All of these are important. We have not selected any options as we do not have conclusive evidence to rank these.

What are the most and least significant barriers to a rewarding and satisfying postgraduate medical training pathway?

To note: pay and conditions are not within the scope of the review.

Please select the 3 most important:

- Inadequate physical and IT infrastructure to support training.
- Limited protected time for portfolio development (research, quality improvement, teaching, leadership).
- Service pressures/time to train.

Please select the 3 least important:

- Cost of training (for example, examinations and College membership fees).
- Current rotational training structure.
- Inadequate physical and IT infrastructure to support training.



- Lack of access to high quality supervision.
- Lack of access to high quality training opportunities.
- Lack of access to simulation, virtual, digital and AI-based education.
- Lack of flexibility to gain experience across multiple settings.
- Length of training.
- Limited protected time for portfolio development (research, quality improvement, teaching, leadership).
- Burden of portfolio requirements.
- Relevance of curricula.
- Rigidity of training structures/career progression routes.
- Service pressures/time to train.
- Training bottlenecks at key progression points.
- Other(s) (please specify below).

All of these are important. We have not selected any options as we do not have conclusive evidence to rank these.

Please select the 3 most important options for reforming postgraduate medical education:

- Ensuring access to physical and IT infrastructure required to facilitate training (for example, shared desk space, reliable digital systems).
- Giving local health systems greater input into shaping postgraduate medical training placements and specialty numbers.
- Protecting time for educators.



If you have any further ideas or feedback regarding a model/exemplar design for the delivery of postgraduate medical education, please describe these:

This response has been prepared by the RCPATH, informed by training experiences of medical pathologists and workforce trends. Separate responses have been submitted by RCPATH committees relevant to area of expertise. Provisional UK-wide data from the RCPATH Workforce Census sent to all members, including registered trainees, in March 2025 has helped inform this response.

RCPATH oversees a range of pathology specialties, both large and small. It has been challenging to provide a uniform or consistent response to the questions on behalf of all specialties, since there are different needs and experiences based on a number of factors, including size of specialty. This highlights that adopting a one-size-fits-all approach to some of the challenges highlighted as part of this survey is unlikely to be successful; finding different ways to approach the issues are required. Although this consultation is England-only, it is important to consider the UK perspective, given trainees will move across borders.

Increasing postgraduate training opportunities is a necessary part of expanding the capacity of the pathology workforce. Robust workforce planning is needed; given that 95% of clinical pathways rely on patients having access to pathology services, pathology laboratories are experiencing greater case complexity and demand. Local input needs to be embedded within the national recruitment process to assist with identifying service pressures and with the process of distribution of trainees into local regions where they are most needed.

Different specialties and regions will require different solutions to ensure trainees are attracted and recruited. Only then can recruitment to, and distribution of, training posts be aligned to meet future local health service needs.

Our response to the NHS 10-Year Plan recommended increasing pathology training places by around 150 in England within 2 years. Further workforce data being collected will refine this recommendation, including post distribution.

The outcome of this review should align with the planned 2025 iteration of the NHS Long Term Workforce Plan in England and corresponding plans in Wales, Scotland and Northern



Ireland. These should outline how accurate medical workforce planning will occur and what input from medical royal colleges is needed.

Research into workforce development is poorly funded and supported in the UK. This research, also called medical education research, needs to be focused on understanding the individual, the job they do and the environment in which they work, and study ways of optimising these components. This provides an evidence base for educational practice, including postgraduate and continuing professional education. The benefits include improved learning, better outcomes, more focused use of resources, more satisfied workforce, improved productivity and better patient outcomes. This research should form a crucial part of all workforce planning.

Contact details

This response was jointly collated by the Learning Directorate and the Workforce team within the Professional Practice Directorate of the RCPATH, with input from the College's Committees.

Please contact Amy Johnson, Workforce and Engagement Manager, at the College if you have any questions: amy.johnson@rcpath.org.

About the Royal College of Pathologists

The Royal College of Pathologists is a professional membership organisation with more than 11,000 fellows, affiliates and trainees, of which 23% are based outside of the UK. We are committed to setting and maintaining professional standards and promoting excellence in the teaching and practice of pathology, for the benefit of patients.

Our members include medically and veterinary qualified pathologists and clinical scientists in 17 different specialties, including cellular pathology, haematology, clinical biochemistry, medical microbiology and veterinary pathology.

The College works with pathologists at every stage of their career. We set curricula, organise training and run exams, publish clinical guidelines and best practice recommendations and provide continuing professional development. We engage a wide range of stakeholders to improve awareness and understanding of pathology and the vital



role it plays in everybody's healthcare. Working with members, we run programmes to inspire the next generation to study science and join the profession.

