



## RESPIRATORY MEDICINE WORKFORCE REVIEW 2020

### THE RESPIRATORY WORKFORCE – FACTS AND FIGURES

This document provides important facts and figures about the respiratory workforce, providing information to support our aim of **BETTER LUNG HEALTH FOR ALL**:

- We champion excellence in the diagnosis, treatment and care of people with lung disease and support those delivering it
- We influence NHS policy and services to help reduce the health and economic burden of lung disease
- We work with, and support, individuals and organisations across the NHS and beyond who share our vision.

This document should be read in conjunction with the 2020 Workforce Review Statement which outlines the Society's work to date and current call for action (1).

Our website provides vital information and guidance for all members of the respiratory workforce. Specific recent developments to this section of our website include:

- Specialty trainee pages now include comprehensive information and advice for those working to become respiratory consultants.
- Expansion to our support for physician associates by providing a series of case studies.

The Society's activities are never completed in isolation and our work to drive standards of care for respiratory patients provides the workforce with much needed guidance and support. As well as continuing to produce guidelines, quality standards and clinical statements, the Society runs an active audit programme and has just published the first document to create standards for thoracic ultrasound training, and a Professional Development Framework for Respiratory Nursing.

The 2020 COVID-19 pandemic saw the specialty step forward to take a leading role in the acute response to this novel disease. Respiratory specialists worked alongside colleagues in Emergency Medicine, Acute Medicine and ICU to lead teams of non-specialists and provide direct patient care.

The BTS produced over 30 guidance and advice documents in the period from March to July 2020 to assist and support those working in the acute care and subsequent rehabilitation of COVID-19 patients. Uniquely, respiratory medicine was involved in all aspects of patient care from acute illness through to rehabilitation and post-discharge follow-up.

### Supporting the future workforce

Data collected by BTS over the past 3 years (2, 3) supports the recent response from the Royal College of Physicians London to the Health Education England (HEE) workforce strategy consultation, which called for a number of specific actions (4)

- The number of medical school places to be doubled to 15,000 per year, with the aim of a small surplus of supply
- Doctors in training should be encouraged to take up posts in specialties and locations with the largest recruitment gaps, by providing them with incentives such as protected time for leadership, education, training, research and quality improvement

- The UK to be made more accessible to doctors and other professionals from across the world, with an immediate increase in the size of the Medical Training Initiative scheme to 2,000 places
- More flexibility in working patterns, regulation, moving between training programmes, moving between specialties, and meeting the aspirations of current and future physicians
- A recognition of the need to change the job plans of physicians to accommodate an older workforce, as the age of retirement increases (5)

The 2018 Respiratory Taskforce report (6) explicitly calls for an increase in respiratory specialty training posts, as well as a focus on recruitment and retention of respiratory nurses, additional training places for respiratory physiologists and an increase in physiotherapy training places.

### **The burden of respiratory disease**

The British Lung Foundation report “The Battle for Breath – the impact of lung disease in the UK, 2016” highlighted the extent and impact of lung disease on the UK population: around 1 in 5 people (12 million) has had a diagnosis of lung disease at some stage in their lifetime, 550,000 people are diagnosed with lung disease in the UK each year, lung disease kills approximately 115,000 people every year in the UK, and is responsible for over 700,000 hospital admissions and more than 6.1 million bed days in the UK each year. (7, 8).

Respiratory disease is a major factor in ‘winter pressures’ on the NHS, with twice as many respiratory admissions occurring in December compared to August (9).

The NHS Long Term Plan, published in January 2019, included Respiratory as a clinical priority for the health service for the first time (10). The Long-Term Plan also includes an emphasis on workforce, training and leadership. Further initiatives recognise the key importance of the workforce in underpinning the future of the health service:

- We are the NHS: People Plan 2020/21 - action for us all. (11)
- The Taskforce for Lung Health’s five-year plan sets out a framework to improve the nation’s lung health and provide better care for people with lung disease. This work includes a focus on the respiratory workforce (6).
- HEE future Doctor (12)
- Everyone Matters 2020 Workforce vision for Scotland and Northern Ireland Health and Wellbeing 2026: delivering together <https://www.health-ni.gov.uk/progressreport2019>
- Developing professional identity in multi-professional teams (AMRC) (13)

The increased focus on Respiratory disease is echoed in Wales, through its Respiratory health delivery plan 2018 – 2020 (14) and in Scotland where most Health Boards have Respiratory Managed Clinical Networks (15).

### **A workforce appropriate to meet the increasing burden of respiratory disease**

The burden of respiratory disease is increasing as evidenced by publications from the British Lung Foundation (7, 8). Those working in respiratory medicine are well placed to make a positive contribution to improving standards of care for patients in the future health service, provided this key workforce is maintained and encouraged at both trainee and consultant level.

Recognising that those working in respiratory medicine have a vital role to play in the planning and delivery of health care services that are fit for the future, the Society is concerned that the current respiratory workforce is insufficient to meet both current, and future, needs.

## **What respiratory specialists do**

The multi-professional respiratory workforce is involved in the care of patients with a large number of conditions, including COPD, asthma, sleep apnoea, pulmonary fibrosis, cystic fibrosis and lung cancer. A more detailed description of the breadth of the work undertaken by those working in respiratory medicine can be found on the BTS website and the RCP Medical Care website (16, 17).

Traditionally, delivery of Respiratory Medicine occurred in a hospital (secondary or tertiary care) setting, however integrating respiratory services into community care for patients with lung disease is increasing as a model for delivering specialist care. BTS has published a position statement on Integrated Respiratory Care which rightly emphasises the need for new models that provide the best possible care for the patient, delivered by the most suitable health professional, at the optimal time, in the most suitable setting (18).

A number of important innovations in patient care have been developed by respiratory teams for example: non-invasive ventilation in acute hypercapnic respiratory failure; the investigation of pleural effusions using ultrasound; COPD care bundles; asthma self-management plans; pulmonary rehabilitation; home ventilation services; MDT lung cancer management; interventional bronchoscopy; CPAP for sleep apnoea and recognising the importance of effective end-of-life care.

The involvement of the respiratory specialist in the care of those with lung disease has been shown to be of benefit, both in relation to the efficiency of health services and to improved standards of care experienced by the patient (19, 20, 21). With recognition of the need to provide highly specialised care for the wide range of complex conditions managed by respiratory specialists, sub-specialisation by consultants within respiratory medicine is increasingly necessary. National guidance for the care of complex respiratory conditions mandates subspecialist involvement in care, in specialist centres and via MDT meetings: this improves the quality of care for patients but increases workload for respiratory physicians, further contributing to workforce pressures (22).

The respiratory workforce is a key advocate for respiratory patients, who are often elderly and less able to speak for themselves.

## **Physicians (Consultants and Specialty Trainees)**

The medical respiratory workforce (both consultants and specialty trainees working alongside colleagues in multi-professional teams) plays a central role in the care of respiratory patients throughout the country; providing leadership and support for those in other specialties and the allied health professions that contribute to the care of this large group of patients. In addition, the respiratory physicians contribute to both acute and general medicine provision (23). The Joint Royal Colleges of Physicians Training Board (JRCPTB) describes Respiratory Medicine as one of the two major specialties of acute General Internal Medicine (GIM). Approximately 30% of all acute admissions in GIM are for a primary respiratory problem, and respiratory physicians are essential and major contributors to the acute medical take in all acute hospitals (23,24).

Respiratory physicians provide care for those with chronic disease with an increasing number working across the community. 90% of respiratory consultants contribute to general medicine, and some work flexibly across both primary and secondary care and, in some cases, tertiary care environments. The Shape of Training report stated that patients and the public need more doctors who are capable of providing general care in broad specialties, across a range of different settings (25). The key intensivist and generalist skills outlined in the HEE Future Doctor Programme are already a core part of Respiratory training and care [12]. The respiratory medical specialty is one of a small number of

specialties that continues to underpin general medical care, as well as providing care for acutely unwell respiratory patients and those with chronic disease, in acute settings and community-based roles. Those working in respiratory medicine, support, in principle, the introduction of new models of care which will, with appropriate investment, undoubtedly improve the experience of care for respiratory patients.

### **Respiratory Nursing**

The 2017 report on the respiratory nursing workforce (26) provided a snapshot of the respiratory nurse specialist workforce in the UK. It highlighted the breadth of the services provided by respiratory nurses across the country, revealing that respiratory nurses are working in the majority of respiratory subspecialties. Reassuringly there is little evidence of frozen positions, but of concern are anecdotal reports of specialist nurses being required to work on the wards, to cover ward vacancies. This affects the ability of the respiratory nurses to fulfil their roles, impacting on the delivery of patient care and the provision of services to enable early discharge and can result in the cancellation of specialist clinics (27). This consequently affects staff morale. It is also reported that many respiratory nurses spent a significant amount of time on administrative duties, again impacting on patient care.

The report highlighted that the current respiratory nursing workforce is drawn from an ageing population, with potentially 50% of the respondents being eligible to retire by 2022. To attract the next generation of respiratory nurses, there is a need to explore in more detail the issues contained in the Yorke et al paper (26).

To address some of the issues, BTS has recently published a Professional Development Framework for Respiratory Nursing to support the role of Specialist Nursing in Respiratory Medicine. This innovative document provides a much needed comprehensive structure to support the training and development needs of the respiratory nurse workforce now and in the future. This framework is intended to provide a template for other allied disciplines to use as a means of defining specialist working (28). The next step might be to develop a curriculum to guide the higher training of non-physician specialist staff.

### **Respiratory Physiotherapy, Physiology, Pharmacy and Psychology**

A 2018 survey by the Association for Respiratory Technology & Physiology (ARTP) found that the expansion of the medical workforce has an impact on the activities and workload of all members of the respiratory team (29). When planning for the appointment of a new Consultant post to a department, the organisation needs to consider the effects of such an appointment on the wider workforce. The study found that each Consultant in Respiratory Medicine post needed a 0.6 WTE physiologist to support their clinical activities in order to provide good patient care. Currently less than 10% of physiology departments are involved in planning for the appointment of new Consultant medical staff.

At the present time there is no data available on numbers of NHS staff employed specifically as respiratory physiotherapists or pharmacists. Psychological support is critical to the care of respiratory patients, highlighted by the COVID-19 pandemic, but few respiratory services currently have dedicated psychology support.

### **Recruitment and retention**

The role of all medical staff is changing with an increasing focus on their role in leadership, followership within a transformed multi-professional team [12]. Multi-professional teams form the core of the respiratory workforce and to deliver optimal patient care now and in the future, teams

must have suitable professionals and skillsets. This will require support for the current respiratory workforce, and wider recruitment of psychologists, pharmacists, dieticians and other health professionals with specialist interests in respiratory care [13].

A 2019 BTS survey of respiratory departments, highlighted high levels of unfilled respiratory consultant posts in hospitals across the country (over 50% of hospitals with advertised consultant posts reported problems with recruitment, up from 40% in 2016, and over 60% reported difficulties in making appointments due to a lack of suitably qualified applicants (2, 3, 23). The existence of unfilled posts in hospitals across the country imposes a strain on the health system, jeopardises the development and delivery of services, and places the health and safety of patients at risk.

The respiratory specialty training programme equips high-calibre doctors with the skills and expertise necessary to maintain the UK's specialist respiratory workforce (comprising consultants, associate specialists and other permanent specialists) and is a popular choice for those wishing to pursue a career in specialty medicine. Respiratory specialty trainees make a significant contribution to the medical registrar workload. Respiratory Medicine offers research opportunities for trainees with a significant number obtaining a MD or PhD. ST3 applications to Respiratory medicine have increased over recent years from 272 applicants in the 2103 round 1 to 375 in 2020.

We need to ensure that the number of trainees graduating from specialist training is sufficient to fill vacant consultant posts. 2019 and 2020 have seen 100% fill rates in respiratory medicine (30).

At the present time, the UK respiratory specialty training programme is not training enough doctors to meet the current demand and, given the increasing call on the medical respiratory workforce to contribute to 7-day services, the number of respiratory trainees required must be increased. To meet future demand, the Society calls for the creation of an additional 200 training posts in respiratory medicine to be introduced over the next 5 years (1, 6).

The Society's innovative online Recruitment Hub allows hospitals to advertise future (and current) Consultant Respiratory Physician posts, as well as posts in other respiratory professions allowing potential candidates greater time to consider their application (31)

### **What does this mean for patients and the wider NHS?**

The existence of vacant posts within the respiratory team presents a significant challenge to the development and introduction of 7-day hospital services. It poses immediate problems for the respiratory teams concerned, e.g. in relation to lengthening waiting lists, but lack of specialist input can lead to poorer outcomes for patients; and an increased length of stay,

There is a disparity between hospitals in urban centres and those in more rural areas in terms of difficulty in recruitment and retention of the medical respiratory workforce. This will need to be addressed and solutions may include allowing some local flexibility in national terms and conditions, or centralising acute medical services in larger hospitals.

**Respiratory is a multi-professional team-based specialty. BTS calls for the recognition of the vital role that nursing, physiotherapy, physiology, pharmacy and related health care professions play in delivering high quality respiratory care.** Through expansion and proper resourcing of respiratory teams, and the widespread adoption of integrated models of care, the NHS will be better prepared for the future (32).

November 2020

## References

1. BTS Workforce Review Statement 2020 – add link
2. British Thoracic Society <https://www.brit-thoracic.org.uk/working-in-respiratory/> BTS Respiratory Medicine Workforce Survey Report 2017, and 2018
3. British Thoracic Society <https://www.brit-thoracic.org.uk/working-in-respiratory/> BTS Respiratory Medicine Workforce Survey Report 2019
4. Royal College of Physicians London (2018) response to 'Facing the Facts, Shaping the Future: A draft health and care workforce strategy for England to 2027' <https://www.rcplondon.ac.uk/guidelines-policy/rcp-response-facing-facts-shaping-future-draft-health-and-care-workforce-strategy-england-2027>
5. RCP London - Later careers: Stemming the drain of expertise and skills from the profession <https://www.rcplondon.ac.uk/projects/outputs/later-careers-stemming-drain-expertise-and-skills-profession>
6. Taskforce for lung health 2018 <https://www.blf.org.uk/taskforce>
7. British Lung Foundation, The battle for breath – the impact of lung disease in the UK, 2016 <https://www.blf.org.uk/what-we-do/our-research/the-battle-for-breath-2016>
8. British Lung Foundation, Estimating the economic burden of respiratory illness in the UK 2017. <https://www.blf.org.uk/what-we-do/our-research/economic-burden>
9. British Lung Foundation, Out in the cold: lung disease, the hidden driver of NHS winter pressure, 2017 <https://www.blf.org.uk/policy/out-in-the-cold>
10. NHS Long Term Plan 2019. <https://www.longtermplan.nhs.uk>
11. Interim NHS People Plan 2019 <https://improvement.nhs.uk/resources/interim-nhs-people-plan/>
12. HEE Future Doctor: a co-created vision for the future clinical team: <https://www.hee.nhs.uk/our-work/future-doctor>
13. Developing professional identity in multi-professional teams, AMRC, 2020 <https://www.aomrc.org.uk/reports-guidance/developing-professional-identity-in-multi-professional-teams/>
14. Respiratory Health Delivery Plan 2018, Wales <https://gov.wales/topics/health/nhswales/plans/respiratory/?lang=en>
15. Respiratory Managed Clinical Networks, Scotland <http://www.knowledge.scot.nhs.uk/respiratory.aspx>
16. British Thoracic Society, [www.brit-thoracic.org.uk](http://www.brit-thoracic.org.uk)
17. RCP Medical Care <http://www.rcpmedicalcare.org.uk/designing-services/specialties/respiratory-medicine>
18. BTS Position Statement on Integrated Respiratory Care <https://www.brit-thoracic.org.uk/about-us/position-statements/>
19. Price LC, Lowe D, Hosker HSR et al. UK National COPD Audit 2003: Impact of Hospital Resources and Organisation of Care on Patient Outcome following Admission for Acute COPD Exacerbation; Thorax 2006; 61: 837-842.
20. T Bewick, V J Cooper, W S Lim. Does early review by a respiratory physician lead to a shorter length of stay for patients with non-severe community-acquired pneumonia? Thorax 2009, 64: 709-712.
21. COPD: Who cares matters National Chronic Obstructive Pulmonary Disease (COPD) Audit Programme: Clinical audit of COPD exacerbations admitted to acute units in England and Wales 2014. <https://www.rcplondon.ac.uk/projects/outputs/copd-who-cares-matters-clinical-audit-2014>
22. NHS England Specialised Commissioning 2018, <https://www.england.nhs.uk/wp-content/uploads/2018/08/Interstitial-lung-disease-service-adult.pdf> ; NHS England 2017,

- <https://www.england.nhs.uk/wp-content/uploads/2017/04/specialised-respiratory-services-adult-severe-asthma.pdf> .
23. Royal College of Physicians, London, 20/18/19 Focus on physicians: census of consultant physicians and higher speciality trainees 2018-19. <https://www.rcplondon.ac.uk/projects/outputs/focus-physicians-2018-19-census-uk-consultants-and-higher-specialty-trainees>
  24. JRCPTB annual specialty report: <https://www.jrcptb.org.uk/news/annual-specialty-report-submitted-gmc>
  25. Shape of Training final report 2013, <http://www.shapeoftraining.co.uk/>
  26. Yorke J, Prigmore S, Hodson M, *et al.* Evaluation of the current landscape of respiratory nurse specialists in the UK: planning for the future needs of patients. *BMJ Open Respiratory Research* 2017; 4:e000210. doi: 10.1136/bmjresp-2017-000210
  27. NMC (2018) Future Nurse: Standards of proficiency for qualified nurses <https://www.nmc.org.uk/globalassets/sitedocuments/education-standards/future-nurse-proficiencies.pdf>
  28. BTS Professional Development Framework for Respiratory Nursing, 2020 <https://www.brit-thoracic.org.uk/workforce/respiratory-nurse-specialists/>
  29. ARTP workforce survey: <http://www.artp.org.uk/en/about-artp/artp-reports.cfm/Workforce-Survey-2018>
  30. JRCPTB Physician ST3 Respiratory Medicine <https://www.st3recruitment.org.uk/specialties/respiratory-medicine>
  31. BTS Recruitment Hub: <https://www.brit-thoracic.org.uk/workforce/recruitment-hub/>
  32. BTS evidence to the Health Select Committee 2020: DEL0109 - Delivering Core NHS and Care Services during the Pandemic and Beyond <https://committees.parliament.uk/writtenevidence/4242/html/>