
Summary

- High levels of burnout and shortages in staff recruitment and retention existed in medical roles prior to the COVID-19 pandemic. Wellbeing and resilience amongst health and social care staff have been affected by the COVID-19 pandemic. Short term strategies will be required to mitigate the impacts of staff sickness and burnout this winter.
- There is evidence to suggest that embedding research activity components in medical job plans may be effective in improving staff recruitment and retention, alleviating burnout, and improving patient care and health outcomes.
- The 2020 Comprehensive Spending Review presents an opportunity for the Government to make funds available to undertake a pilot scheme offering a proportion of consultant contracts with dedicated time for research, as recommended in the Academy's report 'Transforming health through innovation: Integrating the NHS and academia'.
- To maintain the development of new medical advances, future staff shortages should not make it harder for clinical academic trainees to prioritise research.
- Medical research charities fund a significant and diverse portfolio of research totalling £1.4bn/year. Additional Government support for these charities should be considered following the dramatic reductions in their fundraising income due to COVID-19.

Introduction

1. The Academy of Medical Sciences is the independent body in the UK representing the diversity of medical science. Our mission is to promote medical science and its translation into benefits for society. The Academy's elected Fellows are the UK's leading medical scientists from hospitals, academia, industry and the public service. We work with them to promote excellence, influence policy to improve health and wealth, nurture the next generation of medical researchers, link academia, industry and the NHS, seize international opportunities and encourage dialogue about the medical sciences.
2. As the UK responds and adapts to the evolving COVID-19 pandemic, we continue to support the UK's medical and health research community.¹ The Academy strongly supports the Health and Social Care Committee's aim to consider workforce burnout and resilience in pre-COVID-19 and current contexts, and the resulting impacts. The following response draws on the expertise of the Academy's Fellowship and past Academy publications, and focuses on the clinical research community, and the ways their involvement in research can alleviate these issues.

Preparing for a challenging winter

3. The Academy's 'Preparing for a challenging winter 2020/21' report highlights that wellbeing and resilience amongst health and social care staff may be affected this coming winter, particularly in staff who have already dealt with high numbers of COVID-19 patients, and for whom annual leave was cancelled earlier in the year.² It calls for consideration to be given to strategies that will improve the workforce resilience. These are likely to be: measures to bolster morale within teams, as well as provision of support and treatment to those most significantly affected; the provision of adequate PPE; and

¹ Academy of Medical Sciences (2020). *COVID-19 information hub*. <https://acmedsci.ac.uk/policy/uk-policy/coronavirus>

² Academy of Medical Sciences (2020). *Preparing for a challenging winter 2020/21*. <https://acmedsci.ac.uk/file-download/51353957>

comprehensive staff training in infection prevention and control to protect staff and patients. It also calls for the long-term surveillance of the health of the NHS workforce to be a priority.

4. The implications of COVID-19 for workforce planning and management this winter are challenging. It is largely unknown to what extent sickness absence and post-COVID-19 syndromes have affected, and will affect, the capacity of the health and social care workforce.³ We anticipate that there will be significant challenges in ensuring adequate numbers of staff cover for sickness, post-contact isolation and necessary time off. Mental health disorders are the leading cause of long-term staff absence. Previous pandemics and early signals from COVID-19 indicate significant increases in burnout and distress among front line staff, but it is unclear whether this distress will become a more chronic disorder.^{4,5,6,7} Positive actions to improve staff morale and boost resilience will be particularly important as the UK enters the winter period. Further research into the mental health impacts and interventions needed to alleviate mental ill-health are needed.⁸
5. The impact of COVID-19 on staff sickness will likely make it difficult to expand the winter healthcare workforce further than that already achieved. Winter 2020/21 will also coincide with the end of the transition period for the UK's departure from the EU. This may pose additional challenges for recruitment to fill NHS and social care staff vacancies, which currently stand at 9% of posts (100,000 staff).^{9,10} Both the health and social care sectors have become increasingly reliant on EU migrants.
6. In England, 20.7% of the NHS workforce and 21% of the adult social care workforce (67% in London) are of Black, Asian and Minority Ethnic (BAME) background.^{11,12} The disproportionate effect of COVID-19 on some BAME staff groups is a particular concern, as they may be at higher risk of poor COVID-19 outcomes, and protective measures such as their redeployment may lead to further workforce shortages.²

Impacts on the research workforce

7. The role of research and research leaders, such as clinical academics, has shown immense value throughout the COVID-19 pandemic. For example, the Randomised Evaluation of COVID-19 Therapy (RECOVERY) trial and its success with dexamethasone demonstrating

³ NHS Digital (2020). *NHS Sickness Absence Rates April 2020*. <https://digital.nhs.uk/data-and-information/publications/statistical/nhs-sickness-absence-rates/april-2020-provisional-statistics>

⁴ Brooks SK, et al. (2018). *A Systematic, Thematic Review of Social and Occupational Factors Associated With Psychological Outcomes in Healthcare Employees During an Infectious Disease Outbreak*. *Journal of Occupational and Environmental Medicine* **60(3)**, 248-257.

⁵ The British Medical Association (2020). *Stress and burnout warning over COVID-19*.

<https://www.bma.org.uk/news-and-opinion/stress-and-burnout-warning-over-covid-19>

⁶ The British Medical Association (2020) *COVID-19: analysing the impact of coronavirus on doctors*.

<https://www.bma.org.uk/advice-and-support/covid-19/what-the-bma-is-doing/covid-19-analysing-the-impact-of-coronavirus-on-doctors>

⁷ Royal College of Nursing (2020). *Passionate but pushed to the limit*. <https://www.rcn.org.uk/news-and-events/news/uk-passionate-but-pushed-to-the-limit-covid-19-200820>

⁸ Holmes EA, et al. (2020). *Multidisciplinary research priorities for the COVID-19 pandemic: a call for action for mental health science*. *The Lancet Psychiatry* **7(6)**, 547-560.

⁹ The King's Fund (2019). *Brexit: the implications for health and social care*.

<https://www.kingsfund.org.uk/publications/articles/brexit-implications-health-social-care>

¹⁰ Health Service Journal (2019). *Brexit and the NHS workforce: A guide for healthcare leaders*.

<https://www.hsj.co.uk/workforce/brexit-and-the-nhs-workforce-a-guide-for-healthcare-leaders/7024658.article>

¹¹ UK Government (2020). *NHS workforce*. <https://www.ethnicity-facts-figures.service.gov.uk/workforce-and-business/workforce-diversity/nhs-workforce/latest#by-ethnicity>

¹² Skills for Care (2019). *The state of the adult social care sector and workforce in England, 2019*.

<https://www.skillsforcare.org.uk/adult-social-care-workforce-data/Workforce-intelligence/documents/State-of-the-adult-social-care-sector/State-of-Report-2019.pdf>

reduced mortality, has transformed treatment for the most severe COVID-19 patients requiring ventilation or supplementary oxygen.¹³

8. Preliminary estimates suggest that over 1,500 academic trainees in England alone were deployed to clinical duties during the height of the COVID-19 pandemic, representing over 90% of all trainees on the Integrated Academic Training (IAT) pathway.¹⁴ In doing so, many clinical academic trainees have made exceptional efforts to contribute to the national response in a time of acute need. The Academy welcomed this and gave permission for those we fund to do so.¹⁵ We worked with the Clinical Academic Training Forum (CATF) to develop a set of overarching principles and practical actions in response to the disruption to clinical academic training by COVID-19.¹⁴
9. In future, it will be important to ensure that clinical academic trainees are not viewed as an available pool of people to be drawn into back-filling non-COVID-19 related gaps in the NHS workforce, or those that have arisen as the result of burnout. We hope that any future issues relating to the prolonged clinical secondment of clinical academic trainees can be mitigated with active interaction and discussion between the clinical academic community and the Council of Deans of Health.

Long term role of research in addressing burnout

10. A theme that emerged during the development of the Academy's 'Transforming health through innovation: Integrating the NHS and academia' report, was the role of research engagement in alleviating burnout and enhancing medical job recruitment, retention and satisfaction.¹⁶
11. Before the COVID-19 outbreak there were already high levels of burnout in clinical and medical staff, and a crisis in recruitment and retention of these roles, with a significant number of unfilled posts and reliance on agency staff.^{17,18,19,20,21,22,23,24}
12. However, there is evidence that including academic content in medical posts can enhance recruitment and retention, and that some doctors use research as a mechanism to avoid

¹³ Nuffield Department of Population Health (2020). *RECOVERY trial*. <https://www.recoverytrial.net/>

¹⁴ Academy of Medical Sciences (2020). *Progressing UK clinical academic training in 2020: addressing the challenges of COVID-19*. <https://acmedsci.ac.uk/file-download/50182747>

¹⁵ Academy of Medical Sciences (2020). *Clinical academics and COVID-19*. <https://acmedsci.ac.uk/more/news/clinical-academics-and-covid-19>

¹⁶ Academy of Medical Sciences (2020). *Transforming health through innovation: Integrating the NHS and academia*. <https://acmedsci.ac.uk/file-download/23932583>

¹⁷ Buchan J, et al. (2019). *A critical moment: NHS staffing trends, retention and attrition*. https://www.health.org.uk/sites/default/files/upload/publications/2019/A%20Critical%20Moment_1.pdf

¹⁸ NHS Digital (2019). *NHS Vacancy Statistics England, February 2015 - June 2019, Provisional Experimental Statistics*. <https://digital.nhs.uk/data-and-information/publications/statistical/nhs-vacancies-survey/february-2015---june-2019-provisional-experimental-statistics>

¹⁹ NHS (2018). *NHS could free up £480m by limiting use of temporary staffing agencies*. <https://www.england.nhs.uk/2018/08/nhs-could-free-480m-limiting-use-temporary-staffing-agencies/>

²⁰ Moberly T (2019). *Spending on locums has fallen 44% since introduction of wage cap*. *BMJ* **364**, i297. <https://www.bmj.com/content/bmj/364/bmj.i297.full.pdf>

²¹ Health Education England (2019). *NHS Staff and Learners' Mental Wellbeing Commission*. <https://www.hee.nhs.uk/sites/default/files/documents/NHS%20%28HEE%29%20-%20Mental%20Wellbeing%20Commission%20Report.pdf>

²² Royal College of Physicians (2015). *Work and wellbeing in the NHS: why staff health matters to patient care*. <https://www.rcplondon.ac.uk/guidelines-policy/work-and-wellbeing-nhs-why-staff-health-matters-patient-care>

²³ Royal College of Physicians (2018). *Understanding the wellbeing of consultant physicians*. <https://www.rcplondon.ac.uk/news/understanding-wellbeing-consultant-physicians>

²⁴ Hall LH, et al. (2019). *Association of GP wellbeing and burnout with patient safety in UK primary care: a cross-sectional survey*. *British Journal of General Practice* **69(684)**, e507-e514.

burnout.^{25,26,27} There is also increasing evidence that that patients in research-active healthcare settings have better outcomes and receive better care, with benefits extending to patients beyond those actively involved in research.^{28,29,30,31,32,33} Given current staff shortages and workload pressures, incorporating time for research in job descriptions could be an effective way of attracting staff and increasing job satisfaction, while simultaneously contributing to the overall improvement in patient outcomes and healthcare delivery.^{34,35}

13. Recent studies report a decline in the capacity of NHS staff to undertake, or even to engage with, research.^{36,37,38} There is also a decline in the number of clinical academics, who operate at the interface between academia and the NHS and lead research.³⁹ In 2017, clinical academics represented only 4.2% of NHS medical consultants (down from 7.5% in 2004), 0.4% of general practitioners (GPs) and less than 0.1% of the nursing, midwifery and allied health professions.⁴⁰ Only 42% of GP practices are research active.⁴¹ This decline in capacity contrasts with the willingness of NHS staff to conduct research, with 57% of physicians wanting to be more involved in research.⁴²
14. The Academy's 'Transforming health through innovation: Integrating the NHS and academia' 2020 report outlines six key recommendations to improve access to research for NHS staff. These recommendations include a pilot scheme where in a number of hospitals a proportion of consultants would be offered a contract that includes dedicated time for research. We estimate that the costs of conducting such a pilot (where 20% of consultants have 20% of their time protected for research in ten hospitals across the UK) would be around £25 million per year. The 2020 Comprehensive Spending Review presents an

²⁵ Rees MR, Bracewell, M, On behalf of Medical Academic Staff Committee of the British Medical Association (2019). *Academic factors in medical recruitment: evidence to support improvements in medical recruitment and retention by improving the academic content in medical posts*. *Postgraduate Medical Journal* **95**, 323-327.

²⁶ Community Research (2018). *Adapting, Coping, Compromising research*. <https://www.gmc-uk.org/-/media/documents/adapting-coping-compromising-research-report-79702793.pdf>

²⁷ Shanafelt TD, et al. (2009). *Career fit and burnout among academic faculty*. *Archives of Internal Medicine* **169(10)**, 990-995.

²⁸ Downing A, et al. (2016). *High hospital research participation and improved colorectal cancer survival outcomes: a population based study*. *Gut* **66**, 89-96.

²⁹ Ozdemir BA, et al. (2015). *Research activity and the association with mortality*. *PLOS ONE* **10**, e0118253.

³⁰ Jonker L & Fisher SJ (2018). *The correlation between National Health Service trusts' clinical trial activity and both mortality rates and care quality commission ratings: a retrospective cross-sectional study*. *Public Health* **187**, 1-6.

³¹ Boaz A, et al. (2015). *Does the engagement of clinicians and organisations in research improve healthcare performance: a three-stage review*. *BMJ Open* **5**, e009415.

³² Downing A, et al. (2016). *High hospital research participation and improved colorectal cancer survival outcomes: a population based study*. *Gut* **66**, 89-96.

³³ McManus RJ, et al. (2008). *How representative of primary care are research active practices? Cross-sectional survey*. *Family Practice* **25**, 56-62.

³⁴ Twa DDW, et al. (2017). *Cross-sectional-derived determinants of satisfaction with physician-scientist training among Canadian MD/PhD graduates*. *PLoS ONE* **12(9)**, e0185218.

³⁵ Lambert TW, Smith F & Goldacre MJ (2015). *Making clinical academic careers more attractive: views from questionnaire surveys of senior UK doctors*. *JRSM Open* **6(8)**, 2054270415602644.

³⁶ Association of Medical Royal Colleges (2013). *Our vision for research in the NHS*. <https://www.amrc.org.uk/Handlers/Download.ashx?IDMF=25fc862d-5249-44ed-9e3f-7d9e1807340b>

³⁷ Cancer Research UK (2015). *Every patient a research patient*. https://www.cancerresearchuk.org/sites/default/files/cruk_every_patient_may2015_web.pdf

³⁸ Royal College of Physicians (2016). *Research for all*. <https://www.rcplondon.ac.uk/projects/outputs/research-all>

³⁹ Academy of Medical Sciences (2020). *Transforming health through innovation: Integrating the NHS and academia – supporting case studies*. <https://acmedsci.ac.uk/file-download/23442253>

⁴⁰ Council of Deans of Health (2018). *Nursing, midwifery and allied health clinical academic research careers in the UK*. <https://councilofdeans.org.uk/wp-content/uploads/2018/08/Nursing-midwifery-and-allied-health-clinical-academic-research-careers-in-the-UK.pdf>

⁴¹ Royal College of General Practitioners (n.d.). *Clinical research for GP practices*. <https://www.rcgp.org.uk/clinical-and-research/about/clinical-news/2018/june/clinical-research-for-gp-practices.aspx>

⁴² Royal College of Physicians (2020). *Research for all? An analysis of clinical participation in research*. <https://www.rcplondon.ac.uk/projects/outputs/research-all-analysis-clinical-participation-research>

opportunity for the Government to make funds available to undertake this pilot scheme. The latest publication from the Royal College of Physicians also outlines recommendations to increase research capacity, including allocating more time in job plans for research.^{43,44}

15. Creating roles for research in social care would provide evidence of whether the benefits in reported job satisfaction are maintained between NHS and social care settings, while also developing vital data for use by the sector. For example, in the case of COVID-19, evidence published within the 'Vivaldi 1: coronavirus (COVID-19) care homes study' report has set out the case for frequent testing in care homes and their staff and led a new Government social care testing strategy.⁴⁵
16. We welcome the most recent People Plan and its aims to provide further health and wellbeing resources for all NHS organisations.⁴⁶ We are pleased the People Plan recognises the importance of research (which confers many benefits to job recruitment, retention, satisfaction and alleviating burnout), and the role NHS staff have played - in particular, supporting the RECOVERY (Randomised Evaluation of COVID-19 therapy) programme. The recommendation for systems and employers to make greater efforts to design and offer more varied roles (for example including research components in NHS roles) to improve retention, is welcome.
17. The Academy looks forward to working with NHS England, Health Education England and others on the implementation of the People Plan and the development of future People Plan ambitions beyond 2020/21, where we hope research will feature as a tool to enhance the recruitment and retention of NHS staff.
18. Medical research charities make critical contributions to the UK's life sciences research base, with members of the Association of Medical Research Charities (AMRC) providing £14 billion in funding over the past 10 years, with over 17,000 salaries - including 1700 PhDs - across universities, the NHS and other bodies in 2018.^{47,48} However, COVID-19 poses a threat to the viability of charity-funded research, with medical charities expecting drastic reductions in fundraising income. For example, three quarters of the AMRC members anticipate a reduction of 25% or more in fundraising income (and over a third expect a reduction of 40% or more).⁴⁹ If less funding is available to clinical researchers due to charity income falling, then fewer clinicians will be conducting research, which could lead to an associated negative impact on retention and recruitment as they would no longer have the mechanism available to alleviate burnout (as outlined above). Improvements in patient outcomes and healthcare delivery may also be negatively affected.

⁴³ Academy of Medical Sciences (2020) *Transforming health through innovation: Integrating the NHS and academia*. <https://acmedsci.ac.uk/file-download/23932583>

⁴⁴ Royal College of Physicians (2020). *Research for all? An analysis of clinical participation in research*. <https://www.rcplondon.ac.uk/projects/outputs/research-all-analysis-clinical-participation-research>

⁴⁵ 7 International Standard Randomised Controlled Trial Number Registry (2020). COVID-19 in care homes (VIVALDI). <https://doi.org/10.1186/ISRCTN14447421>

⁴⁶ NHS England (2020). *We are the NHS: People Plan 2020/21 - action for us all*. <https://www.england.nhs.uk/wp-content/uploads/2020/07/We-Are-The-NHS-Action-For-All-Of-Us-FINAL-24-08-20.pdf>

⁴⁷ Association of Medical Research Charities (2019). *Medical research charities: our sector's footprint in 2019*. <https://www.amrc.org.uk/Handlers/Download.ashx?IDMF=ad9acc0a-f186-4415-bb13-43d04ea9a6d0>

⁴⁸ Association of Medical Research Charities (2020). *The impact of COVID-19 on charity-supported medical research*. <https://www.amrc.org.uk/Handlers/Download.ashx?IDMF=a04d5206-ac5d-4649-a115-ce6ef97fc6ec>

19. The Academy welcomed the announcement of two Government support packages, which rightly point out the vital role of medical research charities, and hope that they will be a precursor to additional support for the charities.^{49,50}

This response was prepared by George Phillips, Policy Officer, and informed by members of the Academy's Fellowship and previous publications. For further information, please contact: George Phillips george.phillips@acmedsci.ac.uk

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⁴⁹ Academy of Medical Sciences (2020). *President's response to Government measures to mitigate impact of COVID-19 on research*. <https://acmedsci.ac.uk/more/news/presidents-response-to-government-measures-to-mitigate-impact-of-covid-19-on-research>

⁵⁰ Department for Business, Energy and Industrial Strategy (2020). *Government to protect UK research jobs with major support package*. <https://www.gov.uk/government/news/government-to-protect-uk-research-jobs-with-major-support-package>