

HEE Strategic Framework Call for Evidence 2021

Summary of Academy of Medical Royal Colleges' response to Health Education England's (HEE) health and social care workforce planning [review](#).

September/ 2021

Driver Analysis

Within each drivers of change category, what do you believe are the key factors that will impact on workforce demand and supply over the next 15 years?

1. Demographics and Disease

Factor A: Workforce demographics, including early retirement, desire for less than full time and flexible working/ portfolio careers, cultural and societal changes.

The demand for more flexible training and working patterns is already having an impact on workforce availability and planning. It is likely to impact more significantly as flexible working becomes further embedded socially and culturally. In simple terms, greater demand for flexible working may reduce the number of WTE staff, creating a need to expand the health and care workforce. However, it is also an opportunity to think more creatively about what staff are needed and how they will be working (e.g. the expansion of new advanced practitioner roles can support certain tasks once traditionally undertaken by doctors). Further, while flexible working may reduce WTE staffing, it is likely to be a crucial factor in helping to retain the workforce, by increasing job satisfaction and work-life balance. It therefore needs to be determined how far changing working practices will reshape the availability of staff and the longevity of their health and care careers.

Factor B: Long Term Conditions and multiple-morbidities

As life expectancy increases, the prevalence of long-term conditions and multi-morbidities in the UK population will also increase, placing greater demands on the health and care workforce. It will augment the need for generalist skills within medicine, while also increasing the demand on (sub-)specialties such as geriatric medicine and old age psychiatry and other areas which experience increased service need from older patients, including general practice, ophthalmology, and adult social care. While changes will be seen nationwide, current population patterns would lead us to anticipate that the effects of ageing and multi-morbidities will most likely be seen outside major cities and in rural/coastal regions, which will require an expanded workforce with the skillsets to cater for these population demands.

Factor C: Population health factors (epidemiology/population density/birth rates/mortality/life expectancy) that lead to health inequalities.

This cluster of factors will continue to impact population health, driving greater demand for health and care services, as explored above. While analysis of these factors lies outside our immediate remit, reducing health inequalities will become an increasingly important component of healthcare, and we need a workforce and pathways designed to tackle a range of intersecting socio-economic and health deprivations. As part of this, we must



ensure that staff and services are located in those regions of the greatest need. HEE's current work to review the geographic distribution of training posts is especially welcome, as are wider efforts to recruit and retain staff in remote and rural regions, though more work is needed to incentivise living and working in those areas which struggle to attract staff. These may be unpopular due to a constellation of reasons beyond healthcare employment but which impact quality of (family and personal) life – e.g. housing, education, and public transport. One area of uncertainty that requires attention is how morbidity and mortality may be intensified by the ongoing health and socio-economic effects of the COVID-19 pandemic.

2. Public, People who need care and support, Patient and Carer Expectations

Factor A: Digital access and literacy; data security

If patients and their families/carers are able to access and use technology with confidence this may alleviate some of the pressures on the health and care workforce. However, it is clear that technology supports rather than replaces clinical care delivered by health and care workers. The pandemic led to a rapid acceleration in the use of remote consultations, with positive results for many patients and practitioners across primary, secondary, and community care settings and across different geographic regions. These changing ways of working must be balanced with safeguarding against digital exclusion for disadvantaged groups and the loss of face-to-face opportunities for building patient-practitioner relationships and for training the workforce. Further, it is clear that patients need to trust the technology if it is to be used effectively in the longer term, and must be supported to navigate the options available. Our forthcoming report *Multi-professional team-working: The experience and lessons from COVID-19* explores some of these issues in more depth. Further consideration must also be given to the potential for supply-induced demand – if patients perceive their healthcare professionals to be more accessible due to technology, this may encourage them to come forward with more/different concerns. It may thus reveal substantial unmet need among the patient population.

Factor B: Expectations of the health and social care system as a whole; People who need care and support, patient and carer experience.

Public expectations of the health and care system are changing as a result of both experiences of care and wider societal and cultural changes. The increased appetite for digitally enabled care among many patient groups is a key example of this. More broadly, the public expect Governments and the healthcare system to introduce changes they wish to see, which may or may not correlate with areas of high patient need and/or the availability of resources. Social care is one example where public expectation differs from current provision, with many people surprised it is not free at the point of access, as with NHS care. This gap between expectation and actuality is becoming more acutely felt with an ageing population and urgent reforms to the social care system are needed to rectify this. To improve patient experience, the public may expect to see an expansion to the health and care workforce but this would require additional resourcing. Increasing public familiarity with new roles and pathways is important in paving the way for them to be understood and accepted, as we explored in our report on *Developing professional identity in multi-professional teams*.

Links to supporting evidence:

Academy report on *Developing professional identity in multi-professional teams* (2020): https://www.aomrc.org.uk/wp-content/uploads/2020/05/Developing_professional_identity_in_multi-professional_teams_0520.pdf

Factor C: Shared decision-making and access to/ availability of care



Shared decision-making has the capacity to reshape the patient-practitioner relationship, empowering patients to take greater involvement in and ownership of their care, while empowering health and care practitioners to take on an evolving role and professional identity. It demands new skills and new ways of working for current and future practitioners as they utilise their expertise in a more collaborative model. At the same time, these developments should involve pragmatic, honest conversations about the suitability and availability of different treatments, including resource constraints. One example of this approach is the Academy's Evidence-based Interventions (EBI) programme, an initiative co-created by doctors and patients to reduce the number of medical or surgical interventions as well as some other tests and treatments which the evidence shows are inappropriate for patients in some circumstances.

Links to supporting evidence:

Evidence-based Interventions programme: <https://www.aomrc.org.uk/ebi/>

Factor D: Expectations of the staff that work within social care and health – wanting to do effective, safe and rewarding work.

Societal changes have shifted not only the expectations of patients, but also the staff who work within health and care. As explored above, there is a greater expectation of flexible working – this is tied to an increasing demand for supportive work cultures which prioritise staff health and wellbeing, recognise hard work, and offer opportunities for upskilling and career progression. As part of this, consideration should be given to how senior staff may require changes to their job plans as they get older (e.g. more research time, less on-call) to ensure the work is best tailored to their abilities and needs. Making the NHS (and other health and care settings) attractive places in which to work is crucial for workforce supply both now and in the future, as it will determine whether staff wish to stay and whether future generations choose to work within the sector. How far different career paths will appeal to future generations remains uncertain. The changing aspirations and expectations of young people may impact the attractiveness of different specialties/roles within healthcare. Current work by HEE, NHS England and others to study attrition across healthcare careers is important to help determine the factors that encourage staff to leave or stay.

Links to supporting evidence:

Academy statement on SAS workforce – later careers and retirement (2021): <https://www.aomrc.org.uk/sas-papers-guidance/sas-workforce-later-careers-and-retirement/>

3. Socio-economic and Environmental Factors

Factor A: Social determinants of health (linked to the economy, public finances, and the labour market).

Social determinants shape healthcare risks and outcomes, as the pandemic has shown. They can drive health inequalities which, as we explore below, will generate greater demand for health and care services, creating a need for an expanded workforce, with new roles, new skills and new ways of working, especially to tackle increased multi-morbidities. These demands will be most acutely felt in those geographic regions – from rural and coastal to inner-city areas – which experience the highest levels of deprivation. Uncertainty lies in the trajectory of economic recovery following the COVID-19 pandemic, which will be strongly influenced by public finances and social policy. The pace and scale of economic recovery across different geographic regions will need to be continually reviewed to identify those areas of greatest need for both healthcare and other interventions. Further, the economy, housing and education will also affect the career aspirations and opportunities of future generations and may impact the appeal of medical and healthcare careers.



Factor B: Health inequalities (linked to local government, housing, education, safe outdoor spaces, opportunity to work and live healthy lifestyles).

Our submission has highlighted how health inequalities drive workforce demand. Within this overarching category, nuanced analysis is required to determine which groups of people experience which inequalities and why. For instance, socio-economic deprivations are linked to multi-morbidities and long-term conditions, and mental ill-health is more prevalent across some disadvantaged and socially excluded groups (e.g. homeless people). There are also inequalities in terms of how some groups access and experience healthcare. The Royal College of Obstetricians and Gynaecologists have undertaken work to tackle the maternal inequalities experienced by Black, Asian and minority ethnic women, for example. Workforce planning and service design should seek to address health inequalities, ensuring staff are located in regions of greatest need and are appropriately trained and facilitated to support disadvantaged patient groups. This approach requires looking at healthcare differently – the Academy’s Rethinking Medicine initiative prioritises a patient-centred approach, including the interaction between personal circumstances and healthcare outcomes.

Links to supporting evidence:

Inequalities in Health Alliance: <https://www.rcplondon.ac.uk/projects/inequalities-health-alliance>

Factor C: Climate Change and Greenhouse emissions and pollution – risks to health from poor air quality and environmental disasters (e.g. flooding or fires).

Climate change, poor air quality and environmental disasters collectively pose a significant threat to physical and mental health. What impact they will have and within what timeframe is, to some extent, uncertain, but there will be new and increasing demands on the health and care workforce. A joint report by the Royal College of Physicians and the Royal College of Paediatrics and Child Health articulated the lifelong impacts of air pollution on the nation’s health, linked to problems spanning cancer, asthma, stroke, and dementia. As well as dealing with such impacts on population health and health inequalities, the healthcare system and professions also have a role to play in tackling climate change and ensuring both a sustainable NHS and a sustainable planet. Different roles may need to be created both to respond to changing health needs among patients and to ensure the NHS is run sustainably.

Links to supporting evidence:

Academy statement on climate change (2020): https://www.aomrc.org.uk/wp-content/uploads/2020/07/200707_climate_change_statement.pdf

RCP and RCPCH report on air pollution (2016): <https://www.rcplondon.ac.uk/projects/outputs/every-breath-we-take-lifelong-impact-air-pollution>

Factor D: Labour market

General labour market conditions tend not to impact directly on the medical workforce as the NHS is (almost) a monopsony and does not have regionally competitive pay for doctors. Overall labour market conditions will impact the workforce supply of most other NHS staff groups, however. The NHS needs to be an attractive, competitive employment prospect for nursing and allied health professionals, administrative staff (especially finance and IT), and ancillary staff. Making the NHS an attractive place to work relates not only to salaries but the whole employment package, including how staff are valued and treated. The UK is not self-sufficient in producing medical staff and thus the labour market for overseas-trained doctors (and other healthcare workers) will remain important. The UK has traditionally been



an attractive destination for international medical graduates but factors from within/outside the UK may impact on this. The GMC recently commissioned research into the drivers of international migration of doctors to/ from the UK, the findings of which should be considered. Recruitment into medical schools has traditionally been oversubscribed and may well continue to be. We have called for an expansion in medical school places to ensure a modest oversupply of doctors. Geography is a key factor in determining medical workforce distribution. This is not due to regional pay variation but the perceived attractiveness of the working and living environment of different areas, which impacts on workforce supply. For a variety of reasons – reaching beyond market forces – some specialties (such as general practice and psychiatry) have found it more challenging to recruit.

Additional key factor

Workforce planning needs to consider the deeply interconnected nature of how health and care professionals work to deliver patient care. For example, if more patients require operations, that would create a need for more surgeons and anaesthetists, as well as diagnostic specialties, and surgical nurses, ward nurses, district nurses, rehabilitation professionals, and porters, among others. We need a teams- and systems-based approach that does not consider separate roles in isolation.

4. Staff and Student/Trainee Expectations

Factor A: Equality, diversity and inclusion and widening participation

Promoting equality, diversity and inclusion and widening participation in medicine and healthcare more broadly will expand the workforce available by encouraging more people to pursue these careers and improving the retention of current staff. It has also been argued that widening access to medical schools might improve the recruitment of doctors into under-served communities. A healthcare workforce that better reflects the communities it serves may also help to address inequalities in experiences of healthcare. As well as widening participation at the point of accessing medical careers, continuing work is needed to tackle differential attainment in medical education, to close gender and ethnic pay gaps, to diversify medical leadership, and to drive culture change, addressing the prevalence of bullying, harassment, and undermining. Progress in these areas will improve the retention of a diverse workforce.

Factor B: Expectations of working life and careers, generational preferences, culture – spanning flexibility, fluidity, career progression, ability to be fulfilled by the job, hope for the future, support for family life, recognition of different generations' wants and needs.

Workforce supply – in terms of both recruitment and retention – will increasingly be shaped by student/trainee/staff expectations (influenced by generational preferences) and how far these are met by the working culture of the health and care system. As explored in previous sections, workforce planning needs to take into account the greater demand for flexible working, supportive and inclusive workplace cultures, and fulfilling work where skills are valued and there are opportunities for career progression. If these expectations can be met, then more staff will enter and/or stay within the system, enabling it to better meet the increasing demands upon the workforce. Important initiatives to address these issues are underway and must be continually evaluated and refined to help us understand how far they will impact workforce supply.

Factor C: Expectations of service design and workforce structure e.g. multi-disciplinary team (MDT) working, developing generalist skills, moving away from hierarchies, readjustment of society's compact with the NHS (partnership model over paternalism).

Service design and workforce structures are already being redeveloped in response to changing expectations from the public and staff. The hierarchical model of working,



whereby the doctor/ specialist leads and other healthcare practitioners and patients take more passive roles is increasingly becoming outdated. The prioritisation of multi-disciplinary/ multi-professional team-working, of generalist skillsets, and of shared decision-making are all important and welcome moves to address the needs of patients, especially those with long-term health conditions and multi-morbidities. A range of different roles and skillsets must therefore factor into workforce planning. In addition to the development and recruitment of new roles, there should also be opportunities for the existing workforce to upskill. New models of care offer opportunities for career progression and job satisfaction, which can in turn help with retention.

Links to supporting evidence:

Academy report on *Developing professional identity in multi-professional teams* (2020): https://www.aomrc.org.uk/wp-content/uploads/2020/05/Developing_professional_identity_in_multi-professional_teams_0520.pdf

Forthcoming report on *Multi-professional team-working: The experience and lessons from COVID-19*

5. Science, Digital, Data and Technology (Including Genomics)

Factor A: Big data, data security and data sharing

The application of big data can improve clinical insights and interventions, in turn improving health outcomes for patients. It will stimulate demand for additional staff and new skillsets (e.g. data analytics), to ensure the information can be used effectively, but also has the capacity to alleviate some pressures on the workforce through supporting patient health. For the potentialities of big data to be realised, however, the public must have confidence in the security of their data. Public and patient engagement and involvement should be fully embedded from the outset. Further, ensuring a range of patients participate is important to make sure that big data ameliorates rather than intensifies healthcare inequalities and exclusion. One key source of uncertainty is that big data is likely to identify more conditions than was previously possible – this will stimulate greater demand for healthcare interventions, but the scope and scale of this is as yet unclear, as is the longer term impact on improving population health. This is in many ways an unknown, fast-evolving area of healthcare, which will require close scrutiny to monitor its impact. Most immediately, big data is likely to result in role augmentation and generation/creation.

Factor B: Genomics

Genomics will make some earlier diagnoses and interventions possible, particularly with rare and infectious diseases and cancers. This will drive workload and patient expectations, stimulating greater demands upon the workforce (augmentation and generation/creation). However, through better targeting of drugs and therapies, it will also reduce waste in the system and potential harm to patients. In addition to new roles targeted in genomics, training opportunities and upskilling for other staff groups will also be crucial. As with big data, effective public involvement is key to ensure that diverse groups benefit, and to inform patient expectations about what genomics can realistically deliver. Commissioned by NHS England, the Academy has convened a group of College Genomic Clinical Leads to refine and prioritise aspects of the genomic medicine programme. This work seeks to ensure that the full benefits of genomics are realised while avoiding overdiagnosis or any potential harm.

Links to supporting evidence:

Academy statement on genomic medicine in the NHS (2019): https://www.aomrc.org.uk/wp-content/uploads/2019/03/2019-03-07_Genomic_medicine_in_the_NHS.pdf



Factor C: Artificial intelligence

Artificial intelligence (AI) has the capacity to deliver improvements for both patients and the wider healthcare system. It will help crunch big data, find more disease, improve the targeting of treatments, and also support patient flow, pathways, and system management. This will help alleviate some pressures in the system, through improving patient outcomes, freeing up clinicians' time away from more routine tasks so they can work at the top of their licence, and enabling them to take a more co-ordinated and patient-centred approach to care and treatment. However, it will also create expectations from patients, staff and the system about what is possible, and drive the demand for new roles/skills which can help utilise the potentialities of AI (augmentation/creation). Education and training of the workforce, and supporting clinically-led research into AI, is crucial to ensuring its benefits can be realised, as is patient engagement and participation in the development and implementation of AI in clinical practice. One area of uncertainty to be determined is wider socio-cultural attitudes towards the application of AI, and how far it is embraced by the public.

Factor D: Digital technologies, robotics and automation

Digital health technologies and robotics/automation have the ability to transform healthcare delivery and outcomes, empowering patients to manage their own health and practitioners to perform more complex procedures. Rather than role substitution, this is likely to augment practitioners' roles. Developments in surgical and medical techniques [e.g. more non-invasive procedures, fewer endoscopies, better and more targeted drugs, automation of diagnostics] may help alleviate some of the demands on practitioners. However, they will increasingly be expected to help patients navigate, interpret and utilise digital health technologies and to be able to use robotics to manage higher-risk cases and interventions. There should be opportunities for (re)training and upskilling so that staff are able to respond to changing patient demands/expectations and new clinical applications. Practitioners and policymakers will also need to ensure that greater use of digital health technology does not intensify healthcare inequalities. These new ways of working will require additional support, supervision and governance to ensure that changing expectations create opportunities for career progression and job satisfaction and not simply greater pressures on health and care workers.

Links to supporting evidence:

Royal College of Surgeons of England's Commission on the Future of Surgery:
<https://futureofsurgery.rcseng.ac.uk/report/Future%20of%20Surgery%20Report.pdf>

Royal College of Physicians Future Hospital Programme: [Future Hospital Programme: Delivering the future hospital | RCP London](#)

Royal College of General Practitioners vision for general practice: [Fit for the Future \[rcgp.org.uk\]](#) and technology: [Technology \[rcgp.org.uk\]](#)

Additional key factors

In addition to technological developments, medical advances can crucially determine workforce demand. They impact upon the requirement for particular skillsets and potentially even on (sub)specialties. For example, advances in cardiac surgery and treatment (such as the shift towards minimally invasive or keyhole surgery) meant a reduced need for cardiac surgeons. Conversely, some developments increase demands upon the workforce; changing epidemiology can generate need for greater numbers of workers in particular areas, as we saw with the development of the HIV/AIDs specialty. Some of these changes will be linked to a particular specialty or sub-specialty and will not necessarily affect the whole workforce. However, there are likely to be profound and long-lasting changes in particular areas. Over the last fifty years, for instance, the eradication of



smallpox and the progress towards eradicating polio and TB have had huge effects on the shape of the medical workforce not only nationally but globally, while the increased risk of epidemics and pandemics will also generate additional work.

6. Service Models and Pandemic Recovery

Factor A: Personalised care, health promotion/prevention, expanding digital options

As identified above, the direction of travel towards person-centred care, shared decision-making, health promotion (with a focus on health inequalities) and digitally enabled care will all create greater demand for new skills and new models of healthcare delivery.

Factor B: Working across boundaries/ integration

The Academy strongly supports the shift towards greater integration of care systems. Healthcare is best delivered through a collaborative approach and with systems working together. Greater integration will not necessarily entail a reduced demand on the workforce, however. For systems to communicate and work together effectively, there must be sufficient staffing levels, appropriately trained staff, and strong clinical leadership at local levels.

Demand and supply gaps over the next 15 years

Please provide details of where you feel the greatest workforce demand and supply gaps will be over the next 15 years. Where possible please be precise with regards to workforce groups/professions, services/pathways and place (geographic area), as well as timescales.

There are workforce shortages across the system, with significant shortfalls in psychiatry, geriatric medicine, general practice and social care – among other specialties – which are likely to intensify with the demand generated by an ageing population. The pandemic in particular revealed the significant undersupply of anaesthetists and trained intensive care medicine specialists. The issues in psychiatry are now especially acute and while there has been recognition of this in recent years (from the Five Year Forward View to the Long Term Plan), the medical workforce has not kept pace with service expansion.

To some extent, the shortages in certain specialties are due to the duration and intensity of training needed to produce consultants, which creates a ‘lag time’ after a gap has been identified, even when measures are put in place to address it. However, a longer-term and more strategic approach to workforce planning would help guard against these potential shortfalls. The opportunities presented by an increased number of medical student places must be fully optimised, with consideration given to how these additional numbers will translate into specialty training places. (While recognising that not all doctors wish to become consultants, and some may choose SAS careers.) Future expansions in medical school numbers – which we would hope to see – must also be factored in to long-term workforce planning.

There are shortfalls in geographic regions of greatest need – e.g. deprived rural and coastal areas, as identified in the CMO’s recent report. We need to invest in and incentivise training and work in these areas across all branches of health and care.

We hope that the factors explored throughout this submission will help inform a more strategic approach to long-term workforce planning in health and care.



Ambitions for the health and social care system

In 15 years' time, what one key thing do you hope to be able to say the social care and health system has achieved for people who need care and support, patients and the population served?

The Academy's Rethinking Medicine vision looks forward to a health and care system which puts the whole patient at the centre. It respects the wants and needs of individuals, has clear entry points, flexible pathways, and seamless communication between health and care professionals across traditional boundaries and silos. Integrated and collaborative care is delivered in the right place, by the right person, at the right time. If we can realise this ambitious vision then we can tackle some of the biggest challenges identified in this submission, tackling healthcare inequalities, improving access and treatment for disadvantaged groups, and ensuring mental health has a parity of esteem with physical health.

In 15 years' time, what one key thing do you hope to be able to say the health and social care system has achieved for its workforce, including students and trainees?

Building on the momentum of the People Plan and other important workstreams, we would hope to see the NHS fully realise its vision to become a supportive and inclusive employer, which values and rewards staff from across different occupational/professional groups, providing them with opportunities for upskilling and career progression, and offers flexible working that delivers improved work-life balance and wellbeing.