Double or quits: a blueprint for expanding medical school places

Royal College of Physicians

The report[1] is described as a blueprint for medical school expansion. It aims to influence Government to expand the medical workforce. The focus is undergraduate medical education in England. They state: *To support the development of expansion proposals we have sought to identify the issues that need addressing. We…aim for this report to be thought-provoking about the future of medical student training in the UK. There is no one-size-fits-all approach and we are not suggesting that there should be. But we do believe there is a need across the country to realign the graduate attributes of medical school students with the needs and realities of the health and care system.*

On expansion: The RCP has already called for the number of places to be doubled, which was echoed by the Royal College of Psychiatrists (source). In June 2019 Simon Stevens, chief executive of NHS England, publicly recognised the need to expand the number of places. The Interim NHS People Plan likewise refers to the need to consider a potential expansion in places.

Health Education England's vision for future doctors: *Key emergent themes for education reform include a stronger bedrock in generalist skills, especially in complex comprehensive care; embracing a culture of stewardship, with a greater understanding of population health and sustainable healthcare; the provision of flexible ways of training and working and evolving medical careers; and breaking down professional silos to enable the transformed multi-professional team and empowering other healthcare professions and roles to benefit patient care.*

Conclusion: … *Medical schools need to create cohorts of doctors with a broad base of skills, able to develop into specialists as their careers progress… In addition to a greater focus on generalist skill sets there is a need to ensure that medical students and those in the foundation programme are exposed to a range of clinical settings.*

The report's **recommendations** chime with BU's vision of a medical school:

The Government should:

- *double the number of medical school places from 7,500 to 15,000 per year, at an annual cost of around £1.85bn*
- *ensure that an expansion of places and the process of allocating places incentivises an increased focus on widening participation in medicine*
- *build on the successful work of the previous expansion to provide medical school education across the whole of England*
- *consider an increase in undergraduate foundation years for medicine as part of a strategic approach to NHS workforce planning*

The UK government and regulators should:

- *ensure that expansion proposals are informed by the Selection Alliance reports, which provide a wealth of insight into the areas that need a greater focus*
- *consult with medical schools about moving towards an apprenticeship style final year of medical school when developing expansion plans*

[1] The report: *Double or quits: a blueprint for expanding medical school places* published by the Royal College of Physicians, available for download here, or on BU's sharepoint site here, press release here.

The NHS should:

- *address the challenges and opportunities facing the clinical academic workforce in the people plan, including year-on-year growth and the development of clear clinical academic career pathways to create a sustainable pipeline to meet future demand*
- *widen the pool of clinical educators to facilitate expansion*

Medical schools should:

- *review their curricula to ensure they create cohorts of doctors with a broad base of skills, able to develop into specialists as their careers progress*

Key points:

- **Part time workforce needs volume** - *Working practices are also changing. From 2009 to 2019, the number of consultant physicians working less than full time grew from 14% to 23%.4 If the NHS doesn't become a more flexible employer, people will simply leave it. We also need to plan for full-time equivalent (FTE), not headcount, to ensure we train the number of doctors we will need.* Presumably there's also a Dorset point here – allowing the experienced ageing workforce to continue part time rather than retire early to retain talent and coverage.
- **Home grown not recruited** - *…the NHS is heavily reliant on international staff… While we will remain dependent on them in the short-term, we must consider the ethics of recruiting staff into the NHS from countries which may themselves have workforce shortages… expansion will help reduce the pressure on the current workforce. It will also create the opportunity for governments, medical schools and the NHS to ensure that medical school programmes are aligned with the needs of the UK's health and care system.*
- **Working environment** - *training more medical students does not remove the responsibility to improve the working lives of the current workforce. While we must train more staff, we must also retain, value and recognise those already working in the NHS. In recent years we have seen recognition from the NHS and governments that there is a real need to make the NHS a better place to work.*
- **Widening access** - *Over the past 10 years, medical schools have increased the diversity of students entering their medical degree courses. They have a growing number of students from less socially advantaged backgrounds, black and ethnic minority groups and LGBT communities… and current initiatives include increasing access to people with mental health problems or who are disabled. It is clear that there is still work to be done, and we must go further to widen entry to medical school. The doctors of tomorrow should represent the communities they serve. COVID-19 has also led to a significant increase in those considering NHS careers and we must harness that interest. Comparing the GMC data on gender and ethnicity against data held by the Office of National Statistics and Stats Wales on the UK 18–24 population shows that medical school students are not fully representative.* Pages 14-18 dissect the data from different widening access indicators. Also **state schools underrepresented***: the proportion of entrants to medicine programmes from state funded schools was notably lower than the proportion of all entrants to higher education generally… Students from independent schools remain overrepresented in medicine (source). Over the past 10 years the number of entrants to medicine from the most deprived areas increased by only five percentage points… from 19% in 2007… to 24% in 2016. … An expansion of places also creates an opportunity for individual medical schools to consider their entry criteria. Research from Mwandigha et al suggests that, 'the academic entry criteria should be relaxed for candidates applying from the least well-performing secondary schools. In the UK, this would*

translate into a decrease of approximately one to two A-level grades'.[i] *Doing this would support ambitions to widen entry to medicine courses.*

- **Participation & Attainment** - *The current model of medical school education has not served all students equally well. There is increasing recognition of the attainment gap, lack of diversity in the curriculum and faculty, and frequent incidents of discrimination. Schools are addressing this and ongoing work will be required in the long term in medical schools and the NHS.*

- **Clinical academia** - *One of the barriers to expanding medical school places… is the lack of attention that has been given to the clinical academic workforce. Clinical academics undertake the vast majority of work to develop and deliver the curricula and support students through medical school… Expansion of undergraduate medical education will result in the need to expand the number of clinical academics. The total number of full-time equivalent (FTE) clinical academics working…in medical schools has been relatively static for the past 10 years. However, there have been changes to the numbers of the types of posts held with the number of reader/senior lecturer posts reducing by 281.8 FTEs during that time, while the number of lecturer and professor level posts has increased…. It is noticeable that national workforce planning documents, such as the NHS People Plan, make little comment on clinical academics. There is a need for a joinedup, nationally coordinated approach to the future of clinical academia as a career route for all professions. Without a national plan, individual universities and NHS organisations will struggle to manage the significant growth in medical school places needed. The importance of protected time for clinicians to carry out academic activities is key to supporting the development of clinical academic career routes.*

  The Medical Schools Council 2018 report in clinical academic staffing levels provided four recommendations for the future of the clinical academic workforce. These focus on improved data collection, the need for funders and employers to develop clear clinical academic career pathways and funding, alongside the need for employers and funders to improve the diversity of clinical academics. Emphasised in the report - *Future iterations of the NHS People Plan must address the challenges and opportunities facing the clinical academic workforce. This must include year on year growth and the development of clear clinical academic career pathways to create a sustainable pipeline to meet future demand. The NHS should also ensure that when addressing the needs of clinical academics, the needs of the wider clinical academic workforce (such as nursing) are also considered and planned together. The development of clear clinical academic career pathways should also support specialty-specific developments.* And this on general practice academic pathways.

- **Expansion** - *The government should ensure that an expansion of places and the process of allocating places incentivises an increased focus on widening participation in medicine. The UK government and regulators should ensure that expansion proposals are informed by the Selection Alliance reports which provide a wealth of insight into the areas that need a greater focus.* This refers to the demographics of both students and educators. King's College London is recognised as an early exemplar.
  … an expansion of places will also require the NHS to widen the pool of clinical educators. It is key that education is designed by clinical academics and clinical educators with the clinical and educational expertise to inspire students.
  … the significant time that is needed from NHS clinicians to support medical students. The impact of expansion on job planning for clinicians should be considered in financial planning. ***Many clinicians nearing retirement see medical school teaching as something they would want to do after retirement – or something they would delay retirement for*** *if they were able. We should consider how to make the most of this workforce.*

On the five new medical schools created by the 2017 call - *There is some evidence to indicate that recruiting medical school students from underrecruiting areas may help with filling training posts in these areas.*

…A key consideration of a further expansion must be to build on the successful work of the previous expansion to provide medical school education across the whole of England. Expansion of medical school places can also support other agendas such as the UK government's commitment to 'levelling up' and the need to reduce health inequalities across the UK.

… We must understand how potential applicants view their chances of gaining a place at medical school. Recommendation -*The UK government should undertake further detailed work to fully understand the potential undergraduate applicant pool, including analysis of the interplay between A-levels, UCAT and BMAT scores. UCAS should be asked to undertake research with potential applicants to medical school and other science subjects to understand the appetite for places and the perceptions of the entry process to medicine.*

- **Foundation years** - *The data from UCAS highlight that there is merit in a government project to increase medical school places also considering an increase in undergraduate foundation years for medicine. A strategic approach to foundation years and extended medical degrees should form part of NHS workforce planning.*
- **Curriculum design -** *Medical schools face competing priorities when designing and delivering their courses. It is not unusual to hear calls for the length of medical school courses to be shortened, while the same commentators ask yet more of our junior doctors. Medicine isn't just a university course, it is an apprenticeship that lasts a lifetime. As such, it needs a strong foundation so it is cause for concern that an increasing number of foundation doctors report not feeling ready for practice… we need to adapt, placing greater emphasis on how we prepare medical students to be trainee doctors. Much progress has been made in recent years, meaning medical students are exposed to a wider range of clinical settings. But we need a more strategic approach if we are to begin to address the workforce challenges we face.*

  … As life expectancy has improved, there has been a growth in patients who have two or more medical conditions. This presents a challenge for medical education at all levels. Medical education and pathways have become increasingly specialised at a time when our patients need doctors 'who are capable of providing general care in broad specialties across a range of different settings'. Professor Sir David Greenaway's independent report into the structure of postgraduate medical education clearly stated the need for a rethink of aspects of postgraduate training routes. Just as postgraduate medical education has begun to respond to this challenge, so too must undergraduate education.

  … The high prevalence of mental illness means that future doctors in all specialties will need to be equipped to provide appropriate support to people with mental illness.

  …Doctors as a healer, patient partner, team worker, manager and leader, learner and teacher, advocate and innovator. These seven characteristics demonstrate the range of attributes, skills and experiences which doctors in training need to be supported to develop.

  … It is not uncommon to hear policymakers query the length of training for doctors. Everyone involved in training the doctors of the future must effectively explain the expectations that the NHS and patients have of medical students, and how meeting these expectations requires a comprehensive undergraduate education. With competing demands for medical education to cover an increasingly broad range of issues, increased exposure to a variety of clinical settings, and competing time demands associated with specialism vs generalism, there is little room for manoeuvre.

… Medical schools will need to place a greater emphasis on equipping students with the ability to adapt to changing technologies

- **Preparedness for practice** - *Several medical schools have already adopted the model of an **apprenticeship style final year**. Students spend a significant amount of their final year in clinical settings. For this model to work well the learning outcomes and expectations must be clear. This model also has the benefit of freeing up undergraduate teaching capacity in medical schools, meaning the teaching and learning load would move into clinical settings… We encourage governments, medical schools and the regulators to explore the formalisation of a final year apprenticeship model… The growth of degree apprenticeships could provide a model for this final year, in which students could be employed and introduced to the responsibilities of being an employee. As part of this approach, students would have to demonstrate that they are developing their human factor skills… Consideration would need to be given to the settings to which students were exposed – primary, secondary or community. Resources would need to be allocated to clinical settings to allow them to support and develop students during this final year period.*

  … As well as the split of responsibilities between medical schools and placements, it will be important to consider the ability of placements to have a greater role in undergraduate education. This includes the scale of the current clinical educator workforce. Risk aversion within the NHS needs to be addressed and student registration with the GMC in their final year might offer a way forward.

- **Cost** – The total cost to the public purse for a 5 year undergraduate medical course in England is £192,981, plus the private cost of £14,437. The public cost includes the tuition fee loan.

  … *the total cost of 1,000 new places for medical schools would be £207.4million. £193 million is provided by 'public' sources.* Note – this seems to refer to medical place expansion, opening new isn't specifically mentioned.

  … Analysis of student loan repayments by medical professionals indicates that they are likely to repay their loans in full across their careers. Males repay in approximately 20 years, females 27 years post graduation.

  …Due to the number of unknowns – would the student pay tuition fees, would the degree apprenticeship model be used – we have not modelled the impact of changing the final year of medical school to an 'apprenticeship' style as laid out in our principles for expansion.

Table 11: Cost components for medical school places

Stage	Cost component	Funding applied year	Funding provider
Undergraduate medical school place	Tuition fee loan	Years 1, 2, 3 and 4	The Student Loans Company
	Maintenance loan	Years 1, 2, 3 and 4	The Student Loans Company
	Teaching grant fund	Years 1, 2, 3, 4 and 5	The Office for Students
	Clinical placement – undergraduate	Years 3, 4 and 5	Health Education England
	NHS bursary	Year 5	NHS Business Services Authority
	Reduced maintenance loan	Year 5	The Student Loans Company

Table 14: Breakdown of costs by financial provider

Financial provider	Total discounted cost	Cost component [% of discounted cost]
The Student Loans Company	£59,286	Tuition fee loan [57%] Maintenance loan [40%] Reduced maintenance loan [3%]
The Office for Students	£29,003	Teaching grant fund [100%]
Health Education England	£95,076	Undergraduate clinical placement [100%]
NHS Business Services Authority	£9,616	NHS bursaries [100%]
Private funding	£14,437	Cost of living not funded by public [100%]
Total discounted cost	**£207,418**	
Total discounted cost (– private funding)	**£192,981**	

Further details on costings on pages 25 – 34.

Reference information

- Pages 10-11 list numbers of medical student places by area, year of study and so on.
- Page 12 details the recent expansions including the 2017 announcement opening to new providers, it also describes the smaller expansions in the devolved nations.
- Page 13 has a useful map showing the spread of medical school providers across the UK. Note – Dorset doesn't appear as a gap area in the way this is drawn.
- Pages 22-24 list the medical school applications demonstrating that demand outstrips the number of places available, including unsuccessful students who reapply the following cycle. The text makes the point that the demand is there to double the number of medical school places, plus Covid has increased interest even further. It also highlights that individuals with very high A level grades (two A's) are missing out on places. *Students who apply for other courses may also be encouraged to apply to study medicine if the total number of places was increased.*

[i] Mwandigha LM, Tiffin PA, Paton LW et al. What is the effect of secondary (high) schooling on subsequent medical school performance? A national, UK-based, cohort study. BMJ Open 2018;8:e020291. doi:10.1136/bmjopen-2017-020291 1