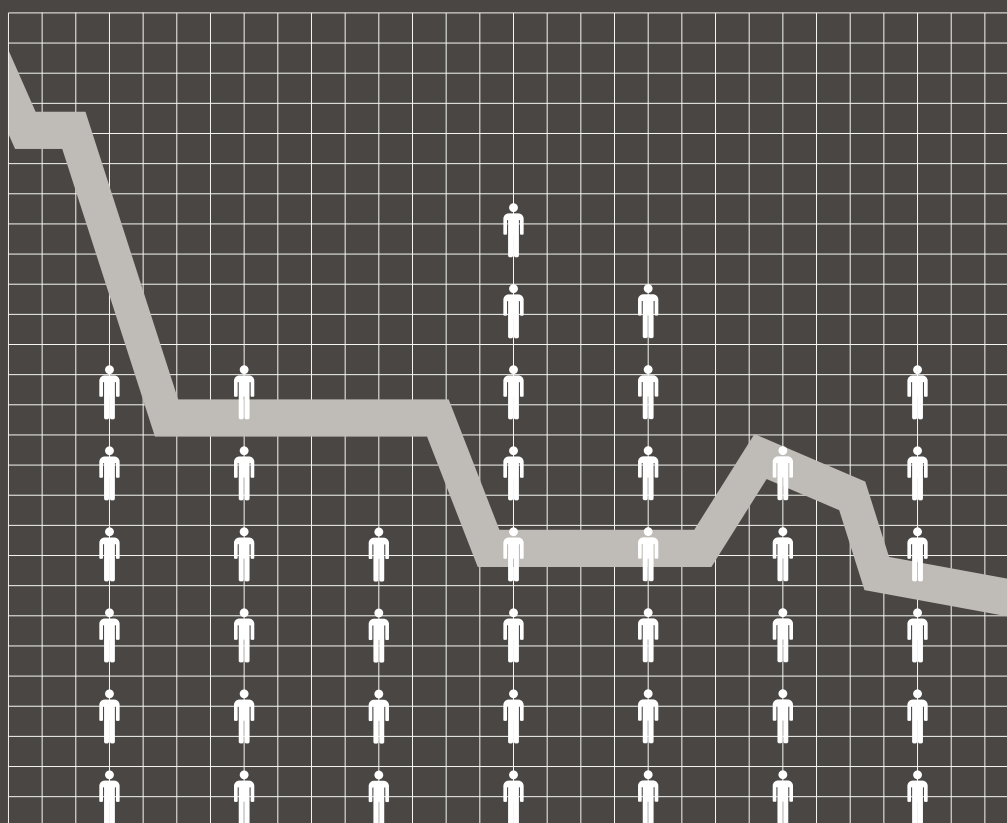


Staffing matters; funding counts

Workforce profile and trends in the English NHS

James Buchan, Ian Seccombe and Anita Charlesworth



Acknowledgements

We would like to thank Sofia Lopes and Andrea Nove from Integrare for providing data analysis. The General Medical Council (GMC) and Nursing and Midwifery Council (NMC) provided data sets. We would also like to thank all participants in a project inception roundtable meeting in October 2015.

Contents

1. Introduction	2
2. Funding counts but staffing matters	3
3. The recent policy context in England	5
The evolution of workforce planning and policy	7
4. The English NHS workforce: current profile and trends	11
Ratio of doctors and nurses to population	11
More doctors, (a few) more nurses, fewer managers...	13
...But increases in workload outstrip staffing	15
No shortage of applications to train as a health professional	16
The international connection: significant, long term, and more coming than going	16
(Some) ageing professions	17
NHS staff pay: A freeze on flexibility	18
5. National workforce pressure points	21
A. What will be the impact of the change in student nurse bursary arrangements on the future supply of student nurses?	21
B. Is international recruitment a viable long-term solution for the NHS?	24
C. Can the recruitment, retention and distribution of GPs be improved?	26
D. Can the physician associate become a significant part of the workforce?	28
E. Can the planned new 'associate nurse' role make a difference?	29
F. Can the NHS make more effective use of temporary staff?	31
6. Discussion	33
7. Conclusion	37
References	38

1. Introduction

Health care is labour intensive, regardless of the nature of the health system, its structural characteristics, levels and sources of funding, or political underpinnings. The effective delivery of care requires decisions to be made about how much funding to allocate to staffing and what mix of skills to deploy. At the same time, quality of care relies on the number and skills of the people providing it. But staffing is not just about numbers. High levels of morale and engagement are vital to the delivery of good quality care, free from avoidable harm.

This report examines the salient features of the health care workforce in England and reviews associated health labour market trends and dynamics. It also explores some specific health care workforce ‘pressure points’ for the NHS in England, where workforce profile and effectiveness is at risk and which require attention from policymakers.

The primary focus is on the workforce in England but international comparisons are used both to provide context and, in some cases, to illustrate possible policy solutions to the identified pressure points. The report looks at the GP and nursing workforce in particular – two key components that have been the subject of much recent policy analysis and media scrutiny. England (along with the other countries of the UK) is not alone in facing the challenges of sustaining an effective health care workforce against a background of funding constraints, and there are lessons to learn from other countries.^{1,2}

The report covers the following:

- A brief overview of the interrelation between funding and staffing in health care workforce issues.
- The current policy context in England, including consideration of the current national workforce policy and planning approach.
- Workforce profile and trends, highlighting key points about the current profile of the workforce in England.
- National pressure points, looking at six critical aspects of the current profile and dynamics of the health care workforce in England and setting out potential policy interventions.*

The report concludes with a discussion of the key points identified in the analysis.

A series of supplements have been produced in addition to this report. These provide more detailed information and analysis about each of the pressure points, as well as further information about current workforce profile and trends in England. The supplements are all available from www.health.org.uk/publication/staffing-matters-funding-counts.

* These ‘pressure points’ were chosen based on feedback from a roundtable of stakeholder experts held in October 2015 and analysis of policy reports published in the previous six months.

2. Funding counts but staffing matters

To be sustained, and retain impact, national-level workforce policy and planning have to be flexible and adaptive. They must respond to changes in the external policy environment (such as funding constraints after the global economic shock of 2008) while also accommodating internal policy changes and labour market dynamics.³ In a labour market as large and dynamic as the health sector, maintaining a live and accurate overview is a critical element of effective planning and commissioning.

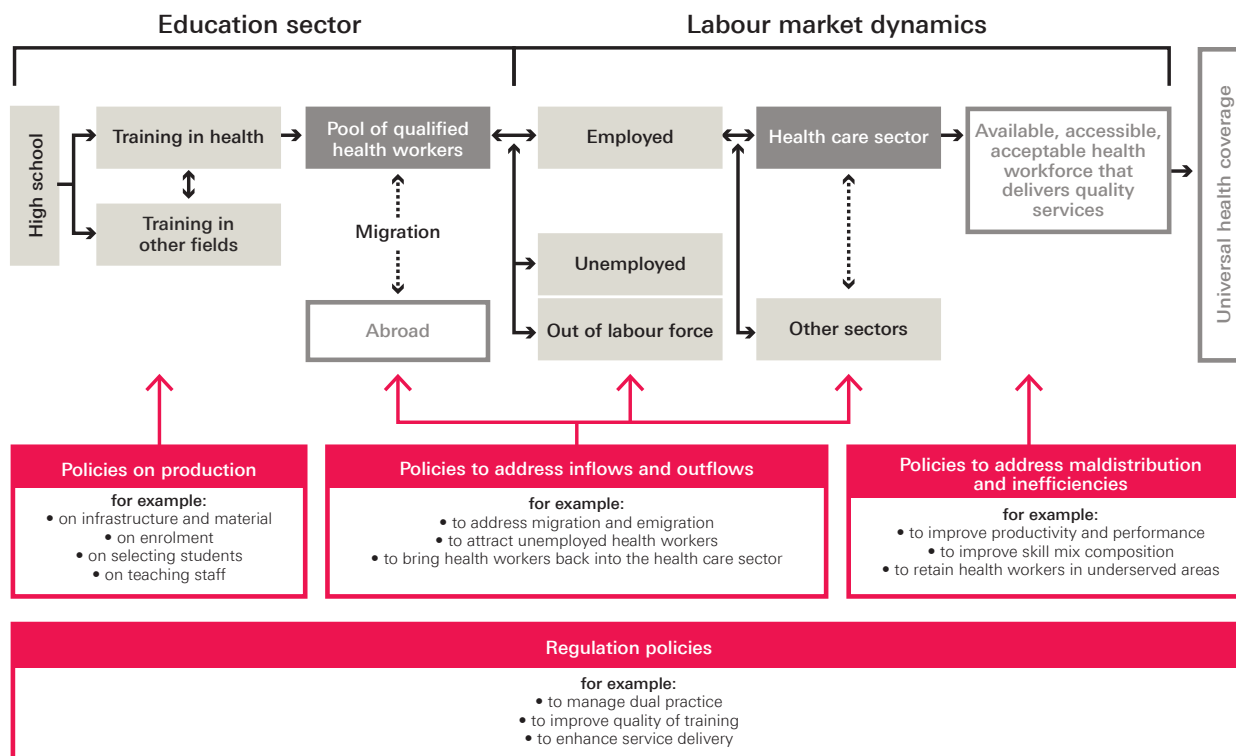
Effectively aligning staffing objectives with funding streams is also vital, but has often not been the case. This is not a direct result of technical shortcomings in the workforce planning approach (although sometimes ‘poor workforce planning’ has been a convenient excuse) but relates more to poor strategic coordination and conflicting political, funding and planning objectives and cycles. This recurring theme of mismatches between staffing and funding will have to be addressed if the NHS in England is to move to a more effective, sustained and long-term approach to workforce planning.

The tendency when trying to ‘fix’ any identified national NHS workforce problems has been to focus on technical limitations, such as data problems, difficulties in integrating the planning of different NHS professions, the organisational structure and ‘location’ of workforce planning capacity, and the composition of the planning capacity itself. Getting the technical aspects of planning right is important. It is necessary but not sufficient to address the NHS workforce problems. If the broader policy frame – and its limitations – is not also considered, and disconnects and gaps are not also addressed, then there is little likelihood that national planning can make a sustained contribution to better utilisation of the workforce, now and in the future. National policy and planning must consider the needs of the health system workforce holistically and dynamically.

Health care workforce dynamics can be framed by a labour market model (see figure 1 overleaf). This frame serves to emphasise the multiple policy options that exist in addressing health care workforce issues, but also highlights the critical need to ensure that those policies are appropriate and aligned. The labour market framework is developed from the Global Strategy on Human Resources for Health: Health Workforce 2030.⁴ This was approved by all member states at the World Health Assembly in May 2016. The framework is based on a ‘live’ labour market model which emphasises the dynamic nature of health care workforce mobility.⁵

The labour market frame highlights the main areas for policy intervention. These include ‘production’ (initial training and education), addressing staff flows (turnover, migration etc), geographic and sector recruitment, retention and distribution, productivity, performance and regulation. The frame emphasises the importance of developing a good overview of labour market dynamics – the level of attrition, the flows between sectors, the levels of retirement, etc – when identifying where there is scope for various types of policy intervention.

Figure 1: A Labour market framework for the health care workforce



Source: Adapted from Souse et al, *Bulletin of the WHO*. 2013

The frame serves to emphasise the multiple policy options that exist in addressing health care workforce dynamics, as well as the critical need to ensure that those policies that are implemented are aligned with the need to recruit, retain, motivate and improve the performance of the health care workforce. In simple terms, it is not just about training more workers (policies on production).

Too often, policy attempts to address health care workforce issues have been constrained either because:

- they have taken a short-term reactive ‘single intervention’ approach without full understanding of the dynamics, or
- they have not appreciated the need to understand the linkages set out in the frame and the possibility of unforeseen circumstances.

3. The recent policy context in England

Effective workforce planning and management have never been more important in the health sector. The NHS is now just over halfway through the most austere decade in its history. Health spending in England will rise by £4.6bn in real terms* between 2015/16 and 2020/21, an increase of around 1% a year⁶ – similar to the last parliament, despite rising demand for services. While NHS England’s budget will rise by £7.6bn in real terms over the period, other health spending will fall by more than £3bn.

The policy context for the NHS in England was set out in the *NHS five year forward view* (Forward View).⁷ This was published by NHS England in 2014 and provides a vision for the future of the NHS. Workforce issues are central to achieving the objectives of the Forward View, including workforce redesign/transformation, supporting workforce innovation, building local capacity such as leadership development, and providing tools and support for local workforce planning.

The NHS has made £1bn of the £22bn efficiency savings needed by 2020/21 to close the funding gap set out in the Forward View.⁸ NHS England estimates that £6.7bn can be saved nationally. Most of this national efficiency saving comes from implementing the government’s 1% cap on public sector pay by 2019/20. Historically health care workers’ earnings have increased by around 2% a year over and above inflation, broadly in line with the growth in whole economy-wide real average earnings. Since the recession of 2008 earnings growth has slowed across the economy but the Office for Budget Responsibility (OBR) does expect whole economy earnings to increase in real terms for the rest of the decade.⁹ From 2017 the OBR forecasts that whole economy average earnings will rise by around 2% a year in real terms. Sustaining the government’s pay policy is therefore likely to result in health care workers’ pay falling relative to other occupations and sectors. However, much will now depend on the economic performance following the UK’s decision to leave the EU. Revised average earnings projections will form part of the Economic and Fiscal Outlook report from the OBR in the autumn.

The vast majority of economic forecasts conclude that the UK’s decision to leave the EU will result in slower economic growth in the short and medium term. Lower economic growth will have implications for the deficit, tax and public spending. The Health Foundation’s analysis finds that if economic growth slows as predicted, funding no longer being paid to the EU would be more than cancelled out by the negative economic consequences of leaving.¹⁰ Depending on decisions about the path of deficit reduction there are serious risks that the low growth in NHS funding since 2010 will continue for much longer and may be greater than planned in the spending review.

* Figures may differ from original source since they are in 2016/17 prices and are adjusted for inflation using HM Treasury GDP deflator as of March 2016.

The Forward View efficiency plans require local health economies to deliver £15bn of efficiency savings over the remainder of this parliament. To achieve this, the NHS workforce will need to find ways to work more productively.

The two most obvious risks to delivering the Forward View are funding constraints and workforce shortages. This report focuses on the second of these but, as noted earlier, funding and staffing are inextricably linked in this labour intensive sector. A focus on funding, without consideration of impact on staffing, can create inflexibilities in staffing deployment, and risks marginalising the workforce whose efforts will deliver health service improvement. A focus on staffing, without consideration of funding, risks setting unattainable workforce goals and continuing with ineffective staffing policies.

The NHS provider deficit in England reached £2.5bn at the end of the 2015/16 financial year, with 76% of providers in the red.¹¹ Staff costs are the biggest area of spending for NHS providers, accounting for almost two-thirds of expenditure. Any change to staff costs will therefore have a substantive impact on the financial viability of NHS trusts. For example, in real terms, spending on agency staff by NHS providers increased by 27% in 2014/15 alone, rising to £3.4bn from £2.7bn in 2013/14.¹² By the end of 2015/16, it had reached £3.7bn.¹¹ The NHS provider deficit at the end of 2015/16 would have been larger if controls on the use of agency staff had not been introduced. However, the high spend on agency staff in the NHS is a major area of concern, as it reflects the fact that it is becoming increasingly difficult to retain and recruit permanent NHS staff. The NAO estimates that three-quarters of the agency staff costs is the result of additional numbers.¹⁵ The present staff shortages in key areas, such as nursing, reflect the disconnect between policy objectives, funding and workforce planning.

NHS staff shortages have been a recurrent theme in the mainstream media in recent years. National Statistics (ONS) data recently revealed that in the NHS in England and Wales, between 2013 and 2015, there had been a 50% increase in nursing vacancies (from 12,513 to 18,714) and a 60% increase in doctor vacancies (from 2,907 to 4,669).¹³ The data also show that nearly three-quarters of NHS trusts and health boards were actively trying to recruit from abroad.

The ONS findings were echoed by a survey of NHS employers in late 2015 in which 93% of NHS trusts in England reported registered nurse shortages. The survey reported a 10% vacancy rate in the NHS, with 63% of NHS trusts saying they had actively recruited from outside the UK in the last 12 months.¹⁴

Staff shortages have also been a key theme in a series of national level policy-oriented reports that have been published in the last six months (see table 1).

In combination these reports represent an unprecedented level of scrutiny on key aspects of NHS workforce policy and planning in England. All the reports attempt, to some extent, to consider the funding–staffing connection, but also highlight the problems caused when either funding or staffing have been given isolated policy attention.

The cumulative impact of these reports is to raise questions about the effectiveness of the current workforce planning arrangements, and to identify several key themes, many of which are looked at in the pressure points section of this report.

Table 1: Recent workforce policy reports

Organisation	Report title	Publication date
National Audit Office	<i>Managing the supply of NHS clinical staff in England</i> ¹⁵	February 2016
NHS Improvement	<i>Evidence from NHS Improvement on clinical staff shortages. A workforce analysis</i> ¹⁶	February 2016
Department of Health	<i>Operational productivity and performance in English NHS acute hospitals: Unwarranted Variations. An independent report for the Department of Health by Lord Carter of Coles</i> ¹⁷	February 2016
NHS Pay review body	<i>NHS Pay review body: Twenty-Ninth Report</i> ¹⁸	March 2016
The Health Foundation	<i>A perfect storm: an impossible climate for NHS providers</i> ¹²	March 2016
Migration Advisory Committee	<i>Partial review of the Shortage Occupation List. Review of nursing</i> ¹⁹	March 2016
The Health Foundation	<i>Fit for purpose? Workforce policy in the English NHS</i> ²⁰	March 2016
Public Accounts Committee	<i>Managing the supply of NHS clinical staff in England. Fortieth Report of Session 2015–16</i> ²¹	April 2016
Nuffield Trust	<i>Reshaping the workforce to deliver the care patients need</i> ²²	May 2016

The evolution of workforce planning and policy

The NHS in England employs more than a million people. This includes around 620,000 professionally qualified clinical staff.²³ The NHS workforce planning system aims to secure a reliable and affordable supply of sufficient numbers of staff across the diversity of professions involved in the delivery of modern-day health care. Long lead times for the training of staff, combined with rapidly changing social and technological practices, makes health care workforce planning particularly difficult. The approach to workforce planning in England has been repeatedly re-organised following structural reform in the NHS and changed funding arrangements. The repeated disconnect between NHS funding allocation and staffing levels, compounded by periodic restructuring, has led to a ‘boom and bust’ approach to the NHS front line, rather than enabling a consistent and sustainable long-term view.

Health Education England (HEE), established in 2012, develops national and regional plans and commissions the training of new clinical staff. The remit of HEE extends beyond the NHS to include other providers. HEE annually forecasts the workforce supply that will arise over the next five years, both locally and nationally, and uses these forecasts to discuss with stakeholders whether this supply will match the system’s view of future demand and whether any changes are needed to the volumes of training commissioned by HEE.²⁴ HEE and its regional bodies, the Local Education and Training Boards (LETBs), use a ‘bottom-up’ approach to workforce planning, based on a collection of NHS trust forecasts of what their future demand for staff will be. This bottom-up approach to workforce

planning and the difficulty to forecast demand from non-NHS providers make it challenging to achieve a comprehensive system-wide understanding of the NHS's workforce requirements, taking into consideration labour market forces from outside the NHS.

The most recent analysis by HEE, for 2016/17 commissions, was published in December 2015. It concluded that 'further expansion in a small number of areas is warranted and desirable', these include:

- adult nursing
- general practice and primary care
- pre-registration pharmacy
- mental health workforce
- emergency medicine and paramedics
- cancer and diagnostics.

HEE's analysis acknowledged that, for nursing at least, because of funding constraints its recommendations on commissions were well below what its own projection suggested was required to meet demand. This is another example of disconnect between funding and workforce considerations.

One of the limitations of this bottom-up approach is that different NHS trusts have varying levels of capacity to understand and analyse their current and future staffing requirements, their business plans and their likely funding levels. Localised funding–staffing disconnects can then become magnified at national level, where the national assessment may also be impacted by national funding–staffing disconnects.

This appears to have happened in recent years, as HEE has had to adjust the national-level estimates. For example in its most recent report it notes: 'In respect of the 2015 forecasts, whilst individual professional positions may be completely valid, the aggregate of this year's forecasts do not appear to represent a position consistent with the expectations of the Forward View, including the agreed financial settlement in the Spending Review and the associated productivity assumptions that underpin it'.

Forecasting demand is more problematic for occupations with significant levels of non-NHS employment, such as nursing, where about one in four nurses is working in non-NHS employment,¹⁹ or where not all training is being commissioned by the NHS (as is now the case for nursing).

There is nothing new in the need for national adjustments to be made to a localised, bottom-up approach to national planning. Similar problems of funding–staffing disconnect were identified in earlier decades, while the approach to workforce planning has been repeatedly re-organised in order to try and match structural reform in the NHS and changed funding arrangements. The challenge of including non-NHS demand for staff has also been repeatedly identified if never fully addressed.

One of the main challenges for sustaining an effective national approach to workforce planning in the NHS in England has been the sequence of top-down system reforms of the NHS, each of which has had to be accompanied by a new approach to health care workforce planning to align with a new structure. Some reforms have given detailed consideration to workforce implications, but many have not. The lack of policy coherence across the funding-staffing connection has been a recurring theme. The combined effect has been to undermine any long-term consistency in approach to workforce policy and planning, and this has been compounded by changes in funding arrangements, and limitations (and some degradation) in NHS workforce data availability and configuration.^{25,26,27,28} Table 2 gives an overview of a schedule of almost permanent flux in recent years, based on periodic reactive change, signified by organisational establishment, merger or abolition.

Table 2: National changes in NHS workforce planning in England, selected list, 2000–16

Year	Change
2000	NHS Plan published – NHS staffing growth targets published NHS HRH Plan published
2001	27 regional Workforce Development Confederations (WDC) established Primary Care Trusts (PCT) established NHS Modernisation Agency created NHS Workforce Review Team (WRT) established to produce national annual recommendations for planning for all of the main clinical staff groups National Workforce Development Board established
2002	Strategic Health Authorities (SHA) created
2004	WDCs ended, merged with SHAs NHS Employers established
2005	Modernisation Agency replaced with NHS Institute for Innovation and Improvement
2006	Number of SHAs reduced from 28 to 10
2009	Medical Education England (MEE) and Professional Advisory Boards (PABs) established
2010	Department of Health (DH) publishes <i>Developing the Healthcare Workforce</i> proposing to create a new body which would supersede both MEE and the PABs. Health Education England (HEE) was to 'go live' in April 2012
2010	DH contract a management consultancy to set up and run the Centre for Workforce Intelligence (CfWI), to be 'the national authority on workforce planning and development and the primary source of workforce intelligence' National Workforce Review team closed down as a result; some staff and functions transferred to CfWI
2013	HEE becomes operational, absorbing MEE (a year later than initially planned); SHAs abolished PCTs abolished; Clinical Commissioning Groups (CCGs) established NHS Institute for Innovation and Improvement closed
2016	CfWI closed down; some functions transferred to DH, and HEE NHS Improvement established (by merger of Monitor, Trust Development Agency and other bodies)

This historic background of policy disconnect between funding and staffing, and between NHS reform and workforce policy/planning, illuminates the potential constraints and limitations for HEE to become fully and sustainably effective. It does have the advantage of being a standalone authority, with some degree of autonomy, but must operate in a complex policy environment where the current priority is cost-containment. Its reported acknowledgement that funding constraints had reduced its most recent recommendations on student nurse commissions by a factor of 10 gives a metric of the extent to which funding concerns have trumped staffing considerations.

The other key challenge that has been identified repeatedly across the last 20 years is the need for any national remit on planning to be truly national and comprehensive. About one in four nurses works outside the NHS, as do significant numbers of other types of health professional; if planning does not consider non-NHS supply and demand it will be flawed from inception. One solution being recommended by the World Health Organization is to publish annual national health care workforce accounts²⁹ which cover the whole system, built on an agreed Minimum Data Set.³⁰ Another source of 'whole system' workforce data is the registers of the professional councils in the UK. Relative to some other countries and systems, this remains a largely untapped source of workforce information in England.^{*31}

More widely, the Health Foundation report *Fit for purpose?* called for an overhaul in how the NHS plans, trains, regulates, pays and supports its people, highlighting the lack of a nationally shared vision for the NHS workforce in England.²⁰ The report argues for a new collaborative approach to policymaking built on a sophisticated understanding of the daily lives of health professionals, their motivations, the cultures they work in, and the pressures they face.

This review of the workforce supports the recommendation made by the Health Foundation, that the government and national leaders across health and social care should come together urgently to develop a long-term vision for the NHS workforce in England. However, this review stresses that the main barriers to achieving this have been the result of national policy changes focused on saving money without fully considering the workforce implications.

* See, for example, Spetz and Kovner 'How Should We Collect Data on the Nursing Workforce?'³¹

4. The English NHS workforce: current profile and trends

This section gives an overview of key aspects of the current profile of the NHS workforce in England. It also highlights trends in how this profile is evolving over time. The aim is to set out salient characteristics of national policy concern. In the next section, specific ‘pressure points’ for workforce policy are examined. More detail about the workforce profile and trends is available in the supplement, available from www.health.org.uk/publication/staffing-matters-funding-counts.

Well over one million people are employed in the NHS and related GP services, with the main blocs being: doctors; qualified nurses, midwives and health visitors; allied health care professionals; support staff in clinical services; and ‘infrastructure support (administrative, clerical, managerial staff)’. Data from the Organisation for Economic Co-operation and Development (OECD) provide an opportunity to compare UK* workforce profile with other OECD countries.¹ Such comparisons must be undertaken with caution because of differences in data collection and definitions. The two most relevant comparisons available are the doctor:population ratio, and the nurse:population ratio.

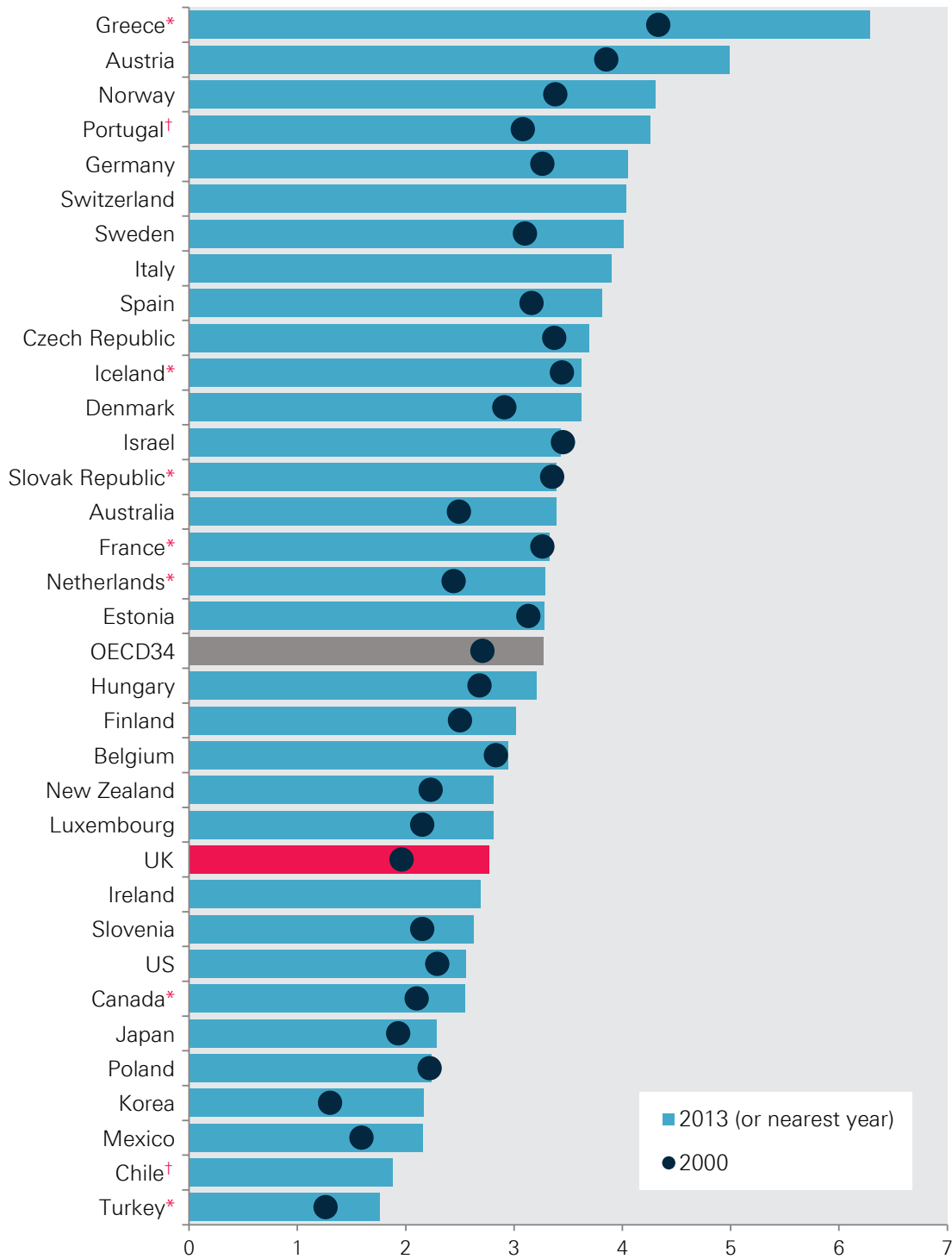
Ratio of doctors and nurses to population

The OECD data suggest that in 2013 the UK had a doctor:population ratio of 2.8 per 1,000 population, which is not dissimilar to the US, Canada, Ireland and New Zealand, but below the OECD average of 3.3 (see figure 2 overleaf).¹ Countries with high ratios of doctors tend to be those that have relatively low nurse:population ratios (eg Greece, Portugal and Italy), or countries that have higher expenditure on health overall. The UK, like many other countries, reported significant growth in the doctor:population ratio between 2000 and 2013.

The nurse:population ratio in the UK in 2013 was reported to be 8.3 per 1,000 population. This is below the OECD average and lower than countries in Scandinavia, Canada, Australia, the US and New Zealand. One factor explaining the relatively low ratio reported for the UK may be the fact that the UK only deploys one level of registered nurse, whereas many other countries have a ‘second-level’ nurse. Another factor is the lower rate of new graduate nurses that have emerged from training in the UK compared with most other OECD countries in the period since 2000. This point is explored in more detail in the pressure point section on the planned new ‘associate nurse’ role.

* Please note: OECD data cannot be disaggregated to examine the four UK countries, but England includes more than 80% of the total NHS workforce.

Figure 2: Number of doctors/1,000 population in OECD countries, 2000 and 2013 (or nearest year)



* Data include not only doctors providing direct care to patients, but also those working in the health sector as managers, educators, researchers, etc. (adding another 5-10% of doctors).

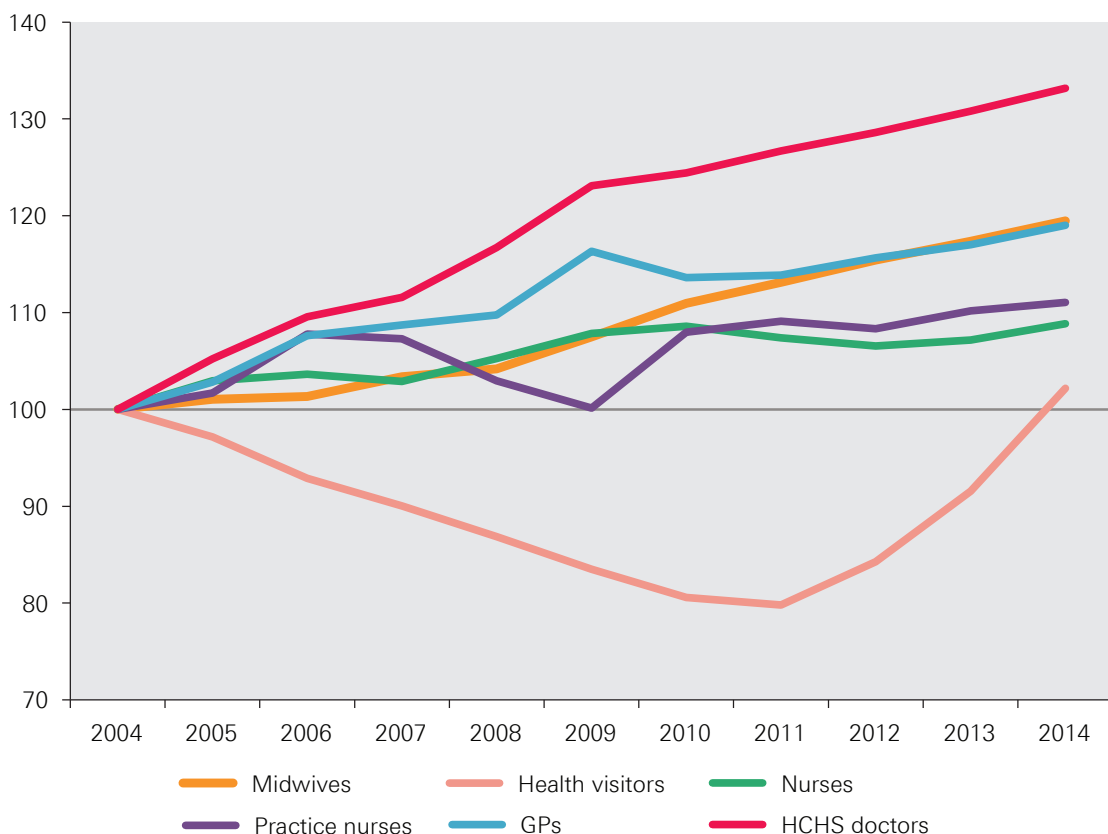
† Data refer to all doctors licensed to practice (resulting in a large over-estimation of the number of practising doctors in Portugal of around 30%).

Source: OECD. See: <http://dx.doi.org/10.1787/888933325971>.

More doctors, (a few) more nurses, fewer managers...

There have been marked variations in growth in different professions and groups in the NHS in England across the period 2004–14 (figure 3). The largest growth has been in hospital and community health service (HCHS) doctors, whose numbers grew by about a third over the period. The GP workforce also grew by 19%. The qualified nursing and midwifery workforces have exhibited a lower rate of growth, and this growth has tailed off in more recent years. The nursing workforce growth was about 9% over the 10 years. Managers (not shown), have actually reduced in number by a few percentage points.

Figure 3: Change in selected occupations in the English NHS 2004–14 (FTE)

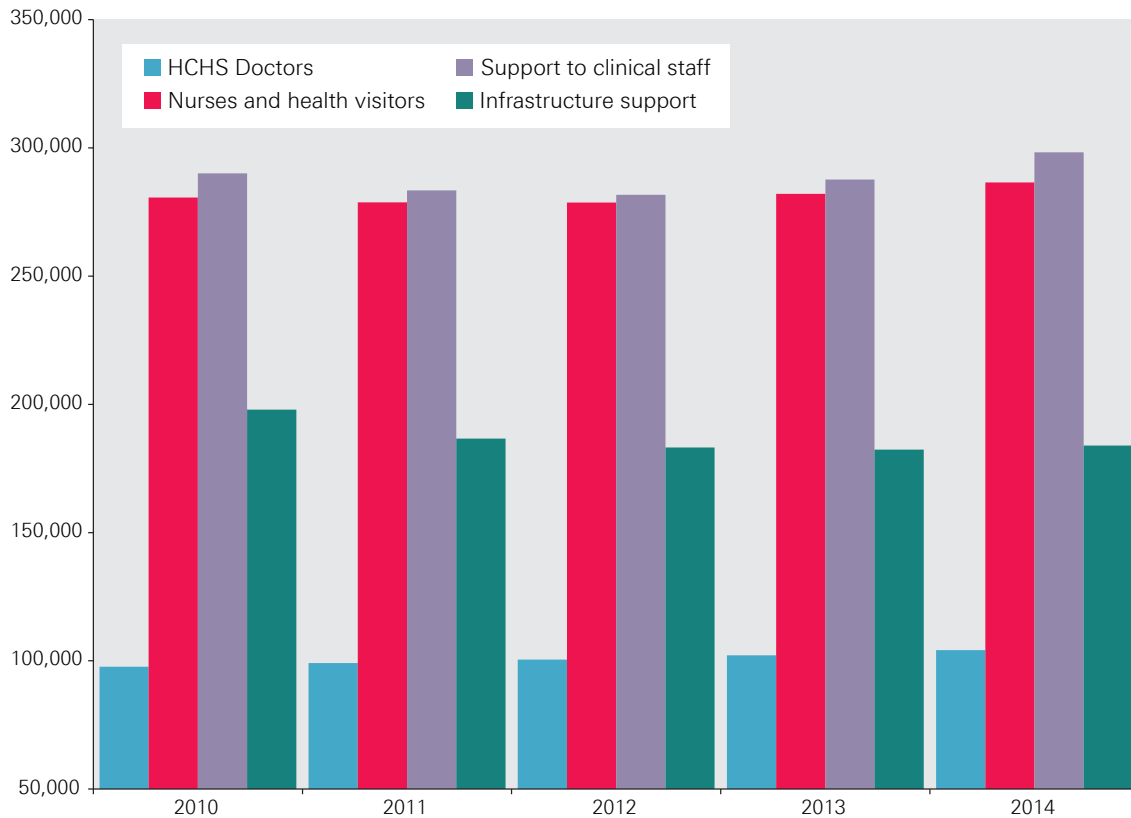


Note: There were changes to the data collection system between 2006 and 2009 particularly for GPs. Since 2010 the GP data collection process has changed by collecting information at individual practice level rather than at an aggregate PCT level, which makes the figures from 2010 onwards not fully comparable with previous years.

Source: HSCIC. *NHS Workforce Statistics in England, Summary of staff in the NHS - 2004-2014, Overview*

More recent data from 2015 is listed as ‘experimental’ by the NHS Health and Social Care Information Centre (HSCIC) and is not directly comparable with the trend data for 2004–14. However this most recent (headcount) data shows an actual decline in the number of GPs for 2014–15. The years since 2010 have been marked by funding austerity, and the impact of this is reflected in changes to staff patterns (figure 4). While the number of HCHS doctors employed in the NHS increased, the number of infrastructure support staff fell on a sustained basis. The number of full time equivalent (FTE) nurses and clinical support staff both fell at the start of the decade but this proved to be unsustainable and numbers have increased since 2013.

Figure 4: Number of nurses employed in acute, general and elderly sectors, excluding bank and agency staff (FTE)



Source: HSCIC. *NHS Workforce Statistics in England, Summary of staff in the NHS - 2004-2014, Overview*

The variable levels of staffing change in recent years have also contributed to changes in staffing patterns and grade mix in different NHS sectors. For example, in the medical workforce the number of HCHS doctors working in the NHS has increased at around 2.9% a year between 2004 and 2014 (up by nearly a third, to 104,500 FTE in 2014). Growth in the number of GPs has been slower at 1.8% (36,920 FTE) – a rise of 19% over the period.

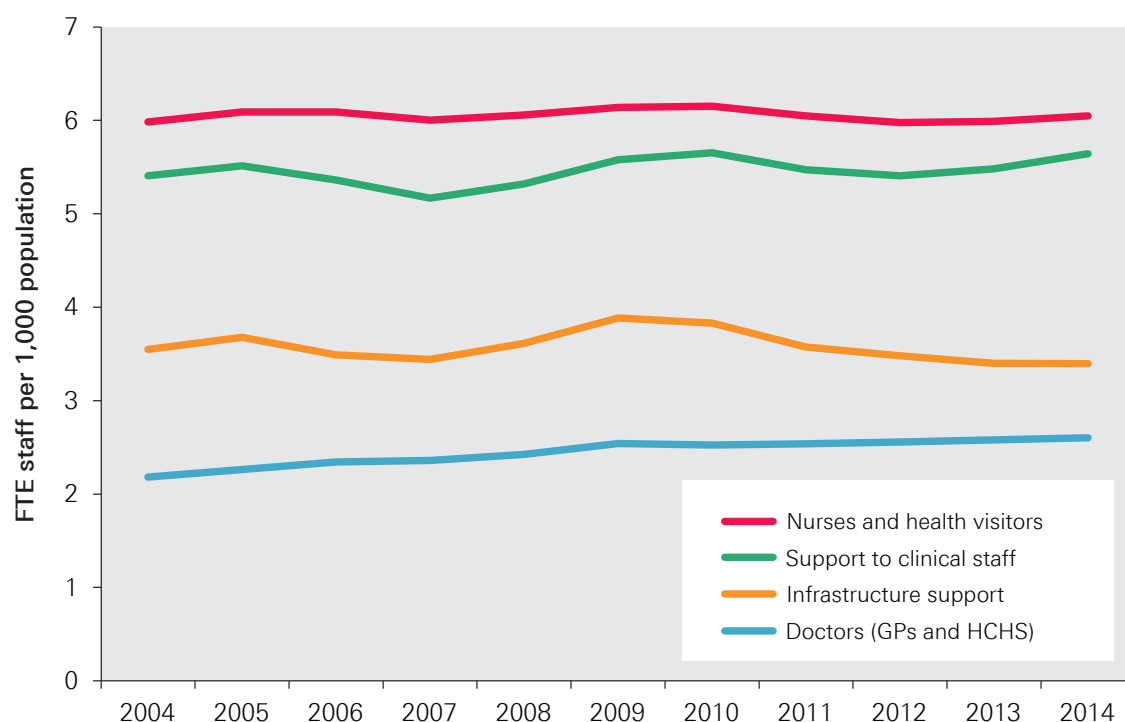
There is also variation in the community and primary care workforce which, despite being regarded as an NHS policy priority area, has seen lower nursing workforce growth than the hospital sector. The number (FTE) of registered qualified nurses and midwives working in NHS hospital services (acute, elderly, general, maternity and paediatrics) has risen from 154,371 in 2004 to 177,255 in 2014 – an increase of 14,084, or 8.6%. In contrast the number of district nurses, health visitors and other first level qualified nurses working in community nursing has only increased by 2,415 (to 42,771 in 2014) – a rise of 6%.

The faster growth in HCHS doctor numbers, compared with registered nurses, has meant a fall in the nurse:doctor ratio from 3.3 in 2004 to 2.7 in 2014. In primary care there is little discernible trend with GP and practice nurse numbers growing at similar rates – although here the ratio started lower (0.43 practice nurses per GP in 2004) and has remained at a similar level throughout the period (0.41 in 2014).

...But increases in workload outstrip staffing

How much is enough? This is not a question easily answered in the context of NHS staffing. At national level, available data³² allows some comparisons across time which give some insight to changing trends of staffing in relation to loose measures of activity or 'demand'.

Figure 5: Staff:population ratios, 2004–14



Source: HSCIC. *NHS Workforce Statistics in England, Summary of staff in the NHS - 2004-2014, Overview*:

Data on the staff:population ratio for key groups in the NHS in England shows a slight downward trend in nurse:population ratios in recent years, and a slight increase in doctor:population ratios. As previously discussed, this reflects the variable pattern in staffing growth, with more consistent growth in doctor numbers, and a much more modest increase in qualified nurses in the period 2004–14.

Comparing the English NHS with the other three UK countries is problematic because of differences in statistics and in definitions of who is included (and excluded) in NHS numbers. However, previous analysis of nurse:population ratios across the UK by the Health Foundation found England to have much lower rates (5.8 per 1,000) in 2011 than the other UK countries (Wales 7.1, Northern Ireland 7.5, Scotland 7.9).³³

Another broad measure of change is to compare staffing change across time with the basic indicator of NHS activity – finished consultant episodes (FCE). NHS activity, as measured by FCEs, has continued to grow, rising from 13.7m in 2004–05 to 18.8m in 2014–15. Over the same period, mean length of patient stay has fallen from 7.1 to 5.0 days. In other words, more patients are being treated, more quickly, in acute hospital services. But, with patients on the wards for a shorter period of time, the average level of patient acuity is also higher, requiring more intense care. Overall, this suggests that workloads for nursing staff in acute care have continued to grow as staffing growth has slowed.

In GP-led services there has also been a situation of increased workload outstripping more modest growth in staffing. A King's Fund survey covering the period 2010/11 to 2014/15 reported that 'GP workload has grown hugely, both in volume and complexity. The research sample shows a 15% overall increase in contacts: a 13% increase in face-to-face contacts and a 63% increase in telephone contacts'.³⁴ Over the same period, the GP workforce grew by 4.75% and the practice nurse workforce by 2.85%.

No shortage of applications to train as a health professional

Despite media rhetoric about shortages, there has been a continuous trend of many more applications than funded places in pre-registration education for the health professions. Data from UCAS highlight long-term applications for pre-clinical medicine at around 50,000 per annum, while applications for pre-registration nursing have increased, peaking in 2014 at almost 200,000. (It is important to note that individual applicants can make multiple applications.)

The international connection: significant, long term, and more coming than going

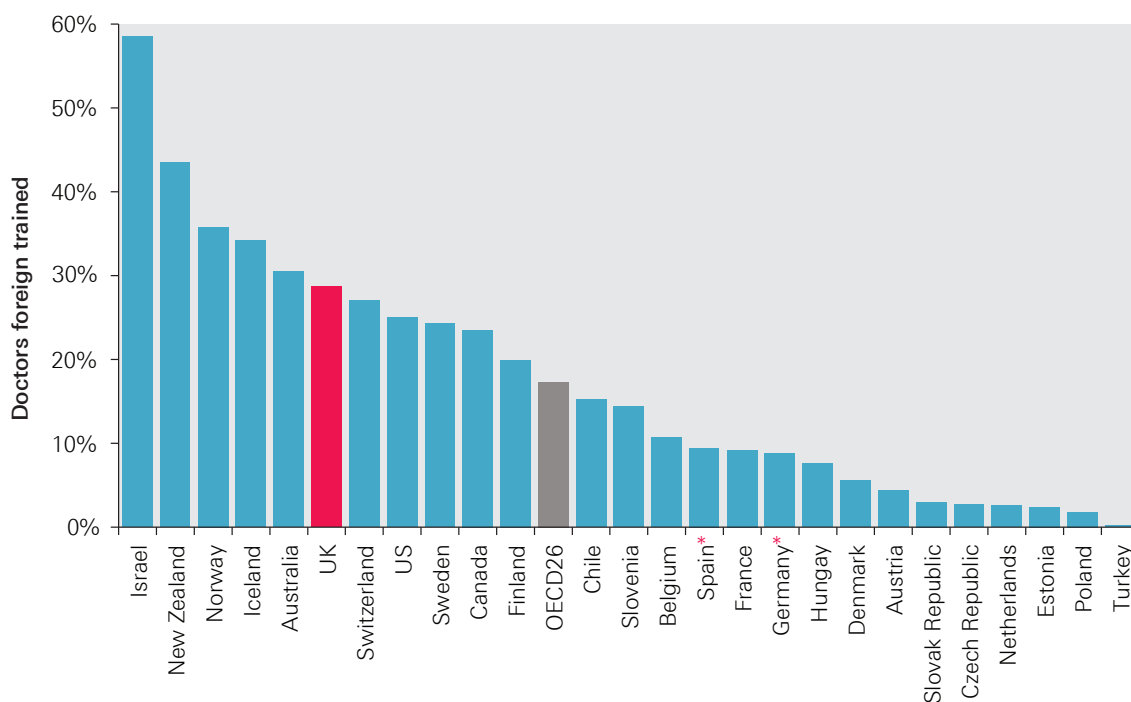
The UK is both a source and destination country for mobile health professionals. Overall it is a significant net 'importer' of doctors, nurses and other health professionals;¹⁹ this international inflow has made a major contribution to meeting domestic demand. The policy implications of a high level of reliance on international recruits are examined in more detail in the international recruitment pressure point section.

The international connection is in part a legacy of empire, in part a result of being able to tap into a very large international population of English-speaking health professionals, and, more recently in part enabled by access to freely mobile health professionals from other countries of the EU. The overall result is that the UK has one of the highest levels of reliance on internationally trained health professionals of any OECD country. In the UK, about one in three doctors, and one in eight nurses, was trained in another country.

Actual annual flows of health professionals into the UK vary year by year. Trends in inflow of health professionals to the UK can be tracked using professional registration data. This data may overstate actual flows as not all who are registered will necessarily move to – or work in – the UK. However, it does provide annual trend data and information on source countries. Data from the General Medical Council show that annual inflow of new doctors from UK training has increased in recent years, reflecting increased medical school intakes a decade ago, while the number from the EU dropped in 2015.

The inflow of international nurses peaked in 2002, at the height of the last round of active international recruitment, when international (EU and non-EU countries) accounted for more than half the total number of new nurses entering the UK register. The rate then dropped rapidly, but has increased since 2009, with notable increases in recent years from EU countries such as Spain, Romania and Italy. In 2015/16 international inflow accounted for one in three newly registered nurses in the UK. At the time of writing, it is too early to assess the impact on inflow and outflow patterns of the recent vote by the UK to leave the EU.

Figure 6: Percentage of doctors who were foreign trained, 2013



* Data is based on nationality (or place of birth in Spain), not on the place of training.

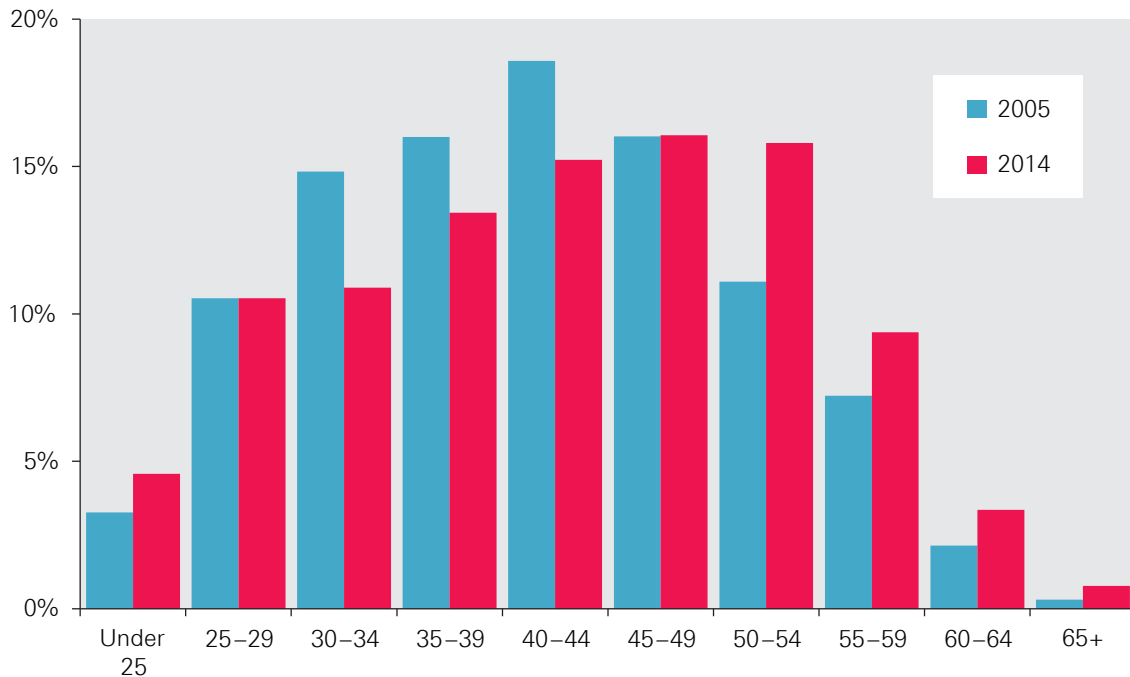
Source: OECD Health Statistics 2015, <http://dx.doi.org/10.1787/health-data-en>.

(Some) ageing professions

Age profile is an important indicator of likely labour market behaviour and potential retirement patterns adding to the challenge of ensuring the supply of qualified staff. Some parts of the NHS workforce – particularly qualified nursing staff, nursing support staff and GPs – have an ageing profile, which poses a policy concern. For example, one in five GPs is aged 55 or older and almost one in three qualified nurses, midwives and health visitors is aged 50 or older (see figure 7 overleaf). Both of these occupational groups are facing likely significant growth in retirements over the next 5–10 years.

In comparison, other groups such as allied health professionals and hospital doctors have a younger profile, which suggests a less immediate policy concern about overall retirement patterns and reflects relatively large recent intakes to the profession. OECD data highlight that the UK has the lowest proportion of hospital doctors aged 55 or older of any OECD country – 13%, compared with an OECD average of 33%.³⁵

Figure 7: Qualified nurses, midwives and health visitors (headcount) by age group, 2005 and 2014



Source: HSCIC, 2004 to 2014 non-medical staff.

NHS staff pay: A freeze on flexibility

Most people in the NHS are employed on national pay scales. The NHS pay determination system is based on two review bodies: one covering salaried medical and dental staff, the second covering other NHS staff. Some local pay flexibility is built into the system, notably on recruitment and retention premia. This national approach to pay determination has in the past been criticised for reducing the ability of individual NHS trusts to respond more creatively and flexibly to local labour market challenges. At different times over the last 30 years various local and regional pay setting mechanisms have been mooted, but in practice none have achieved any real traction in the NHS.

Pay comparisons are fraught with definitional difficulties, but OECD data presented in figures 8 and 9 give some sense of the pay relativities for hospital nurses in the UK, and in comparison with their peers in other countries. Figure 8 shows the remuneration of hospital nurses in OECD countries compared with average wages in their respective country. By this measure, hospital nurses in the UK earn just above the average wage in the UK, similar to the OECD average for nurses (1.1), but lower than nurses in some other OECD countries. When converted into US dollars to allow a more direct comparison of purchasing power parity (PPP) (see figure 9), UK hospital nurse remuneration is ranked as 15th out of 30 OECD countries, just above the OECD average but below the US, Canada, Australia and most countries in north and western Europe.

Figure 8: Remuneration of hospital nurses, ratio to average wage, 2013 (or nearest year)

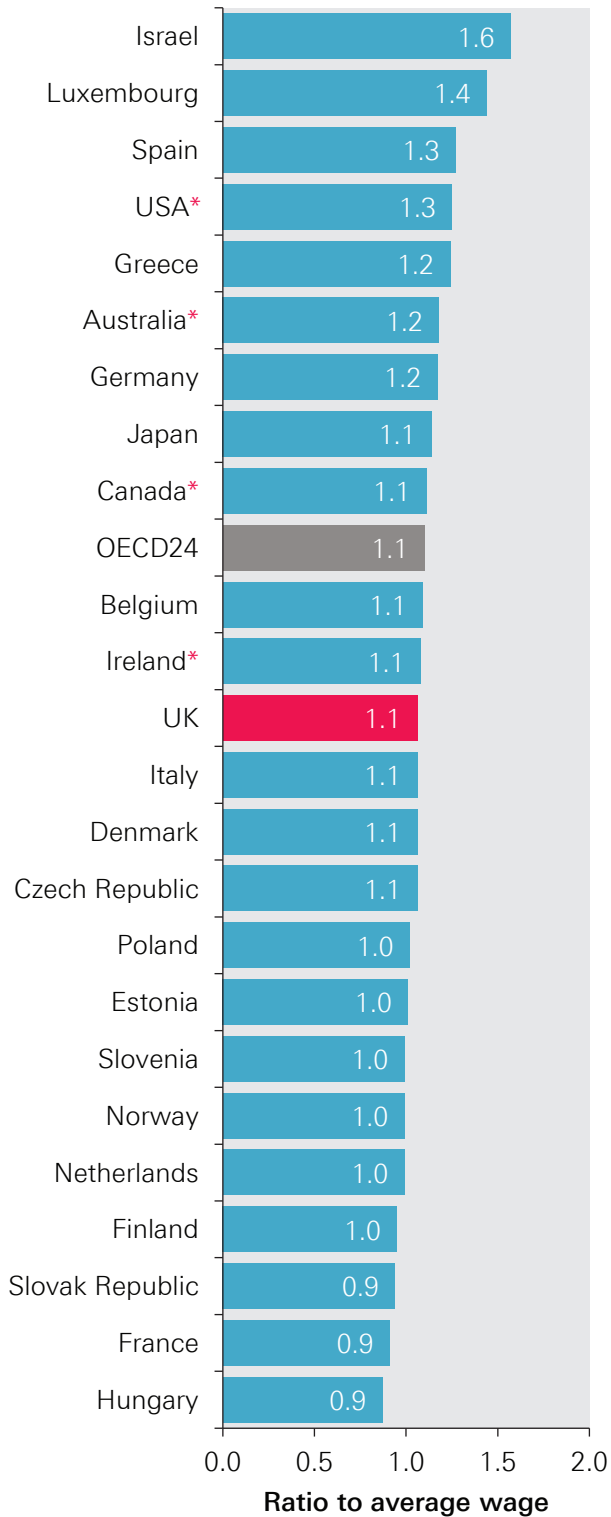
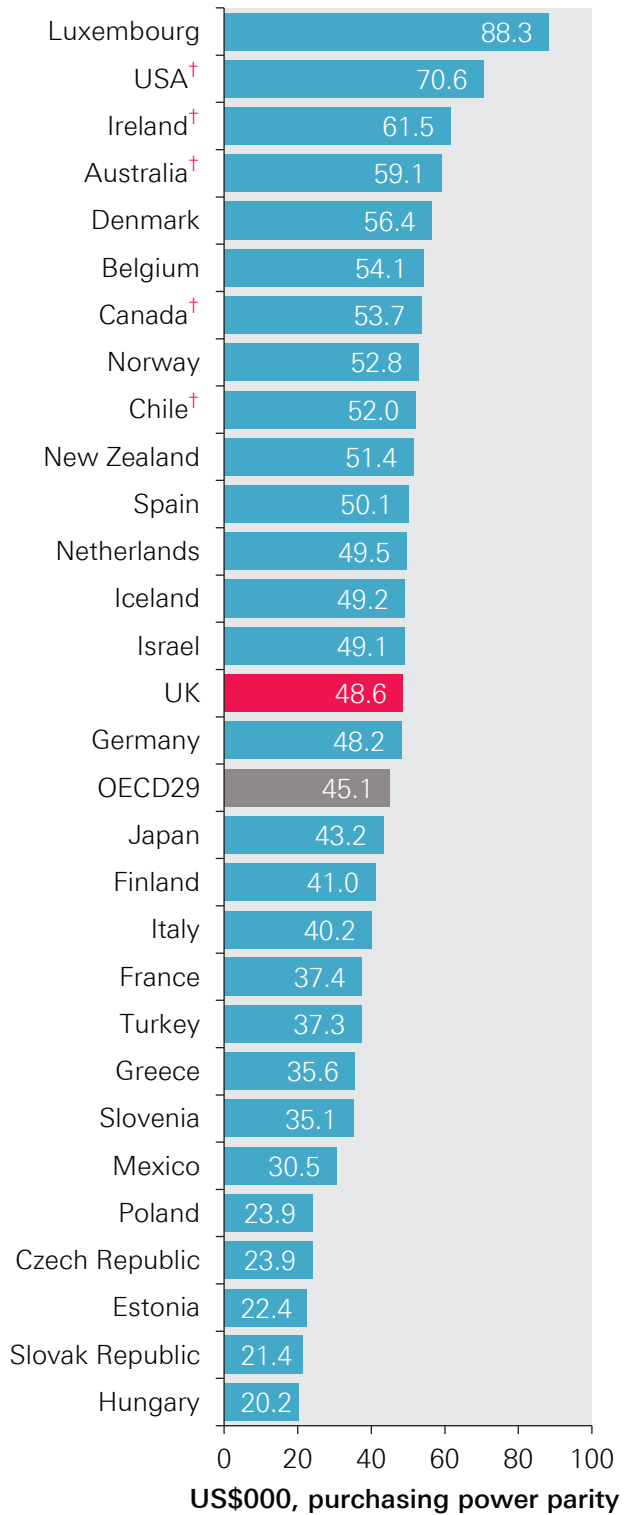


Figure 9: Remuneration of hospital nurses, US\$000 purchasing power parity, 2013 (or nearest year)



* Data refer to registered ('professional') nurses in the US, Australia, Canada and Ireland (resulting in an over-estimation).

† Data refer to registered ('professional') nurses in the US, Australia, Canada, Ireland and Chile (resulting in an over-estimation).

Source: OECD Health Statistics 2015, <http://dx.doi.org/10.1787/health-data-en>.

Although characterised as inflexible by critics, the main pay system for most NHS staff does have some degree of flexibility built in, such as recruitment and retention premia and a ‘market forces factor’, but in practice these have not been much used by local management – because of lack of capacity, or lack of resources. However, in more recent years, the centralised pay system has enabled a system-wide NHS pay ‘freeze’ to be more easily sustained as part of overall fiscal constraint after the global financial crisis than could a decentralised or localised system. The most recent NHS staff pay constraint was announced in the 2015 Budget and is scheduled to remain in place for four years, capping annual increases at 1%.³⁶ If it does extend through to the end of the four years, there will have been a 10-year period where NHS pay has been centrally restrained.

There has been a general trend in European countries hit by the financial crisis to contain costs through public sector pay restraint, and in some countries this has included a policy shift away from local pay bargaining to national level in order to enable more effective national paybill control.³⁷

Pay determination should be a lever to improve performance and service delivery. It should also recognise the contribution of staff, and motivate them to continue to contribute. The longer the centralised ‘freeze’ goes on, the less pay and associated reward can be a policy lever to achieve these objectives, locally or nationally.

NHS England’s plan to deliver the Forward View rests in part on implementing the government’s 1% cap on public sector pay by 2019/20. However, there is a risk that continuing to constrain pay through national public sector pay restraint will backfire as it will undermine the ability to use pay to recognise, reward and motivate NHS staff and encourage them to work productively. The Migration Advisory Committee (MAC) have also commented on ‘highly suggestive indications’ that international recruitment of nurses has had the effect of saving costs by suppressing wages.¹⁹

5. National workforce pressure points

The trend analysis shows that the NHS in England is experiencing a number of pressure points across the workforce that need to be addressed if the health service is to have access to the staff it needs to deliver high quality care. There are key shortages, notably for nursing and GPs. As a result the NHS is reliant on overseas recruitment and temporary workers. New roles are being developed but are still in their infancy.

This section summarises analysis of six critical ‘pressure points’ for the current health care workforce in England and sets out the evidence on potential policy interventions. These pressure points are:

- the proposed changes to nurse bursaries
- international recruitment to fill vacancies
- the recruitment and retention of GPs
- the potential of physician associates
- the potential of nursing associates
- the use of temporary and agency workers.

The pressure points were chosen based on feedback from a roundtable of stakeholder experts, held in October 2015, and analysis of policy reports published in the previous six months.

More details about each of the pressure points is available in the supplements, available from www.health.org.uk/publication/staffing-matters-funding-counts.

A. What will be the impact of the change in student nurse bursary arrangements on the future supply of student nurses?

From 1 August 2017, the government proposes that new nursing, midwifery and allied health students will no longer receive NHS bursaries. Instead, they will have access to the same student loans system as other students. In essence the change will remove the bursary funding cap on the number of training places that can be made available to suitably qualified applicants in England. The government claims that the new system will provide:

- more nurses, midwives and allied health professionals for the NHS
- a better funding system for health students in England
- a sustainable model for universities.³⁸

Applications to pre-registration nurse education have outstripped available funded places in recent years. The government reported in late 2015 that ‘the result is that last year we turned away 37,000 applicants to nurse training places, even though we would have liked to have taken on a great number of them’.³⁹ This point was then used to argue that the new funding approach will enable universities to provide ‘up to 10,000 additional nursing, midwifery and allied health training places over this parliament’.³⁸

While the ending of bursaries represents a national policy change, there are local precedents. In February 2015 Lancashire Teaching Hospitals Foundation Trust and the University of Bolton launched the first degree course to offer student nursing places that are not commissioned and funded centrally. The aim is to help address local nursing shortages, with all students completing the programme being offered a job at the trust after graduation. The planned 50 students per year apply through UCAS and self-fund their study via the student loan system;⁴⁰ other local NHS employers have subsequently joined the initiative.⁴¹ Birmingham Children’s Hospital NHS Foundation Trust and Birmingham City University have initiated a similar scheme, with a three-year course to train to become a registered children’s nurse; successful graduates are offered a full-time permanent position with the hospital. The places are not NHS-funded and students will be required to pay course fees and access finance via the Student Loans Company.⁴²

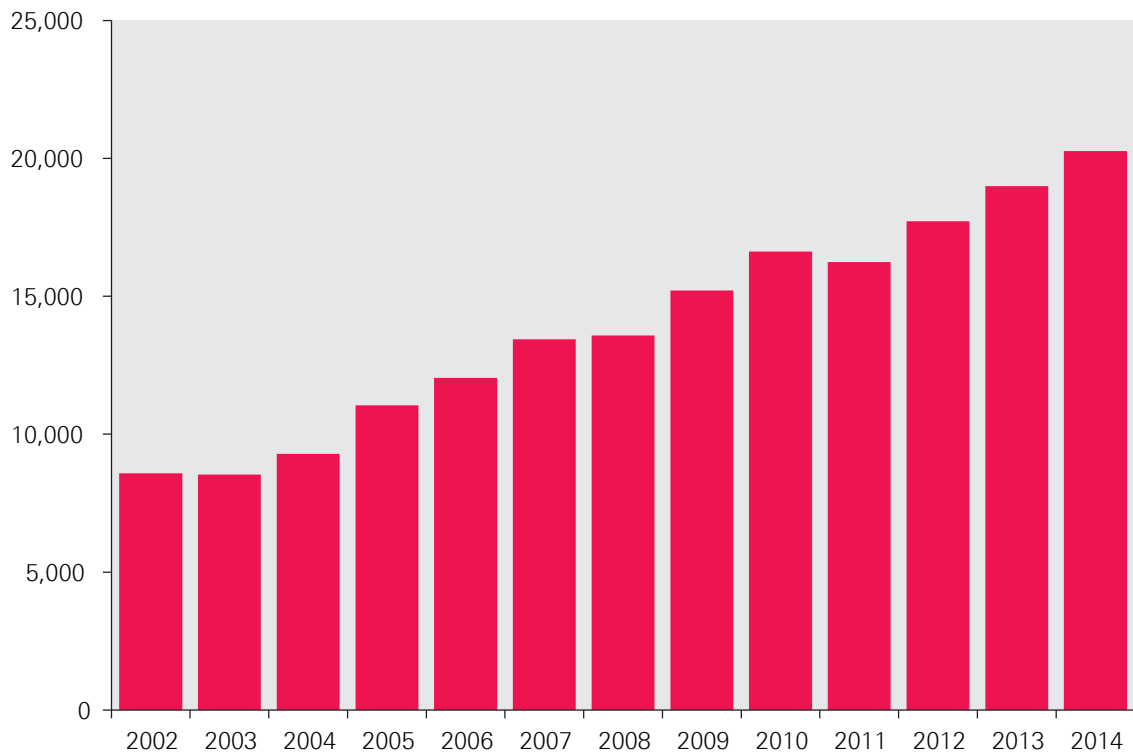
It is too early to be certain how the change of funding will impact on future supply in England; however, international evidence does provide some relevant background. A comparison across OECD countries suggests that the UK was at the lower end of the scale in terms of its output of newly qualified nurses, at 42 graduating nurses per 100,000 population in 2013. This is below the OECD average of 47 and well below Australia (75), the US (63) and many other northern European countries.

A more detailed examination of UCAS data highlights that there was a peak in the number of applications for pre-registration nurse education, but that the number has continued to be well in excess of funded acceptances. At the crudest level of analysis this suggests that ‘demand’ for pre-registration nurse education does exceed the supply of funded places, and that ending the funding cap could lead to an increase in intakes, assuming self-funded students increase in number. The current Lancashire model does reinforce the point that there is a market for self-funded places – at least where there is a promise of a local job on completion.

More detailed examination of the experience of Australia and the US* suggests that removing the cap in the UK is likely to lead to numerical growth in the number of student nurses, assuming job availability and affordable fees, and with the main constraints being the capacity of the education sector to cope with greater numbers and provide suitable clinical placements. However, these examples do not include moving from a policy of government-funded training to one of self-funded training. The Australian experience also cautions that national numerical growth may exacerbate current geographical supply–demand imbalances rather than reduce them.

* See the student nurse pressure point supplement to this report. Available from www.health.org.uk/publication/staffing-matters-funding-counts

Figure 10: Commencing enrolments of students for general nursing courses in Australia, 2002–14



Source: Australian Government, Department of Education and Training. www.highereducationstatistics.education.gov.au

Longer term, much will depend on the continued attraction of nursing as a career if a higher applicant base is to be maintained. This in part will depend on perceptions of career opportunities, and comparative pay levels; the possibility that a shift away from the bursary model may also reduce the supply of older applicants and those who already have more financial and domestic commitments will have to be considered. It should be noted that the current local initiatives in the NHS in Lancashire and Birmingham are predicated on the offer of a 'guaranteed' local job on completion of training.

Finally it must be noted that the end of the cap also means that central government is distancing itself from full funding of intakes to pre-registration education of nurses and of allied health professionals and that HEE will therefore no longer control completely the numbers being trained. This places a greater emphasis on monitoring and tracking of non-centrally funded training places if there is to be any continued aspiration to have national supply estimates.

B. Is international recruitment a viable long-term solution for the NHS?

The UK has been a long-term recruiter of internationally educated health professionals. The annual intake of doctors, nurses and other health professionals from other countries has ebbed and flowed over the years, but has remained a continuous and significant source of new recruits over the decades. About one in three doctors and one in seven nurses in the UK was trained in another country. In particular, the inflow of nurses has increased in recent years, notably from EU countries, in response to recruitment difficulties.

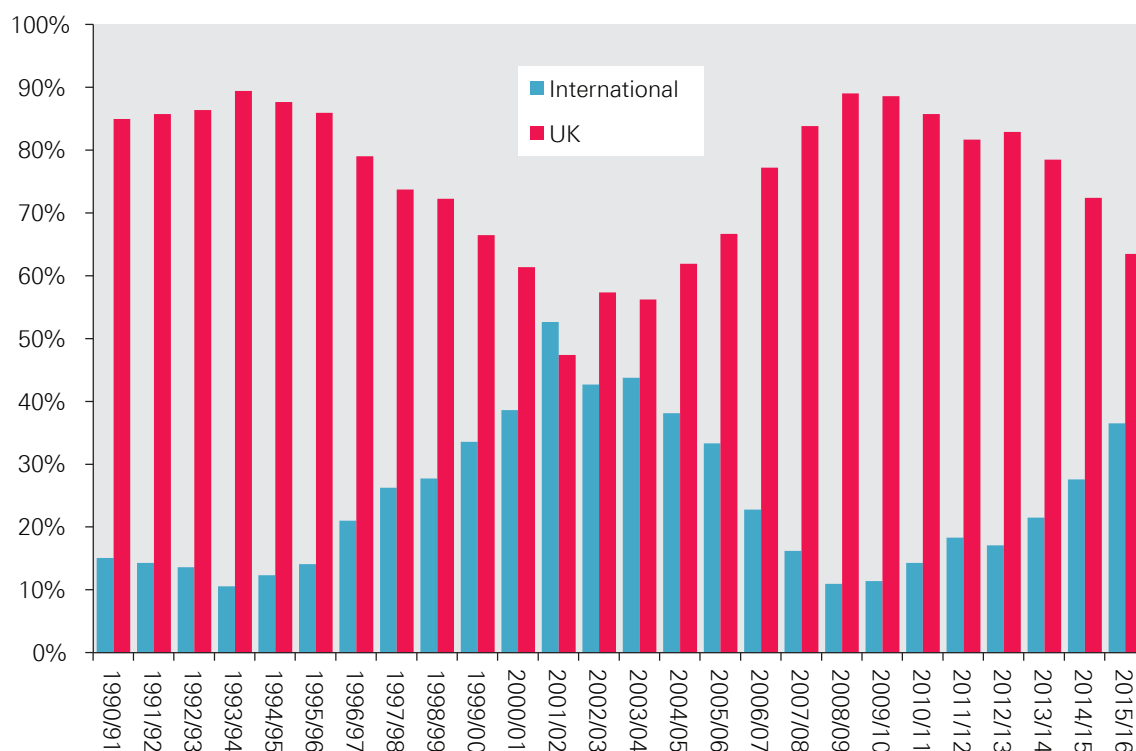
The Migration Advisory Committee (MAC) report in March 2016 recommended a longer-term, but ‘tapered’, use of international recruitment of nurses, with an overall annual ceiling.¹⁹ It also expressed concerns about whether the health and care sectors will be sufficiently incentivised to tackle nursing shortages if this occupation is retained on the Shortage Occupation List, pointing to their ‘poor track record’ in addressing nursing shortages by other means (domestic training, improved retention, etc).¹⁹

To develop a better understanding of the level of reliance on international recruitment, it is important to compare the relative level of inflow from other countries (and the pattern of source countries) with the level of ‘new’ flows from education in the UK, as shown in figure 11. This shows the percentage of nurses entering the UK register annually, from the UK and from international sources. It is one indicator of workforce ‘self-sufficiency’ – the higher the proportion of international nurses, the less self-sufficient was the UK in meeting its nursing requirements in that year. The level of reliance on international nurses has varied from a high of just over 50% in 2001/2, to lower annual levels around 10%. Since 2008/9 the proportion of new admissions from international sources has increased year on year, reaching more than one in three in 2015/16.

It is notable that the growth in inflow of international nurses in recent years has led to a point that in 2015/16 it is almost back up to the proportionate contribution evident in the early 2000s. The size and relative contribution of the international health care workforce in the UK means it cannot be ignored. The relative inflow from other countries has varied across time, and the mix of source countries has also changed, which points to the need for effective monitoring of flows in order to assess immediate and longer-term risks of high or changing reliance on inflows (or effect of outflows). Inflow from non-EU countries is more susceptible to control than that from the EU, although it remains to be seen how the UK leaving the EU will impact on free movement of health professionals. The magnitude of the inflow also argues for coordinated national policy to ensure that any flows that do occur are assessed, and adjusted where feasible, to assist in achieving a better supply–demand balance.

International recruitment has been an ever present component in the health care workforce policy terrain over the lifetime of the NHS. Its prominence has been ebbed and flowed, and it has not been well aligned with domestic health care workforce policies, but it has remained an attractive option because it is a relatively quick, and inexpensive, fix for employers. Training costs and time lag are not part of the international recruitment option – but must be considered in the domestic training option. When there is immediate pressure to recruit to fill vacancies, UK employers’ thoughts turn abroad.

Figure 11: International and UK sources as a % of total new admissions to the UK nursing register, 1990/91–2015/16 (initial registrations)



Source: UKCC/NMC data, the authors.

As already discussed, the UK is much more reliant on international doctors and nurses than most other OECD countries. The inflow/outflow data highlights that the total annual number of international nurses (EU and non-EU) entering the UK has varied over time, between 10% and 50% of annual total.

This variation reflects the changing level of demand for nurses in the UK. As the MAC noted, if international recruitment was not an option, UK employers would be forced to become more effective in utilising the other policy options of domestic recruitment, retention and workforce productivity.

There is a role for government in monitoring and moderating this process, and maintaining a consistent national approach. This mandate has not been fulfilled clearly in recent years, because of policy disconnect and mixed messages from different government departments. What is required is a nationally led approach which focuses on achieving overall health care workforce sustainability, and which integrates any nationally led international recruitment approach in overall health care workforce planning and policy.

This means focusing on improving health care workforce sustainability, which requires coordinated domestic policies and approaches on health care workforce intelligence and planning; adapting the current workforce; and improving regional recruitment, retention, distribution and productivity. These ‘domestic’ policies must be aligned with policies aimed at making any international recruitment efficient, through effective recruitment and integration of foreign-trained/born professionals;⁴³ and also ‘ethical’ international recruitment – meeting the requirements both of the Department of Health’s own Code

on international recruitment,⁴⁴ and the WHO global code,⁴⁵ to avoid active recruitment from designated low income countries. In particular, the Department of Health and other government departments will have to give heed to the milestone set out in the Global strategy on human resources for health,⁴⁶ adopted by the UK and all other WHO member states in May 2016, that ‘By 2030, all countries will have made progress towards halving their dependency on foreign-trained health professionals...’. However, the recent trend in England, for nurses at least, is for growing rather than reducing dependency.

C. Can the recruitment, retention and distribution of GPs be improved?

The shortage of GPs has been identified as one of the current critical workforce constraints in England. The population is increasing, and people are living longer with multiple medical conditions. This is likely to increase not only the level of demand in general practice but also the complexity. For example, the number of patients aged 75 or over, who use general practice most often, is predicted to grow by 38% in the next 10 years.⁴⁷ Demand for general practice is increasing, but the National Audit Office (NAO) reported recently that the Department of Health and NHS England do not have up-to-date data to estimate the number of consultations.⁴⁷

Improving access to general practice is a priority for the government. In April 2016 NHS England published the *General practice forward view*, which states the aim is to add ‘a further 5,000 net’ GPs in the next five years, along with 3,000 new fully funded practice-based mental health therapists, an extra 1,500 co-funded practice clinical pharmacists, and nationally funded support for practice nurses, physician associates, practice managers and receptionists.⁴⁸

The most recent data available shows that there were only 11 FTE physician associates working in English GP practices in September 2015, 168 FTE pharmacists and only 19 physiotherapists and 17 therapists. Overall it also showed an estimated 1.4% drop in FTE direct clinical care staff in GP practices in England between 2014 and 2015, and that the number of FTE GPs dropped by an estimated 1.9% over the last year.²³

Practices are independent contractors, typically companies owned by an individual GP or group of GPs that provide care to a registered list of patients at one or more surgery sites. In 2014/15, NHS England spent £7.7bn on general practice.⁴⁷ In 2014, there were around 37,000 FTE GPs (including trainee GPs) working in 7,875 practices across England.

Some practices have only one fully qualified permanent GP (often called single-handed practices). At large practices there may be 10 or more GPs working together. GPs can have different roles in a practice – some are full or part practice owners; others are salaried GPs employed by the practice. In addition to these 37,000 GPs, there are also locum (temporary) GPs who work across practices as required. The NAO reports that complete data are not available on the use of locums within general practice, but there is anecdotal evidence that they account for an increasing proportion of the workforce.⁴⁷

However it should be noted that GPs make up only 29% of the general practice workforce,⁴⁷ which totals about 125,000 (FTE), with practice nurses, other health professionals, administrative and managerial staff accounting for the majority. Data on the general practice workforce and working practices are not complete, which the NAO reports ‘makes it harder to identify where pressures are greatest and where more capacity is needed. Gaps include data on the use of locum GPs and the recruitment and retention of practice nurses. NHS England does not understand how different practices prioritise and manage the demand for appointments and cannot assess which systems provide better access for patients’.⁴⁷

While the government has committed to providing an additional 5,000 doctors working in general practice by 2020 to improve access, the NAO noted in 2015 that the lack of reliable data on the number of consultations means that the Department and NHS England do not know how many more GPs are required to meet demand, nor do they have detailed data on the number or use of locum GPs, or on staff vacancies in general practice.⁴⁷

In trying to address the challenges of improving the recruitment, retention and distribution of the GP workforce, policymakers in England should give greater consideration to experiences in other OECD countries. England is not alone in having to attempt to encourage more doctors to work in general practice, and to be based in underserved rural and inner city areas. OECD has recently reviewed the policy approaches in high income countries to achieving more effective geographic and speciality distribution of doctors,^{*} focusing on three main areas of intervention: targeting the selection of medical students or the location of medical schools; providing financial incentives for doctors to practice in underserved areas or implementing regulations to restrict the choice of practice location; and promoting innovations in health service delivery and telemedicine.

An examination of this international experience highlights a broader range of potential policy options to address GP recruitment, retention and distribution issues than are evident currently in England. Much of the current policy effort is on trying to increase training numbers without a more comprehensive and coordinated package that includes looking at encouraging or regulating geographic re-balancing, removing barriers to greater use of nurse practitioners and other staff, and looking at service redesign and technology-based solutions to improving access.

Primary care can only be delivered effectively by multi-skilled teams. There are significant gaps in the data available on GP services, including staffing, workload, and activity which undermines analysis and the identification of best policies. Better routine data would help with workforce planning and with proactively managing demand. The most recent survey-based data does highlight that workload is growing more rapidly than staffing. It suggests that the NHS is struggling to attract sufficient medical students into the GP career option, and then to retain sufficient GPs in the workforce, with many looking to work less than full time or retire early.

* See also *Health Workforce Policies in OECD Countries. Right Jobs, Right Skills, Right Places*¹

While ‘more’ GPs (or, more accurately, more GP hours) is part of the solution to the current problems with recruitment, retention and distribution, there is a need for a broader and more comprehensive policy focus, where the real driver is improved access to primary care and productivity, and where the staffing element of the ‘solution’ takes account of the need to enable effective team-working.

In part, this requires a policy response that gives greater consideration to how to achieve a more equitable distribution of current GP services. International experience on this issue suggests that this requires looking at skill mix changes, service redesign and better use of technology, as well as trying to increase initial supply.

Improvements in national-level workforce planning for GP-led services in England need to take account of the broader workforce, assess the implications of the ageing of the current practice nursing workforce, build in scenarios which have a more explicit focus on the scope for greater use of nurse practitioners and other staff, and factor in service redesign.

D. Can the physician associate become a significant part of the workforce?

In 2015 a National Physician Associate Expansion Programme was set up to increase the number of physician associates working in the NHS in England. Earlier that year HEE had noted ‘Physician Associates: our current workforce planning process does not allow us to estimate demand for this workforce in a robust way. Working with our provider trusts, we understand that this new role is essential for trusts to address the service gaps created as more junior doctor posts are reconfigured to support GP expansion and the broadening of the Foundation Programme’.⁴⁹

In its Proposed Education & Training Commissions for 2016/17, HEE proposed that physician associates be increased from 205 to 657 – a 220.5% increase, the largest for any group.²⁴ (As noted in the previous section, NHS data shows only 11 FTE physicians associates working in GP practices in England in 2015.²³)

More recently, in April 2016, NHS England reported in its *General practice forward view* that it planned to train 1,000 more physician associates to work in GP practices by 2020.⁴⁸

When first introduced to the UK more than a decade ago, the title used for this role was ‘physicians’ assistant’. More recently, the role has been retitled as ‘physician associate’. The title change does not appear to signify any related changes in job role as the earlier version of the title also continues to be used. The physician associate (PA) has been described by the Department of Health in England as: ‘A Physician Assistant (PA) is defined as someone who is: a new healthcare professional who, while not a doctor, works to the medical model, with the attitudes, skills and knowledge base to deliver holistic care and treatment within the general medical and/or general practice team under defined levels of supervision. The role is therefore designed to supplement the medical workforce, thereby improving patient access’.⁵⁰

The training of PAs in the UK is at postgraduate level, based on 90 weeks of training; at present there are several universities in the UK that provide courses.⁵¹ Recruits are either science graduates, or individuals currently with nursing or AHP professional qualifications.

There are currently small numbers of PAs working in England and Scotland in a wide variety of medical and surgical specialties. The Voluntary Register for Physician Assistants in the UK, managed by the Royal College of Physicians, lists approximately 200 PAs in employment in the UK.⁵²

UK-based research on PAs^{53,54,55} suggests they could fulfil roles currently filled by medical staff, potentially saving resources, working in mid-level roles. Patients are reportedly satisfied with PAs, but the scope of practice for PAs does not replicate US working practices, as PAs in the UK are not able to prescribe.

Despite policy interest over a period of more than 10 years, and evaluation suggesting that the role can play a part in more cost-effective and acceptable care, the data available suggest only about 200 PAs, at most, are working in the UK. In part, slow progress relates to limitations of the role currently in the UK, compared with the US, where the role was first developed. The absence of independent prescribing and registration mean that the role in the UK is constrained, making it less attractive to employers. In addition, the clear message from the Department of Health that PAs are ‘supplemental’ staff for doctors, rather than substitutes, also means that employers need to consider funding constraints when looking at scope for expansion. Finally, the role of nurse practitioners, a comparable ‘mid-level’ provider, is already well established in the UK and has prescriptive authority, making it an existing viable option in some care environments.

HEE funding to increase numbers in training will contribute to growth in the pool of recruits, but currently the PA role remains a somewhat exotic breed in the UK. It took the US 50 years to reach a PA to population ratio of 26.8 per 100,000. Attaining a similar ratio in England would require about 14,000 PAs to be employed. With at best about 200 currently in employment, and a suggested intake to training of 650 per annum, it would take 20 years or more to reach a similar level of presence, assuming no attrition. Given the current funding constraints on any workforce expansion, the established existence of the nurse practitioner role and continued regulatory barriers on full effectiveness, the PA role is not going to become widespread any time soon.

E. Can the planned new ‘associate nurse’ role make a difference?

In December 2015, the Government announced plans to create a new nursing support role. The new role is ‘expected to work alongside care assistants and registered nurses to deliver hands-on care, focusing on ensuring patients continue to get the compassionate care they deserve’.⁵⁶ Nursing associates ‘will support nurses to spend more time using their specialist training to focus on clinical duties and take more of a lead in decisions about patient care’.

Earlier this year there was an open consultation on this new role, with respondents asked to consider the potential for a new role ‘to sit between a Care Assistant with a Care Certificate and a graduate Registered Nurse’, to consider ‘whether or not the proposed role should be regulated’ and to agree the title of this new role.⁵⁷

At the end of the consultation phase in late May, HEE announced that the new role would be established.⁵⁸ Test sites will recruit 1,000 students to start training in 2017. In the first instance this will involve developing a scope of practice for the new role, based on workshops to be scheduled this summer, before testing it next year. Issues that remain for examination include how the role will be supervised, if the role may have supervisory responsibilities for care assistants, and whether nursing associates should be regulated.⁵⁹

The UK is in a minority of high income countries in only having one level of qualified/registered nurse.⁶⁰ Many high income countries educate and employ two levels, a 'first level' nurse with three or more years of training, often to degree level, and usually termed a registered nurse; and a 'second level' nurse with one or two years of technically focused training, variously titled enrolled nurse (EN), licensed practical nurse (LPN) and licensed vocational nurse in different countries.

When enrolled nurses were phased out, the 'replacement' was Health Care Assistants (HCAs) who were introduced in the late 1990s, and while initial numbers were small, there has been steady growth over the last two decades. There are now about 60,000 (FTE) working in the NHS – about 30,000 more than 10 years earlier. But numerical growth in HCAs has been mirrored by decline in the number of auxiliary nurses – there are now about 50,000 (FTE), some 30,000 less than 10 years ago.²³ So in crude numerical terms, the growing number of HCAs has not compensated for the reduced numbers of ENs but it has covered for the reduction in auxiliaries.

In other countries the second level nurse continues to be a substantial source of care in health systems that have retained the role. Australia deployed about 60,000 ENs in 2014⁶¹ (20% of the qualified nurse workforce) and the EN role has been extended, with some now educated to administer drugs and supervise other staff and students;⁶² in the USA there were approximately 730,000 LPNs active in 2012⁶³ (again, about 20% of the qualified nurse workforce). New Zealand ended EN training during the early 1990s, but subsequently reintroduced training.⁶⁴

The announcement of the associate nurse role in England could be perceived as a move to, in part, fill the gap left by the ending of the EN role, as well as provide scope to recruit from broader labour markets in achieving a numerical scale up in the broader nurse workforce. The role could also be used to extend the current career ladder and give aspirational HCAs a next step in career development.

However there is also a risk of role confusion, as the NHS already employs a few thousand 'assistant practitioners'. When introduced last decade, this new role was intended to deliver protocol-based clinical care previously associated with registered practitioners, while under the direction and supervision of a registered practitioner; the role descriptor was published by Skills for Health almost 10 years ago.⁶⁵ This 'old/new' role appears to have some of the characteristics promoted in the 'new' role of associate nurse, but in terms of numerical growth, the assistant practitioner cannot be cited as an example of rapid scale up.

The proposed introduction of the associate nurse appears to risk confusion in two directions. Firstly, most of the debate and review has been about the role: how it should be regulated, whether it will supplement or substitute for registered nurses, or be a 'new'

enrolled nurse. The quality impact of any skill mix change is important, but will have to be considered beyond the simple ‘regulate or do not regulate’ debate. Relatively little attention has been paid to how training of the new role will be configured and funded, how many associates are required (other than an arbitrary training target) and to what timeline.

Secondly, it must be noted that the track record of the NHS with the introduction of new roles is mixed, and far from encouraging. The lesson here is that a new role is never a quick fix. Even if it does receive unwavering policy attention (by no means a given) and has a relatively fast lead-in time, it will probably take at least a decade to have significant numerical impact. It will also require sustained investment in training (funding and capacity), and preparation of recipient health systems and existing workforces. Recent experience in the NHS suggests that the sustained policy involvement and national funding required to enable a new role to mature may be found wanting.

At a time when the NHS is focusing on containing staff costs, the fiscal space to support any rapid large number scale up of a ‘new’ role is just not evident. Unless there was to be either a determined effort to scale up the new role by switching scarce training funds from current allocations to other established roles (both new entrants and those already in posts that would benefit from upskilling), or earmarked central funding to kick start training capacity and scale up, it is unlikely that the associate nurse will become a salient and integral part of the broader health care workforce much before the middle of the next decade.

F. Can the NHS make more effective use of temporary staff?

Over the last two years, NHS trusts in England have responded to workforce supply shortages by increasing the use of agency workers, which in turn has driven up agency costs. Monitor and the Trust Development Authority responded by recommending that price caps be applied to agency and bank staff rates.⁶⁶ A range of measures were subsequently introduced in NHS England in late 2015 to contain the use of temporary staff. An annual ceiling was set for total agency spend for each trust between 2015/16 and 2018/19. Mandatory use of frameworks for procuring agency staff was required, and limits were set on the amount individual agency staff can be paid per shift.⁶⁷

While there is a place in NHS staffing policy for temporary staff, notably in providing short-term cover, recent trends of growth and the subsequent policy responses require examination.

The key issue identified in the introduction to this report was that health care workforce policy must consider both staffing and funding if it is to be successful. The problem with recent use of temporary staff in the NHS is that the funding–staffing balance has not been maintained. A shortfall in permanent staffing drove up the use of temporary staff, which pushed up staffing costs, which in turn triggered the cost-containment capping policy.

The current primary policy driver in relation to the use of temporary staff is cost, with insufficient scope for local employers to respond flexibly to staffing variations. Monitor has highlighted that increased use of temporary staff in the NHS in England reflected a ‘fundamental mismatch between demand for clinical staff and supply’.⁶⁶

In 2014/15, some 61% of the shifts requested from NHS Professionals were reported, by trusts, as being to cover unfilled substantive vacancies. Temporary staff are also used to cover sickness absence (which accounted for 12% of requests) or as a result of poor rostering of existing staff.¹⁵

One issue to clarify is what types of temporary staff are being deployed, as well as how they are deployed. This will in large part determine the cost and effectiveness of deployment. For example, Audit Scotland estimated recently that using external agency nursing staff costs the NHS in Scotland almost three times more than using internal NHS bank staff.⁶⁸ In addition, deployment of people who are already familiar with the care environment is likely to reduce patient safety risks.

While there will be a need to monitor the hours worked by individual staff, there are clear benefits for an NHS organisation if it can resource more of its temporary staffing requirements internally, or share with other local employers through an in-house bank rather than on a shift-by-shift basis with external agencies. Local protocols for dealing with short-term absence, and need for cover for workload peaks, should favour internal temporary resourcing over external agency use. Where required, additional efforts should be made to develop effective internal staff bank arrangements, and recruit sufficient staff to banks, so that such protocols can be supported.

The varying use of temporary staff is in part a reflection of varying workload levels; the extent to which workload and workflow can be predicted varies in different work areas in the health sector, but often the current approach is rudimentary. This means that temporary staff use is often last minute and reactive, and that overall staffing decisions, including when to use temporary staff, are poorly informed at local level.

The effective use of temporary staff can increase the responsiveness of NHS organisations to changes in workflow, allow them to meet unpredicted 'peaks' in workload, and provide cover for unanticipated short-term absence of staff. In short, it can support flexibility in staffing.

But shorter-term staffing flexibility can become a longer-term cost driver when temporary staff are used inappropriately, or long term, to cover for unfilled permanent staff posts.

To achieve a sustainable balance between the competing pressures of staffing flexibility, safe staffing levels and cost-containment, two different priorities need to be met.

Firstly, local flexibility must be supported. While the costs of temporary staffing should be contained by the use of appropriate protocols for requesting temporary staff cover, supported by procurement frameworks, there should also be scope for individual NHS employers to respond flexibly and rapidly to changes in workflow and patient dependency levels. An arbitrary top-down national cap on costs risks undermining this flexibility, as well as safety.

Secondly, temporary staffing use needs to be effectively integrated into day-to-day workload assessment and staff rostering, and monitored in the context of longer-term workforce planning. Focusing only on containing the costs, rather than addressing the underlying reasons for use, is unlikely to be a sustainable approach.

6. Discussion

The increased demand for care, which underlies projections of health care workforce shortages in England, will keep staffing–funding issues on the policy agenda. Achieving a supply–demand balance and improving workforce performance against a backdrop of constrained NHS funding, which limits policy responses nationally and constrains management responses locally, will be difficult. The economic, political and policy implications of the recent vote for the UK to leave the EU will also add to an increasingly uncertain and complex outlook for the health and care system. Recent evidence of growth in active international recruitment and the current cap on temporary staffing costs highlight that less costly, reactive and short-term policy solutions are in the ascendency. Longer-term sustainability in workforce policy and planning will be much more difficult to achieve.

Clarity on national and local planning and policy functions, and the ‘form’ will follow

This report has set out the evolution of the current approach to national health care workforce policy and planning in England. The legacy of not paying heed to the past and not taking a long view, compounded by the sometimes deleterious impact of serial health reforms on workforce policy and planning capacity, has contributed to what has been characterised as ‘boom and bust’ NHS workforce supply.

Repeated restructuring of the NHS in England has, at best, meant too much focus on planning structures (which have therefore changed frequently as a result of the periodic reforms), and not enough on a sustained planning process that supports the longer-term view; is underpinned by consistent principles and reliable data; and is robust enough to survive structural change.

Several of the recent reports (see table 1, page 7) have expressed the need for ‘something to be done’ to improve the national component in workforce policy and planning, without setting out detailed direction. What is required is more effective local–national alignment on staffing–funding issues in the NHS in England, with a whole-system perspective.

The current workforce planning approach has the illusion of being ‘bottom-up’ and building on local workforce plans, but is flawed because of capacity limitations locally, which lead to incomplete and sometimes incompatible local planning outcomes. In practice, the approach is *de facto* centralised, but constrained by incomplete analysis, particularly on non-NHS supply and demand, and a lack of transparency on funding allocations. The point noted in section 4 that HEE this year funded nursing commissions at only 10% of the level that their own projections had identified as necessary, is indicative that there is sometimes a gulf between staffing projections and funding allocation decisions. The national element in the overall system must become truly ‘national’,

encompassing the whole of the health system and the whole of government, not just the NHS. It must provide overall direction, framed by whole-system data and analysis (eg a National Health Workforce Account) and funding transparency.

Take a whole-system perspective

Form should follow function. Part of this process of improved capacity and analysis would be to focus more on labour market dynamics, taking a whole-system perspective that recognises that health care workers flow between subsectors (NHS, private sector, NGOs, social services etc) and that staffing projections need to take account both of this supply dynamic and whole-system demand for staffing.

Underpinning this whole-system perspective would be greater use of forecasting and scenario planning, aligned with costings, and with key stakeholders involved in agreeing the main parameters of scenarios on the future shape of services. This process, and its outcomes, should be transparent. Taking the example above, HEE should report both the 'shortage' scenario outcome and the 'actual' funding-constrained outcome when it undertakes national projections and publishes national plans.

Key stakeholders to be involved nationally would be those who employ health care workers, who can participate in forward thinking on workforce skills and competencies, and who can contribute to workforce analysis. Two other stakeholder groups, currently not effectively involved, are the professional regulators and associations, who could be contributing significantly to improved data and analysis.

Pressure points: Take the long view

Workforce pressure points will come and go. Some are cyclical, some entirely predictable. Some are self-inflicted – the results of narrow, reactive policy intervention, change in policy or change in funding. Some are unexpected – the result of external economic, social and political change.

This report has examined several current pressure points. This has not only shown that there is scope to address them more effectively, but also highlights the need to be more strategic in doing so. Too often the approach to addressing workforce pressure points is reactive, and sometimes it is also unconnected to (or even counter to) broader issues of staffing and funding. Pressure points will change over time; what is required is a more consistent and coordinated approach, maintaining a longer-term view that is underpinned by effective analysis. The longer-term view is both about looking back and projecting forward. Too often there has been repetition of previous failed ideas, either because lessons have not been learned, or because these old ideas are dressed up in new acronyms.

Part of this longer-term view should be to focus on assessing the costs and benefits of different policy interventions – such as the comparative costs and benefits of international recruitment versus retention (eg costs of turnover, value of workforce stability etc.). If there is only a short-term focus then the longer-term benefits of some lower cost options are not assessed fully and cannot be realised.

Pressure points: Bottom-up learning

Developing a better understanding of workforce costs and benefits can also be informed by local experience and innovation. As the Carter report noted, the track record of the NHS in realising workforce productivity savings is poor.¹⁷ In part this reflects variable local capacity and appetite for change, but it is also the result of poor knowledge dissemination and sharing of experience. The Carter report's support for local collaboratives addressing local workforce productivity pressure points makes sense, but these local initiatives must be supported to share their lessons, in order both to transfer knowledge throughout the system and to act as a check and balance mechanism to top-down national policies.

Pressure points: 'New/old' roles are not the (only) answer

The NHS in England is currently promoting or piloting several 'new' roles. In the case both of the physician associate and the associate nurse, the 'newness' of these roles is less than clear cut. Both have antecedents, both have international comparators. The lead time to establish training capacity to scale up either of these roles to a significant size is likely to be 10 years or more, unless a decision is made to re-allocate funding currently being used to train established professions in the NHS. New roles may grab headlines, and could fill identified skills gaps, but will not make a substantial impact in the next few years. Investment in re-training current staff, or increasing the numbers of some established roles such as nurse practitioners, will in some cases be a more cost-effective and rapid way of filling these gaps.

Assess impact on workforce of proposed major policy changes

This report has highlighted that many recent major reforms and changes to the NHS in England have given, at best, cursory attention to the workforce policy and planning element. This neglects the workforce as the enabler of any change, and also risks policy misalignment, with workforce policy and planning having to react to system changes already implemented, rather than shaping and supporting change. In the future, any major national health system reform or change should have a workforce impact assessment conducted as part of this development process.

Link staffing and funding, nationally and locally

Any continuation of the current short-term focus on NHS staffing, and related funding–staffing disconnect, will undermine the prospects of achieving the Forward View. If NHS England wants an effective national health care workforce policy and planning system it must acknowledge that it has to have a centralised core which will be top-down, but where the staffing–funding connection is more transparent in national processes. If it is serious about bottom-up involvement of local employers, there is a need to improve the capacity of NHS trusts, other local employers and LETBs, and to explore the scope for whole-system workforce planning in Vanguard areas. If it is serious about policy and planning

being informed by evidence, then it must develop a more accurate and complete picture of the current/future supply–demand scenario locally and nationally, using standardised methods and data, and including the non NHS sectors. This is not unachievable, but requires a concerted, nationally led effort.

Addressing staff shortages and improving workforce performance will be difficult, as NHS funding constraints limit the options for policymakers nationally and constrain NHS management locally.

Efforts to recruit from abroad and measures to cap temporary staffing costs highlight that national and local leaders are trying to use less costly, reactive and short-term solutions to tackle these problems. While a longer-term sustainable approach to workforce policy and planning will require more sustained focus and effort, the reliance on quick fixes will only put a sticking plaster on deep-seated and systemic problems for the NHS.

7. Conclusion

To address these problems the NHS needs a more open approach to funding and staffing, which aligns the two and ensures that the workforce implications of new policies are carefully considered and planned for.

In the short term there is a pressing need to address current and looming skills shortages, through more targeted and aligned policies on retention, temporary staff use and international recruitment. This will buy time for more effective and sustained responses to skills shortages and staffing to be implemented.

These longer-term responses must be framed by a fully aligned and coordinated national approach to workforce policy and planning, underpinned by greater predictability on funding flows. This process must be informed by improved workforce data, and by the use of scenario planning to assist in achieving the optimum funding–staffing balance.

Improved staff productivity is the key, but this can only be achieved by a committed and supported workforce. Investment in current staff and supportive technology should not be downplayed by an overemphasis on new roles; some new roles are necessary but will not have a major impact unless there is significantly more central support for scale up.

References

1. Organisation for Economic Co-operation and Development (OECD). *Health Workforce Policies in OECD Countries. Right Jobs, Right Skills, Right Places*. OECD, 2016. www.oecd.org/health/health-systems/Health-workforce-policies-in-oecd-countries-Policy-brief.pdf
2. World Health Organization (WHO). *Health workforce 2030: A Global strategy on human resources for health*. WHO, 2015. www.who.int/workforcealliance/knowledge/resources/strategy_brochure2014/en/
3. Ono T, Lafortune G, Schoenstein M. Health Workforce Planning in OECD Countries: A Review of 26 Projection Models from 18 Countries. *OECD Health Working Papers*. No. 62. OECD Publishing. <http://dx.doi.org/10.1787/5k44t787zcwb-en>
4. World Health Organization (WHO). *Health workforce 2030: towards a global strategy on human resources for health*. WHO, 2016. www.who.int/hrh/resources/16059_Global_strategyWorkforce2030.pdf
5. Sousa A, Scheffler RM, Nyoni J, Boerma T. A comprehensive health labour market framework for universal health coverage. *Bulletin of the World Health Organization*. 2013;91(11):892–4. doi:10.2471/BLT.13.118927
6. Health Foundation, Nuffield Trust and King's Fund. *The spending review: what does it mean for health and social care?* The Health Foundation, 2016. Available from: www.health.org.uk/publication/spending-review-what-does-it-mean-health-and-social-care
7. Health Education England (HEE). *Delivering the NHS five year forward view*. HEE. <https://hee.nhs.uk/our-work/planning-commissioning/delivering-nhs-five-year-forward-view> (accessed 6 July 2016).
8. NHS England. *NHS Five Year Forward View: Recap briefing for the Health Select Committee on technical modelling and scenarios*. NHS England, 2016. www.england.nhs.uk/wp-content/uploads/2016/05/fyfv-tech-note-090516.pdf
9. Office for Budget Responsibility (OBR). *Economic and fiscal outlook – March 2016*. OBR <http://budgetresponsibility.org.uk/efo/economic-fiscal-outlook-march-2016/>
10. The Health Foundation. *NHS finances outside the EU: Health Foundation analysis of the impact on NHS finances of the UK leaving the European Union*. London: The Health Foundation; 2016. Available from: www.health.org.uk/publication/nhs-finances-outside-eu
11. NHS Improvement. *Quarter 4 sector performance*. NHS Improvement, 2016. https://improvement.nhs.uk/uploads/documents/BM1653_Q4_sector_performance_report.pdf
12. Lafond S, Charlesworth A, Roberts A. *A perfect storm: an impossible climate for NHS providers' finances?* Health Foundation, 2016.
13. Office for National Statistics (ONS). *Dataset VACS02: Vacancies by industry*. London: ONS; 2016. Available from: www.ons.gov.uk/employmentandlabourmarket/peoplenotinwork/unemployment/datasets/vacanciesbyindustryvacs02.
14. NHS Employers. *NHS Registered Nurse Supply and Demand Survey*. NHS Employers, 2015. www.nhsemployers.org/case-studies-and-resources/2016/01/2015-nhs-registered-nurse-supply-and-demand-survey-findings
15. National Audit Office (NAO). *Managing the supply of NHS clinical staff in England*. NAO, 2016. www.nao.org.uk/report/managing-the-supply-of-nhs-clinical-staff-in-england/
16. NHS Improvement/ Monitor. *Evidence from NHS Improvement on clinical staff shortages. A workforce analysis: February 2016*. NHS Improvement, 2016.
17. Department of Health. *Operational productivity and performance in English NHS acute hospitals: Unwarranted Variations. An independent report for the Department of Health by Lord Carter of Coles*. Department of Health, 2016. www.gov.uk/government/uploads/system/uploads/attachment_data/file/499229/Operational_productivity_A.pdf
18. NHS Pay Review Body. *Twenty-Ninth Report*. NHS Pay Review Body, 2016. www.gov.uk/government/uploads/system/uploads/attachment_data/file/506030/54488_Cm_9210_NHS_PRB_2016_Web_Accessible_NEW.PDF
19. Migration Advisory Committee (MAC) *Partial review of the Shortage Occupation List. Review of nursing. March 2016*. MAC, 2016. www.gov.uk/government/uploads/system/uploads/attachment_data/file/510630/Partial_review_of_the_shortage_occupation_list_-_review_of_nursing.pdf
20. Health Foundation. *Fit for purpose? Workforce policy in the English NHS*. Health Foundation, 2016. www.health.org.uk/sites/default/files/FitForPurpose.pdf
21. House of Commons Committee of Public Accounts. *Managing the supply of NHS clinical staff in England. Fortieth Report of Session 2015–16*. HC 731, House of Commons, 2016. www.publications.parliament.uk/pa/cm201516/cmselect/cmpubacc/731/731.pdf
22. Imison C, Castle-Clarke S and Watson R. *Reshaping the workforce to deliver the care patients need*. Nuffield Trust, 2016.
23. HSCIC. *General and personal medical services, England 2005-2015, as at 30 September, Provisional Experimental statistics*. HSCIC, 2016. www.hscic.gov.uk/catalogue/PUB20503
24. Health Education England (HEE). *HEE commissioning and investment plan – 2016/17*. HEE, 2015. <https://hee.nhs.uk/sites/default/files/documents/HEE%20commissioning%20and%20investment%20plan.pdf>

25. House of Commons Health Committee. *Workforce Planning: Fourth Report of Session 2006–07, Volume I. Report, together with formal minutes*. The Stationery Office Limited, 2007. www.publications.parliament.uk/pa/cm200607/cmselect/cmhealth/171/171i.pdf
26. House of Commons Health Committee. *First Report. Education, training and workforce planning*. The Stationery Office Limited, 2012. www.publications.parliament.uk/pa/cm201213/cmselect/cmhealth/6/602.htm
27. Imison C, Buchan J, Xavier S. *NHS workforce planning, limitations and possibilities*. The King's Fund, 2009. www.kingsfund.org.uk/sites/files/kf/NHS-Workforce-Planning-Candace-Imison-James-Buchan-Su-Xavier-Kings-Fund-November-2009.pdf
28. Imison C, Bohmer R. *NHS and social care workforce: Meeting our needs now and in the future?* The King's Fund, 2013. www.kingsfund.org.uk/time-to-think-differently/publications/nhs-and-social-care-workforce
29. World Health Organization (WHO). *Policy brief – National health workforce accounts*. WHO, 2015. www.who.int/hrh/documents/brief_nhwfa/en/
30. World Health Organization (WHO). *Minimum Data Set for Health Workforce Registry Human Resources for Health Information System*. WHO, 2013. www.who.int/hrh/statistics/minimum_data_set/en/
31. Spetz J, Kovner C. How should we collect data on the nursing workforce? *Nursing Economics*. March-April 2011 Vol. 29, No. 2. <http://campaignforaction.org/sites/default/files/Spetz-Kovner2011.pdf>
32. HSCIC. *NHS Workforce Statistics in England, Summary of staff in the NHS – 2004-2014, Overview*. Available from: www.hscic.gov.uk/article/2021/Website-Search?productid=17425&q=overview&topics=13209&sort=Relevance&size=10&page=2&area=both#top
33. Bevan G, Karanikolos M, Exley J, Nolte E, Connolly S, Mays N. *The four health systems of the United Kingdom: how do they compare?* The Health Foundation and the Nuffield Trust, 2014. www.health.org.uk/sites/default/files/TheFourHealthSystemsOfTheUKHowDoTheyCompare_fullversion.pdf
34. Baird B, Charles A, Honeyman M, Maguire D, Das P. *Increasing demands on general practice*. The King's Fund, 2016. www.kingsfund.org.uk/sites/files/kf/field/field_publication_file/Understanding%20pressures...%20online%20version_0.pdf
35. OECD (2015) *Health at a Glance 2015*. OECD Indicators, p52. DOI:10.1787/health_glance-2015-en
36. Stone J. Budget 2015: Public sector pay rises to be capped at 1 per cent for another four years, George Osborne announces. *The Independent, online*. 8 July 2015. www.independent.co.uk/news/uk/politics/public-sector-pay-rises-to-be-capped-at-1-per-cent-for-another-four-years-osborne-announces-10374980.html (accessed 6 July 2016).
37. Buchan J, Kumar A, Schoenstein M. Wagesetting in the Hospital Sector. *OECD Health Working Papers*, No. 77, OECD Publishing, 2014. <http://dx.doi.org/10.1787/5jxx56b8hqhl-en>
38. Department of Health. *Nurse bursary reform*. Department of Health, 2016. www.gov.uk/government/publications/nhs-bursary-reform/nhs-bursary-reform
39. Gummer B. *Speech: Creating a modern nursing workforce*. Department of Health, 2015. www.gov.uk/government/speeches/creating-a-modern-nursing-workforce
40. Hazell W. First self-funded nursing course launched to tackle shortage in NW. *Nursing Times*, January 7, 2015. www.nursingtimes.net/roles/nurse-educators/first-self-funded-nursing-course-launched-to-tackle-shortage-in-nw/5077980.fullarticle
41. The academy of fabulous stuff. *Update on the first fee paying nursing course in the country at University of Bolton*. Available from: www.fabnhsstuff.net/2015/10/11/update-first-fee-paying-nursing-course-country-university-bolton/ (accessed 6 July 2016).
42. Ford S. Students offered job guarantee but must pay for course. *Nursing Times*, 13 May 2016. www.nursingtimes.net/7004781.article?WT.tsrc=email&WT.mc_id=Newsletter302&cm_ven=ExactTarget&cm_cat=NT+Daily+News+
43. Glinos I, Wismar M, Buchan J, Rakovac I. *How can countries address the efficiency and equity implications of health professional mobility in Europe?* World Health Organization 2015 (acting as the host organization for, and secretariat of, the European Observatory on Health Systems and Policies). www.euro.who.int/__data/assets/pdf_file/0008/287666/OBS_PB18_How-can-countries-address-the-efficiency-and-equity-implications-of-health-professional-mobility-in-Europe.pdf?ua=1
44. NHS Employers. *Code of practice for international recruitment*. NHS Employers. Available from: www.nhsemployers.org/your-workforce/recruit/employer-led-recruitment/international-recruitment/uk-code-of-practice-for-international-recruitment (accessed 6 July 2016).
45. World Health Organization (WHO). *WHO global code of practice on the international recruitment of health personnel*. WHO, 2010. www.who.int/hrh/migration/code/WHO_global_code_of_practice_EN.pdf
46. World Health Organization (WHO). *Global strategy on human resources for health: Workforce 2030. Milestone 2.1*, p17. WHO, 2016. http://who.int/hrh/resources/16059_Global_strategyWorkforce2030.pdf?ua=1
47. National Audit Office (NAO). *Stocktake of access to general practice in England*. NAO, 2015. www.nao.gov.uk/Stocktake-of-access-to-general-practice-in-England.pdf
48. NHS England. *General practice forward view*. NHS England, 2016. www.england.nhs.uk/ourwork/gpfv/
49. Health Education England (HEE). *Workforce and education plan*. HEE, 2015. <https://hee.nhs.uk/workforce-education-plan>

50. Department of Health. Competence and curriculum framework for the physician assistant. Department of Health, 2012. <http://static1.squarespace.com/static/544f552de4b0645de79fbe01/t/557f1c1ae4b0edab35dd92cf/1434393626361/CCF-27-03-12-for-PAMVR.pdf>
51. Royal College of Physicians. *Welcome to the home of the Faculty of Physician Associates at the Royal College of Physicians*. Available from: www.fparcp.co.uk (accessed 6 July 2016).
52. Royal College of Physicians. Physicians assistants – managed voluntary register. Available from: http://static1.squarespace.com/static/544f552de4b0645de79fbe01/t/56f3bfdf9f7266fac1570268/1458814944817/Managed-Voluntary-Register_24.03.2016.pdf (accessed 6 July 2016).
53. Farmer J, Currie M, Hyman J, West C, Arnott N. Evaluation of physician assistants in National Health Service Scotland. *Scottish medical journal*, 2011 56(3), 130-134.
54. Halter M, Drennan V, Chattopadhyay K, et al. The contribution of physician assistants in primary care: a systematic review. *BMC Health Serv Res*. 2013 13:223.
55. Drennan V, Halter M, Joly L, Gage H, Grant R, Gabe J, Brearly S, Carneiro W, Lusignan S. Physician associates and GPs in primary care: a comparison. *British Journal of General Practice*, 2015. DOI: 10.3399/bjgp15X684877
56. Department of Health. *Nursing associate role offers new route into nursing*. Department of Health, 2015. Available from: www.gov.uk/government/news/nursing-associate-role-offers-new-route-into-nursing (accessed 6 July 2016).
57. Health Education England (HEE) *Nursing associate consultation: frequently asked questions*. HEE, 2015. Available from: http://www.hee.nhs.uk/sites/default/files/documents/Nursing%20associate%20FAQs_0.pdf (accessed 6 July 2016)
58. Health Education England (HEE) *A new support role for nursing*. HEE, 2016. Available from: www.hee.nhs.uk/our-work/developing-our-workforce/nursing/new-support-role-nursing (accessed 6 July 2016)
59. Merrifield N. 'Green light' given for nursing associates, says HEE, as consultation results revealed. *Nursing Times* May 26 2016. www.nursingtimes.net/news/education/associate-role-supervision-to-be-debated-over-summer/7005152.article?blocktitle=today's-headlines&contentid=18932
60. Robinson S, Griffiths P. *Nursing education and regulation: international profiles and perspectives*. Kings College London, 2007. <http://eprints.soton.ac.uk/348772/1/NurseEduProfiles.pdf>
61. Australian Institute of Health and Welfare. *Nursing and midwifery workforce*. Available from: www.aihw.gov.au/workforce/nursing-and-midwifery/ (accessed 6 July 2016).
62. Keast K. Taking enrolled nurses into a new era. *Australian Nursing and Midwifery Journal*, 2016, 23(8) 21-25.
63. Health Resources and Services Administration, Bureau of Health Workforce, National Center for Health Workforce Analysis. *The future of the nursing workforce: national- and state-level projections, 2012-2025*. US Department of Health and Human Services Health Resources and Services Administration. HRSA, Washington DC, 2014. <http://bhpr.hrsa.gov/healthworkforce/supplydemand/nursing/workforceprojections/nursingprojections.pdf>
64. Department of Health, Australia. *Review of Australian government health workforce programs: nursing and midwifery education*. DOH, Canberra, section 7.1. 2013. www.health.gov.au/internet/publications/publishing.nsf/Content/work-review-australian-government-health-workforce-programs-toc~chapter-7-nursing-midwifery-workforce%E2%80%93education-retention-sustainability~chapter-7-nursing-midwifery-education
65. Skills for Health. *Key elements of the career framework: assistant practitioner*. Bristol: Skills for Health, 2007.
66. Monitor. *Price caps for agency staff: impact assessment*. Monitor, 2015. www.gov.uk/government/uploads/system/uploads/attachment_data/file/468469/Impact_assessment_-_agency_rules.pdf
67. Monitor/NHS Trust Development Authority. *New rules launched to reduce agency spend in the NHS*. Available from: www.gov.uk/government/news/new-rules-launched-to-reduce-agency-spend-in-the-nhs (accessed 6 July 2016).
68. Audit Scotland. *NHS in Scotland 2015*. Audit Scotland, 2015. www.audit-scotland.gov.uk/uploads/docs/report/2015/nr_151022_nhs_overview.pdf

The Health Foundation is an independent charity committed to bringing about better health and health care for people in the UK.

Our aim is a healthier population, supported by high quality health care that can be equitably accessed. We learn what works to make people's lives healthier and improve the health care system. From giving grants to those working at the front line to carrying out research and policy analysis, we shine a light on how to make successful change happen.

We make links between the knowledge we gain from working with those delivering health and health care and our research and analysis. Our aspiration is to create a virtuous circle, using what we know works on the ground to inform effective policymaking and vice versa.

We believe good health and health care are key to a flourishing society. Through sharing what we learn, collaborating with others and building people's skills and knowledge, we aim to make a difference and contribute to a healthier population.

The Health Foundation
90 Long Acre, London WC2E 9RA
T +44 (0)20 7257 8000
E info@health.org.uk
🐦 [@HealthFdn](https://twitter.com/HealthFdn)
www.health.org.uk

ISBN: 978-1-906461-81-2
Registered charity number: 286967
Registered company number: 1714937
© 2016 The Health Foundation