Evidence to the House of Lords Committee

The long-term sustainability of the NHS: Creating a sustainable workforce

05.01.2017
Key points

The pressures on the NHS workforce are as great, if not a greater, threat to the future sustainability of services as the pressures on finances.

- There are serious and growing gaps in the NHS workforce, in both numbers and skills. These threaten the quality of care and the NHS’s capacity to deliver improvements in productivity.

- A striking feature of the gaps in the clinical workforce is their concentration in the areas where the needs are greatest, and where new models of care are seeking workforce expansion. Thus they undermine the capacity to deliver these new models of care.

- Despite planned expansions in training numbers, a wide range of factors could magnify the current gaps in the clinical workforce, in particular, the pressures on the workforce created by the current productivity challenge. The falling morale in many staff groups and subsequent loss of skilled and experienced staff will not be easy to repair.

- While the NHS has invested billions of pounds in training doctors, nurses and other clinical staff, it has invested little in the skills and capacity to plan, develop and manage this highly skilled workforce. Despite a huge productivity challenge, this position has not changed, in fact it has deteriorated, with raids both on training and continuing professional development budgets.

There are opportunities to address these challenges, making better use of the NHS’s most valuable resource, its human capital, but none are quick fixes, and each is hampered by the current constraints on NHS funding. These include:

- Improving retention, both in training and at work, through improved staff management.

- Providing more flexible training pathways and investing in continuing professional development.

- Changing skill mix to tap the full potential of staff and deliver more patient-focused care. This requires careful planning and implementation. There is an urgent need for more evidence in this area.
• Improving our approach to workforce planning. The focus should be on developing a flexible approach that does not seek long-term predictive precision but can identify potential medium-term issues, and, most importantly, enable the current workforce to evolve and adapt to the inherently unpredictable health care environment. A core foundation for this should be a deep understanding of the skills gap in the current workforce. This is currently lacking.

• Making better use of information technology to support more flexible working and improve productivity. This will require service improvement and organisational development as well as technological capacity, and may take many years to achieve, but the benefits could be considerable.
Introduction

Around 1.3 million staff work in the NHS, with a further 1.6 million in social care. The health and social care workforce together account for 13/100 jobs in the United Kingdom. In common with other countries, the health and social care workforce is a growing proportion of the overall workforce.

The NHS has 824,000 clinical staff, including 141,000 doctors and 329,000 FTE nurses (NAO, 2016). The NHS is therefore heavily dependent on staff with high-level skills that take long periods (3-15 years) to acquire. In addition, staff need continuing professional development to keep abreast of medical and other technological advances, as well as respond to changing patient needs.

Gaps in the health and social care workforce, in terms of both numbers and skills, now threaten the quality and efficiency of care.

Responding to these challenges requires sophisticated workforce planning, development and management skills as well as significant investment in new technologies, service improvement and organisational development.

Challenges facing the NHS workforce

Large and growing gaps in the clinical workforce

There are workforce pressures across the globe but the workforce pressures faced by the NHS are growing and acute. The National Audit Office (2016) estimated there were 50,000 vacant clinical posts in 2014. The NHS spent £3.7 billion on agency staff in 2015/16, compared to £2.2 billion in 2009/10. 61% of the requests for agency staff were to cover staffing vacancies (NAO, 2016).

The gaps in nursing, particularly in some geographies and services, are acute. In London, the RCN puts the vacancy rate at 17% and one London mental health trust recorded an overall nurse vacancy rate of 30% (RCN, 2016). In community settings there are vacancy levels of over 21% for district nurses and 46% for children’s nurses (MAC, 2016), at a time when policy is driving a shift to community-based care. There are also pressing gaps in the nursing workforce within social care, gaps often neglected by NHS workforce planners (NAO, 2016). New trainees are failing to compensate. More nurses are leaving the profession than joining it. In 2014, there were 13,400 graduates from nursing school while
7,500 nurses retired, but more worryingly 17,800 nurses left before retirement (NAO, 2016).

In medicine there are similar problems. The graph below shows data from the Royal College of Physicians on the rate of success of current job adverts. The gaps in geriatric and acute medicine are stark.

**Figure 1**

![Graph showing data from the Royal College of Physicians on the rate of success of current job adverts.](source: Dr Andrew Goddard, Royal College of Physicians)

General practice also faces significant pressures. A recent BMA survey found a third of practices reported at least one vacancy for a GP partner, with similar vacancy rates for salaried GPs and practice nurses. A small number of these practices had been trying to recruit for more than three months (BMA, 2016).

A striking feature of the majority of the gaps in the clinical workforce is their concentration in the areas where the needs are greatest, and where new models of care are seeking workforce expansion. Thus they undermine the capacity to deliver these new models of care.
Skills gaps

A recent and large OECD study, across 22 countries, showed that 51% of doctors and 43% of nurses felt they were under-skilled for what they are currently doing, whilst 76% of doctors and 79% of nurses felt that elements of their role were over-skilled. Being under-skilled raises issues of quality and safety, while over-skilling suggests inefficiency and can lead to job dissatisfaction and turnover (OECD, 2016). The findings underline a key message in our research (Imison et al, 2016); that the skills of the current health workforce do not match the work that needs to be undertaken. Better aligning skills to work can create more rewarding careers for staff and improve patient experience. Current roles are poorly designed – resulting in a mismatch between staff skills and requirements. A recent survey in England of the health care support workforce, found that nearly 20% are being asked to do things beyond their scope of competence (Unison, 2016).

Figure 2: Two types of skills mismatch in health sector: under-skilling and over-skilling
Continuing austerity and rising workload pressures

Many professional bodies have raised concerns about increasing work pressures and burnout in the staff they represent. “The morale of the medical workforce in the UK is at a low ebb and has continued to fall for much of the past decade” (RCP, 2016). Half of GP practices say workload is “unmanageable a lot of the time” or all of the time (12.45%) (BMA, 2016). Ambulance services are experiencing unprecedented annual increases in demand on their services, placing increasing pressure on their staff. This is leading many staff (including paramedics) to leave their jobs and ambulance services are finding it increasingly difficult to recruit to posts due to the lack of trained paramedics. This then puts pressure on those remaining staff, exacerbating the retention problems (Unison, 2015). The number of NHS staff that left to achieve a “better work/life balance” has more than doubled in the last five years. Over 17,000 staff left for this reason in the year to June 2016 (NHS Digital, 2016).

Austerity has also driven constraints on pay. The current median pay for nurses is £31,500, which is £7,500 below the median in other graduate occupations (MAC, 2016). RCM estimates that if midwives’ pay had increased with RPI since 2010, they would earn £6,000 more.

The impact of Brexit

The UK has a significant reliance on overseas recruits. The proportion of staff who trained overseas varies between staff groups. In 2014, they accounted for around 35% (14,600) of hospital consultants, 22% (8,000) of GPs and an estimated 14% (47,000) of nurses (NAO, 2016). With growing curbs on international migration there has also been a significant shift towards dependence on staff from the European Economic Area (EEA) – see Figure 3. Brexit could both trigger a withdrawal of staff as well as making overseas recruitment more challenging.
Removal of NHS bursaries for non-medical staff

The shift away from centrally-funded bursaries for nurse training in England means that future training numbers will be driven by the perceived attractiveness of nursing as a profession. This was not a problem in the past, but the current pressures on pay and services could act as a major deterrent. There are also constraints on training placements with limited training budgets and placement availability. Given the scale of the problem facing nursing, the Government cut to nurse training budgets carries significant risks.
Potential solutions to the challenges

Improving staff retention – in training and work

While nursing courses have generally been heavily oversubscribed, they have also had relatively high drop out rates – 20% on average and up to 50% on some courses (Willis, 2015). There is growing evidence of the same happening in medicine (RCP, 2016a). Much more attention needs to be paid to reducing the rates of drop out in training.

As highlighted earlier, one of the biggest drivers of the current workforce shortages is also poor retention, with more clinical staff leaving the NHS than joining it. There is good evidence that empowering and developing your workforce can significantly improve retention rates. This can be achieved by creating opportunities for staff to develop professionally; offering increased autonomy and participation in decision-making; flexible employment; and access to continuing professional development. The recent cuts to continuing professional development budgets were short sighted, and are likely to have cost the NHS much more than their face value savings.

Pay should not be forgotten as a factor in this equation. When there was a severe nurse shortage in the late 1990s and early 2000s, the Pay Review Body responded with substantial real pay increases. According to the Migration Advisory Committee review of the nursing workforce, “available pay flexibility is insufficiently used”.

More flexible training pathways and continuing professional development

There are considerable opportunities from creating more flexible training pathways within and between professional groups. For example, training and developing the support workforce, enabling them to enter training for skilled nursing and other clinical roles. Not only does this expand the potential training pipeline, it widens participation and creates a clinical workforce that better mirrors its local community.

There are also opportunities to create pathways that help bridge the gaps between different parts of medicine, particularly between primary and secondary care. There should also be more routes into medicine for experienced clinical staff.

Skill mix change

Our recent report “Reshaping the workforce to deliver the care patients need” (Imison et al, 2016) laid out some of the key opportunities from skill mix change.
Support workforce

There are considerable opportunities to grow and develop the staff who are not professionally qualified, training them to take on more caring responsibilities and reduce the workload of more highly qualified staff. This part of the workforce is highly flexible, and short training times mean that numbers can be grown relatively rapidly. The additional training can also provide the first step towards more formal professional training, opening up new pathways to health care roles.

Assistant practitioners are a good example of the potential of support roles. In Taunton and Somerset NHS Foundation Trust, assistant practitioners – higher-level support workers who complement the work of registered professionals – have been recruited to support its radiology team amid a shortage of radiologists. The practitioners have helped to streamline the service, eliminate hold-ups for ultrasounds and biopsies and enable the unit to offer more one-stop clinics, decreasing the number of visits to clinic per patient.

Extending skills of registered health care professionals

Extending the roles of the non-medical workforce provides opportunities to manage the growing burden of chronic disease more efficiently and effectively. It also provides the opportunity to enrich the work of professional staff. There is some evidence that these new ways of working can release some savings and help bridge workforce gaps, particularly in primary care.

They also create opportunities to deliver a more complete package of care for patients. For instance, the Nottingham CityCare Partnership utilises ‘holistic workers’ to support their nursing and health care services across the city. The ‘holistic worker’ is a new breed of health care professional that is able to assess a patient’s complete care needs by receiving training beyond their registered profession. Each worker is registered in one area: nursing, physiotherapy, occupational therapy or social work, but goes on to expand their knowledge and skills across all four areas. As a result, each professional is able to provide cohesive support to their colleagues and a rounded experience for patients.

Use of these roles has allowed for a more efficient use of resources, with professionals able to do more for patients within a single visit.

Advanced roles

Advanced roles – which we’ve defined as those that require a Master’s degree in advanced practice – offer opportunities to improve clinical continuity; provide mentoring and training for less experienced staff; offer a rewarding, clinically facing career option for experienced staff; and help to bridge some of the gaps in the medical workforce. The roles can be developed relatively rapidly in about three years.
For example, Sheffield Teaching Hospitals NHS Foundation Trust has developed the advanced clinical practitioner (ACP) role. It has 70-80 ACPs working across a range of services and has established a faculty to standardise training and supervision requirements, among other things. Although a comprehensive evaluation of ACPs in the trust has not been carried out, anecdotal feedback from junior doctors working with ACPs and other staff has been positive, suggesting reductions in delays for patients in some areas.

A large number of countries are expanding the scope-of-practice of nurses in primary care. This includes nurses working in advanced roles as ‘generalists’ to take on some of the GP work and fill gaps in the GP workforce; nurses working in advanced roles as single-disease specialists particularly for chronic disease management; and nurses undertaking health promotion and prevention activity. For example, the USA is anticipating a significant expansion in the numbers of advanced nurses and physician associates.

**Change is vital, but will not be easy**

Changing the way people work is not easy. It takes skill, resources and persistence. Careful attention needs to be paid to role design, governance and effective change management. The financial context makes this agenda particularly challenging.

**Improved workforce planning**

Assessing the future supply and demand for doctors, nurses and other health professionals 10-15 years ahead is a complex task fraught with uncertainties around both demand and supply (OECD, 2016; NAO, 2016). It would be hard to point to any country as a model of success. The boom and bust of NHS workforce supply is a common experience internationally (OECD, 2016).

Despite the difficulties, most countries use what is known as “numerus clausus” for medical training, whereby limits are set on the number of doctors in training. This method avoids supply-induced demand, helps manage the cost of training and helps align training placements in health care providers with university output. It is less common for countries to try and control numbers and plan for other professional groups.

Figure 4 is a schematic of the many factors that need to be taken into account when modelling the supply of workforce, while Figure 5 shows the factors that need to be taken into account when modelling demand. In their recent report (NAO, 2016), the NAO criticised Health Education England for poor quality assumptions around many of these factors.
Figure 4: Overview of supply factors

Source: OECD

Figure 5: Overview of demand factors

Source: Nuffield Trust Analysis
England has recently placed significant reliance on provider plans for its workforce planning assumptions. The problem with this is that financial pressures will moderate trusts’ workforce plans. Providers also struggle to look to the long term and lack workforce planning capacity and capability.

The changing demand for health care and the limitations in forecasting mean there is a high degree of uncertainty in the estimates of future workforce pressures. For example, Health Education England’s previous analysis suggested that the difference between supply and demand for adult nurses in 2015 could range from a shortfall of 63,700 to an oversupply of 7,900 depending on different scenarios. The NAO pointed out that Health Education England has not undertaken a comprehensive investigation into the level of uncertainty, including the relative risks and implications of over- or undersupply. It is therefore unclear how the uncertainty is feeding into risk management across the health system (NAO, 2016).


- The focus should be on developing a flexible approach that does not seek long-term predictive precision but can identify potential medium-term issues, and, most importantly, enable the current workforce to evolve and adapt to the inherently unpredictable health care environment.

- Workforce planning at local and national level should be a core part of the productivity and quality improvement agenda. Workforce planners should undertake scenario modelling, workforce costing and supply-side projections, and future projections should include changes in the number, pay and mix of staff, in order to give employers and policymakers the information they need to help improve productivity.

- The annual assessment of priorities should look at the workforce in the round, not just the different professional groups and their sub-specialist elements.
The assessment of risks should provide relevant information on:

- education
- employment law
- pay
- working conditions
- national and international flows.

- There is a particular need to link pay policy to broader workforce goals.
- The planning and funding of broader workforce development, including leadership skills, should be given a higher priority.
- As part of the annual risk assessment, management and leadership capacity should be given specific attention. Consideration should also be given to whether the balance of investment is correct between the clinical and non-clinical workforce, as well as between the current and future workforce.
- The multi-professional approach to workforce planning should be strengthened.
- Planning capacity at regional/local level should be audited and improved.
- There should be greater transparency about the degree of inherent uncertainty. The risks and assumptions in the workforce planning cycle should be made more transparent. Any annual assessment of workforce priorities needs to highlight and quantify the inherent uncertainties and risks in supply and demand.
- Workforce planning information needs to be secured from all health care providers. Workforce information is also needed from organisations that do not submit data via the ESR – that is, non-NHS providers and independent contractors within primary care. It will be important to find robust ways of capturing their workforce data.
The role of technology

A key uncertainty in this uncertain future is the role of technology. In our recent report (Imison, Castle-Clarke & Watson, 2016) we described what that future might be and some of the implications for the workforce.

We mapped out two potential futures.

“Technology Heaven”

Health care will transform from the messy, inefficient world it is today, with much that is clinically uncertain and variable, to a glorious nirvana of streamlined efficiency, clinical certainty and consistency and patients who are so effective at managing their own health and care that they barely need to trouble the doctor.

“Technology Hell”

A bleak world where clinicians are tied to computers, trying to interpret a sea of data, while patients are overburdened with self-management tasks and anxiety about health, generated by obsessional monitoring and difficult-to-interpret probabilistic predictions about their genetic risk factors.

Information technology and the digitisation of health information are disrupting the health care landscape and the outcome of that disruption is inherently uncertain. Given that health warning, our best assessment of what the future may hold, is as follows.

First, information technology will be omnipresent but much less visible. No more carts with personal computers on the ward. Medical technology will become more and more intelligent. Data will be held remotely in the cloud, allowing professionals to use hand-held devices that give them access to everything they need. Some have described the smartphone as the new stethoscope – the difference being that the patient has one too.

Second, technology is driving a fundamentally different relationship between patient and professional. This requires new skills for both. Professionals will require new coaching skills in order to ‘activate’ and engage people in their care. They will also need skills that can adapt to the wide range of patient capabilities and new consulting styles. In some areas, technology and the ability of patients to self-manage will require a very different approach from how professionals work now.

Third, technology is also driving a very different relationship between professionals. It supports medicine as a team rather than individual pursuit. This too will require new ways
of working. As the traditional barriers between primary, secondary, community, social and mental health care are broken down, so will some of the traditional roles and services. For example, the current hospital outpatient model looks increasingly anachronistic in a world where consultants can offer advice to professionals and patients remotely. Multiskilled staff with a range of core therapeutic skills are likely to become an increasingly fundamental part of the workforce.

Fourth, the management of the potential sea of data presents health care and its workforce with their greatest opportunity and challenge. All staff will need to develop and extend their analytical skills. Meanwhile, new professional roles in the area of clinical and medical informatics are likely to emerge and become a core part of any clinical team. Many have talked about how the new access to clinical decision support tools will enable all staff to work to the top of their licence. This may well be true, but it may also present opportunities to work beyond the scope set by current professional boundaries. We need to move from the sea of data and wealth of information, to a personalised, informed and intelligent environment.

Fifth, managerial staff will also require new analytical skills in order to maximise the benefits from the newfound intelligence about their organisation and how it is operating. They will also need sophisticated organisational development competences in order to take staff on the transformation journey that technology can facilitate.
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