



# BIG PICTURE CHALLENGES THE CONTEXT

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CENTRE  
FOR  
WORKFORCE  
INTELLIGENCE



**BIG PICTURE  
CHALLENGES  
THE CONTEXT**

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# INTRODUCTION

The CfWI is the national authority on workforce planning and development, providing advice and information to the health and social care system. We have developed a horizon scanning capability to encourage the sector to think about the factors that will influence the workforce in 10-20 years' time, rather than focusing on three- to five-year financial and political cycles.



# INFORMING BETTER WORKFORCE PLANNING

**As part of our horizon scanning programme, the Department of Health (DH) has commissioned the CfWI to identify the big picture challenges facing health, social care and public health to draw out their workforce implications.**

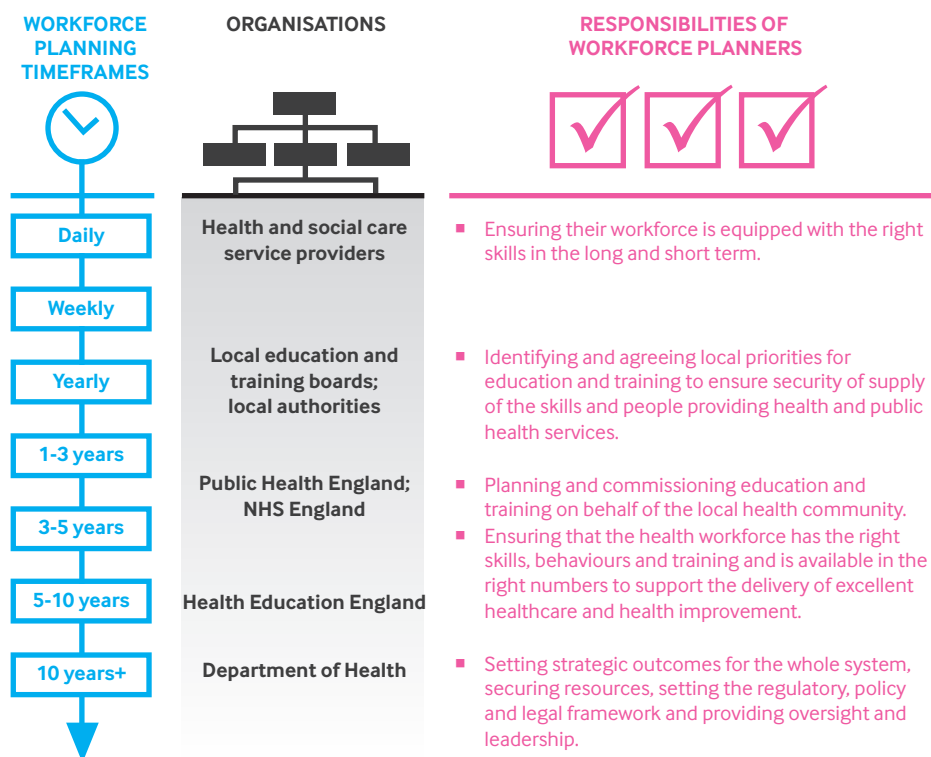
A big picture challenge is a fundamental challenge facing policymakers across the sector and requires focused action across politics, industry and research. This approach offers the opportunity to move away from professional silo thinking about workforce planning by looking at these overarching challenges in the context of the whole workforce.

The aim of this report, and associated workforce briefings, is to demonstrate the

significant implications these challenges pose for the workforce, and the need for change if they are to be addressed.

This series of reports takes these big picture challenges and begins to explore their workforce implications. Our work mainly focuses on 'workforce' in terms of frontline professionals and those involved in service delivery. However, these challenges have significant implications for workforce planning: organisations will need to ensure they have this capability and workforce planners who are skilled to do this effectively. Figure 1 shows that planners throughout the system have different horizon scanning and strategic planning timescales. These timescales vary. They may be daily and weekly, such as rota management on a ward, or yearly,

looking at the capacity and capability to deliver business plans, or longer-term planning and commissioning of professionally qualified staff to deliver future services.



## Fig. 1

Workforce planning timelines (adapted from Department of Health, 2012a with CfWI analysis)

# STRUCTURE

This context document describes the big picture challenges affecting health and social care. The ten supporting workforce briefings begin to explore some of the implications they might have for the workforce.



## BRIEFINGS EXPLORE KEY WORKFORCE QUESTIONS

### The context document

This context document is part of a series of reports and describes the big picture challenges we have identified as facing health, social care and public health. We have grouped the challenges into four overarching categories: demographic and social, health and social care system design, quality and productivity, and finance and economic. This document describes the big picture challenges in each category, focusing on why they are challenges, current trends that are being seen, and any indications about what may happen in the future.

### The workforce briefings

A series of workforce briefings follow the context document to explore the workforce implications of the big picture challenges. They seek to stimulate debate about the challenges facing workforce planning to ensure we have a future workforce that can meet the needs of the population, and deliver effective and high-quality care within the short- and long-term constraints. The briefings offer an initial exploration of some of the key workforce implications of the big picture challenges, with a view to identifying the areas where more work is needed to inform evidence-based workforce planning.

### The workforce briefings:

1. How can we recruit and retain sufficient domiciliary care workers to meet future demand?
2. How can the workforce be used to address the challenges facing emergency departments?
3. What role will informal carers have in meeting future demand?
4. How can band 1-4 staff be utilised to improve workforce productivity and meet demand?
5. What does 24/7 working mean for the workforce?
6. How can we promote diffusion and adoption of technology and innovation across the workforce?
7. What leaders will we need to address the big picture challenges?
8. How do we achieve effective safeguarding across health and social care?
9. How could the community workforce alleviate some of the pressure on general practitioners and improve joint working across primary and community care?
10. What does a flexible workforce look like?

### The horizon scanning hub



[www.horizonscanning.org.uk](http://www.horizonscanning.org.uk)



Our horizon scanning hub is an exciting and interactive site that allows stakeholders to find and share information and ideas about factors which may affect the future health and social care workforce. The hub acts as a central point for engaging with horizon scanning at the CfWI. You can find out about the big picture challenges project, follow other horizon scanning projects, and explore a bank of ideas. The hub is designed to be collaborative and collegiate, and we warmly welcome additions and ideas from all Friends of CfWI and everyone working in health and social care.

# METHODOLOGY

The big picture challenges and key workforce implications were identified through stakeholder engagement.





## WE ARE NOT MAKING PREDICTIONS

The list of big picture challenges was developed through engagement with internal and external experts. These experts provided a range of perspectives to ensure the list accurately represents the challenges faced by the health, social care and wider support system. We conducted interviews to gather information on the key challenges people felt were facing the health and social care system. There were significant similarities between the topics mentioned, and this process produced a draft list of challenges. This was refined following discussions with the Department











of Health to give the list of challenges in Figure 2.

The topics covered by the workforce briefings result from engagement with experts from across health and social care, academia, think tanks and policymakers. Based on their different backgrounds and perspectives, they gave their opinions on the key questions for the future workforce; areas where there are significant risks and uncertainties, and where the system is in need of workforce intelligence.

In these reports, we are asking questions which concern a complex system (health and social care). The reports are also about the future, which has a high degree of uncertainty. With this complexity and uncertainty in mind, we are not making predictions or attempting to elicit predictions. Rather, as a report aimed at workforce planners and decision-makers within the system, we wish to promote discussion on the big picture challenges to further understand their workforce implications so that we can improve strategic planning advice.

### Fig.2

#### CfWI big picture challenges

Category	Challenge
Demographic and social	 Planning to meet the needs of an ageing population with an ageing workforce
	 Managing changing demand resulting from an increasing prevalence of complex long-term conditions and co-morbidities
	 Managing changing public expectations about the care they receive
Health and social care system design	 Achieving better integration between health, social care and support organisations
	 Shifting the focus of the system towards prevention and well-being
	 Delivering the personalisation agenda and providing person-centred care within financial constraints
Quality and productivity	 Ensuring the system delivers high-quality services within financial constraints
	 Developing effective measures for quality of care and productivity and ensuring high-quality data is collected
	 Preparing for changes resulting from innovation and technology
Financial and economic	 Planning service delivery given the uncertainty about levels of funding in the future and how this will affect future demand for and supply of care services
	 Uncertainty about how investment in life science, health and care will support the UK economy

# THE BIG PICTURE CHALLENGES

Demographic and social  
Health and social care system design  
Quality and productivity  
Financial and economic



# FUNDAMENTAL CHALLENGES FOR THE WORKFORCE



Planning to meet the needs of an ageing population with an ageing workforce



Managing changing demand resulting from an increasing prevalence of complex long-term conditions and co-morbidities



Managing changing public expectations about the care they receive



## DEMOGRAPHIC AND SOCIAL

Over the last thirty years there have been a number of notable demographic changes:

- Between 1981 and 2011, the size of the population increased by 13.4 per cent
- The median age of the population in England increased from 35.6 in 1985 to 39.5 in 2010 (Office for National Statistics, 2012b).

Within these large demographic changes there are underlying social factors which have an impact on the health of the population. For example, there is a systematic pattern of declining health linked to declining socioeconomic status in England (the 'social gradient') (Department of Health, 2010a). People in disadvantaged areas are also more likely to have a shorter life expectancy, and significant health inequalities remain in England relating to social status, both in life expectancy and quality of life, and some groups also face further inequalities (Department of Health, 2010b).

We have identified three demographic and social big picture challenges that could impact widely on the health and social care workforce. These are:

- a) planning to meet the needs of an ageing population with an ageing workforce
- b) managing changing demand resulting from an increasing prevalence of complex long-term conditions and co-morbidities
- c) managing changing public expectations about the care they receive.

1a



### Planning to meet the needs of an ageing population with an ageing workforce

England's population has increased and this trend is likely to continue. The median age of the population will also continue to increase and it is this change in the age distribution – 'the ageing population' – and the increasing numbers of people overall that represent the most significant opportunities and challenges for health and social care.

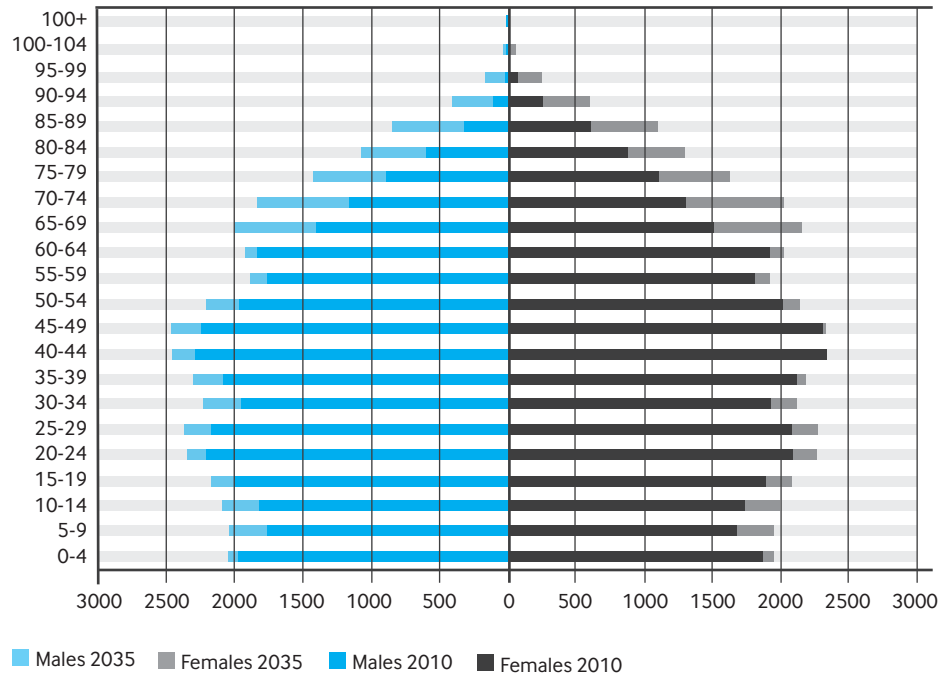
The ageing population is a very positive trend but there are concerns that it could lead to increased demand for health and social care services, placing increased financial pressure on the system. Older people use more services than those in younger age groups, taking into account the size of each cohort. In 2011/12, 68 per cent of services commissioned by Councils with Adult Social Services Responsibilities were for people over 65 (CfWI analysis of The Information Centre for Health and Social Care, 2012a), as were 39 per cent of finished consultant episodes (CfWI analysis of Hospital Episode Statistics, 2012).

The Department of Health estimates that the average cost of providing hospital and community health services for a person aged 85 or more is around three times greater than for a person aged 65 to 74 (House of Commons Library Research, 2010). Activity for older age groups is growing at a faster rate than total activity. From 2001/02 to 2011/12 there was a 41 per cent growth in overall finished

The ageing population is a very positive trend but there are concerns that it could lead to increased demand for health and social care services, placing increased financial pressure on the system.

# Fig.3

2010-based subnational population projections by sex and quinary age to 2035



Source: ONS, 2010

... but will demand for services and consequent financial pressure really increase? The European Intelligence Unit report *Healthcare strategies for an ageing society* suggests that a significant proportion of healthcare spending is made in the final years of life, regardless of life expectancy.

consultant episodes, but activity increased by 54 per cent for patients aged 60-74 and by 65 per cent for patients aged 75 and over (Hospital Episode Statistics 2012).

But will demand for services and consequent financial pressures really increase? The European Intelligence Unit report *Healthcare strategies for an ageing society* suggests that a significant proportion of healthcare spending is made in the final years of life, regardless of life expectancy (Economist Intelligence Unit, 2009). This in part depends on whether healthy life expectancy increases; contracting morbidity so that people live healthier for longer would greatly reduce the potential impact of the ageing population on health and social care services. Whether or not this is the case, it is more certain that larger numbers of older people will contribute to the death rate and the health and social care costs associated with death (The King's Fund, 2013). Understanding the relationship between health and social care in this context is vital; hospital use often climbs steeply in the last few months of life, but use of social care shows only a steady increase in the last 12 months. There is some evidence that higher social care costs at the end of life can be associated with lower inpatient costs, although a direct causal link cannot be confirmed (AgeUK, 2013). Will

reductions in social care spend, and availability of local authority-funded care, increase demand for hospital services?

Assuming current patterns of care and population projections keep pace with expected demographic and cost pressures, public expenditure on social care and continuing healthcare for older people is projected to increase by 37 per cent between 2010 and 2022 (Nuffield Trust, 2012). Net public expenditure is projected to rise from £9.3 billion in real terms (0.74 per cent GDP) to £12.7 billion (0.78 per cent GDP) over the same period (Nuffield Trust, 2012). If life expectancy rises by more than the base case assumptions, or if prevalence of chronic disease continues in line with recent trends, these figures could be underestimates.

The future demand for health and social care services will partly determine the particular size and composition of certain parts of the health and social care workforce. This will affect the existing workforce as well as recruitment and training programmes. The ageing population could also change the needs of the population, and consequently the proportion of the workforce that needs to work and be trained in different areas.



## Managing changing demand resulting from an increasing prevalence of complex long-term conditions and co-morbidities

A significant proportion of NHS resources are allocated to long-term conditions: people with long-term conditions account for 50 per cent of all GP appointments, 64 per cent of all outpatient appointments and 70 per cent of all inpatient hospital bed days (Department of Health, 2011). The use of social care differs according to the presence of certain long-term conditions: people with mental health problems, stroke, diabetes and asthma tend to use more (AgeUK, 2013). In total, around 70 per cent of the total health and care spend in England is attributed to caring for people with long-term conditions (Department of Health 2012b).

Prevalence of many long-term conditions is higher among older people. Older people are also more likely to have multiple conditions which can increase the complexity of care required. An estimated 4 million older people in the UK have a limiting longstanding illness – 40 per cent of all people aged 65 and over. If nothing is done about age-related disease, there could be over 6 million people with a long-

term limiting illness or disability by 2030 (AgeUK, 2013). Table 1 shows how prevalence varies with age for a number of long-term conditions.

Although the future age distribution of the population can be visualised, the likely health needs are more difficult to predict. Individual health is determined by a complex interaction between our individual characteristics, lifestyle and the physical, social and economic environment. The social and economic environment, income and educational level have the most significant impact (The King's Fund 2012a).

However, there are some big trends which point towards increasing prevalence of conditions in the future. This includes:

- Increasing obesity and unhealthy lifestyles among younger age groups could change the services people will demand as they store up problems for the future.
- Projections that the number in the UK with dementia will double in the next 40 years (Alzheimer's Society, 2012).
- If rates of chronic disease continue to rise in line with recent trends, the number of older people with moderate or severe disabilities is projected to increase by 54 per cent between 2010 and 2022 (Nuffield Trust, 2012).

It is important to understand which conditions will be prevalent in the future,

If nothing is done about age-related disease, there could be over 6 million people with a long-term limiting illness or disability by 2030.

as this will influence the workforce required to deliver care; the specialties and areas people need to work in will depend on the needs of the population. This has implications on service delivery which then impacts on the existing workforce, who may need retraining to ensure supply can meet demand, but also for recruitment and training programmes.

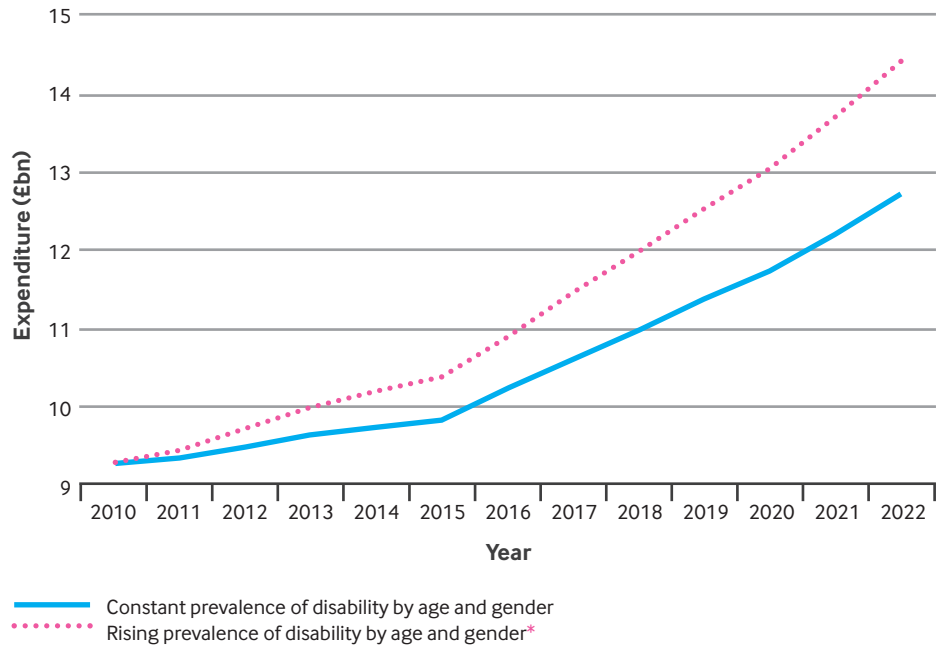
Table 1: Proportion of people in age bracket with condition

Type of long-term condition	Age group								
	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80+
Cancer	<1%	<1%	<1%	<1%	1%	2%	2%	3%	4%
Diabetes		<1%	1%	1%	2%	5%	8%	10%	8%
Mental health	2%	2%	2%	4%	4%	4%	3%	3%	3%
Epilepsy	<1%	<1%	1%	1%	1%	1%	1%	1%	<1%
Stroke or transient ischaemic attacks	<1%	<1%	<1%	<1%	<1%	<1%	1%	2%	2%
Hypertension	<1%	<1%	<1%	<1%	3%	8%	13%	16%	14%
Chronic obstructive pulmonary disease	<1%	<1%	<1%	<1%	<1%	1%	2%	2%	2%
Asthma	4%	4%	3%	4%	4%	4%	5%	5%	6%
Musculoskeletal problems	1%	1%	3%	6%	11%	19%	22%	30%	37%
Coronary heart disease	<1%	<1%	<1%	1%	2%	5%	10%	13%	15%

Source: Department of Health, 2012b

# Fig.4

Personal social services net and continuing healthcare expenditure on over-65s in England under base case and continued trends assumption, 2010-22



Source: Nuffield Trust, 2012

\*The rising prevalence of rates of disability reflects continuation of recent trends in prevalence rates of chronic conditions



## Managing changing public expectations about the care they receive

‘Over the past 15 years there has been a change in what we in the UK expect of our National Health Service, and this has mirrored a wider change in expectations for health services across the developed world.’

What people expect from health and social care services is complex and there may be differences in people’s expectations of health and social care. In healthcare, ‘over the past 15 years there has been a change in what we in the UK expect of our National Health Service, and this has mirrored a wider change in expectations for health services across the developed world’ (Greenhalgh et al, 2011). In England this could be linked to the cultural shift from ‘patients’ to ‘consumers’ that aligns with the creation of the internal market; the Health and Social Care Act promotes individual involvement in treatment decisions and collective involvement in service design (HM Government, 2012). Demands for 24/7 care and the improved measurement and public accountability of patient experience (The Richmond Group of Charities and The King’s Fund, 2012) are examples of how changing expectations are influencing delivery of services.

In social care, whilst the same trends exist around co-production, there may be a complicating stigma associated with social care services which deters people from seeking the information needed to make informed choices (Local Government Association, 2011). The *Barriers to choice* review (The Cabinet Office, 2013) found that although 46 per cent of respondents to their Ipsos Mori telephone survey suggested they received a genuine choice across public services, that figure falls to 27 per cent for social care.

63 per cent of people questioned about their care and support services responded that they were extremely satisfied, with only 4 per cent saying they were very or extremely dissatisfied (The Information Centre for Health and Social Care, 2012b). Seven in ten (69 per cent) people are satisfied with the current running of the NHS, which matches the level of satisfaction recorded in December 2011. However, this is lower than between December 2009 and December 2008, when 73 per cent of the public were satisfied with the NHS. The proportion of people saying they are very satisfied with the NHS is now 17 per cent, which has fallen from 24 per cent in December 2009 (Ipsos Mori, 2012). Expectations about

future services are likely to be affected by communication about current challenges (particularly the efficiencies required by the funding environment) to the workforce and patients through personal experience, friends, family and the media.

Improved availability of information and communication from professionals could increase expectations of health services through a positive feedback loop. Conversely, improved communication and a greater understanding and avoidance of 'preference misdiagnoses' could reduce demand (The King's Fund, 2012b). There are wide gaps between what people want and what doctors think people want; a study showed that 71 per cent of doctors thought patients with breast cancer rated keeping their breast as a top priority, but the actual figure reported by patients was just 7 per cent (The King's Fund, 2012b). Several studies show that patients choose different treatments when they are well

informed; they often choose fewer treatments. When patients with benign prostate disease were well informed about the trade-off of treatments, 40 per cent fewer preferred surgery (The King's Fund, 2012b).

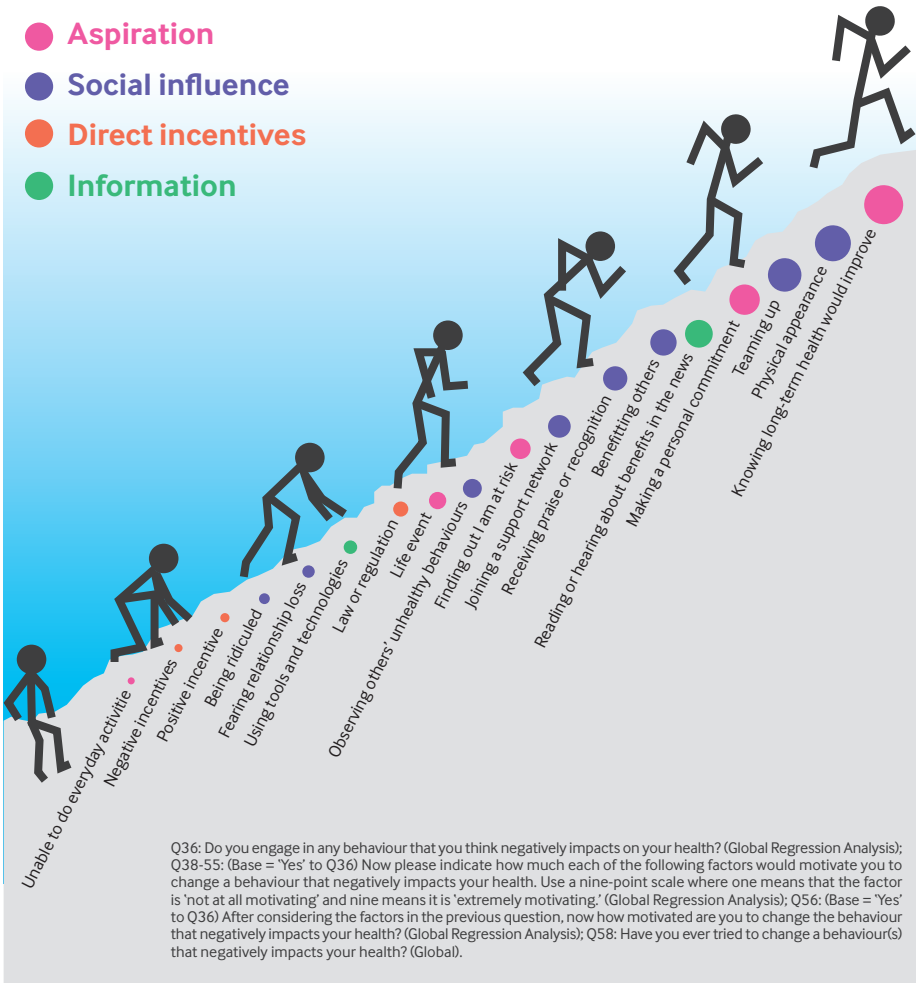
Fully understanding what patients want, and expect, from the health and social care system could save billions of pounds. Should commissioners shift their focus from trying to calculate need to avoiding preference misdiagnosis; ensuring patients receive the care they need (and no less), and the care they want (and no more)? (The King's Fund, 2012b).

The *Health Barometer 2011* shows that, internationally, people think that personal and social behaviours shape health the most, and social indicators are among the top motivators for behaviour change (Edelman, 2011a). How can resources be targeted to areas people think have most

Fully understanding what patients want, and expect, from the health and social care system could save billions of pounds.

impact on their health? How can we capitalise on these societal influencers to help improve public health?

The workforce needs to deliver a high-quality service that meets the expectations of the population, and this will require the right workforce numbers, trained in the right areas, who can work together effectively. Health and social care workers will need the skills to engage people effectively in decisions about their care and ensure they have the information required to make the choices that work best for them.



**Fig.5**

Social influence among the top motivators of health behaviour change

Source: Edelman, 2011a



Achieving better integration between health, social care and support organisations



Shifting the focus of the system towards prevention and well-being



Delivering the personalisation agenda and providing person-centred care within financial constraints

2

## HEALTH AND SOCIAL CARE SYSTEM DESIGN

**The health and social care system is undergoing a period of significant change, in order to ensure it is fit for purpose to deliver care to the population in the future. These system changes are designed to address some of the other big picture challenges, such as a possible increase in demand from the ageing population. They aim to create a system capable of delivering high-quality and sustainable care to meet the needs of the population.**

The CfWI has identified three big picture challenges in health and social care system design:

- a) achieving better integration between health, social care and support organisations
- b) shifting the focus of the system towards prevention and well-being
- c) delivering the personalisation agenda and providing person-centred care within financial constraints.

2a



### Achieving better integration between health, social care and support organisations

Achieving better integration between health, social care and support organisations is a longstanding aspiration, with concerns raised as early as the 1960s and 1970s that separating health and social care with the 1948 foundation of the NHS had been a mistake (Central Policy Review Staff, 1975; Priest, 2012). In this context, while acknowledging the importance of clear definitions in this area, integration describes the processes, methods and tools that facilitate integrated care (Nuffield Trust, 2011).

Integrated care is different, and essentially involves placing the user's perspective as the organising principle of service delivery (Nuffield Trust, 2011). The main argument

in favour of integrated care is that it ensures services reflect patient and service user need and avoids duplication of labour between different organisations (Department of Health, 2008b). Moreover, increasing numbers of patients and service users have complex co-morbidities so professionals increasingly need to work in a joined-up way and across organisational boundaries. This is necessary to ensure that patients' and service users' needs are met and that care is delivered in a holistic manner. A 2011 paper by National Voices argues that 'achieving integrated care would be the biggest contribution that health and social care services could make to improving quality and safety', with patients, service users and carers expressing concerns over a lack of joined-up care (National Voices, 2011).

A key driver in favour of integration and integrated health and social care is the current financial situation. As highlighted in the 2010 Comprehensive Spending Review (CSR), the aim is to 'make efficiencies to deal with rising demand from an ageing population and the increased costs of new technology' (HM Treasury, 2010). Integrated health and social care offers a potential opportunity to reduce costs incurred through unnecessary processes and acute care admissions, making care both less expensive and better targeted at the patient and service user. However, the DH's own two-year pilot identified some possible limitations with integration. Patients and service users did not necessarily think that services had improved, although staff did; most benefits realised were procedural, and therefore noticed by staff but rarely by patients. There was no reduction in acute care costs, and overall cost reduction from integration cannot be guaranteed, especially over the short term (RAND Europe/Ernst & Young, 2012).

Requiring organisations across health and social care to work in a more integrated way is a huge task, reflected in the fact that these are longstanding debates. To make the challenge more manageable, it may

Does everyone require integrated health and social care or are their specific groups, such as older people, who would benefit the most?



need to be broken down. Does everyone require integrated health and social care or are there specific groups, such as older people, who would benefit most?

The health system has undergone significant organisational change as a result of the Health and Social Care Act, and the remit of many bodies is currently being discussed. To achieve integration, processes and ways of working will need to be implemented to ensure links between commissioners across the system, and health and social care providers, are maintained and strengthened.

Given changes under way in 2013, including the introduction of the Any Qualified Provider policy and the implementation of a new organisational structure, is it possible that care will be more, rather than less, fragmented in the future? Patients and service users currently need a GP referral to access many private-sector services. Could this change with the development of affordable digital solutions by the private sector? Online consultations are already available and, if this becomes mainstream, they could increase the number of people using non-NHS provision for part of their diagnostics or care. Could 'pay as you go' care become a reality in the future?

Integration and integrated health and social care will require the workforce to communicate and function together more effectively at a strategic and management level. Front-line professionals will need to understand other professions and when

**For 80 per cent of people, who were interviewed in 12 countries, health is about more than being disease free. These people also think that personal and social behaviours have the biggest impact on their health. Most of the health and social care budget is allocation to formal institutions; given the importance of factors outside of the formal system, does this allocation of resources and approach to delivering care need to be reconsidered?**

they should be engaged, and be trained to work effectively in a team across professional boundaries. Workforce change will be important, but integration will also require supporting processes and IT systems to be redesigned.



### Shifting the focus of the system towards prevention and well-being

Following the passing of the Health and Social Care Act in 2012, changes in delivery of public health are now being implemented, based around Public Health England, a ring-fenced budget, and new statutory powers for local authorities to improve public health.

The aim of the reform is to ensure a greater focus on prevention and promoting well-being, which could help to address a number of the big picture challenges by avoiding the development or deterioration of long-term conditions and expensive future treatments and care. This has the potential to decrease demand and free up resources in the future. However, shifting towards and spending resources on prevention will be a key challenge within a constrained system.

We know that issues of public health currently cost the taxpayer significant amounts of money. In Great Britain we lose 140 million working days to sickness absence annually (Black and Frost, 2011). Sickness absence of NHS staff costs £1.7 billion annually (DH, 2009). As the health and social care workforce is a significant proportion of the population – human health and social work activities account for the employment of 12.5 per cent of the usual residents aged 16 to 74 in England and Wales (Office for National Statistics, 2012c) – can improvements in public health generally have a workforce impact?

For 80 per cent of people, who were interviewed in 12 countries, health is about more than being disease free (Edelman, 2011a). These people also think that personal and social behaviours have the biggest impact on their health (Edelman, 2011). Most of the health and social care budget is allocated to formal institutions;

given the importance of factors outside the formal system, does this allocation of resources and approach to delivering care need to be reconsidered (Edelman, 2011a)? Will direct provision of formal care be a small part of a successful future health system that is focused on prevention and well-being?

The workforce also has a crucial role in promoting healthier lifestyles through contact with the public (NHS Future Forum, 2012) and should 'make every contact count', through smarter commissioning and sharing of best practice by Public Health England (NHS Future Forum, 2012). The workforce will need to be trained in public health and have the skills to be proactive in promoting public health and well-being, which has implications for training the existing workforce and new recruits. The shift towards prevention could alter the shape of the workforce, with more people delivering early intervention and public health services rather than acute interventions.



### Delivering the personalisation agenda and providing person-centred care within financial constraints

The Government's personalisation agenda seeks to encourage self-management and self-care and shift some of the responsibility for health and social care from the state onto the individual. This could help to address a number of other big picture challenges: the ageing population and increasing prevalence of complex co-morbidities, the uncertain financial situation, and improving the quality of care. The NHS Future Forum says that personalisation has three main benefits:

- better value for money
- better integration of care
- putting people in control of their health

(NHS Future Forum, 2012).

Personalisation is at the centre of the Government's *Vision for adult social care*,

which states that 'people, not service providers or systems, should hold the choice and control about their care' (Department of Health, 2010c). Meanwhile, *No decision about me without me* (Department of Health, 2012c) puts forward an ambition to empower patients and service users to take more of a role in their own care, making choice central to decisions about treatment and care. In 2010, Ipsos MORI conducted a study about what people want, need and expect from public services. The study posed the question 'If your GP decided that you needed to be referred to hospital and offered you a choice of four or five hospitals, both in the area and the rest of the country, to choose from, which of the following would best represent your feelings?' Some 62 per cent of respondents selected the choice 'would like to be able to make the decision but would need advice and information to help me decide' (Ipsos MORI, 2010). This suggests that the public at least partially support greater capacity to make their own decisions, although the *Barriers to choice* review highlights that choice in healthcare is not necessarily valued for its own sake, but rather in certain circumstances, at certain times and when properly supported (The Cabinet Office, 2013).

Technology could help people take more responsibility for their conditions, shifting some of the responsibility from the health and social care system to the individual. 20 per cent of people interviewed internationally regularly use technology

devices, such as apps, for managing or tracking health and 68 per cent (of the 20 per cent) say they have helped improve their health (Edelman, 2011a). Given their apparent effectiveness, how can we increase numbers using these tools? Social influence is one of the top motivators for people to change their health behaviour; can social media and apps, websites and communities be leveraged to take advantage of this?

Personalisation changes the role of commissioners; they must shape the health and social care market so that people can choose from a wide range of high-quality services rather than bulk-commissioning services which provide limited choice. The independent sector already has a significant role in social care provision, and the introduction of the Any Qualified Provider policy in 2012 is seen as a way to increase choice for patients and service users, and seems likely to widen the provider base in healthcare. The 2012 Care Bill (Department of Health, 2012c) proposes placing a duty on councils to ensure service users can access a diverse market of care providers. How can commissioners influence the provider market to ensure the system can deliver personalised care?

Personalisation could result in the creation of new workforce roles (such as navigators) to help people acquire the information they need and direct them through the system. A higher percentage of the workforce could be employed directly by

an individual with a personal budget, rather than through a local authority, the NHS or an independent organisation, with associated implications for the skills required. The workforce will need to have information available to inform people about available services and be trained to communicate this effectively and support the public to make their own decisions.

### Integrated care must:

- be organised around the needs of individuals (person-centred)
- focus always on the goal of benefiting service users
- be evaluated by its outcomes, especially those which service users themselves report
- include community and voluntary sector contributions
- be fully inclusive of all communities in the locality
- be designed together with the users of services and their carers
- deliver a new deal for people with long-term conditions
- respond to carers as well as the people they are caring for
- be driven forwards by the commissioners
- be encouraged through incentives
- aim to achieve public and social value, not just to save money
- last over time and be allowed to experiment (National Voices, 2012).

20 per cent of people interviewed internationally regularly use technology devices, such as apps, for managing or tracking health and 68 per cent say they have helped improve their health (Edelman, 2011a). Given their apparent effectiveness, how can we increase numbers using these tools? Social influence is one of the top motivators for people to change their health behaviour; can social media and apps, websites and communities be leveraged to take advantage of this?

### Health and social care navigators

Given the system design changes taking place in health and social care, and the increasing complexity of the system, will 'navigators' be a key component of the future workforce? The Skills for Health report *Rehearsing uncertain futures* identifies 'personal health navigators' as one of the roles which may emerge in the future, a care coordinator who is an amalgam of advocate, information organiser, and broker (Skills for Health, 2010). Navigators are a key part of the health and social care system in the USA where patient advocacy businesses exist, and people can hire 'personal health navigators' (Health Care Navigators LLC, 2013). These individuals carry out a number of roles: researching a person's diagnosis and helping them to choose among treatment options, informing people of their rights and advocating on their behalf, providing emotional support and helping to negotiate red tape in the system. Some hospitals employ advocates, who provide customer service to patients and address any complaints during their stay. The US system is clearly very different from the health and social care system in England, but are there aspects we could learn from these roles to help improve patient and service user experience?



Ensuring the system delivers high-quality services within financial constraints

Developing effective measures for quality of care and productivity and ensuring high-quality data is collected

Preparing for changes resulting from innovation and technology

There may be trade-offs between quality, provision, cost and personalisation. Will it be possible to provide high-quality and universally or widely available care, where people are offered a choice between services and where they receive them, within the available budget? Is it necessary to explore these trade-offs and the public's opinion of them? Perhaps the public would accept a less personalised approach to care – 'this is the care we offer and it will be delivered in this way' – if it was really high quality.

# QUALITY AND PRODUCTIVITY

High-quality service is one of the central themes underpinning health and social care. This includes quality of clinical care and support, and treating people with compassion, dignity and respect, which strongly links to patients' and service users' perception of the quality of care they receive. Productivity refers to improvements in efficiency that lead to reduced production costs and improved outcomes. This is fundamental to ensuring the sector offers good value for money and can meet some of the big picture challenges around increasing demand and constrained resources. Alongside quality and productivity, assuring patient safety is of paramount importance in planning the future delivery of healthcare services. It is integral to the safeguarding agenda and the Quality Innovation, Productivity and Prevention (QIPP) programme (QIPP, 2013).

In the recommendations of the Francis Inquiry on the care provided by Mid-Staffordshire NHS Trust (Report of Mid-Staffordshire NHS FT Inquiry, 2013), there is strong focus on the importance of the workforce and its critical role in ensuring high-quality patient-centred care. The overall challenge will be to maintain and improve the quality of service, whilst maximising productivity to ensure this is done within budget commitments.

There is debate over whether the implementation of personal budgets and direct payments will increase quality and productivity, or have the reverse effect. There is increasing evidence that local authority commissioning activities are not yet resulting in the development of a market that allows personal budgets to be used effectively (Social Care Institute for Excellence, 2010). However, the evidence does suggest that giving people choice and control over their care can lead to efficiencies such as reducing overheads and improving outcomes and value for money. However, this will only be realised if the changes are supported by improved information, market development and choice in care and support provision.



## Ensuring the system delivers high-quality services within financial constraints

A fundamental difference between healthcare and social care is eligibility. The NHS is a universal service free at the point of delivery, which is based on the principle of clinical need rather than ability to pay (NHS Choices, 2011). By contrast, social care is means tested. Both sectors have always aimed to deliver high-quality services, but this needs to be balanced with the resources that are available.

The Care Quality Commission (CQC) is the independent regulator of health and adult social care in England. It is responsible for regulating all providers of health and adult social care services to ensure they meet the national standards of quality and safety. The national standards are the essential standards the public should expect from care services. These include:

- to be respected, involved in your care and support, and told what's happening at every stage
- care, treatment and support that meets your needs
- to be safe
- to be cared for by staff with the right skills to do their jobs properly
- your care provider to routinely check the quality of their services (CQC, 2012a).

CQC's most recent report on the state of care in England finds that 'the increasing complexity of conditions and greater comorbidities experienced by people are impacting on the ability of care providers to deliver person-centred care that meets individuals' needs' (CQC, 2012b). The report also notes that pressures on the workforce are increasing in terms of the skills that are required to care for people with more complex conditions. Many organisations meet these challenges and deliver excellent quality of care. But across

Technologies already exist to help people self-diagnose and monitor their conditions. Will this become more common as smartphones and 4G technology become available to all? Currently these devices cannot be used to give a confirmed diagnosis; by law that requires a physician. To take full advantage of these technologies, will it be necessary to review the regulatory framework? What are the possible consequences of this?

health and social care, others are failing to manage the impact of these pressures. Some workforce findings from the CQC report show that in 2011/12:

- a number of NHS services still struggled to make sure they had enough qualified and experienced staff on duty at all times
- 93 per cent of residential care homes and 95 per cent of domiciliary care services were treating people with respect and dignity, compared to only 85 per cent of nursing homes
- lack of a good registered manager was a common problem in social care services; a change of manager was often followed by dramatic changes in the quality of care provided (CQC, 2012b).

There may be trade-offs between quality, provision, cost and personalisation. Will it be possible to provide high-quality and universally or widely available care, where people are offered a choice between services and where they receive them, within the available budget? Is it necessary to explore these trade-offs and the public's opinion of them? Perhaps the public would accept a less personalised approach to care – 'this is the care we offer and it will be delivered in this way' – if it was really high quality.

How we deliver high-quality future care, and understanding the workforce's role in achieving this, is a key challenge. We must understand the need for investment in new technology and innovations and their role in improving quality and productivity. We must allow for more time to care, and we must

work out how to ensure the workforce is flexible enough to adapt to these changes.



### Developing effective measures for quality of care and productivity and ensuring high-quality data is collected

It is important to measure quality of care and productivity effectively. How do we know we are delivering high-quality health and social care that offers value for money? Is the new way of doing things better than the old way? Having the information to answer these questions – and using it effectively – is key to ensuring measures and processes are in place to safeguard individuals. This would help prevent a reoccurrence of the failures at Mid Staffordshire NHS Trust and Winterbourne View.

CQC's report *State of Care 2011/12* found that there was varied performance in the assessment of services and monitoring of the quality of care. Only 80 per cent of nursing homes, 84 per cent of residential care homes and 87 per cent of domiciliary care services met the standard for assessment and monitoring of the quality of care (CQC, 2012b). A Royal College of Nursing report identified that measuring quality is not only important for improving everyday delivery of care, but is central to enabling and supporting policy analysis

and strategic decision-making, including commissioning, reimbursement systems and accreditation (RCN, 2009). Achieving effective measurement involves well-defined quality standards at local and national levels (what is 'good'), how they should be measured, and ensuring that data is of a high quality and that it is valid and reliable.

We also need to ensure that funding- and outcome-based incentives are aligned to promote high-quality care and innovation and do not encourage perverse incentives. The introduction of the four-hour waiting target in accident and emergency departments (A&E) was designed to ensure prompt assessment and diagnosis of patients presenting at A&E. In reality, many departments created clinical decision units and patients approaching the four-hour mark were transferred to these units. The departments did not breach the target, but in reality they did not achieve the underlying goal of assessing and diagnosing patients, and making a decision about their ongoing needs, within this timeframe.

The workforce will play a crucial role in measuring quality. They will be responsible for putting systems in place to capture and analyse the data and making appropriate decisions based on the results. Doing this effectively requires specific skills. It will also be important that quality systems demonstrate the value of the workforce.



### Preparing for changes resulting from innovation and technology

Significant changes to health and social care services, and the way the workforce operates, often result from innovation such as technological developments or scientific advancements in treatments. Anticipating which innovative changes may become operational in the future will be important for ensuring the system and the workforce are prepared to take advantage of the opportunity to improve quality and productivity.

There are some technologies which we can expect to become widely available over the short to medium term, such as

How much emphasis should be placed on the social value of health and social care services? It explores a wider sense of value than is sometimes captured in contracts with providers and investments that are made. As the provider base widens, third sector and voluntary providers may need to work with commissioners to identify the full value of the services they provide, so it can be managed and paid for. This would also help commissioners to focus on how they could increase the value of services they obtain through commissioning practice. The introduction of the Public Services (social value) Act 2012 requires public authorities to take into account social and environmental value when they choose suppliers, rather than focusing solely on cost. This puts social enterprises, charities and voluntary organisations in a perfect position to bid for, and win, public contracts. What are the workforce implications of this? Is it time for the system to place more emphasis on social value as a result of this Act?

*It's not just about putting a pound sign next to your project, it's about telling the whole story about what you are doing – and the pound sign is part of that.*

Big Life Group (DH, 2010c)

telehealth and telecare. These technologies are expected to deliver a number of benefits associated with other big picture challenges, enabling more care to be delivered closer to patients' and service users' homes and addressing the potential increase in demand by freeing up workforce time. Delivering these benefits will require training for the current workforce on how to use the equipment, changes to education and training programmes, redesign of care pathways, the implementation of new ways of working, and changes in workforce mentality.

We know what these technology changes are likely to involve, so should be able to plan the workforce effectively. But what about the innovations and technology developments that are more uncertain, or that we know nothing about? How much of an impact is genetics likely to make? Will genetic profiling and personalised prevention and treatment options become a reality for everyday care? Given the immense uncertainty, we need to ensure the workforce is flexible and able to adapt to future changes.

Technologies already exist to help people self-diagnose and monitor their conditions. Will this become more common as smartphones and 4G technology become available to all? Currently these devices cannot be used to give a confirmed

## Big data

Collecting data to measure quality of care and productivity creates enormous amounts of information, or 'big data'. As new monitoring technologies such as telehealth and telecare are introduced, and genetic profiling becomes more common, the amount of information about services and services users is likely to get even bigger. Big data analytics tries to bring together data from lots of different sources to look at patterns that could be useful in problem solving or making improvements (Information week healthcare, 2013a). Are healthcare providers ready for big data analytics, and the opportunity to use small and big data point to new policies and procedures, and provide insight into what works? What are the workforce implications of big data, and how can we ensure people have the skills to interpret and analyse all the information?

Kaiser Permanente has spent approximately \$6 billion on an integrated electronic health records system to manage 9 million people, and the big data is being analysed to help meet organisational goals around improving care and reducing costs (Information week healthcare, 2013b). The drivers of the US system are clearly different, but what can the NHS and social care system learn from the US health system's experience with big data?

diagnosis; by law that requires a physician. To take full advantage of these technologies, will it be necessary to review the regulatory framework? What are the possible consequences of this?

Technology could help health and social care to address a number of the big picture challenges around increasing demand and constrained resources, and act as an enabler for moving towards integrated working and preventive care. We must understand the need for investment in new technology and

innovations to improve quality and productivity and allow these benefits to be achieved. Crucially, it will also be important to understand what needs to be done, and how the workforce needs to operate, to ensure the successful adoption and diffusion of new technologies to realise their full benefits. To help support this, the CfWI will be embarking on research in spring 2013 into emerging and future technologies likely to impact on the health and social care workforce.

## Technologies on the horizon

**Envisioning Technology has created an infographic depicting how technology in healthcare may develop over the next 30 years. It suggests huge advancements in areas from diagnostics and treatments to augmentation and regeneration may be seen within a relatively short timeframe and could have large implications for delivery or health and social care series, and the workforce (Envisioning Technology, 2013).**

**3D printed organs:** Scientists have succeeded in using digital photogrammetry and CAD/CAM techniques to develop collagen scaffolds and moulds for human ears that mimic the normal anatomy and functioning of the organ. This strategy holds immense potential for developing patient-specific and anatomically accurate ears, and could suggest it will be possible to "print" other human organs in the future (Reiffel, 2013).

**Anti-ageing stem cells:** Human embryonic stem cells and reprogrammed cell types are currently considered as a possible source of cells for regenerative therapies. Recent clinical trials have shown that human embryonic stem cell-derived retinal pigmented cells could improve vision in patients with macular dystrophy and dry age-related macular degeneration—the leading cause of blindness in the developed world (Schwartz, 2012). The full potential of stem cells is unknown but if technologies become widely available there will be implications for workforce training and commissioners will need to consider how these new therapies impact the shape of the workforce required.

**Bloodstream sensors:** Mobile sensors could be inserted into the bloodstream and move around the body to help identify signals that could result in a heart attack, stroke or even the onset on cancer. In the future the devices may also be able to deliver drugs, perform analyses, and carry out procedures such as dissolving blood clots or removing plaque from sclerotic arteries (Stanford University, 2012).



Planning service delivery given the uncertainty about level of funding in the future and how this will affect future demand for and supply of care services



Uncertainty about how investment in life science, health and care will support the UK economy

4

# FINANCIAL AND ECONOMIC

**Growth in health expenditure has far outpaced the rise in both GDP and total public expenditure. In 2011/12, spending in the NHS reached around £106 billion. This represents a doubling in the spending on the NHS over the past decade.**

In 2010, the Government published its plans to control public spending in the Comprehensive Spending Review (CSR) where the Government's commitment to protect health spending was made clear. The CSR highlighted a real-term increase in overall NHS funding in each year to meet the Government's commitment on health spending, with total spending growing by 0.4 per cent over the spending review period to 2014/2015 (HM Treasury, 2010). The NHS saved £1.5 billion between 2011 and 2012 by reducing the number of managers and cutting £400 million expenditure on IT projects (The Cabinet Office, 2012).

Local government continues to face significant budgetary pressures. The 2010 CSR decreased central government funding to councils by around 26 per cent over four years, and councils' budgets were estimated to decrease by around 14 per cent once projections by the Office for

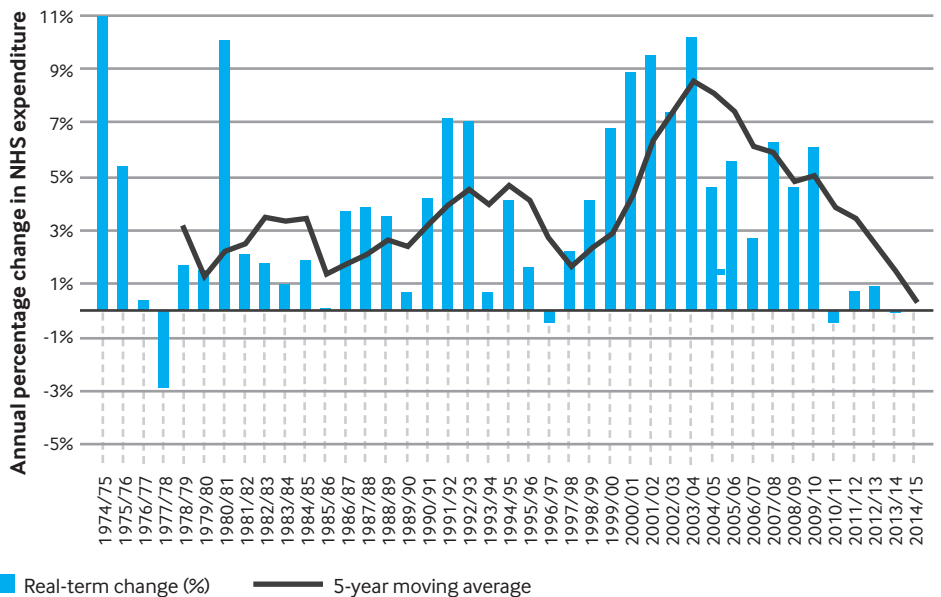
Budget Responsibility (OBR) for council tax were taken into account (HM Treasury, 2010). The funding settlement for 2013/14 represented a 1.7 per cent cut in spending power, although councils will now retain a proportion of business rates locally as a growth incentive (Parliament UK, 2012). Budget cuts have implications for the services councils provide: Barnet Council has revealed a 'graph of doom' which shows that, on the current trajectory, within 20 years the whole of their budget will be spent on adult and children's social care (London Borough of Barnet, 2011). There is some debate about whether this is an overly pessimistic view, but it is clear that public sector budgets will remain constrained for a number of years and this is likely to continue to affect spending on health, social care and public health over the short to medium term.

Looking further into the future (+10 years) there is a wider range of possible scenarios for financing the system. There is uncertainty about whether self-funding will begin to play a larger role, and what the implications of a mixed economy provision will be. The need to ensure the financial sustainability of providers and the workforce impact of this are topics that are beginning to be debated.

Barnet Council has revealed a 'graph of doom' which shows that, on the current trajectory, within 20 years their entire budget will be spent on adult and children's social care.

**Fig.6**

Annual percentage change in real terms NHS expenditure and planned expenditure in England: 1974/75 to 2014/15



Source: House of Commons Library, 2012

A vibrant life sciences economy could have wider workforce benefits, encouraging children to continue to study science and enhancing the pool of resources that health and social care can recruit from.

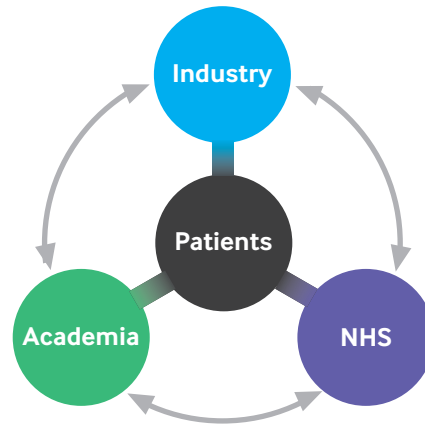


#### Planning service delivery, given the uncertainty about the level of funding in the future and how this will affect future demand for and supply of care services

In June 2013 the Government presented departmental spending plans for 2015/16 and health was one of the few areas that did not receive a real-terms cut (HM Treasury 2013). The NHS budget for 2015/16 will be £110.4 billion, a real terms growth of 0.1 per cent, maintaining the Government's pledge to protect it. Whether this ring-fence will extend further into the next parliament is unclear and concerns are being raised about the impacts on quality of care if spending is not increased to meet the needs of an ageing population with co-morbidities. In a recent King's Fund survey, 40 per cent of finance directors expected patient care to deteriorate in the coming years and a majority thought that the NHS would miss its overall target of making £20 billion efficiency savings by 2015 (The King's Fund, 2012c).

The Dilnot Commission put forward recommendations for how social care should be funded in the future in 2011 (Dilnot Commission, 2011). In early 2013, the Government announced it would introduce a cap in individual's lifetime contributions of £75,000 which is more than double the £35,000 recommended by the Commission. It is estimated that this reform will cost the State an extra £1 billion a year by the end of the next Parliament (House of Lords, 2013).

The workforce is the biggest area of NHS spending. This makes it a target when considering funding constraints, but the workforce is vital to service delivery. Increasing workforce productivity will be important, with care being delivered in new ways. These include creating different roles to utilise the skill mix, implementing new technology and processes, and changes to the locations in which services are delivered. All of this will require training for the existing workforce and changes to education programmes. The workforce will need to be flexible to adapt to these



changes as they are embedded in the service.



#### Uncertainty about how investment in life sciences, health and care will support the UK economy

The UK currently has one of the world's strongest and most productive life sciences economies. In 2009, £4.4 billion was spent on pharmaceutical research and development in the UK. Medical technology and biotechnology sectors had an annual turnover of around £18.4 billion. In 2011, the Prime Minister released the *Strategy for UK life sciences* and made a firm commitment to re-establish the UK's global leadership in the life sciences sector and ensure that the UK remains a globally competitive environment (Department for Business, Innovation & Skills and Office for Life Sciences, 2012).

It is currently unclear how this investment in science and technology may change in the long term. *Innovation health and wealth* (NHS, 2011) sets out how the NHS should work in partnership with UK industry to develop technologies and innovations, describing how searching for and applying innovation must be an integral part of the way the NHS does business. This would allow the NHS to adopt innovations early, greatly increasing productivity, diffusing new treatments to patients and contributing to a thriving UK

## Fig.7

### Vision for life sciences in the UK

**Source:** Department for Business, Innovation & Skills and Office for Life Sciences, 2011

economy (Department for Business, Innovation & Skills and Office for Life Sciences, 2011). Exporting innovation ideas and expertise could also provide new business opportunities abroad for UK-based companies (NHS, 2011).

Investment in life sciences could impact on the workforce in two ways: direct involvement in research, and a requirement to adapt, as innovations are implemented.

Clinical/academic training programmes are open to those who are interested in a combined research and clinical career, and there are over 750 clinical fellows in the system. There are around 400 research posts advertised each year at foundation stage and around 270 academic clinical fellowships are funded and advertised nationally each year (Department for Business Innovation and Skills and Office for Life Sciences, 2011).

A vibrant life sciences economy could have wider workforce benefits, encouraging children to continue studying science and enhancing the pool of resources that health and social care can recruit from. It would also create an academically stimulating environment for health and social care professionals, reducing the risk of a brain-drain effect, where people emigrate to countries which are seen to be involved in more cutting-edge work. But what happens if this investment does not continue in the long term? What impact would it have on the health and social care sectors and their ability to recruit and retain the workforce?

# CONCLUSION





## ... TO BE CONTINUED

**The CfWI has worked with stakeholders to identify the big picture challenges facing health and social care. This document outlines the big picture challenges, which range from demographic and system design challenges through to quality and productivity and financial challenges. It focuses on past trends, why they are challenges, and hints at what they future may hold. The challenges are often interlinked and will require coordinated action between health and social care organisations, policymakers and the academic sector if they are to be effectively addressed.**

We have alluded to some of the workforce implications of the big picture challenges. The key areas of uncertainty surrounding the future workforce, and areas where there are significant risks or unknowns, are developed in more detail in the workforce briefings that support this document.

These documents are being published to promote discussion. Following engagement with stakeholders, we will further develop the work to start bridging the gap between theory and practical application, to inform better evidence-based decision making which considers these long-term and overarching challenges.

**We will be running a series of events to promote and discuss this work.**

If you would like to be involved with the ongoing engagement, or the development of our work in this area, please email [horizonsscanning@cfwi.org.uk](mailto:horizonsscanning@cfwi.org.uk)

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