UKCES

UK COMMISSION FOR EMPLOYMENT AND SKILLS

Health: Sector Skills Assessment 2012

Briefing Paper
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Intelligence Investment Impact

Health: Sector Skills Assessment

Ian Wheeler and Lorraine Yeomans

Skills for Health

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Foreword

The UK Commission for Employment and Skills is a social partnership, led by Commissioners from large and small employers, trade unions and the voluntary sector. Our ambition is to transform the UK's approach to investing in the skills of people as an intrinsic part of securing jobs and growth. Our strategic objectives are to:

- Maximise the impact of employment and skills policies and employer behaviour to support jobs and growth and secure an internationally competitive skills base;
- Work with businesses to develop the best market solutions which leverage greater investment in skills;
- Provide outstanding labour market intelligence which helps businesses and people make the best choices for them.

The third objective, relating to intelligence, reflects an increasing outward focus to the UK Commission's research activities, as it seeks to facilitate a better informed labour market, in which decisions about careers and skills are based on sound and accessible evidence. Relatedly, impartial research evidence is used to underpin compelling messages that promote a call to action to increase employers' investment in the skills of their people.

Intelligence is also integral to the two other strategic objectives. In seeking to lever greater investment in skills, the intelligence function serves to identify opportunities where our investments can bring the greatest leverage and economic return. The UK Commission's third strategic objective, to maximise the impact of policy and employer behaviour to achieve an internationally competitive skills base, is supported by the development of an evidence base on best practice: "what works?" in a policy context.

Our research programme provides a robust evidence base for our insights and actions, drawing on good practice and the most innovative thinking. The research programme is underpinned by a number of core principles including the importance of: ensuring 'relevance' to our most pressing strategic priorities; 'salience' and effectively translating and sharing the key insights we find; international benchmarking and drawing insights from good practice abroad; high quality analysis which is leading edge, robust and action orientated; being responsive to immediate needs as well as taking a longer term perspective. We also work closely with key partners to ensure a co-ordinated approach to research.

Sector Skills Assessments (SSAs) are key sources of authoritative and focused sectoral labour market intelligence (LMI), designed to inform the development of skills policy across the UK. They combine "top-down" analysis of official data with bottom-up intelligence to provide a consistent, comparable and rich understanding of the skills priorities within different sectors of the economy, across the four UK nations. This SSA focuses on the Real Health sector and was produced by Skills for Health.

Faced with a much tighter financial environment and increasing demand, Health sector employers are focused on delivering efficiency savings and productive change whilst maintaining quality. Employers need to invest in the skills of their workforce to prepare it for the changes ahead and to ensure that skills across the sector are utilised appropriately and effectively.

Sharing the findings of our research and engaging with our audience is important to further develop the evidence on which we base our work. Evidence Reports are our chief means of reporting our detailed analytical work. All of our outputs can be accessed on the UK Commission's website at www.ukces.org.uk

But these outputs are only the beginning of the process and we are engaged in other mechanisms to share our findings, debate the issues they raise and extend their reach and impact. These mechanisms include our *Changing Behaviour in Skills Investment* seminar series and the use of a range of online media to communicate key research results.

We hope you find this report useful and informative. If you would like to provide any feedback or comments, or have any queries please e-mail info@ukces.org.uk, quoting the report title or series number.

Lesley Giles

Deputy Director

UK Commission for Employment and Skills

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Introduction

This is the Sector Skills Assessment for the UK Health sector. It has been developed and produced by Skills for Health on behalf of the UK Commission for Employment and Skills.

Using a comprehensive range of primary and secondary sources this assessment brings together data on the size, shape and make-up of the UK Health sector with a range of forward looking consultation activities to highlight how the sector is confronted with a range of current skills issues and near future skills needs.

The Health sector makes a substantial contribution to the UK economy. Measures of Gross Value Added (GVA) show that the combined sectors of Health and social care contribute just under £94 billion to GVA. The UK's Health sector is predominantly non-commercial in its focus and therefore the sector fares less well when benchmarked against commercial sectors using a comparison of 'GVA per job'. Universal measures of productivity such as GVA are of limited value given their strong focus on output versus inputs and take relatively little account of quality and complexity, both of which are key for Health service providers.

The sector measures performance by utilising a range of Health outcome indicators together with financial data. Taken together these enable a broader view of performance. International comparisons, whilst difficult, indicate that the UK Health sector is offering good value and quality to the population in many areas. This is further supported by high levels of patient satisfaction in the NHS.

In common with many other advanced economies the sector is heavily reliant upon government funding, and has enjoyed relatively large increases in spending over recent years. The rate of growth in government spending is forecast to slow to between one and three per cent per annum in the medium term. The sector will therefore be challenged to raise its productivity and quality in the context of these constrained government resources.

The sector is beginning to experience some reductions in total employment. This is a result of the joint pressures of reduced public spending and reduced spending amongst consumers. This has created a changing focus amongst employers from 'more of the same' to 'more for less'. Therefore employers will be looking for substantial changes to the way in which the workforce is organised.

The sector provides a 24-hour service; 365 days of the year and the diversity of services delivered are underpinned by a huge variety in occupations and flexibility in working patterns. However rates of self employment and temporary assignments are lower in the sector than the whole economy.

The demographics of the workforce in the Health sector are markedly different to that seen across the whole economy; it is highly feminised and has an older age profile. This presents specific challenges for employers in how careers in the sector are managed to allow for breaks in service and flexible retirement practices. A further challenge will be how the sector effectively succession plans in order to avoid a substantial skills and knowledge deficit as workers retire.

The focus on qualifications in the sector is high; there is a significant proportion of the workforce qualified to Level four and above (60 per cent compared to 34 per cent in the whole economy). The importance placed upon qualifications is linked to issues of patient safety and regulation. There is also a clear demarcation between professionals in respect of their scope of practice and the activities that they are able to undertake based upon the qualifications which they hold.

Despite the high qualification profile of the sector there are some concerns around basic skills levels, particularly in occupational groups such as caring and personal services and elementary occupations. In addition to this, given the high importance of numeracy skills in tasks such as drugs administration, the sector also needs to keep a keen focus on the basic skills needs of the associate professional occupations.

Generic skills such as team-working, communication, customer service and problem solving are used across a wide range of occupations in the sector. Specific job-related skills used in the sector vary considerably given the wide range of roles undertaken. Core skills however relating to clinical roles involve the assessment, diagnosis and treatment of patients within appropriate professional boundaries.

Health sector employers provide a higher than average level of training compared to the whole economy and unlike other sectors in the economy this has remained steady in recent years. The level of training undertaken is similar to the care sector and other sectors with a high proportion of public sector employers i.e. education and government services. Levels of training are boosted in the sector by the need for core, mandatory Health and safety training, this is necessary due to the high compliance environment within which employers operate.

Employers report barriers to training in the sector; these include financial issues, and difficulties in sourcing training in the relevant subject area. This is likely to be linked to the very specialist nature of job-specific skills utilised in the sector.

Whilst the sector reports a high level of skills, there are persistent questions around management and leadership capability within the sector, as well as the effectiveness of some of the high performing working practices.

Employers within the sector report slightly above average levels of issues around the retention of staff in the sector. Churn in the sector is being created by the ease with which NHS employees are able to change employer whilst continuing their terms and conditions of service.

Other indicators suggest that the sector's demand for skills is relatively well matched by supply. The sector reports a lower proportion of employees that are over qualified than many other sectors. Vacancies are low, so too are reported 'hard-to-fill' and 'skills shortage' vacancies.

Skills gaps exist where an employee is considered not to be fully proficient in their role. Around 19 per cent of Health sector employers report that they are experiencing skills gaps which is higher than the whole economy average of 13 per cent. Skills gaps are estimated to affect 100,000 employees in the sector (five per cent) and this is in line with the whole economy average.

Employers in the sector report that the main areas of skills gaps relate to generic rather than job-specific skills. The main causes of such gaps remain people being part way through their training or being new in post, many of these issues could therefore be addressed by experience and further training and development.

This assessment identifies a range of drivers forcing change in the sector. After detailed analysis, interviews with experts and a series of workshops, a number of factors emerge as key drivers for change. These are as follows:

- The NHS concept.
- Funding of Healthcare.
- Public/private Healthcare.
- Demographic changes.
- Political developments in bioscience, pharmaceuticals and technology.

- The choice agenda.
- Societal trends.

The resulting trends are likely to have a significant impact on the current and future skills needs of the sector. The sector is likely to be under considerable pressure to change how it provides Health care and we are likely to see many traditional ways of working eroding.

Each of the major occupational groups in the sector is likely to experience significant shifts in the skills they need to develop. There will be a renewed focus on skills utilisation in the sector as organisations look at ways to cost effectively deliver services whilst maintaining quality of patient care. Professional and clinical occupations and managers and senior officials are likely to be called upon with increased urgency to develop the sector and lead it through a period of prolonged change.

Generic skills such as team working, communication skills, customer service skills and problem solving will demand constant attention by employers as the sector seeks to provide high quality Healthcare, across wider multidisciplinary teams, in the context of fewer resources.

There is also evidence that some new skill sets may emerge. These may in time become new roles in their own right, or may extend the skills utilised in existing occupations. The need to develop high quality skills at the intermediate level is also likely to become increasingly important for employers.

This Assessment highlights that the skills focus for the sector is likely to be in regard to:

- Priority 1 - Developing high quality management, leadership and engagement strategies to enable change.
- Priority 2 – Developing approaches to enable the safe and rapid development of new roles, particularly at the intermediate skills level.
- Priority 3 – Promoting intermediate skills development.
- Priority 4 – Addressing generic skills issues and enhancing ICT skills in the sector.
- Priority 5 – Enhancing the accuracy of core/mandatory training within the sector.
- Priority 6 – Developing Health skills for non-Health specialists – community friends, and relatives.
- Priority 7 – Developing future-orientated intelligence for the Health sector to provide early warnings on skills needs.

- Priority 8 – Providing careers Information, Advice and Guidance for all ages.
- Priority 9 – Addressing business development skills needs in small and medium sized Healthcare providers.
- Priority 10 – Developing responsive local intelligence.
- Priority 11 – Reducing the dependence on non-EU migration.

1. Introduction

1.1 Purpose of report

The aim of this report is to provide authoritative labour market intelligence (LMI) for the Health sector to inform the strategic decision making of national governments in the development of employment and skills policy. It is one of 15 UK Sector Skills Assessment (SSA) reports produced by Sector Skills Councils[1] and the UK Commission for Employment and Skills (UKCES).

SSAs combine top-down data from official sources with bottom-up sectoral intelligence to provide a consistent, comparable and rich understanding of the skills priorities within sectors across the four UK nations. The reports have been produced to a common specification (developed by the UK Commission in consultation with the four UK governments) and follow a consistent structure.

Reports have been produced for the following sectors of the economy:

- Agriculture, forestry and fishing
- Energy production and utilities
- Manufacturing
- Construction building services, engineering and planning
- Wholesale and retail trade
- Transportation and storage
- Hospitality, tourism and sport
- Information and communication technologies
- Creative media and entertainment
- Financial, insurance & other professional services
- Real estate and facilities management
- Government
- Education
- Health

1 Please note, the Education report was produced by LSIS who are not a licensed Sector Skills Council

- Care

The reports contain intelligence on sectors and sub-sectors of particular interest to the four UK governments. As each nation has different 'key sectors', that are defined in different ways, it has not been possible to define the SSA sectors in a way that matches precisely the key sectors identified by each national government. Therefore, as far as possible, data has been reported in such a way that it can be aggregated to produce an overall picture for key sectors of interest. In some cases this will involve gathering information from more than one SSA report.

The reports are designed to provide sectoral intelligence at a relatively broad level for strategic decision making purposes. Whilst they do contain some sub-sectoral and occupational intelligence, further intelligence at a more granular level may be available from individual Sector Skills Councils.

This report contains information on key regional variations between the four UK nations and within England where appropriate (for example if sectoral employment is focused in a particular geographical area). However, the reports are not designed to provide a comprehensive assessment of sectoral skills issues beyond the national level.

1.2 Defining the sector

The Health sector can be technically defined using the 2007 Standard Industrial Classification (SIC) code of 86 – Human Health Activities. This technical definition includes all hospital activities, medical nursing home activities, general and specialist medical practice activities, dental practice activities as well as other human Health activities.

At a sub-sectoral level Standard Industrial Classification defines the sector as:

- SIC 86.1, Hospital activities including Hospital activities (86.10/1) and Medical nursing home activities (86.10/2)
- SIC 86.2, Medical and dental practice activities including General medical practice activities (86.21), Specialist medical practice activities (86.22) and Dental practice activities (86.23)
- SIC 86.9, Other human Health activities

More commonly, particularly when describing the NHS, the terms primary and secondary care are used to describe the sector. 'Primary care' is the name given to those services where the public goes first; they are then referred on to 'Secondary care' for more complex treatment if necessary.

Examples of the types of organisations that you would find in primary and secondary care include:

Primary Care	**Secondary Care**
Doctors/General Practitioners (GPs)	Ambulance Trusts
NHS Walk-in Centres	NHS Trusts/NHS Foundation Trusts/Independent Sector hospitals
Out-of-Hours Emergency Care	Mental Health Trusts
	Care Trusts (provide joint Health and social care activities)

The separation of the sector into public and private sectors is particularly important. The Health sector is dominated in terms of employees by those in the public sector, however there are a significant number of employees in the private sector and their business models, size of enterprise etc. differ significantly from the public sector and therefore their current and future skills issues can also be different.

Examples of the types of organisations that you would find in the independent Health sector include:

- Private hospitals and clinics
- Dentists
- General practitioners (GPs)
- Family planning and pregnancy services, including family planning and sexual Health clinics
- Complementary medicine, including acupuncturists, aromatherapists, homeopathy, chiropractors
- Allied Health professional services, including physiotherapy, speech and language therapy, chiropody and podiatry
- Mental Health services, including psychologists and addiction services
- Diagnostic services, including DNA testing, diagnostic imaging services and lab testing

In respect of producing this report and the use of some national data sets it is important to note that some data is only available at the combined sectoral level of Health and Social Care. Where data is presented in this combined way it is because Health-specific data is not available.

1.3 Sector Skills Councils

Sector Skills Councils (SSCs) are independent, employer-led, UK-wide organisations working in partnership with the UK Commission to create conditions for increased employer investment in skills.

Skills for Health is the Sector Skills Council (SSC) for the UK Health sector. It is an employer-led organisation covering all employers working in the sector including public, private and voluntary.

This report has been developed by the Research and Labour Market Intelligence team within Skills for Health. The SSC is engaged in an active research and labour market intelligence programme, providing authoritative data and intelligence to the sector. The outputs of these activities can be found at www.skillsforhealth.org.uk

1.4 Summary of methodology

A mix of both quantitative and qualitative methodologies has been used to complete this Sector Skills Assessment. The report has been written by the Research and LMI team within Skills for Health with contributions and quality assurance from across the organisation.

Data from national sources has been provided in standardised tables by the UKCES for all sectors. This centralised approach allows consistency and comparability of data across sectors.

This SSA draws upon a range of research studies undertaken by Skills for Health over the past five years. It represents a synthesis of recent research activities together with analysis of secondary data sources and a review of recent studies by other agencies across the sector and whole economy.

Methods used across the projects include questionnaires, structured interviews with experts and employers, statistical quantitative analysis of secondary data and forward-looking, future-orientated research which included scenario planning and the use of technology to identify areas of development in the sector.

Some of the sample sizes utilised in the research are small or confined to a defined geographical boundary. This makes generalisation of the results for some research projects more problematic, where this is the case the issues are discussed in the text of the report. More detailed information in respect of the specific methodologies used in each piece of research can be found within the methodology section.

2. Current performance of the Health sector

Chapter Summary

- Health and social work contribute just under £94 billion Gross Value Added to the UK economy; this makes it the fifth largest contributor to GVA in the UK economy.
- Health and social work contribute a greater proportion of GVA in the North East (9.8 per cent), Yorkshire and the Humber (8.4 per cent) and the North West (8.3 per cent). This reflects a greater reliance on the Health and social work sectors in these regions for employment.
- GVA as a measure of productivity defines the Health sector as a 'low productivity' sector.
- In 2010 government funding in the Health sector was £118 billion; this is forecast to increase to £133 billion by 2015. This represents a much tighter financial settlement for the NHS with year on year increases in funding falling to much lower levels than has been seen historically.
- The public spend around £15 billion on Health related products and services.
- Health spending as a proportion of GDP in the UK is less than ten per cent; this is lower than in many other developed countries including Canada (11 per cent), France (12 per cent), Germany (12 per cent) and USA (17 per cent).
- International comparisons of Health sectors show that the UK Health sector performs well in comparison to other developed countries on a range of measures related to performance. Given the lower proportion of GDP spent on Health this is taken to indicate that the UK Health sector is more efficient than the Health sectors in many other countries.
- The Health sector is geographically spread throughout the UK with the number of establishments and employees in each region broadly reflection population size.
- The Health sector has seen a steady increase in numbers of establishments since 2008, expanding by three per cent at a time when the number across all sectors was decreasing by a similar amount
- The Health sector employs just over 2 million workers which makes it the sixth largest sector in the UK economy. Employment in the sector has steadily increased since 2002; however the rate of growth has slowed since 2006 with a slight fall in overall employment numbers since 2008.

Introduction

This Chapter outlines how the UK's Health sector contributes to the UK's overall economic and social well-being. Section 2.1 outlines how the Health sector is funded and how it contributes to the UK's economic output.

As a primarily 'non-commercial' sector direct comparisons of GVA can be of limited interest when exploring the sector's performance. Some international comparisons of spending, population coverage and life expectancy are outlined to offer an indication of the sectors performance in comparison to other countries on a range of metrics.

Section 2.2 provides an outline of the sectors contribution as a major employer in the UK's economy and how employment is distributed throughout, England, Scotland, Wales and Northern Ireland.

2.1 Economic performance

The Health sector is extraordinarily complex, delivering a broad range of services from the very routine to the very complex. There are a huge number of services that are provided across the sector and the variability in respect of the skills needed in each service and the amount of time a patient may require is great.

The ability to robustly develop a single measure of performance and productivity that takes account of all relevant factors in such an environment is very challenging. Attempts to draw together measures of performance therefore combine a mixture of indicators which incorporate finance and quality measures, (NIESR, 2005). For example, capturing healthcare outcomes and patient experience in the Health sector provides complementary data on performance alongside traditional indicators of output, (ONS, 2011).

2.1.1 Cross-sectoral measures of productivity and performance

GVA as a measure of economic performance generally indicates that the Health sector is a 'low productivity sector'. This is because it is a services sector where proportionally fewer employees are engaged in the production or sale of goods on an open market. The contribution that the Health sector makes is therefore seen as more of a social good.

The UK total GVA for the Health and social work sector in 2008 was just under £94 billion, this makes it the fifth largest sector in terms of GVA in the UK. Total GVA was highest in England, followed by Scotland, Wales and Northern Ireland; this is a reflection of the way in which the delivery of Health and social care services is generally proportionate to population size.

Health and social work makes up a higher proportion of total GVA in Wales (11 per cent) followed by Northern Ireland (9.7 per cent), Scotland (9.5 per cent) and finally England (seven per cent) (see Table 2.1).

Table 2.2 illustrates that at a regional level the highest level of GVA for Health and social work is found in London (£13.7 billion) followed by the South East (£12 billion) then the North West (£10 billion). This reflects the general pattern across the whole of the UK economy with a concentration across most sectors in London and the South.

However, if we examine the contribution that Health and social work makes to the total GVA in each region we see that Health and social work makes up a higher proportion of total GVA in the North East (10 per cent), Yorkshire and the Humber (8 per cent) and the North West (8 per cent). It makes the lowest contribution to total GVA in London (6 per cent), the South East (6.per cent) and the East (7 per cent). This reflects the reliance upon employment in Health and social care sectors in the regional economies. The proportion of total GVA from Health and social care in London and the South East is suppressed by the concentration of other, high value sectors, in these regions including sectors involved in Financial services and Real estate.

Table 2.1: Gross Value Added (GVA) by broad industrial sector (2008) by nation (£m in current basic prices)

Nation	UK	England	Scotland	Wales	Northern Ireland
Broad Industrial Sector	**£m**	**£m**	**£m**	**£m**	**£m**
Agriculture, hunting, forestry & fishing	9,715	7,982	1,180	145	407
Mining and quarrying of energy producing materials	2,661	1,298	1,277	60	27
Other mining and quarrying	2,365	1,777	282	134	173
Manufacturing	150,298	124,860	13,555	7,734	4,149
Electricity, gas and water supply	21,342	17,414	2,653	729	545
Construction	80,756	68,247	7,328	2,924	2,256
Wholesale and retail trade (including motor trade)	147,158	127,900	10,441	5,166	3,651
Hotels and restaurants	36,428	30,938	3,297	1,424	770
Transport, storage and communication	91,347	80,262	7,065	2,529	1,491
Financial intermediation	116,801	104,574	8,501	2,305	1,422
Real estate, renting and business activities	303,179	268,770	20,829	8,380	5,200
Public administration and defence	63,281	51,275	6,148	3,275	2,583
Education	76,493	64,478	6,322	3,502	2,191
Health and social work	**93,775**	**76,336**	**9,851**	**4,788**	**2,800**
Other services	65,563	57,177	4,804	2,420	1,162
All sectors	1,261,162	1,083,288	103,533	45,515	28,827

Source: Regional Accounts, ONS, 2010

Table 2.2: GVA by English Region (£m in current basic prices), (2008)[2]

	North East	North West	Yorkshire & The Humber	East Midlands	West Midlands	East	London	South East	South West
	£m	£m	£m	£m	£m	£m	£m	£m	£m
Agriculture, hunting, forestry and fishing	303	777	966	996	915	1,387	86	1,168	1,383
Mining and quarrying of energy producing materials	81	90	140	130	82	164	280	270	61
Other mining and quarrying	178	142	156	379	84	132	60	202	442
Manufacturing	6,706	19,336	14,332	13,299	13,974	13,518	13,651	18,084	11,961
Electricity, gas and water supply	979	1,622	1,511	1,952	1,920	1,948	1,823	3,061	2,598
Construction	2,990	8,236	6,266	5,835	6,588	8,946	10,262	12,482	6,643
Wholesale and retail trade (including motor trade)	4,424	14,906	11,348	10,850	12,313	15,933	22,016	24,588	11,522
Hotels and restaurants	1,123	3,527	2,383	2,012	2,905	3,041	7,717	5,063	3,166
Transport, storage and communication	2,668	8,846	6,518	5,866	6,596	9,871	17,509	16,218	6,170
Financial intermediation	2,195	8,356	6,641	3,702	5,260	9,352	48,190	13,828	7,050
Real estate, renting and business activities	7,842	26,072	17,146	16,325	20,405	29,769	74,039	55,440	21,733
Public administration and defence	2,623	5,843	4,753	3,919	4,376	5,634	7,642	10,218	6,267
Education	3,156	8,008	6,302	4,877	6,541	6,725	11,972	10,861	6,036
Health and social work	**4,004**	**10,080**	**7,552**	**5,894**	**7,215**	**8,201**	**13,719**	**11,975**	**7,696**
Other services	1,715	5,174	3,459	3,314	4,583	5,577	18,190	10,551	4,615
All sectors	40,987	121,015	89,473	79,350	93,757	120,198	247,156	194,009	97,343

Source: Regional Accounts, ONS, 2010

[2] Data is not organised by SSA sector. This is because data is not available at a 2-digit (division) level. Therefore, the lists of sectors presented are those used in Regional Accounts.

The total GVA that Health and social work contribute to the UK has steadily increased from just under £51 billion in 1999 to just under £94 billion in 2008. As a proportion of total GVA per annum the contribution from Health and social work has increased from 6 per cent in 1999 to 7 per cent in 2008 (Table 2.3).

Over this period the rate of increase in investment in the Health sector from central government has been higher than at any other time in history. The demand for services found within the Health and social work sectors are also continuing to increase due to the general ageing of the population. As the population lives longer so does the demand to manage complex long-term conditions.

Table 2.3: UK GVA (£m in current basic prices), (1999-2008)[3]

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m
Agriculture, hunting, forestry and fishing	9,022	8,532	8,333	9,007	9,807	10,670	7,530	7,792	8,632	9,715
Mining and quarrying of energy producing Material	2,059	1,998	1,874	1,661	1,456	1,643	2,055	2,297	1,861	2,661
Other mining and quarrying	1,700	1,784	1,750	1,469	1,519	1,848	2,115	2,145	2,291	2,365
Manufacturing	151,157	150,009	149,223	146,308	144,845	145,689	148,110	151,455	154,726	150,298
Electricity, gas and water supply	15,703	15,798	15,660	16,052	16,405	16,106	16,685	20,279	21,884	21,342
Construction	42,236	45,626	50,526	54,684	59,522	66,029	69,868	74,619	80,675	80,756
Wholesale and retail trade (including motor trade)	99,509	103,410	110,249	113,777	120,520	127,367	129,810	135,366	141,735	147,158
Hotels and restaurants	24,146	25,605	26,928	28,639	30,120	31,870	32,902	34,594	35,962	36,428
Transport, storage and communication	64,961	69,201	70,502	73,064	76,587	79,020	80,889	83,655	88,280	91,347
Financial intermediation	48,545	44,989	48,202	63,367	71,530	75,117	79,553	90,807	103,731	116,801
Real estate, renting and business activities	173,329	188,361	204,041	214,849	232,204	248,677	260,116	276,108	296,955	303,179
Public administration and defence	39,891	41,645	43,855	46,212	49,768	53,779	58,229	60,385	61,503	63,281
Education	44,914	48,111	51,675	55,099	58,328	61,934	65,739	68,926	72,766	76,493
Health and social work	**51,577**	**55,282**	**59,549**	**64,492**	**70,593**	**75,154**	**79,965**	**85,965**	**89,381**	**93,775**
Other services	39,821	42,085	44,560	48,311	51,804	54,947	57,961	60,166	62,824	65,563
All sectors	808,570	842,436	886,927	936,991	995,008	1,049,850	1,091,527	1,154,559	1,223,206	1,261,162

Source: Regional Accounts, ONS, 2010

[3] Data is not organised by SSA sector. This is because data is not available at a 2-digit (division) level. Therefore, the list of sectors presented are those used in Regional Accounts.

Table 2.4 shows that GVA contribution per employee job by the Health sector is £27,000 for the UK. This is significantly lower than the average across the whole economy (£46,000) and reflects a number of factors including:

- The Health sector being resource intensive, utilising the skills of people rather than benefitting from a range of production activities assisted by automation as seen in other sectors.
- These employees are highly skilled, well paid, professionals.
- A high degree of variability in the needs of individual patients meaning that services have to be tailored to meet these needs.

Table 2.4: Estimated workplace gross value added per employee job at current basic prices, 2009

SSA Sector	UK	England	Wales	Scotland	Northern Ireland
	£000s	£000s	£000s	£000s	£000s
Agriculture, forestry and fishing	35	41	11	21	25
Energy production and utilities	131	134	118	127	107
Manufacturing	52	51	49	61	53
Construction, building services, engineering and planning	65	66	54	60	56
Wholesale and retail trade	33	33	27	29	27
Transportation and storage	50	51	44	50	41
Hospitality, tourism and sport	23	23	21	22	20
Information and communication technologies	83	84	72	77	63
Creative media and entertainment	45	49	30	12	38
Financial, insurance & other professional services	86	89	57	69	63
Real estate and facilities management	85	86	103	67	98
Government services	39	40	33	35	40
Education	33	33	32	36	33
Health	27	27	26	25	23
Care	30	30	28	31	26
Not within scope	32	33	27	35	30
All sectors	46	47	38	43	38

Source: UK Commission estimates based on Regional Accounts; Annual Business Survey; Business Register and Employment Survey (BRES). See technical appendix for basis for estimates.

Notes: Figures for Real estate and facilities management sector include contribution from owner-occupier imputed rental. All figures exclude Extra-Regio element. Estimates will tend to overstate the level of GVA per job in those sectors with high levels of self-employment.

The *Working Futures* model (Wilson and Homenidou, 2011) provides historic estimates of productivity (output per job) by sector on a constant price (chained volume measure) basis. This analysis indicates an average rate of productivity growth for the UK Health sector for the first half of the last decade (2000-2005) of 0.4 per cent per annum, with almost no growth in the second half. This contrasts with the average rates for the wider UK economy of 1.4 per cent and 0.7 per cent respectively. This modest rate of productivity growth has happened against a backdrop of rapid advances in medical and surgical techniques (which have enabled more patients to be treated in a shorter time span). According to *Working Futures*, increases in support staff numbers, often working part time, have depressed productivity based on output per job.

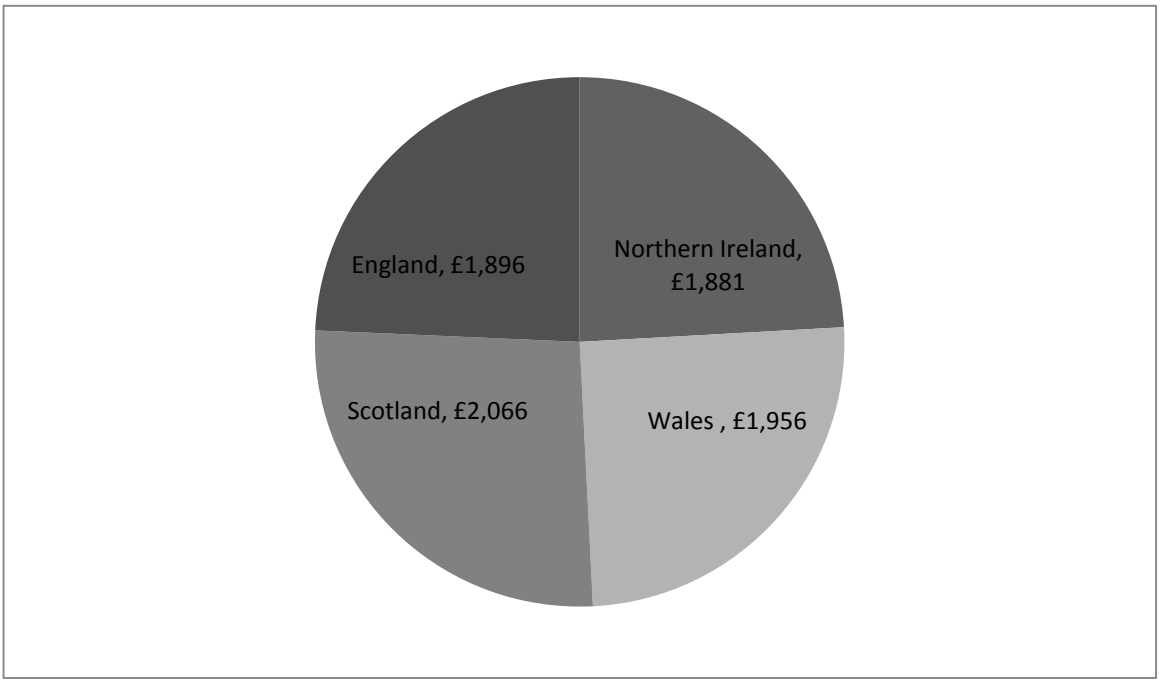
GVA as a measure of productivity and economic performance is a good cross-sectoral measure. However because of the way in which the Health sector is funded and the way in which Health-related activity can fall within other sectors (e.g. retail pharmacy) it is useful to examine other ways in which the performance of the sector can be measured.

2.2 Trends in government and private sector investment

The UK Health sector is heavily funded by central government. In 2010 government funding on the sector totalled £118 billion; it is however important to recognise that despite this large government investment the contribution of the independent Healthcare sector is significant.

Chart 1 demonstrates that the average spend per person by government on Health in each of the UK nations. The figure shows that Northern Ireland receives the lowest amount whilst Scotland receives the highest. The reasons for the differing amounts spent per person on Health in each nation is complex but is linked to factors such as the prevalence of ill Health, rural geographies and differing Health policy in each nation.

Chart 1: Planned spend per person on Health in each of the nations



Source: www.hm-treasury.gov.uk

In addition to the government funding of the NHS there are a range of products and services that are sold within the independent Health sector, all of which make a positive contribution to the Gross Domestic Product (GDP) of UKPLC. Table 2.5 shows that in 2010-11 Laing and Buisson estimate that the independent Healthcare and related sectors are worth an estimated £31 billion. The table below is not directly comparable with the skills for Health footprint of SIC 86 as it contains services that would fall under the remit of both Health and social care.

Table 2.5: Value of the independent Health and social care sector (2010-11)

Sub-Sector	Value (£ millions)
Hospital Sector	7,186
Long term (social) care of elderly and physically disabled people	17,172
Long term (social) care of mentally ill people	721
Long term (social) care of people with learning disabilities	2,311
Primary Care Services	1,371
Dentistry	2,398
Total	**31,005**

Source: Laing's Healthcare Market Review 2010-11, p.37

Furthermore it is estimated that individuals across the UK spend an estimated £1.5 billion on private medical insurance. This enables them to access a range of services from independent sector providers including dentistry, diagnostic testing and hospital care.

There are also a range of goods and services that are Health related that consumers across the UK purchase outside of the NHS and insurance system. Table 2.6 provides a breakdown of this spending and shows that it in 2010 this was estimated to be worth almost £15 billion.

Table 2.6: Breakdown of UK household expenditure on Health services and products

	2007 £million	2008 £million	2009 £million	2010 £million	% change 2009 - 2010	% Change 2007-2010
Medical Goods						
Pharmaceutical products	4,292	4,267	4,347	4,417	2%	3%
Other medical products	464	498	524	483	-8%	4%
Therapeutic appliances and equipment	3,000	3,034	3,124	2,932	-6%	-2%
Sub-Total	4,456	7,799	7,995	7,832	-2%	76%
Out-patient Services						
Medical services	1,681	1,526	1,667	1,746	5%	4%
Dental services	2,025	1,626	1,591	1,735	9%	-14%
Pharmaceutical services	515	485	529	495	-6%	-4%
Sub-Total	4,226	3,639	3,787	3,976	5%	-6%
Hospital Services	2,849	2,796	2,929	2,771	-5%	-3%
Total	14,883	14,234	14,711	14,579	-1%	-2%

Source: Consumer Trends, ONS, Q3 2011

The breakdown of UK household expenditure does begin to demonstrate the squeeze on spending on Health services and products that are likely to continue in the medium term with an annual decrease in spending on medical goods and hospital services between 2009 and 2010.

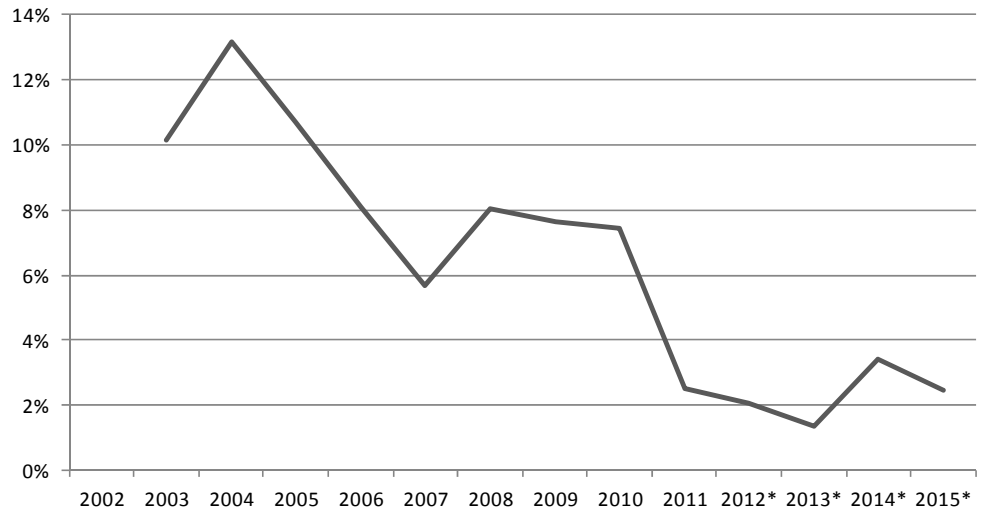
Other commentators on the Health sector have also observed these patterns. Private spending as a proportion of all spend on dental treatment has fallen; the increased capacity created in NHS services since 2004 and the recession are cited as reasons for this (Laing and Buisson, 2011a). Spending on private medical insurance has also decreased; these falls have been from both individual and company-funded private medical cover (Laing and Buisson, 2010).

The continued difficulties across the UK in reducing the deficit will mean that the high year-on-year increases in Health spending by central and local government will not continue and the lower settlements seen in recent budget announcements are likely to remain, at least for the medium term.

Chart 2 provides an examination of the annual rate of growth between 2002 and 2015; it illustrates the slowdown in investment more clearly with the annual percentage increase dropping from a high of 13 per cent in 2004 to an estimated low of one per cent in 2013 before increasing slowly to between two and three per cent in the years that follow.

The impact of this constraint on investment will mean that organisations within the public sector will be required to make significant efficiency savings whilst coping with increased demand and inflationary cost pressures.

Chart 2: Percentage year-on-year increase in government funding on Healthcare 2002 – 2015



Source: www.ukpublicspending.co.uk

** figures for these years are estimates based upon Public Expenditure Statistical Analysis (PESA) function or sub-function data published by HM Treasury*

The constraint in investment could also create difficulties for independent sector organisations as during recent years they have provided NHS services in order to expand capacity in the sector. It is likely that in some areas the public sector may begin to 'sweat' its assets more by directing demand to NHS services. This may put pressure on specialist independent Healthcare sector providers. Whilst the proposed new government policy in England, Equality and Excellence: Liberating the NHS (Department of Health, 2010), supports an 'any willing provider' approach, tighter NHS settlements will demand that all providers are able to demonstrate best value and best quality in order to deliver NHS services.

Pressures within the sector will include demand from an ageing population, increased incidence of ill Health through lifestyle factors such as obesity, alcohol consumption and smoking, whilst inflationary cost pressures will include the provision of more expensive drugs or treatments that improve patient outcomes. Since workforce costs account for over 70 per cent of spending in the sector, workforce development and redesign should be a central feature of attempts to transform services.

2.3 International comparisons of Health sector performance

Some commentators have focused on international comparisons of Health systems to identify 'high performance'. There are many differing models of Healthcare delivery throughout the world and this can make international comparisons difficult, however, the studies that are available draw together a range of measures that are important indicators of performance together with financial information.

In 2009 government expenditure accounted for over 80 per cent of the total expenditure on Health in the UK, this means that 20 per cent of the expenditure on Health in the UK came from spend in the independent sector through consumer spending either on goods and services or on private medical insurance. The UK spend on Health as a percentage of GDP is just under 10 per cent, this is less than other countries including USA (17 per cent), France (12 per cent), Germany (12 per cent) and Canada (11 per cent) (see Table A1 in the Technical Appendix).

This economic data can be further supplemented with Health outcome data from Organization for Economic Cooperation and Development (OECD) and the World Health Organisation (WHO). If we contrast the economic data with an international comparison of a range of Health related measures such as life expectancy, Healthy years life expectancy, infant mortality and adult mortality it is clear that the UK is performing comparatively well in respect of providing universal coverage of Health to the UK population and maintaining outcomes in many areas that are equal to, or better than countries that are spending greater proportions of GDP on Health (see Table A2 in the Technical Appendix).

In 2010 The Commonwealth Fund compared the performance of seven countries on a range of measures related to quality and performance. The results of this study are contained within Figure 1 and they show that the UK ranked second out of the seven countries overall. This indicates that the performance of the UK Health sector in comparison to the systems in other countries fares well.

The UK scored particularly well in relation to measures on overall efficiency, equity, cost not being a barrier to access and effective, safe and coordinated care. The areas which the analysis identifies could be improved in the UK relate to patient-centred care, timeliness of care and the population living long, healthy and productive lives. These areas perhaps highlight the continued need to perform better in relation to tackling health inequalities, reduce waiting times and to have health system processes that put the patient at the heart of delivery and decisions.

Figure 1: Commonwealth fund overall ranking of international Health systems

	Australia	Canada	Germany	Netherlands	New Zealand	UK	US
OVERALL RANKING (2010)	**3**	**6**	**4**	**1**	**5**	**2**	**7**
Quality Care	**4**	**7**	**5**	**2**	**1**	**3**	**6**
Effective Care	2	7	6	3	5	1	4
Safe Care	6	5	3	1	4	2	7
Coordinated Care	4	5	7	2	1	3	6
Patient Centred Care	2	5	3	6	1	7	4
Access	**6.5**	**5**	**3**	**1**	**4**	**2**	**6.5**
Cost-Related Problem	6	3.5	3.5	2	5	1	7
Timeliness of Care	6	7	2	1	3	4	5
Efficiency	**2**	**6**	**5**	**3**	**4**	**1**	**7**
Equity	**4**	**5**	**3**	**1**	**6**	**2**	**7**
Long, Healthy, Productive Lives	**1**	**2**	**3**	**4**	**5**	**6**	**7**
Health Expenditure/Capita, 2007	$3,357	$3,895	$3,588	$3,837 *	$2,454	$2,992	$7,290

Source: Calculated by The Commonwealth Fund based on 2007 International Health Policy Survey; 2008 International Health Policy Survey of Sicker Adults; 2009 International Health Policy Survey of Primary Care Physicians; Commonwealth Fund Commission on a High Performance Health System National Scorecard; and Organization for Economic Cooperation and Development, OECD Health Data, 2009 (Paris: OECD, Nov. 2009)

*Note: * Estimate. Expenditures shown in $US PPP (purchasing power parity)*

A different study of NHS performance (Thorlby et al, 2010) looked at a similar range of measures in order to define those that would indicate a 'high-performing Health system'. The measurement of progress against these measures was then made. This study concluded that:

> Since 1997 there has been considerable progress in moving the NHS towards becoming a high-performing Health system. The NHS has taken big strides forward in setting standards for high-quality, safe care based on the best available evidence and measuring improvements from patients' perspectives…..
>
> But the review has also found evidence that the NHS has some way to go before it can be considered comprehensively high performing.

It should also be noted that the Health sector is adding value to all sectors of the economy through maintaining the Health of the UK population, including the workforce within all sectors of the economy. In 2010 workplace absence was estimated to cost the UK economy £17 billion (CBI, 2011). It is clear therefore that the Health sector has a vital role to play in assisting the whole economy in reducing these costs by enabling those with long term sickness to return to work as quickly as possible.

2.4 Employer Profile

The Health sector is geographically spread across the UK with the number of establishments broadly reflecting population size. This is due to the way in which the NHS has sought to provide services which are free at the point of delivery to the entire population of the UK.

There are some areas of the UK where rurality and population spread mean that delivering this vision is a particular challenge. There are very rural areas of the UK where in order to access the full range of Health services available individuals have to travel great distances and services are delivered on a ‘visiting’ arrangement on set days or times. There are areas of remote Scotland where patients live an average of 130 miles away from their nearest district general hospital (British Medical Association, 2005).

Establishments within the heath sector represent approximately two per cent of all establishments across the UK. This proportion remains consistent across all of the UK nations. This reflects the consistent presence of the Health sector in all parts of the UK (See Table 2.7).

Table 2.7: Number of establishments by sector and nation (2010)

	UK		England		Scotland		Wales		Northern Ireland	
	Number	%	Number	%	Number	%	Number	%	Number	%
Agriculture, forestry and fishing	144,895	6%	96,770	4%	17,625	9%	14,210	13%	16,290	19%
Energy production and utilities	13,290	1%	10,365	0%	1,495	1%	865	1%	565	1%
Manufacturing	144,115	6%	124,235	6%	9,395	5%	6,040	5%	4,445	5%
Construction, building services, engineering and planning	358,455	14%	303,300	14%	27,845	14%	14,280	13%	13,030	15%
Wholesale and retail trade	509,215	20%	431,330	20%	38,165	20%	23,000	20%	16,720	20%
Transportation and storage	83,825	3%	70,685	3%	6,370	3%	3,925	3%	2,845	3%
Hospitality, tourism and sport	223,370	9%	185,390	8%	20,515	11%	11,580	10%	5,885	7%
Information and communication technologies	131,065	5%	120,095	5%	6,610	3%	3,130	3%	1,230	1%
Creative media and entertainment	134,115	5%	121,900	6%	6,830	4%	3,640	3%	1,745	2%
Financial, insurance & other professional services	255,000	10%	228,725	10%	14,770	8%	7,160	6%	4,345	5%
Real estate and facilities management	149,325	6%	129,340	6%	10,610	5%	5,730	5%	3,645	4%
Government services	52,210	2%	40,870	2%	5,625	3%	2,985	3%	2,730	3%
Education	67,125	3%	55,020	3%	5,535	3%	3,250	3%	3,320	4%
Health	55,135	2%	46,925	2%	3,895	2%	2,515	2%	1,800	2%
Care	85,935	3%	70,460	3%	7,810	4%	4,710	4%	2,955	4%
All economy	2,574,230	100 %	2,183,845	100 %	193,305	100 %	112,810	100 %	84,270	100 %

Source: Inter-departmental Business Register (IDBR), ONS

Table 2.8: Number of establishments by sector and English region (2010)

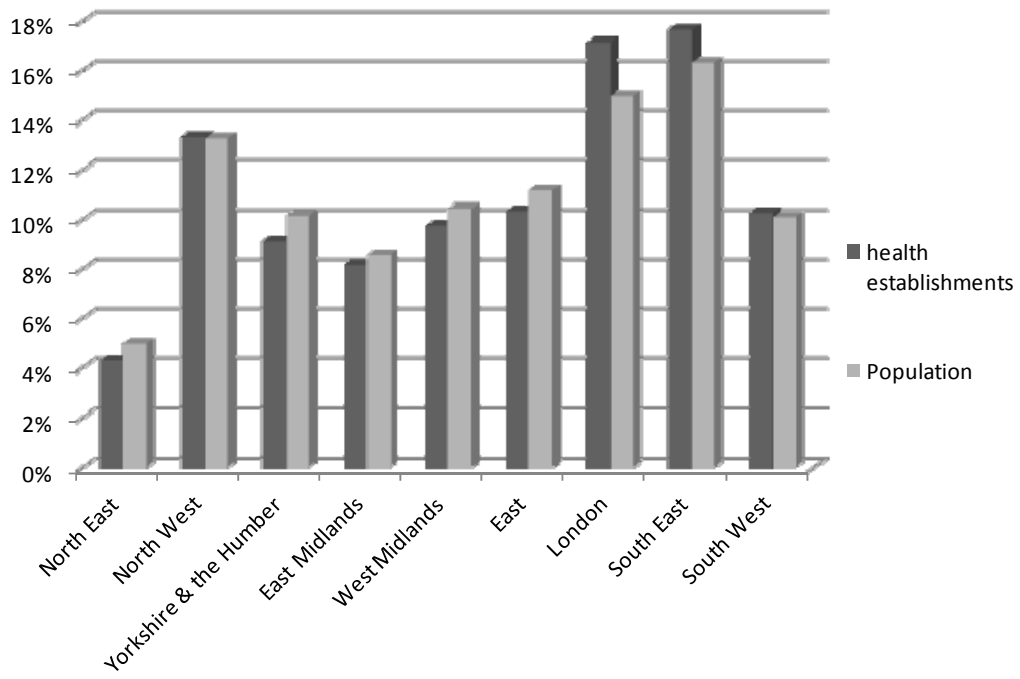
	North East	North West	Yorkshire and The Humber	East Midlands	West Midlands	East	London	South East	South West
Agriculture, forestry and fishing	3,870	11,305	11,205	10,770	11,880	12,170	935	11,785	22,850
Energy production and utilities	475	1,460	1,155	1,025	1,065	1,320	950	1,605	1,310
Manufacturing	4,650	15,950	13,100	12,915	15,930	15,235	13,350	20,025	13,080
Construction, building services, engineering and planning	10,845	35,520	26,035	24,975	28,750	41,485	42,520	58,785	34,385
Wholesale and retail trade	16,630	55,955	41,975	36,895	45,695	48,635	67,620	71,850	46,075
Transportation and storage	2,610	8,775	7,270	6,830	7,930	9,305	9,190	11,570	7,205
Hospitality, tourism and sport	8,395	23,095	17,600	14,030	16,700	19,290	32,470	31,885	21,925
Information and communication technologies	2,325	10,885	6,685	6,900	9,260	14,735	29,655	28,805	10,845
Creative media and entertainment	2,660	10,035	6,735	6,215	7,425	12,210	43,255	22,760	10,605
Financial, insurance & other professional services	5,440	23,475	14,900	14,950	18,300	23,850	61,915	45,495	20,400
Real estate and facilities management	4,185	14,800	10,225	9,390	11,925	15,045	27,475	22,980	13,315
Government services	1,815	4,810	4,260	4,270	4,040	4,215	6,495	6,340	4,625
Education	2,495	6,890	4,965	4,810	5,465	6,330	8,215	9,925	5,925
Health	2,010	6,255	4,265	3,830	4,570	4,850	8,045	8,280	4,820
Care	3,575	9,340	6,950	6,110	6,940	7,210	10,725	11,700	7,910
Whole economy	75,975	255,705	187,810	174,700	210,065	253,120	392,540	394,505	239,425

Source: Inter-departmental Business Register (IDBR), ONS

At a regional level the number of Health sector establishments ranges from 2,010 in the North East to 8,280 in the South East (Table 2.9).

The proportion of the total number of establishments in England in each region is broadly consistent with the population in that region. The exception to this is London and the South East where there are proportionally more establishments than you would expect given the population (Chart 3).

Chart 3: Distribution of Health sector establishments and population, English regions (2010)



Source: Inter-departmental Business Register (IDBR), ONS and 2010 Mid-Year population Estimates England and Wales, ONS

The higher number of establishments in London and the South East in comparison to the population can be accounted for by the larger presence of the independent sector in these regions (see Table 2.9). This is driven by more prosperous consumers in these regions who are willing to pay for private Healthcare and a propensity for large independent sector organisations to base their headquarters in London and the surrounding areas.

At a national level we can also see that Scotland has a higher proportion of publicly funded Health sector organisations than independent Health sector organisations. This lower presence of the independent sector in Scotland is driven by a policy context that encourages the use of the NHS as the main provider of Health care in the country. This is different to England and Wales that have expanded choice in the sector through the provision of NHS services by independent Health sector providers.

Table 2.9: Geographic distribution of the Independent sector and the NHS

	Independent health sector	public health sector (NHS)
North East	3%	5%
North West	11%	13%
Yorkshire & Humberside	8%	9%
East Midlands	8%	7%
West Midlands	8%	8%
Eastern	9%	9%
London	12%	10%
South East	17%	12%
South West	9%	8%
Scotland	7%	10%
Wales	5%	5%
Northern Ireland	3%	3%
UK	100%	100%

Source Labour Force Survey 2010, ONS

Expansion in the number of establishments in the sector is a result of growth in the independent Health sector; they are often smaller organisations and therefore the creation, merger and closure of them can be more dynamic in nature. During times of economic prosperity there has been an increase in the willingness of consumers to pay for goods and services in the independent Health sector and as such the number of establishments has expanded to meet consumer demand. There has been a growth in the number of people who will seek the services of independent sector therapists such as chiropractors and physiotherapists in order to perhaps address pain and to stay well. The challenge will be if this demand remains during more economically difficult times and if consumers continue to prioritise their spending on these services.

Table 2.10 shows that the number of establishments in the Health sector has more than doubled between 2006 and 2010, increasing from just under 26,000 in 2006 to just over 55,000 in 2010. It must be noted however that there was an increase of over 27,000 establishments in 2008 which may be the result of the change in classification from SIC 2003 to SIC 2007 rather than a significant increase in the number of establishments in 2008. It is therefore more valid to look at the change in the numbers from 2008 – 2010.

Over this shorter period of time the number of Health sector establishments is estimated to have increased by just over 1,800, which equates to a 3.4 per cent increase. During this same period the number of establishments across all of the sectors decreased by 2.6 per cent.

Table 2.10: Number of establishments by sector 2006-2010 (UK)

	2006	2007	2008	2009	2010	% Change 2006-2010
Agriculture, forestry and fishing	146,485	158,080	163,715	146,620	144,895	-1%
Energy production and utilities	18,170	18,260	11,435	12,980	13,290	-27%
Manufacturing	165,675	163,525	167,335	151,165	144,115	-13%
Construction, building services, engineering and planning	230,610	240,535	258,055	374,320	358,455	55%
Wholesale and retail trade	533,105	532,905	532,060	520,070	509,215	-4%
Transportation and storage	70,425	70,750	71,665	86,680	83,825	19%
Hospitality, tourism and sport	219,770	222,920	227,430	229,690	223,370	2%
Information and communication technologies	136,395	140,505	144,080	134,805	131,065	-4%
Creative media and entertainment	125,100	130,185	131,180	132,225	134,115	7%
Financial, insurance & other professional services	271,310	283,920	287,015	256,915	255,000	-6%
Real estate and facilities management	180,305	191,195	201,915	155,855	149,325	-17%
Government services	159,395	164,690	54,875	52,060	52,210	-67%
Education	28,935	28,880	66,055	66,725	67,125	132%
Health	25,860	25,810	53,300	53,900	55,135	113%
Care	40,150	40,075	82,755	83,675	85,935	114%
All economy	2,533,855	2,600,065	2,643,215	2,634,790	2,574,230	2%

Source: Inter-departmental Business Register (IDBR), ONS

Note: Data for 2006-2008 is based on SIC 2003 whereas data beyond this use SIC 2007. Some of the data for 2006-2008 is based on estimates. For full details please see technical appendix.

The Health sector has a high proportion of establishments with more than 50 employees compared to other sectors and the all-economy average. This is a reflection of how employment numbers are concentrated in organisations such as hospitals that are very large. However, 80 per cent of organisations within the sector employ less than 24 people and 55 per cent employ less than 9 people. These smaller organisations will predominantly be in the independent sector, or smaller organisations such as GPs and dentists that are independent but provide contracted services to the NHS (Table 2.11).

Table 2.11: Size of establishments by sector (UK) (2010)

	Number of employees						
	2-4	5-9	10-24	25-49	50-250	251+	All
	%	%	%	%	%	%	Number
Agriculture, forestry and fishing	80	14	5	1	0	0	97,910
Energy production and utilities	36	22	20	10	10	2	10,265
Manufacturing	43	22	18	8	8	1	108,050
Construction, building services, engineering and planning	67	18	10	3	2	0	211,710
Wholesale and retail trade	49	27	16	4	3	1	385,760
Transportation and storage	48	20	16	7	8	1	52,620
Hospitality, tourism and sport	42	30	19	6	3	0	198,630
Information and communication technologies	68	15	10	4	3	1	56,710
Creative media and entertainment	66	17	10	4	3	0	62,305
Financial, insurance & other professional services	57	21	14	4	3	1	134,900
Real estate and facilities management	62	21	11	3	3	1	95,270
Government services	34	21	20	10	12	4	41,505
Education	20	14	20	23	21	2	56,740
Health	31	24	25	10	7	2	47,570
Care	26	24	28	13	8	0	75,725
All economy	52	22	15	6	4	1	1,742,370

Source: Inter-departmental Business Register (IDBR), ONS

Table 2.12 and Table 2.13 show that at a national level, across the whole economy, the profile of organisations by employee size is very similar, with approximately 50 per cent of all establishments having between 2-4 employees and one per cent of all establishments having over 250 employees.

Table 2.12: Size of establishments within sector by nation (2010)

	England		Scotland		Wales		Northern Ireland	
	Number	%	Number	%	Number	%	Number	%
2-4	35,215	68	1,770	63	1,060	71	440	62
5-9	7,685	15	470	17	230	15	110	15
10-24	5,040	10	325	12	125	8	80	11
25-49	1,820	4	120	4	35	2	45	6
50-250	1,590	3	100	4	30	2	25	3
251+	345	1	20	1	15	1	15	2
Total	51,695	100	2,805	100	1,495	100	715	100

Source: Inter-departmental Business Register (IDBR), ONS

Data has been rounded to the nearest 5 and may not sum to totals due to rounding.

Table 2.13: Size of establishment by nation, whole economy (2010)

	England		Scotland		Wales		Northern Ireland	
	Number	%	Number	%	Number	%	Number	%
2-4	767,415	52	66,560	48	44,675	54	30,175	52
5-9	323,815	22	33,775	24	18,005	22	13,395	23
10-24	215,295	15	23,090	17	11,910	14	9,175	16
25-49	82,055	6	8,330	6	4,170	5	3,265	6
50-250	63,865	4	6,405	5	3,130	4	2,145	4
251+	9,915	1	1,030	1	505	1	270	0
Total	1,462,360	100	139,190	100	82,395	100	58,425	100

Source: Inter-departmental Business Register (IDBR), ONS

Within the Health sector the profile of organisations by employee size varies in each nation. Northern Ireland and Scotland have the highest proportion of organisations with 50 or more employees (14 per cent and 13 per cent of all establishments respectively); whilst England and Wales have a higher proportion of establishments with 2-4 employees (33 per cent and 30 per cent of all establishments respectively) (see Table 2.14).

Table 2.14: Size of establishment by nation, Health sector (2010)

	England		Scotland		Wales		Northern Ireland	
	Number	%	Number	%	Number	%	Number	%
2-4	13,025	33	820	23	670	30	400	24
5-9	9,505	24	955	27	555	25	480	28
10-24	10,085	25	1,010	28	615	27	365	22
25-49	4,215	11	320	9	210	9	215	13
50-250	2,610	7	355	10	140	6	195	12
251+	620	2	115	3	50	2	40	2
Total	40,060	100	3,575	100	2,240	100	1,695	100

Source: Inter-departmental Business Register (IDBR), ONS

An examination of start-ups and closures in 2009 shows that the number of establishments within the Health sector is expanding, with start-ups exceeding the number of closures by over 1,000 (Table 2.15). Across the UK there were 236,025 business start-ups in 2009 and 277,618 business closures, creating a balance of 41,593 more closures than start-ups. In 2009, there were more business closures than start-ups in each nation of the UK and in every English region.

Table 2.15: Business (enterprise) start-ups and closures 2009 (UK)

Sector	Start-ups	Closures
	Number	Number
Agriculture, forestry and fishing (SIC 75 only)	285	190
Energy production and utilities	1270	408
Manufacturing	10570	15445
Construction, building services, engineering and planning	35835	51040
Wholesale and retail trade	38760	47090
Transportation and storage	6980	10805
Hospitality, tourism and sport	23345	28030
Information and communication technologies	16120	19935
Creative media and entertainment	24290	20805
Financial, insurance & other professional services	25640	25765
Real estate and facilities management	12805	16275
Government services (SIC 94 only)	1010	1260
Education	3485	3160
Health	4135	3110
Care	2745	2165
Other sectors	28750	32135
All economy	**236,025**	**277,618**

Source: Business Demography – Enterprise Births, Deaths and Survivals 2009 (ONS)

The number of start-ups and closures can provide a picture of how a sector responds to market forces. There is a possibility that the move to 'any willing provider' within the NHS in England may increase the number of start-ups and closures within the Health sector. The potential increased use of the independent sector that this policy could bring may act to make the creation, mergers and closures of organisation in the sector more dynamic and linked to faster pace of change in consumer and service needs.

2.5 Employment

Employment numbers in the sector are high and they have been on a steady upwards trajectory for many years, driven primarily through increased central government funding in the NHS but also by the expansion of the independent Health sector as increasing numbers of consumers purchase health-related goods and services. Recent figures, however, suggest that employment numbers are now stagnating and even reducing slightly

It is envisaged that employment in the sector will decrease in the medium term. This is likely to be a result of lower consumer spending on the independent sector resulting from the recession coupled with tighter public spending and efficiency savings being made in the NHS.

The Health sector employs an estimated 2.1 million workers which accounts for approximately seven per cent of the UK's total employment. This makes it the sixth largest sector in terms of employment across the UK. The universal nature of Health service delivery means that employment within the Health sector is geographically distributed across the UK, often reflecting levels of population density in any given area. At a national level the Health sector makes up between seven per cent (in England) and eight per cent (in Scotland, Wales and Northern Ireland) of total employment (Table 2.16).

Table 2.16: Total employment by sector and nation (2010) (000s)

	UK		England		Scotland		Wales		Northern Ireland	
	000s	%	000s	%	000s	%	000s	%	000s	%
Agriculture, forestry and fishing	406	100	296	73	51	13	31	8	27	7
Energy production and utilities	473	100	346	73	88	19	25	5	14	3
Manufacturing	2,970	100	2,542	86	199	7	138	5	91	3
Construction, building services, engineering and planning	2,697	100	2,270	84	244	9	113	4	71	3
Wholesale and retail trade	4,140	100	3,471	84	353	9	205	5	112	3
Transportation and storage	1,448	100	1,252	86	117	8	46	3	33	2
Hospitality, tourism and sport	2,046	100	1,704	83	198	10	100	5	44	2
Information and communication technologies	761	100	675	89	56	7	18	2	13	2
Creative media and entertainment	987	100	876	89	65	7	32	3	14	1
Financial, insurance & other professional services	2,001	100	1,768	88	138	7	53	3	41	2
Real estate and facilities management	978	100	848	87	75	8	38	4	18	2
Government services	2,209	100	1,835	83	173	8	111	5	89	4
Education	3,088	100	2,625	85	235	8	154	5	75	2
Health	2,087	100	1,713	82	199	10	111	5	64	3
Care	1,729	100	1,409	81	183	11	97	6	40	2
Whole Economy	28,855	100	24,331	84	2,446	8	1,312	5	766	3
Unweighted bases	*194.448*	100	*161.501*	83	*17.022*	9	*8.693*	4	*7.232*	4

Source: Labour Force Survey 2010, ONS

Analysis at a regional level shows the reliance of any given sector for employment within the region. Table 2.17 shows that the proportion of total employment within the Health sector is fairly consistent at between 6 per cent and 8 per cent of total employment. This analysis shows that London and East of England have a slightly lower reliance on the Health sector for employment than Yorkshire and the Humber, the North West and North East. The reason for the lower reliance on the Health sector for employment in London relates to the way in which the UK economy is concentrated in this region, as we have seen when examining GVA, other sectors such as Financial Services are heavily concentrated in London compared to the rest of the UK.

Table 2.17: Total employment by sector and English region, % share within region (2010)

	London	South East	East of England	South West	West Midlands	East Midlands	Yorkshire and the Humber	North West	North East
Agriculture, forestry and fishing	*	1	1	3	2	2	1	1	1
Energy production and utilities	1	2	1	2	2	2	1	2	2
Manufacturing	4	9	11	11	14	15	12	12	11
Construction, building services, engineering and planning	9	10	10	9	9	9	9	9	9
Wholesale and retail trade	12	14	14	14	14	16	16	16	15
Transportation and storage	5	5	5	4	5	6	5	5	4
Hospitality, tourism and sport	8	7	6	7	7	7	7	7	7
Information and communication technologies	3	4	3	3	2	2	2	2	2
Creative media and entertainment	8	4	3	3	2	2	2	2	2
Financial, insurance & other professional services	13	8	8	6	6	5	6	6	4
Real estate and facilities management	5	4	3	4	3	3	3	4	3
Government services	8	8	7	7	7	7	8	8	9
Education	10	11	11	11	11	11	11	10	11
Health	6	7	6	7	7	7	8	8	8
Care	5	5	5	6	6	5	6	6	8
Whole Economy	3	3	3	3	3	3	3	3	3
Weighted base	100	100	100	100	100	100	100	100	100
Unweighted bases	*18.925*	*26.614*	*18.998*	*17.015*	*16.534*	*15.044*	*17.467*	*22.418*	*8.486*

Source: Labour Force Survey 2010, ONS

** Sample size too small for reliable estimate*

The Health sector experienced significant growth between 2002 and 2010, increasing from 1.8 million employees in 2002 to almost 2.1 million by 2010. Total employment increased by 15 per cent over this period compared to a growth of 3.4 per cent in the whole economy. This was driven largely by increased investment in the NHS, and an increase in prosperous consumers purchasing goods and services from the independent Healthcare sector (Table 2.18).

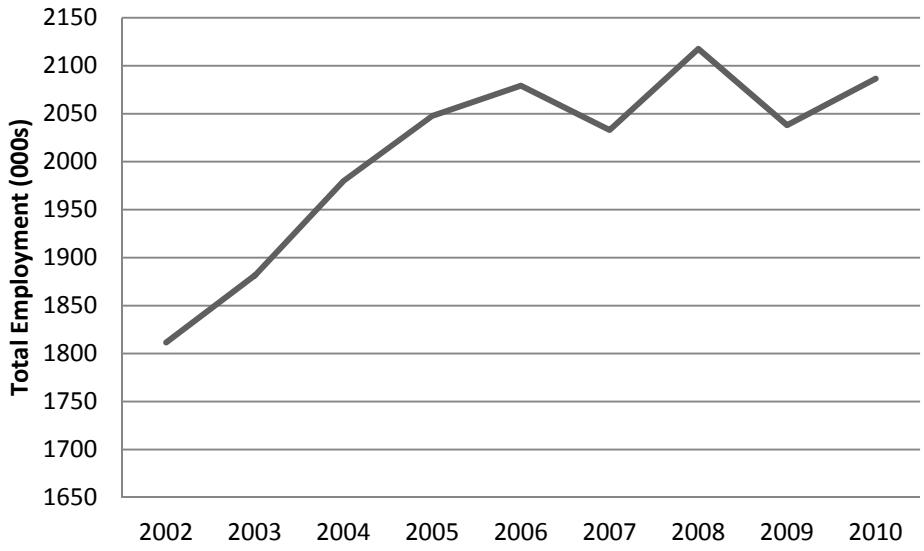
Table 2.18: Total employment by sector 2002 – 2010 (UK) (000s)

	2002	2003	2004	2005	2006	2007	2008	2009	2010
	000s	000s	000s	000s	000s	000s	000s	000s	000s
Agriculture, forestry and fishing	394	389	396	421	417	422	448	364	406
Energy production and utilities	434	389	407	422	436	479	486	483	473
Manufacturing	4,153	3,870	3,687	3,615	3,562	3,575	3,368	2,915	2,970
Construction, building services, engineering and planning	2,223	2,333	2,434	2,500	2,560	2,615	2,639	2,875	2,697
Wholesale and retail trade	4,368	4,545	4,536	4,489	4,404	4,349	4,446	4,143	4,140
Transportation and storage	1,486	1,485	1,461	1,511	1,501	1,490	1,517	1,489	1,448
Hospitality, tourism and sport	1,718	1,720	1,730	1,714	1,773	1,807	1,799	1,991	2,046
Information and communication technologies	813	813	839	832	835	851	871	784	761
Creative media and entertainment	1,102	1,139	1,108	1,111	1,138	1,142	1,156	975	987
Financial, insurance & other professional services	1,671	1,662	1,623	1,677	1,696	1,744	1,736	2,038	2,001
Real estate and facilities management	898	869	924	946	984	1,036	1,028	948	978
Government services	2,115	2,166	2,194	2,251	2,282	2,285	2,323	2,265	2,209
Education	2,295	2,414	2,543	2,580	2,642	2,636	2,664	2,939	3,088
Health	1,811	1,881	1,980	2,048	2,079	2,033	2,118	2,038	2,087
Care	1,288	1,338	1,408	1,456	1,479	1,446	1,506	1,721	1,729
Whole Economy	27,908	28,172	28,456	28,740	28,987	29,164	29,382	28,811	28,855
Unweighted base	*247.273*	*238.005*	*230.951*	*227.794*	*222.196*	*221.046*	*217.000*	*203.221*	*194.448*

Source: Labour Force Survey 2010, ONS

It can also be seen that there has been much slower growth since 2006, with a slight fall in overall employment since 2008; this is due to slower growth in government investment in the NHS (Chart 4).

Chart 4: Total Employment in the Health sector 2002-2010 (UK)



Source: Labour Force Survey 2010, ONS

It is anticipated that in the medium term employment across the sector will continue to reduce slightly as a result of the need for the sector to improve productivity and realise efficiency savings. This will be driven by pressure on income for all parts of the sector with tighter public funding affecting the NHS, the voluntary sector being challenged by tighter local government funding and consumer spending impacting on the independent Health sector.

Conclusion

The overall contribution that Health and social care make to the GVA of the UK is considerable. It fairs less well when comparisons at the GVA per person employed level are benchmarked. The UK's Health sector is however predominantly non-commercial in its focus. As a result, universal measures of productivity such as GVA are of limited value given their strong focus on output versus inputs. Additional intelligence on quality and coverage is therefore necessary in order to understand the sectors performance.

International comparisons of Health sectors suggest that the sector is offering good value to the UK population. This is borne out also by historically high levels of satisfaction with the UKs Health service. Going forward the sector will be challenged to raise its productivity and quality in the context of constrained resources, it is unlikely however that these changes will create any marked shift in benchmarking measures such as GVA.

In terms of employment, the sector is beginning to experience some shrinkage in the number of employees. This is a result of the joint pressures of reduced public spending in the sector and reduced spending amongst consumers. This static picture of employment is likely to remain in the near future. However, as later sections highlight the sector is undergoing significant structural change and the workforce will be a key element of that change.

3. The workforce

Chapter Summary

- There are over 300 different careers in the Health sector, many of which are highly specialised in nature
- Higher rates of part-time working are seen in the Health sector with 34 per cent of the sector working part-time compared to 27 per cent in the whole economy
- A smaller number of workers are self-employed (seven per cent) compared to the whole economy average (14 per cent)
- The sector has a tendency toward the employment of people on permanent contracts (92 per cent) compared to the whole economy average (86 per cent)
- The Health sector is highly feminised with 78 per cent of the workforce being female. 46 per cent of the whole economy are female
- The Health sector is older than the whole economy with 45 per cent of the workforce being aged 45 and over

Introduction

This chapter highlights the characteristics of the Health sector workforce including an examination of the roles that are undertaken, the working patterns in the sector and a range of demographic indicators.

Section 3.1 provides an overview of the range of jobs available in the Health sector. Including the identification of those that are most prevalent.

Section 3.2 examines the extent to which the sector provides flexible and part-time working opportunities. It also explores the reasons for why there are relatively few people in self-employment in the sector and the prevalence of permanent employment in the sector.

Section 3.3 studies the characteristics of the Health sectors workforce in terms of gender, age and ethnicity.

3.1 The jobs people do

With over two million people working in the Health sector it is no surprise that there are a variety of roles that are available across a range of different employers and businesses.

There are estimated to be over 300 different careers within the sector (NHS Careers). However, the number of different roles available is far greater than this. Roles within the sector are specialist in nature and require specialist training. Even within small occupational groups there are sub-specialties where further study is required to undertake roles i.e. for many staff groups there are differing qualification paths for working within paediatrics. Specialists providing services to children will rarely be responsible for providing clinical care to adults. This is all underpinned by regulation, patient safety and best practice.

Before analysis of core national datasets it is useful to outline some of the different types of careers that are available in the Health sector. Clinical staff providing direct patient care make up the majority of employees in the sector. However there are a range of non-clinical support roles that support the everyday business of employers.

Clinical roles with direct patient contact include:

- Doctors (including GPs, hospital doctors, consultants, surgeons, anaesthetists etc.).
- Dentists.
- Pharmacists.
- Nurses, Health visitors and midwives.
- Therapists (including physiotherapists, occupational therapists, speech and language therapists etc.).
- Paramedics.
- Clinical support workers (including Health care assistants, therapy assistants, nursing assistants, phlebotomists etc.).

There are a large number of clinical skilled roles that do not have direct patient contact but provide important skills to the sector in diagnosing and reporting on clinical tests. These roles include:

- Biomedical scientists.
- Microbiologists.

- Laboratory assistants.

There are also a number of non-clinical roles that require a greater proportion of transferable skills that are also found in other sectors. These roles provide the infrastructure support of the sector and include:

- Managers.
- Clerical and secretarial staff.
- Housekeeping and cleaning staff.
- Estates and facilities staff.

Table 3.1 and Table 3.2 show that the occupation profile of Health sector is very different to the profile of the whole economy. We can see that a high proportion of the Health sector workforce can be found within Associate Professional and Technical Occupations which includes nurses, therapists, midwives, and dental technicians. Occupations within this group make up 39 per cent of the Health sector but only 15 per cent of the whole economy.

As well as the sector having a greater proportion of Associate Professional and Technical occupations than the whole economy, there is also a greater proportion of the workforce found in Personal Service Occupations (18 per cent versus nine per cent). This occupational group would include roles such as Health care assistants, nursing assistants and therapy assistants.

Table 3.1: Employment by occupation and sector, whole economy, 2010 (UK)

	UK		England		Scotland		Wales		Northern Ireland	
	000s	%	000s	%	000s	%	000s	%	000s	%
Managers and Senior Officials	4,455	15	3,866	16	331	14	173	13	85	11
Professional Occupations	4,028	14	3,454	14	299	12	176	13	100	13
Associate Professional and Technical	4,265	15	3,638	15	353	14	186	14	88	12
Administrative and Secretarial	3,181	11	2,670	11	270	11	135	10	106	14
Skilled Trades Occupations	3,061	11	2,502	10	285	12	149	11	125	16
Personal Service Occupations	2,544	9	2,123	9	226	9	131	10	64	8
Sales and Customer Service Occupations	2,146	7	1,772	7	209	9	111	8	54	7
Process, Plant and Machine Operatives	1,907	7	1,570	6	174	7	99	8	63	8
Elementary Occupations	3,257	11	2,724	11	300	12	153	12	81	11
All occupations	28,842	100	24,319	100	2,446	100	1,311	100	765	100
Unweighted base	*194.372*		*161.438*		*17.020*		*8.690*		*7.224*	

Source: Labour Force Survey 2010, ONS

The sector has proportionally fewer Managers and Senior Officials than the whole-economy average (seven per cent compared to 15 per cent) but a greater proportion of Administrative and Secretarial occupations (14 per cent compared to 11 per cent).

Table 3.2: Employment by occupation and sector, Health sector, 2010 (UK)

	Health		All economy	
	000s	%	000s	%
Managers and Senior Officials	136	7	4,455	15
Professional Occupations	333	16	4,028	14
Associate Professional and Technical	807	39	4,265	15
Administrative and Secretarial	296	14	3,181	11
Skilled Trades Occupations	21	1	3,061	11
Personal Service Occupations	378	18	2,544	9
Sales and Customer Service Occupations	9	0	2,146	7
Process, Plant and Machine Operatives	11	1	1,907	7
Elementary Occupations	95	5	3,257	11
All occupations	2,086	100	28,842	100
Unweighted base	*14.747*		*194.372*	

Source: Labour Force Survey 2010, ONS

The largest occupational groups across the whole economy include the presence of health-related occupations such as Care Assistants and Home Carers and Nurses.

Table 3.3: Largest occupational groups, whole economy, UK, 2010

Rank	Occupation	000s	% workforce
1	7111 Sales and retail assistants	1,233	4
2	6115 Care assistants and home carers	741	3
3	4150 General office assistants or clerks	656	2
4	9233 Cleaners, domestics	588	2
5	1132 Marketing and sales managers	532	2
6	4122 Accnts wages clerk, bookkeeper	523	2
7	6124 Educational assistants	513	2
8	3211 Nurses	509	2
9	2314 Secondary eductn teaching prfsnals	445	2
10	2315 Prim & nurs eductn teaching profs	432	1
11	1121 Prod. works & maintenance managers	414	1
12	9223 Kitchen and catering assistants	411	1
13	1163 Retail and wholesale managers	394	1
14	9149 Oth good hndlng & storage occup nec	382	1
15	2132 Software professionals	327	1
	Other occupations	20742	72
	Total workforce	28,842	100
	Unweighted base (000s)	*194.372*	

Source: Labour Force Survey 2010, ONS

Occupations at the minor SOC level show the dominance of clinical roles within the sector. The largest four occupations are all clinical roles, involved in direct patient contact, and make up over 45 per cent of total employment in the sector.

It is also noteworthy that many media reports[4] point to excessive numbers of managers in the Health sector and that there is a drive from all government administrations to reduce the cost of management in the NHS, however, hospital and Health service managers make up just three per cent of the total sector workforce, (see table 3.4).

Table 3.4: Largest occupational groups, Health sector, UK, 2010

Rank	Occupation	000s	% workforce
1	3211 Nurses	452	22
2	2211 Medical practitioners	204	10
3	6111 Nursing auxiliaries and assistants	182	9
4	6115 Care assistants and home carers	101	5
5	4216 Receptionists	84	4
6	4211 Medical secretaries	61	3
7	3229 Therapists n.e.c.	55	3
8	1181 Hospital and health service mngers	53	3
9	9233 Cleaners, domestics	50	2
10	4150 General office assistants or clerks	49	2
11	6113 Dental nurses	47	2
12	3221 Physiotherapists	42	2
13	3212 Midwives	35	2
14	4131 Filng & othr recrds assists & clrks	33	2
15	2215 Dental practitioners	32	2
	Other occupations	605	29
	Total workforce	2,086	100
	Unweighted base (000s)	*14.747*	

Source: Labour Force Survey 2010, ONS

If we further contrast the whole economy occupations (Table 3.3) with the largest occupational groups in the Health sector (Table 3.4) we can see that:

- 88 per cent of all nurses working in the whole economy are employed in the Health sector; most of the other 12 per cent would be found in related sectors such as Care and Justice.
- 14 per cent of all care assistants and home carers in the whole economy are employed in the Health sector.
- 8.5 per cent of all cleaners and domestics in the whole economy are employed in the Health sector.
- 7.5 per cent of all general office assistants or clerks in the whole economy are employed in the Health sector.

4 http://www.telegraph.co.uk/comment/personal-view/5062266/Cure-the-NHS-with-far-fewer-managers.html

3.2 Working patterns

Organisations in the Health sector have worked hard to become an employer of choice over recent years. Through periods of recruitment, when competition for skills has been high, they have sought to set themselves apart from others by introducing working patterns and policies that are at the forefront of improving equality and diversity and improving the working lives of employees.

The Health sector provides a 24-hour service, 365 days of the year and this heavily influences working patterns. Whilst in some respects this may make some areas of work less attractive due to the need to work unsociable hours, it also means that the sector can be innovative in offering working patterns that are flexible to the individual needs of employees. Employers adopt a range of working patterns that allow them to effectively attract and retain staff whilst ensuring high quality service delivery. These working patterns include term-time working, annualised hours, ‘long days’ (where individuals work full-time hours over three days), job share and flexi-time.

There is a higher proportion of the Health sector that works part-time compared to other sectors across the UK and the all-economy average (Table 3.5).

Table 3.5: Working hours by sector, 2010 (UK)

	Full-time	Part-time	Full-time	Part-time	Weighted base	Unweighted base
	000s	000s	%	%	000s	000s
Agriculture, forestry and fishing	326	79	80	19	406	2.976
Energy production and utilities	435	38	92	8	473	3.244
Manufacturing	2,688	281	91	9	2,969	20.400
Construction, building services, engineering and planning	2,435	260	90	11	2,695	17.917
Wholesale and retail trade	2,549	1,590	62	39	4,139	27.571
Transportation and storage	1,218	229	84	16	1,447	9.729
Hospitality, tourism and sport	1,127	920	55	44	2,046	13.183
Information and communication technologies	682	79	90	10	761	4.875
Creative media and entertainment	737	249	75	25	986	6.186
Financial, insurance & other professional services	1,623	377	81	18	2,001	12.804
Real estate and facilities management	643	334	66	35	977	6.561
Government services	1,800	408	82	19	2,208	15.098
Education	1,872	1,215	61	40	3,087	21.537
Health	1,344	742	64	34	2,086	14.742
Care	1,056	672	61	37	1,728	12.001
All economy	21,083	7,760	73	27	28,843	194.363

Source: Labour Force Survey 2010, ONS

Higher overall levels of part-time working are intrinsically linked to high levels of female participation in the Health sector workforce (see Section 3.3.1). The working patterns of male employees across the sector are the same as that found in the whole economy, indicating that female employees in the sector are probably balancing work with family caring commitments.

Table 3.6: Working hours by gender, 2010 (UK)

	Health Sector		Whole Economy	
	Full-time	Part-time	Full-time	Part-time
Male	87%	13%	87%	13%
Females	58%	42%	57%	43%
All Employees	64%	36%	73%	27%

Source: Labour Force Survey 2010, ONS

Across each nation of the UK the proportion of the Health sector workforce working part-time is greater than the all-economy average. Rates of part-time working are higher in England and Scotland than Wales and Northern Ireland (Table 3.7).

Within Northern Ireland it appears that full-time working is more of a national characteristic of the labour market and this naturally has an impact on patterns of working in the Health sector. Other factors that may influence the proportion of people working part-time in Northern Ireland include the fact that the Health sector workforce is ‘younger’ than in other parts of the UK (See Table 3.33 Section 3.3.2). It is common for part-time working to increase, particularly for females, as they get older and have more personal caring responsibilities for children or, as is become more common, older relatives.

Table 3.7: Working hours by sector and nation, 2010 (UK)

	England				Scotland				Wales				Northern Ireland			
	Full-time	Part-time	Weighted base	Unweighted base	Full-time	Part-time	Weighted base	Unweighted base	Full-time	Part-time	Weighted base	Unweighted base	Full-time	Part-time	Weighted base	Unweighted base
	%	%	000s	000s	%	%	000s	000s	%	%	000s	000s	%	%	000s	000s
Agriculture, forestry and fishing	79	21	296	2.112	83	17	51	0.385	85	*	31	0.198	88	*	27	0.281
Energy production and utilities	92	8	346	2.336	91	9	88	0.620	96	*	25	0.157	92	*	14	0.131
Manufacturing	90	10	2,541	17.233	92	8	199	1.431	93	7	138	0.905	93	*	91	0.831
Construction, building services, engineering and planning	90	10	2,268	14.834	93	7	244	1.702	93	7	112	0.717	93	*	71	0.664
Wholesale and retail trade	62	38	3,469	22.822	58	42	352	2.369	57	42	205	1.325	63	37	112	1.055
Transportation and storage	84	16	1,251	8.292	83	17	117	0.822	80	23	46	0.308	87	*	33	0.307
Hospitality, tourism and sport	55	45	1,704	10.849	52	48	198	1.295	51	49	100	0.636	62	38	44	0.403
Information and communication technologies	90	10	675	4.269	89	11	56	0.377	88	*	18	0.114	88	*	13	0.115
Creative media and entertainment	75	25	875	5.406	68	32	64	0.436	70	23	32	0.214	72	*	14	0.130
Financial, insurance & other professional services	82	18	1,768	11.123	78	22	138	0.948	77	22	53	0.358	81	19	41	0.375
Real estate and facilities management	65	35	847	5.623	73	27	75	0.519	63	35	38	0.254	74	*	18	0.165
Government services	81	19	1,835	12.302	84	16	173	1.210	81	23	111	0.744	84	16	89	0.842
Education	60	40	2,624	18.075	64	36	234	1.677	66	32	154	1.059	67	33	75	0.726
Health	64	36	1,712	11.931	65	35	198	1.409	67	31	111	0.771	71	29	64	0.631
Care	61	39	1,409	9.629	60	40	183	1.308	61	40	97	0.665	62	38	40	0.399
All economy	73	27	24,321	161.435	73	27	2,444	17.008	72	27	1,311	8.689	77	23	766	7.231

Source: Labour Force Survey 2010, ONS

** Sample size too small for reliable estimate*

Those working in the sector are more likely to be employees than self-employed compared to other sectors. An estimated 92 per cent of workers in the sector are employees, whilst seven per cent are self-employed. The rate of self-employment is considerably lower than the all-economy average of 14 per cent, but is comparable to other sectors where the public sector has a large presence such as ‘education’ and ‘government services’ (see Table 3.8).

There are a number of reasons why the levels of self-employment may be lower in the Health sector. These include:

- The majority of people working across the sector do so to deliver public services and the high presence of the government in the sector makes being directly employed attractive.
- Professional bodies require all those practising in their relevant field, whether directly employed or self-employed, to adhere to core standards and there may be core minimum standards relating to continuing professional development that some self-employed clinicians may struggle to meet without the diverse caseload that a large organisation can bring.
- There are further barriers related to liability. Self-employed practitioners are required to hold professional indemnity insurance to protect the individual against claims arising from medical malpractice, negligence, and breach of duty. Such insurance can be very costly depending upon the activities undertaken; the employer usually carries these risks and liabilities for those that are direct employees.

Within the Health sector there are some professions where the levels of self-employment tend to be higher; these tend to be based more around the therapeutic professions.

Table 3.8: Employment status by sector (2010) (000s)

	Employee	Self-employed	Employee	Self-employed	Weighted base	Unweighted base
	000s	000s	%	%	000s	000s
Agriculture, forestry and fishing	189	202	47	50	405	2.973
Energy production and utilities	446	25	95	5	472	3.240
Manufacturing	2,776	184	94	6	2,968	20.397
Construction, building services, engineering and planning	1,716	964	64	36	2,692	17.897
Wholesale and retail trade	3,731	390	90	9	4,133	27.534
Transportation and storage	1,194	250	83	17	1,447	9.729
Hospitality, tourism and sport	1,817	219	89	11	2,044	13.168
Information and communication technologies	635	124	84	16	761	4.871
Creative media and entertainment	672	310	68	31	987	6.191
Financial, insurance & other professional services	1,706	291	85	15	2,001	12.804
Real estate and facilities management	744	229	76	23	977	6.561
Government services	2,145	58	97	3	2,207	15.091
Education	2,891	188	94	6	3,082	21.507
Health	1,928	155	92	7	2,085	14.740
Care	1,577	140	92	8	1,723	11.971
All economy	24,774	3,952	86	14	28,817	194.200

Source: Labour Force Survey 2010, ONS

Weighted and Unweighted bases also include unpaid family workers

At a national level the proportion of Health sector workers that are employees is highest in Northern Ireland and Scotland (95 per cent and 94 per cent respectively) (see Table 28). These levels reflect a smaller presence of the independent Health sector in these countries compared to England and Wales, which results in fewer self-employed independent practitioners (see Table 2.10 in Section 2.2).

Table 3.9: Employment status by sector and nation (2010) (000s)

	England				Scotland				Wales				Northern Ireland			
	Employee	Self-employed	Weighted base	Unweighted base	Employee	Self-employed	Weighted base	Unweighted base	Employee	Self-employed	Weighted base	Unweighted base	Employee	Self-employed	Weighted base	Unweighted base
	%	%	000s	000s	%	%	000s	000s	%	%	000s	000s	%	%	000s	000s
Agriculture, forestry and fishing	50	46	295	2.110	49	50	51	0.385	33	62	31	0.197	*	75	*27*	0.281
Energy production and utilities	94	6	346	2.334	95	*	87	0.619	99	*	25	0.157	95	*	*14*	0.130
Manufacturing	93	6	2,540	17.229	95	5	199	1.432	94	6	138	0.905	93	7	*91*	0.831
Construction, building services, engineering and planning	63	37	2,266	14.822	77	23	244	1.701	65	35	112	0.717	55	45	*70*	0.657
Wholesale and retail trade	91	9	3,466	22.800	91	9	351	2.359	86	14	204	1.323	84	16	*112*	1.052
Transportation and storage	83	17	1,252	8.294	85	15	117	0.820	76	23	46	0.308	77	23	*33*	0.307
Hospitality, tourism and sport	89	10	1,702	10.836	89	11	198	1.295	87	12	100	0.634	82	17	*44*	0.403
Information and communication technologies	84	16	674	4.266	82	18	56	0.377	77	*	18	0.113	87	*	*13*	0.115
Creative media and entertainment	68	32	875	5.409	76	24	65	0.438	60	39	32	0.214	75	*	*14*	0.130
Financial, insurance & other professional services	85	15	1,768	11.122	90	10	138	0.948	81	19	53	0.359	92	*	*41*	0.375
Real estate and facilities management	75	24	847	5.624	85	15	75	0.520	78	21	37	0.252	67	*	*18*	0.165
Government services	97	3	1,834	12.298	97	3	173	1.209	97	*	111	0.742	99	*	*89*	0.842
Education	94	6	2,619	18.049	95	5	234	1.676	96	4	153	1.056	95	*	*75*	0.726
Health	92	8	1,712	11.930	94	6	199	1.410	92	8	111	0.769	95	*	*64*	0.631
Care	91	9	1,404	9.601	93	6	183	1.306	95	*	97	0.665	90	*	*40*	0.399
All economy	86	14	24,301	161.314	89	11	2,442	16.995	85	14	1,309	8.674	84	16	765	7.217

Source: Labour Force Survey 2010, ONS

** Sample size too small for reliable estimate*

Weighted and Unweighted bases also include unpaid family workers

The proportion of permanent employees within the Health sector (95 per cent) is broadly in line with other sectors and the all economy average across the UK (see Table 2.29). This underlines the stable nature of Healthcare with demand for services rarely decreasing. Overall, job security adds to the attractiveness of the Health sector. It also reflects the highly skilled professional profile of the sector's workforce. These individuals have skills that are highly sought after and highly regarded by employers and, as such, permanent employment contracts are utilised as a way to attract and retain skills. In addition to this, for those working within the NHS, continuity of service for entitlements such as pension and annual leave arrangements transfers with the employee from one NHS employer to another and individuals would be reluctant to move for temporary opportunities which could potentially break their NHS service.

Table 3.10: Permanent and temporary employees by sector, UK (2010)

	Permanent	Temporary	Permanent	Temporary	Weighted base	Unweighted base
	000s	000s	%	%	000s	000s
Agriculture, forestry and fishing	181	8	96	4	189	1.306
Energy production and utilities	430	16	96	4	446	3.060
Manufacturing	2652	123	96	4	2775	18.984
Construction, building services, engineering and planning	1648	66	96	4	1714	11.317
Wholesale and retail trade	3573	156	96	4	3728	24.614
Transportation and storage	1132	62	95	5	1194	7.970
Hospitality, tourism and sport	1631	183	90	10	1814	11.563
Information and communication technologies	612	22	97	3	635	4.048
Creative media and	615	56	92	8	671	4.181
Financial, insurance & other professional services	1651	55	97	3	1706	10.835
Real estate and facilities management	704	39	95	5	743	4.957
Government services	2028	117	95	5	2145	14.642
Education	2563	327	89	11	2890	20.195
Health	1825	103	95	5	1928	13.639
Care	1474	103	93	7	1576	10.953
All economy	23247	1513	94	6	24760	166.200

Source: Labour Force Survey 2010, ONS

3.3 Workforce characteristics

Studying the workforce characteristics of the sector gives some indication of the way in which the demographics of the sector reflect those of the general population. This can indicate if there are any particular groups that are over- or under-represented in the sector.

Any over-representation of specific groups in the sector either through a gender bias, skewed age profile or lack of diversity can have both positive and negative impacts. For example, an older workforce can bring a richness of experience to the workplace. However any peaks in retirement can create issues for organisations in how they effectively succession plan in order to ensure that knowledge and skills are retained in the workforce. The importance of strategic workforce planning for the sector is discussed in Chapters 6 and 7.

3.4 Gender

The gender split of employees across the whole economy ranges from 51 per cent male in Scotland to 54 per cent male in England.

Table 3.11: Employment by gender and nation, whole economy (2010)

	Male	Female	Total	Male	Female	Total	Unweighted base
	000s	000s	000s	%	%	%	000s
UK	15,439	13,416	28,855	54	46	100	*194.448*
England	13,081	11,250	24,331	54	46	100	*161.501*
Scotland	1,257	1,189	2,446	51	49	100	*17.022*
Wales	692	620	1,312	53	47	100	*8.693*
Northern Ireland	409	358	766	53	47	100	*7.232*

Source: Labour Force Survey 2010, ONS

The gender profile within the Health sector is vastly different to the averages that we see across the whole economy. Across the UK the sector is highly feminised with 78 per cent of employees being female and 22 per cent male.

The sector has historically had a greater proportion of female workers, this was related to the way in which roles in the sector were seen to require skills such as ‘caring’ which were traditionally viewed as natural skills for females. However, at a time of rapid expansion from 1997 onwards organisations in the sector sought to expand opportunities for part-time and flexible working as a way to not only retain their current workforce but to attract new employees, these patterns of working are likely to have been more attractive to new female entrants into the labour market.

Table 3.12: Employment by gender and nation, Health sector (2010)

	Male	Female	Total	Male	Female	Total	Unweighted base
	000s	000s	000s	%	%	%	000s
UK	464	1,623	2,087	22	78	100	*14.749*
England	384	1,328	1,713	22	78	100	*11.937*
Scotland	44	155	199	22	78	100	*1.410*
Wales	26	85	111	23	77	100	*0.771*
Northern Ireland	10	54	64	15	85	100	*0.631*

Source: Labour Force Survey 2010, ONS

There are some differences between broad occupational groups in the gender profile. In general, in the Health sector, the feminisation of the workforce remains true for the Managers and Senior Officials workforce. This is interesting considering the way in which the percentage of females in this category for the all-economy average decreases compared to the overall percentage. This may suggest that female managers in the Health sector experience more support than in other sectors to enable them to be promoted to higher-level roles or it may be indicative of the Health sector's promoting from within and valuing Health sector experience in its managers.

There are proportionally more males in the skilled trades occupations and process plant and machine occupations than other staff groups. These are occupational groups that are heavily dominated by men in the whole economy too.

Table 3.13: Gender profile by broad occupational group, UK (2010)

	Health			All economy		
	Male	Female	Total	Male	Female	Total
	%	%	000s	%	%	000s
1 Managers and Senior Officials	25	75	136	65	35	4,455
2 Professional occupations	49	51	333	56	44	4,028
3 Associate Professional and Technical	15	85	807	50	50	4,265
4 Administrative and Secretarial	9	91	296	22	78	3,181
5 Skilled Trades Occupations	75	*	21	92	8	3,061
6 Personal Service Occupations	15	85	378	16	84	2,544
7 Sales and Customer Service Occupations	*	72	9	34	66	2,146
8 Process, Plant and Machine Operatives	67	*	11	88	12	1,907
9 Elementary Occupations	35	65	95	55	45	3,257
All occupations	22	78	2,086	54	46	28,842

Source: Labour Force Survey 2010, ONS

**Sample size too small for reliable estimate*

An examination of NHS data[5] reveals an overall gender profile that is similar to that estimated by the LFS. However, it also reveals that staff groups such as qualified nursing, Health visiting and midwifery staff are more feminised than the average with just over 90 per cent being female, and that staff groups such as qualified ambulance staff and ambulance support staff are more likely to be male than the average (60 per cent and 50 per cent respectively).

There are also examples of ways in which the gender profile within specific occupational groups has changed over time. Data for doctors and dentists now appears to show that these occupational groups have a roughly equal ratio of males to females (British Medical Association, 2009). These professions have, however, historically been dominated by men. Recently the number of women training in these professions has vastly increased which is now resulting in the tipping point for women to begin to outnumber men in this occupational category.

In 2008, 56 per cent of all accepted applicants to medical school were female (British Medical Association, 2009). This is a significant reversal of the historic gender balance within the UK which saw a greater proportion of males than females pursue medical roles.

5 NHS Information Centre 2009 Workforce Census www.ic.nhs.uk

The high level of feminisation across the workforce presents challenges for employers relating to maternity leave and flexible working arrangements. For example, if we examine the medical staff group, large proportions of young female doctors are likely, at some point, to take maternity leave and may then request more ‘family friendly’ working arrangements to allow them to balance work and family life. It is also possible that certain specialties may be more attractive to women than others, which could theoretically create skills shortages in specialties that are not able to accommodate flexible working practices or are seen as being less ‘family friendly’. In 2009 the British Medical Association described ‘horizontal’ gender segregation with high proportions of female doctors found in specialties such as clinical genetics, dermatology and palliative medicine but low proportions found in specialties such as general surgery, cardiology, gastroenterology and medical ophthalmology.

Although the Health sector has been an early leader and adopter of flexible working practices, its employers may wish to re-examine whether the options available to the workforce are flexible enough to enable the progression of the careers of women to the higher-level roles across the organisation. One solution highlighted as having the potential to improve the retention of female doctors and enable them to progress in their chosen careers is flexible training which allows participation in medical activities for at least half the time of a full-time trainee (British Medical Association, 2009).

3.5 Age

The study of the age profile of a sector or organisation has particular benefits in respect of succession planning. Even at times when sectors may be contracting, having an age profile that is older than average can mean that there are still significant numbers of jobs that need to be recruited to within the sector.

Within the Health sector having a detailed understanding of the age profile of the workforce is particularly important for activities such as workforce planning. The training times for professionals means that organisations and education commissioners have to look at least 5 years ahead in order to ensure that there are sufficient new people undertaking training to replace those that need to be replaced through retirements etc.

The age profile in the whole economy of the UK remains fairly consistent at a national level. There are low proportions of the workforce aged between 16 and 24 years, with the largest age category being 45-59 and then a sharp drop in the proportion of the workforce aged over 60 (Table 3.14).

Table 3.14: Age profile of the workforce, whole economy (2010) (all numbers in 000s)

	UK		England		Scotland		Wales		Northern Ireland	
	Number	%	Number	%	Number	%	Number	%	Number	%
Under 16	*	*	*	*	*	*	*	*	*	*
16-18	673	2	569	2	58	2	35	3	10	1
19-24	3,037	11	2,541	10	274	11	136	10	85	11
25-34	6,324	22	5,365	22	500	20	267	20	192	25
35-44	7,029	24	5,932	24	589	24	311	24	197	26
45-59	9,331	32	7,826	32	834	34	434	33	236	31
60-64	1,631	6	1,394	6	129	5	79	6	30	4
65 +	831	3	702	3	62	3	49	4	17	2
Total	28,855	100	24,331	100	2,446	100	1,312	100	766	100
Unweighted base	*194.448*		*161.501*		*17.022*		*8.693*		*7.232*	

Source: Labour Force Survey 2010, ONS

**Sample size too small for reliable estimate*

Employees in the Health sector are older than the whole economy. The sector employs fewer people aged under 25 than the whole economy average and the proportion of the workforce aged 35- 59 is higher than the whole economy (Table 3.15).

The reasons for this are partly due to the training times to enter the professions within the Health sector. Many professions do not join the sector until their mid-twenties or early thirties as they require qualifications at least at graduate level to join. The opportunities for young people (particularly those aged 16 to 21) within the sector are therefore limited to administrative, infrastructure and clinical support roles.

The age profile of the Health sector remains broadly consistent across all of the nations of the UK. It does however reveal that the Health sector workforce in Wales is older than that within England, Scotland and Northern Ireland, particularly when looking at those aged over 60 years. This indicates that Wales has a greater reliance on older workers and they may therefore face more significant pressures caused by the retirement of these skilled and experienced workers over the next ten to fifteen years.

The reasons for Wales having a greater reliance on an older workforce is that the population in general is older than the rest of the UK and it enjoys a net inward migration from other parts of the UK (Welsh Government migration statistics 2010). The reasons for the net inward migration are linked to people seeking to move to more rural areas during their mid to late career in preparation for retirement.

Table 3.15: Age profile of the Health sector workforce by nation (2010)

	UK		England		Scotland		Wales		Northern Ireland	
	000s	%	000s	%	000s	%	000s	%	000s	%
Under 25	138	7	111	6	14	7	7	6	6	10
25-34	425	20	348	20	40	20	23	21	15	23
35-44	541	26	449	26	51	26	26	23	15	23
45-59	818	39	668	39	80	40	45	40	25	39
60+	165	8	137	8	14	7	11	10	3	5
Total	2,087	100	1,713	100	199	100	111	100	64	100
Unweighted base	*14.749*		*11.937*		*1.410*		*0.771*		*0.631*	

Source: Labour Force Survey 2010, ONS

Time- series analysis of the whole economy across the UK shows that between 2002 and 2010 the number of workers aged 18 and under has decreased by over 400,000, this is despite the overall number of workers increasing. Fewer workers are now entering the Health sector under the age of 18 as they seek to obtain the requisite qualifications.

Table 3.16: Age profile of the workforce, whole economy, 2002 – 2010 (UK)

	2002	2003	2004	2005	2006	2007	2008	2009	2010
	000s	000s	000s	000s	000s	000s	000s	000s	000s
Under 18	1,078	1,076	1,077	1,028	976	938	925	765	673
19-24	2,948	2,973	3,072	3,097	3,179	3,224	3,221	3,048	3,037
25-34	6,505	6,361	6,279	6,289	6,250	6,242	6,279	6,186	6,324
35-44	7,317	7,416	7,490	7,525	7,533	7,528	7,442	7,241	7,029
45-59	8,474	8,638	8,748	8,915	9,017	9,046	9,171	9,182	9,331
60-64	1,107	1,186	1,252	1,306	1,405	1,545	1,652	1,650	1,631
65 +	479	522	538	580	625	641	693	739	831
Total	27,908	28,172	28,456	28,740	28,987	29,164	29,382	28,811	28,855
Unweighted base	*247.273*	*238.005*	*230.951*	*227.794*	*222.196*	*221.046*	*217.000*	*203.221*	*194.448*

Source: Labour Force Survey 2010, ONS

The same analysis of the Health sector shows that the proportion of the Health sector workforce aged 60 and over has increased more than any other age group over the 2002 to 2010 period (Table 3.17). This shows the reliance the sector now has on this very knowledgeable, experienced cohort of employees. Employers across the sector need to ensure that they are adequately succession planning and that the retirement of these individuals will not leave a knowledge and skills void in key areas of service delivery.

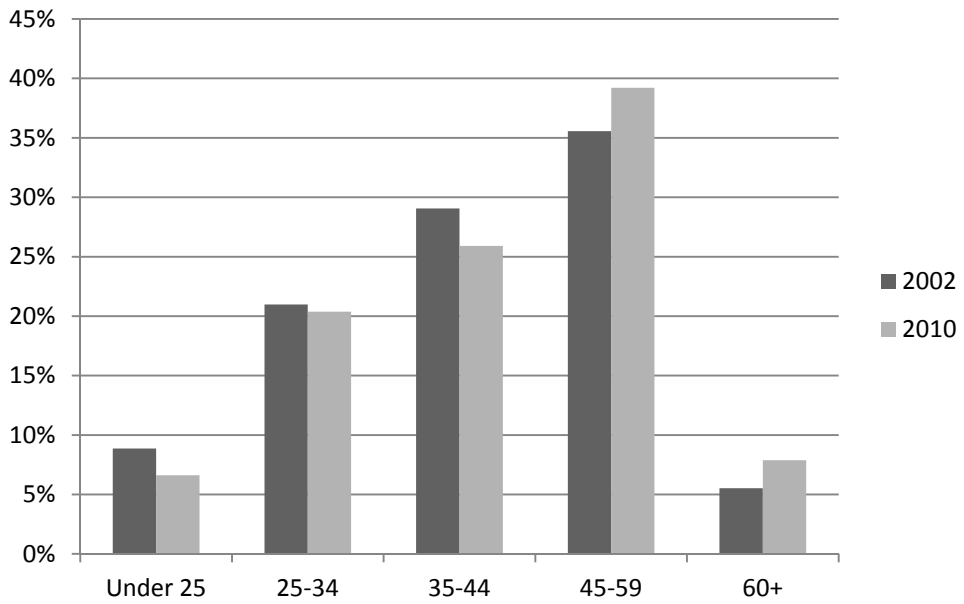
Table 3.17: Age profile of the Health sector workforce 2002 – 2010 (UK)

	2002	2003	2004	2005	2006	2007	2008	2009	2010
	000s	000s	000s	000s	000s	000s	000s	000s	000s
Under 25	161	169	181	172	175	177	185	140	138
25-34	380	398	420	419	425	405	424	396	425
35-44	526	543	559	578	575	555	570	570	541
45-59	644	660	697	745	758	750	771	779	818
60+	100	111	122	133	145	146	167	153	165
Total	1,811	1,881	1,980	2,048	2,079	2,033	2,118	2,038	2,087
Unweighted base	*16.456*	*16.323*	*16.543*	*16.774*	*16.56*	*16.048*	*16.228*	*14.933*	*14.749*

Source: Labour Force Survey 2010, ONS

Chart 5 shows how the age profile has changed between 2002 and 2010. It shows that in 2010 employees aged over 65 made up just under eight per cent of the total workforce. This has grown from five and a half per cent in 2002. At the same time the proportion of the workforce aged below 25 has decreased from just under nine per cent in 2002 to just over 6.6 per cent in 2010.

Chart 5: Profile of the Health workforce 2002 and 2010



Source: Labour Force Survey 2010, ONS

The chart also shows the potential 'cliff edge' created by retirements in the sector. With workers aged 45-59 increasing as a proportion of total workforce between 2002 and 2010 the sector faces a significant challenge over the next 15 years in trying to retain and replace these individuals.

3.6 Ethnicity

The study of the ethnicity profile of a sector or organisation has particular benefits in respect of ensuring that the organisation is reflective of the population which it serves. As the Health sector has a large public sector component there has been a statutory duty placed upon NHS employers to monitor and publish a range of statistics relating to workforce and ethnicity since 2000[6]. This has meant that employers across the sector are not only aware of the demographics of their organisation but they have policies and practices in place to increase diversity across their workforce and to ensure that the services they provide meet the diverse needs of the population.

The Health sector is more ethnically diverse than many other sectors of the UK; only the hospitality, tourism and sport sector is more diverse. An estimated 13 per cent of Health sector employees are from a black, Asian and minority ethnic group (BAME). This is significantly greater than the all-economy average of nine per cent (See Table 3.18).

The greater diversity of the Health sector is, in some respects, an indicator of the historic reliance of the sector on international recruitment to fill hard-to-fill vacancies. At times of rapid expansion in the sector, particularly during the late 1990s and early 2000s, international recruitment of large numbers of professionals was commonplace, particularly in the NHS. Nurses were sought from countries such as the Philippines, physiotherapists and medics from India and dentists from Poland. This international recruitment was necessary due to the time lag for increased numbers of UK-based Health professionals to complete training. The sector continues to operate in an international labour market and this is reflected in the number of high skills occupations on the latest Skilled Shortage and Sensible list developed by the Migration Advisory Committee[7].

6 Race Relation (Amendment) Act (2000)

7 See Section 5.4.2 for full outline of occupations on the Skilled, Shortage and Sensible list developed by MAC

Table 3.18: Ethnicity of workforce by sector, UK (2010)

	White	BAME	Total	White	BAME	Total
	'000	**'000**	**'000**	**%**	**%**	**%**
Agriculture, forestry and fishing	402	*	402	100	*	100
Energy production and utilities	453	20	472	96	4	100
Manufacturing	2,769	199	2,968	93	7	100
Construction, building services, engineering and planning	2,567	130	2,697	95	5	100
Wholesale and retail trade	3,722	416	4,139	90	10	100
Transportation and storage	1,266	180	1,445	88	12	100
Hospitality, tourism and sport	1,766	280	2,045	86	14	100
Information and communication technologies	660	100	760	87	13	100
Creative media and entertainment	913	73	986	93	7	100
Financial, insurance & other professional services	1,776	224	2,000	89	11	100
Real estate and facilities management	852	125	977	87	13	100
Government services	2,037	171	2,208	92	8	100
Education	2,875	210	3,085	93	7	100
Health	1,814	272	2,086	87	13	100
Care	1,526	200	1,726	88	12	100
All economy	**26,151**	**2,686**	28,837	91	9	100

Source: Labour Force Survey 2010, ONS

** Sample size too small for reliable estimate*

At a national level the ethnicity profile of the whole economy workforce varies considerably. There is a significantly lower proportion of the workforce in Wales, Scotland and Northern Ireland that are from a BAME background. This is a reflection of the lower levels of people from a BAME background in the general population (Table 3.19).

Table 3.19: Ethnicity of workforce across the whole economy, four nations (2010)

	White	BAME	Total	White	BAME	Total	*Unweighted base*
	000s	000s	000s	%	%	%	*000s*
UK	26,151	2,686	28,837	91	9	100	*194.336*
England	21,755	2,558	24,313	89	11	100	*161.395*
Scotland	2,370	76	2,445	97	3	100	*17.019*
Wales	1,272	40	1,312	97	3	100	*8.691*
Northern Ireland	754	12	766	98	2	100	*7.231*

Source: Labour Force Survey 2010, ONS

The Health sector has a higher proportion of the workforce born outside of the UK and Europe (Table 39). This, coupled with the higher proportion of the workforce from a BAME background, shows the historic reliance of the sector on filling skills shortage vacancies through international recruitment. It also demonstrates that the UK Health sector is an attractive destination for professionals from other countries with world-leading organisations at the forefront of advances in health delivery.

Table 3.20: Employment by country of birth and sector, UK (2010)

	UK	Rest of Europe (EU 27)	Rest of world	Total	UK	Rest of Europe (EU 27)	Rest of world	Total
	'000	'000	'000	'000	%	%	%	%
Agriculture, forestry and fishing	357	20	7	385	93	5	2	100
Energy production and utilities	395	12	26	433	91	3	6	100
Manufacturing	2,507	206	173	2,887	87	7	6	100
Construction, building services, engineering and planning	2,387	128	127	2,642	90	5	5	100
Wholesale and retail trade	3,460	149	311	3,920	88	4	8	100
Transportation and storage	1,190	67	150	1,407	85	5	11	100
Hospitality, tourism and sport	1,537	146	254	1,937	79	8	13	100
Information and communication technologies	612	31	92	735	83	4	13	100
Creative media and entertainment	800	47	75	921	87	5	8	100
Financial, insurance & other professional services	1,723	80	186	1,988	87	4	9	100
Real estate and facilities management	784	59	83	926	85	6	9	100
Government services	1,970	44	148	2,161	91	2	7	100
Education	2,614	113	191	2,918	90	4	7	100
Health	1,664	74	250	1,987	84	4	13	100
Care	1,437	61	177	1,674	86	4	11	100
Other sectors	689	45	61	794	87	6	8	100
All economy	24,124	1,281	2,310	27,715	87	5	8	100

Source: Labour Force Survey 2010, ONS

In England 86 per cent of workers in the whole economy are born within the UK. In Scotland and Wales this proportion is 93 per cent and in Northern Ireland it is 92 per cent (Table 3.21). This indicates that employers in England are making more use of workers from outside the UK than the other nations. The reasons for this are not clear but it is could be a combination of factors including:

- The increased migration of people from outside the UK to England in comparison to the other nations.
- Employers in England making more use of international recruitment to directly seek skills from other countries.

Table 3.21: Employment by country of birth and nation, 2010

	UK		England		Scotland		Wales		Northern Ireland	
	000s	%	000s	%	000s	%	000s	%	000s	%
UK	24,124	87	20,009	86	2,251	93	1,161	93	702	92
Rest of Europe (EU 27)	1,281	5	1,112	5	91	4	40	3	38	5
Rest of world	2,310	8	2,149	9	91	4	49	4	21	3
Total	27,715	100	23,271	100	2,432	100	1,251	100	761	100
Unweighted base	38.034		31.446		3.448		1.678		1.462	

Source: Labour Force Survey 2010, ONS

Conclusion

The depth and breadth of services provided by the Health sector, delivered all times of the day and the sectors active policy to be an ‘employer of choice’ supports relatively high levels of part-time working. Clinical roles make up over 45 per cent of total employment in the Health sector. Nurses, medical practitioners, nursing auxiliaries and care assistants are the largest occupational groups. By contrast, Managers comprise just three per cent of the total sector workforce.

As a highly regulated and professionalised sector, the sector also demonstrates a tendency towards the employment of people on permanent contacts, with self-employment relatively lower than the economy average. The sector is highly feminised, with female participation continuing to rise. The number of women in medical schools has recently overtaken the number of men, which will need to be factored into the rate of commissioning of doctor training as it is more common for women to take careers breaks or revert to reduced hours during their 30s and 40s. The Health sector workforce aged between 35 and 59 is greater than the all-sector average. Succession planning for the sector is crucial to ensure that skills and knowledge are retained.

The sector’s focus on equal opportunities and its participation in an international labour market also means it has a high representation of people from a range of communities and this should be considered a key strength.

4. Demand for, and value of, skills

Chapter Summary

- The sector has a high stock of skills in its workforce with 60 per cent qualified to Level four or above, this is higher than the all-economy average (34 per cent) and reflects the highly professionalised nature of the workforce.
- Whilst the sector has high levels of skills there remains some concern around basic skills levels in some areas including caring and personal services, and elementary occupations. There is also evidence that there are also some literacy and numeracy skills needs in the associate professional occupations.
- Generic skills such as team-working, communication, customer service and problem solving are utilised across a wide range of occupations in the sector. Specific job related skills used in the sector vary considerably given the wide range of roles undertaken. Core skills however relating to clinical roles involve the assessment, diagnosis and treatment of patients within appropriate professional boundaries.
- Health sector employers provide a higher than average level of training and this has remained steady in recent years. The level of training is similar to the care sector and sectors such as education and government services.
- Barriers to training in the sector include financial issues, and sourcing training in the relevant subject area. The proportion of establishments reporting issues sourcing relevant training in the sector is higher than in the whole economy (ten per cent versus six per cent)
- Health sector employers value qualifications and skills. They are more likely than employers in other sectors to believe that qualifications offered are valuable and relevant.
- The Health sector has a higher proportion of employers with formal procedures for identifying high potential individuals (20 per cent compared to 14 per cent across all sector).
- The high compliance environment in the sector means that it reports lower levels of variety in employees' work and lower levels of employee discretion in how work is carried out.
- Whilst the sector reports a high level of skills, there are persistent questions around management and leadership within the sector, as well as the effectiveness of some of the high performing working practices.

Introduction

This Chapter analyses how the sector uses skills, Section 4.1 explores the overall qualifications levels present in the sector and discusses the extent to which the sector is confronted with issues around basic skills. Furthermore this section also outlines the likely generic skills needed in the sector. Examples of occupations, and the way in which generic and specific skills are utilised in the sector are also outlined.

Section 4.2 outlines the value that the sector places on skills generally and how much they train in various occupations and roles in the sector and explores barriers to training.

Section 4.3 explores how the sectors stock of qualifications and propensity to undertake training and development translates into performance. It also examines indicators of high performance working practices within the sector.

4.1 Nature of skills used

For a sector to perform effectively it requires a sufficient and appropriate stock of skills within its workforce. Many attributes will influence the mix of skills needed and how these skills are used. These could include the individual organisation's activities, overall strategy, work structure and its use of technology. However a recent literature review undertaken by UKCES (Campbell, Garrett and Mason, 2010) concludes that a high stock of qualifications in an organisation's workforce, among other factors, supports more effective achievement of its organisational goals. This implies that a high stock of qualifications should also support a high performing sector.

The Health sector and its workforce are large and diverse. In this section we provide an overview of the skills used across the sector and how they are distributed across the workforce. We also consider:

- Overall qualifications levels.
- Levels of literacy and numeracy skills.
- The balance between technical and generic skill needs.

The Health sector workforce is more highly qualified than the UK average. Almost 60 per cent of the workforce are qualified to the equivalent of Level 4 or above compared to just over a third of workers across the whole economy. In addition, just two per cent of the workforce has no qualification compared to an estimated four per cent of workers across all sectors (Table 41). This is most likely due to the fact that many occupations, including nursing, are heavily regulated which ensures minimum skill requirements across large sections of the Healthcare workforce.

Table 4.1: Qualification profile of workforce within sectors, UK (2010)

	No qualifications	Level 1	Level 2	Level 3	Level 4 +	Total	Unweighted base
	%	%	%	%	%	'000s	'000s
Agriculture, forestry and fishing	7	30	28	14	21	309	0.579
Energy production and utilities	4	28	28	16	24	404	0.612
Manufacturing	4	29	29	15	23	2,610	4.026
Construction, building services, engineering and planning	4	29	33	12	22	2,443	3.584
Wholesale and retail trade	4	33	31	15	16	3,459	5.309
Transportation and storage	7	41	29	11	13	1,239	1.929
Hospitality, tourism and sport	5	30	30	16	19	1,722	2.543
Information and communication technologies	2	14	18	15	51	719	0.959
Creative media and entertainment	3	12	16	14	54	885	1.178
Financial, insurance & other professional services	2	15	19	16	48	1,957	2.601
Real estate and facilities management	7	33	27	13	19	793	1.260
Government services	2	17	24	15	42	2,103	3.010
Education	2	13	16	8	61	2,813	4.146
Health	2	15	16	7	59	1,909	2.842
Care	4	26	27	10	33	1,588	2.376
All economy	**4**	**24**	**25**	**13**	**34**	**25,682**	38.029

Source: Labour Force Survey 2010, ONS

Overall qualification levels in the sector reflect the fact that over half of the workforce is employed in professional or associate professional and technical occupations. Around nine out of ten of these have a qualification of Level 4 or above. However, personal service occupations are the second largest major occupational group in the sector, accounting for around one sixth of the workforce. Around one quarter of this group either have no qualifications or a qualification below Level 1 (UK Commission for Employment and Skills, 2011).

Of interest to Health is the comparatively low proportion of the sector workforce with qualifications at level 3. There may be an opportunity for the Health sector to make better use of qualifications at this level to enable more effective skills utilisation at the intermediate level.

There are also differences in the average qualification levels of the workforce in the independent sector compared to the public sector (Table 4.2). The independent sector is generally more involved in lower-risk, routine activities than the public sector. This is reflected in a lower skilled occupational profile. Compared to the public Health sector it has a slightly higher proportion of its workforce with Level 2 and 3 qualifications, but fewer with Level 4 and above.

Table 4.2: Qualification levels public and private Health sectors (2010)

	Independent Health sector	Public Health sector
No Qualification	3%	3%
Level 1 or below	7%	7%
Level 2	13%	12%
Level 3	12%	11%
Level 4 or above	58%	62%
Other Qualifications	7%	5%

Source: Labour Force Survey 2010, ONS

Scotland has a much higher proportion of the whole economy and Health sector that are qualified to Level 3 in comparison to other parts of the UK (Tables 4.3 and 4.4). Scotland also has a significantly lower proportion of the national workforce qualified to level 1 and below. This may indicate that the Health sector in Scotland is making better progress at raising overall national qualification levels compared to the UK average.

Table 4.3: Qualification levels by nation, whole economy (2010)

	UK	England	Scotland	Wales	Northern Ireland
	%	%	%	%	%
Level 4 +	34	34	31	35	33
Level 3	13	12	21	10	12
Level 2	25	25	25	28	30
Level 1 and below	28	29	23	27	25
Total	100	100	100	100	100
Weighted base	25,682	21,635	2,237	1,157	654
Unweighted base	35.070	29.119	3.165	1.550	1.236

Source: Labour Force Survey 2010, ONS

Table 4.4: Qualification levels by nation, Health sector (2010)

	UK	England	Scotland	Wales	Northern Ireland
	%	%	%	%	%
Level 4 +	59	59	60	n/a	n/a
Level 3	7	7	16	67*	67*
Level 2	16	17	13	16	14
Level 1 and below	18	18	11	17	19
Total	100	100	100	100	100
Weighted base (000s)	1,909	1,585	175	93	55
Unweighted base (000s)	2.725	2.234	0.252	0.131	0.108

*Source: Labour Force Survey 2010, ONS. *Level 3+*

The whole economy and the Health sector have both become more highly qualified over time, with the percentage of the workforce holding qualifications at Level 4+ increasing from 42 per cent in 2002 to 59 per cent in 2010. During this period there has also been a decrease in the proportion of the workforce holding Level 1 and Level 2 qualifications (Tables 4.5 and 4.6).

Table 4.5: Qualification levels, whole economy, UK (2002-2010)

	2002	2003	2004	2005	2006	2007	2008	2009	2010
	%	%	%	%	%	%	%	%	%
Level 4 +	28	29	30	31	32	33	33	35	37
Level 3	20	20	20	20	19	19	20	19	20
Level 2	22	22	21	20	22	22	21	21	21
Level 1 and below	30	29	29	29	27	27	26	24	23
Total	100	100	100	100	100	100	100	100	100
Weighted base	27,905	28,165	28,455	28,741	28,986	29,163	29,380	28,810	28,854
Unweighted base	247.232	237.919	172.402	210.643	222.190	221.039	216.986	203.217	194.437

Source: Labour Force Survey 2010, ONS

Table 4.6: Qualification levels, Health sector, UK (2002-2010)

	2002	2003	2004	2005	2006	2007	2008	2009	2010
	%	%	%	%	%	%	%	%	%
Level 4 +	43	43	44	44	45	46	47	60	61
Level 3	13	13	14	15	15	15	16	11	12
Level 2	18	18	18	18	20	19	19	14	14
Level 1 and below	26	26	24	23	20	19	18	15	13
Total	100	100	100	100	100	100	100	100	100
Weighted base (000	1,811	1,881	1,980	2,048	2,079	2,033	2,117	2,038	2,087
Unweighted base (	16.452	16.321	12.404	15.505	16.559	16.047	16.227	14.932	14.749

Source: Labour Force Survey 2010, ONS

Table 4.6 does show a significant change to the qualifications profile between 2008 and 2009. It is unlikely that there was such a dramatic shift in the proportion of the workforce with Level 4 qualifications at this time (particularly given the time taken for clinical staff to complete training). The most likely explanation for this is therefore the change from SIC 2003 to SIC 2007 during this period. An outline of the change from SIC 2003 to SIC 2007 and the way in which this impacts on Health sector workforce numbers is included in Section 0. Table 4.7 shows that the Health sector has a much lower percentage of managers and professionals that are not qualified to Level 4 or above. The possible reasons for this include:

- The qualifications for entry into clinical professions within the Health sector dictate that most professionals are qualified to at least Level 4.
- The migration of clinical staff into managerial roles.

Together these also create expectations in the sector that managers will hold higher-level qualifications at least equivalent to clinical staff.

Table 4.7: Managers and professionals without Level 4 or higher qualifications (% of all managers and professionals)

	UK	England	Scotland	Wales	Northern Ireland
	%	%	%	%	%
Agriculture, forestry and fishing	45	43	*	*	*
Energy production and utilities	49	51	41	*	*
Manufacturing	51	51	51	59	35
Construction	50	51	41	40	*
Wholesale and retail trade	64	64	67	60	50
Transportation and storage	61	59	67	*	*
Hospitality, tourism and sport	66	66	61	70	*
Information and communication technologies	40	40	37	*	*
Creative media and entertainment	38	38	*	*	*
Financial, insurance & other professional services	36	36	38	35	*
Real estate and facilities management	58	59	63	*	*
Government services	31	32	36	29	*
Education	10	11	8	*	*
Health	15	15	*	*	*
Care	30	30	33	*	*
All economy	39	39	37	36	27

Source: Labour Force Survey 2010, ONS

** Sample size too small for reliable estimate*

Basic skills in the sector

The UK Commission[8] (UKCES, 2009) estimates that the proportion of the whole population without functional literacy (below Level 1) and functional numeracy (below Entry Level 3) skills was approximately 14 per cent and 19 per cent respectively.

The 2003 Skills for Life Survey in England found that 21 per cent of all adults had numeracy skills below Entry Level 3, the standard expected of seven year olds, and five per cent had literacy skills below this level. Analysis of a sub-sample of just over 500 respondents to the survey who identified themselves as working within the Health and social services sector found that the literacy and numeracy skill levels of the Health and social care workforce are similar to those of the population as a whole (Aldridge, 2004). Skills for Health's Employability Skills Matrix (2008) suggests that anyone working in the Health sector should have a minimum of Entry Level 3 skills in literacy and numeracy.

8 Spilsbury et al (2010) Ambition 2020: World Class Skills and Jobs for the UK: The 2010 Report,

In 2010 a pilot undertaken by Skills for Health[9] to measure literacy and numeracy levels in six NHS Trusts in North West England found that two per cent of the NHS non-medical workforce has literacy and numeracy levels below Entry Level 3. Although there are some methodological issues[10] associated with comparing this data to the 2003 survey, it does support the UKCES estimate of improving levels of numeracy and literacy in the sector.

However, the Skills for Health pilot also shows that it is not just lower skilled employees in the NHS that lack good literacy and numeracy skills. The pilot examined literacy and numeracy levels by Agenda for Change (AfC) pay bands. AfC is the standardised pay structure for most NHS staff (it excludes very senior managers and medics). Pay bands five and above generally map to those roles in the Associate Professional staff groups and above e.g. nurses, therapists, managers etc. Pay bands 1-4 generally map to those entry level and intermediate level roles such as cleaners, porters, clinical support and administrative staff.

The report suggests that whilst around one in five employees in AfC pay bands 1-4 do not have Level 1 literacy skills (the level considered to be functionally literate); seven per cent of those in higher bands (Bands 5-8) are also functionally illiterate. Similarly, one quarter of those in pay bands 1-4 do not have numeracy skills at Level 1, but neither do nine per cent of those in higher bands. (See Table 4.8 for a summary of the findings)

Although limited in respect of how far we can generalise these findings, it is important that we recognise the need to improve literacy and numeracy levels amongst the whole workforce and not just those in lower and intermediate level roles.

9 Skills for Health (2011a) Establishing a literacy and numeracy baseline in the Health sector

10 The Skills for Health 2010 pilot contained a limited sample from the NHS in a single geographical area of England utilising a range of sampling criteria which means that the results are not easily comparable to wider surveys that have been carried out.

Table 4.8: Literacy and numeracy levels amongst the non-medical NHS workforce

Level	Workforce with skills below Level 1	Workforce with skills below Level 2
Literacy		
All	12%	51%
Pay Bands 1-4	19%	63%
Pay Band 5-8	7%	42%
Numeracy		
All	16%	56%
Pay Bands 1-4	25%	67%
Pay Band 5-8	9%	47%

Source: Skills for Health, Establishing a literacy and numeracy baseline in the Health sector (2011)

Other recent research supports these findings and also provides evidence of limited numerical skills amongst registered nurses (McMullan, 2010). The research found that 45 per cent of registered nurses scored less than 60 per cent in a numerical ability test, whilst 89 per cent scored less than 60 per cent in a drug calculation ability test. The research suggested that these results could be due to de-skilling, for example using calculators instead of mental arithmetic, or because some nurses do not perform these calculations on a regular basis and thus become 'rusty'. The potentially life-threatening, adverse implications of this, however, should not be ignored and employers should be willing to assist all staff in improving their literacy and numeracy skills at all levels of the organisation.

Generic and specific skills in the sector

There is a great deal of high quality intelligence developed by the Health sector that enables us to understand in some detail the generic and specific skills utilised in the sector (See Table 49 for an outline). Included in this intelligence is Skills for Health's Health functional map[11]. It highlights six core functions relevant to the entire sector's workforce. These functions link to the core attributes in the English NHS Knowledge and Skills Framework (KSF)[12,13] and include a need for staff to:

- Effectively communicate the needs and requirements of patients, carers, staff and others. This also requires effective development of relationships.
- Develop and reflect on their own practice and support the development of others.

11 Skills for Health, Health Functional Map. https://tools.skillsforHealth.org.uk/hfm/ accessed 5/1/2012

12 Department of Health (2004) The NHS Knowledge and Skills Framework (NHS KSF) and the Development Review Process

13 NHS Employers (2010), Summary descriptions of KSF core dimensions
http://www.nhsemployers.org/SiteCollectionDocuments/Summary_KSF_core_dim_fb131110.docx, accessed 5/1/2012

- Promote and maintain the Health, safety and security of everyone in the organisation or anyone who comes into contact with it either directly or through the actions of the organisation. It includes tasks that are undertaken as a routine part of work such as moving and handling.
- Contribute to and promote service improvement. These might be services for the public (patients, clients and carers) or services that support the smooth running of the organisation (such as finance, estates).
- Review, maintain and improve quality in all areas of work practice including team working.
- Promote, support and develop equality of opportunity and diversity.

In addition the functional map outlines eight functions that are specific to certain parts of the Health sector workforce. These include functions associated with:

- Assessment of population and community Health needs as well as those of individuals.
- Health interventions such as conducting medical investigations on an individual; repairing/restoring bones, tissues and organs; and managing medication and prescriptions.
- Health promotion and protection.
- Information management and ICT.
- Maintaining and providing facilities and estates.
- Planning, managing and implementing education, learning and research.
- Designing, developing, manufacturing, installing, maintaining and repairing medical devices, products and equipment.
- Management and administration.

Table 4.9 outlines, by broad occupation group, the types and level of skills that are used across the sector. This outline of the skills used by broad occupations in the sector has been derived from a number of sources including NHS Careers, the Health functional map and the NHS's Knowledge and Skills Framework. The list of sector occupations is intended to be indicative of the roles that fall within each of the broad occupation groups and is not exhaustive. However it is clear that there is a strong utilisation of higher-level skills across the sector.

Table 4.9: Summary of the nature of skills used in the Health sector

Broad Occupation Group	Sector Occupations	Predominate level of skill required	Generic skills required	Example of specific skills required (linked to an occupation where appropriate)	Minimum qualification level typically required
Managers and Senior Officials	• Chief Executives • Directors o Health service managers including: Information Managers HR Managers Finance Managers	Higher skills	• Leadership and management • Strategic thinking • Communication skills • Customer care • Team working • Use of technology • Financial and numerical skills • Complex problem solving	• Chair meetings • Technical knowledge including knowledge of specific field e.g. finance but also of the sector. • Develop procedures for delivery of services • Recruit and select people • Allocate and monitor the progress and quality of work • Monitor and evaluate the quality, outcomes and cost-effectiveness of Health care services	Level 3 or 4
Professionals	• Doctors • Dentists • Anaesthetists	Higher skills	• Leadership and management • Communication skills • Customer care • Team working • Use of technology • Financial and numerical skills • Analysis and interpretation of information • Complex problem solving	• Medical expertise in a given field • Diagnose problems and diseases • Plan activities, interventions and treatments • Identifying and administer treatments • Prescribe drugs • Carrying out surgery • Provide advice to patients • Contribute to the formulation of policy • Direct and manage research activities	Level 4+ Post graduate level qualification i.e. medical degree
Associate Professionals	• Nurses • Midwives • Health Visitors • Physiotherapists • Ophthalmologists • Scientists e.g. immunologists microbiologist	Higher and Intermediate skills	• Communication and customer care • Use mathematics - deciding what needs to be calculated, using appropriate calculations and presenting and explaining results clearly and accurately • Use technology • Teamwork including leading or supporting when appropriate and motivating a group for high performance • Solve problems - assessing situations and identify the root cause of a problem	• Occupational example - Nurse • Lead a specific area of clinical expertise (i.e. surgery, dermatology, ophthalmology, and orthopaedics), developing nursing care to the highest standard possible • Assess an individual's Health status • Prioritise treatment and care for individuals according to their Health status and needs • Manage environments and resources • Administer medication • Provide intermediate life support	Level 4+ Usually degree level entry with post graduate qualification for some roles

Broad Occupation Group	Sector Occupations	Predominate level of skill required	Generic skills required	Example of specific skills required (linked to an occupation where appropriate)	Minimum qualification level typically required
Caring, leisure and other services	• Health Care Support Workers • Nursing Auxiliaries • Senior Health Care Support Workers • Assistant Practitioners	Intermediate skills Basic skills Employability skills	• Communication and customer care including listen to, understand and follow lengthy or multi-step instructions and narratives and speak clearly and confidently in a way which suits the situation. • Use mathematics including tackling practical number problems using straightforward calculations. • Teamwork • Solve problems by following a given procedure in response to a problem	• Able to provide basic life support • Obtain specimens from patients for the purpose of testing and screening • Prepare patients and assist practitioners to implement Healthcare activities • Skills to move and position patients • Escorting patients occasionally with the use of wheelchairs	Level 2/3
Administrative and Clerical	• Medical Secretaries • Receptionist • Ward clerks • Administrative Assistants • Computing staff • Human Resource staff • Finance staff	Intermediate skills Basic skills Employability skills	• Communication and customer care including listen to, understand and follow lengthy instructions and narratives • Use mathematics • Use technology • Teamwork • Solve problems including assess situations, identify problems and implement solutions	• Receive and monitor visitors • Enter and retrieve data from databases • Understand and maintain confidentiality in Health care • Make and receive telephone calls • Use a diary system • Use a filing system • Support the organisation of meetings • Prepare text from recorded audio	Level 2/3
Elementary Occupations	• Porters • Cleaners • Catering staff • Linen/laundry staff • Sterile services staff	Basic skills Employability skills	• Customer care including listen to, understand and follow instructions • Teamwork • Solve simple problems including assess situations, identify problems and implement solutions	• Clean and remove spillages of blood and other bodily fluids • Use appropriate equipment safely in carrying out duties	Level 1/2

Sources: NHS Careers, Health functional map, KSF Core Dimensions, Skills for Health Career Framework Tool and General Dental Council Scope of Practice

4.2 Value of skills

Qualifications held can only be considered to be a proxy for skills. However, a 2008 survey (Skills for Health, 2009) suggest that Health sector employers consider all types of qualifications to be more valuable and relevant than not. They also consider them to be more valuable and relevant than the average for all sectors.

Table 4.10: Relevance and value of different types of qualifications

Qualification	Health sector (mean score)	Whole economy (mean score)
Other VQs (apart from S/NVQs)	6.0	5.1
Degrees	5.9	4.8
S/NVQs	5.8	4.9
Qualifications up to A Levels or Highers	5.5	5.0

Source: 2008 Skills for the workplace: Employer Perspectives (1 = not relevant or valuable, 10 = extremely relevant and valuable).

The levels of training in the Health sector are high. Tables 4.11 and 4.12 show the proportion of employees receiving training between 2002 and 2010. In 2010, an estimated 27 per cent of Health sector staff report receiving training in the last 4 weeks whilst 50 per cent report receiving training in the last 13 weeks.

These percentages are higher in 2010 than the levels of training reported in any other sector and significantly higher than the all-economy average. Time-series analysis also shows that these levels of training have remained stable over time whilst other sectors show that training has dropped in recent years. It is likely that the incidence of training and development activities will remain high across the sector, there are significant issues surrounding Health and safety and regulation that mean that employers have to continue to invest in the skills of their workforce to ensure that they meet core standards.

Table 4.11: Percentage of employees receiving training in last 4 weeks, 2002-2010 (UK)

	2002	2003	2004	2005	2006	2007	2008	2009	2010
	%	%	%	%	%	%	%	%	%
Agriculture, forestry and fishing	16	14	14	14	12	10	13	15	11
Energy production and utilities	17	14	15	13	14	15	13	14	11
Manufacturing	11	11	10	11	10	10	10	9	10
Construction, building services, engineering and planning	16	16	16	16	16	16	14	13	14
Wholesale and retail trade	13	13	12	12	11	11	11	9	10
Transportation and storage	12	12	12	10	10	9	10	9	9
Hospitality, tourism and sport	16	15	14	14	13	12	12	11	14
Information and communication technologies	16	15	14	14	12	12	11	13	11
Creative media and entertainment	17	16	16	16	15	14	13	11	12
Financial, insurance & other professional services	21	20	20	18	17	17	16	17	17
Real estate and facilities management	19	18	18	16	17	16	15	11	10
Government services	22	22	21	21	19	20	20	20	18
Education	24	24	23	23	22	22	22	20	22
Health	27	28	29	27	26	25	25	25	27
Care	27	28	29	27	26	25	25	22	25
All economy	18	17	17	17	16	16	16	15	16
Weighted base (000s)	4,284	4,217	4,242	4,202	3,972	3,909	3,846	3,630	3,705
Unweighted base (000s)	*14.992*	*14.137*	*13.569*	*13.14*	*12.016*	*11.724*	*11.207*	*12.305*	*11.962*

Source: Labour Force Survey 2010, ONS

Table 4.12: Percentage of employees receiving training in last 13 weeks, 2002-2010 (UK)

	2002	2003	2004	2005	2006	2007	2008	2009	2010
	%	%	%	%	%	%	%	%	%
Agriculture, forestry and fishing	30	29	30	24	25	24	26	34	24
Energy production and utilities	37	33	32	31	31	29	27	27	25
Manufacturing	24	22	22	22	21	21	20	18	20
Construction, building services, engineering and planning	32	32	32	32	31	31	30	28	28
Wholesale and retail trade	25	24	23	23	22	21	20	18	19
Transportation and storage	26	25	25	24	23	21	22	20	22
Hospitality, tourism and sport	28	27	26	25	25	22	22	22	23
Information and communication technologies	32	30	28	28	27	25	24	25	24
Creative media and entertainment	32	32	30	31	30	28	27	25	22
Financial, insurance & other professional services	40	38	37	37	34	34	32	33	33
Real estate and facilities management	36	35	35	34	34	31	31	22	18
Government services	43	43	42	42	39	39	38	39	37
Education	47	46	44	44	44	43	43	40	42
Health	50	51	52	52	51	47	48	49	50
Care	50	51	52	52	51	47	48	44	48
All economy	34	34	33	33	32	31	31	30	30
Weighted base (000s)	8,244	8,199	8,122	8,253	7,975	7,630	7,528	7,231	7,181
Unweighted base (000s)	*28.953*	*27.505*	*26.094*	*25.956*	*24.275*	*23.049*	*22.078*	*24.365*	*22.089*

Source: Labour Force Survey 2010, ONS

There are some interesting differences between the percentages of Health sector employees reporting receiving training at a national level. Table 4.13 shows that the percentage of employees receiving training in the last four weeks in Northern Ireland is significantly less than other parts of the UK. The Health sector percentage of 14 per cent is still slightly higher than the all-economy average of ten per cent.

Table 4.13: Percentage of employees receiving training in last 4 weeks, 2010 (all nations)

	UK	England	Scotland	Wales	Northern Ireland
	%	%	%	%	%
Agriculture, forestry and fishing	11	12	*	*	*
Energy production and utilities	11	11	15	*	*
Manufacturing	10	9	11	9	13
Construction, building services, engineering and planning	14	13	16	16	*
Wholesale and retail trade	10	10	11	11	8
Transportation and storage	9	9	8	*	*
Hospitality, tourism and sport	14	14	14	23	*
Information and communication technologies	11	11	*	*	*
Creative media and entertainment	12	12	*	33	*
Financial, insurance & other professional services	17	16	23	26	*
Real estate and facilities management	10	10	10	*	*
Government services	18	19	17	13	7
Education	22	22	23	20	11
Health	27	29	21	19	14
Care	25	25	23	31	*
All economy	16	16	16	16	10
Weighted base (000s)	3,705	3,124	344	176	61
Unweighted base (000s)	*4.959*	*4.149*	*0.472*	*0.230*	*0.108*

Source: Labour Force Survey 2010, ONS

**Sample size too small for reliable estimate*

The percentage of employees receiving training in the last 13 weeks in each of the nations shows that levels of training in Northern Ireland are significantly less than other parts of the UK (Table 4.14). As with training in the last four weeks it is, however, significantly higher than the whole economy average.

Table 4.14: Percentage of employees receiving training in last 13 weeks, 2010 (all nations)

	UK	England	Scotland	Wales	Northern Ireland
	%	%	%	%	%
Agriculture, forestry and fishing	24	26	*	*	*
Energy production and utilities	25	23	30	*	*
Manufacturing	20	20	21	18	19
Construction, building services, engineering and planning	28	28	29	26	17
Wholesale and retail trade	19	19	19	16	14
Transportation and storage	22	23	22	*	*
Hospitality, tourism and sport	23	23	22	30	*
Information and communication technologies	24	24	29	*	*
Creative media and entertainment	22	22	*	43	*
Financial, insurance & other professional services	33	32	37	40	23
Real estate and facilities management	18	18	23	*	*
Government services	37	38	36	33	25
Education	42	42	43	37	28
Health	50	52	46	43	38
Care	48	49	44	48	24
All economy	30	30	31	29	22
Weighted base (000s)	7,181	6,065	668	312	137
Unweighted base (000s)	*9.729*	*8.132*	*0.934*	*0.414*	*0.249*

Source: Labour Force Survey 2010, ONS

**Sample size too small for reliable estimate*

The UK Commission's employer skills survey asks employers about the training received by their staff. The proportion of employers reporting that they have provided training is consistently higher in the Health sector than the whole economy and this pattern is seen across all parts of the UK (Tables 4.15 and 4.16).

The proportion of employees receiving training (as reported by employers) is higher in the Health sector than the whole economy in England and Scotland but is lower in the Health sector in Wales and Northern Ireland (Table 4.16). These low levels of training in Wales and Northern Ireland are surprising given the high amount of training undertaken to satisfy Health and safety requirements.

Table 4.15: Employers providing training by sector and nation (last 12 months)

	UK		England		Scotland		Wales		Northern Ireland	
	Number	%	Number	%	Number	%	Number	%	Number	%
Agriculture, forestry and fishing	58,869	53	42,577	54	†7,737	†58	3,536	34	5,019	71
Energy production and utilities	8,743	69	6,858	69	1,040	81	554	67	291	54
Manufacturing	73,972	57	61,935	55	6,629	71	3,464	64	1,944	51
Construction	163,641	53	137,473	53	13,506	63	7,193	55	5,469	51
Wholesale and retail trade	261,948	56	218,681	55	23,692	67	11,347	54	8,228	58
Transportation and storage	55,004	45	46,106	43	5,633	70	2,103	50	1,161	52
Accommodation, food and tourism activities	134,314	61	108,618	60	15,665	71	6,570	58	3,461	59
Information and communication	39,090	54	34,418	52	†2,974	†83	1,215	62	483	44
Creative media and entertainment	74,069	52	63,945	51	†5,976	†54	2,690	57	1,457	71
Financial, insurance & other professional services	114,074	67	101,640	66	5,354	64	4,605	80	2,474	73
Real estate and facilities management	95,068	57	85,826	57	†6,652	†55	1,340	44	1,249	67
Government	41,608	76	32,980	74	4,715	85	2,343	87	1,571	77
Education	55,629	86	45,309	85	4,348	97	2,941	92	3,031	92
Health	44,797	86	38,133	85	3,208	99	2,216	79	1,239	84
Care	73,669	84	60,516	84	6,798	81	3,562	81	2,793	86
All economy	1,361,250	59	1,141,560	58	119,847	68	58,171	59	41,668	64
Weighted base	2,299,921		1,960,298		175,115		98,952		65,558	
Unweighted base	87,572		75,053		2,503		6,012		4,004	

Source: UK Commission's Employer Skills Survey (Davies et al, 2012).

Base: All establishments.

† Treat figures with caution due to small unweighted base size of 50-99 establishments in Scotland

Table 4.16: Employees receiving training by sector and nation (last 12 months)

	UK		England		Scotland		Wales		Northern Ireland	
	Number	%	Number	%	Number	%	Number	%	Number	%
Agriculture, forestry and fishing	198,736	43	152,352	43	†25,724	†47	8,993	29	11,667	51
Energy production and utilities	167,507	50	120,687	49	32,976	55	11,072	66	2,772	38
Manufacturing	1,146,654	45	934,516	44	93,562	48	74,719	54	43,857	52
Construction	1,072,552	48	884,923	48	116,140	47	39,666	44	31,826	46
Wholesale and retail trade	2,340,353	50	1,960,109	49	201,879	55	109,603	55	68,761	48
Transportation and storage	538,494	41	448,580	39	49,954	44	22,489	58	17,468	63
Accommodation, food and tourism activities	1,221,736	53	1,017,791	53	124,328	55	48,807	49	30,809	50
Information and communication	233,240	38	205,944	37	†15,377	†51	5,255	28	6,663	65
Creative media and entertainment	524,081	48	451,335	47	†30,017	†43	24,215	69	18,513	69
Financial, insurance & other professional services	1,109,888	54	949,712	52	101,444	73	32,505	60	26,224	69
Real estate and facilities management	560,354	47	492,799	47	†36,284	†49	19,985	60	11,286	50
Government	1,004,866	56	835,514	58	82,550	47	49,901	53	36,901	59
Education	1,598,280	63	1,354,826	63	116,696	62	84,527	72	42,231	58
Health	1,300,684	65	1,032,851	64	187,638	81	58,505	49	21,690	52
Care	969,487	64	780,108	64	89,130	63	52,831	84	47,414	64
All economy	14,476,138	53	12,050,111	52	1,337,833	56	661,045	56	427,137	54
Weighted base	27,547,123		23,198,475		2,381,601		1,182,314		784,732	
Unweighted base	2,816,693		2,345,213		201,868		178,922		90,690	

Source: UK Commission's Employer Skills Survey (Davies et al, 2012).

Base: All employment.

† Treat figures with caution due to small unweighted base size of 50-99 establishments in Scotland

Table 4.17 shows that employers in the Health sector provide training to a range of occupational groups. The proportions providing training to each group are reflective of the occupational group profile of the sector.

Table 4.17: Employers providing training to employees by occupational group (last 12 months)

	Health		All economy	
	Number	%	Number	%
Managers, Directors and senior officials occupations	28,923	65	825,928	61
Professional occupations	16,760	37	152,106	11
Associate professional and technical occupations	7,275	16	124,610	9
Administrative and secretarial occupations	26,221	59	372,218	27
Skilled trades occupations	4,104	9	192,480	14
Personal service occupations	20,206	45	129,265	9
Sales and customer service occupations	1,956	4	261,082	19
Process, plant and machine operatives	626	1	96,592	7
Elementary occupations	7,594	17	217,981	16
Other	632	1	35,410	3
Don't know	543	1	20,638	2
Arrange training for all categories of staff employed	24,556	55	714,095	52
Arrange training for some (but not all) categories of staff	20,240	45	647,154	48
Weighted base	44,797		1,361,249	
Unweighted base	3,125		66,916	

Source: UK Commission's Employer Skills Survey (Davies et al, 2012)

Base: All establishments providing training

Column percentages sum to more than 100 since multiple responses were allowed

The proportion of employees receiving training in the Health sector is generally greater in each occupational group than the all-economy average (Table 4.18). The only occupational groups where this is not the case are sales and customer service occupations and process plant and machine operatives. Both of these occupational groups are underrepresented in the Health sector workforce.

Table 4.18: Employees receiving training by occupational group (last 12 months)

	Health		All economy	
	Number	%	Number	%
Managers, Directors and senior officials occupations	135,090	61	2,413,145	45
Professional occupations	282,897	67	1,904,780	61
Associate professional and technical occupations	100,248	66	1,022,510	56
Administrative and secretarial occupations	183,953	52	1,607,984	45
Skilled trades occupations	32,637	78	1,041,373	55
Personal service occupations	436,706	73	1,606,254	70
Sales and customer service occupations	10,410	50	1,937,670	55
Process, plant and machine operatives	3,821	41	902,782	47
Elementary occupations	113,385	61	1,938,793	48
Other	*	n/a	100,845	n/a
All occupations	1,300,683		14,476,137	
Weighted base	1,300,683		14,476,137	
Unweighted base	142,438		1,517,802	

Source: UK Commission's Employer Skills Survey (Davies et al, 2012)

Base: All employees receiving training

Note: % figures refer to % of those working in x occupation who have received training

** suppressed due to unweighted establishment base size <25*

4.2.1 Management and Leadership

Continuing to improve management skills and leadership qualities forms a key part of maintaining quality standards in delivering a broad range of services in the Health sector.

The proportion of managers and professionals without Level 4 or higher qualifications is smaller in the Health sector than the whole economy (Tables 4.19 and 4.20). These lower levels are to be expected given that the professional occupational group includes roles such as hospital doctors, general practitioners and dentists which are regulated professions and require minimum qualification levels above Level 4.

The tables also show that within the Health sector there has been a large reduction in the proportion of managers and professionals without Level 4 or higher qualifications since 2002. It must be noted, however, that there was a significant reduction in the proportion of managers and professionals without Level 4 or higher qualifications between 2008 and 2009. This may be the result of the change in classification from SIC 2003 to SIC 2007.

Table 4.19: Managers and professionals within the whole economy without Level 4 or higher qualifications 2002-2010 (UK)

		2002	2003	2004	2005	2006	2007	2008	2009	2010
Managers or professionals without L4 or higher qualifications	000s	3,239	3,336	2,554	3,023	3,460	3,471	3,496	3,371	3,283
	%	45	45	33	38	43	42	42	40	39
Weighted base (number of managers and professionals)	*000s*	*7,214*	*7,481*	*7,726*	*7,866*	*8,123*	*8,201*	*8,356*	*8,406*	*8,483*

Source: Labour Force Survey 2010, ONS

Table 4.20: Managers and professionals within the Health sector without Level 4 or higher qualifications 2002-2010 (UK)

		2002	2003	2004	2005	2006	2007	2008	2009	2010
Managers or professionals without L4 or higher qualifications	000s	88	91	79	101	113	95	110	67	69
	%	26	27	20	24	26	23	24	14	15
Weighted base (number of managers and professionals)	*000s*	*337*	*336*	*386*	*419*	*438*	*411*	*452*	*469*	*469*

Source: Labour Force Survey 2010, ONS

4.3 Barriers to training

Despite the high incidence of training across the Health sector in comparison to other areas of the economy there are still a significant proportion of employers (14 per cent) who report that they do not provide training.

Table 4.21 shows that the main reasons given by employers for not providing training in Health and the economy overall. In the Health sector, 61 per cent of employers cited “All our staff are fully proficient / no need for training,” slightly less than the all-economy average, (64 per cent). A further 11 per cent of employers reported that there is no money available for training, consistent with all-sector figures. Finally, ten per cent of Health sector employers state that they do not provide training as there is no training available in relevant subject area. This figure is greater than the economy average (just six per cent) and may indicate the need for more tailored training provision in certain areas of Health.

Whilst the pattern of responses in the Health sector are broadly comparable to the patterns emerging in the whole economy, the one area of marked difference is in relation to difficulties sourcing training in relevant subject areas (ten per cent in Health versus six per cent in the whole economy). The reasons for this could be related to the highly specialised skills that are utilised in the sector with some training and development activity requiring considerable resources from providers or the in-house provision by large sector employers may leave too low a level of demand from the rest of the sector to make providing the training viable for providers.

Table 4.21: Barriers to training, UK

	Health sector		Whole economy	
	Number	%	Number	%
All our staff are fully proficient / no need for training	4,406	61	591,690	64
No money available for training	769	11	96,037	10
Training is not considered to be a priority for the establishment	535	7	81,427	9
No training available in relevant subject area	756	10	58,741	6
Managers have lacked the time to organise training	137	2	26,023	3
Learn by experience/Learn as you go	258	4	21,758	2
External courses are too expensive	46	1	20,193	2
Small firm/training not needed due to size of establishment	35	**	14,808	2
Employees are too busy to undertake training and development	123	2	14,293	2
Employees are too busy to give training	79	1	11,745	1
Business not operating long enough/New business (inc. takeover transition)	87	1	11,372	1
Trained staff will be poached by other employers	25	**	5,983	1
I Don't know what provision is available locally	85	1	5,353	1
The start dates or times of the courses are inconvenient	0	0	5,220	1
The courses interested in are not available locally	10	**	4,518	**
No new staff (only train new staff)	40	1	3,637	**
The quality of the courses or providers locally is not satisfactory	0	0	2,728	**
Difficult to get information about the courses available locally	25	**	1,788	**
Other	292	4	37,499	4
No particular reason	184	3	43,226	5
Don't know	82	1	10,195	1
Weighted base	7,264		919,212	
Unweighted base	247		19,924	

Source: UK Commission's Employer Skills Survey (Davies et al, 2012)

Base: All establishments that do not provide training

Column percentages sum to more than 100 since multiple responses were allowed

***Denotes a figure greater than 0% but less than 0.5%*

4.4 Skills and performance of the Health sector

4.4.1 High performance working practices

Skills utilisation describes how employers seek to maximise organisational performance through the optimal matching of skills use to business needs. High performance working practices (HPWPs) is a term given to a range of tools that Managers and HR managers have to practically enhance the utilisation of skills in the workplace.

UKCES define HPW as:

> "a general approach to managing organisations that aims to stimulate more effective employee involvement and commitment to achieve high levels of performance"[14]

The research suggests that there is no single practice or approach to HPW which is suitable in all circumstances. Organisations need to use a combination of approaches that are effectively aligned to its aims and objectives. The most recent indicators of high performance working practices are available from the UK Commission's Employer Skills Survey 2011 (Davies *et al*, 2012). Several indicators of high performance working were sought in this survey from systems to deal with talent management through to access to flexible working.

In terms of talent management the Health sector has a higher than all-sector average of employers with formally documented procedures for identifying high potential or talented individuals at 20 per cent compared to 14 per cent in the whole economy. However, this level is lower when compared to the broadly comparable sectors of education (32 per cent) and care (28 per cent). Health employers are more likely to report that they have no formal processes (47 per cent) for indentifying high potential or talented people. This is despite the sector's relatively comprehensive application of appraisal systems, of which 70 per cent of NHS staff report having in Scotland and 77 per cent have in England.[15]

14 Spilsbury et al (2010) Ambition 2020: World Class Skills and Jobs for the UK: The 2010 Report.

15 Care Quality Commission (2010) Briefing note: issues highlighted by the 2010 NHS staff survey in England

Table 4.22 shows that formally documented processes for identifying 'high potential' individuals in Health (20 per cent) are higher than the all-economy average (14 per cent). However, given the high level of skills in the sector and appraisal systems, in comparison with other areas of the public sector, there is a relatively lower level of formal systems to identify high potential or talented individuals. Professional body minimum standards (which already mandate high performance) provide in themselves a 'ready-made' means of developing progression in the sector which is often outside the remit of employers themselves and may contribute to reasons why formal processes for identifying talent are relatively lower. The sector also has low incidence of performance-related pay and therefore the incentive to have formal systems in this area is likely to be reduced.

There are also potential issues with the reviews in practice. The English NHS survey reports that just over one third (34 per cent) of staff felt that their review was 'well structured' and improved how they worked, set clear objectives and left them feeling that their work was valued. In Scotland over half (56 per cent) felt their review did not help to improve how they do their job, although 72 per cent felt it helped agree clear objectives for their work. In addition only 37 per cent of all staff said they received 'clear' feedback on how they were doing in their job.

Table 4.22: Whether establishment has formal processes in place to identify 'high' potential or talented individuals

	Formal process for identifying 'high potential' individuals								Unweighted base	Weighted base
	Yes, formally documented		Yes, informally		No		Don't know			
Agriculture, forestry and fishing	5,652	5	30,105	27	72,671	64	4,348	4	820	112,776
Energy production and utilities	2,191	17	4,077	31	6,385	49	486	4	866	13,138
Manufacturing	15,955	12	41,908	31	72,179	54	3,456	3	4,001	133,498
Construction	21,136	7	89,742	29	185,426	61	8,056	3	4,570	304,360
Wholesale and retail trade	79,322	17	144,464	31	229,455	49	18,075	4	8,093	471,317
Transportation and storage	12,217	10	30,841	26	73,328	61	4,419	4	2,400	120,805
Accommodation, food and tourism activities	32,190	15	69,719	32	109,728	50	7,234	3	5,819	218,871
Information and communication	5,976	8	23,608	32	42,403	58	1,136	2	1,261	73,123
Creative media and entertainment	11,873	8	48,322	33	83,861	57	3,495	2	1,959	147,551
Financial, insurance & other professional services	31,220	18	56,823	33	80,911	47	3,669	2	2,680	172,623
Real estate and facilities management	20,259	13	48,382	30	83,504	52	9,000	6	1,745	161,145
Government	11,426	21	16,967	31	25,307	46	1,600	3	1,379	55,300
Education	18,653	32	20,236	34	18,789	32	1,231	2	2,780	58,909
Health	10,508	20	15,684	30	24,879	47	1,427	3	1,739	52,498
Care	25,788	28	26,675	29	32,817	36	6,485	7	2,455	91,765
All economy	320,952	14	702,866	31	1,198,876	52	77,227	3	44,691	2,299,921

Source: UK Commission's Employer Skills Survey (Davies et al, 2012)

Base: All establishments in Module 1 and Scotland

The extent to which employee's experience variety in their work is often seen as an indicator of high trust and ability to develop a range of skills in the workplace (table 4.23). Health sector employers are more likely to indicate that they offer variety 'to some extent' (38 per cent) when compared to the whole economy (55 per cent). The sector's emphasis on patient safety and the need to comply with regulations means that too much day-to-day variation is often avoided. The relatively high proportion of employers indicating that they offer variety to 'some extent' is consistent with earlier indicators of the stated desire of employers to become employers of choice. This is also a reflection of the fewer people employed in smaller organisations and overall levels of self employment in the sector as outlined in Chapter 3.

Table 4.23: Extent to which employees have variety in their work

	Extent to which employees have variety in their work										Unweighted base	Weighted base
	To a large extent		To some extent		Not much		Not at all		Don't know			
Agriculture, forestry and fishing	76,675	68	24,469	22	7,742	7	2,816	2	1,074	1	820	112,776
Energy production and utilities	5,929	45	4,909	37	1,795	14	406	3	100	1	866	13,138
Manufacturing	67,095	50	48,484	36	12,899	10	3,756	3	1,262	1	4,001	133,498
Construction	179,144	59	88,851	29	24,047	8	9,313	3	3,003	1	4,570	304,360
Wholesale and retail trade	238,562	51	168,884	36	48,318	10	11,692	2	3,861	1	8,093	471,317
Transportation and storage	53,146	44	35,613	29	17,947	15	13,259	11	840	1	2,400	120,805
Accommodation, food and tourism activities	86,140	39	83,543	38	37,117	17	9,289	4	2,782	1	5,819	218,871
Information and communication	46,346	63	21,687	30	3,293	5	417	1	1,381	2	1,261	73,123
Creative media and entertainment	99,587	67	37,290	25	7,267	5	2,237	2	1,170	1	1,959	147,551
Financial, insurance & other professional services	94,803	55	60,363	35	12,493	7	3,148	2	1,816	1	2,680	172,623
Real estate and facilities management	92,156	57	51,012	32	15,579	10	1,561	1	837	1	1,745	161,145
Government	33,925	61	17,273	31	2,855	5	391	1	856	2	1,379	55,300
Education	38,306	65	17,346	29	2,187	4	619	1	452	1	2,780	58,909
Health	26,622	51	19,718	38	5,203	10	694	1	260	**	1,739	52,498
Care	54,001	59	31,224	34	4,410	5	972	1	1,159	1	2,455	91,765
All economy	1,256,316	55	745,134	32	212,192	9	64,300	3	21,979	1	44,691	2,299,921

Source: UK Commission's Employer Skills Survey (Davies et al, 2012)

Base: All establishments in Module 1 and Scotland

*** denotes a figure greater than 0% but less than 0.5%*

Levels of discretion are often understood to be useful indicators of how innovative and responsive organisations can be to changing needs. The high compliance nature of the sector also has an impact on the amount of discretion allowed to employees (table 4.24). The low level of 'to a large extent' in the Health sector (42 percent) compared to the whole economy (52 per cent) responses and high levels of 'not much' (12 per cent) are of little surprise. There will be limits to professional and non-professional discretion.

The extent to which non-registered staff might be able to exercise discretion is often a source of debate in the sector. This can be seen in the recent debate about the limits of discretion that non-registered staff such as assistant practitioners are allowed (Miller, 2011). Indeed constraints on discretion also have an impact on how roles are able to develop to meet changing needs within the sector.

Table 4.24: Extent to which employees have discretion over how they do their work

	Extent to which employees have discretion over how they do their work										Unweighted base	Weighted base
	To a large extent		To some extent		Not much		Not at all		Don't know			
Agriculture, forestry and fishing	61,757	55	39,087	35	6,625	6	2,485	2	2,821	3	820	112,776
Energy production and utilities	5,809	44	4,957	38	1,467	11	557	4	348	3	866	13,138
Manufacturing	63,859	48	49,442	37	11,926	9	5,326	4	2,945	2	4,001	133,498
Construction	167,066	55	103,337	34	18,624	6	10,627	3	4,706	2	4,570	304,360
Wholesale and retail trade	222,298	47	182,574	39	44,174	9	13,608	3	8,663	2	8,093	471,317
Transportation and storage	60,073	50	38,390	32	12,736	11	8,160	7	1,446	1	2,400	120,805
Accommodation, food and tourism activities	88,190	40	87,712	40	28,331	13	9,926	5	4,712	2	5,819	218,871
Information and communication	48,851	67	20,130	28	3,082	4	614	1	446	1	1,261	73,123
Creative media and entertainment	94,306	64	39,623	27	5,912	4	3,212	2	4,498	3	1,959	147,551
Financial, insurance & other professional services	88,150	51	62,426	36	15,688	9	5,292	3	1,068	1	2,680	172,623
Real estate and facilities management	95,298	59	48,171	30	11,255	7	4,656	3	1,765	1	1,745	161,145
Government	32,235	58	17,718	32	3,674	7	810	1	863	2	1,379	55,300
Education	27,530	47	26,592	45	3,231	5	660	1	897	2	2,780	58,909
Health	22,195	42	21,678	41	6,472	12	1,544	3	608	1	1,739	52,498
Care	48,843	53	36,123	39	3,779	4	1,532	2	1,488	2	2,455	91,765
All economy	1,188,767	52	814,655	35	185,638	8	71,823	3	39,037	2	44,691	2,299,921

Source: UK Commission's Employer Skills Survey (Davies et al, 2012)

Base: All establishments in Module 1 and Scotland

In Chapter 3 we saw that the Health sector has a high level of part-time working indicating a willingness from employers to work flexibly. However, there are limits to this flexibility which are like many of the other indicators a result of the sector's high compliance environment.

Table 4.25 presents data on access to flexible working in Health. Only 27 per cent of Health sector employers indicated that their employees had access to flexible working, 'to a large extent,' compared to 44 per cent in the whole economy. It was more likely that flexible working was offered to 'some extent' (44 per cent) and the sector scores high for 'not much' (19 per cent) compared to the whole economy (11 per cent).

Table 4.25: Extent to which employees at establishments have access to flexible working

	Employees have access to flexible working										Unweighted base	Weighted base
	To a large extent		To some extent		Not much		Not at all		Don't know			
Agriculture, forestry and fishing	48,869	43	41,468	37	12,485	11	8,004	7	1,950	2	820	112,776
Energy production and utilities	4,781	36	4,419	34	2,431	19	1,450	11	58	**	866	13,138
Manufacturing	52,687	39	44,362	33	17,955	13	16,667	12	1,827	1	4,001	133,498
Construction	139,674	46	101,224	33	33,585	11	26,266	9	3,610	1	4,570	304,360
Wholesale and retail trade	176,251	37	168,909	36	64,843	14	56,324	12	4,991	1	8,093	471,317
Transportation and storage	44,233	37	38,327	32	16,329	14	20,683	17	1,233	1	2,400	120,805
Accommodation, food and tourism activities	99,272	45	77,239	35	22,537	10	17,703	8	2,120	1	5,819	218,871
Information and communication	42,992	59	20,273	28	5,342	7	4,226	6	289	**	1,261	73,123
Creative media and entertainment	83,200	56	44,734	30	10,011	7	7,602	5	2,004	1	1,959	147,551
Financial, insurance & other professional services	89,019	52	55,484	32	15,828	9	11,747	7	546	**	2,680	172,623
Real estate and facilities management	77,691	48	52,389	33	16,393	10	13,861	9	811	1	1,745	161,145
Government	34,229	62	15,040	27	3,343	6	1,865	3	823	1	1,379	55,300
Education	14,445	25	21,754	37	12,772	22	9,545	16	393	1	2,780	58,909
Health	14,407	27	23,130	44	9,761	19	5,025	10	174	**	1,739	52,498
Care	38,920	42	35,210	38	9,701	11	6,858	7	1,075	1	2,455	91,765
All economy	1,012,366	44	783,411	34	264,071	11	216,701	9	23,372	1	44,691	2,299,921

Source: UK Commission's Employer Skills Survey (Davies et al, 2012)

Base: All establishments in Module 1 and Scotland

*** denotes a figure greater than 0% but less than 0.5%*

The Scottish NHS Staff survey shows that formal systems for personal development planning are filtering through to each employee. In 2010 87 per cent of staff agreed a personal development plan or equivalent, an increase from 58 per cent in 2006. Over three quarters of staff (77 per cent) have received, or expect to receive, the training that was identified in that plan and 92 per cent report that their immediate manager supported them to access the training they received. Over half (57 per cent) were positive about the training they had received whilst just 14 per cent were negative.

The English NHS Staff Survey reports slightly higher satisfaction with learning and development received in the previous 12 months:

- 66 per cent felt that it had helped them to do their job better
- 69 per cent felt that it helped them to stay up-to-date with the requirements of their job
- 68 per cent felt that it helped them to stay up-to-date with professional requirements

However, it also suggests there is more to do to create a culture where staff feel their learning and development needs are supported. Less than half of staff (44 per cent) agreed that there has been strong support for training in their area of work.

Communication processes

Case studies in HPW undertaken for UKCES[16] show that communication processes and employee engagement are crucial for the effective implementation of HPW practices. They help to clearly articulate the purpose and focus of activities and encourage openness and trust. There is some variation between the sectors in England and Scotland in this respect.

Job design

The regulated nature of the sector heavily influences job design; there are tasks within the sector that can only be undertaken by certain staff groups or individuals that hold very specific qualifications. Given the range of activities undertaken within the sector there remains flexibility for employers to examine the way in which skills are deployed and develop new roles that enhance productivity and quality.

On an organisational basis Skills for Health's Transforming Community Services Project illustrates how looking at job design and the use of functional, competence based workforce solutions can help transform community service delivery. The evaluation of the project[17] found that focusing on patients' needs, and the competences required to meet them, helped organisations break down barriers between different staff groups. It enabled them to think differently about how services could be delivered. More strategically it provided a different way to undertake workforce planning, enabling a focus on the skills needed as opposed to the number of people required in each NHS pay band.

Reviewing the scope and design of jobs can help organisations create flexible cultures and ways of working. The opportunities for the sector to release capacity and improve efficiency and productivity are discussed later in this report. The principle of creating new roles at the intermediate skills level to enable more highly skilled staff to focus more of their time on higher added-value activities is well established (Miller, 2011).

16 UKCES (2010) High Performance Working: Case studies analytical report. Evidence Report 21

17 Skills for Health (2011b) Transforming Community Services Project - Final external evaluation.

4.5 The impact of skills on organisational performance

The UKCES review of the value of skills (Campbell, Garrett and Mason, 2010)[18] identifies evidence of a link between a highly skilled workforce and organisational performance. Studies have shown that the higher the skill level of the workforce the higher the impact on productivity. The relationship is clearest at the intermediate skills level and in management skills.

Similarly the UKCES review found evidence of a link between employer training and organisations performance. Studies have found that:

- non-training establishments are almost twice as likely to close as those that do provide training, all other things being equal
- there are direct links between the proportion of workers trained in an industry and the value added per worker
- there is a link between the number of training days per employee and productivity of a firm
- benefits from training also include improved staff retention, increased innovation and better quality and improved safety

Much of the literature has focused on the link between skills and productivity. Whilst individual workers may be less productive if they do not focus on their core competences and activities, and Health teams may be less productive with a less than optimal skills mix.

Skills for Health (The Evidence Centre, 2011a)found that:

- there is limited evidence about the impact of extending training and development for the wider workforce on productivity
- there is some evidence that training and development of non professional support staff and corporate and administrative teams can improve the quality of care
- there is limited evidence about the impact of training on patient safety

Similarly a literature review on the impact of literacy and numeracy training in the Health sector identified a similar lack of evidence[19].

18 Campbell, Garrett and Mason (2010), The Value of Skills: An Evidence Review. Evidence Report 22.

19 Skills for Health (2011a) Establishing a literacy and numeracy baseline in the Health sector

Ensuring an organisation has highly skilled workers is a necessary but not sufficient condition for raising organisational performance. These skills must also be utilised effectively. A high proportion of organisations in the sector are using a wide range of high performance working practices (HPW) that cover all four key core practice areas. Evidence suggests that these practices are generally successful although there are still areas for further work such as:

- ensuring performance reviews are well structured, feedback is provided and clear objectives are set
- creating a culture where staff feel their learning and development needs are supported
- improving communication and employer engagement

Management capability and skills are crucial to the implementation of HPW practices and the overall effectiveness of an organisation. There is evidence that better managed organisations have more highly educated managers. The Health sector has a relatively high proportion of managers with a qualification at Level 4 or above. However this does not necessarily indicate that they have management related qualifications or that these managers apply accepted management practices.

Conclusion

It is clear that a high stock of qualifications in an organisation's workforce, alongside quality management processes support more effective achievement of its organisational goals. The Health sector has a relatively high proportion of its workforce with Level 4 qualifications and relatively few with no or low level qualifications. This reflects the high number of professionals and associate professionals employed.

The proportion of the sector's workforce with literacy and numeracy needs is similar to the UK average and there are indications that levels have increased over recent years. There is some evidence of literacy and numeracy needs across all levels of staff i.e. not just those employed in routine or semi-routine roles.

The sector enjoys high levels of training, and these activities are viewed as important and valuable by employers.

Skills are key to the performance of the Health sector, however there are concerns that remain around the utilisation of skills and the effectiveness of both management and the range of high performing working practices in the sector. The issue of better deployment and utilisation of skills is returned to in section six through discussion of potential change confronting the sector.

5. Extent of skills mis-match

Chapter Summary

- Seven per cent of establishments in the Health sector report experiencing retention issues. This is higher than the whole economy average of five per cent.
- The main causes of retention difficulties relate to low wages, roles that are not attractive to applicants and competition from other employers.
- The main impact of retention difficulties include difficulties managing and covering any shortfall in staff, increases in recruitment costs and increased running costs for the business.
- Vacancies as a proportion of total employment are relatively low in the sector (one per cent) compared to the whole economy (two per cent).
- The proportion of vacancies that are Hard-to-fill Vacancies and Skills-Shortage Vacancies are relatively low compared to the other sectors of the economy (19 per cent and 12 per cent respectively).
- 19 per cent of employers in the Health sector report that they have skills gaps within their workforce. This compares to 13 per cent in the whole economy.
- Five per cent of employees in the Health sector are estimated to have skills gaps. This is comparable to the whole economy.
- The main causes of skills gaps in the Health sector include employees only being part-way through their training, being new to the role or not having received the appropriate training.
- Skills that need improving in the Health sector workforce include team working skills, customer handling skills and written communication skills.
- Employers in the Health sector report that skills gaps increase the workload for other staff, create difficulties introducing new working practices, increase operating costs and impact upon quality standards.
- In comparison to the whole economy the Health sector has a lower proportion of employees that are over qualified and over skilled.

Introduction

This chapter examines the extent to which there is a mismatch between the skills needs of the Health sector and those that are available in the wider workforce and those they already employ. Section 5.1 focuses on recruitment difficulties and the causes and consequences of these for employers in the Health sector. Section 5.2 explores skills issues that employers are confronted with within their current workforce. Section 5.3 looks at over-qualification and the extent to which it is an issue within the sector. Section 5.4 reports on the effects of skills shortages on average wage levels and international recruitment in the sector.

5.1 Extent and nature of vacancies

Vacancies within an organisation can arise due to:

- Normal retirement. This can be calculated based on the age of the workforce and an employer's retirement policy. However, pressure points can be reached when large numbers of people reach retirement age within a short period of time.
- Involuntary circumstances, generally beyond the control of either the employer or the employee. This could include death, ill-health or dismissal.
- Voluntary resignation by the employee for their own reasons. These reasons are usually of most interest to those wanting to improve retention rates in organisations.
- Job creation by the employer.

It is important to recognise that the Health sector is large, with employers spread throughout the UK. Over recent years the expansion in the number of employees in the Health sector has meant that it has been relatively easy for employees to find new jobs when they wish to move on to a different role or to progress their career.

The terms and conditions of employment within the NHS facilitate movement between employers through continuity of terms and conditions and service. This in part may contribute to retention issues reported by organisations.

We know that levels of movement around the sector are high[20] and whilst this does not mean that skills are lost to the sector overall, it does create issues for individual employers that include recruitment and induction costs for new staff, temporary staffing costs, loss of knowledge and skills from the workforce and a loss of stability within teams.

20 The Mackinnon Partnership (2009a), Identifying the Movement of the Workforce around the Sector. Skills for Health.

It is therefore not surprising that the UK Commission's Employer Skills Survey 2011 (Davies *et al*, 2012), highlights a higher than average proportion of establishments in the Health sector reporting problems with retaining staff compared to the whole economy. Across the UK (excluding Scotland) the Health sector has the second-highest reported proportion of establishments with retention difficulties (Table 5.1). The highest proportion of establishments with retention difficulties are found in 'Hospitality, Tourism and Sport'.

Across the Health sector establishments in Wales have a slightly higher incidence of reported retention difficulties than England and Northern Ireland.

Table 5.1: Has retention problems, by sector and geography

	UK (excl. Scotland)		England		Wales		Northern Ireland	
	Number	%	Number	%	Number	%	Number	%
Agriculture, forestry and fishing	4,954	5	4,236	5	360	3	358	5
Energy production and utilities	555	5	484	5	62	8	9	2
Manufacturing	6,493	5	5,883	5	433	8	177	5
Construction, building services, engineering and planning	10,569	4	9,710	4	722	5	138	1
Wholesale and retail trade	18,192	4	16,682	4	891	4	619	4
Transportation and storage	5,676	5	5,240	5	321	8	115	5
Hospitality, tourism and sport	18,345	9	16,670	9	1,126	10	548	9
Information and communication technologies	3,084	4	2,948	4	57	3	79	7
Creative media and entertainment	5,303	4	4,891	4	306	7	106	5
Financial, insurance & other professional services	6,271	4	5,876	4	339	6	55	2
Real estate and facilities management	5,826	4	5,649	4	139	5	38	2
Government services	2,496	5	2,200	5	208	8	88	4
Education	2,925	5	2,493	5	267	8	165	5
Health	3,297	7	2,961	7	249	9	87	6
Care	5,134	6	4,615	6	327	7	191	6
Not within scope	6,810	6	6,476	6	247	6	87	3
Whole Economy	105,929	5	97,014	5	6,054	6	2,860	4
Weighted base	2,124,807		1,960,298		98,952		65,558	
Unweighted base	85,069		75,053		6,012		4,004	

Source: UK Commission's Employer Skills Survey (Davies et al, 2012)

Base: All establishments in England, NI, Wales (question not asked in Scotland)

Table 5.2 reports that the main reasons given by employers for retention problems in the Health sector are:

- Wages offered are lower than those offered by other firms (48 per cent).
- Not enough people interested in doing this type of work (42 per cent).

- Too much competition from other employers (38 per cent).

Issues regarding wage levels are interesting as a large proportion of the sector has standardised wage levels[21]. Further analysis of this issue may therefore be needed to explore the specific issue experienced by employers, be it independent Health sector employers offering higher or lower wage levels than the public sector, or competition with employers from other sectors for non-clinical roles such as administration and managers.

The competition with other sectors for the skills of non-clinical or more 'routine occupations' is high, particularly given some of the difficulties that employers in the sector will have in making roles attractive. These difficulties are created in respect of the need for people to work on a 24-hour rota and perform tasks that are considered undesirable.

21 NHS Agenda for Change provides a standard level of wages across the NHS.

Table 5.2: Reasons for retention problems within the Health sector

	UK (excl. Scotland)	
	Number	%
Not enough people interested in doing this type of work	1,387	42
Long/unsocial hours	952	29
Wages offered are lower than those offered by other firms	1,578	48
Staff don't want long term commitment	1,053	32
Lack of career progression	1,167	35
Too much competition from other employers	1,260	38
Impact of the benefits trap	729	22
Unattractive conditions of employment	931	28
Geographic location of the firm	673	20
Difficult to find experienced/skilled staff	294	9
Nature of work is too difficult/mentally and physically tiring	139	4
Other	186	6
None	7	**
Don't know	8	**
Weighted base	3,297	
Unweighted base	266	

Source: UK Commission's Employer Skills Survey (Davies et al, 2012)

Base: All establishments in England, NI, Wales that find it difficult to retain staff (question not asked in Scotland)

Column percentages sum to more than 100 since multiple responses were allowed

***Denotes a figure greater than 0% but less that 0.5%*

Employers in the Health sector are more likely to cite issues with wages, lack of career progression, unattractive conditions of employment and competition from other employers as reasons for retention issues compared to the whole economy. They were less likely to cite issues such as long and unsocial hours and difficulties finding people interested in the type of work or with the relevant experience or skills than the whole-economy average.

As shown in table 5.3, the impact of retention problems on employers in the Health sector includes:

- More strain on management of existing staff in covering the shortage (80 per cent).
- An increase in recruitment costs due to more advertising or use of a recruitment agency (60 per cent).
- Increased running costs (for example use of excess overtime, subcontracting or use of temporary staff etc.) (58 per cent).

Table 5.3: Impact of retention difficulties, Health sector

	UK (excl. Scotland)	
	Number	%
Loss of business to competitors	719	22
Restrictions to business development activities	967	29
Increased running costs (for example use of excess overtime, subcontracting or use of temporary staff etc)	1,904	58
More strain on management of existing staff in covering the shortage	2,623	80
An increase in recruitment costs due to more advertising or use of a recruitment agency	1,993	60
Difficulties with quality	1,137	34
Difficulties with customer service	1,283	39
Loss of efficiency or increased wastage	1,267	38
Difficulties with accommodating technological change	566	17
Difficulties with introducing new working practices	1,095	33
Something else	0	0
Not affected the business	213	6
Don't know	0	0
Weighted base	3,297	
Unweighted base	266	

Source: UK Commission's Employer Skills Survey (Davies et al, 2012)

Base: All establishments in England, NI, Wales that find it difficult to retain staff (question not asked in Scotland)

Column percentages sum to more than 100 since multiple responses were allowed

Interestingly if we compare the Health sector responses with those from the whole economy (Table 5.4) we see that a lower proportion of employers in the Health sector cited that retention difficulties had an impact on quality (34 per cent in Health versus 50 per cent in the whole economy) or loss of efficiency or increased wastage (38 per cent in Health versus 47 per cent in the whole economy). This may be a reflection on the high priority given to quality across the sector in terms of regulatory requirements and how the sector is resourceful in finding appropriate temporary solutions to vacancies..

Table 5.4: Impact of retention difficulties, whole economy

	UK (excl. Scotland)		England		Wales		Northern Ireland	
	Number	%	Number	%	Number	%	Number	%
Loss of business to competitors	39,740	38	36,917	38	1,784	29	1,037	36
Restrictions to business development activities	45,905	43	42,342	44	2,196	36	1,367	48
Increased running costs (for example use of excess overtime, subcontracting or use of temporary staff etc)	50,190	47	46,179	48	2,662	44	1,348	47
More strain on management of existing staff in covering the shortage	84,051	79	76,766	79	4,901	81	2,383	83
An increase in recruitment costs due to more advertising or use of a recruitment agency	47,935	45	44,411	46	2,038	34	1,486	52
Difficulties with quality	52,763	50	48,786	50	2,659	44	1,317	46
Difficulties with customer service	38,216	36	35,318	36	1,924	32	977	34
Loss of efficiency or increased wastage	49,677	47	45,461	47	2,991	49	1,226	43
Difficulties with accommodating technological change	21,147	20	20,026	21	745	12	377	13
Difficulties with introducing new working practices	30,890	29	28,555	29	1,414	23	920	32
Something else	1,686	2	1,221	1	313	5	151	5
Not affected the business	6,292	6	5,673	6	539	9	79	3
Don't know	190	**	178	0	0	0	11	0
Weighted base	105,929		97,014		6,053		2,862	
Unweighted base	5,866		5,126		512		228	

Source: UK Commission's Employer Skills Survey (Davies et al, 2012)

Base: All establishments in England, NI, Wales that find it difficult to retain staff (question not asked in Scotland)

Column percentages sum to more than 100 since multiple responses were allowed

***Denotes a figure of greater than 0% but less than 0.5%*

It is likely that organisations have to accept other adverse consequences of vacancies such as increased running costs through the use of temporary staffing as they cannot compromise patient safety and quality through low staffing levels. It is therefore not surprising that a significantly greater proportion of Health sector employers cite increased running costs as an impact of retention issues compared to the whole economy (58 per cent versus 47 per cent).

Action taken by employers in the Health sector to overcome retention problems introducing further training/development opportunities (31 per cent) and offering more pay or more incentives than normal (24 per cent), see table 5.5. A significant proportion of employers reported that they had not taken any measures to overcome retention difficulties (22 per cent).

Table 5.5: Measures taken to overcome retention problems, Health sector

	UK (excl. Scotland)	
	Number	%
Introduced further training/development opportunities	1,036	31
Offered higher pay or more incentives than normal	789	24
Altered/improved recruitment methods	407	12
Introduced flexible working hours	360	11
Changed the job specification by giving some of the tasks to other staff	148	4
Introduced job enrichment	397	12
Improved career progression	240	7
Changed working environment generally	116	4
Changed the job specification by automating some of the tasks	144	4
Provided assistance with travel	83	3
Used agency staff /sub contractors	35	1
Provided assistance with childcare	82	2
Other	76	2
Not taken any measures to overcome retention difficulties	724	22
Don't know	164	5
Weighted base	3,297	
Unweighted base	266	

Source: UK Commission's Employer Skills Survey (Davies et al, 2012)

Base: All establishments in England, NI, Wales that find it difficult to retain staff (question not asked in Scotland)

Column percentages sum to more than 100 since multiple responses were allowed

The ultimate consequence of retention issues is that employers have vacancies for which they need to recruit. One aspect of recruitment that is important to the Health sector is the ability of employers to recruit young people.

Table 5.6 demonstrates that a large proportion of Health sector employers report having recruited a person under the age of 24 to their first job in the last three years when compared to other sectors. This is despite the fact that the sector has a much older age profile than other sectors with a much lower proportion of the workforce aged between 16 and 21. It is therefore likely that many of those recruited that are under the age of 24 are graduates joining the sector in clinical roles having completed the necessary statutory training at undergraduate level.

Table 5.6: Recruitment of young people by sector and nation (number and % who have recruited one or more young people over the last 3 years)

	UK		England		Scotland		Wales		Northern Ireland	
	Number	%	Number	%	Number	%	Number	%	Number	%
Agriculture, forestry & fishing	21,769	20	14,815	19	†2,725	†20	1,183	11	3,046	43
Energy production & utilities	2,660	21	2,080	21	322	25	197	24	61	11
Manufacturing	31,047	24	26,304	23	2,442	26	1,437	27	863	23
Construction, building services engineering and planning	66,741	22	55,108	21	6,498	30	2,973	23	2,161	20
Wholesale & retail trade	120,702	26	101,878	25	9,862	28	5,297	25	3,665	26
Transportation and storage	18,432	15	16,069	15	1,496	19	476	11	391	17
Hospitality, tourism and sport	70,608	32	59,071	33	6,164	28	3,583	32	1,789	31
Information and communication technologies	14,960	21	13,659	21	†794	†22	241	12	266	24
Creative media & entertainment	31,843	22	28,704	23	†1,573	†14	1,082	23	484	24
Financial, insurance & other professional services	37,955	22	34,274	22	1,679	20	1,230	21	773	23
Real estate & facilities management	23,229	14	21,827	15	†699	†6	475	16	229	12
Government services	10,268	19	8,375	19	1,084	20	378	14	431	21
Education	28,641	44	24,132	45	1,812	41	1,450	45	1,247	38
Health	13,817	26	11,547	26	938	29	822	29	510	34
Care	26,557	30	22,175	31	1,955	23	1,481	34	947	29
All economy	552,385	24	467,925	24	43,211	25	23,664	24	17,584	27
Weighted base	*2,124,807*		*1,960,298*		*175,115*		*98,952*		*65,558*	
Unweighted base	*85,069*		*75,053*		*2,503*		*6,012*		*4,004*	

Source: UK Commission's Employer Skills Survey (Davies et al, 2012). Base: all establishments. NB: Scottish employers were asked a slightly different question; results cannot be compared directly to UK, England, Wales, or Northern Ireland figures. Scottish employers have not been included in the UK base. † Treat figures with caution due to small unweighted base size of 50-99 establishments in Scotland

An examination of vacancy levels at occupational level can help to identify any specific pressure points for the sector. This is important, particularly in the Health sector, because the lead-in time to get sufficient numbers through education and training can be lengthy.

Table 5.7 shows that seven per cent of establishments reported vacancies in Professional occupations; within the Health sector this would include roles such as hospital doctors, general practitioners and dentists. Six per cent reported vacancies in caring services roles and five per cent reported vacancies in administrative and clerical roles. The proportion of establishments reporting vacancies in all three of these occupation groups is greater than the whole-economy average.

The training times for occupations in the professional category are also lengthy, their skills are highly regarded across the sector and the competition between employers for these skills is high. We also know that the administrative and clerical roles and caring services roles make more use of generic and transferable skills; there is therefore much more competition for skills with other sectors where these roles are concerned (The MacKinnon Partnership, 2009b).

The sectors competing for the skills utilised in the caring services occupations not only include Care but also, because of relatively low wage levels, the Retail sector.

The high incidence of vacancies within the administrative and clerical staff groups is of interest and more research is needed to understand if the reasons for this are simply due to competition with other sectors, or if there are other reasons underpinning these higher levels of vacancies.

Table 5.7: Employers reporting vacancies by occupation within the Health sector

	UK		England		Scotland		Wales		Northern Ireland	
	Number	%	Number	%	Number	%	Number	%	Number	%
Managers	522	1	490	1	9	**	14	**	9	1
Professionals	3,823	7	3,197	7	295	9	266	9	65	4
Associate professionals	631	1	443	1	163	5	11	**	13	1
Administrative/clerical staff	2,385	5	2,119	5	64	2	182	6	19	1
Skilled trades occupations	220	**	148	**	45	1	7	**	20	1
Caring, leisure and other services staff	3,334	6	2,865	6	320	10	81	3	67	5
Sales and customer services staff	72	**	72	**	0	0	0	0	0	0
Machine operatives	57	**	57	**	0	0	0	0	0	0
Elementary staff	580	1	414	1	91	0	56	2	19	1
Unclassified staff	58	**	49	**	9	**	0	0	0	0
Weighted base	52,370		44,845		3,235		2,809		1,481	
Unweighted base	3,398		2,912		107		242		137	

Base: All UK establishments in sector

*** Denotes a figures of greater than 0% but less than 0.5%*

NB: This is establishments reporting vacancies, not number of vacancies.

Table 5.8: Employers reporting vacancies by occupation within the whole economy

	UK		England		Scotland		Wales		Northern Ireland	
	Number	%	Number	%	Number	%	Number	%	Number	%
Managers	18,783	1	16,372	1	1,262	1	814	1	338	1
Professionals	37,601	2	33,069	2	2,197	1	1,426	1	908	1
Associate professionals	51,880	2	46,687	2	2,903	2	1,485	2	806	1
Administrative/clerical staff	45,285	2	39,641	2	2,509	1	2,091	2	1,043	2
Skilled trades occupations	35,607	2	30,336	2	2,901	2	1,715	2	652	1
Caring, leisure and other services staff	31,635	1	27,636	1	1,997	1	1,254	1	746	1
Sales and customer services staff	37,961	2	32,188	2	3,060	2	1,730	2	983	1
Machine operatives	18,684	1	15,970	1	1,511	1	832	1	371	1
Elementary staff	41,164	2	33,885	2	4,596	3	1,937	2	750	1
Unclassified staff	3,023	**	2,655	0	174	0	49	0	144	0
Weighted base	2,299,921		1,960,298		175,115		98,952		65,558	
Unweighted base	87,572		75,053		2,503		6,012		4,004	

Base: All UK establishments

*** Denotes a figures of greater than 0% but less than 0.5%*

In order to establish if there are serious recruitment issues within the sector it is important to identify the proportion of vacancies that employers are finding it difficult to fill (hard-to-fill or HTF vacancies) and the proportion that are skills shortage vacancies (SSVs).

Skills shortage vacancies are defined as hard-to-fill vacancies where the causes of being unable to fill the vacancy include a low number of applicants with the required skills, a lack of relevant work experience or a lack of relevant qualification in applicants.

The Health sector reports lower levels of overall vacancies as a percentage of total employment compared to the whole economy (one per cent versus two per cent). Of the vacancies reported a lower proportion of those in the Health sector are classed as hard-to-fill vacancies and skills shortage vacancies compared to the whole economy. The proportion of vacancies that are reported as hard-to-fill in the Health sector is 19 per cent compared to 23 per cent in the whole economy, whilst the proportion of vacancies that are skills shortage vacancies in the Health sector is 12 per cent compared to 16 per cent in the whole economy.

Table 5.9: Profile of vacancies, whole economy

	Volume			%				
	Vacancies	HTF vacancies	SSV (prompted and unprompted)	Vacancies as a % employment	HTF vacancies as a % vacancies	SSV as a % vacancies	*Weighted base*	*Unweighted base*
Agriculture, Forestry & Fishing	14,641	5,785	4,238	3	40	29	466,870	19,506
Energy Production & Utilities	9,343	1,590	1,236	3	17	13	333,050	47,228
Manufacturing	40,252	11,834	9,711	2	29	24	2,541,188	291,593
Construction, Building Services Engineering and Planning	47,241	19,103	12,394	2	40	26	2,235,270	150,111
Wholesale & Retail Trade	95,390	17,441	12,619	2	18	13	4,674,684	514,820
Transportation and Storage	25,734	4,739	3,182	2	18	12	1,320,126	114,658
Hospitality, Tourism and Sport	73,886	18,245	11,179	3	25	15	2,313,487	258,524
Information and Communication Technologies	29,361	5,449	4,937	5	19	17	614,641	53,681
Creative Media & Entertainment	37,885	6,824	5,502	3	18	15	1,086,978	87,953
Financial, Insurance & other Professional Services	58,847	11,732	10,623	3	20	18	2,052,039	112,945
Real Estate & Facilities Management	31,155	5,773	4,252	3	19	14	1,183,601	91,204
Government Services	35,917	9,330	5,938	2	26	17	1,780,058	223,796
Education	34,684	4,984	3,729	1	14	11	2,538,545	387,221
Health	27,811	5,281	3,330	1	19	12	2,004,436	219,765
Care	37,494	5,924	3,335	2	16	9	1,504,729	157,681
Not Within Scope	36,266	9,533	7,248	4	26	20	897,422	86,007
Total	635,907	143,564	103,453	2	23	16	27,547,123	2,816,693

Source: UK Commission's Employer Skills Survey (Davies et al, 2012)

Base: Varies

Vacancies as a % of employment based on all employment

Hard-to-fill vacancies as a % of vacancies based on all vacancies

SSVs as a % of vacancies based on all vacancies

When vacancies are examined at a national level there are some interesting variations reported. General levels of vacancies as a percentage of employment are higher in England (two per cent) than Scotland, Wales and Northern Ireland. The proportion of vacancies described as hard-to-fill and skills shortage vacancies are significantly higher in Northern Ireland than elsewhere. (See Table 76)

The reasons for these higher levels of hard-to-fill vacancies and skills shortage vacancies in Northern Ireland are not fully understood. The levels of these types of vacancies in the whole economy are also higher but this does not explain the magnitude of the vacancies in the Health sector. It is an area where more research may be beneficial to enhance our understanding.

Table 5.10: Profile of vacancies by sector and nation

	Vacancies as a % employment				HTF vacancies as a % vacancies				SSV as a % vacancies			
	England	Scotland	Wales	Northern Ireland	England	Scotland	Wales	Northern Ireland	England	Scotland	Wales	Northern Ireland
Agriculture, Forestry and Fishing	3	†4	2	0	36	†45	87	0	28	†22	85	*
Energy Production and Utilities	2	7	4	1	11	22	32	49	9	17	22	25
Manufacturing	2	1	2	2	28	39	30	33	23	36	27	29
Construction, Building Services Engineering and Planning	2	2	2	1	42	29	41	27	26	24	34	16
Wholesale and Retail Trade	2	2	2	2	18	17	23	32	13	10	12	18
Transportation and Storage	2	2	3	1	17	6	48	60	12	3	29	11
Hospitality, Tourism and Sport	3	3	4	2	23	25	56	29	13	17	41	23
Information and Communication Technologies	5	†5	3	3	18	†35	19	13	16	†28	17	13
Creative Media & Entertainment	3	†2	5	11	20	†1	18	7	16	†0	16	4
Financial, Insurance & other Professional Services	3	2	2	11	19	7	12	44	17	6	12	44
Real Estate and Facilities Management	3	†1	2	1	18	†29	17	0	14	†22	12	*
Government Services	2	1	2	2	25	10	46	43	17	5	4	36
Education	1	2	1	1	16	6	6	16	12	2	5	11
Health	**2**	**1**	**1**	**1**	**19**	**19**	**17**	**27**	**12**	**9**	**13**	**27**
Care	3	1	3	3	16	19	20	13	9	16	13	3
Total	2	2	2	2	22	20	36	44	16	14	22	22
Weighted base	23,198,476	2,381,601	1,182,314	784,732	545,064	45,749	25,542	19,552	545,064	45,749	25,542	19,552
Unweighted base	2,345,213	201,868	178,922	90,690	43,960	3,186	2,999	1,759	43,960	3,186	2,999	1,759

Source: UK Commission's Employer Skills Survey (Davies et al, 2012). Bases vary. Vacancies as a % of employment based on all employment. Hard-to-fill vacancies as a % of vacancies based on all vacancies. SSVs as a % of vacancies based on all vacancies. † Treat figures with caution due to small unweighted establishment base size of 50-99 in Scotland.

Examining hard-to-fill vacancies at occupational level reveals that for the Health sector there appears to be particular pressure in respect of managers, professionals and caring staff (Table 5.11). The same staff groups also have issues in relation to skills shortage vacancies.

Table 5.11: Profile of vacancies by occupation in the Health sector

	Volume			HTF vacancies as a % vacancies	SSV as a % vacancies	*Weighted base (number of vacancies)*	*Unweighted base (number of vacancies)*
	Vacancies	HTF vacancies	SSV				
Managers	539	234	228	43	42	539	40
Professionals	12,409	2,450	1,557	20	13	12,409	1,376
Associate professionals	853	110	94	13	11	853	59
Administrative/clerical staff	3,406	312	256	9	8	3,406	290
Skilled trades occupations	*	*	*	*	*	*	*
Caring, leisure and other services staff	7,766	1,818	974	23	13	7,766	790
Sales and customer services staff	*	*	*	*	*	*	*
Machine operatives	*	*	*	*	*	*	*
Elementary staff	803	119	79	15	10	803	94
Unclassified staff	*	*	*	*	*	*	*
Total	26,594	5,282	3,331	20	13	26,594	2,744

Source: UK Commission's Employer Skills Survey (Davies et al, 2012)

Base: All Vacancies

**Data suppressed as unweighted base <25*

Table 5.12 show that the proportion of employers reporting vacancies, hard-to-fill vacancies and skills shortage vacancies are lower in the Health sector than the whole economy, at just 3 percent. This indicates that the sector has less of an issue with vacancies in general than other sectors. However, given the specialist nature of skills in the sector and the time taken to train new employees the sector must avoid complacency over the longer term.

Table 5.12: Employers with vacancies, hard-to-fill vacancies and skills shortage vacancies

	Vacancies		HTF vacancies		SSV		*Weighted base*	*Unweighted base*
	Number	%	Number	%	Number	%		
Agriculture, Forestry & Fishing	8,285	3	4,141	5	2,660	4	110,220	1,547
Energy Production & Utilities	1,783	1	635	1	532	1	12,610	1,614
Manufacturing	17,423	6	7,684	8	6,040	9	130,709	7,776
Construction, Building Services Engineering and Planning	22,972	8	11,596	13	9,607	14	306,403	8,961
Wholesale & Retail Trade	50,681	18	13,499	15	9,778	14	470,200	16,150
Transportation and Storage	13,036	5	4,127	5	2,662	4	122,058	4,735
Hospitality, Tourism and Sport	32,674	12	11,656	13	7,435	11	220,055	11,318
Information and Communication Technologies	9,146	3	3,596	4	3,386	5	72,281	2,510
Creative Media & Entertainment	16,182	6	5,506	6	4,746	7	143,772	3,762
Financial, Insurance & other Professional Services	21,794	8	5,310	6	4,556	7	170,887	5,343
Real Estate & Facilities Management	17,403	6	4,651	5	3,956	6	166,486	3,424
Government Services	8,185	3	1,877	2	1,204	2	54,687	2,605
Education	14,466	5	3,220	4	2,386	4	64,540	5,439
Health	9,577	3	2,820	3	1,842	3	52,370	3,398
Care	15,589	6	3,956	4	2,054	3	87,899	4,763
Not in scope	15,583	6	6,497	7	5,121	8	114,744	4,227
Total	274,779	100	90,771	100	67,965	100	2,299,921	87,572

Source: UK Commission's Employer Skills Survey (Davies et al, 2012)

Base: All establishments with vacancies

Tables 5.13 and 5.14 outline the main causes of hard-to-fill vacancies across the whole economy and the Health sector in the UK. There is a commonality in the top causes of hard-to-fill vacancies across the whole economy and the Health sector, these are:

- Low number of applicants with the required skills.
- Lack of work experience the company demands.
- Not enough people interested in doing this kind of job.
- Low number of applicants with the required attitude, motivation or personality.
- Poor terms and conditions.
- Low number of applicants generally.

Taken together these causes could be indicating that employers feel that the Health sector is not an attractive option to potential applicants; what is perhaps more likely given the breadth of activity undertaken in the sector, is that there are some areas of the sector less attractive to work in than others and these may be the areas that experience the biggest difficulty in respect of hard-to-fill and skills shortage vacancies.

Table 5.13: Causes of hard-to-fill vacancies, whole economy

	UK	
	Number	%
Low number of applicants with the required skills	789	28
Lack of work experience the company demands	467	17
Not enough people interested in doing this type of job	680	24
Low number of applicants with the required attitude, motivation or personality	425	15
Poor terms and conditions (e.g. pay) offered for post	551	20
Low number of applicants generally	630	22
Lack of qualifications the company demands	239	8
Job entails shift work/unsociable hours	452	16
Remote location/poor public transport	289	10
Too much competition from other employers	400	14
Poor career progression / lack of prospects	62	2
Not full-time/permanent work	163	6
Low number of suitable applicants inc. Age of applicants	7	**
Poor recruitment channels/mechanisms (inc. lack/cost of advertising)	48	2
Seasonal work	45	2
Benefits trap	7	**
Lack of funding for the position	37	1
Difficulty with work permits/immigration issues for non-EU staff	8	**
Other	111	4
No particular reason	29	1
Don't know	61	2
Weighted base	2,820	
Unweighted base	250	

Source: UK Commission's Employer Skills Survey (Davies et al, 2012)

Base: All establishments with hard-to-fill vacancies

Column percentages sum to more than 100 since multiple responses were allowed

*** Denotes a figures of greater than 0% but less than 0.5%*

Table 5.14: Causes of hard-to-fill vacancies, Health sector

	UK	
	Number	%
Low number of applicants with the required skills	789	28
Lack of work experience the company demands	467	17
Not enough people interested in doing this type of job	680	24
Low number of applicants with the required attitude, motivation or personality	425	15
Poor terms and conditions (e.g. pay) offered for post	551	20
Low number of applicants generally	630	22
Lack of qualifications the company demands	239	8
Job entails shift work/unsociable hours	452	16
Remote location/poor public transport	289	10
Too much competition from other employers	400	14
Poor career progression / lack of prospects	62	2
Not full-time/permanent work	163	6
Low number of suitable applicants inc. Age of applicants	7	**
Poor recruitment channels/mechanisms (inc. lack/cost of advertising)	48	2
Seasonal work	45	2
Benefits trap	7	**
Lack of funding for the position	37	1
Difficulty with work permits/immigration issues for non-EU staff	8	**
Other	111	4
No particular reason	29	1
Don't know	61	2
Weighted base	2,820	
Unweighted base	250	

Source: UK Commission's Employer Skills Survey (Davies et al, 2012)

Base: All establishments with hard-to-fill vacancies

Column percentages sum to more than 100 since multiple responses were allowed

*** Denotes a figures of greater than 0% but less than 0.5%*

We are able to examine vacancies at a more detailed level using NHS vacancy data. The NHS Information Centre for Health and social care draw data from all NHS organisations across England annually. They examine the overall number of vacancies and the number that have been vacant for three months or longer.

The general trend for the NHS in England is that total numbers of vacancies have fallen in all staff groups. Three-month vacancy rates have also fallen in all staff groups except midwives.

Table 5.15 gives a summary of vacancy rates and three-month vacancy rates for the large occupation groups for all NHS organisations in England as at March 2010.

Table 5.15: NHS vacancy and three-month vacancy rates

	March 2010	
	Vacancy rate	three month Vacancy rate
Medical and dental consultants	3.5%	1.0%
Other doctors and dentists	7.3%	2.6%
All qualified nursing, midwifery and health visiting staff	2.5%	0.6%
Unqualified nurses	1.2%	0.3%
All qualified Allied Health Professionals	2.3%	0.5%
All qualified healthcare scientists	1.5%	0.4%
All other qualified Scientific, Technical and Therapeutic staff	2.9%	0.8%
Unqualified ST&T staff	1.9%	0.4%
All other staff	1.5%	0.3%

Source: NHS Information Centre for Health and social care 2010 Vacancy Survey

There is some consistency between the NHS and UKESS data, in that they are both showing vacancy rates for doctors and dentists (Professional occupations) and nurses and therapists (Associate professional occupations). However the NHS data does not appear to show any significant issue in vacancies for managers.

There is further detail available within the results of the survey and Table 5.16 contains a subset of the occupational level data showing the smaller staff groups that have a higher than average vacancy and three-month vacancy rates. This table identifies those occupations where organisations are experiencing higher numbers of vacancies and greater difficulty filling vacancies in a timely manner.

Table 5.16: Occupations with above average vacancy and three month vacancy rates

		March 2010	
		Vacancy rate	three month Vacancy rate
Nursing, midwifery and health visiting staff			
	Psychiatry	3.20%	1.00%
	Midwives	2.70%	1.20%
	Paediatrics	2.70%	0.70%
Qualified Allied Health Professionals			
	Dietetics	3.10%	0.50%
	Occupational therapists	2.60%	0.70%
	Therapeutic radiographers	3.90%	0.80%
	Speech and language therapy	2.50%	0.50%
Qualified Healthcare Scientists			
	Audiology	2.20%	0.40%
	Cardiology	3.70%	1.30%
	Respiratory physiology	2.30%	0.80%
	Other physiological sciences	2.90%	1.30%
	Nuclear medicine and diagnostic radiology	3.70%	1.30%
Other qualified ST&T staff			
	Multi-therapies	3.60%	1.60%
	Clinical psychology	4.00%	1.10%
	Registered pharmacists	3.40%	0.90%

Source: NHS Information Centre for Health and social care 2010 Vacancy Survey

When asked about the main impact of hard-to-fill vacancies a slightly higher proportion of employers said that there was no impact (10 per cent) compared to the whole economy (6 per cent) (Tables 83 and 84). Those employers in the Health sector who could identify the main impact of hard-to-fill vacancies highlighted the following as the main issues:

- Increase workload for other staff (76 per cent).
- Experience increased operating costs (41 per cent).
- Have difficulties meeting customer services objectives (36 per cent).
- Have difficulties meeting quality standards (34 per cent).

This demonstrates the resilience of the sector when faced with difficulties surrounding staffing. The nature of the services being provided mean that when experiencing staffing shortages employers have developed mechanisms to utilise staff in a flexible way. An example of this is the ‘nursing bank’ which many large hospitals operate. This is a pool of staff that can be deployed across different departments in order to cover any staff shortages that may arise from sickness or holidays. This mechanism helps contain costs as it reduces the reliance on expensive agency staff.

Tables 5.17 and 5.18 show a lower proportion of Health sector employers report that hard-to-fill vacancies have meant that they have had to withdraw from offering certain products or services altogether (13 per cent versus 26 per cent in whole economy). This demonstrates the way in which employers, particularly those in the public sector, cannot easily add and withdraw services that they are offering. NHS organisations have a statutory duty[22] to consult on any proposals for substantial development of the Health service in a given area or substantial variation in the provision of services.

22 Section 244 of the consolidated NHS Act2006 (which replaced Section 7 of the Health and Social Care Act 2001)

Table 5.17: Impact of having hard-to-fill vacancies, whole economy

	UK		England		Scotland		Wales		Northern Ireland	
	Number	%	Number	%	Number	%	Number	%	Number	%
Increase workload for other staff	75,165	83	64,739	82	5,237	88	3,684	86	1,504	77
Have difficulties meeting customer services objectives	40,550	45	34,975	44	2,581	43	2,117	50	878	45
Lose business or orders to competitors	37,879	42	33,309	42	1,969	33	1,757	41	845	44
Delay developing new products or services	37,635	41	32,458	41	2,165	36	2,057	48	957	49
Experience increased operating costs	35,766	39	30,968	39	2,417	41	1,731	41	650	33
Have difficulties meeting quality standards	30,498	34	26,689	34	1,908	32	1,156	27	747	38
Have difficulties introducing new working practices	29,065	32	24,700	31	1,977	33	1,540	36	847	44
Outsource work	23,666	26	20,200	26	1,741	29	1,185	28	542	28
Withdraw from offering certain products or services altogether	23,180	26	19,994	25	1,124	19	1,406	33	655	34
Have difficulties introducing technological change	19,905	22	16,960	22	1,123	19	1,250	29	572	29
None	5,476	6	5,036	6	184	3	140	3	118	6
Don't know	361	**	300	0	0	0	37	1	25	1
Weighted base	90,770		78,628		5,942		4,260		1,942	
Unweighted base	5,160		*4,409*		219		377		155	

Source: UK Commission's Employer Skills Survey (Davies et al, 2012)

Base: All employers with hard to fill vacancies

Column percentages sum to more than 100 since multiple responses were allowed

*** Denotes a figures of greater than 0% but less than 0.5%*

Table 5.18: Impact of having hard-to-fill vacancies, Health sector

	UK	
	Number	%
Increase workload for other staff	2,140	76
Have difficulties meeting customer services objectives	1,011	36
Lose business or orders to competitors	549	19
Delay developing new products or services	724	26
Experience increased operating costs	1,166	41
Have difficulties meeting quality standards	972	34
Have difficulties introducing new working practices	885	31
Outsource work	777	28
Withdraw from offering certain products or services altogether	375	13
Have difficulties introducing technological change	361	13
None	269	10
Don't know	0	0
Weighted base	2,820	
Unweighted base	250	

Source: UK Commission's Employer Skills Survey (Davies et al, 2012)

Base: All employers with hard to fill vacancies

Column percentages sum to more than 100 since multiple responses were allowed

In order to overcome hard-to-fill vacancies there are an array of measures that employers can take. When asked about the measures they take 15 per cent of employers in the Health sector responded that they did nothing. This is comparable with the average for the whole economy (14 per cent). Employers in the Health sector who did take action highlighted the following measures as those most commonly taken:

- Increasing advertising/recruitment spend (44 per cent).
- Using NEW recruitment methods or channels (26 per cent).
- Redefining existing jobs (11 per cent).
- Increasing salaries (nine per cent).

Employers in the Health sector were more likely to report that they increase advertising/recruitment spending to tackle hard-to-fill vacancies than the whole economy (44 per cent versus 39 per cent) and they were also more likely to increase salaries (nine per cent) compared to the whole economy (four per cent), as shown in tables 5.19 and 5.20.

They are less likely to use new recruitment methods (26 per cent compared to 30 per cent) and less likely to redefine roles (11 per cent compared to 14 per cent) in comparison to the whole economy.

Table 5.19: Measures taken by employers to overcome hard-to-fill vacancies, Health sector

	UK	
	Number	%
Increasing advertising / recruitment spend	1,238	44
Using NEW recruitment methods or channels	747	26
Redefining existing jobs	320	11
Increasing the training given to your existing workforce	182	6
Increasing / expanding trainee programmes	216	8
Being prepared to offer training to less well qualified recruits	133	5
Bringing in contractors to do the work, or contracting it out	190	7
Increasing salaries	257	9
Recruiting workers who are non-UK nationals	106	4
Making the job more attractive e.g. recruitment incentives, enhanced T&Cs, working hours	64	2
Other	26	1
Nothing	410	15
Don't know	81	3
Weighted base	2,820	
Unweighted base	250	

Source: UK Commission's Employer Skills Survey (Davies et al, 2012)

Base: All employers with hard to fill vacancies

Column percentages sum to more than 100 since multiple responses were allowed

Table 5.20: Measures taken by employers to overcome hard-to-fill vacancies, whole economy

	UK	
	Number	%
Increasing advertising / recruitment spend	34,959	39
Using NEW recruitment methods or channels	26,927	30
Redefining existing jobs	12,397	14
Increasing the training given to your existing workforce	6,458	7
Increasing / expanding trainee programmes	5,781	6
Being prepared to offer training to less well qualified recruits	4,679	5
Bringing in contractors to do the work, or contracting it out	4,634	5
Increasing salaries	3,985	4
Recruiting workers who are non-UK nationals	3,231	4
Making the job more attractive e.g. recruitment incentives, enhanced T&Cs, working hours	1,325	1
Other	3,682	4
Nothing	12,792	14
Don't know	2,894	3
Weighted base	90,770	
Unweighted base	5,160	

Source: UK Commission's Employer Skills Survey (Davies et al, 2012)

Base: All employers with hard to fill vacancies
Column percentages sum to more than 100 since multiple responses were allowed

The main skills found lacking by employers in the Health sector where skills shortage vacancies exist include; job specific skills, technical or practical skills, planning and organisation skills and customer handling skills.

The percentage of employers in the Health sector highlighting job specific skills as an issue was significantly higher than the whole economy (77 per cent versus 66 per cent). Other areas where skills lacking were higher than the whole economy included:

- Basic computer literacy / using IT (22 per cent compared to 16 per cent in the whole economy).
- Office admin skills (20 per cent compared to 17 in the whole economy).

The percentage of employers highlighting literacy and numeracy skills needs was significantly lower in the Health sector than the whole economy.

The issue in respect of job-specific skills reflects the complex nature of the sector, and the way in which organisations support the transition from student to clinical practitioner is important. Courses leading to professional registration for roles such as nursing, physiotherapy etc. across the UK are ‘standardised’ in respect of the core training content. This gives individuals the skills that they need to practice. However, there is further development of clinical skills and extending scope of practice that occurs post qualification within the workplace.

Table 5.21: Skills lacking in Skills Shortage Vacancies, whole economy

	UK	
	Number	%
Basic computer literacy / using IT	16,832	16
Advanced IT or software skills	21,988	21
Oral communication skills	39,113	38
Written communication skills	33,859	33
Customer handling skills	41,349	40
Team working skills	33,728	33
Written Welsh language skills	1,574	2
Oral Welsh language skills	1,680	2
Foreign language skills	16,773	16
Problem solving skills	37,882	37
Planning and Organisation skills	42,431	41
Strategic Management skills	29,853	29
Numeracy skills	26,775	26
Literacy skills	30,151	29
Office admin skills	17,559	17
Technical or practical skills	47,992	46
Job specific skills	68,385	66
Experience/lack of product knowledge	1,668	2
Personal attributes (e.g. motivation, work ethos, common sense, initiative, reliability, commitment, punctuality, flexib	2,743	3
Other	911	1
No particular skills difficulties	7,129	7
Don't know	3,777	4
Weighted base	103,453	
Unweighted base	7,197	

Source: UK Commission's Employer Skills Survey (Davies et al, 2012)

Base: All skills shortage vacancies

Column percentages sum to more than 100 since multiple responses were allowed

Table 5.22: Skills lacking in Skills Shortage Vacancies, Health sector

	UK	
	Number	%
Basic computer literacy / using IT	747	22
Advanced IT or software skills	700	21
Oral communication skills	774	23
Written communication skills	631	19
Customer handling skills	926	28
Team working skills	737	22
Written Welsh language skills	0	0
Oral Welsh language skills	0	0
Foreign language skills	517	16
Problem solving skills	779	23
Planning and Organisation skills	981	29
Strategic Management skills	753	23
Numeracy skills	197	6
Literacy skills	441	13
Office admin skills	650	20
Technical or practical skills	1,240	37
Job specific skills	2,557	77
Experience/lack of product knowledge	0	0
Personal attributes e.g. motivation, work ethos, common sense, initiative, reliability, commitment, punctuality, flexibility)	161	5
Other	40	1
No particular skills difficulties	80	2
Don't know	73	2
Weighted base	*3,330*	
Unweighted base	*350*	

Source: UK Commission's Employer Skills Survey (Davies et al, 2012)

Base: All skills shortage vacancies

Column percentages sum to more than 100 since multiple responses were allowed

5.2 Extent and nature of skills issues

Skills gaps are said to exist in an establishment when the employer indicates that staff at the establishment are not fully proficient in their jobs. There are many things that occur within organisations that can create skills gaps within the workforce. These include:

- Changing services requiring individuals to undertake new tasks.
- The introduction of new technology in the workplace.
- Movement of staff from one part of the organisation to another to cope with service demands.
- Promotion of individuals within the workplace to higher grades.

Skills gaps can be expressed as a percentage of employers reporting skills gaps and the percentage of employees with skills gaps.

Table 5.23 shows that 19 per cent of establishments in the Health sector reported skills gaps in their workforce compared to 13 per cent in the whole economy. The percentage of employers reporting skills gaps has been consistently higher in the Health sector than in the whole economy in most historic skills surveys. This could indicate that employers in the Health sector are relatively proactive at identifying skills gaps.

At a national level a significantly lower proportion of employers in the Health sector in Northern Ireland report skills gaps compared to the other parts of the UK. The highest proportion of employers reporting skills gaps can be found in Scotland and Wales.

At the employee level the nation experiencing the lowest proportion of employees with skills gaps is Wales (two per cent) closely followed by Northern Ireland (three per cent). Scotland has the highest estimated proportion of employees with skills gaps with an estimated six per cent of the total workforce affected.

Table 5.23: Employers and employees with skills gaps by nation, Health sector

	UK		England		Scotland		Wales		Northern Ireland	
	Number	%	Number	%	Number	%	Number	%	Number	%
Employers with skills gaps	9,776	19	8,267	18	790	24	581	21	138	9
Employees with skills gaps	101,986	5	85,115	5	13,918	6	1,844	2	1,108	3
Employer weighted base	52,370		44,845		3,235		2,809		1,481	
Employer unweighted base	3,398		2,912		107		242		137	
Employment weighted base	2,004,436		1,609,864		232,319		120,538		41,715	
Employment unweighted base	219,765		184,519		11,422		20,282		3,542	

Source: UK Commission's Employer Skills Survey (Davies et al, 2012)

Table 5.24: Employers and employees with skills gaps by nation, whole economy

	UK		England		Scotland		Wales		Northern Ireland	
	Number	%	Number	%	Number	%	Number	%	Number	%
Employers with skills gaps	300,941	13	252,792	13	28,416	16	12,965	13	6,769	10
Employees with skills gaps	1,489,540	5	1,281,758	6	120,470	5	53,692	5	33,622	4
Employer weighted base	2,299,921		1,960,298		175,115		98,952		65,558	
Employer unweighted base	87,572		75,053		2,503		6,012		4,004	
Employment weighted base	27,547,123		23,198,476		2,381,601		1,182,314		784,732	
Employment unweighted base	2,816,693		2,345,213		201,868		178,922		90,690	

Source: UK Commission's Employer Skills Survey (Davies et al, 2012)

The occupational group with the highest proportion of skill gaps in the Health sector is the 'professional' group where skills gaps are estimated to affect eight per cent of the workforce (Table 5.25). This group includes hospital doctors, general practitioners and dentists. This is a higher percentage than the whole-economy average for this staff group of five per cent (Table 5.26). This group of staff are arguably the most highly skilled in the sector; however, medical advances mean that their skills are constantly being updated and they have to continually engage in continued professional development in order to maintain and enhance their clinical skills and professional knowledge.

Table 5.25: Skills gaps by occupation, Health sector

	Total employment	Number with skills gaps	% with skills gaps
Managers	219,942	7,590	3
Professionals	419,589	32,575	8
Associate professionals	150,773	7,252	5
Administrative/clerical staff	356,256	18,684	5
Skilled trades occupations	42,059	1,503	4
Caring, leisure and other services staff	599,597	24,569	4
Sales and customer services staff	20,763	1,030	5
Machine operatives	*	*	*
Elementary staff	186,224	8,637	5
Weighted base	*2,004,436*	*101,986*	*5*
Unweighted base	*219,765*	*11,053*	

Source: UK Commission's Employer Skills Survey (Davies et al, 2012)

Base: All employees

** Data suppressed as unweighted establishment base < 25*

Table 5.26: Skills gaps by occupation, whole economy

	Total employment	Number with skills gaps	% with skills gaps
Managers	5,413,709	165,796	3
Professionals	3,136,161	130,124	4
Associate professionals	1,832,909	89,670	5
Administrative/clerical staff	3,540,227	170,269	5
Skilled trades occupations	1,885,480	101,153	5
Caring, leisure and other services staff	2,296,289	124,331	5
Sales and customer services staff	3,493,349	288,832	8
Machine operatives	1,932,620	114,650	6
Elementary staff	4,015,451	304,716	8
Weighted base	27,547,123	1,489,541	5
Unweighted base	2,816,693	166,795	

Source: UK Commission's Employer Skills Survey (Davies et al, 2012)

Base: All employees

Table 5.27 outlines that the main causes of skills gaps identified among employers in the Health sector are:

- Their training is currently only partially completed (40 per cent). Fewer Health employers cite this as the main causes of skills gaps than the all-sector average (46 per cent).
- They are new to the role (37 per cent). This is perceived as less a significant cause of skills gaps than economy-wide (47 per cent).
- More employers in Health state that skills gaps are caused by employees have not received appropriate training (37 per cent) than across the whole economy (23 per cent).

- Staff lacking motivation (35 per cent) is cited by slightly more Health employers than the economy-wide figure (32 per cent).
- Health employers report that skills gaps result from being unable to recruit staff with the required skills (28 per cent), significantly more than UK employers overall (18 per cent).

The first three causes of skills gaps above highlight the importance of work readiness in new employees. The sector is one where regulation is high and as such the requirements for organisations to assure themselves of the clinical competence of staff is also high.

Table 5.27: Causes of skills gaps, UK

	Health Sector		Whole economy	
	Number	%	Number	%
They are new to the role	37,470	37	699,116	47
Their training is currently only partially completed	41,148	40	678,973	46
Staff lack motivation	36,164	35	471,416	32
They have been on training but their performance has not improved sufficiently	21,869	21	430,612	29
The introduction of new working practices	24,861	24	342,371	23
They have not received the appropriate training	37,994	37	336,532	23
Unable to recruit staff with the required skills	28,631	28	267,020	18
The introduction of new technology	18,904	19	247,118	17
The development of new products and service	14,539	14	230,234	15
Problems retaining staff	11,296	11	152,954	10
Lack of other skills e.g. communication, interpersonal	1,499	1	20,492	1
Lack of aptitude to do job/reached maximum potential	369	**	12,589	1
Non-work related problems e.g. health or personal problems	144	**	12,311	1
Language barrier - English not first language	1,346	1	8,849	1
Staff are too old to carry out the work required	80	**	3,717	*
Other	854	1	25,161	2
No particular cause	392	**	11,873	1
Don't know	23,741	23	284,691	19
Weighted base	101,986		1,489,540	
Unweighted base	11,053		166,795	

Source: UK Commission's Employer Skills Survey (Davies et al, 2012)

Base: All skills gaps followed up

*** Denotes figures of greater than 0% but less than 0.5%*

Many newly qualified clinical staff will undertake a period of preceptorship under the observation and guidance of more experienced staff; this allows the individual to consolidate the learning that they have recently completed and work on areas of skills development. Whilst not compulsory, it is seen as good practice in helping employees through the transition from student to clinician. Given this culture within the sector to acknowledge that new staff will not be fully proficient within their roles on joining, it is not surprising that the top three causes of skills gaps relate to issues of work readiness.

It has already been established that the composition of the Health sector workforce is complex, with numerous distinct roles, many of which require qualifications at a very high level. These roles however are also subject to constant change; the innovations that are led by the sector in identifying, managing and treating disease mean that the knowledge and skills of those in the sector is constantly in need of updating.

This is recognised by employers, regulatory bodies and employees through their continued commitment to continuing professional development.

Table 5.28 shows that the skills lacking in the Health sector workforce and are therefore in need of improvement are:

- Team working skills (52 per cent).
- Customer handling skills (47 per cent).
- Written communication skills (44 per cent).
- Job-specific skills (40 per cent).
- Strategic management skills (35 per cent).

With the exception of ‘job-specific skills’ all of the above skills deficiencies were higher in the Health sector than in the whole economy. Other areas where skills gaps were higher in the Health sector than the whole economy included ‘basic computer literacy/using IT’ and ‘office admin skills’.

Table 5.28: Skills lacking within the workforce, UK

	Health Sector		Whole Economy	
	Number	%	Number	%
Basic computer literacy / using IT	21,977	22	248,641	17
Advanced IT or software skills	14,126	14	222,242	15
Oral communication skills	24,383	24	506,673	34
Written communication skills	44,815	44	422,198	28
Customer handling skills	48,335	47	572,924	38
Team working skills	53,319	52	569,206	38
Written Welsh language skills	192	**	5,699	**
Oral Welsh language skills	263	**	6,345	**
Foreign language skills	5,299	5	129,401	9
Problem solving skills	28,171	28	517,321	35
Planning and Organisation skills	29,816	29	575,195	39
Strategic Management skills	36,151	35	278,387	19
Numeracy skills	12,591	12	228,542	15
Literacy skills	18,797	18	276,366	19
Office admin skills	18,574	18	243,868	16
Technical or practical skills	17,451	17	402,797	27
Job specific skills	41,293	40	716,192	48
Personal attributes (e.g. motivation, work ethos, common sense, initiative, reliability,	412	**	9,411	1
Experience/lack of product knowledge	528	1	15,342	1
Other	473	**	5,866	**
No particular skills difficulties	1,168	1	39,373	3
Don't know	23,790	23	285,218	19
Weighted base	101,986		1,489,540	
Unweighted base	11,053		166,795	

Source: UK Commission's Employer Skills Survey (Davies et al, 2012)

Base: All skills gaps followed up

*** Denotes figures of greater than 0% but less than 0.5%*

As we have seen in Section 4, team working, customer handling and communications skills are all generic skills that have a wide spread throughout the Health sector, being utilised in every role, it is therefore not surprising that these non-technical skills rank higher than job-specific skills. It is also likely that for many employees the minimum job-specific skills that they require are enshrined in their route to qualification and registration.

There are also some challenges within the Health sector – created by the way in which the sector operates and the nature of the services being provided – that may act as barriers to effective utilisation of these generic skills. These may include:

- The need to work with many different teams which will be multi-professional in nature.

- The 24 hour nature of the Health service means that for many employees their 'team' will change constantly as not everyone will be working the same shift patterns.
- The need to convey complex, sometimes very emotive information in a way that can be easily understood and is appropriate to the knowledge and skills of the listener or reader.
- The need to provide services to a range of patients, some of which may not be able to communicate their needs due to things such as physical illness, mental health issues or learning disabilities.

The proportion of employers who identified skills gaps in 'literacy skills' and 'numeracy skills' was slightly lower than the whole economy.

Management and leadership is a skills area which is continually highlighted as in need of improvement across the sector. Graeme Martin[23], writing in a recent Skills for Health commentary highlights several indicators unique to the NHS that signal improvements in management and leadership practice are required. He stated:

- A large-scale survey of 9,000 staff in the NHS in England (IPSOS/Mori, 2008) provides some evidence to suggest that staff within the NHS experience a lack of effective management. It reported low agreement with the statements 'I understand my role and where it fits in', 'I feel fairly treated with pay, benefits and staff facilities' and 'senior managers are involved with our work'. The research concluded that staff did not feel they helped to provide high-quality patient care to any significant extent, and that these last three factors were important causes of this problem.

In October 2009 the Care Quality Commission surveyed almost 290,000 employees in England, asking for their views of working in the NHS (fifty-five percent responded). The survey concluded[24]:

- Over 90 per cent of NHS employees reported working in teams but only 40 per cent reported their teams to be effective.
- Only 45 per cent of all staff felt that Healthcare professionals and managers worked well together; only a quarter of staff felt their managers involved them in important decisions and only a third felt that managers involved staff in important decisions.

23 Martin G (2009) Do we need a leadership 2.0 in Health care? Tomorrows workforce, commentaries on the future of skills and employment in the UK's Health sector

24 For full results please see http://www.cqc.org.uk/aboutcqc/howwedoit/engagingwithproviders/nhsstaffsurveys/staffsurvey2009.cfm

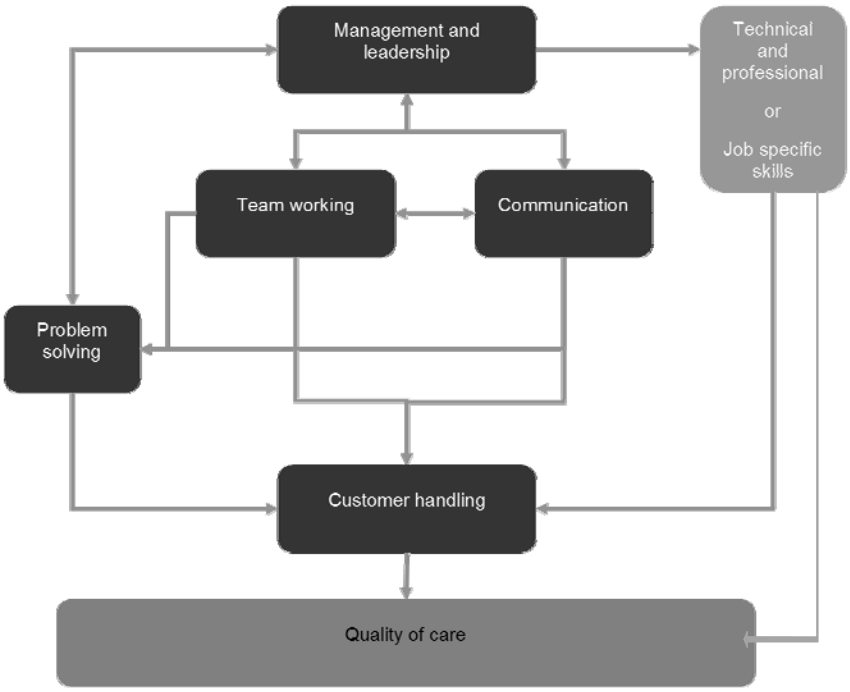
- On organisational engagement with their Trusts, only a third of staff were satisfied with the extent to which their Trust valued their work, half believed their Trust communicated aims clearly, and only 44 per cent felt their Trusts were committed to helping staff achieve work-life balance.

There are very strong connections between many of the skills highlighted as skills gaps by the UKESS, 2011. These relationships indicate dependency; for example, management and leadership relies on and facilitates good communication and, while technical and professional skills are needed for good customer handling, the reverse is not necessarily true.

Management and leadership influence all of the other listed skills and strongly depend upon the other generic skills, especially team working and communication. Communication and team-work are highly interdependent while the generic and specific skills all contribute to customer handling skills and, in turn, impact upon quality of care.

Technical, professional and job-specific skills in the diagram are included to show how the skills highlighted by employers as the main skills gaps relate to one another.

Figure 2: Skills gaps hierarchy and inter-relationships



Based upon UKESS11 findings

Tables 5.30 presents the consequences of skills gaps felt by employers across the Health sector and the wider economy as a whole. Broadly, the main consequences of skills gaps found in Health are largely consistent with those found across the whole economy.

The most cited impact of skills gaps by employers in the Health sector is to increase the workload of other staff, with a greater number of sector employers (82 per cent) stating this as a consequence, than employers across the economy (78 per cent). This implies that employees who are fully proficient in their roles have to pick up tasks for colleagues that are not fully proficient.

Interestingly, skills gaps are cited as creating difficulties introducing new working practices for 44 per cent of employers in the Health sector with skills gaps, compared to an all-economy average of 38 per cent. As the sector is currently entering a significant period of change it may now be a time for employers to focus on identifying and reducing skills gaps in order to increase the likelihood of this change being successful and to foster innovation more generally.

Approximately 40 per cent of Health sector employers report that skills gaps increase operating costs and impact upon their ability to meet quality standards, which is lower than the all-sector average (45 per cent).

A lower proportion of employers in the Health sector (20 per cent) report that skills gaps mean they lose business or orders to competitors than across the economy as a whole (32 per cent) which represents one area of more significant difference. This is a consequence of the way in which much of the sector represents a public good and does not operate in a truly open market.

Table 5.30: Consequences of skills gaps, UK

	Health sector		Whole economy	
	Number	%	Number	%
Increase workload for other staff	4,236	82	144,234	78
Increase operating costs	2,068	40	82,833	45
Have difficulties meeting quality standards	1,994	39	74,405	40
Have difficulties introducing new working practices	2,260	44	70,317	38
Lose business or orders to competitors	1,006	20	59,139	32
Delay developing new products or services	897	17	46,767	25
Outsource work	565	11	28,173	15
No particular problems / None of the above	374	7	14,285	8
Don't know	0	0	344	**
Weighted base	5,153		184,733	
Unweighted base	429		12,943	

Source: UK Commission's Employer Skills Survey (Davies et al, 2012)

Base: All employers with skills gaps that have impact on establishment performance

*** Denotes a figures of greater than 0% but less than 0.5%*

It is well documented that skills gaps within the Health sector can have consequences on quality of delivery within healthcare provision. The impact of skills gaps on quality can range from creating confusion for the patient to serious incidents or even patient death.

The Care Quality Commission's Inpatient Survey, 2010, reveals the impact of team-work skills gaps in NHS hospitals. More than a third of respondents said they were sometimes or often told one thing by one member of staff and something quite different by another. This highlights the importance of team working and communication between staff and the impact that it has on the patient experience.

A much more serious consequence of skills gaps can be seen where there has been serious incidents in the NHS where failings in management effectiveness have resulted in public enquiries. Official inquiries repeatedly cite poor team working, poor communication and poor management and leadership as contributing factors in things going wrong in a healthcare setting. In many instances these failings have contributed to patient deaths[25].

25 Bristol Royal Infirmary Inquiry (2001), Victoria Climbie inquiry (2003) and Stafford Trust Inquiry (2011)

It is clear, therefore, that the sector has a responsibility to ensure not only that it adequately understands and can identify skills gaps, but that there are mechanisms in place to support employees to address these gaps.

The most common action taken to overcome skills gaps by employers in the Health sector is to 'increase training activity/spend or increase/expand trainee programmes'. This action is taken by 83 per cent of employers with skills gaps, consistent with UK figures (Table 5.31). Other popular action taken by employers in the Health sector includes more supervision of staff (64 per cent). The implementation of mentoring/buddying schemes in Health (56 per cent) is greater than the whole economy average (50 per cent). Slightly fewer Health employers, however respond to skills gaps by implementing more staff appraisals or performance reviews (52 per cent) than across all sectors (55 per cent).

Table 5.31: Steps employers have taken to overcome skills gaps, UK

	Health Sector		Whole economy	
	Number	%	Number	%
Increase training activity / spend or increase/expand trainee programmes	6,454	83	185,527	82
More supervision of staff	4,935	64	139,442	62
More staff appraisals / performance reviews	4,066	52	123,245	55
Implementation of mentoring / buddying scheme	4,316	56	113,645	50
Reallocating work	2,281	29	76,053	34
Changing working practices	2,318	30	69,850	31
Increase recruitment activity / spend	1,108	14	33,319	15
Recruiting workers who are non-UK nationals	909	12	21,589	10
Other	84	1	3,156	1
Nothing	136	2	3,541	2
Don't know	9	**	348	**
Weighted base	*7,764*		*225,379*	
Unweighted base	*674*		*16,506*	

Source: UK Commission's Employer Skills Survey (Davies et al, 2012)

Base: All employers with skills gaps who have taken steps to improve the proficiency or skills of these staff, or have plans to do so

*** Denotes a figures of greater than 0% but less than 0.5%*

It is clear that the sector employs a range of methods to support staff with skills gaps. The size of the sector and the concentration of employees in very large organisations mean that these employers in the Health sector may find it easier to introduce and implement measures such as supervision and mentoring.

5.3 Extent of under-employment

A lower proportion of employers in the Health sector report having employees that are over qualified and over skilled compared to the whole economy (45 per cent of employers in the Health sector compared to 49 per cent in the whole economy) (see Table 5.32).

The proportion of employees that are classed as over qualified and over skilled is also lower than the average for the whole economy (11 per cent versus 16 per cent).

Taking these reported percentages together indicates that skills in the sector are utilised well, this may be due to the regulated nature of many of the occupations within the sector. For a large proportion of employees in the Health sector there is an explicit link between the qualifications that a person holds and the roles that they are able to undertake.

Table 5.32: Extent to which workforce is 'over qualified' and 'over skilled' by sector

	Employers with employees who are over qualified and over skilled				Employees who are over qualified and over skilled			
	Number	%	*Weighted base*	*Unweighted base*	Number	%	*Weighted base*	*Unweighted base*
Agriculture, Forestry & Fishing	42,111	38	110,220	1,547	88,613	19	466,870	19,506
Energy Production & Utilities	5,458	43	12,610	1,614	43,319	13	333,050	47,228
Manufacturing	56,009	43	130,709	7,776	252,633	10	2,541,188	291,593
Construction, Building Services Engineering and Planning	129,922	42	306,403	8,961	369,923	17	2,235,270	150,111
Wholesale & Retail Trade	241,146	51	470,200	16,150	846,216	18	4,674,684	514,820
Transportation and Storage	61,038	50	122,058	4,735	202,809	15	1,320,126	114,658
Hospitality, Tourism and Sport	131,526	60	220,055	11,318	566,562	24	2,313,487	258,524
Information and Communication Technologies	33,764	47	72,281	2,510	93,637	15	614,641	53,681
Creative Media & Entertainment	66,845	46	143,772	3,762	205,573	19	1,086,978	87,953
Financial, Insurance & other Professional Services	76,826	45	170,887	5,343	312,906	15	2,052,039	112,945
Real Estate & Facilities Management	81,744	49	166,486	3,424	217,791	18	1,183,601	91,204
Government Services	29,384	54	54,687	2,605	256,006	14	1,780,058	223,796
Education	34,623	54	64,540	5,439	341,455	13	2,538,545	387,221
Health	23,566	45	52,370	3,398	225,183	11	2,004,436	219,765
Care	47,114	54	87,899	4,763	258,385	17	1,504,729	157,681
Whole economy	1,118,691	49	2,299,921	87,572	4,456,192	16	27,547,123	2,816,693
Weighted base	2,299,921				27,547,123			
Unweighted base	87,572				2,816,693			

Source: UK Commission's Employer Skills Survey (Davies et al, 2012)

Base: Varies

"Employers" column based on all establishments

"Employees" column based on all employees

A similar pattern emerges when looking at the data at a national level. In all parts of the UK the percentage of the Health sector workforce classed as over qualified and over skilled is lower than the whole economy, (see table 5.36). The Health sector in Scotland, Wales and Northern Ireland report lower proportions of their workforce being over qualified and over skilled compared to England.

Table 5.33: Extent to which workforce is 'over qualified' and 'over skilled' by nation and by sector

	UK		England		Scotland		Wales		Northern Ireland	
	Number	%	Number	%	Number	%	Number	%	Number	%
Agriculture, Forestry & Fishing	88,613	19	65,776	18	†14,421	†26	6,304	20	2,112	9
Energy Production & Utilities	43,319	13	24,398	10	16,430	27	1,492	9	1,000	14
Manufacturing	252,633	10	207,252	10	23,989	12	10,438	8	10,953	13
Construction, Building Services Engineering and Planning	369,923	17	322,354	18	26,150	11	11,605	13	9,813	14
Wholesale & Retail Trade	846,216	18	706,922	18	84,085	23	29,870	15	25,339	18
Transportation and Storage	202,809	15	174,327	15	19,364	17	5,532	14	3,586	13
Hospitality, Tourism and Sport	566,562	24	469,544	24	61,407	27	21,939	22	13,672	22
Information and Communication Technologies	93,637	15	82,478	15	†6,789	†22	2,486	13	1,883	18
Creative Media & Entertainment	205,573	19	180,207	19	†16,895	†24	5,726	16	2,744	10
Financial, Insurance & other Professional Services	312,906	15	273,503	15	25,942	19	5,851	11	7,611	20
Real Estate & Facilities Management	217,791	18	190,600	18	†16,587	†23	8,312	25	2,292	10
Government Services	256,006	14	209,697	14	25,177	14	11,208	12	9,923	16
Education	341,455	13	283,067	13	26,749	14	21,757	19	9,882	14
Health	225,183	11	203,155	13	11,177	5	7,399	6	3,452	8
Care	258,385	17	219,433	18	20,636	15	9,128	15	9,188	12
Whole economy	4,456,192	16	3,612,713	16	395,798	17	165,139	14	117,410	15
Weighted base	27,547,123		23,198,476		2,381,601		1,182,314		784,732	
Unweighted base	2,816,693		2,345,213		201,868		178,922		90,690	

Source: UK Commission's Employer Skills Survey (Davies et al, 2012)

Base: All employment

† Treat figures with caution due to small unweighted base size of 50-99 establishments in Scotland

It is possible that in the medium term the proportion of employees that are over qualified and over skilled may increase in the sector. Organisational change is an inevitable consequence of tightening budgets and the drive for efficiency savings. It is therefore likely that organisations in the sector will employ a range of measures to achieve this change including recruitment freezes and accepting applicants for vacant posts from internal candidates only.

The other consequence of this is that it may be possible that the sector may have short-term issues of oversupply of newly qualified clinical staff who are seeking their first post in the sector (Centre for Workforce Intelligence, 2012). Given the time taken and expense incurred to the sector in recruiting these staff, employers may look for innovative ways to retain these highly valuable skills.

The sector has a proven track record of supporting newly qualified staff during these difficult periods. In 2010, Scotland adopted a One Year Job Guarantee for newly qualified nurses who had been unable to secure a post through their own endeavours[26]. This guarantee gave nurses a one year, fixed-term, part-time role. Approaches such as this have benefits for the individual and also ensure that these highly valuable skills are retained in the sector.

It is also important to recognise that in the medium to long term, the age profile of the sector means that there will be a need to replace many of those who retire. This means that there will still be opportunities for all professionals within the sector, but the demand for new skills will not be as high as we have historically seen.

Opportunities for unemployed people without specific clinical qualifications are largely restricted to entry-level roles and non-clinical support roles. Employers across the sector have, however, been innovative in their approach to supporting the long-term unemployed into work in the sector. Employers in the public sector in particular see the support of individuals through pre-employment programmes as having wider benefits to the Health sector in breaking long-standing cycles of worklessness and poor Health outcomes.

Many of the pre-employment programmes in place focus on a model which works in partnership with Jobcentre Plus to give individuals that have been unemployed for a long time the skills that they need to secure employment through a mixture of contextualised learning, work placements and careers information advice and guidance.

26 Scottish Government (2010) One Year Job Guarantee for Nurses and Midwives: Guidance for 2010 - 2011

Core and Mandatory training in the Health sector

As a high compliance sector, employers are obliged to ensure that their staff undertake a range of training and development that ensures the safety of patients and themselves. These are often around core areas such as; fire safety, moving and handling, conflict resolution, equality and diversity, resuscitation, Health, safety and security, infection control and prevention safe guarding children and adults. This type of training covers the majority of those employed in the sector.

There are indications that there is some unnecessary duplication of this training with 79 per cent of respondents to a recent survey indicating that they experienced 'unnecessary' duplication (Skills for Health, Jan 2012) Working to reduce this is likely to make some efficiency savings for the sector overall.

5.4 Impact of mis-matches

The extent of skills mis-matches in the Health sector in terms of skill shortage vacancies and skills gaps is three per cent across all roles. It can be said therefore that Health sector employers are proactive in seeking to make roles more attractive to new entrants and in identifying learning and development needs for existing staff. Skills mis-matches can have adverse impacts on individuals (through carrying a higher workload) and organisations (through higher costs or loss of business). Employers therefore may seek to make the sector or roles more attractive by increasing wage levels or if the issues being experienced are with higher level skills they may seek recruits internationally.

5.5 Wages

The average hourly wage in the Health sector is higher than the all-economy average (Table 5.37). With a significant proportion of the workforce qualified to degree level and above the wages that are commanded in the Health sector are relatively high compared to other sectors.

The average hourly wage seen within the Health sector is on a par with other sectors that have a high public sector element such as education and government services. It is, however, significantly higher than that seen in care. This reflects the different skills mix of the two sectors and the extent of regulation, with the Care sector making more use of employees at the intermediate skills level than the Health sector.

Between 2008 and 2010 the average hourly wage in the Health sector increased by 10 per cent, which is double the rate seen in the whole economy (5 per cent). The growth in the education and government services sectors are also higher than the all-economy average at seven per cent and eight per cent respectively.

Pay increases through 2011 and 2012 are, however, likely to be much lower as public sector employees earning more than £21,000 per annum will have their pay frozen in 2011 and 2012 followed by a rise of no more than one per cent per annum until 2015.

Table 5.34: Average hourly wage by sector (£) (UK)

	2008	2009	2010
	£	£	£
Agriculture, forestry and fishing	10.42	11.18	10.38
Energy production and utilities	15.93	16.41	16.62
Manufacturing	13.86	14.28	14.37
Construction, building services, engineering and planning	14.66	15.29	15.39
Wholesale and retail trade	11.00	11.27	11.36
Transportation and storage	12.44	13.16	13.21
Hospitality, tourism and sport	9.14	9.35	9.52
Information and communication technologies	20.05	20.26	20.40
Creative media and entertainment	17.14	17.29	17.50
Financial, insurance & other professional services	21.06	21.45	21.99
Real estate and facilities management	11.36	11.64	11.71
Government services	14.40	14.87	15.62
Education	14.67	15.39	15.71
Health	14.97	15.79	16.45
Care	10.21	10.30	10.49
All economy	13.94	14.39	14.60

Source: Annual Survey of Hours and Earnings, 2010 (ONS)

Agenda for Change (AfC) is the national terms and conditions for NHS staff across the UK. It applies to all directly employed staff in the NHS excluding very senior managers and medical staff.

Recommendations on pay increases in the NHS are made by pay review bodies, with final decisions being made by government.

Although AfC paybandings are unique to the NHS, they heavily influence the pay offered to employees in the independent and voluntary sector. For many staff groups the salaries offered in the independent and voluntary sectors is very similar to those offered in the NHS. Exceptions to this are found at the very high end of the career or skills spectrum e.g. surgeons with very specialist skills can command very high salaries within the independent sector, sometimes significantly higher than those offered by the NHS.

Independent sector employers however have more freedom to set flexible pay levels in line with market forces. So if recruitment to specific roles or specialties is proving challenging they are able to offer higher pay to try to attract high-calibre applicants.

Within the NHS there is provision under the AfC system to supplement the basic pay offered with a recruitment and retention premia. This applies where market pressures would otherwise prevent the employer from being able to recruit or retain staff in sufficient numbers at the normal salary.

5.6 Migration

Historically the Health sector has had a reliance on international recruitment both from within the EU and outside of the EU to fill skilled posts where the specialist skills required could not be sourced within the UK.

An indicator of where severe skills shortages currently exist within high skilled occupations ‘professions’ can be found in the MAC Skilled, Shortage and Sensible shortage occupation list for the UK and Scotland (Migration Advisory Committe, September 2011). Evidence for shortages across the UK Health sector are gathered and submitted collaboratively by the Centre for Workforce Intelligence, Skills for Health[27], NHS Employers and Scottish Government.

It is clear that for many of the staff groups on the list, the roles that are experiencing severe shortages require very specialist levels of skills in sometimes very specific Health specialties, and as such, overall numbers across the sector within the UK may be low.

27 As part of the process Skills for Health consulted with the devolved administrations and the independent sector.

Medical practitioners; (2211) **ONLY** the following jobs in this occupation code:

Consultants in the following specialities: clinical neurophysiology, emergency medicine, genito-urinary medicine, haematology, neurology, occupational medicine.

Consultants in the following specialities of psychiatry: forensic psychiatry, general psychiatry, learning disabilities psychiatry, old age psychiatry.

Non-consultant, non-training, medical staff posts in the following specialities: anaesthetics, paediatrics, general medicine specialities, delivering acute care services (intensive care medicine, general internal medicine (acute)) emergency medicine, general surgery, obstetrics and gynaecology, trauma and orthopaedic surgery ST4 level trainees in paediatrics.

Nurses (3211) **ONLY** the following jobs in this occupation code: specialist nurse working in operating theatres, operating department practitioner, specialist nurse working in neonatal intensive care units.

Medical radiographers (3214) **ONLY** the following jobs in this occupation code: HPC-registered diagnostic radiographer, HPC-registered therapeutic radiographer, sonographer.

Medical and dental technicians (3218) **ONLY** the following jobs in this occupation code: nuclear medicine technologist, radiotherapy technologist.

Within Scotland the Skilled shortage and sensible list is added to with:

- ST3, ST5 and ST6 level trainees in paediatrics.
- Staff grade and Associate Specialist (SAS) doctors in paediatrics.
- Consultants in paediatrics.

Overall demand for migration is likely to be suppressed in the coming years as the labour market is not expected to expand over the next decade. However, the specialist nature of the skills needed in the sector is likely to lead to continued demand for a range of highly skilled occupations. With a constrained ability to bring people into the UK through Tier 1 and Tier 2 migration the sector may have to focus on redesigning roles and job substitution within key areas of service in order to lessen its reliance on non-EU migration.

5.7 Extent to which skills deficiencies are hampering growth

The majority of the Health sector's activities are derived from a 'planned economy'. Many priorities are set nationally by government with the advice of the clinical establishment. There are also important quality standards established to ensure patient safety. For these reasons, the ability of the sector to 'grow' in commercial terms is somewhat restricted. Given the nature of the work undertaken in the sector, any difficulties encountered due to skills deficiencies are likely to be keenly felt unless issues of skills gaps and shortages are addressed either through training and development activities or role redesign to enable better skills utilisation.

The impact on 'growth' is felt in a number of particular areas. For instance, submissions to the Migration Advisory Committee on shortage occupations (Migration Advisory Committe, September 2011) elicited a range of views from private Health care providers that pointed towards the significant issues being experienced in meeting demand in operating theatres due to shortages in specialist nurses in this field. This report also indicates a number of other areas that may struggle to meet service needs in the light of skills deficiencies. Whilst restricted to relatively few occupations, these skills deficiencies are substantial both to service users and the system. High profile incidents, or increases in waiting times can erode the 'trust' in the ability of the Health sector to deliver.

In previous sections of this chapter the proportion of employers in the Health sector reporting retention issues is high. However, the overall level of vacancies and severe skills shortages are low when compared to whole economy averages. The sector is one where, for many employees, the movement between employers is facilitated by continuation of NHS service and terms and conditions of employment. It is therefore likely that these patterns of vacancies and retention issues are describing this 'churn' of the workforce around the sector rather than being indicative of severe recruitment and retention issues.

Chapter 5 outlines that the level of skills gaps reported within the sector are in line with the whole economy. The main reasons cited for these skills deficiencies are related to individuals being new in post or having only partially completed training. Given this, it appears that overall skills gaps in the sector do not currently present a great difficulty for employers. They still report being able to meet quality demands and do not easily reduce the services they offer to the public.

Future research is required to explore the possible affect that a relatively small volume of intermediate level skills in the sector is having in terms of enabling the more effective utilisation of clinical professionals in the sector.

The surveys on skills deficiencies that have been utilised for this assessment were conducted at a 'cusp' point between the sector having experienced a prolonged and historically high increase in expenditure from 1998 to 2009, to a period where expenditure is likely to be severely restricted[28]. These questions have also yet to be put to employers in the context of increased demand for healthcare and the proposed shift in institutions active in the sector as a result of drivers outlined in Chapter 6 of this assessment, which are already affecting the sector.

For this reason, there is a need for employers across the sector to tackle skills deficiencies reported in these surveys. If left unattended, they could form significant barriers to the changes ahead. Issues of management and leadership are likely to be important in order that the change can be effectively implemented. Issues of team working and communication are also likely to be key in order to effectively engage employees in the change and improve the likelihood of any change being successful. The skills issues likely to be of high importance to the sector are discussed in more detail in Chapter 7.

Conclusion

Employers within the sector are reporting above average levels of issues around the retention of staff in the sector. It is evident that some employers in the sector will need to examine their offer and the extent to which this is known by potential recruits.

Other indicators suggest that the sectors demand for skills is relatively well matched by supply. The sector reports a lower proportion of employees that are over qualified than many other sector. Vacancies are relatively low, so too are reported 'hard-to-fill' and 'skills shortage vacancies'. Whilst skills gaps are more reported amongst employers in the Health sector than the whole economy they affect around 5 per cent of employees, in line with the whole economy average. The main causes of such gaps remain people being newly arrived in the sector and many of the issues could be addressed by experience and further training and development.

However, there are considerable challenges awaiting the sector as demand for its services continue to rise. Chapter 7 highlights a number of skills issues that are likely to be amplified as a result of major drives in the sector. Skills deficiencies and their impacts will require careful monitoring as the sector enters this important new phase in its development.

28 See Chart 2: Government funding on Healthcare 2002 – 2015, percentage year-on-year increase (£billion)

6. Drivers of change and their skills implications

Chapter Summary

- In 2010 UKCES conducted a Skills Audit which contains an analysis of drivers for change, developed by St Andrew's Management Institute (SAMI) on their behalf.
- In a recent scenario development project, Health sector employers and stakeholders agreed on nine drivers for change of particular relevance for the Health sector.
- The drivers for change, short, medium and long term are all pointing towards the need for the sector to move beyond many of its traditional models of working. Failure to address these challenges may threaten the quality of healthcare and how it is provided in the UK.
- The skills implications of these drivers range from a shift in skills amongst the workforce to enhance roles and better utilise the existing workforce to the creating of new skillsets within the sector.

Introduction

This chapter focuses on those forces acting to develop the Health sector. Section 6.1 focuses on a range of drivers emerging from workshops carried out by Skills for Health in its Rehearsing Uncertain Futures programme of work. The consequences of such drivers are discussed throughout however; section 6.2 discusses the scale and nature of these drivers in more detail. Section 6.3 also outlines how these drivers are expressed in each nation of the UK.

6.1 Drivers of change

The term 'drivers for change' refers to those forces that are influencing the future shape of an economy, region or sector. In the field of skills and labour market intelligence, understanding what forces are the most influential and how they might interact together can provide insight into the trajectory and possible future employment and skills needs. They are not intended to predict the future, but they can provide an ongoing framework for review and analysis of possible future concerns and help develop consensus with communities of practice about future actions.

St Andrew's Management Institute (SAMI) were asked to undertake such an analysis for the UKCES as part of a national skills audit for 2010. Figure 3 below shows the range of drivers that were identified as a result of their work.

Figure 3: Drivers for change

Source: UKCES National Skills Audit 2020

The set of drivers are suitable as a broad outline of drivers across the UK. In 2010 Skills for Health also developed an analysis of drivers for change to feed into the development of a number of scenarios for use by employers in the Health sector. This enabled insights tailored to the needs of the Health sector. An outline of the methodology undertaken is provided in the Technical Appendix. Subsequent desk research and horizon scanning has been undertaken in order to ensure their continued relevance. A series of outputs have also been developed to support employers in thinking creatively about the future of healthcare activities and the consequences for skills and employment.

After detailed analysis, interviews with experts and a series of workshops a number of factors emerged as key drivers for change. These were as follows:

- The NHS concept.
- Funding of healthcare.
- Public/private healthcare.
- Demographic changes.
- Political developments.
- Developments in bioscience, pharmaceuticals and technology.
- The choice agenda.
- Societal trends.

In order to allow a degree of comparability between the suite of Sector Skills Assessments we have used the general headings suggested by SAMIs framework and placed the drivers identified through Skills for Health in the most relevant areas.

6.2 Regulation and Governance

In common with many western societies, the provision of healthcare is shaped by a wide range of political and regulatory influences from a local, regional, national and international level. With the Skills for Health analysis, these areas were broadly covered in an analysis of the 'political drivers'. It is evident that the UK's Health sector will be influenced by a complex interaction of National, UK, international and local politics and policies. Such politics will also have important consequences for the regulation of the sector.

UK and National politics

UK politics and increasingly, the national politics of England, Scotland, Wales and Northern Ireland are some of the most influential drivers for the development of healthcare. The establishment of the NHS in 1948 and its development since has been the result of political consensus in the UK to date. In addition, the development of Health policy and implementation has long been a function devolved to the four UK countries. Whilst the continued trend towards devolution has led to significant differences in emphasis and delivery mechanisms there are also commonalities.

At a UK level the political decision has been made to reduce the national deficit caused by the recent economic crises and sluggish growth. In each nation, politicians are looking at ways of reducing budget deficits within their national priorities. Whilst public spending on Health has been prioritised in all four of the UK countries with either increases in spending or reduction in spending that are less than the average across government departments there is still significant challenges ahead for the sector. This constraint to public finances will mean that reforming the Health service to provide better services for the same or lesser resource will be key, both in the short and medium term. There will also be some long-term changes to how the sector is organised.

Within England the Government has set out its long-term vision for the NHS in *Equity and Excellence: Liberating the NHS,* published in July 2010[29]. Perhaps the most important, and most discussed, element of this will be the introduction of Any Willing Provider (now referred to as Any Qualified Provider, AQP) which will offer patients choice and control over their treatments, thereby reducing barriers to entry to new suppliers from all sectors. These policy changes within England are likely to have significant implications on the way in which NHS services are procured and delivered.

This is aimed at offering patients unprecedented scope for control over their care, as well as increasing innovation and productivity by encouraging a more open and competitive market. At present, this is due to be phased in during 2012/13 with a restricted set of services; some areas, such as Ambulance and A&E Services are specifically excluded. There are eight areas to be included, which account for more than £1bn of NHS services.

The “Nicholson challenge” refers to the demand made in 2011 by Sir David Nicholson, the leader of the NHS in England, for the NHS to find £20 billion in efficiency savings by 2015. This underlines the need to focus on productivity and efficiency without compromising the quality of patient care or their Health outcomes. This was set out in the Department of Health’s Quality Innovation Productivity and Prevention (QIPP) agenda.

Whilst the scale of the efficiency savings to be implemented across the NHS in Scotland, Wales and Northern Ireland is less clear, there can be no doubt that they are likely to be significant. The political decisions taking place in Scotland, Wales and Northern Ireland will undoubtedly impact upon the development of the Health sector in each country.

29http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_117353

Despite the notable divergences in healthcare development it is possible to discern a number of common threads running through policy trends for the NHS. These trends include:

- An increased emphasis on the quality of the patient's experience and the greater personalisation of services.
- The delivery of care closer to home and the resultant shift of services and skills from the hospital sector to primary and community care.
- A continued emphasis on public Health - in particular the reduction of Health inequalities; this will impact on skills development of the wider workforce.
- Improved productivity and quality - already leading to improvements such as reduced waiting times and a reduction in healthcare-acquired infections.
- Better-integrated working across sectors, particularly between Health and social care - to help ensure service users experience seamless pathways of care.

Taken together the implications of policy changes for skills will emphasise the need for generic skills such as team-working and customer handling as well as a range of business related skills

New localism policy developments

There is a growing interest amongst politicians to develop policies that promote greater responsiveness of the Health service to local Health needs. The main thrust of these developments for England is encapsulated in the white paper cited above. This paper emphasises the role of new consortia of General Practitioners and Local Authorities in the delivery of healthcare.

Furthermore, over recent years there has been significant structural change in Scotland, Wales and Northern Ireland. In each country these changes have been driven by the need to deliver services that meet the needs of the local population, and are responsive to changes in demand. Such an emphasis is likely to lead to an increased need for commercial and social entrepreneurship amongst large and small enterprises wishing to serve local communities.

Influence of European politics

The EU requirement of a maximum working week of 48 hours within the Health sector took effect in 2009 and continues to affect the delivery of healthcare in the UK. This has proved a particular challenge for junior doctors in the UK because of the historic reliance on them to work very long hours and provide cover during unsociable hours.

Even though the EU requirement has been known for several years, employer responses have been relatively 'traditional' with a focus on making changes in the way doctors are deployed. However, one potential solution to this problem could be the development of skills and competences to deliver functions usually provided by junior doctors within other members of the healthcare team. By developing skills sets in this way, services to patients could continue to be provided effectively, whilst maintaining quality, increasing productivity and potentially reducing costs. Change and strategic management skills are likely to increase in demand as sophisticated national responses are required to European wide directives.

Regulation

Due to the nature of the work undertaken in the sector, the protection of patients and their families is a central concern. Regulation also has a major influence on the development of the Health sector throughout the UK. The regulators present in the Health sector are numerous making it one of the most regulated sectors in the UK economy.

It is evident that regulation and compliance will continue to be a key feature of the sector. This is reflected in the large numbers of stakeholder organisations in the sector that are responsible for the regulation and registration of those working in the sector including professional bodies.

The Health sector has been and for the foreseeable future will be affected by political decisions and influences. The current political debate within the Health sector continues to be about how the sector will provide high quality care in the context of constrained budgets. Change management skills will need to incorporate high quality negotiation and communication skills as employers seek to make changes that regulators can be assured do not put patients care at risk.

Conclusion – regulation and governance

For the Health sector, these drivers of change are multilayered with international and national influences having an active role as well as local contexts. Media interest in these drivers will continue to be significant and therefore they will continue to have a high profile.

There is little sign of the sector becoming 'de-politicised' over the next decade. These drivers will continue therefore to exert an influence on the sector. However, the exact nature of their influence remains uncertain as policies are not always linear in their effect and can lead to unintended consequences and result in counter trends in other areas. For instance the government is naturally keen for the sector to respond quickly to change. However, the need to assure patient safety can reasonably act as a brake on rapid change as there is a need to redefine how roles are developed within the sector.

6.3 Demographics

Demographics were identified by SAMI as a major driver for the UK overall, this was also identified strongly by Skills for Health's scenario planning research and work. The changing composition of the population, particularly its overall ageing, is shaping the demand for health care. Overall, UK population is expected to increase by 0.7 per cent per annum and the proportion of the population aged 65 and over is projected to increase from 16 per cent in 2008 to 23 per cent in 2033[30]. The ageing population will increase demand for health-related services.

Ageing population

A recent report from the ONS[31] shows that whilst all UK countries show evidence of population ageing, the changes have not occurred evenly across the UK (or indeed in its constituent countries), and the concentration of older people varies.

These figures show that in 2008 people aged 50 and over made up at least 25 per cent of the population in each part of the UK. The lowest percentages were found in London (26 per cent) and Northern Ireland (31 per cent). The highest percentages were found in the South West of England (39 per cent) and Wales (37 per cent).

30 Office of National Statistics, 2008 based population projections http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=8519

31 Office for National Statistics (2010) Regional Trends 42, Ageing Across the UK.

Coastal and rural areas had the highest percentages of population aged 50 and over, except within Northern Ireland. These higher percentages reflect the known patterns of internal migration related to people of retirement age within the UK moving to such areas over a period of many years.

One of the most striking features of UK population ageing is the increasing numbers in the oldest age groups. Although much smaller in volume compared to younger age groups, they are noted as being important because this is where most growth is projected to take place in the future. There is also concern that the extension of life may mean more 'unhealthy years' for many individuals within the UK, there are likely therefore to be increases in the need for specific skills around managing a series of chronic conditions. Particular areas where job specific skills will increase are care and management of people with dementia and diabetes. Overall, older people are likely to be a powerful pressure group. They may have a particular range of issues intimately linked to healthcare and will therefore be able to influence provision and the sector will need to be responsive.

Increases in lifestyle related conditions

In addition to the ageing population, lifestyle factors continue to be of concern to the sector. Factors such as obesity, high levels of alcohol consumption and smoking mean that there are increasing demands on services to deal with their adverse health-related consequences. Increasingly younger age groups are presenting for help with illness and disease related to these behaviours which potentially means that the Health sector has increasing demand across all age groups, not just the very oldest.

The increase in the number of years we tend to live has not been coupled with increases in the number of *healthy* years we live (See table 115 in the Technical Appendix). Job-specific skills in the area of promoting healthy lifestyles are likely to accompany governments' desire to increase prevention.

Ageing Health sector workforce

In terms of how this might affect the workforce directly, whilst it appears that the Health workforce is ageing, there is no clear evidence to suggest that older workers are more likely to have their Health affected by work than younger workers.[32]

The Health sector's workforce is older than the whole economy. The oldest profiles are, in general, found in those geographies with older populations. The reason for this is that the UK-wide nature of the sector means that employees have historically been able to move to areas they wish to retire to during the middle of their career with relative ease.

The impact of a rapidly ageing population and ageing workforce on the sector are numerous, including:

- Fewer working-age people able to look after the old, it is likely that those working in Health may need a greater breadth of skills to deal with a broader range of Health issues
- A loss of a large number of older more experienced employees over the coming decade, succession planning is therefore a key part of the sector's development
- An increase in demand for care from older populations who have more long-term conditions with a drive to be treated in their own home rather than in hospital

Conclusion – demographics

The development of an older and ageing population is a particularly strong driver for change in the Health sector. There is a high degree of certainty that the ageing population will become a reality. What is a key feature of interest for the Health sector is that many of these older people will also have a range of conditions that will require ongoing monitoring and treatment. The magnitude of this driver is considerable.

There are some communities that are living life-styles that will threaten more illnesses than others. Those with poor eating habits, who smoke, drink heavily and fail to take exercise will be particularly prone to poor health. What is interesting is these are not entirely random features and these patterns of health and wellbeing can already be geographically pinpointed. There are some communities for whom it is feared that the children might die before their parents. The sector is keen to target these communities with public health information and to intervene early in order to prevent the unsustainable increases in demands for services that these individuals could bring.

32 H&SE (2007) The ageing workforce: A Health issue? Economic and Labour Market Review vol.1 no.2

Demographics of the UK population and the UK Health sector workforce will be major forces shaping services in the future. The precise outcomes of these drivers are difficult to fully determine. However, many technological innovations are being sought to provide assistance to people in their own homes that may assist in the sector being able to meet increased demand.

6.4 Environmental change

Environmental change was highlighted by SAMI as a driver for change for the UK economy overall. Whilst debated environmental change was not 'surfaced' as one of the top drivers for change for the Health sector as part of the Rehearsing Uncertain Futures project. This suggests its order of magnitude and possible impact is not as great as might be the case for other sectors of the UK economy.

However, much of the impetuses for change from concerns around environmental change are likely to be pushed through 'governance' as the sector seeks to comply with regulations and initiatives to reduce emissions and waste leading to specific skills and knowledge around these government initiatives.

There is also another element of environment that is of relevance to Health and well-being and there is evidence that this is beginning to be more understood which may lead to its ascendance to a primary driver in future debate on drivers in the future. Whilst medical studies have long highlighted lifestyle as a predictor of good Health, there is a growing body of knowledge around the impact of local environment on people's Health and well-being (Davenhall, 2010).

There are links between an area's industrial legacy, pollution and some aspects of Health. There are a growing number of people suffering from asthma and hay fever, which has been raised as one effect of global warming. There is also awareness that the planning of urban spaces can restrict the ability of residents to lead healthy lifestyles as they prevent them from fully enjoying outside spaces. In many communities there are shortages of space and new housing stock is being built within the UK which are some of the smallest habitable spaces in the developed world (CABE, 2009).

Conclusion – Environment Change

The impact of environment agenda on the development of the Health sector is likely to be mediated by regulation. However, the true extent of the impact of the environment is likely to be more fully understood as interest continues to grow in the impact of the local milieu on people's health and well-being. This driver may well feature more highly in future debates on those forces driving change in the Health sector.

6.5 Economics and Globalisation

During debates about the drivers for change in the Health sector there was consensus amongst participants that economics and the global economy is a key driver of the Health sector. However, there was consensus amongst participants that the effects would be mediated by the decisions of politicians in terms of how much 'funding' the state could afford in the light of the global economic crises and how much personal expenditure was affected by the recession.

The particular debate is around how much can be afforded from public expenditure in this area.

Funding of Health care

In common with many OECD countries, the state is the main funder of healthcare in the UK. As we have seen, the economic sphere has a significant impact on the decisions of politicians and policy makers. The government's ongoing deficit reduction measures will have an important bearing on the future of the sector, the provision available and therefore workforce design and skills in the sector.

In Chapter 2, some analysis is offered about the possible future performance of the sector in the light of reduced financial settlements for the Health sector. Less NHS funding could impact on NHS services in different ways; for example, cuts in specific service lines, reduced availability of medicine, or longer waiting times for patients.

Any change in the funding of the NHS is also likely to have a significant impact on private and voluntary sector providers, as well as NHS providers. Less funding may also result in the NHS contracting less with private and voluntary healthcare providers as it seeks to get more out of its own resources and assets. A possible counter trend to this may be that any cuts to the supply of NHS services might drive up demand for other services, opening up opportunities for private and voluntary healthcare providers.

Economic context and the public sector

The settlement for the NHS in England outlined in the CSR in October 2010[33] confirmed the Government's commitment to protect NHS spending in England over the course of the parliament. The NHS budget in England is to rise by £10 billion between 2010/11 and 2014/15. This equates to a 0.4 per cent real-terms growth over the spending period.

It will mean funding increasing to just over £114 billion by 2014/15[34]. This is a more austere settlement than has historically been the case and as set out by the previous government. 5 per cent efficiency savings per annum have been targeted across the NHS through the QIPP[35] programme. This requires the NHS to achieve somewhere in the region of £20bn of savings by 2014/15.

Within Scotland the draft budget outlines that the funding allocated to healthcare will rise from £11.2 billion in 2010/11 to £11.4 billion in 2011/12. During 2011/12 Territorial Boards and Special Boards will receive a core allocation of £8.6 billion. The budget also outlines that priorities for 2011/12 will include supporting NHSScotland to eliminate waste, achieve productivity and efficiency gains without compromising quality, together with the implementation of a 25 percent reduction in management costs.

The draft budget for Wales outlines a combined Health and Social Services Allocation. This revenue allocation has been protected from cash reductions with funding for 2011/12 and 2012/13 remaining at the same level as 2010/11 (£5.87 billion). This means that efficiency savings will need to be realised to meet unavoidable inflationary costs over this period (including pay awards and other inflationary pressures). In 2013/14 the budget increases by 0.2 per cent to £5.88 billion, and is planned to remain at this level for 2014/15.

The budget for Northern Ireland underlines the commitment of the administration to the Health sector, with increased funding allocations for the Department of Health Social Services and Public Safety (DHSSPS) between 201/11 to 2014/15. Funding for Hospital and Community Health will increase from £3bn in 2010/11 to £3.3bn in 2014/15.

33 HM Treasury (2010) Spending Review 2010 http://cdn.hm-treasury.gov.uk/sr2010_completereport.pdf

34 This includes capital (£4.6 bn) and administrative budgets (£109.8 bn) for the NHS in 2014-15.

35 QIPP is a large scale transformational programme for the NHS, involving all NHS staff, clinicians, patients and the voluntary sector and will improve the quality of care the NHS delivers whilst making up to £20billion of efficiency savings by 2014-15, which will be reinvested in frontline care.

What is clear, therefore, is that whilst the settlement for the Health sector can be regarded as generous, particularly in the light of very tight budgetary constraints across central government, there is still a significant challenge to the NHS in order to meet the efficiency savings whilst coping with increased demand and inflationary cost pressures.

Economic context and the independent sector

The impact of the recession on the independent Health sector is aligned with market forces. The effects of the recession have, until now, been more visible in the independent sector than the NHS or voluntary sectors.

A 2008 report from Laing and Buisson[36] highlights that 2007 recorded the first fall (in real terms) in spending on private treatments in twenty years. More recent reports[37] demonstrate how, during 2009 as the economy contracted, the number of private medical cover policies in the UK fell by 4.8 per cent. This decline was seen in both company-funded and individual cover.

Market forces impacting on the independent sector influence the success of existing organisations in delivering high-quality, affordable healthcare and providing jobs to healthcare professionals. They also influence the types of businesses that are set up, as well as their location. The demographic and economic profile of potential consumers in different geographic locations is an important consideration for organisations looking to expand or start new services.

One way in which independent Health sector organisations may look to answer these questions is by the use of consumer and health profiling. Such profiling can give users a glimpse of the demographic, economic, current health and future health profiles of local populations[38].

36 Laing and Buisson Press Release, 29th October 2008 http://www.laingbuissonconsulting.co.uk/pressreleasesLB.asp

37 Laing and Buisson Press Release, July 2010 http://www.laingbuissonconsulting.co.uk/pressreleasesLB.asp

38 An overview of ACORN Health profiling can be found in the Glossary of the 2011 SSA for the Health Sector www.skillsforhealth.org.uk

The economic context and the voluntary sector (third sector)

The role of the voluntary sector in delivering sustainable Health services will continue to be promoted by government and policy makers. As with the NHS and the independent sector, the voluntary sector will also face challenges as a result of the recession. For many charities and non-profit making providers, the demand for the services will increase as wellbeing in the population decreases. At the same time, there is downward pressure on the levels of donations and available grants.

Analysis and review of the CSR by Third Sector[39] highlights that:

> "Although the comprehensive spending review will reduce public spending by 19 per cent over the next four years, it promises a bigger role for the voluntary and community sector."

A key part of delivering this bigger role will be a new £100m transitional fund available in England over the next two years. The fund has been set up to assist voluntary and community organisations to prepare for the larger role they will play, particularly in public service delivery.

Overall the review highlights that around £470m will be spent by the government over the next four years to support capacity building across the voluntary and community sector.

Given these economic indicators across all parts of the sector, it is reasonable to assume that the drive for employers across the whole sector – public, independent and third – will be to exploit areas for business growth and development whilst ensuring that sustainable efficiency savings are achieved in order to maintain financial balance and high-quality patient care.

Much of the Health sector has been insulated from the immediate swings in global economic trends. However, the effects of the recession and global economic crises, whilst delayed, continue to reverberate into the Health sector.

As we have seen, the political response has been to initiate a period of austerity in public finances. Whilst there has been some attempt to reduce the impact on the Health sector, the demands for efficiency saving for the sector are significant, at over £20 billion over four years, and of a scale never previously attempted.

39 Third Sector Online 20th October 2010. Comprehensive Spending Review. http://www.thirdsector.co.uk/news/Article/1036189/Comprehensive-spending-review/

A significant amount of the Health sectors budget (70 per cent) is spent on staffing, therefore large-scale changes to how people work in the sector will be a key feature of the sectors development over the coming years. However, because of the shifts in demographics demand will continue to grow. As a result, themes such as role substitution and design will be of high interest to the sector as employers seek to achieve better value for money.

Conclusion – Economics and Globalisation

Whilst not immediately exposed to the global markets, the Health sector has nonetheless been affected by the economic crises as politicians have sought to deal with deficits in the UK budget. The consequences of these are not simply restricted to the public sector, as both private and third sector providers of Health care are often service providers of public healthcare. Wider economic concerns are likely to have an impact on private sector providers, For instance, companies may examine their health insurance benefits leading to a reduction in private healthcare demand.

Given these economic indicators across all parts of the sector, it is reasonable to assume that the drive for employers across the whole sector – public, independent and third – will be to exploit areas for business growth and development whilst ensuring that sustainable efficiency savings are achieved in order to maintain financial balance and high-quality patient care. A significant amount of the Health sector's budget (70 per cent) is spent on staffing, therefore large-scale changes to how people work in the sector will be a key feature of the sector's development over the coming years.

Skills such as financial management and evaluating the impact of services are likely to be in greater demand. It is also likely that there will be a quicker push towards diverse means of delivering healthcare over the next decade, thereby increasing the need for technical and IT skills in the sector.

6.6 Technological innovation

Advances in medical treatments and technology constantly drive changes in the sector. Developments in pharmaceuticals, bio-science, diagnostics and information and communication technology influence how healthcare is delivered and therefore the roles required within the healthcare systems. This driver was also acknowledged by participants in workshops. The technological development highlighted here fall into three main categories, Information Technology, telecare & remote monitoring and pharmaceuticals.

Information Technology

Over the past 20 years we have seen the growing influence of information technology in healthcare. The rapid increases in processing capacity have led to important new methods in diagnostics and visualising the patient (Ynnerman:, 2011). There are also a growing range of opportunities offered over the past 10 years we have begun to see the growth of mobile technology and the cross fertilisation of previously un-connected technology, an example of which is the smart-phone which joins mobile phone and computing technology.

However, it should be recognised that technological advances are not simply 'black boxes'. Eventual applications are shaped by the complex interactions of many drivers and changes in the sector.

The development of Information and Communication Technology (ICT) is currently one of the most influential drivers in developing healthcare practice. Highly publicised difficulties with some ICT initiatives have dampened optimism about its possible impact on productivity within the NHS. Indeed, as one commentator observes:

> "A frequent challenge for the Health service is not the lack of new, cutting-edge ideas and inventions, but the historical failure to adopt, diffuse and implement knowledge and technologies. The hope is that the new financial imperatives may encourage more rapid adoption." [40]

However, there continues to be huge potential for ICT to reshape ways of working across the sector. The improved flow of information will have a significant impact on service delivery.

40 Imison, C (2009), Tomorrow's Workforce? A perspective on employment and skills in the United Kingdom's Health sector. Part of the Skills for Health (2009), Tomorrow's Workforce: Commentaries on the future of skills and employment in the UK's Health sector.

There are currently a range of developments which indicate a renewal of the sector's approach to the use of information technology. Firstly, there are a growing number of smaller organisations seeking to develop software solutions for the Health sector and a willingness of larger organisations to 'buy small' ICT solutions rather than larger scale offers.

Recent horizon scanning suggests that more employers in the Health sector are utilising open source software and paying for support as and when they require; an indication that the days of the 'super initiative' are, for the time being at least, over. The table below outlines some areas of IT development that are likely to have an impact on the sector

Table 6.1: IT developments that are likely to impact on the sector

Ownership of records	The ownership of medical records is likely to be important, with individuals being able to decide who and how people can view and process their records. Issues of confidentiality and security will continue to be of critical importance. The debate about who can view and process records will be important in this respect. If, in light of concerns around confidentiality, accessing and processing is limited to medically qualified staff, possible savings could be limited as only high paid professionals.
Administering patient records	The potential introduction of the Electronic Patient Record (EPR) system over the coming years is likely to reduce the need to manually handle and transport patient records and notes whilst increasing the need for clinical staff to be able to access and negotiate this new technology.
Data analysis and quality	It is to be expected that there will be increases in new role types and skills involving data analysis and data quality with the introduction of new and emerging ICT. It is also highly likely that additional posts will be needed in ICT and elsewhere to ensure that such large and complex systems remain operational.

Telecare and remote monitoring

Developments in Information Technology combined with technologies in diagnosis are making a whole range of interventions possible in the form of telecare. It is also now possible for patients to buy a whole range of technology from retailers in the form of blood pressure measurement, heart rate monitors and so on.

This is also enabling a growing number of people to have their conditions monitored at home, with access to a range of medical advice and guidance remotely. For many, this has been a liberating development that allows them to enjoy home life as well as being cared for cost-effectively. Sophisticated healthcare advice and consultations are now also available online. Some sources are state-sponsored, while others are supported by private companies.

We are seeing the early stages of the ability of mobile technology in the shape of smart-phones with applications suitable for reliable self-diagnosis and monitoring of hearts. There are likely to be a range of new roles and skills emerging round assisting people with remove monitoring. These are likely to be around good communication as well as specific medical knowledge for relevant conditions.

Pharmaceuticals

Historically the Health sector has had a strong reciprocal relationship with the bio-science/technology and pharmaceutical industries. The Health sector has been able to utilise the breakthroughs made in these fields to improve healthcare.

These supplier sectors have also been able to make these breakthroughs with the help of those in the Health sector. Such collaborative innovations can occur rapidly and have far reaching consequences for Health provision and the skills of the workforce. In some cases, traditional forms of healthcare practice have become redundant within a relatively short period of time owing to pharmaceutical developments.

Currently there are numerous areas where knowledge has been, or is being, developed, but where the relevant technology and its application in medicine has not developed concurrently. A particular example is in the field of genetics. The human genome has been mapped. However, the technology to translate this basic knowledge into preventative medicine (to potentially eliminate a host of genetic diseases) has not. Looking ahead, the sector will therefore need to develop 'genetic treatment therapy' skills, and begin to change skills developed in response to the existing paradigm for treating these diseases.

More recently, there have been a series of developments in the ‘life sciences’ industry that may challenge the UK’s position as a world leader[41,42,43]. The future of the interaction between these and the Health sector has been a major concern for politicians and healthcare providers. This has led the government to establish the Office for Life Sciences to facilitate government policy in ensuring these sectors remain strong players in the UK. This driver will translate into a range of high level skills around developing medical intervention, diagnosis and management of care.

41 Price Waterhouse Coopers (2007) Pharma 2020 Series.

42 Organisation for Economic Co-operation and Development (2009). The Bioeconomy to 2030: Designing a Policy Agenda.

43 Organisation for Economic Co-operation and Development (2009). Innovation in Pharmaceutical Biotechnology. Comparing National Innovation Systems at the Sectoral Level

Conclusion – Technological innovation

Technological changes have had a major impact on the development of healthcare. Indeed the development of human sciences is in many ways responsible for the Health sector as we currently know it. The sector employs a large number of scientists and technological experts. There is also a rich history of technological innovations reshaping Health provision and skills within the Health sector.

The precise impacts for the future are difficult to pinpoint as the use of technology continues to be mediated by culture and practice. However, there are a range of developments that will have a profound effect on healthcare activities and the shape of the workforce and skills. This section has mentioned just a few of a wide range of important developments.

The key theme for the next decade is anticipated to be the bringing together of information technology and biological science as medical issues can be clarified into data. Another is the merging of technologies that have been traditionally separate. The smart phone is an example of how computer technology and telephony can be brought together. Smart televisions, more reliably hardwired which allow applications could also provide monitoring of Health conditions as well as entertainment.

Looking further into the future, there is every reason to see further developments in diagnostic technologies and the emergence of robotics into the sector. The sector must monitor these longer term trends to ensure it can exploit these for the nation's Health.

6.7 Values and identities

Values and identities are an important force and have a profound effect on the shape of healthcare in the UK. As we have seen, whilst technology promises a great deal, cultural values and identities remain an important influencer. This was one of the highest ranking influencing forces on the development of Health provision in the UK and in turn skills development. However, the debate in the Health sector is framed slightly differently in terms of the identification of people with the NHS and that of the broader 'societal' trends. In this section we therefore outline these two areas of debate.

The NHS concept

The NHS is an important symbol for the UK. Few public institutions receive the same level of support as the NHS amongst all sections of the population. It can, in many ways be said to form one of the core values and defining characteristics of all countries in the UK.

Launched just after the Second World War in 1948 it was based on three core principles:

- That it meet the needs of everyone.
- That it be free at the point of delivery.
- That it be based on clinical need, not ability to pay.

Whilst finessed throughout the years, various modernisation programs have sought to drive forward change whilst upholding these principles. These principles continue to guide the development of the NHS more than sixty years later. Tensions do, however, exist within the concept of the NHS and the practicalities of Health provision which help shape its development.

One of the key tensions of the NHS concept is its aim to provide a universal service within finite (publicly funded) resources whilst demand and expectations for services continue to rise. As a result, there has been a growing debate on how to measure and achieve better productivity in the NHS. The debates on skills mix and workforce reconfiguration are continually pushing the development of new services.

The concept of the NHS also influences the development of private and voluntary sector provision. This influences how these sub-sectors are able to provide services and therefore employ and develop people. For instance, within England there has been a greater emphasis on private sector institutions delivering healthcare funded by the public purse through a programme of increasing patient choice. In Scotland, however, there is a greater emphasis on the use of NHS only.

The NHS concept, therefore, has an important set of further consequences for change and therefore the development of employment and skills-related issues.

- The NHS, because of its size, takes time to adjust to change. Reconfiguring services and skills sets can therefore take time and pose a challenge for employers.
- Change can be stymied by the complex set of institutions that the NHS needs to relate to, each with different needs and, often, regulatory powers.
- Managers and leaders can be confronted with a set of problems that are not easily (and sometimes never) solved.

The current position of the NHS concept is usefully illustrated in the current UK government's deficit reduction plan. The NHS has been protected from many of the cuts other public institutions have been confronted with. Public satisfaction with the NHS remains at an all time high at 70 per cent in 2009 up from 37 per cent in 1997 (Nat Cen Social Research, 2012).

There remains a need, however, for significant efficiency savings to take account of surging demand. These efficiency savings will require better skills utilisation and development as well as management otherwise satisfaction with the NHS may experience a decrease.

Societal change

During Skills for Health's Rehearsing Uncertain Futures work, the development of 'community identities' were highlighted as important in shaping healthcare provision. This related driver, we found, is formed by how people relate to groups of common interest and how these groups relate to wider society and other communities of interest. These include:

- Patient self-reliance and responsibility. Will society be content to continue to provide healthcare to those who openly take risks with their own health such as smoking or poor diet?
- To what extent will communities be exclusive in the sense that they become tribal and look after their own rather than working with other communities collectively? Could this, in combination with localism, create many systems that do not wish to work with one another?

There are a range of complex issues around public health that will have implications for future health provision; for example, increasing levels of migration, tourism, air travel etc. lead to a growing potential for the spread of an increasing array of communicable diseases and fears for increased risk of pandemics.

This driver is of particular relevance for policy makers as the coalition government is seeking to develop the relationship between individuals, communities and the state. There are indications policy makers would like to encourage more participation in wider society to assist in the provision of goods and services. However, British Social Attitudes Survey (Nat Cen Social Research, 2012) examines a number of trends in people attitudes from religion, political participation and willingness to pay taxes and writes '*The signs are of a more fragmented society no longer underpinned by old certainties'.*

Conclusion – Values and Identities

The NHS and its ethos remain a valued part of a UK wide identity. There are signs that public attitudes may be shifting to a more individualistic stance, many social ties are being challenged and there may be a growing unwillingness of the population to fund more activities through the state. However, the UK 'settlement' of the NHS being the core means by which healthcare is delivered looks set to continue for the next 5-10 years. Whilst framed by the NHS ethos, the sector is likely to see an increase in demand for skills around change management, strategic management and entrepreneurial skills as many in the sector work to maintain the universal nature of Health services in the UK.

6.8 Consumer demand

Across the UK economy as a whole, consumers are widely regarded as becoming more sophisticated and demanding. The Health sector is no exception in this trend. There is a greater amount of knowledge about health and wellbeing amongst the population at large. In the development of Rehearsing Uncertain Futures, the issue of consumer demand was shaped in terms of the 'choice agenda'. This terminology reflects the 'managed' nature of consumer choice in the sector as there is a need for impartial advice and control of medical interventions in the UK.

The choice agenda

How empowered individuals feel about their own Health management and about the overall package of Health services they are offered is also a key issue helping to shape the future development of the Health sector, and will continue to be so in the near future.

The issue of empowerment, and the fact that healthcare consumes a large amount of taxpayers' money, makes the choice agenda of particular importance for politicians and the public.

Within the UK there are variations in the profile of 'choice'. Within England and Wales 'choice' is emphasised much more readily in policy documents than in Scotland and Northern Ireland

The choice agenda is also interplaying with the demand for the government to offer more services locally. This can be seen most recently in current government policy in England which is seeking to develop groups of GPs into commissioning consortia for the local area. At the same time, there have always been local variations in services throughout the UK driven by the health profiles of their populations.

However, there are also trends around the development of a two-tier system, whereby those who have the resources are able to pay for a quicker and more bespoke service than those who don't have the resources. Elements of this have long been a part of life in the UK system, which private insurance and the propensity for people to pay privately indicate.

The choice agenda remains perhaps one of the most fluid and multifaceted of all the drivers for change. In those areas of the UK where the choice agenda is followed, the patient is likely to have more power and is in effect a buyer of healthcare with more power than might have been present in a 'traditional' patient relationship. In this case a whole range of skills such as communications and customer services and a whole range of high-quality backroom systems are likely to become more important.

It is envisaged that the importance of 'navigator' roles will be emphasised with employers as greater choice emerges across the sector.

Consumer demand – conclusion

The growing sophistication of customers will continue to have an effect on the how the sector needs to provide services. Expectations are high and behaviours from health care employees will need to appropriate to meet these. However, given the nature of the services being offered, the challenge is in providing perceived high quality customer care when there are not always easy solutions for people's problems.

6.9 Scale of drivers

In this assessment we have sought to combine the intelligence gathered as part of Skills for Health's Rehearsing Uncertain Futures work and the more general analysis of the UK provided by SAMI.

The table below outlines the drivers together with a discussion on their impacts on current and future skills needs. Some of the drivers for change are seen as very significant in terms of the scale of the impact they will have on the sector whilst others will have a low or neutral impact

It is difficult to arrive at a precise hierarchy of the drivers for change regarding the Health sector in the UK. The three most commonly cited in the ongoing demand around the future of the sector relate to demographic changes, the financial restrictions on the sector and technological innovations. However, politics, societal trends, the populations support for the NHS concept can also feedback into how future challenges are addressed. As a result, the Health sector is a very complex environment in terms of the range of drivers acting upon it.

Driver	Current Skills	Future Skills	Scale
Demographics • *Ageing population* • *Increases in lifestyle related conditions* • *Ageing workforce*	The sector is already reporting a range of job specific skills needs around the treatment of long term conditions brought on through an aging population and changes in lifestyle.	More job specific skills needed around the care of those with longer term conditions. Overall increase in the volume of people requiring healthcare will increase demand for Health and care related skills. Retirements from the Health sector are likely to lead to a loss of expertise in some areas. This may increase skills gaps and skills shortages	High
Economics and Globalisation • *Funding of healthcare* • *Economic context and the public sector* • *Economic context and the independent sector* • *The economic context and the voluntary sector (third sector)*	Significant skills needs around management and leadership to assist the sectors drive to make efficiency savings and increase productivity and performance. Changes in the structure of the sector are already requiring greater team-work as a result of multi-disciplinary teams.	Management and leadership skills will increase. Need for skills in evaluation and impact knowledge of how their services can make an impact on health and well being in the sector. Overall increases in the need for skills around assessing the impact of interventions. The 'economics' and suppressed funding is likely to lead to an increase in employers seeking to develop new roles in the Health sector – particularly around intermediate level skills.	High
Technological innovation • *Information Technology* • *Telecare and remote monitoring* • *Pharmaceuticals and bio-science*	The sector has ongoing job specific skills in relation to Health based on knowledge of the biological sciences. Developing skills around IT are raised in the sector as current skills needs. The discipline of bio-informatics is emergent. Early signs of technology being applied to care at home.	Broad range of job specific and technical skills around the application of new scientific discoveries will emerge. Information technology skills will require enhancements as more biological related data is managed through this area. Skills to utilise technology to co-ordinate services in a highly multidisciplined and geographically diverse environment will grow.	High
Regulation and Governance • *UK and National politics* • *New localism policy developments* • *Influence of European politics* • *Regulation*	The sector has to develop a range of skills in order to comply with a range of statutory skills needs in the sector.	Skills will need to be developed in the context of a high compliance environment. This will mean innovation in roles and skills will require management. Knowing the boundaries between job roles is key, as will be managing risk.	Medium
Consumer demand • The choice agenda	Sector reporting current skills needs in a range of 'generic' skills areas including customer services.	Breadth of customer service related skills are likely increase as well as entrepreneurship amongst smaller providers of healthcare.	Medium
Values and identities • The NHS concept • Societal change	Sector reporting current skills needs in a range of 'generic' skills areas including customer services.	Understanding communities of people and their health needs and how different communities received and understand health messages and advice. The growth of 'online communities', unique ways in which advice and guidance on health can be exchanged and advocacy can be given	Low
Environmental change	This is currently a relatively under developed area in the sector.	Likely to be increases in skills needed to treat some areas of health care brought on via changes to the environment.	Not Known

6.10 Differences in drivers across the four nations

In the process of surfacing of the drivers for change, delegates were drawn from around the UK. For this reason, the drivers have a high presence within all countries of the UK. In many respects they are pivotal areas when considering their possible future development. The figure below, drawn from the scenario development exercises, demonstrates the extent to which the drivers for change are important in the sector. There are areas of some variance.

In terms of public and private healthcare, England is home to more large independent healthcare providers. The development of large-scale independent provision has been less so in Scotland, Wales and Northern Ireland. The choice agenda has also taken on a different form between the nations of the UK. Within England it is compulsory to offer, where available, three potential Health providers. This is not so prevalent in the other nations.

Figure 4: Relevance of drivers in each nation of the UK

	England	Scotland	Wales	Northern Ireland
The NHS concept – degree to which current debate supports key principles	High	High	High	High
Funding of healthcare – degree to which the sector is being challenged to control spending	High	High	High	High
Public/private healthcare – degree to which non-NHS providers are promoted for both	Some mix of public/private	Primarily public	Primarily public	Primarily public
Demographic changes - the magnitude to which these will increase demand on the Health sector	High	High	High	High
Political developments - the extent to which political decisions will influence provision	High	High	High	High
Developments in bioscience, pharmaceuticals and technology – likely impact on future services	High	High	High	High
The choice agenda – extent to which individuals are given choice of healthcare providers	All patients offered choice outside NHS as well as within	Choice within NHS	Choice within NHS	Choice within NHS
Societal trends – extent of diversity	High	High	High	High

Conclusion

The Health sector is subject to complex range of drivers for change, such as demographics, developments in science and technology and economic constraints. It is also a sector that has a high degree of political intervention and regulation as well as a significant amount of public interest. The interrelationships between these drivers can make the sector a very complex area to understand.

The skills implications of these drivers are explained in greater detail in the next section. However the main impacts on requirements for human capital are unlikely to be more people. But people used far more effectively. Hence there will be a greater emphasise in the sector on the better utilisation of skills in the sector, as well as increasing the quality of skills of a whole range of people at an intermediate level. Whilst there will be some important variations between each of the nations, the overall direction of skills needs is likely to be more common between nations than different.

7. Future skills needs

Chapter Summary

- The sector will be under considerable pressure to change how it provides healthcare. We are likely to see many traditional ways of working eroding. There will be a greater emphasis on community based care and self care as a means of dealing with the ongoing increases in demand for Health provision in the context of less financial resources.
- Working Futures four forecasts that the sector is likely contract in the short term with very modest growth return in the long term.
- Administrative occupations are forecast to reduce significantly between 2010 and 2020.
- Such changes will have a 'multiplier' effect on many of the generic skills employers report today as issues for the sector including, team working, communication, customer services and problem solving skills.
- Skills around utilising information technology in the sector are likely to be required, new skillsets around navigating patients through the complexity of the Health sector show signs of emerging.
- Existing occupations will see their roles requiring additional skills around managing and leading change in the sector.
- Developing intermediate level occupations will become more important as the sector seeks to utilise, more cost effectively the skills and knowledge and professionals in the sector.
- The sector will need to equip those providing healthcare in the third sector and within the community with skills to enable them to continue to make an effective contribution.

Introduction

This chapter outlines how the drivers outlined may act to change in broad terms the nature of services provided by the Health sector. It then examines how these changes might affect overall employment levels, skills and the occupational profile of the sector.

Such analysis on future trends is by its nature speculative. However, we have sought to make our assertions plausible and credible and linked this analysis with Working Futures 4, a range of expert opinion, (Skills for Health, 2009), the application of the scenarios (Institute for Employment Studies, 2010) and Skills for Health's continued monitoring of trends. It is possible to make a range of reasonable assertions about the direction of travel for the sector over the next decade.

7.1 Future trends

Overall the drivers for change outlined in Chapter six, whether they are long, medium or short term are broadly following the same trajectory. In the short and medium term there is ongoing pressure on the sector to continue to deliver more high-quality healthcare in the context of a greater restriction of financial resources. Looking towards the longer term the sector will be required to respond to significantly increased demand for healthcare treatments, with dementia and diabetes being just two of the major long term conditions forecast to increase.

Healthcare providers will have to deal with increasingly knowledgeable and sophisticated customers who will demand more information and choice about how they are treated, but such choice will need to be effectively regulated. The sector will continue to have to incorporate new innovations in information technology, bio-science and pharmaceuticals. Whilst many of these innovations could, in time, simplify care and speed up diagnosis for patients, there will also be areas that demand a critical mass of resources and specialists to ensure complex care is conducted safety and cost effectively.

Throughout the sector there are a range of trends therefore that are likely to change the overall shape of healthcare delivery. In developing its understanding of possible futures Skills for Health developed three scenarios that offered plausible, credible and challenging narratives about the future of the healthcare system. These scenarios range from, 'Business and Economy class', 'United We Stand' and 'It's your Choice' each of which tells a potential story about the future of healthcare. Using these scenarios it is possible to think sensibly about the future shape of healthcare and employment and skills.

It is only really possible to speculate reasonably about the future of the Health sector into the next 10 years or so. Much further than that would be far more theoretical than might be useful.

The following is an outline of nine possible future trends in the Health sector:

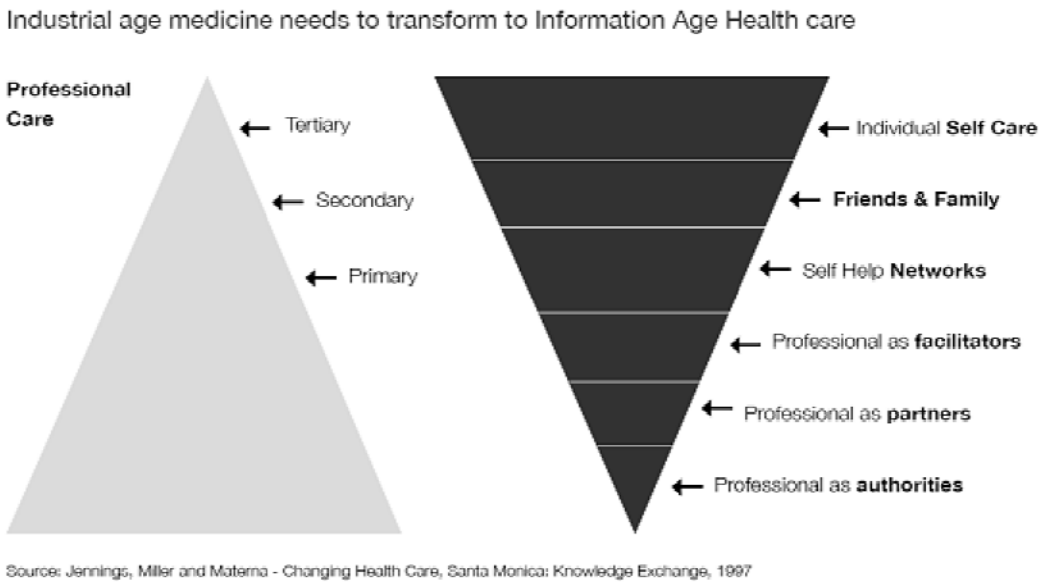
- We are likely to see a concerted push towards community-based care. Medical opinion has long appreciated that the best place for people's health and recovery is usually at home; in addition chances of infection are greatly reduced. Technology, particularly telecare is a key enabler of such a trend. It is often believed to be an approach that is more cost effective. However, counter trends include the relatively high cost of transition to these new systems. The organisation of such systems can be resource intensive and the management of distributed care can be complex (Skills for Health, 2009).
- Shift from hospitals being the focus of care towards communities and homes. Related to the trend described above there is a desire to move away from an emphasis on healthcare provision in hospital being the locus of where best healthcare is delivered. An alternative perspective is that should a patient need to attend a hospital it should be regarded as a failure of the healthcare system and not a first "port of call". A possible barrier that may need to be overcome relates to the transfer of employees into community settings as many may feel they lose some status in moving into this new environment.
- There is likely to be a greater articulation/integration of services and workforces traditionally separated between Health and social care. Health care systems across the UK are moving towards more effective integration of Health and Social Care functions in order to provide better services to customers and avoid systemic failures. This model is already well established in Northern Ireland, and increasingly so in Wales and Scotland. There is also now a greater momentum towards this within the English system.
- Greater proliferation of non-traditional providers of healthcare. As the Health sector seeks to deliver a greater variety of health care in community contexts, there is likely to be a proliferation of types of organisations offering health-related services. The emphasis on locally provided care may increase opportunities for extended roles, and functions such as pharmacists offering healthcare and advice and services provided through retail operations and health and fitness clubs particularly in regard to the public health agenda. These extended roles may well require occupational regulation to ensure quality of service.

- The health and well being agenda is likely to be reinvigorated. Again, the effects of lifestyle have long been appreciated as a major influence on people's health. The need to address trends such as obesity and alcohol-related illnesses over the next generation will become more urgent as these conditions increase in frequency and severity. Within England Health and Wellbeing boards have been established to take lifestyle issues forward.
- Greater prevention and care delivered outside of traditional healthcare settings is linked to the movement towards personalisation and self-care. Effective self-care is likely to be supported by the proliferation of advice and support from community groups and the availability of information sharing over the internet as well as face to face. Another enabling trend is that of portable technologies which enable individuals to monitor their own conditions with a greater degree of accuracy. This again is an attractive proposition from a cost perspective; any reduction in visits to GPs and other medical institutions will have a positive cost benefit as well as being an attractive choice for customers themselves. It is important to maintain quality levels of care whilst implementing these cost reductions.
- In many cases, healthcare is, and will continue to be supported by family and friends. Such care will also be facilitated by high-quality and well-developed advice and guidance. Advances in information technology will greatly support this trend. The potential increase in dementia-related illnesses is likely to be well served by this type of support. Counter trends may include the growth in numbers of more dispersed networks of family and friends which may affect significant parts of the population.
- The development of high-quality and safe specialist care will continue to be a focus of the Health sector. A primary driver of such developments will be the ongoing developments in bio-science, technology and pharmaceuticals that will continually provide potential new developments for health. Innovation and knowledge creation can often be well served by having centres of excellence. However, such specialist care is likely to increase in costs and indeed may even be global in its nature with different countries establishing renowned expertise in certain areas and offering these internationally.
- The above trend will also reinforce other areas of development that have been highlighted. Services currently provided in acute hospitals will be increasingly unbundled with some diagnostic and outpatient services provided in primary care, and many hospital based services delivered in facilities such as community hospitals, clinics and perhaps in shopping centres.

Possible trends such as those outlined above, and drivers for change outlined in the previous section, have led to many commentators observing that the UK's Health sector is at an important juncture in its development. For many the structures established since 1948 have remained in large intact albeit with incremental adjustments along the way but this more traditional model of healthcare is under threat.

The diagram below provides a useful illustration of how the Health sector may need to develop in the coming years. Commentators (Imison, 2009) indicate that the sector will need to change radically over the next decade or so if the country is to be able to afford healthcare for all within the auspices of the NHS.

Figure 5: How the Health sector may need to develop



7.2 Likely changes to skills

The future trends that are highlighted above will undoubtedly have an impact on the range of skills that are utilised across the sector. The table below brings together our analysis of the way in which these future trends may change skills that are common to many occupations within the sector.

Table 7.1: Future trends and their skills implications

Skill	Future Trends	Skills Implications
Generic Skills e.g. Team working Communication Customer Services Problem Solving	Move to non-traditional health outlets. Greater focus on skills utilisation with doctors delegating the administration of treatment to appropriately trained staff. Greater emphasis on self care. Utilisation of web-based communication. A continued focus on the importance of dignity and respect in relation to treatment The increase of knowledgeable consumers. The expectation from consumers for rapid diagnosis and treatment is likely to continue and increase. A greater complexity across the health service structure in respect of the providers available.	**Team working skills will….** Be in greater demand as employees need to work across multi-disciplinary teams. The presence of multidisciplinary teams in the community setting is likely to increase and will more commonly incorporate professions not traditionally seen in a health environment e.g. social workers, teachers etc. **Communication skills will….** Require employees to effectively communicate with a diverse client base, tailoring the messages to meet what will be very differing individual needs. Be developed in utilising web based communication and technology to assist patients to stay well in their own homes and reducing hospital admissions. This will require clinical staff to draw together an array of data and clinical indicators to identifying accurately and quickly when clinical intervention may be necessary. Be further engaged in using web based communication to help those who are 'hard to reach' due to issues such as rurality or chronic ill health. New communication skills will be utilise to identify, and in some instances support or facilitate virtual support networks for those with rare or complex conditions. There will be a general need to improve customer service skills across the sector to keep up with consumer expectations. **Customer service skills will….** Require a greater focus on understanding the needs of individual patients and increased empathy skills from those within the sector. Be utilised in ensuring that all basic care needs are met for all patients. **Problem solving skills will….** Continue to require enhancement for a wide range of occupations in the sector and may even result in some unique roles being developed. Inevitably continue to be required in respect of clinical skills and diagnostics but there may be an increased emphasis on the use of technology to support diagnosis. Be required to help consumers deal with the complexity that plurality of provision may bring, helping people to navigate through this new 'eco-system' in order to get the service they want.

Skill	Future Trends	Skills Implications
Use of Information Technology	All healthcare occupation, wherever they are based will, be affected by the ongoing impact of ICT on the Health sector over the next ten years There is huge potential for ICT to reshape the way that services are delivered across the Health sector. The connection between the biological sciences and information intelligence has given rise to a new phrase in the Health sector known as bio-informatics.	The majority of roles will have to understand how to operate basic ICT systems in order to do their jobs. This implies increased levels in many of the related 'functional' and key skills. Data-handling skills with respect to issues of confidentiality and security will grow in importance. There is likely to be debate within the sector about which roles should be using and processing patient information. A range of potential developments for Health professionals and clinicians. With ICT developments bringing remote diagnostics, or even surgery, within ever closer reach. The exponential rise in medical knowledge means that professionals will need to make much greater use of information technology to support clinical decision-making. Professionals need to be expert knowledge managers and navigators
Entrepreneurship	Plurality of provision - This is particularly relevant within England, but should not be ignored as potential development elsewhere in the UK The drive to ensure that healthcare provision is connected more closely with the local communities means that we may see organisations in the sector emerging in a more dynamic and responsive way. Local responsiveness from providers	Within England there is likely to be a greater focus across the whole sector on the identification of 'business opportunities' through private income. There is also likely to be greater call for 'social entrepreneurship' within the Health sector. This phrase encapsulates the growing requirement of those in public or voluntary employment to be constantly seeking ways of exploiting new opportunities to improve healthcare outside of the profit motive
Development of 'navigator' skillsets	Increasing complexity and interlinking nature of institutions in the Health sector Growing demand from customers who wish to seek out the best centres for healthcare Government policy which continues to stress the importance of choice	The range of drivers affecting the sector point toward the potential development of a 'navigator' skill set. This might be incorporated in existing occupations, or could lead to the development of a specific occupation The Health navigator role could then be part advocate, part information organiser and part broker. The role could act as an enabler, assisting clients, especially vulnerable people, to navigate their way through the increasingly joined-up systems of health, social care, education and housing. Such a navigator role has emerged in the area of mental health where there is a greater history of reciprocity between the carer and the cared for.
Employee Engagement and Distributed Leadership	Sector needs to be more responsive to rapid changes in population health needs. Sector needs to overcome some barriers that are systemic across the sector. These include silo working, and employee disengagement from employers' aims and objectives	The sector will need to develop leaders that can engage employees in the changes ahead. Leadership practice will be a skill that will need to be developed at many levels across the sector, not just at the top.

Skill	Future Trends	Skills Implications
Strategic Management and Workforce Development	The Health sector will remain a 'planned' workforce economy. The traditional focus of workforce planning activities on professional grades of staff will continue to be challenged and a focus on non-professional grades will become important Plurality of providers will mean planners have to look beyond the NHS to plan future workforce numbers	Organisations will need to ensure that they have skills in place to capture, interpret and model workforce data across all staff groups. The shift in focus to developing the number of Assistant Practitioners will require organisations understanding the number of healthcare assistants who are already developed up to Level 3 or equivalent. The sector has relatively few people qualified to this level; therefore significant development of this area of the workforce may need to be undertaken and planned. This would have to begin with functional skills such as literacy and numeracy. The need to make greater efficiencies in the sector and the new complexity may heighten the demand for such skills. There are likely to be specialists in the field of workforce planning, however it will continue to grow and these skills may become a core part of management skills in the Health sector in the same way that financial management is today Those working in the Health sector will need to become skilled at evaluating the effectiveness of health- related services, including articulating the return on investment and social return on investment.

7.3 Employment Projections

Working Futures 2010-2020 provides important projections for the UK labour market at a sectoral level. The projections allow us to examine the types of broad occupations groups that are likely to expand or contract over the period and comparisons with the whole economy is possible.

7.4 Whole Economy Employment Projections

Across the whole economy it is forecast that employment will increase by five per cent between 2010 and 2020, (see table 7.2). There are some occupations that are expanding at a greater rate than this such as managers, director and senior officials (18 per cent growth), professional occupations (15 per cent growth and associate professional and technical occupations (14 per cent growth). All of these occupations have a significant presence in the Health sector and the expansion of these broad occupation groups, which traditionally require higher level skills, is consistent with the historic trend of employment growth in these occupations.

Caring, leisure and other service occupations are also forecast to grow significantly (increasing by 12 per cent). This is an occupation group that has a significant presence in the Health sector and its continued growth reflects the ageing population and the increased demand that this brings to help care for people into old age.

Significant decreases in employment are projected in the administrative and secretarial group across the UK with a decrease of 11 per cent expected. This fall in employment is anticipated largely as a result of the continuing impact of technology in the workplace.

Table 7.2: Workplace job growth by occupation within the whole economy, UK

Employment growth	2010	2015	2020	2010	2015	2020	2010-2020
	Numbers (000s)			% shares			Net change (000s)
Managers, directors and senior officials	3016	3279	3560	9.9	10.6	11.1	544
Professional occupations	5843	6189	6712	19.2	20.1	21.0	869
Associate professional and technical	3926	4138	4476	12.9	13.4	14.0	551
Administrative and secretarial	3698	3466	3312	12.1	11.2	10.3	-387
Skilled trades occupations	3526	3389	3295	11.6	11.0	10.3	-230
Caring, leisure and other service	2719	2801	3032	8.9	9.1	9.5	313
Sales and customer service	2608	2555	2610	8.6	8.3	8.2	2
Process, plant and machine operatives	1950	1829	1737	6.4	5.9	5.4	-213
Elementary occupations	3173	3209	3274	10.4	10.4	10.2	101
All occupations	30458	30855	32008	100.0	100.0	100.0	1550

Source: Working Futures 4, IER

7.5 Health Sector Employment Projections

Table 7.3 shows that Working Futures forecasts an overall one per cent decrease in employment in the Health sector within the UK between 2010 and 2020. This decline is not anticipated to be a slow and steady decrease between 2010 and 2020. The modelling suggests that the sector will experience a larger fall of four and a half per cent (102,000 employees) between 2010 and 2015 followed by growth of just over three per cent (72,000 employees) between 2015 and 2020.

This is in line with expectations across the sector given the tighter financial settlements for the public health sector and the squeeze on consumer spending. It is also a reflection of an anticipated shift in the balance of the economy away from public sector activities.

Analysis at a UK level within occupations reveals that in general terms the Health sector can expect more modest growth than the whole economy in occupations that are growing, and more severe decreases in employment in occupations that are contracting over the period.

Discussion of the magnitude of change in the broad occupational groups is given in section 7.3 together with the key issues that are driving those changes.

Table 7.3: Workplace job growth by occupation within the Health sector, UK

Employment growth	2010	2015	2020	2010	2015	2020	2010-2020
	Numbers (000s)			% shares			Net change (000s)
Managers, directors and senior officials	109	109	116	4.8	5.0	5.2	7
Professional occupations	730	729	771	32.1	33.5	34.3	41
Associate professional and technical	242	242	256	10.6	11.1	11.4	14
Administrative and secretarial	285	232	194	12.5	10.7	8.6	-91
Skilled trades occupations	32	23	19	1.4	1.1	0.9	-12
Caring, leisure and other service	759	753	813	33.3	34.6	36.2	53
Sales and customer service	32	29	28	1.4	1.3	1.3	-4
Process, plant and machine operatives	14	10	8	0.6	0.4	0.3	-6
Elementary occupations	73	49	42	3.2	2.2	1.9	-31
All occupations	2277	2175	2247	100.0	100.0	100.0	-29

Source: Working Futures 4, IER

7.6 Replacement Demand

As well as the opportunities for employment created by expansion in overall employment, further opportunities also arise in respect of replacing those workers who leave the sector due to mortality, retirement, career moves etc. This replacement demand can mean that there is still demand to fill roles in the sector even at times when overall employment may be decreasing.

The modelling suggests that even with the Health sector contracting in absolute terms between 2010 and 2020 there will still be an estimated 880,000 jobs that need to be filled due to vacancies arising from people leaving the sector.

Table 7.4: Replacement demand and total demand for employees 2010-2020, UK Health sector

	2010	2020	Net change (000s)	Replacement Demand (000s)	Total Requirement (000s)
Managers, directors and senior officials	109	116	7	46	52
Professional occupations	730	771	41	275	316
Associate professional and technical	242	256	14	90	104
Administrative and secretarial	285	194	-91	128	36
Skilled trades occupations	32	19	-12	13	*
Caring, leisure and other service	759	813	53	317	371
Sales and customer service	32	28	-4	11	7
Process, plant and machine operatives	14	8	-6	6	*
Elementary occupations	73	42	-31	28	-3
Total	**2277**	**2247**	**-29**	**913**	**884**

Source: Working Futures 4, IER

** Cell size of less than 1,000 suppressed*

7.7 Likely changes of skills within occupations

So far we have concerned ourselves with the across-the-board impact of the changes to services and skills that are being initiated by the longer-term drivers for change and the overall changes that are forecast across the sector and whole economy. We now focus on the potential changes to the main occupational groups over the next decade.

For ease of reference the table below breaks down the broad occupation groups, key drivers, skills implications and Working Futures forecasts for the Health sector.

Table 7.5: Likely changes to occupations

Broad Occupation Group	Types of occupations	Drivers	Skills Implications	Working Futures Four Evidence
Professional and Associate Professional Occupations	Professional Group: • Doctors • Dentists • Anaesthetists Associate Professional Group: • Nurses • Midwives • Health Visitors • Physiotherapists • Scientists e.g. immunologists microbiologist	Developments in bio-science, information technology and pharmaceuticals The need to demonstrate 'added value' of the professions The drive for clinicians to become more involved in or undertake management roles	Technology will continue to permeate into the working lives of clinical staff particularly in the areas of supporting clinical decision making and treatment. The historic boundaries between roles may blur with tasks being escalated down the skills hierarchy. There will be a need for better skills utilisation across all occupation groups with a greater emphasis on undertaking work for which they are trained and reducing the amount of time spent on tasks that may be more cost effectively provided by others. Focus for senior clinical staff to acquire managerial skills and the skills needed to innovate and improve the process of healthcare. **Solutions** are likely to mean that continuing professional development will be needed to keep skill up to date and to acquisition of new skills keeps up with developments.	6% Growth of six per cent in overall employment in both of these occupation groups between 2010 and 2020 This is lower than the growth forecast in these occupation groups across the whole economy.
Managers, directors and senior officials	• Chief Executives • Directors • Health service managers including: Information managers HR Managers Finance Managers	Rapid structural change in the sector (Particular relevance for England) A commitment from all administrations to reduce spend (as a proportion of total staff spend) on non-clinical staff New technology to harness the information available across the sector	Likely growth in importance of developing management and leadership skills for those in clinical roles. Focus on improving management and leadership skills across the sector in order to drive through transformational change. Growth in the utilisation of new technology to aid planning and decision making.	6% Growth of six per cent in overall employment between 2010 and 2020 This is lower than the rate of growth in this occupation group across the whole economy

Broad Occupation Group	Types of occupations	Drivers	Skills Implications	Working Futures 4 evidence
Caring, leisure and other services	• Healthcare Support Workers • Nursing Auxiliaries • Senior Healthcare Support Workers • Assistant Practitioners	The need for the sector to make significant productivity gains and efficiency savings will mean there will be a drive to address skills utilisation. The focus will be on ensuring that tasks are carried out by staff with the most appropriate skills level.	Focus on the development of those in lower level roles to give them the skills and knowledge to develop into intermediate level roles. This must include a focus on numeracy and literacy skills Increased investment in training and development activities are likely for this occupation group in order that they can be equipped with the skills needed to better support Associate Professional occupations.	7% Growth of seven per cent in overall employment between 2010 and 2020. This is lower than the rate of growth in this occupation group across the whole economy
Administrative and Clerical	• Medical Secretaries • Receptionist • Ward clerks • Administrative Assistants • Computing staff • Human Resource staff • Finance staff	A commitment from all government administrations to reduce spend (as a proportion of total staff spend) on non-clinical staff The drive to increase 'shared services' The need for the sector to effectively manage the range of data available New technology enabling automation of some tasks currently undertaken by the administrative staff group	Growth in the utilisation of new technology to transform information into intelligence for business decision making. Greater need to diversify skills over a range of activities in order to ensure that job specific skills gaps do not increase. Potentially more links between administrative and clinical staff in order to better support effective skills utilisation.	32% Reduction of 32 per cent in overall employment between 2010 and 2020. This is a greater rate of reduction than seen in this occupation group across the whole economy

Broad Occupation Group	Types of occupations	Drivers	Skills Implications	Working Futures 4 evidence
Elementary Occupations	• Porters • Cleaners • Catering staff • Linen/laundry staff • Sterile services staff	New technology including robotics, infection fighting technology and better scheduling.	Changes here are more speculative however there are is a range of new and emerging technology which could mean some tasks become automated. This has already been seen in some new hospitals in respect of robots collecting dirty linen and delivering clean linen to clinical areas. This approach also has the potential to help reduce infection and cross contamination. There is also a range of design features which are being implemented in new hospitals to enable easier cleaning and reduce the risk of infections.	43% Reduction of 43 per cent in overall employment between 2010 and 2020. This is a greater rate of reduction than seen in this occupation group across the whole economy

Although not an occupational group the needs of the voluntary sector are in some ways distinct from those in the rest of the sector. There is likely to be a focus on those involved in the third sector Health service delivery being able to demonstrate the added value that they are bringing to services across the sector.

	Types of occupations	Drivers	Skills Implications
Voluntary Sector	•Volunteers • Volunteer managers	To include the skills and services of the voluntary sector in an increased number of Health services	Developing the skills of volunteer managers to enable them to ensue volunteers are effectively skilled and deployed. Developing the skills of the voluntary sector to demonstrate the added value of their services so that programmes can become mainstreamed and move beyond the project funding phase.

Conclusion

The drivers for change and likely changes to Health services could have a significant multiplier effect on many of the skills issues currently being experienced by the sector.

Each of the major occupational groups in the sector is likely to experience significant shifts in the skills they need to develop. Professional and clinical occupations and managers and senior officials are likely to be called upon with increased urgency to develop the sector and lead it through a period of prolonged change.

Generic skills such as, team working, communication skills, customer services and problem solving will demand constant attention by employers as the sector seeks to provide high quality healthcare in the context of fewer resources.

There is also evidence that some new skill sets are emerging. These may in time become new roles in their own right, or may extend existing occupations. The need to develop high quality skills at an intermediate level is also likely to grow in importance as are a range of initiatives to help individuals, their families and communities to develop healthcare in the future.

Whilst we have focused on the coming decade, the sector will need to be alert now to new developments for which decisions and planning may need to be made for the workforce beyond 2020. Although the types of changes and the implications on skills are more speculative what is clear is that the fusion of consumer expectations and technology has the potential to innovate practice across the sector. There is likely to become a drive for **on the spot diagnostics.** The following are examples of innovation in these areas:

- The one-hour TB test (versus the current 8 week timescale).
- Raman Spectroscopy, which has the potential to identify bone disease, high cholesterol, cancer and even early tooth decay, giving results within a few seconds.
- The growth of ‘home testing’ and ‘home monitoring’ technologies which, if managed correctly, will deliver higher-quality healthcare within a restrained budget.

These developments will continue to shape the skills of those working within the sector and the teams that they work within. Likely consequences include an increase both in the volume of patient data that needs to be managed, and in the speed of patient treatment.

The use of robots in the Health sector will continue to proliferate in both the near and longer term. There is evidence that they can assist with many of the mundane tasks, such as delivering the post or accurately dispensing drugs, and in some of the more complex areas of surgery. Early signs indicate that the use of robots in these areas is likely to improve outcomes for patients.

The following Chapter outlines those areas that require action to help the sector achieve its aims.

8. Priority areas for action check comment whether priorities meet report

Chapter Summary

This section outlines the priority areas for action for the sector;

- Priority 1, Develop high quality management, leadership and engagement strategies to address the changes ahead.
- Priority 2, Develop approaches to enable the safe and rapid development of new roles.
- Priority 3, Promote intermediate skills development.
- Priority 4, Address generic skills issues and enhance ICT skills in the sector.
- Priority 5, Enhance the accuracy of core/mandatory training within the sector.
- Priority 6, Develop health skills for non-health specialists – community, friends and relatives.
- Priority 7, Develop future orientated intelligence for the Health sector to provide early warnings on skills needs
- Priority 8, Careers Information, Advice and Guidance for all ages.
- Priority 9, Address business development skills needs in small and medium sized healthcare providers
- Priority 10, Developing responsive local intelligence
- Priority 11, Reduce dependence on non-EU migration.

Introduction

This section outlines those priority areas for action for the sector. The overall context for these priorities is the need for a more affordable, flexible workforce at the heart of the Health sector.

The priorities are presented in order of perceived importance to the sector; this ranking is based upon the following questions:

- Does the priority address a critical need across the sector?

- Will addressing the priority lead or assist in the achievement of a step-change in performance across the sector?
- Will the priority make the sector more efficient?

Priority 1, Develop high quality management, leadership and engagement strategies to enable change

The issue of *management* has long been a key area of concern for the Health sector. It is a critical area for development as the quality of this skill is essential for a sector during a time of great change. In the context of the NHS, there is added complexity and elements of stakeholder management making such skills needs include forward planning, stakeholder management, as well as personal attributes such as patience and stamina as decisions can take a great deal of time to come to fruition..

Developing the range of *leadership* skills is also a key area for development in the sector. The indications are, the sector will be experiencing major change in the coming years and the ability to manage change will be vital for the sector and those that use it.

Whilst leadership development of individuals is important, there is a need for the sector to overcome some of the 'systemic issues' associated with leading in the UK's Health sector. Including a propensity of many to identify primarily with their professional groups and occupations rather than the ambitions of the organisations for whom they work.

A priority for the sector is to develop a means of engaging with employees in order to understand their motivations and then demonstrating how these connect with the ambitions of the organisations. In developing such approaches, the engagement techniques would need to facilitate and encourage the most desirable forms of 'followership' from all employees in the Health sector. If successful, such an approach could help employers make quick and effective changes to the organisation and working practices.

An important ongoing priority for development in the area of strategic management is that of workforce planning capability. The sector has further developed its workforce planning capability drawing on Skills for Health's support, such as its Six Steps approach to Workforce planning and Doctors Rostering. However, drivers for change indicate more is required in the ever-increasing complexity of the sector and the pace of change demanded by policy makers and customers. The sector will need to continue, therefore, to develop its expertise.

Priority 2: Develop approaches to enable the safe and rapid development of new roles

As employers develop services to be more efficient there will be many instances where the need arises to develop or adjust roles that may have not previously existed in their organisation. The sector will continue to operate within a high compliance environment to ensure patient safety. As a result, the sector will require a means of confidently developing, adapting and extending roles that will be trusted by patients, employers, regulators and professions. The sector will also require knowledge and understanding of how these roles can 'fit' into the operational needs of the organisation.

Future activity in this area is likely to build upon work undertaken by Skills for Health on the development of transferable roles in the sector. This utilises a range of competence based tools, and evidenced based best practice in order to develop roles for employers in the Health sector.

Priority 3: Promote intermediate skills development

As this report has highlighted, the sector has had a strong tradition of developing higher level skills. Indeed the minimum entry level for many occupations has steadily increased; nursing is now a degree level occupation. This will need to be matched in the future by concerted action to develop high quality intermediate-level skills for those working in more routine occupations such as Healthcare assistants.

Action in this area will help improve the supply of likely candidates wishing to become Assistant Practitioners and other 'new' roles at an intermediate level. To support this Skills for Health has developed a Literacy and Numeracy Initial Assessment Tool, allowing individuals to assess their current level of literacy and numeracy, identify areas for development and plan their future learning. Taken alongside the development of the Skills Passport (Turquoise Thinking Ltd, 2010) the tool has the potential to provide a clearer picture of how these skills are being developed across the sector.

There are also considerable opportunities at this level for the promotion and development of apprenticeships in the sector. This program could form the basis of an approach to facilitate a culture of development for intermediate level skills.

Priority 4 - Address generic skills issues and enhance ICT skills in the sector

These have been identified by the UKESS survey as immediate skills need in the sector. These include;

- Team working skills.
- Customer handling skills.
- Written and oral communication skills.
- Problem Solving Skills.

In Chapter 5 we saw how many of these skills are interlinked and are often identified when there are serious failures in healthcare provision. Future demand for skills such as these has been 'multiplied' by the combination of drivers identified in Chapter 6. These generic skills will require improvement throughout the sector with employees if it is going to meet the needs of the population within the resources available.

ICT utilisation is also a generic skill that will need development. It is clear that most occupations within the Health sector will also be affected by the growing potential of ICT. The utilisation of ICT, with its increasing links to bio-science and pharmacy as seen in Chapter 6 has the potential to transform the sector and the way it works. ICT skills will need to be enhanced across a whole range of occupations and the manipulation of data is likely to form the basis of new skill sets.

The challenge for the Health sector will be to improve these skills. Skills for Health will work to establish networks to help develop approaches to such skills development and work with employers to define and develop new roles.

Priority 5: Enhance the accuracy of core/mandatory training within the sector

Patient and employee safety are critical to the Health sector. To this aim employers in the sector undertake a range of core/mandatory training. There is evidence that at times the sector needlessly replicates training and development activities of this type. The costs associated are considerable and anything the sector can do to reduce these costs efficiently may bring substantial efficiency savings whilst maintaining patient safety. Skills for Health is currently coordinating activity to agree on what is core/mandatory training is in the sector, and how might it be incorporated into some form of Skills Passport offer.

Priority 6: Develop Health skills for non-health specialists – community, friends and relatives

The delivery of healthcare away from traditional outlets into the community has been a policy priority for a considerable time. This drive has been given further impetus by the Coalition Government's desire to create a larger role for communities in England, through its 'big society' initiative. This is likely to be a theme for the Governments of Scotland, Wales and Northern Ireland in 2012. As Chapter 6 indicates skills to help patients and carers 'self-care' is of development. The Health sector will need to ensure individuals are coached, mentored and provided with accessible information to enable them to provide care for themselves.

Skills for Health will continue to build upon its work developing roles, qualifications and frameworks that will assist in delivering healthcare in a diverse range of environments.

Priority 7: Develop future oriented intelligence for the Health sector to provide early warnings on skills needs

In addition, beyond 2020, technological innovations will mean the sector will have further opportunities to develop the way it delivers care and this will have significant repercussions for the development of roles and skills. The sector will need to start now to rehearse, develop and position itself in the future global health market through developing areas of expertise to offer services and to attract the talent it needs to do so.

Priority 8: Careers Information, Advice and Guidance for all ages

The demand for high-quality, objective careers information, advice and guidance (CIAG) will only grow as the sector undergoes a series of reforms over the next 5 to 10 years. The high publicity that the sector attracts in terms of its workforce is not always based on objective intelligence. Without strong and objective advice available there is the potential for considerable confusion about the position of jobs and roles in the sector. Those starting their careers will need advice on occupations within the sector. Those within the sector already will require information about future opportunities in the Health and related sectors.

Priority 9: Address business development skills needs in small and medium sized healthcare providers

The policy environment outlined in chapter 6 is encouraging a the participation of a broader range of services providers in Health, particularly in England. The role of smaller private enterprises in providing healthcare has in recent years also grown. Early research suggests that employers in this part of the sector are confident about their ability to deliver particular health interventions. Many of their staff have studied to at least a degree level, will have continual professional development provided by their professional body, and in recent times have been regulated to a greater degree.

A recurring area of skills development for the small private enterprises relates to business-related skills. Owners of these organisations have a strong desire to improve and drive forward their business, but it appears that for a significant number this desire is not supported by learning opportunities that are easily accessible and tailored to their needs.

Priority 10: Developing responsive local intelligence

The assessment has also demonstrated how employers and providers will be placing more emphasis on the local needs of the population. There is a strong need for a greater degree of localised intelligence to support the development of local service solutions. Skills for Health will provide guidance to employers wishing to explore this area further and it has already begun to extend its intelligence activities to encompass intelligence that takes account of local needs.

Priority 11 - Reduce dependence on non-EU migration

Historically the Health sector has benefitted from accessing readymade employees from throughout the world in order to fill skills-shortage vacancies and to create additional capacity within the sector. The UK's relative economic decline is likely to reduce its ability to do this in the future. Government is also making a concerted effort to reduce the economy's overall dependence upon migration.

The occupations identified by the MAC are a potential starting point for work to reduce migration into the UK's Health sector. In some cases, significant role redesign and analysis of the functions needed to undertake such work in the sector may alleviate the need for non EU migration in many areas of the Health sector. However, like many areas of the economy there will remain a level of demand for highly skilled people from outside the EU.

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9. Technical appendix – Methodology

Summary of methodology

A mix of both quantitative and qualitative methodologies has been used to complete this Sector Skills Assessment. The report has been written by the Research and LMI team within Skills for Health with contributions and quality assurance from across the organisation.

Data from national sources has been provided in standardised tables by the UKCES for all sectors. This centralised approach allows consistency and comparability of data across sectors.

This SSA draws upon a range of research studies undertaken by Skills for Health over the past five years. It represents a synthesis of recent research activities together with analysis of secondary data sources and a review of recent studies by other agencies across the sector and whole economy.

Methods used across the projects include questionnaires, structured interviews with experts and employers, statistical quantitative analysis of secondary data and forward-looking, future-orientated research which included scenario planning and the use of technology to identify areas of development in the sector.

Data Collection

Literature Review

The literature review undertaken for the production of this SSA has sought to draw together the most up to date and relevant literature on skills and employment issues in the Health sector.

An extensive review of available literature was undertake between October 2011 and January 2012

The sources used in the production of the SSA are listed in full in the Bibliography. They include, but are not limited to:

- Professional bodies; British Medical Association, Nursing and Midwifery Council, Royal College of Nursing, Chartered Institute of Personnel and Development
- Government Departments; Department of Health, Welsh Assembly Government, Scottish Government

- UK Commission for Employment and Skills for a wide range of research and statistics relating to skills and employment issues
- Organisations for Economic Co-operation and Development for statistics relating to international comparisons

Skills for Health's own research includes:

- Understanding the contribution of Skills to productivity in the UK Health Sector.
- Debating the future of employment and skills in the future of the United Kingdoms Health sector: Tommorrows Workforce.
- A perspective on employment and skills in the United Kingdoms Health sector.
- Rehearsing Uncertain Futures: Scenario Building for Skills for Health from 2010 to 2020.
- Skills for Health expert paper: The Role of the Assistant Practitioner.
- The Hidden Workforce, Volunteers in the Healthcare Sector in England .
- Assistant Practitioners: Scoping Exercise
- Careers in Healthcare: A Guide to Volunteering in Healthcare Organisations.
- Competences Tool - Health Functional Map
- Core Standards for Assistant Practitioners in England. A Consultation Report.
- Employability Skills Matrix for the Health Sector.
- Establishing a Literacy and Numeracy Baseline in the Health Sector.
- Impact of Nationally Transferable Roles on Productivity - Building an Evidence Base.
- Rehearsing Uncertain Futures - New roles and occupations.
- Skills for Health Career Framework Tool.
- Skills for Health. Health Functional Map
- Skills Passport for Health Evaluation, Developed by Turquoise Thinking Ltd.
- The role os Assistant Practitioners in the NHS: factors affecting evolution and development of the role.
- Tomorrows workforce: Commentaries on the future of skills an employment in the UK's Health sector.
- Transforming Community Services Project - Final external evaluation.

Secondary Quantitative data

The provision of core data

To ensure consistency and comparability across all 15 SSA reports, data from core labour market information sources was centrally collected, processed and formatted. It was then distributed by the UK Commission to Sector Skills Councils for inclusion within the reports.

Core data was centrally produced from the following sources:

- The Labour Force Survey
- The UK Employer Skills Survey 2011
- Working Futures 2010-2020
- Regional Accounts (information on Gross Value Added)
- Mid Year Population Estimates
- European Continuing Vocational Training Survey
- Business Demography Statistics

Data from the Labour Force Survey, regional accounts and mid-year population estimates was collated, processed and formatted by Cambridge Econometrics and the Institute for Employment Research (IER), Warwick.

Data from the UK Employer Skills Survey 2011 was collated and processed by IFF Research and formatted by the UK Commission.

Data from Working Futures was collated, processed and formatted by IER.

Data from the European Continuing Vocational Training Survey and Business Demography Statistics was collated, processed and formatted by the UK Commission.

All data was quality assured by contractors, the UK Commission and by Sector Skills Councils.

It has been necessary to suppress some data within the reports to adhere to official guidelines regarding data quality. The details of suppression strategies applied to data from specific sources are described in more detail below. Data for Scotland, Wales and Northern Ireland for the three smallest SSA sectors is most likely to be suppressed. These are:

- Agriculture, forestry and fishing

- Energy production and utilities
- Information and communication technologies)

Methodological information for core labour market information sources

Method used to derive estimates of gross value added (GVA) per employee job by SSA sector and nation

No official estimates are currently available for the level of productivity by sector and UK nation. The figures presented in this report have therefore been estimated by the UK Commission using the following process.

Levels of workplace gross value added at current basic prices by SIC 2007 Section were derived from the official estimates published by the Office for National Statistics as part of its Regional Accounts series. Levels of employee jobs were taken from the Business Register and Employment Survey for 2009.

The sectoral “footprint” definitions used as the basis for the SSA reports are not coterminous with SIC Sections, however, and in some cases draw on 2-digit SIC divisions. At present the official GVA estimates for nations and regions are only available at a SIC section level.

To overcome this an approach was adopted which has been developed by Welsh Government to derive gross value added estimates for its priority sectors. This approach was applied to the UK and all four nations. Approximate estimates of GVA at 2-digit level are available for much of the economy from the Annual Business Survey (ABS). These were used to allocate GVA at the 2-digit level with the results being constrained to the official GVA totals by SIC section taken from the Regional Accounts. For those areas of the economy not covered by the ABS, shares of employment at the 2-digit level were used instead, taken from the Annual Population Survey.

Labour Force Survey

About the survey

One of the key data sources used within this report is the Office for National Statistics’ (ONS) Labour Force Survey (LFS). The LFS is a survey of households living at private addresses (plus in NHS accommodation and student halls of residence) in the UK.

The survey is carried on a quarterly basis. The sample is made up of around 41,000 responding (or imputed) households in Great Britain every quarter, and around 1,600 households in Northern Ireland. The LFS uses a rotational sampling design which means that, once selected, a household[44] is kept in the sample for a total of five consecutive quarters.

Interviewers can take answers to questions by proxy if a respondent is unavailable. This is usually from another related adult who is a member of the same household. About a third of LFS responses are collected by proxy. Information on individuals aged 16 – 19 most likely to be obtained by proxy.

Full user guidance can be accessed here: http://www.ons.gov.uk/ons/guide-method/user-guidance/labour-market-statistics/index.html

Preparation of LFS data for this report

The UK Commission provided report authors with a core set of tables based on LFS data for mandatory inclusion within Sector Skills Assessment reports. The data within these tables was prepared by two contractors: Cambridge Econometrics (CE) and Warwick Institute for Employer Research (IER).

Data was prepared in three stages:

1. The original survey data was gathered and coded by IER to the categories and classifications required for the SSA tables. This was then sent to CE
2. CE used the data prepared by IER and derived the indicators and aggregated the data to the dimensions required for the tables
3. The UK Commission checked tables and distributed to report authors

Annual data presented within this report is based on an average of four consecutive quarters of data. Data prior to 2009 is based on SIC2003 and data for 2009 and 2010 is based on SIC2007 codes.

Reporting of LFS data

In line with ONS convention, annual LFS data presented within this report has been suppressed if individual cell sizes fall below 6,000. This is because cell sizes of fewer than 6,000 are deemed to be low quality estimates.

[44] Note, it is the address that is selected and not necessarily the particular people who live there.

Analysis of employment uses all four categories of employments status within the LFS: employee, self-employed, government scheme & unpaid family worker.

Please note, some tables present a total for *All sectors* while others present a total for *Whole economy*. The values for these totals are different because the *Whole economy* total includes the 'Not within scope' category (i.e. sectors that don't fall within an SSA sector), whereas *All sectors* is the total for just the 15 SSA sectors.

UK Commission's Employer Skills Survey 2011

The UK Commission's Employer Skills Survey 2011 (UK Commission's ESS 11) was the first large-scale economy-wide employer skills survey to be conducted across the whole of the UK. The survey was managed by the UK Commission for Employment and Skills and was conducted by three contractors: IFF Research, BMG Research and Ipsos Mori (Davies et al, 2012). The project steering group included representatives from all four nation governments, the Alliance of Sector Skills Councils, the Department for Work and Pensions and the Skills Funding Agency.

Fieldwork was carried out from March to July 2011. Two waves of interviews were conducted. The main survey involved telephone interviews with approximately 87,600 employers and a follow-up survey focusing on investment in training was undertaken with over 11,000 respondents. The data presented within this report draws only on information gathered from the main survey.

The table below provides information on the number of employers interviewed by sector and nation for the main survey.

SSA sector	England	Scotland	Wales	NI	UK
Agriculture, forestry and fishing	1,270	99	133	45	1,547
Energy production and utilities	1,306	106	133	69	1,614
Manufacturing	6,774	182	470	350	7,776
Construction	7,538	300	660	463	8,961
Wholesale and retail trade	13,919	333	1,129	769	16,150
Transportation and storage	4,078	152	300	205	4,735
Accommodation, food and tourism activities	9,630	324	909	455	11,318
Information and communication	2,262	56	111	81	2,510
Creative media and entertainment	3,301	99	227	135	3,762
Financial, insurance & other professional services	4,525	146	391	281	5,343
Real estate and facilities management	3,113	85	133	93	3,424
Government	2,078	163	188	176	2,605
Education	4,597	164	391	287	5,439
Health	2,912	107	242	137	3,398
Care	4,028	101	338	296	4,763
Not within scope	3,722	86	257	162	4,227
Total	75,053	2,503	6,012	4,004	87,572

UK Commission's ESS 11 is a quota survey. Quotas were set on a size by sector within nation / English region basis. In Northern Ireland and Wales, where more interviews were carried out than the required minimum to get national representation, they were predominately distributed in proportion to the population.

In order to include the maximum number of questions without extending the overall length of the interview, the sample was randomly split in half for some sections, and one set of employers were asked one module of questions, and the other half of the sample different questions.

The survey is a local unit (establishment) survey. This means that for large multi-site organisations several branches/ locations may have been interviewed. The establishment level sampling reflects that the survey asks employers about issues that need to be answered by people with day-to-day contact with employees rather than head office.

Respondents are those who have the best overview of HR and training within the establishment. This will tend to be HR or training managers in large establishments and owner/managers or senior managers within small establishments.

The valid population of establishments being used in UK Commission's ESS 11 is all establishments with the exception of sole traders (this means that establishments with one employee and no working proprietors (for e.g. flower stall at a station, where there is one person working but they don't own it themselves) are included). In addition, establishments with multiple working proprietors but no employees are also included.

Sampling error for the survey results overall and for different sub-groups by which analysis is presented in the report is shown in the table below. Sectoral figures are presented for the 14 SIC 2007 sections which were used for the survey sampling approach.

Figures have been based on a survey result of 50 per cent (the 'worst' case in terms of statistical reliability), and have used a 95 per cent confidence level. Where the table indicates that a survey result based on all respondents has a sampling error of +/- 0.32 per cent, this should be interpreted as follows: 'for a question asked of all respondents where the survey result is 50 per cent, we are 95 per cent confident that the true figure lies within the range 49.68 per cent to 50.32 per cent'.

As a note, the calculation of sampling error has taken into account the finite population correction factor to account for cases where we are measuring a significant portion of the population universe (i.e. even if two sample sizes are the same, the sampling error will be lower if in one case a far higher proportion of the population was covered).

These confidence intervals are based on the assumption of a normal distribution of responses.

Sampling error (at the confidence 95 per cent level) associated with findings of 50 per cent

	Population	Number of interviews	(Maximum) Sampling Error
Overall	**2,299,921**	**87,572**	**+/-0.32**
By country			
England	1,960,298	75,053	+/-0.35
Northern Ireland	65,559	4,004	+/-1.5
Scotland	175,114	2,503	+/-1.94
Wales	98,950	6,012	+/-1.22
By size of establishment			
1-4	1,466,397	18,955	+/-0.99
5-24	648,446	47,770	+/-0.61
25-99	147,319	15,951	+/-1.03
100-249	25,945	3,270	+/-2.27
250+	11,814	1,626	+/-3.12
By sector			
Agriculture	98,458	939	+/-3.18
Mining & Quarrying	2,222	188	+/-6.84
Manufacturing	128,255	7,704	+/-1.08
Electricity, Gas and Water	10,583	1,426	+/-3.35
Construction	241,429	6,654	+/-1.18
Wholesale and Retail	441,365	15,340	+/-0.78
Hotels & Restaurants	167,215	8,471	+/-1.04
Transport and Communications	210,801	7,885	+/-1.08
Financial Services	52,381	1,881	+/-2.22
Business Services	551,612	14,488	+/-0.80
Public Administration	26,058	1,617	+/-2.36
Education	65,499	5,439	+/-1.27
Health and Social Work	140,269	8,161	+/-1.05
Community, Social and Personal Services	163,774	7,379	+/-1.11

Looking specifically at sampling error for SSA sectors at national level, Agriculture in Scotland provides an illustrative example. 99 interviews were completed for this sub-group. Applying the assumptions outlined above, this gives a maximum sampling error of around +/-10 percentage points. This demonstrates the indicative nature of the detailed survey estimates for smaller sectors.

Within the report, data based on unweighted bases of less than 25 have therefore been suppressed for quality reasons. In addition, data based on unweighted bases of between 25 and 50 have been marked as indicative. More stringent thresholds have been applied in Scotland because of the lower total number of interviews that were conducted than in other nations. Estimates based on unweighted bases of fewer than 50 have been suppressed, whilst estimates based on bases of 50-99 are marked as indicative in the relevant tables.

Finally, occupations within the survey are defined by 2010 Standard Occupational Classification codes and sectors are defined by 2007 Standard Industrial Classification codes.

Please visit the UK Commission's Employer Surveys website for further information including the full survey report and questionnaire. https://ness.ukces.org.uk/default.aspx

Working Futures

Working Futures 2010-2020 is the latest in a series of detailed projections of UK employment, productivity, labour supply and skills. The projections have been prepared by the Institute for Employment Research (IER) and Cambridge Econometrics (CE) on behalf of the UK Commission for Employment and Skills (UKCES).

The projections are calculated from a number of different data sources, including the Annual Business Inquiry, the Business Register and Employment Survey, and the Labour Force Survey. The results provide a picture of employment prospects up to 2020 by industry, occupation, qualification level, gender and employment status for the UK as a whole, the four nations, and English regions.

As with all projections and forecasts, the results presented in Working Futures should be regarded as indicative of likely trends and orders of magnitude given a continuation of past patterns of behaviour and performance, rather than precise forecasts of the future. At a time of great uncertainty about the short to medium term prospects for the economy, it is important to stress the value of Working Futures in aiding understanding of likely prospects for employment in the longer term (i.e. in 2020). Readers should therefore focus on the relative position of sectors, and occupations in 2020 and treat the projected values as broad indicators of scale rather than exact predictions.

Further methodological details can be found on the UK Commission's website - http://www.ukces.org.uk/publications/working-futures-technical-report

NHS Vacancy Survey – The Information Centre for Health and Social Care

The annual survey of NHS Vacancies in its current format has been produced since 2002 although in fact collected since 1999. Its purpose is to collate and supply data about NHS recruitment in England and to provide information on issues that may need to be addressed.

The NHS Vacancies Survey collects data directly from NHS organisations in England via an electronic data collection. All data is collected as of 31st March. The survey is a mandatory return for all NHS organisations in England, including Foundation Trusts. This means that there are no concerns over sampling or survey data.

This online system for collecting the data has some inbuilt validations based on previous years' thresholds – data suppliers are also required to comment on vacancy rates over 10 per cent compared with staff in post. Data once signed off is returned to the Information Centre for full collation and analysis.

More information regarding the data collection can be obtained from www.ic.nhs.uk

Employer Perspectives Survey 2010 - UKCES

The UK Employer Perspectives Survey 2010 was a large-scale, representative, UK-wide, employer survey. Interviews were conducted with 14,390 employers by telephone. The sample was designed and weighted to be representative of the UK employer population as a whole. Interviews were conducted at an establishment rather than an organisational level, with the most senior person at the site with responsibility for human resources. In smaller establishments this was typically the owner or managing director, and in large establishments this was typically the human resources manager.

Data Collection

The Employer Perspectives Survey 2010 was conducted by telephone with 14,390 UK employers. Interviews were conducted by IFF Research from their call centre in central London between June and August 2010.

Sample Design

The starting point for the sample design was to allocate a number of interviews to be undertaken in each nation as part of the core survey, with these national quotas set to ensure large enough base sizes in each constituent nation within the UK to allow analysis at the national level. This is necessary, in part, because employment and skills policy is devolved to the UK nations each of which has developed its own series of programmes and initiatives.

Quotas were then set to ensure the profile of the establishments surveyed was proportionate to the total business population, while also achieving enough interviews in sectoral sub-groups to enable robust analysis.

Half of all interviews were divided equally across broad Standard Industrial Classification (SIC) sectors, to ensure sufficient interviews to conduct robust analysis in the smallest sectors. The remaining half of interviews were allocated in proportion to the number of business units each broad SIC sector accounts for, to ensure the most populous sectors can be analysed with the greatest degree of precision. Quotas were then set on the size of establishments (in terms of the number of people they employ) within each sector.

Final data were weighted and grossed up to reflect the total business population of establishments.

Full details of the sample structure and quota targets are included in the technical appendices of the full report. This is available from

http://www.ukces.org.uk/publications/er25-employer-perspectives-survey

Limitations of Time Series Analysis in data sources using Standard Industrial Classifications (SIC)

In all technical analysis of the Health sector, historic publications from Skills for Health have defined the sector (Skills for Health footprint) using Standard Industrial Classifications (SIC).

In recent years the SIC classifications were updated in an attempt to better represent the sectors working across the whole economy. This updating of classifications altered the basis of the Skills for Health footprint and created some notable differences in the baseline data.

Baseline Variations

If we examine data for England, Scotland and Wales from the Annual Business Inquiry[45] 2008 by the Skills for Health footprint as defined by both SIC 2003 and SIC 2007 there is an overall variation of 185,300 employees.

The following table summarises these variations by each country

	SIC 2003 85.1	SIC 2007 86	Variation
England	1,684,000	1,529,700	-154,300
Scotland	244,400	227,300	-17,100
Wales	112,800	98,900	-13,900
Total	**2,041,200**	**1,855,900**	**-185,300**

** Numbers rounded to the nearest hundred*

[45] Northern Ireland data sourced from Census of Employment and released biannually.

The reasons for these variations are caused by activities being disaggregated between Health and Care. The net result of this split is that it appears that our overall workforce numbers across the Health sector have reduced by the numbers as outlined above.

Implications for Research and LMI

The main implication of this change in classification is that it means that medium- and longer-term historical comparisons are no longer possible. We are able to take data from 2007 onwards but any comparisons with data prior to this date will require the provision of suitable caveats in respect of the change in classifications and the known variations in data.

Primary quantitative data

Establishing a literacy and numeracy baseline (2011)

In 2010 Skills for Health undertook a pilot to measure literacy and numeracy levels in six NHS Trusts in North West England. This project was delivered partly in-house and partly with the support of project leads in each organisation. Phase 3 of the project was delivered by an external contractor (Carter Cooper) with extensive experience of data handling and the Health sector.

Stage 1 – Between December 2010 and January 2011 the six pilot sites asked staff members to complete Skills for Health's Literacy and Numeracy Initial Assessments. The number of staff participating and the way they were asked to participate varied between sites. The reason for this was to enable employers to manage their participation in the study in a way that did not disrupt service delivery. At some sites there was an open invitation to volunteer whilst at others more structured sampling took place. Sites had the option of using the online, downloadable or paper version of the tool. The overall objective was to include staff from all Agenda for Change (AfC) bandings.

The differing versions of the tool were not significantly different in respect of content and the questions asked of participants. There is however potentially some bias in respect of the sampling methods used across each pilot site. It is possible that where self selection took place that there was a bias towards participants that may have personal concerns about their literacy or numeracy skills, this could, theoretically result in lower average scores in these sites.

Sample selection process and number of completed assessments from each pilot site

Pilot site	Sample selection process	No. completing assessment		% of wforce
		Lit	Num	
A	Staff were self-selected, responding to a request for volunteers. Participants used a mixture of the online and paper-based versions of the tool	38	38	1%
B	Staff were selected at random from staffing sheets to ensure a cross section of job roles and all participants undertook the paper-based version of the tool	77	77	5%
C	Staff were selected at random for the pilot. To ensure a cross section of job roles, HR sent letters to managers and staff being given the option to take part. All participants undertook the paper-based version of the tool	68	66	1%
D	Staff were self-selected from groups targeted by Service Leads, who held open sessions to which staff were invited to attend. Participants undertook a mixture of the online and the paper-based versions of the tool	27	31	1%
E	Staff were self-selected, having responded to a request for volunteers via the staff newsletter and managers. Some of the participants chose to undertake the online version of the tool, but the majority used the paper-based version.	72	73	4%
F	Staff were selected at random from different job roles and had written invitations to participate. Participants completed a mix of online and paper based versions of the tool	30	32	1%

Stage 2 – The data collected from the assessments were forwarded to Skills for Health. Based on this data a Literacy and Numeracy Profiling Report was produced for each pilot site.

Stage 3 – The data from each pilot site was combined and estimates for literacy and numeracy levels by AfC banding for the NW region and England were calculated. This involved grossing up estimates for the non-medical workforce by pay banding from the NHS Information Centre and total workforce size from the 2009 NHS Hospital and Community Health Services Non-medical Workforce Census.

Although limited in its scope, the baseline assessment provides a basis upon which the sector can build its approach to literacy and numeracy needs.

The full report is available on the Skills for Health website www.skillsforhealth.org.uk

Primary qualitative research

Rehearsing Uncertain Futures

Skills for Health's initiative, Rehearsing Uncertain Futures, is a scenario-planning initiative aimed at supporting Health sector employers in planning for the workforce of the future.

Skills for Health worked in partnership with the Institute for Employment Studies and Tosca Consulting to carry out the initiative, which was informed by a thorough review of theory and best practice relating to scenario planning.

Rehearsing Uncertain Futures consists of five broad stages:

Theme Development

- Key themes relevant to the sector were developed by Skills for Health as a basis for the scenario-planning exercise.
- These themes emerged from a combination of primary research (including 12 interviews with industry experts and academics which led to the creation of a set of sector-relevant commentaries) and secondary research (focused desk research to review existing literature on and around the Health sector).
- The evidence created was used as stimulus material for three scenario-building events attended by over 50 people from different parts of the Health sector. These pieces identified a wide range of drivers that are effecting the development of the sector.

Scenario Development

- Using the themes developed in the first stage as stimulus material, a set of three scenario-development workshops were run with 47 Health sector employers and stakeholders to identify key drivers for change in the sector, and to speculate how these might 'play out' to the year 2020.
- Where possible, delegates considered the level of impact each driving factor would have on the sector, as well as the level of certainty that could be attached to how a factor would play out up until the year 2020.
- A set of eight main driving factors emerged from the scenario development stage
- In addition, delegates were asked to take these factors and develop potential scenarios, or story lines, for the UK Health sector in the year 2020.

- These scenarios were developed by Skills for Health, the Institute for Employment Studies and Tosca Consulting into three plausible futures for the UK Health sector.

Application Sessions

- Following the scenario-development workshops, two sessions were run with 26 delegates from the sector - employers - in order to apply the output (key drivers and scenarios) from the scenario workshops to the identification of future skills demand.
- Delegates outlined how roles and skills sets might be transformed, and how skills gaps and shortages might develop between 2010 and 2020, if the scenarios created at the previous stage.
- Skills for Health further developed the output from these application sessions to assessment of priorities for people development within the sector.

Horizon Scanning

- Skills for Health then ran two further sessions with Health sector colleagues as part of its ongoing horizon-scanning activities.
- These sessions enabled Skills for Health's research team to direct AMIsoft, Web crawling technology, to identify and monitor debates in the sector.
- They also enabled Skills for Health to look beyond 2020 at 'weak signals' – those factors that might create opportunities for employers in terms of skills development.

Assessment and Refreshment

- At the time of publication, Skills for Health has just embarked on a phase of refreshment of its scenarios.
- The purpose of this stage will be to review the key drivers, scenarios and skills implications identified through the initiative, and to update these in accordance with how factors have developed since the initial exercise.
- This assessment and refreshment will ensure that the output of this scenario planning initiative will remain up-to-date and relevant for Health sector for a further 12 to 124 months before a full recast in undertaken

Independent Sector Skills Assessment 2011 (currently unpublished)

Conducted in house, secondary quantitative data, including sources such as Labour Force Survey, Laing and Buisson and the UKCES Employer Perspectives Survey, and a relevant literature review was supplemented with 25 qualitative telephone interviews with a range of different employers and stakeholders across the independent Health sector. Each interview lasted between 30 minutes and one hour.

Interviewees were drawn from an in-house contacts database, and the interviews were designed to explore the range of issues that the independent sector faces rather than being fully representative of all skills and employment concerns.

Interviews were conducted throughout November and December 2011. The full report is due to be published in April 2012.

The Mental Health Workforce in Wales – Skills and employability issues in the mental Health workforce in Wales (2011)

This research was commissioned by Skills for Health and carried out over a 3 month period from January to March 2011 by Trends Business Research (TBR) and associate Andrew Garman, it utilised:

- Desk-based research to gain a detailed understanding of the key (international, UK-wide and Wales-specific) policies and drivers that are shaping the future of the mental Health sector and workforce in Wales
- An online survey of organisations engaged in the delivery of mental Health services in Wales. The survey was primarily quantitative, gathering information on skills issues, use of training and investment in training. The survey was started by a total of 90 respondents, of which 68 provided useable responses.
- In-depth telephone interviews with 10 stakeholders in the mental Health workforce in Wales. The interviews built a second layer of qualitative information on the data gathered through the online survey.
- A focus group in Wales. This provided a forum to discuss and debate the likely future of the workforce, and the findings of the online survey, depth interviews and desk-based research.
- Secondary analysis of a number of data sources from organisations such as WCVA, Stats Wales and from TBR's own business database called TCR.

Following finalisation of the report there has been consultation with a small group of key stakeholders and colleagues which has resulted in the refinement of the report. The report is now finalised and available on request; however it is not yet available on the Skills for Health website.

Urban and Rural Issues for the Health Sector in Scotland

Skills for Health commissioned the Institute for Employment Studies (IES) to undertake a study designed to help in identifying solutions to skills development and utilisation for Scottish Health care employers working in sparsely and densely populated areas. It also explored whether solutions developed in one setting might be effective in the other, and vice versa.

The project had three main components:

- A literature review and analysis of current workforce statistics. To obtain the relevant literature a search was made of the following on-line databases: the British Nursing Index, the Cumulative Index to Nursing and Allied Health Literature (CINAHL) and EMBASE. A full outline of the search terms can be found in the main report.
- Interviews were sought with key individuals within the 14 Territorial Health Boards in Scotland. Individuals who were well-positioned to give an overall view on key service delivery, deployment of staff and workforce issues were selected and an interview requested. In the main these were Workforce Development Managers or Human Resource Directors within the Health Boards. Two Health Boards fielded two interviewees to ensure they could fully respond across the breadth of issues to be addressed in the interview. In addition, interviews were requested from the Scottish Ambulance Service (SAS) and NES; NES participated; SAS agreed to participate but in the end was unable to field an interviewee. The total number of interviews conducted was 17.
- Two case studies of innovative practice were also completed. One within NHS Greater Glasgow and Clyde which is the biggest Health Board in Scotland the second in NHS Grampian.

The work also made use of Skills for Health's Geographical Information System.

The work took place between January and May 2011 and the final report is available on the Skills for Health website www.skillsforHealth.org.uk

Data Analysis and Interpretation

The data used in this report has been drawn from a wide range of reliable sources including national statistics and NHS data; it has been interpreted by Skills for Health to provide the reader with the most up to date and relevant information available.

Data has been quality assured with reference to historical data in order to ensure consistency of approach in the analysis and interpretation of the data.

All data has been contextualised for the sector and interpreted alongside the latest policy information in order to show the linkages between national and sector specific data and

Quality Assurance

This report has undergone a quality assurance process within Skills for Health with reference to relevant departments and teams to ensure consistency and robustness of the data and intelligence provided.

Technical appendix – Data Tables

Table A1: International comparisons of Health expenditure ratios

Health Expenditure Ratios	Australia	Canada	France	Germany	Netherlands	New Zealand	United Kingdom	United States of America
Total expenditure on health as a % of gross domestic product	8.7	11.4	11.8	11.6	12	10.3	9.8	17.4
General government exenditure on health as % of total expenditure on health	68	70.6	77.9	76.9	n/a	80.5	84.1	47.7

Source: OECD 2011

n/a – data not available

Table A2: International comparisons of life expectancy, healthy years life expectancy, infant and adult mortality rates

Health Ratios (2009 unless otherwise stated)		Australia	Canada	France	Germany	Netherlands	New Zealand	United Kingdom	United States of America
Life expectancy at birth (years)	Male	80	78	78	78	78	79	78	76
	Female	84	83	85	83	83	83	82	81
	Both Sexes	82	81	81	80	81	81	80	79
Healthly Life Expectancy at birth (years) (2007)	Male	72	71	71	71	72	72	71	68
	Female	75	75	76	75	74	74	73	72
	Both Sexes	74	73	73	73	73	73	72	70
Infant mortality*		4	5	3	3	4	4	5	7
Adult mortality rate**	Male	102	87	117	99	75	86	95	134
	Female	50	53	54	53	56	57	58	78
	Both Sexes	76	70	85	76	66	72	77	106

Source: World Health Statistics 2011

**probability of dying by age 1 per 1,000 live births*

***probability of dying aged 15 – 60 years per 1,000 population*

The UK Commission for Employment and Skills is a social partnership, led by Commissioners from large and small employers, trade unions and the voluntary sector. Our mission is to raise skill levels to help drive enterprise, create more and better jobs and economic growth.

All of the outputs of the UK Commission can be accessed on our website at www.ukces.org.uk

UKCES
Renaissance House
Adwick Park
Wath-upon-Dearne
Rotherham
S63 5NB
T +44 (0)1709 774 800
F +44 (0)1709 774 801

UKCES
Sanctuary Buildings
Great Smith St.
Westminster
London
SW1P 3BT
T +44 (0)20 7227 7800

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