

Mapping the core public health workforce

Final report



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Mapping the core public health workforce infographic: www.cfwi.org.uk/keyfindingsinfographic	
Literature Review: www.cfwi.org.uk/publichealthlitreview	
Immunisation Infographic and briefing paper: www.cfwi.org.uk/immunisationsinfographic	

Executive summary

The Centre for Workforce Intelligence (CfWI) was commissioned by Public Health England (PHE), Health Education England (HEE) and the Department of Health (DH), to gather information on the core public health workforce in England to support commissioners in making policy decisions relating to the future size and shape of the public health workforce. This report includes a background to the public health workforce in England, an estimate of the numbers of staff in each part of the core workforce, and areas for further consideration.

Context and key considerations

The public health system in England is going through a transitional period following changes brought about by the Health and Social Care Act 2012, including the shift of responsibility for most public health commissioning from the NHS to local authorities and the establishment of a new central agency in PHE. Whilst these changes are embedded, relationships are still developing between the key stakeholders as well as within individual organisations.

This transition makes the task of understanding the current position of the workforce challenging, particularly to understand the numbers and locations of people delivering key public health services. This report estimates the number of people working in core public health roles in England, using the best data available to the CfWI. The estimates provided in this report will support the development of public health and its core workforce.

Mapping the core workforce

Following consultation with stakeholders, for the purpose of this report the CfWI has defined the core public health workforce as:

‘All staff engaged in public health activities who identify public health as being the primary part of their role.’

The CfWI’s definition excludes professions, such as the majority of midwives, occupational health nurses, community pharmacists, GPs, trading standards officers and others in the wider workforce such as teachers or leisure centre staff, who may promote public health but as only part of their job. This is because although they may fulfil a public health function(s), delivery of those functions is not the primary part of their role – where PHE employs midwives, these have been included within other nurse specialisms, where appropriate.

However, the CfWI acknowledges that everyone has a potential contribution to make to public health following the idea that public health is ‘everyone’s business’ (DH, 2012a). While they may not be considered within the ‘core workforce’, their contribution needs to be acknowledged, and where appropriate, taken into consideration when conducting workforce planning.

The CfWI identified 11 roles within the core public health workforce with distinct functions (see Table 1). Individuals may move between these roles as their career develops, and may be in more than one role, for instance all Directors of Public Health (DsPH) will also be consultants and specialists, public health scientists may also be public health academics, public health nurses may also be public health managers.

A summary of the roles and estimated numbers in each is shown in Table 1 below. They are presented in terms of where people typically work on the Public Health Skills and Knowledge Framework (PHSKF), which identifies

the key skills and knowledge required to make a contribution to the public health workforce. The groups used in this report are:

- people working primarily at higher levels PHSKF (levels 8 and 9)
- people working primarily at levels 5 to 7 of the PHSKF, and
- people working across levels 5 to 9 of the framework.

Our classification may not reflect every individual in each type of role. The CfWI acknowledges that there may be some individuals who work at higher or lower levels of the PHSKF than is indicated by the groupings. However the grouping is intended to reflect what is typical of the profession as a whole.

The CfWI estimates the number of core public health workers in England is likely to range from up to around 36,000 to 41,000 people on a headcount basis. The four largest core public health roles are health visitors, school nurses, public health practitioners and environmental health professionals. Combined they account for up to around 31,000 to 34,000 workers – approximately 80 to 85 per cent of the total core public health workforce.

The size of the range reflects the lack of reliable workforce data for several roles. Out of the 11 categories outlined in this report, three have limited data available from which to estimate the size of the workforce, four roles have moderately robust estimates based on some reasonable data, and the estimates for four roles are underpinned by good quality data. This suggests considerable uncertainty around exact numbers of people working in public health and variable data quality and availability. These are key challenges, and are discussed in some detail in the report.

We estimate that there are approximately 25,000 to 30,000 staff for whom the data quality is high or moderate, approximately 70 per cent of the core public health workforce in total.

Table 1: Summary of the core public health workforce

Role	Summary description	Estimated numbers (headcount) ¹
People working primarily at higher levels of the PHSKF (levels 8 and 9)		
Public health consultants and specialists	<ul style="list-style-type: none"> Employed primarily within local authorities and PHE, but may also work within NHS (e.g. NHS England, clinical commissioning groups, NHS trusts) Work at a strategic or senior management level or at senior level of scientific expertise to influence health of entire communities May be qualified through specialty training or submission of a portfolio, and must be registered with the General Medical Council (GMC), General Dental Council (GDC) or the UK Public Health Register (UKPHR). 	<p>1,200–1,300, plus 250–350 registrars</p> <p>Numbers estimated from registrations with GMC/GDC/UKPHR and 2012 data from the Health and Social Care Information Centre (HSCIC), so will include Directors of Public Health and some academics.</p> <p>CfWI confidence in estimate: high</p>
Directors of Public Health (DsPH)	<ul style="list-style-type: none"> Statutory position, employed by local authorities Responsible for determining overall vision and objectives for public health locally Will be consultants who have qualified through specialty training or submission of a portfolio and registered via GMC, GDC or UKPHR. 	<p>130</p> <p>Broadly one per county/unitary local authority, but some shared arrangements.</p> <p>CfWI confidence in estimate: high</p>
Public health academics	<ul style="list-style-type: none"> Lecturers, researchers and teachers employed in higher or further education sectors, whose primary focus is public health May also be consultants/specialists, most likely regulated by GMC or UKPHR. 	<p>200–300</p> <p>Numbers primarily relate to senior academics based at universities with medical and dental schools; therefore actual numbers may be higher.</p> <p>CfWI confidence in estimate: moderate</p>
Public health managers	<ul style="list-style-type: none"> Employed primarily in local authorities Experienced and qualified staff (e.g. Masters in PH) delivering projects or programmes through in-house teams or by commissioning partners No requirement to be registered. 	<p>600–1,200</p> <p>Multiple professional titles/roles and therefore difficulty in tracking numbers accurately; no data on staff in local authorities.</p> <p>CfWI confidence in estimate: low</p>
People working across levels 5 to 9 of the PHSKF		
Public health scientists	<ul style="list-style-type: none"> Generally employed by PHE or NHS Perform scientific role in support of public health objectives, at all grades May be regulated by the Health and Care Professions Council (HCPC) depending on scientific specialty and protected title (Biomedical or Clinical Scientist). 	<p>1,500–2,500</p> <p>Numbers based primarily on staff working previously for the Health Protection Agency (HPA) and currently working within PHE; numbers may therefore be higher.</p> <p>CfWI confidence in estimate: moderate</p>

¹ Throughout the report, The CfWI has assessed confidence of the data available to it. Where confidence in the estimate is low, there is no, or minimal, data to support the figure. Where confidence in the estimate is moderate, there is some data available to support the estimate but no definitive dataset available from a regulatory body or the HSCIC. Where confidence in the estimate is high, it is supported by data from a regulatory body or the HSCIC.

Role	Summary description	Estimated numbers (headcount) ¹
Intelligence and knowledge professionals	<ul style="list-style-type: none"> Employed across the system, primarily within local authorities and PHE Staff employed in data analysis, informatics and presentation of PH information Some may also have qualified as public health consultants/specialists and regulated accordingly. 	1,000–1,300 (up to 1,000 in PHE, including non-health professionals; estimate of at least 300 people working in local authorities but limited data available). CfWI confidence in estimate: moderate
Public health nurses (excluding health visitors and school nurses, which are listed separately below)	<ul style="list-style-type: none"> Employed across local authorities, PHE and NHS – most commonly in health protection teams Registered with the Nursing and Midwifery Council (NMC), and may be registered as specialist community public health nurses (SCPHN) or have completed other qualifications (e.g. infection prevention and control). 	350–750 Multiple professional titles/roles and therefore difficulty in tracking numbers accurately. CfWI confidence in estimate: low
People working primarily at levels 5 to 7 of the PHSKF		
Health visitors	<ul style="list-style-type: none"> Commissioned by NHS at present, will be commissioned by local authorities from October 2015 Work as part of a primary healthcare team, assessing the health needs of individuals, families and the wider community Aim to promote good health and prevent illness, by offering practical help and advice, and in particular delivering the Government's Healthy Child Programme Registered with NMC. 	11,000 Number takes into account qualified health visitors working in the NHS recorded in the September 2013 census. CfWI confidence in estimate: high
School nurses	<ul style="list-style-type: none"> Mostly commissioned by local authorities from NHS and working in schools; some employed directly by independent schools and local authorities Nurses with public health function as core activity, working at practitioner level Registered with NMC. 	4,000 Number takes into account both qualified school nurses and nurses working in school nursing. CfWI confidence in estimate: high
Public health practitioners	<ul style="list-style-type: none"> Work across the system, including within PHE, local authorities and provider organisations, delivering public health programmes May be registered with UKPHR, Chartered Institute of Environmental Health (CIEH), allied health professionals regulated by the HCPC, or nurses/midwives regulated by NMC. 	Up to 10,000 Multiple professional titles/roles and therefore difficulty in tracking numbers accurately; no data on staff in local authorities; above figure estimate for the UK as a whole by the UKPHR. CfWI confidence in estimate: low
Environmental health professionals	<ul style="list-style-type: none"> Generally employed by local authorities Work in improving, monitoring and enforcing public and environmental health standards Regulated by the CIEH. 	5,500–8,500, including more than 4,000 in local authorities. CfWI confidence in estimate: moderate
Source: CfWI analysis		

Key challenges

During the course of this project, the CfWI identified a number of challenges associated with mapping core public health workforce roles and understanding the core public health workforce. Issues that have been identified and are documented in this report include:

- **A lack of consensus around definitions.** Without a clear means of measuring the number of people working in specific public health roles at a given point in time, numbers by role and function cannot be tracked effectively.
- **Limited data availability.** Data collection is neither reliable nor done consistently across all professions, so managers and policymakers cannot track the public health workforce effectively.
- **Variable regulatory processes.** Approaches to regulation vary considerably by profession; although where it exists revalidation can be an effective way of tracking members.
- **Variable training routes.** Many of the training routes identified are difficult for either HEE or PHE to control, either because another organisation determines who trains and/or qualifies the workforce (e.g. environmental health, the portfolio route for public health specialist training), because training roles are determined by the employer (knowledge and intelligence roles, most practitioner type roles, academic roles), or because people come in from a range of career backgrounds. While greater diversity in public health practice has been a welcome development, it has meant training pipelines have become more difficult to monitor.
- **Varying provision in local authority services, PHE centres, and other local providers and no applicable benchmark with which to compare.** For example, local authorities have taken a range of approaches in organising public health services since reorganisation in April 2013. However, there is currently no publicly reported data collected on local authority staff. This poses a challenge in comparing like-for-like, and understanding precise numbers working in local authorities and other local providers such as NHS trusts and PHE centres.

Suggested actions

In response to these challenges and our research, the CfWI observes that work is already in hand in the following areas:

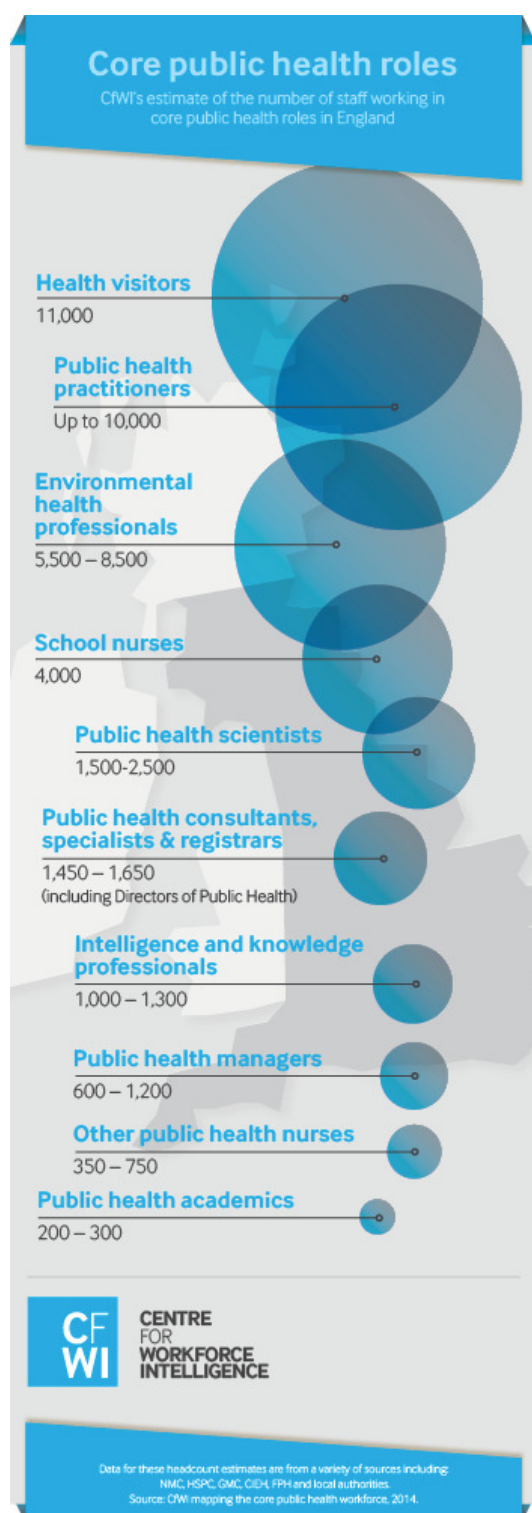
- **Moves toward confirming working definitions**, such as those proposed by the CfWI
- **Local workforce development plans**, e.g. ST3 entry and the Advanced Practitioner programme in the West Midlands
- **Implementation of the skills passport**
- **Implementation of the National Minimum Data Set for public health.**

In addition, the CfWI suggests following possible actions for policymakers to consider, taking into account both work in progress and the challenges raised by our survey of consultants and specialists:

- **A census of the public health workforce**, to establish a baseline and follow up on this report. There are a number of identified core public health roles where data on workforce numbers is patchy.
- **A project to map the wider public health workforce** taking in to account that there are a large number of job roles that make a significant contribution to public health, but have a broader function. Mapping the wider workforce may assist with understanding the training and development needs across public health.

- **A future stocktake to look into specialist training for consultants and specialists.** This project would build a better understanding of the demand and supply for senior public health staff and help plan for a stable and skilled workforce.

Figure 1: Core public health roles: CfWI's estimate of the number of staff working in core public health roles in England [this infographic is also available online at www.cfwi.org.uk/keyfindingsinfographic]



1. Introduction

1.1 Background to the project

The CfWI was jointly commissioned by Public Health England (PHE), Health Education England (HEE) and the Department of Health (DH) to gather information on the public health workforce in England to support commissioners in making policy decisions relating to the future size and shape of the public health workforce.

This project is focused on core public health workforce roles, which the CfWI has defined following consultation with stakeholders, as:

‘All staff engaged in public health activities who identify public health as being the primary part of their role’

The 11 core public health roles identified and included in this report are:

- Public health consultants and specialists (including registrars)
- Directors of Public Health (DsPH)
- Public health academics
- Public health managers
- Public health scientists
- Intelligence and knowledge professionals
- Health visitors
- School nurses
- Other public health nurses
- Public health practitioners
- Environmental health professionals.

In identifying the core roles to be included, we categorised the core public health workforce using the following principles:

- Separating staff with distinct skill sets or functions e.g. DsPH, academics
- Identifying staff qualified through distinct registration or qualification processes e.g. school nurses, health visitors, environmental health officers, consultants/specialists
- Distinguishing between staff operating at different levels of the Public Health Skills and Knowledge Framework (PHSKF), e.g. managers as opposed to practitioners.

We have excluded workforces which may be involved in public health, but who do not have it as their primary function. These include:

- midwives
- general practitioners (GPs)
- community pharmacists
- trading standards officers
- staff across the NHS and local government fulfilling a public health function as part of their job, e.g. leisure centre staff, teachers, social workers
- staff supporting public health teams (e.g. business support staff, administration staff, personal assistants).

While they can and very often do fulfil public health functions, delivery of those functions is not the primary purpose of the role. For example, trading standards officers fulfil a public health role in areas such as food safety; however their work relates primarily to legal compliance issues such as labelling and weights and measures, and is not so specific to public health. By contrast, environmental health officers, who may work in the same team as trading standards officers, deal primarily in protecting food quality, hygiene and safety issues, and so their role is more explicitly related to public health through its primary foci on health protection and health improvement.

The CfWI acknowledges that public health is ‘everyone’s business’ (DH, 2012a), and therefore everyone has a potential contribution to make to public health. While they may not be considered within the ‘core workforce’, their contribution needs to be acknowledged and possibly taken into consideration when conducting workforce planning.

1.2 Report content

This report contains four main sections:

- **Introduction:** this section explores the purpose of the report, how public health is understood, and the current landscape of public health following changes to the public health system in April 2013. For more information on the key considerations for mapping the core public health workforce, please find a comprehensive **literature review** at www.cfw.org.uk/publichealthlitreview.
- **Mapping the public health workforce:** a summary of our findings, including workforce numbers and skills.
- **Findings and challenges:** a summary of the challenges involved in documenting such a diverse workforce, and the issues arising from these challenges.
- **Discussion and recommendations:** proposals for further work and possible actions to build on this project in the future.

The report also includes **two case studies** outlining how HEE local education and training boards (LETBs) have approached understanding their public health workforce.

For more information on the key considerations for mapping the core public health workforce and a comprehensive review of the existing literature, please read a **literature review**, which is available at www.cfw.org.uk/publichealthlitreview. This paper explores the context and key considerations for mapping the core public health workforce, including:

- public health workforce policy
- counting the public health workforce
- previous recommendations on numbers and roles
- who works in public health and what skills and competencies they are expected to meet
- education and training
- registration and validation, and
- previous attempts to examine the public health workforce.

In addition, a separate **summary infographic of our results** is at Figure 1 in the Executive Summary of this report and available online at www.cfw.org.uk/keyfindingsinfographic. We have also produced an **immunisation infographic** and an **accompanying paper**, which explore the routine immunisation programme and demonstrate the breadth and diversity of the public health workforce. Both documents can be found at www.cfw.org.uk/immunisationsinfographic.

1.3 What is public health?

Public health is about helping people to stay healthy and protecting them from threats to their health. The Faculty of Public Health (FPH)² defines it as *‘the science and art of promoting and protecting health and well-being, preventing ill-health and prolonging life through the organised efforts of society’* (FPH 2013a; Acheson 1998).

In addition, the Health and Social Care Act 2012 defines the duties of the Secretary of State for Health in health protection as:

‘... steps... appropriate for the purpose of protecting the public in England from disease or other dangers to health’ (Health and Social Care Act 2012, clause 11).

The DH’s *Public Health Outcomes Framework* (DH, 2012b) outlines four domains of public health with the following objectives:

- **Improving the wider determinants of health:** improvements against wider factors that affect health and wellbeing, and health inequalities
- **Health improvement:** people are helped to live healthy lifestyles, make healthy choices and reduce health inequalities
- **Health protection:** the population’s health is protected from major incidents and other threats, while reducing health inequalities
- **Healthcare public health and preventing premature mortality:** reduced numbers of people living with preventable ill health and people dying prematurely, while reducing the gap between communities.

For the purpose of this report we focus on professions that have the last three functions at the heart of their role. We have excluded the domain *improving the wider determinants of health* as we see this as incorporating the functions of the wider public health workforce.

1.4 The current public health landscape

A major motivation for this project has been the change to the public health landscape as a result of the Health and Social Care Act 2012 (2012 Act), following the Government’s 2010 White Paper *Healthy Lives, Healthy People* (Health and Social Care Act, 2012; DH, 2010). Whereas public health was previously the responsibility of primary care trusts (PCTs) and strategic health authorities (SHAs) in the NHS, it has now become primarily the responsibility of a new centralised body, PHE, and of local authorities, with other new organisations such as HEE playing an important role.

HEE, under its initial mandate, is responsible for the commissioning of education and training of public health specialists and other public health staff in PHE and local government, and also has a role in developing public health capacity across the entire health, public health and social care system (HEE, 2013a). The work of HEE is supported by its **Public Health Advisory Group**, which met for the first time in April 2014 and whose role is to support HEE in better understanding the supply and demand assumptions for the public health workforce, and

²The Faculty of Public Health is part of the Royal College of Physicians. In practice, the Faculty of Public Health is the main representative body of consultants, specialists and trainees working in public health.

its contribution to the wider public health agenda (HEE, 2013b). Its 2014-15 mandate emphasises the role of the Public Health Advisory Group as *'the key forum for considering the unique challenges facing the public health workforce by concentrating HEE expertise in one place with a single dialogue between HEE and the public health community to address the training and educational needs of the public health workforce'* (HEE, 2014). This indicates that its Advisory Group is likely to be a key player in future workforce issues.

The 2012 Act paved the way for the creation of **PHE** as a new national agency in April 2013, through the merger of a number of organisations such as the Health Protection Agency (HPA) and the National Treatment Agency for Substance Misuse (NTA). The Act also gave the Secretary of State certain powers relating to health protection.

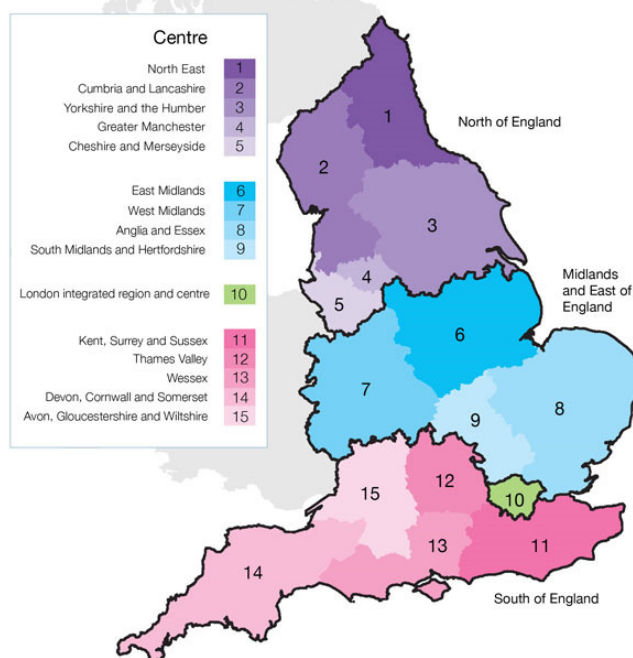
Overall, PHE's mission is 'to protect and improve the nation's health and to address inequalities'. Its primary responsibility is to consider, on behalf of the Government, how best to achieve strategic objectives within public health (PHE, 2013a). PHE does this through:

- encouraging discussions, advising government and supporting action by local government, the NHS and other people and organisations
- supporting the public so they can protect and improve their own health
- protecting the nation's health through the national health protection service, and preparing for public health emergencies
- sharing information and expertise with local authorities, industry and the NHS, to help them make improvements in the public's health
- researching, collecting and analysing data to improve our understanding of health and come up with answers to public health problems
- reporting on improvements in the public's health so everyone can understand the challenge and the next steps
- helping local authorities and the NHS to develop the public health system and its specialist workforce.

On workforce issues, PHE's core responsibilities lie in building workforce capacity across the health and social care system. It does this through encouraging professional development in public health across health and social care and through working closely with other organisations involved in delivery of public health services through its 15 centres and four regions as shown in Figure 2.

Figure 2: Public Health England regions and centres

There are four regions (North, Midlands and East, London and South) and 15 centres.



Source: PHE, 2013b

Local authorities (LAs) have also been given (or more accurately, given back³) responsibility under the 2012 Act to improve the health and wellbeing of their local communities. A Director of Public Health (DPH) has responsibility for leading public health provision within the LA (Health and Social Care Act, 2012) and there are 134 DPH roles in England. Their role is to support and advise elected members and other senior officers within children's and adult social services across the LA, and support other LA provision in promoting public health across the LA area. DsPH also support and improve commissioning of health and social care services, and education and training with their role underpinned by their statutory involvement in Health and Wellbeing Boards (HWWBs) and in their developing Joint Strategic Needs Assessments (JSNAs) and Joint Health and Wellbeing Strategies (JHWSs) (DH, 2013a) at a local level.

The most recent DH guidance on DsPH advises that while they do not have to be on the most senior corporate management team, they should:

- be directly accountable to the local authority chief executive
- have direct access to elected members (councillors)
- have full access to papers and information necessary for informing and supporting their work
- have day-to-day responsibility for the authority's public health budget (DH, 2013a)

DsPH and their colleagues are expected to answer directly to the local authority chief executive – who in turn is accountable to elected members. Therefore, while the public health workforce in LAs and DsPH, in

³ Public health was the responsibility of local government until 1974 when responsibility shifted to the NHS.

particular, are expected to operate with significant independence of the political arena, their work must align with the council's overall strategy, which covers a greater range of areas. In addition, DsPH have access to ring-fenced public health budgets allocated by the Government to LAs, with the budgets currently protected under the 2012 Act. The objective of ring-fencing is to ensure money is targeted towards promoting public health at a local level, and to ensure better planning of services. However, the Government initially only ring-fenced this budget for two years (2013-14 and 2014-15) (DH, 2013b), and although ring-fencing has been guaranteed for 2015-16 (Wiggins, 2013) there is currently no guarantee that it will continue beyond this time. The uncertainty around ring-fenced public health spending may have implications for workforce planning in the future and how local authorities decide on how best to organise their services.

The creation of **Health and Wellbeing Boards (HWBs)** under the 2012 Act may be significant in how public health services are delivered in future. Under the Act, DsPH are automatic members of HWBs. They and their teams support the development of JSNAs and JHWSs by LAs, which inform LA decisions on how best to meet their local public health outcomes through health and social care interventions (DH, PHE and LGA, 2013). An assessment of HWBs by the King's Fund in October 2013 found that strong relationships had developed between LAs and clinical commissioning groups (CCGs) and that public health and health inequalities were the key priorities within JSNAs and JHWSs (The King's Fund, 2013), which may indicate the growing importance of public health professionals. However, the King's Fund also noted that HWBs are currently struggling with more immediate issues such as accident and emergency services, and will be expected to play an ever increasing role in commissioning health and social care services (The King's Fund, 2013). This may have implications for people working in public health locally, in terms of the level of support LAs will expect them to provide.

PHE and LAs are also supported by **NHS England**, who has commissioning responsibility for some key public health services, particularly those relating to immunisation, screening programmes, public health programmes for children and prisoners, and sexual health (NHS Commissioning Board, 2012). NHS England also has significant influence in shaping what services are offered locally.

In addition, **Public Health Online Resource for Careers, Skills and Training (PHORCaST)**, which is currently managed by Health Education East Midlands, is an online portal which aims to:

- promote public health (including health and wellbeing) as a career
- attract the most appropriate people into public health roles
- help retain the most appropriate people in public health roles
- help develop the careers of people already working in public health
- help support those with a public health aspect to their role (the wider public health workforce) (PHORCaST, 2014a)

From winter 2014, a new Health Education England website for health careers will be available, incorporating PHORCaST as well as NHS Careers and Medical Careers (PHORCaST, 2014b).

2. Mapping the public health workforce

2.1 Introduction

The purpose of this section is to understand what the core public health workforce looks like and thereby support those organisations which have responsibility for developing and implementing public health services in their workforce planning.

In this chapter we outline how public health is understood by key stakeholders, and the current landscape of public health following changes to the public health system in April 2013.

A literature review, available online at www.cfwi.org.uk/publichealthlitreview, explores the context and key considerations for mapping the core public health workforce in further detail.

2.2 Approach

The CfWI undertook its mapping through a combination of extensive desk research and engagement with a number of stakeholders. The project involved the following processes:

- **Scoping:** to determine the workforces to be mapped and agree the main definitions used throughout the project
 - **Review of the literature:** to provide an overview of key developments and literature on important themes relating to the public health workforce
 - **Data collection:** a review of available data sources
 - **Stakeholder engagement:** to understand data availability on public health, how public health is understood with respect to the workforce, and how important public health functions are delivered both nationally and locally.
-

2.3 Staffing groups

We have categorised the core public health workforce using the following principles:

- Separating staff with distinct skill sets or functions e.g. DsPH, academics
- Identifying staff qualified through distinct registration or qualification processes e.g. school nurses, health visitors, environmental health officers, consultants/specialists
- Distinguishing between staff operating at different levels of the skills framework e.g. managers as opposed to practitioners.

We recognise that individuals may move between these categories during their career as they attain new qualifications or additional experience, and some may fulfil two roles, for instance all Directors of Public Health will also be consultants and specialists, public health scientists may also be public health academics, public health nurses may also be public health managers.

We have categorised staff by the 11 main occupational staffing groups listed in Table 2. These have been split into three subgroups, based levels of the Public Health Skills and Knowledge Framework (PHSKF) they primarily work at:

Table 2: Core public health roles categorised by the PHSKF

People working primarily at higher levels of the PHSKF (levels 8 and 9)
Public health consultants and specialists
Directors of Public Health (DsPH)
Public health academics
Public health managers
People working across levels 5 to 9 of the PHSKF
Public health scientists
Intelligence and knowledge professionals
Public health nurses (excluding health visitors and school nurses which are listed separately below)
People working primarily at levels 5 to 7 of the PHSKF
Health visitors
School nurses
Public health practitioners
Environmental health professionals
Source: CfWI analysis

We present these roles based on where professionals typically work on the PHSKF. This classification may not reflect every individual in each type of role. The CfWI acknowledges that there may be some individuals who work at higher or lower levels of the PHSKF than is indicated by the groupings. However the grouping is intended to reflect what is typical of the profession as a whole.

In addition, staff from the following groups may flow in and out of the core public health workforce in England, and may therefore be considered in certain statistics but not others. Where possible, we have provided appropriate caveats to the data provided. These categories of public health workers are:

Table 3: Main public health staffing groups flowing in and out of core workforce, excluded from this report

Category	Functional description
Staff working in Scotland, Wales	<ul style="list-style-type: none"> Public health staff at all levels working in Scotland, Wales or Northern Ireland, who may or may not enter (or return to) the England workforce

Category	Functional description
and Northern Ireland	<ul style="list-style-type: none"> • These people will often be included in registration data but not in workforce censuses conducted by bodies such as the Health and Social Care Information Centre (HSCIC), which focus on England • Data on public health staff is collected by: <ul style="list-style-type: none"> Information Services Division, NHS Scotland (Scotland) (medical and dental public health and school nursing, health visiting and public health nursing, both by headcount trend, age, contract, grade, and region) http://www.isdscotland.org/Health-Topics/workforce Stats Wales (Wales) (community and public health staff by grade, school nursing by grade) http://www.statswales.wales.gov.uk/Catalogue/Health-and-Social-Care/NHS-staff Department of Health, Social Services and Public Safety (Northern Ireland) (health visitors and school nurses, by Trust, age, gender and contract) http://www.dhsspsni.gov.uk/index/stats_research/workforce-statistics/stats-hsc.htm
Overseas staff	<ul style="list-style-type: none"> • Public health staff at all levels working abroad on temporary or permanent contracts, who may or may not return to the English workforce • These people may be included in registration data but not in workforce censuses conducted by bodies such as the HSCIC.
Private sector staff	<ul style="list-style-type: none"> • Public health staff employed by private sector contractors (e.g. pharmaceutical companies) to deliver services • May be included in registration data, but will not be visible on workforce censuses involving public sector.
Third sector staff	<ul style="list-style-type: none"> • Public health staff employed by third sector contractors – e.g. social enterprises – to deliver services on behalf of the NHS or local authorities • May be registered but will not be visible on workforce censuses involving public sector • From 2014 will be included in public sector data following implementation of the Workforce Minimum Data Set (wMDS), which will result in staff from any provider of NHS-funded care being included.
Source: CfWI analysis	

2.4 Core roles and numbers

On the following pages we provide estimates for the number of people working in each of the 11 core roles outlined in section 2.3. Sources are described in more detail in the References section at the back of this report.

We have given an indication of the robustness of our estimate. There is considerable variation in the quality and quantity of data available to estimate the size of the core public health workforce. Where confidence in the estimate is low, there is no, or minimal, data to support the figure. Where confidence in the estimate is moderate, there is some data available to support the estimate but no definitive dataset available from a regulatory body or the Health and Social Care Information Centre (HSCIC). Where confidence in the estimate is high, it is supported by data from a regulatory body or the HSCIC.

Section A: People working primarily at higher levels of the PHSKF (levels 8 to 9)

Four of the core public health roles identified in this report work primarily at the higher levels of the PHSKF: consultants and specialists (including registrars), Directors of Public Health, academics in public health and

public health managers. People in these roles primarily fulfil strategic and managerial functions across the main domains of public health.

1. Public health consultants and specialists (including registrars)

- Employed primarily within local authorities and PHE in public health teams or fulfilling a public health role within a wider team. May also work within the NHS, e.g. NHS England, CCGs, NHS trusts
- May manage local authority teams including non-public health staff
- Work at a strategic or senior management level or at senior level of scientific expertise to influence health of whole population or community
- Work across any of the three main domains of public health (health protection, health improvement, healthcare public health); in practice, consultants may specialise in one area
- Within local authorities may also work with focus on particular locality or in a particular area or locality
- May be medically or non-medically qualified and must be registered with the General Medical Council (GMC), General Dental Council (GDC), or the UK Public Health Register (UKPHR).

The main sources of data come from the HSCIC, the GMC and GDC specialist registers, and the FPH.

Table 4: Public health consultants and specialists

Staff group: Public health consultants and specialists, including registrars

Available data (incl. trend from recent years if available), quoting data sources

HSCIC:

The numbers provided take into account staff data extracted from the Electronic Staff Record (ESR) and the data collected directly from the two NHS Foundation Trusts which do not use ESR from 2012, when public health staff were based in the NHS. We have not, however, included figures from the September 2013 census as statistics for those working for PHE and for local authorities are not collected and recorded in official HSCIC statistics.

September 2012:

- 756 consultants in public health medicine and 52 consultants in dental public health (this number includes directors of public health)
- 172 associate specialists in public health medicine and 2 associate specialists in dental public health
- 166 specialty doctors in public health medicine and 2 specialty dentists in dental public health
- 36 staff grade doctors in public health medicine
- 224 registrars in public health medicine and 12 registrars in dental public health (HSCIC, 2013a).

This gave a suggested total of 1,186 consultants, associate specialists, specialty doctors/dentists and staff grade doctors practising in the NHS in September 2012, plus 236 at registrar grade. This number excludes public health consultants, specialists and registrars working in other settings (notably the private and third sectors), so the actual number practising in September 2012 may have been higher.

GMC and GDC:

1,476 public health medicine consultants on the GMC's specialty register (GMC, 2014) and 116 dentists registered in dental public health on the GDC's register (GDC, 2014).

This gives a number of 1,592 people registered in public health at consultant level in the UK. However, this includes people no longer practising (e.g. through retirement), and does not include people registered with the UKPHR as specialists.

UKPHR (March 2014):

The UKPHR currently has four dually registered, and 536 defined or generalist specialists⁴ on its register in the UK (UKPHR, 2014). These are people who have completed a portfolio demonstrating met requirements in specialist areas of public health, or in the case of dually registered specialists, people already on the GMC and GDC's specialist register who have chosen to register with the UKPHR.

FPH (March 2014):

- 1,777 active fellows (out of a total of 2,354 fellows). This number takes into account people practising in public health at consultant/specialist level who have completed specialty training, or are consultants in communicable disease control, public health dentists, specialists on the UKPHR and other senior public health specialists who gain inclusion onto the specialty register. This suggests that approximately 75 per cent of the FPH fellowship is in practice. FPH records show that 67 to 72 per cent of fellows are based in England, this might suggest therefore that there are approximately 1,200-1,300 FPH fellows in active practice in England.
- 550 currently enrolled in specialty training in England in February 2014.

⁴ A defined specialist is a specialist who has achieved the same knowledge and core competencies as a generalist specialist, but has enhanced and recognised expertise in particular areas of public health, for example health protection or health improvement.

Staff group: Public health consultants and specialists, including registrars

Estimated range (by headcount)

1,200 to 1,300 consultants and specialists; 250 to 350 registrars

These ranges take into account that:

- There were at least 1,186 people practising at consultant and specialist level in the NHS in September 2012, before the April 2013 reorganisation. This number however excluded people working outside the NHS.
- There are just under 1,800 members registered with the FPH in February 2014, who are not retired; if one assumes 67 to 72 per cent are in active practice in England this suggests there are between 1200 and 1300 fellows in active practice.
- There are 2,124 people registered with the GMC, GDC and UKPHR in May 2014. However, this number includes people who may no longer be practising in the UK (e.g. through retirement), and if we assume (based on FPH fellowship) 75 per cent are in active practice, this may suggest approximately 1,600 registrants are working in consultant/specialist roles. This is a UK wide figure. If we then assume from FPH statistics that 67 to 72 per cent are based in England, this would indicate that in England there would be at least between 1050 and 1150 registrants in active practice.
- There were 236 registrars recorded by the HSCIC as working in the NHS in England in 2012, and the FPH count a total of 550 in specialty training in England in May 2014. If we assume an average of 110 per year of training, this would suggest that up to as many as 330 are at registrar grade as of May 2014.

CfWI confidence in estimate

High – supported by data from professional bodies and pre-2013 HSCIC data

Employers (incl. typical roles)

Of respondents to a survey by the Centre for Workforce Intelligence (CfWI, 2014a) of consultants and specialists working in public health, 52 per cent worked within local authorities, 30 per cent within PHE and 11 per cent within universities.

Of respondents to a survey by the British Medical Association (BMA, 2014) of public health medicine staff, 44 per cent worked within local authorities, 32 per cent for PHE and 12 per cent in academic institutions.

Finally, the main employers of FPH members (FPH, 2014b) are local authorities (1,072 members, 34.5 per cent), academic/research institutions (519, 16.7 per cent) and PHE (c200, 7 per cent). However, FPH figures are dependent on information provided by its members and may not be up-to-date.

Training routes

There are two main routes for qualification: **specialty training**, and a **portfolio route**

- For **specialty training**, the FPH curriculum (FPH, 2010) sets out the knowledge, skills and specifically outlines the individual learning outcomes which need to be achieved during the training programme. Once a candidate has passed both FPH examinations and demonstrated the skills required by the curriculum, candidates from a medical/dental background can register with the GMC/GDC as specialists, while registrars from other backgrounds can register with the UKPHR.
- For the **portfolio route**, individuals present a portfolio of experience for assessment, to demonstrate that they have gained sufficient experience despite not completing specialty training (FPH, LGA and PHE, 2013). The portfolio is then accepted by the GMC and/or the UKPHR (FPH, LGA and PHE, 2013). This can currently involve one of three processes:
 - **Certificate of eligibility for specialist registration:** this is for doctors who have not followed the training programme but have gained the same level of skills and knowledge as someone who has completed the programme. These applications (based around a portfolio of evidence) go through the FPH in the first instance and ultimately the GMC who determines whether a professional may practice (FPH, 2014b).
 - **Assessment for defined specialists:** this involves assessment of a retrospective portfolio showing sufficient high level experience in a given area of specialist public health. This can also be achieved within any of the nine local practitioner registration schemes.
 - **Recognition of specialist status:** this is for people in senior positions who have previously been unable to take a standard education and training programme. This process is rare and a limited exception to the above process (UKPHR, 2013).

Key statistics:

- 68 trainees completed specialty training in 2013, compared to 48 in 2012, 39 in 2011, 43 in 2010 and 85 in 2009 (FPH, 2014b). Around 550 are currently enrolled in specialty training in February 2014 (FPH, 2014b).

Staff group: Public health consultants and specialists, including registrars

- 43 entered the UKPHR as a defined/generalist specialist in 2013, compared to 37 in 2011 and 2012, 51 in 2010 and 66 in 2009. There are no records for numbers currently qualifying through the portfolio route (UKPHR, 2014).
- HEE expect to commission 65 training places in public health medicine and 9 in dental public health for 2014-15 (HEE, 2013b).

Registration body

Public health consultants and specialists must register with the GMC, GDC or UKPHR.

From 2012, public health consultants from a medical background must revalidate with GMC via a Responsible Officer in each organisation (for local authorities, this is via PHE). For most doctors, revalidation will be every five years. This is not obligatory for non-medical specialists but those registered with UKPHR will be expected to do so.

Public health consultants and specialists from a non-medical background can choose to register with the UK Public Health Register, but this is not obligatory. Under PHE, DH and LGA's joint Public Health Workforce Strategy, registration is expected to be obligatory for all public health specialists by 2015 (through the Health and Care Professions Council). In practice, registration with the UKPHR is necessary to work at consultant level.

Issues/notes/comments

The main issues raised by the Faculty of Public Health (FPH, 2014b) on behalf of its members include:

- the ageing profile of the profession: the average age of FPH membership is 56, which is indicative of the senior public health workforce
- skills mix: there are concerns over declining numbers of medically qualified public health specialists within local authorities, and over the balance of skills and specialisms required of public health professionals
- importance of maintaining a multidisciplinary public health system amongst all employers for the benefit of the public
- workforce mobility: importance of maintaining a system that enables movement between different employers
- terms and conditions: issues raised include the relative attractiveness of different employers, how appointments are made, and equal pay/equal value/job evaluation differences between the NHS, the civil service and local authorities.

Source: CfWI analysis

2. Directors of Public Health

- Employed within local authorities
- Responsible for determining overall vision and objectives for public health locally, based on available evidence. Also responsible for forging partnerships and influencing all local agencies
- Accountable for delivering public health objectives (reporting annually)
- Statutory position (Health and Social Care Act, 2012)
- Work across any of the three main domains of public health (health protection, health improvement, healthcare public health)
- Will be medically or non-medically qualified consultants and registered via GMC/GDC/UKPHR.

The main sources of data come from the Association of Directors of Public Health (ADPH), which is the representative body for Directors of Public Health and Deputy Directors of Public Health.

Table 5: Directors of Public Health

Staff group: Directors of Public Health
<p>Available data (incl. trend from recent years if available), quoting data sources</p> <p>131 in post as of January 2014 (ADPH, 2014b), including those in interim positions.</p>
<p>Estimated number (by headcount)</p> <p>Approximately 130. Broadly one per county/unitary local authority, but some shared arrangements. These are also public health consultants and specialists.</p>
<p>CfWI confidence in estimate</p> <p>High – supported by data from ADPH</p>
<p>Employers (incl. typical roles)</p> <p>Employed by local authorities from 1 April 2013 (previously the NHS in primary care trusts and strategic health authorities)</p>
<p>Training routes</p> <p>Directors of Public Health come from the pool of senior consultants and specialists who have qualified through the national specialty training programme or through the portfolio route.</p>
<p>Registration body</p> <p>Directors of Public Health have the same registration requirements as public health consultants and specialists.</p>
<p>Issues/notes/comments</p> <p>Issues identified by the ADPH include:</p> <ul style="list-style-type: none"> • approximately 30 to 35 posts are vacant at time of writing this report • an increasing trend for shared DsPH, E.g. IoW/Hampshire, Nottinghamshire/City of Nottingham, London boroughs, Dorset, Bedfordshire, Berkshire (ADPH, 2014b) • public health often not found in 'place' type teams, despite rationale for transfer from NHS being to get public health close to those areas of local government that the NHS cannot readily influence: tend to be more in 'corporate' or 'people' teams (ADPH, 2014b).
<p>Source: CfWI analysis</p>

3. Public health academics

- Lecturers, researchers and teachers employed in higher education or further education sectors, whose primary focus is public health
- Typically either set up research investigations to address specific public health issues which are then reported, and/or teach about public health theories and practice
- Fulfil academic function, which supports work across any of the three main domains of public health
- Depending on qualification and experience, may be registered with number of bodies [e.g. GMC/GDC/UKPHR/Health and Care Professions Council (HCPC)/Nursing and Midwifery Council (NMC)/General Pharmaceutical Council (GPC)], however registration as a public health academic is not required.

The main sources of data for public health academics are the Medical and Dental Schools Councils.

Table 6: Public health academics

Staff group: Public health academics

Available data (incl. trend from recent years if available), quoting data sources.

Medical and Dental Schools Councils (July 2013, reported May 2014):

- 171.2 FTE academic roles in public health medicine in the UK, 20 per cent fall from 2001 (214.8 FTE) and a 0.8 per cent fall from 2011 (172.6 FTE) (MSC, 2014), and 25.9 FTE roles in dental public health in the UK; 17 per cent fall from 2004 (31.2) and 8 per cent fall from 2011 (28.2) (DSC, 2014). This gives a total of 197.1 FTE roles in public health medicine and dental public health in the UK.

However, the number of public health academics may be higher, with some public health academics coming from non-medical and dental backgrounds, and with some universities having public health courses but neither a medical nor a dental school. In addition, while dental public health figures include researchers and clinical teachers, public health medicine figures only consider professors and lecturers. These figures are across the UK.

FPH (March 2014):

- 393 of its registrants (out of 2,472) recorded employment as an academic and research institutions. However this figure includes registrants who are retired and may not be practising. If we assume based on FPH membership statistics that 67 to 72 per cent are based in England, this would indicate that 260-280 work in academic roles in England; assuming approximately 75 per cent of FPH membership are in active practice this may suggest there are between 200 and 210 people in academic roles and in active practice.

Estimated range (by headcount)

200–300

This range takes into account that:

- There are approximately 200 FTE public health academics working within medical and dental schools in the UK
- That the FPH record 393 of its registrants as working in academic and research institutions, and assuming 67 to 72 per cent work in England and 75 per cent of FPH members are in active practice this may mean approximately 200 to 210 of its members are currently in academic roles in England
- That the actual number is likely to be higher, given the exclusion of academics from non-medical public health courses.

CfWI confidence in estimate

Moderate

Staff group: Public health academics

Employers (incl. typical roles)

Academics are typically employed within **universities**, often alongside other roles through an honorary contract. Before 1 April 2013, this was usually with an NHS organisation; and from 1 April 2013, PHE.

Training routes

No fixed routes for public health academics. Academic roles typically require higher qualification (**Masters or Doctoral level studies**). Lecturers in public health medicine or dental public health will usually have a doctoral qualification; lecturers in other areas such as health promotion may have a Masters level qualification. Academics may also have qualified via other routes (e.g. specialty training).

Registration body

There is no required registration as an academic. However, academics may be registered with a registration body, if they are qualified in a particular profession (e.g. nurse/midwife, scientist, consultant).

Source: CfWI analysis

4. Public health managers

- Work across the system, primarily in local authorities, but also in the NHS, PHE and provider organisations
- Responsible for managing projects and programmes to deliver public health outcomes
- Either directly managing in-house teams or commissioning services from private or third sector provider organisations
- Experienced and qualified staff (e.g. Masters in Public Health)
- Work across any of the three main domains of public health (health protection, health improvement, healthcare public health)
- Depending on qualification and experience, may be registered with number of bodies (e.g. GMC/GDC/UKPHR/HPCPC/NMC/GPC), however registration as a public health manager is not required.

There is no data available on this workforce. This is because the workforce is not regulated and numbers are not monitored by a professional body. The CfWI nonetheless recognises this workforce as a separate grouping, because people working in these roles are responsible for strategic delivery of projects/programmes and typically work at levels 8 and 9 of the PHSKF.

Table 7: Public health managers

Staff group: Public health managers

Available data (incl. trend from recent years if available), quoting data sources

There is currently no robust, central published data about how many people work in managerial or commissioning roles delivering public health functions across England.

From a sample of 12 local authorities examined by the CfWI (see Table 15) 10 reported the number of public health managers in the headcount of their public health teams, and five reported a commissioning role. Two local authorities did not distinguish between managers and practitioners. There was significant variability in the number of managers reported, from three per local authority to 20. This suggests that it is difficult to estimate the number of public health managers nationally.

If, based on this sample, we assume an average of six public health managers for each of 150 local authorities this would give us approximately 900 managers nationally.

Estimated range (by headcount)

600-1,200

Range based on the assumption of 4-8 public health managers per local authority.

CfWI confidence in estimate

Low – estimate based on extrapolation from a small sample of local authorities

Staff group: Public health managers

Employers (incl. typical roles)

Public health managers usually work within **local authorities**, leading on or commissioning specific programmes (e.g. healthy weight, tobacco control, sexual health).

Typical roles within local authorities include:

- Public Protection Service Manager (Plymouth)
- Public Health Programme Manager (Coventry, Wigan, Devon)
- Senior Public Health Manager and Public Health Manager (Nottinghamshire)
- Healthy Communities Manager and Health and Wellbeing Partnership and Strategy Manager (Worcestershire)
- Health Improvement Manager (York)
- Commissioning Manager (Coventry)
- Public Health Commissioner, Public Health Commissioning Support Specialist and Service Commissioning Officer (Harrow/Barnet)
- Public Health Commissioning Strategist and Joint Commissioning Manager (Haringey)
- Drugs and Alcohol Action Team Commissioning Manager (Devon)
- Commissioning Support Officer (Lancashire)
- Commissioning and Contracts Manager, Substance Misuse (York).

Training routes

There is no defined qualification route to become a public health manager, which reflects the diversity of the public health workforce. As such there is no fixed number of training places. The skills and experience of an individual public health manager will depend on employer requirements.

However, many employers will require a postgraduate diploma or Masters in an area related to public health, such as health promotion or development, especially for more senior roles (NHS Careers, 2014).

Registration body

There is no specific registration body for a public health manager. However, managers may be registered with a registration body, if qualified in a particular profession (e.g. nurse/midwife, scientist, consultant).

Source: CfWI analysis

Section B: People working across levels 5 to 9 of the PHSKF

Three of the core public health roles identified in this report, work across the spectrum of levels of the PHSKF: public health scientist, intelligence and knowledge professionals, public health nurses (excluding health visitors and school nurses). People in these roles work as both specialist and practitioners, i.e. they can be involved in both strategic and delivery functions across the main domains of public health.

5. Public health scientists

- Generally employed by PHE or NHS
- Perform scientific role in support of public health objectives
- All grades; may be pure or applied research, or customer-facing service delivery
- Work primarily in health protection, and may also fulfil knowledge and intelligence and academic functions
- Some roles generally are not (presently) a good fit with the Modernising Scientific Careers framework, or the categories specified in the NHS Occupation Codes.

The main sources of data come from the HSCIC, PHE and its predecessor the Health Protection Agency (HPA).

Table 8: Public health scientists

Staff group: Public health scientists
Available data (incl. trend from recent years if available), quoting data sources
HSCIC (September 2013): 1,475 qualified healthcare scientists (i.e. scientists qualified and registered as a clinical or biomedical scientist) working for PHE in September 2013 (HSCIC, 2014c).
PHE (October 2013): 2,730 scientific staff working in health protection, microbiological and development production services in October 2013, including 872 working in health protection roles (excluding strategy and other health protection directorate staff) and 1,858 working in microbiological and development production services (PHE, 2013c). However, these numbers include people in support functions and other roles.
Estimated range (by headcount) 1,500–2,500 This range takes into account that: <ul style="list-style-type: none">• There were at least 1,475 qualified healthcare scientists working in public health roles within PHE in September 2013• PHE in October 2013 recorded 2,730 scientific staff working in health protection, microbiological and development production services (with this number including staff working in support functions and other roles).
CfWI confidence in estimate Moderate

Staff group: Public health scientists

Employers (incl. typical roles)

The main employer is **PHE**, following reorganisation in 2013. Previously, the majority of scientists in public health roles worked in the HPA, which was absorbed into PHE.

Scientists typically work in health protection roles, including communicable and non-communicable disease control and screening.

Training routes

There is currently no fixed route specifically for public health scientist training. New entrants to healthcare science degrees since 2010 have come under the *Modernising Scientific Careers (MSC) Framework*, with four levels of qualifications (associate/assistant, practitioner, scientist and higher specialist scientific) equating to National Vocational Qualifications (NVQ), degree, Master's and doctoral levels. The intention was to provide a more systematic framework for healthcare science degrees; this has had and will have implications for healthcare scientists who decide to specialise in public health.

MSC practitioner training covers five areas: cardiovascular, respiratory and sleep; neurosensory sciences; life sciences, medical physics technology and clinical engineering. MSC scientist training covers seven areas: infection sciences; blood sciences; cellular sciences, neurosensory sciences, cardiovascular, respiratory and sleep; clinical engineering; and medical physics.

Registration body

No specific registration body for public health scientists. However, scientists may be registered with another body (e.g. HCPC, GMC, UKPHR) if qualified as a biomedical or clinical scientist, a doctor in microbiology, or public health specialist.

Issues/notes/comments

A large number of public health scientists now work in PHE following the 2013 reorganisation of public health, and the CfWI is currently leading a stocktake of public health scientists working within PHE and is expected to publish its findings in late 2014.

Source: CfWI analysis

6. Intelligence and knowledge professionals

- Employed across the system within local authorities locally and regionally by PHE
- Staff employed in data analysis, informatics and presentation of public health information
- Responsible for collation, management, analysis, interpretation and dissemination of data and information from a wide range of primary and secondary health, social, economic and demographic data sources
- May lead the production of performance indicator data related to public health to support planning and development of public health services
- Fulfil knowledge and intelligence function in support of three main domains of public health (health protection, health improvement, healthcare public health)
- Roles generally are not (currently) a good fit with NHS Occupation Codes.

The main sources of data are from PHE, with some historic data available.

Table 9: Intelligence and knowledge professionals

Staff group: Intelligence and knowledge professionals

Available data (incl. trend from recent years if available), quoting data sources

DH (2012):

- Estimate of approximately 1,000 roles in 2012

PHE (October 2013):

550 in total working within the Chief Knowledge Officer Directorate, including 485 in regional teams (disease registration, drug treatment monitoring, and evidence and intelligence) and 44 working nationally (for the National Cancer Intelligence Network and in Libraries). In addition, 113 worked in Field Epidemiology, 260 in screening and 49 in social marketing. This gives an estimate of just under **1,000 roles** within PHE, although some of these will be in support roles.

There is, however, no publicly reported data about how many people work in intelligence and knowledge roles delivering public health functions in local authorities. Our research suggests that there are typically 1 to 5 people working in a knowledge and intelligence team locally (see Table 15), which may suggest 300–400 people working in such roles locally.

Estimated range (by headcount)

1,000–1,300 (up to 1,000 in PHE, at least 300–400 in local authorities)

This range takes into account that:

- DH estimated that there were approximately 1,000 roles in 2012
- There are approximately 1 to 5 people per local authority team, based on CfWI research
- There are up to 1,000 knowledge and intelligence roles in PHE (though the actual number will be lower, as a number will be working in support roles and functions)

CfWI confidence in estimate

Moderate

Staff group: Intelligence and knowledge professionals

Employers (incl. typical roles)

Main employers are the **Chief Knowledge Officer's Directorate within PHE**, with the majority in **regional knowledge and intelligence teams (KITs)**. Within PHE, other professionals are found in health protection (through PHE's Field Epidemiological Services and Colindale centre) and the Health and Wellbeing Directorate (primarily within screening and social marketing) (PHE, 2013c).

Other employers include **local authorities, NHS England and independent practice**. Prior to 2013, the main employers were **primary care trusts and regional public health observatories (PHOs)**, with some people in private sector roles (Jenner et al, 2010). People working in PHE's KITs mostly came from PHOs, disease registration staff from cancer registries and National Drug Treatment Monitoring centres, and epidemiologists and health protection staff from the Health Protection Agency.

Training routes

There are no fixed training routes for public health knowledge and intelligence roles. Previously, analyst training posts provided by some PHOs though many roles lost in reorganisation of the system (Jenner et al, 2010).

Registration body

There is no required registration as an intelligence and knowledge professional. However, knowledge and intelligence professionals may be registered with a registration body, if qualified in a particular profession (e.g. nurse/midwife, scientist, consultant).

Source: CfWI analysis

7. Public health nurses (excluding health visitors and school nurses which are listed separately below)

- Are employed across local authorities, PHE and the NHS – most commonly in health protection teams
- Are qualified nurses with public health function as core activity, which work with populations and subsequently undertake further training to demonstrate competence in this area. These include infection control nurses, family health nurses and occupational health nurses
- Work primarily in health improvement and health protection
- Are registered with NMC, and usually are registered as specialist community public health nurse (SCPHN), follows completion of NMC-approved SCPHN course at degree level
- No title protection for specialist nurses at present, resulting in multiple professional titles/roles and therefore difficulty in tracking numbers accurately.

For the purpose of this report, public health nurses are nurses working in public health, but excluding health visitors and school nurses which are listed separately below.

The CfWI has also excluded occupational health nurses from this category. Although their training involves elements of public health and nurses can choose to register on the Specialist Community Public Health Nursing Register (SCPHN) in occupational health, their role identity, as with occupational health consultants, is in occupational health rather than public health.

Some data is collected on these nurses by PHE and the NMC.

Table 10: Public health nurses (excluding school nurses and health visitors)

Staff group: Public health nurses (excluding school nurses and health visitors)

Available data (incl. trend from recent years if available), quoting data sources.

HPA (2013)/PHE:

- As at 1 June 2014, PHE had 341 NMC registered nurses on staff, including 5 occupational health nurses. In addition, there are some Health Protection Practitioners/Screening & Immunisation staff that undertake similar roles, but do not have a clinical element to the role and therefore do not require registration for their current roles (PHE, 2014b).
- In May 2014 there were 237 nurses specialising in TB in England, with most employed in the NHS and PHE (PHE, 2014a).
- The annual accounts of the HPA in its final year of operation (2013) listed 171 nurses on its staff.

NMC (2012):

- 37 family health nurses, and 175 general public health nurses on the SCPHN register in the UK in 2012.

Estimated range (by headcount)

350–750

This range takes into account that:

- Approximately 340 nurses employed by PHE as of June 2014
- At least 200 nurses specialise in TB nursing, mostly in the NHS
- Just over 200 nurses across the UK are registered as family health or general public health nurses.

CfWI confidence in estimate

Low – no consistent registration or reporting of this role

Staff group: Public health nurses (excluding school nurses and health visitors)

Employers (incl. typical roles)

Public health nurses work in local authorities, PHE and the NHS, most commonly in health protection teams.

Training routes

These nurses must first qualify as a nurse/midwife and register with the NMC.

Registration body

Nurses must be registered with the **NMC**, and must revalidate in order to maintain their registration. The NMC regulates nursing practice, not public health practice.

Source: CfWI analysis

Section C: People working primarily at levels 5 to 7 of the PHSKF

Four of the core public health roles identified in this report, work primarily in the mid-tier levels of the PHSKF: health visitors, school nurses, public health practitioners and environmental health professionals. People in these roles primarily work in delivery functions across the main domains of public health.

8. Health Visitors

- Work as part of a primary healthcare team, assessing the health needs of individuals, families and the wider community
- Aim to promote good health and prevent illness, by offering practical help and advice, in particular delivering the Government's Healthy Child Programme
- Commissioned currently by the NHS, will be commissioned by local authorities from October 2015
- Specially trained nurses or midwives who have trained for an additional year in child health, health promotion, public health and education to become qualified practitioners in health visiting
- Must be registered with the NMC as a qualified health visitor.

The main sources of data are the NMC and the HSCIC.

Table 11: Health Visitors

Staff group: Health Visitors

Available data (incl. trend from recent years if available), quoting data sources

HSCIC (September 2013):

- 10,980 qualified health visitors in the NHS in England.

Estimated number (by headcount)

11,000

This figure takes into account that there were 10,980 **qualified** health visitors working in the NHS in England in September 2013.

CfWI confidence in estimate

High – supported by data from the HSCIC

Employers (incl. typical roles)

Currently employed by the **NHS**. Will be employed in and commissioned by **local authorities** from 2015.

Staff group: Health Visitors

Training routes

- **To qualify in health visiting, one must first qualify as a nurse, before mandatory completion of an NMC-approved course in health visiting to degree or postgraduate level.** Programmes are required to have an overall length of 52 weeks (of which 45 are programmed weeks), which may be delivered full-time or part-time. Health visitors need to meet NMC standards in the following 10 areas:
 - Surveillance and assessment of the public's health and wellbeing
 - Collaborative working for health and wellbeing
 - Working with and for communities to improve health and wellbeing
 - Developing health programmes and services and reducing inequalities
 - Policy and strategy development and implementation to improve health and wellbeing
 - Research and development to improve health and wellbeing
 - Promoting and protecting the population's health and wellbeing
 - Developing quality and risk management within an evaluative culture
 - Strategic leadership for health and wellbeing
 - Ethically managing people, self and resources to improve health and wellbeing.
- **Upon completion, a nurse must be registered on the SCPHN section of the NMC register as a health visitor.**

Training statistics:

- 2,787 commissions for 2013-14, falling by 63 per cent to 1,041 during the 2014-15 year
- 2,606 started health visitor courses in 2013, compared to 1,631 from April to December 2012. A total of 1,726 completed health visiting training in 2013, compared to 939 from April to December 2012.

Registration body

Health visitors must be registered as nurses/midwives with the NMC and must revalidate in order to maintain their registration. Health visitors register on the SCPHN section of the NMC register, upon completion of a health visiting qualification.

Issues/notes/comments

The health visiting workforce is expanding by 4,200 FTE from 2011 to 2015 under the Government's 2011 *Health Visitor Implementation Plan* (DH, 2011).

Source: CfWI analysis

9. School nurses

- Commissioned by local authorities from the NHS and working in schools, others are employed directly by independent schools and local authorities
- The DH's 2012 paper *Getting it right for children, young people and families* outlined a four stage model for the role of school nursing centred around safeguarding children and involving the following areas:
 - Leading on public health within schools, notably in promoting, protecting and providing public health
 - Leading, coordinating and providing services to deliver the Healthy Child Programme for children aged 5 to 19
 - Helping children and families gain additional help and support when required
 - Providing and coordinating additional services for vulnerable children, young people and families (DH, 2012c)
- Typically work in schools to improve public health among pupils and students
- Work primarily in health improvement and health protection
- Registered with the NMC.

The main sources of data are the NMC and the HSCIC.

Table 12: School nurses

Staff group: School nurses

Available data (incl. trend from recent years if available), quoting data sources

HSCIC (September 2013):

- 1,455 qualified school nurses (i.e. have completed a postgraduate qualification in school nursing) working in NHS
- 3,866 in total working in school nursing (which includes both those who have completed a postgraduate qualification and those who have not).

The difference in numbers reflects the fact that unlike health visiting, a postgraduate qualification in school nursing is not a prerequisite for working in school nursing.

Estimated number (by headcount):

4,000

This figure takes into account that there are:

- Just under 4,000 nurses working in school nursing within the NHS, including just under 1,500 qualified nurses.

CfWI confidence in estimate

High – supported by data from HSCIC

Employers (incl. typical roles)

- Typically work in a **number of schools (within the public sector), at both secondary and primary level**
- School nurses are typically commissioned by local authorities and employed by NHS trusts; some will work in independent schools.

Staff group: School nurses

Training routes

To work in school nursing, a registered nurse must first qualify as a nurse; a nurse can choose to work in school nursing immediately after initial registration.

A nurse can choose to complete an NMC approved SCPHN course in school nursing to become a qualified school nurse. To qualify as an SCPHN, a nurse must complete an NMC-approved SCPHN course at a degree level. Programmes are required to have an overall length of 52 weeks (of which 45 are programmed weeks), which may be delivered full-time or part-time.

Qualified school nurses meet NMC standards in the following areas:

- Surveillance and assessment of the public's health and wellbeing
- Collaborative working for health and wellbeing
- Working with and for communities to improve health and wellbeing
- Developing health programmes and services and reducing inequalities
- Policy and strategy development and implementation to improve health and wellbeing
- Research and development to improve health and wellbeing
- Promoting and protecting the population's health and wellbeing
- Developing quality and risk management within an evaluative culture
- Strategic leadership for health and wellbeing.
- Ethically managing people, self and resources to improve health and wellbeing.

Upon completion, a nurse becomes a qualified school nurse and must be registered on the SCPHN section of the NMC register.

Training statistics:

224 commissions for the 2012-13 academic year, 192 for 2013-14 and 198 for 2014-15.

Registration body

School nurses must be registered with the **NMC, and must revalidate in order to maintain their registration.** If qualified as a school nurse they must register on the **SCPHN** section of the register.

Source: CfWI analysis

10. Public health practitioners

- Work across the public health system, including within PHE, local authorities and provider organisations
- Work across any of the three main domains of public health (health protection, health improvement, healthcare public health), but may focus on a single topic (usually within health improvement)
- Registration as a public health practitioner is not required; however may be registered with UKPHR if local area has a practitioner registration scheme
- Depending on qualification and experience, may be registered with number of bodies (e.g. UKPHR/HCPC/NMC/GPC).

There is very limited data on practitioners, although some data is collected by the UKPHR.

Table 13: Public health practitioners

Staff group: Public health practitioners

Available data (incl. trend from recent years if available), quoting data sources

UKPHR (March 2014):

- By February 2014, 109 practitioners have chosen to register with the UKPHR.
- Estimate of a total of 10,000 public health practitioners across the UK. This is a UKPHR estimate, based on its informed understanding of the workforce rather than a detailed data collection exercise.

There is no national data about how many people work in practitioner roles delivering public health functions.

Estimated number (by headcount)

Up to 10,000

This number is based on the UKPHR's own estimates across the UK; however there is currently limited evidence available to support this figure.

CfWI confidence in estimate

Low — no consistent registration or reporting of this role

Employers (incl. typical roles)

Main employers are **local authorities, PHE, the NHS and the voluntary sector**. Public health practitioners typically work within specific teams related to health improvement, health protection and healthcare public health.

Sample job roles within local authorities include:

- Public health practitioner (Coventry, Lancashire)
- Health improvement principal (Hertfordshire); public health principal (Wandsworth)
- Health improvement practitioner (Hertfordshire)
- Health improvement practitioner specialist (York)
- Public health strategist (Haringey)
- Public health advanced practitioner (Devon, Lancashire)

Staff group: Public health practitioners

Training routes

There is currently no fixed training route for practitioners. A large range of professions make up the practitioner workforce, all of which have their own training routes.

Typically, working as a public health practitioner requires a first degree or equivalent/professional qualification and experience, although postgraduate qualification in health promotion/development is usually encouraged (NHS Careers, 2014).

In 2013, 54 people registered on the UKPHR as a practitioner, bringing the total registered practitioners to 109 (UKPHR, 2014). Registration requires approval of a portfolio of evidence recognising capability at levels 5 to 7 of the PHSKF, administered through nine local schemes across the UK. Registration must be renewed annually and registrants must undergo revalidation every five years (UKPHR, 2014). These practitioners have usually qualified in another profession (e.g. nurse, environmental health officer) and have practised for some time in public health functions.

An **advanced practitioner pilot registration scheme** will be available from autumn 2014, via the West Midlands public health practitioner scheme. The aim of the scheme is to:

- Offer quality assurance to employers for this level of practice
- Offer recognition to employees.

As a prerequisite for accreditation of advanced practice, professionals must have first achieved practitioner registration with the UKPHR, and must be up-to-date with continuing professional development and other future requirements for revalidation.

Current thinking is that this will be based on application, applicant's evidence, employer (or equivalent) verification and interview. It is unlikely that applicants will be expected to produce a new portfolio for assessment, and piloting is due to commence in autumn 2014.

Recruitment will commence in July 2014 for September 2014. Practitioners accepted onto the Advanced Practitioner Scheme will participate in a bespoke Part A Tutorial programme delivered by a West Midlands university, and undertake the FPH's Part A exam in June 2015.

As part of the commitment of Health Education West Midlands to on-going development of the public health workforce, ST3 entry to the Public Health Higher Speciality Training Scheme will then be available in the West Midlands to those completing advanced practitioner registration – meaning that one can qualify as a specialist within three years.

Registration body:

Practitioners can choose to register as a practitioner with the **UKPHR** on successful assessment of a portfolio. Some practitioners may choose to join the CIEH. Associate membership is available to people who work in, or have an interest in, environmental or public health. Accredited associate membership is available to people with a range of related qualifications who fulfil CPD requirements.

If registered as nurse/midwife or allied health professional with a protected title (e.g. chiropodist/podiatrist, dietician, occupational therapist, physiotherapist, practitioner psychologist), with the **NMC or HCPC**.

Issues/notes/comments

The UKPHR highlighted the following issues:

- Terms and conditions and security of employment are both issues (with many practitioners feeling insecure or unhappy following the 2013 reorganisation of public health services)
- Practitioners regard increasing professional opportunities as a positive (following the transfer of public health to local authorities) (UKPHR, 2014).

Source: CfWI analysis

11. Environmental health professionals

- Generally employed by local authorities
- Work in improving, monitoring and enforcing public and environmental health standards
- Responsible for developing, coordinating, implementing and enforcing public health policies locally
- Key areas of work including: food safety/nutrition, workplace health and safety, housing conditions, noise levels, air pollution control and communicable diseases
- Tend to be employed within distinct areas of regulation, e.g. food safety, health and safety, housing, environmental protection
- Work predominantly in health protection, but also work in health improvement
- Regulated by the Chartered Institute for Environmental Health (CIEH).

The main source of information is the CIEH, the main representative body for environmental health officers working in England, Wales and Northern Ireland.

The CfWI has distinguished between environmental health professionals and public health practitioners, given that the vast majority of environmental health professionals worked in local authorities prior to the April 2013 reorganisation and environmental health has long had a specific route for qualification. Consequently, environmental health professionals have usually not been included in local authority public health teams, unless an individual council decides to group environmental health with public health, which is the case with Hartlepool Borough Council (PHE and LGA, 2014).

Table 14: Environmental health professionals

Staff group: Environmental health professionals
Available data (incl. trend from recent years if available), quoting data sources
CIEH (March 2014): There are 9,664 members of the CIEH in the UK, of which 8,368 work in England. CIEH membership is available to people who work in, or have an interest in, environmental or public health. There are 5,570 members in England, Wales and Northern Ireland who are either chartered members (who must complete 30 hours CPD per year) or graduate/voting/fellow members (who must complete 20 hours CPD per year).
Environmental Health Registration Board (EHRB) (March 2014): 6,514 people on the register recorded as having completed CIEH accredited degree qualifications in environmental health since 1975.
The Office of National Statistics (2013): Estimate of approximately 13,000 environmental health professionals in the UK. People in this category include air pollution inspectors, environmental health officers, food inspectors, public health inspectors and technical officers in environmental health, and work across the UK.
Estimated range (by headcount)
5,500-8,500 (including at least 4,000 in local authorities) The higher number is based on CIEH membership from England. The lower number is based on the number of CIEH members across the UK for whom either CPD is obligatory, or have CIEH accredited degrees in environmental health.
CfWI confidence in estimate

Staff group: Environmental health professionals

Moderate

Employers (incl. typical roles)

The main employers of CIEH members in the UK are:

- Local authorities, with 4,418 people
- Training companies (490 people)
- Charities (291 people)
- Universities (138 people).

The employer of 3,599 people on the CIEH register is not recorded.

Training routes

There are numerous routes into a career in environmental health, with CIEH membership open to people working in or with an interest in environmental or public health.

The CIEH offers accredited qualifications to technician or practitioner level, required for graduate or voting membership. At present, approximately 120 people qualify as practitioners and 30 as technicians, per year. Candidates for practitioner complete a CIEH accredited BSc or MSc Environmental Health programme, then complete a period of work-based learning which may be with a local authority environmental health department, a commercial organisation or combination of the two. Work-based learning usually takes about 12 months and can be completed during a sandwich year of the degree, but most candidates complete this after graduating (CIEH, 2014). Candidates for technician complete a CIEH-accredited course at a university or college, which must be at least level 5 of the PHSKF. Candidates complete six months work-based learning either alongside or after their taught course (CIEH, 2014). When candidates have successfully completed the environmental health practitioner qualification their name is passed forward to the EHRB, which maintains the register (CIEH, 2014).

Qualified environmental health practitioners and technicians are required to undertake continuing professional development (CPD) throughout their careers; there is a chartered status scheme where environmental health practitioners can become chartered 5 years after qualification (CIEH, 2014).

Registration body

Chartered Institute for Environmental Health (CIEH).

Separate register of all environmental health professionals who have completed degrees in environmental health is maintained by EHRB.

Issues/notes/comments

The main issues identified by the CIEH are:

- Cuts in spending in local authorities has reduced the number of work-based learning opportunities, which are required for qualification and the funding available for attending courses
- Senior staff are not being replaced, resulting in a lack of skills in some employers.

Observations:

- Environmental health degrees/qualifications are currently not commissioned by HEE.
- Regions referenced by the CIEH do not correspond to HEE LETB and PHE centre boundaries.

Source: CfWI analysis

Section D: Local authority staff

A particular challenge in this project has been the limited data available on staff working in public health functions within local authorities, with no publically held data on staff working within local authorities.

In response, we have sought to gauge the typical numbers of people working in local authority teams at all levels and functions, on the basis of organisational charts available in 12 local authority public health teams. The local authorities were chosen in order to ensure balance between:

- Two-tiered local authorities and unitary authorities
- London and non-London local authorities
- Joint and non-joint arrangements (e.g. sharing of a Director of Public Health)
- Larger and smaller local authorities.

The CfWI has made the following assumptions in presenting the local authority workforce data in Table 15:

- Directors of Public Health are counted separately from consultants and specialists
- Consultants and specialists are grouped under one category
- Analysts are grouped under knowledge and intelligence
- Staff with explicitly defined management responsibilities are counted under managers
- Staff with explicitly defined commissioning responsibilities are counted under commissioners
- Staff with explicitly defined nursing responsibilities are counted under nurses
- General roles, not referring explicitly to management or commissioning responsibility but within scope of this project, are counted under practitioners.

Table 15: Staff headcount composition within sample local authority public health teams

Local authority	Date	Director of Public Health	Consultants and specialists	Knowledge and Intelligence	Practitioners	Managers	Commissioners	Nurses
Bedford/Milton Keynes/ Central Bedfordshire	Apr 14	1	6	5	30	20	6	1
Cornwall	Nov 13	1	8	1	10		N/A	N/A
Coventry	Apr 14	1	5	3	4	6	2	N/A
Devon	Apr 14	1	11	3	3	5	2	N/A
Durham	Apr 14	1	8	1	1	8	N/A	N/A
Haringey	Nov 13	1	4	2		6	9	N/A
Harrow/Barnet	Aug 13	1	15	1	2	4	N/A	N/A

Local authority	Date	Director of Public Health	Consultants and specialists	Knowledge and Intelligence	Practitioners	Managers	Commissioners	Nurses
Hertfordshire	Apr 14	1	15	1	2	4	N/A	N/A
Nottinghamshire	May 13	1	6	5	35		2	2
Wandsworth	May 13	1	3		2	3	N/A	N/A
Wigan	Apr 14	1	1			3	N/A	4
York	Apr 14	1	2	1	1	5	N/A	N/A

Source: CfWI analysis of local authority data; sources given in References

Based on the above, it is clear that:

- **Every local authority has made arrangements for a Director of Public Health, as required by the Health and Social Care Act 2012** (whether for one council or for more than one council as is the case for Harrow/Barnet and Bedford/Milton Keynes/Central Bedfordshire).
- **Smaller councils (usually unitary authorities) typically have three or four consultants and specialists**, while **larger two-tier authorities or councils with joint arrangements** (for example, Devon, Bedfordshire) **will have a much larger number, usually between five and 15 consultants**. This may simply be a question of scale, and possibly reflect a greater need for coordination between the county and district councils. From the 12 councils sampled above, the CfWI counted 84 consultants and specialists: an average of seven consultants and specialists per local authority.
- **Smaller unitary councils tended to employ one to two knowledge/intelligence professionals, if at all; larger authorities by contrast tended to have a larger team (three to five people)**. On average, the 12 local authorities tested employed a total of 28 knowledge and intelligence professionals (an average of just over two professionals per local authority). This suggests that there may be approximately 300 people working within local authorities in knowledge and intelligence.
- **A small number of councils report public health nurses as part of their core team.**
- For other roles, **it is far more challenging to identify precise numbers of public health staff**. The above evidence for the 12 councils surveyed show that smaller unitary councils such as Haringey and York tended to employ between five and 10 people in practitioner/managerial/commissioning roles, while larger joint council teams tended to employ at least 10 people— with the joint Bedford/Central Bedfordshire/Milton Keynes team employing over 40. On average from the 12 councils surveyed, there were between 14 and 15 people exercising these roles per council— which may suggest a total of approximately 2,200-2,300 people working in practitioner, managerial and commissioning roles within local authorities.

However, with job titles subject to considerable variance depending on the council, estimating both the precise number of these people and what function they exercise are difficult to do with accuracy. For example, some councils place greater emphasis on managerial roles: Coventry make use of four programme managers and two project managers; Nottinghamshire has 35 senior public health managers and public health managers; Haringey has six people in 'commissioning strategist' roles. The result is difficulty in comparing like with like,

especially when compared to defined or protected roles such as Director of Public Health or public health consultant/specialist.

More information on the data limitations within local authorities can be found in section 3.5.

2.5 Summary of main findings

A summary of the main findings for each of the main workforces can be found in Table 16. Numbers provided are for headcount rather than individual roles or FTE and in most cases are estimates. **These estimates suggest the number of core public health workers in England is likely to range from around 36,000 to 41,000 people.**

Out of these, approximately:

- **2,000 to 3,000 people work primarily at higher levels of the PHSKF (levels 8 to 9)**
- **3,000 to 5,000 people work across levels 5 to 9 of the PHSKF**
- **31,000 to 34,000 people work primarily at levels 5 to 7 of the PHSKF.**

The size of the range indicates the lack of reliable workforce data for several professions or staffing groups.

The four largest core public health roles are health visitors, school nurses, public health practitioners and environmental health professionals. Combined they account for around 31,000 to 34,000 staff, approximately 80 to 85 per cent of the total core public health workforce.

The size of the range indicates the lack of reliable workforce data for several roles. Out of the 11 categories outlined above, three are supported by little available data, four have moderate data and four, are considered by CfWI robust estimates based on quality data. This suggests considerable uncertainty around actual numbers working in public health and variable data quality and availability. These are key challenges and are discussed in some detail in Section 4. There are approximately 16,000 to 17,000 professionals for whom the CfWI is confident in the estimate, approximately 8,000 to 13,000 professionals for whom the CfWI has moderate confidence in the estimate, and at least 11,000 for which there is limited verifiable data. This suggests that data quality is good or moderate for approximately 70 per cent of the core public health workforce.

For further reading related to mapping the core public health workforce, please find the following documents at the links provided below:

- Mapping the core public health workforce infographic: www.cfwl.org.uk/keyfindingsinfographic
- Literature Review: www.cfwl.org.uk/publichealthlitreview
- Immunisation infographic and briefing paper: www.cfwl.org.uk/immunisationsinfographic

Table 16: Summary findings of the main core workforces in public health in England

Role	Numbers		Employer and functions		Education, training and CPD			Obligatory registration
Role	Estimated range (by headcount)	CfWI confidence in estimate ⁵	Primary employer (setting)	Main functions ⁶	Protected title?	Formal training	Training and commissioning responsibility	
People working primarily at higher levels of the PHSKF (levels 8 and 9)								
Consultants and specialists	1,200–1,300; plus 250–350 registrars	High	Local authorities PHE (Policy)	All	✓ consultant	Postgraduate	HEE	GMC GDC UKPHR
Directors of Public Health	130 (included in figure above)	High	Local authorities (Policy)	All	✓ (statutory role)	Postgraduate	N/A	GMC GDC UKPHR
Public health academics	200–300	Moderate	Universities PHE (Research)	APH	X	Postgraduate	Universities	X
Managers	600–1,200	Low	Local authorities (Community)	All	X	None	N/A	X
People working across levels 5 to 9 of the PHSKF								
Public health scientists	1,500 –2,500	Moderate	PHE (Research, Delivery)	HP	✓ if biomedical/ clinical scientists with HCPC	Undergraduate or Postgraduate	HEE Universities	If practising bio-medical or clinical scientist, HCPC)

⁵ Throughout the report, the CfWI has assessed confidence of the data available to it. Where confidence in the estimate is low, there is no, or minimal, data to support the figure. Where confidence in the estimate is moderate, there is some data available to support the estimate but no definitive dataset available from a regulatory body or the HSCIC. Where confidence in the estimate is high, it is supported by data from a regulatory body or the HSCIC.

⁶ HI= Health Improvement, HP= health protection, HC= health commissioning, HIK= health intelligence, APH = academic public health

Role	Numbers		Employer and functions		Education, training and CPD			Obligatory registration
Role	Estimated range (by headcount)	CfWI confidence in estimate ⁵	Primary employer (setting)	Main functions ⁶	Protected title?	Formal training	Training and commissioning responsibility	
Knowledge and intelligence professionals	1,000 –1,300	Moderate	Mostly PHE, some LA (Research, Delivery)	HIK	X	None	N/A	X
Public health nurses (family health, health protection public health, excluding health visitors and school nurses)	350-750	Low	All (Delivery)	HI/HP	✓ nurse	Undergraduate or Postgraduate	HEE (nurses)	NMC
People working primarily at levels 5 to 7 of the PHSKF								
Health Visitors	11,000	High	NHS (will be commissioned by local authorities from 2015) (Community)	HI/HP	✓ nurse/health visitor	Postgraduate	HEE	NMC
School Nurses	4,000	High	NHS Trusts (commissioned by local authorities) (Community)	HI/HP	✓ nurse	Postgraduate	HEE	NMC
Practitioners	Up to 10,000	Low	Local authorities (Community)	All	X	None	N/A	X
Environmental health professionals	5,500-8,500	Moderate	Local authorities (Community)	HI/HP	X	Undergraduate	Universities	EHRB
Source: CfWI analysis								

3. Key challenges

During the course of this project, the CfWI identified a number of challenges associated with understanding the core public health workforce and mapping core public health workforce roles. These challenges are discussed below.

3.1 Workforce data availability and measurement

Our findings indicate several challenges related specifically to measuring the core public health workforce: **defining public health professions, whether certain roles should be counted as core to public health delivery, and gaps in data availability.**

Workforce data availability is a widely acknowledged challenge for public health workforce planning, with the *Public Health Workforce Strategy* conceding that ‘current information about the public health workforce is poor and better data is needed to underpin workforce planning and capacity building’ (DH, LGA and PHE, 2013).

The reorganisation in public health under the Health and Social Care Act 2012 has also brought about a number of challenges, not least shifting most public health staff from the NHS to a new executive agency in PHE and to local authorities, which now have responsibility for the majority of public health services. One effect of the reorganisation has been to reduce the amount of data recorded on public health professionals, especially those in consultant and specialist roles. People working in local authorities are not counted by the HSCIC’s annual census, and those working in PHE are also excluded from the HSCIC’s recorded data (HSCIC, 2014a).

There is also considerable variation in how professions are defined. While ‘public health consultant’ is a protected title meaning that one must be registered with either the GMC or GDC to practise, there are no protected titles for other professions with regard to their public health practice (although nurses and healthcare scientists working in public health must be registered with other bodies in order to practise as a nurse or a healthcare scientist).

This pre-existing lack of clarity on definitions has characterised previous attempts of mapping the workforce. For example, the Government’s *Public Health Workforce Strategy* (DH, PHE and LGA, 2013) did not pursue an approach in its preceding consultation document, where it proposed classifying staff working in public health as either consultants and specialists, specialist practitioners, practitioners with some public health component work, or wider workforce (DH, 2012a).

Health Education North West and Health Education Thames Valley have recognised measurement issues in understanding their public health workforce. Both organisations have provided the CfWI with case studies which we have included at the end of this report. The difficulty of assessing the public health workforce is reflected in Health Education North West’s work to understand its current workforce, which it has defined as those working in local authority public health teams, PHE centres and registrars training in the area. Its aim by summer 2014 is to gain a greater understanding of the workforces within the 23 local authorities and the three PHE centres, in order to identify shortages, surpluses and skills gaps which need to be addressed in future; including through developing a data collection mechanism through consolidating and reviewing job titles. Lessons from that project are likely to shape the development of the National Minimum Data Set for public

health (on page 52) – highlighting the potential for new solutions as a means of improving measurement. This dataset in particular will examine national occupational codes and how best to measure differing roles.

Similarly, Health Education Thames Valley has worked with local authorities and universities to develop education and training across the whole public health workforce, including pilot courses to improve public knowledge and skills and continuous professional development; and is working actively with other LETBs to share best practices in understanding the workforce. These developments suggest that both innovation and partnership working may be vital for improving how the public health workforce is monitored.

Providing greater clarity around role and job definitions — particularly in terms of functions delivered — will be crucial for measuring and facilitating future development of the public health workforce. Recent work has helped define key functions, tasks, outcomes and members within public health teams (FPH and ADPH, 2012; FPH, 2014a). In January 2014, PHE, the FPH, the ADPH and the LGA announced that they would develop this work further, through providing guidance to help local authorities identify what skills mix they may wish to have in their public health teams (FPH et al, 2014). These projects should help to provide greater clarity in future. A possible question remaining to be answered is which body or bodies would be the best placed to provide this service in future.

3.2 Complexity of the workforce

One feature apparent in the CfWI's findings is the complexity of the public health workforce, and in particular the lack of clearly defined boundaries between different public health workforces.

The routine immunisations programme led by NHS England and PHE provides a good example of this, and is explained in more detail in an infographic with accompanying briefing paper on the CfWI website at www.cfwi.org.uk/immunisationsinfographic. While some workforces such as the screening and immunisation teams in NHS England's Area Teams are easy to identify, other workforces are harder to define, especially in the wider public health workforce. For example, while practice nurses and school nurses have clearly defined responsibilities in immunisation, others such as health visitors also contribute to immunisations (though to a lesser extent), and other nurses play a role (but may not even be identified as a nurse in their job description).

With the principle of 'making every contact count' increasingly central to public health practice, it is likely that a wider range of public health professionals will be involved in delivering services such as immunisation — including nurses, midwives and even those from other health and care professions. Other causes for complexity within immunisation, include differences in how training is provided (and possible implications for the workforce), the extent to which immunisation is central to one's role, and how current roles and functions are delivered.

In addition, Health Education North West found that the complexity of its own public health workforce meant that a new data collection method was needed to support workforce planning and development, while Health Education Thames Valley has worked actively with local authorities in joining up activity in education and training for public health, as shown in a case study at the end of this report.

3.3 The variety of accreditation and registration processes

There are **varying levels of, and obligations for, accreditation and registration** depending on the role delivered. This reflects a welcome diversity within the public health workforce, and the variety of functions which are carried out in public health, and may be desirable.

While the number of possible routes into public health allow for people to pursue successful careers in public health regardless of their background, the mixture of accreditation and registration processes may mean that the number and location of professionals are more difficult to track.

For example, those in public health consultant and DPH roles must register with the GMC, the GDC or the UKPHR. By contrast, there is currently no obligation to register as a specialist, although in January 2012 the Government announced that non-medically qualified public health consultants and specialists would in future have to register with the HCPC (DH, LGA and PHE, 2013).

There is also currently no obligation to register as a practitioner, scientist or knowledge professional in public health, although a practitioner registration scheme through the UKPHR now exists, while nurses, biomedical and clinical scientists and environmental health professionals must register with their respective registration bodies in their own areas (NMC, HCPC and EHRB). Although moves towards obligatory registration for public health specialists and increased availability of registration schemes for practitioners may improve tracking of public health professionals overall, the variety of registration processes will continue to make tracking a complex triangulation process.

The CfWI's analysis indicate that while the variety of accreditation and registration processes reflect the number of functions carried out in public health and the variety of backgrounds within the public health workforce, one result may be that it is harder to track exact numbers in public health.

3.4 Multiple training routes

The diversity of training routes raises a possible question of responsibility and accountability for education and training. This is especially significant for HEE, given the responsibility it has for commissioning education and training places and for ensuring sufficient public health capacity (HEE, 2013a).

However, while HEE commissions training places for public health consultants (through the specialty training route) and specific professions with a key role in delivering public health, such as health visitors and school nurses, HEE does not currently do so for other key roles and functions. These include environmental health, and the academic, scientist and knowledge and intelligence workforces working in public health (although HEE does commission healthcare scientist training places).

HEE, in addition, has limited influence over the education and training for commissioners, managers and practitioners, with numbers and qualifications required determined by employers, such as local authorities. Even for public health specialists, the extent to which HEE can monitor numbers is currently limited — given the existence of a portfolio route for qualification. While specialty training places can be controlled, responsibility for approving portfolios of public health work rests with the UKPHR.

While multiple training routes have increased the diversity of the public health workforce, the corollary is that planning the public health workforce may become more difficult to do systematically — especially if a sizeable

proportion of roles are within local authorities, which may have quite different workforce planning arrangements to those of the NHS.

3.5 Local authority provision of public health services

There is considerable variation in how local authorities deliver public health services, particularly in terms of the number and type of staff in differing roles — although variation between NHS primary care trusts was also common. Given the shift towards localism, it is likely that diverse local models of employment and policy delivery will continue.

However, with current HSCIC data no longer accounting for staff locally as a result of the shift to local authorities, it has become more challenging to compare variation in roles and functions both nationally and locally. Consequently, it is difficult to give a precise figure for the total number of people across England who are delivering, or are needed to deliver, different public health functions locally. This makes it challenging to plan nationally, given a sizeable proportion of staff working in public health now work in local authorities.

The variance within local authorities has been illustrated clearly by a recent joint publication by PHE and the LGA (PHE and LGA, 2014), and also within the individual HEE case studies included in Annex 2. Approaches to delivering public health locally identified include:

- A ‘hub and spoke’ model of a small senior team with public health functions dispersed across the council (North Lincolnshire)
- A Director of Public Health with wider roles in the council, for example adult social services (York; West Sussex)
- A public health team with additional responsibilities including leisure, environmental health and licensing standards (York; Hartlepool)
- A core team with supporting teams in other localities (Bedford and Central Bedfordshire; Dorset, Bournemouth and Poole)
- Other departments supporting public health teams, including as a result of receiving grants (North Lincolnshire, Durham) (PHE and LGA, 2014).

The *Public Health Workforce Strategy* (DH, LGA and PHE, 2013) assessed the number of people transferring to local authorities as around 4,500 people (including consultants, commissioners, health promotion specialists and knowledge and intelligence staff). Yet with public health staff once more in local authorities after a 40 year absence, an issue is that while one can estimate the overall number and proportion of the workforce in local authorities, the change to a new system has resulted in greater uncertainty around numbers fulfilling certain roles and functions.

The CfWI’s *Public health consultants and specialists survey 2013* estimated that approximately half of those in consultant and specialist positions worked in local authorities, and found that uncertainty around career prospects and the role of public health within local authorities was a key factor in understanding job satisfaction and career intentions (CfWI, 2014a).

Consultation with the ADPH suggests that public health employees within local authorities are based within three types of teams:

- **Corporate**, e.g. finance, HR, strategy directorates. This gives public health teams greater influence over corporate strategies and plans.

- **People**, e.g. adults, children directorates. This gives public health teams greater influence over specific services provided, including to vulnerable people.
- **Place**, e.g. leisure, trading standards, housing, planning, transport, or environment directorates (many found in Districts in 2-tier areas). This gives public health teams greater influence over longer term determinants of public health (ADPH, 2014b).

One implication is that for workforce planning in public health to support local authorities effectively in future, **an initial workforce benchmark may be useful to establish how many work in public health services across local government and the variety of roles used to deliver these services.**

This might be a census or the National Minimum Data Set for public health proposed by the *Public Health Workforce Strategy*. The form it takes has to reflect the demands and circumstances of local government, and to fit into their existing workforce planning processes (which will tend to be more linked to the political cycle). There is a possible precedent for such a process; in 2008 the Workforce Review Team developed a public health benchmarking tool for assessing how many people worked in trusts and strategic health authorities in health improvement, health protection, health intelligence and health commissioning (WRT, 2008).

3.6 Recent activity

As the case studies from Health Education North West and Health Education Thames Valley show, LETBs are aware of the issues and are working actively with a range of organisations to gain greater consensus around the composition of their public health workforce.

For instance, the Public Health Workforce Development Network – of which Health Education Thames Valley is a member – looks at public health job roles, approaches to understanding the workforce and sharing good practice. Health Education Thames Valley also works closely with local PHE centres to understand the public health workforce. Similarly, Health Education North West is underpinned by regional local workforce and education groups from a wide range of organisations and sectors, to take into account the networks that already existing in Cheshire and Merseyside, Cumbria and Lancashire and Greater Manchester, and has worked actively with local authorities and employers to improve data collection and coding for public health professions. Health Education West Midlands' public practitioner development scheme demonstrates the potential of using a structured training programme to give greater recognition to practitioners, whatever the setting and employer (Health Education West Midlands, 2014)

This may suggest that **greater sharing of experience and methodological approaches** — allied with aggregated data — may help in improving planning locally.

For further reading related to mapping the core public health workforce, please find the following documents at the links provided below:

- Mapping the core public health workforce infographic: www.cfwl.org.uk/keyfindingsinfographic
- Literature Review: www.cfwl.org.uk/publichealthlitreview
- Immunisation infographic and briefing paper: www.cfwl.org.uk/immunisationsinfographic.

4. Discussion and considerations

4.1 Context

Understanding the size of the public health workforce and the different roles that exist within public health is, as the evidence in this report shows, complex. This is due to the large variety of workforces, organisations and means of registration that exist in public health. Also, the emphasis in public health workforce planning is to focus on the outcomes delivered, rather than on the specific workforce resources required to deliver the outcomes, and there are typically a number of ways in which public health outcomes can be delivered.

There has been a considerable amount of work in recent years to understand the shape of the public health workforce, with a number of projects currently looking to increase understanding of the core roles, functions and outcomes required to deliver good quality public health services, including:

- A DH consultation with other organisations **to extend statutory regulation to non-medically qualified public health specialists** with the HCPC (DH, LGA, and PHE, 2013)
- PHE, LGA and other organisations development of a **National Minimum Data Set** for the public health workforce to support workforce planning for specialists and the wider workforce (DH, LGA, and PHE, 2013). This is building on existing work by Health Education North West, PHE, the DH and the HSCIC (see HEE case studies at the end of this report)
- The ADPH, the FPH, the LGA and PHE are **development of guidance for local authorities on ensuring effective multidisciplinary teams locally** (ADPH et al, 2014)
- The UKPHR have **nine local practitioner registration schemes** in England to register public health practitioners (UKPHR, 2013), with **Health Education West Midlands launching an advanced practitioner development scheme** (HE West Midlands, email communication, 2014)
- The FPH is working to **update the curriculum and assessment systems of specialty training** to take into account recent changes to regulatory standards (FPH, 2013b), and **has recently published a policy paper outlining the main functions of public health to be delivered locally** (FPH, 2014a)
- The CfWI is undertaking a **stocktake on public health scientists**, which will provide a better understanding of the range, diversity and specialisms within this workforce and any implications for future numbers (CfWI, 2014b).

In addition, revalidation is becoming a reality for all medically qualified consultants and specialists, and the current government is committed to obligatory registration for all specialists. This may mean better access to workforce data in the long-term.

4.2 Activities in progress

The following projects and activities are already in progress:

- **Use of the definitions in this report by HEE and other stakeholders for workforce planning**

Some individual HEE regional teams have expressed interest in using these definitions for their workforce planning and, as part of work on the National Minimum Data Set for public health, work is already in hand

to align these findings with work taking place in parallel which is being led by Health Education North West, PHE and the HSCIC.

- **Local training and development schemes**

As outlined in the HEE case studies at the end of this report, there is good work already taking place towards developing local training schemes. One example is the advanced practitioner scheme and ST3 entry to public health speciality training being introduced by Health Education West Midlands (see Section 2) which has the potential to encourage further development of the public health workforce, providing a more cohesive and integrated career pathway with greater links between practitioners and consultants/specialists.

As the CfWI's *Public Health Consultant and Specialist Survey 2013* acknowledged (CfWI, 2014a), some proposed actions towards strengthening local training schemes include building stronger networks and communities of interests, closer working on training development and good practice to remove barriers between different employers, and developing training courses focused on engaging more effectively locally (for example, through strategic leadership).

Local development, through both the actions outlined above and the skills passport (explained below), could therefore be used to facilitate career development and provide greater support and monitoring of the workforce, and thereby ensure that any national actions are both proportionate and appropriate.

- **Implementation of a public health skills passport**

One key deliverable under the *Public Health Workforce Strategy* (DH, PHE and LGA, 2013) was a public health skills passport, which aims to record of a person's training, education and vocational experience and to provide a structure and mechanism for career and workforce development. The skills passport is designed to help facilitate career development, through making it easier for public health professionals to transfer between different kinds of organisation (for example, PHE, local authorities, universities and the NHS).

Work is currently underway; an initial consultation period to gauge interest in the project and in the project's design ended in April 2014. This work will need to align with other projects, including any further reviews of the PHSKF. If fully implemented, the passport could make it easier for people to move around the public health system.

This would be significant, with the CfWI's *Public Health Consultant and Specialist Survey 2013* identifying a perceived lack of a clear career structure across the public health system (CfWI, 2014a). This may be preventing people from broadening their skills by moving between, for example, PHE, local authorities and academia. A skills passport may also help enable positive actions identified by the survey, notably stronger networks, closer working on training, and tailoring of training courses to meet particular competencies (CfWI, 2014a).

- **Development of a National Minimum Data Set which takes into account both roles and functions in public health**

Improved understanding of how many people work in specific types of roles and functions could improve both planning and commissioning in the long term.

The CfWI recognises the work already in hand here, and has supported the working group tasked with this activity set up following the *Public Health Workforce Strategy* (DH, LGA and PHE, 2013). The CfWI has also sought to align its conclusion with implementation of the dataset in mind, as this will be crucial to improving workforce tracking and planning, not least in understanding how many work in public health, and especially within local government (where data is currently not collected) and within PHE (where data is not included in reported statistics).

However, the CfWI recognises that the dataset will need to work effectively for local authorities and others outside the NHS, and in particular ensure the collection of information from local authorities does not impose too significant a burden on their resources. The CfWI understands from DH that it is unlikely that the Government will mandate the use of the Minimum Data Set once it has been finalised, and so the need to 'sell' the benefits to employers will be a major challenge, as will the need to provide clear guidance and support to secure good quality data.

4.3 Possible actions

The CfWI has offered possible actions for policymakers to consider, taking into account both work in progress and the challenges raised by the *Public health consultants and specialist survey 2013* (CfWI, 2014a). **The following may be deliverable within reasonable timeframes and costs, and align with existing policies:**

- **A census of the public health workforce, to establish a baseline and follow up on this report**

While data for some roles, functions and organisations is readily available (notably consultants, and staff working in PHE), data for other parts of the public health workforce is poor. There is possible scope for conducting a census of the public health workforce, on similar lines to the workforce comparison tool developed by the Workforce Review Team in 2008 (WRT, 2008). Data on the workforce is patchy, and this census could be focused initially on areas of greatest uncertainty, such as managers and practitioners.

However, this would require clearly defined and agreed coding beforehand— and so it may be prudent to follow full implementation of the National Minimum Data Set and changing registration requirements, for it to add the most value. Achieving a sufficient response rate may also be difficult to achieve, especially if the system has bedded down and there is no immediate incentive to warrant the exercise (unlike before April 2013, where human resources transition was a relevant issue). As a project of this kind could also incur considerable costs in data collection, especially on commissioning bodies and on local authorities where a large number of public health staff would be employed; a valid question is whether this project would deliver value for money.

A more pragmatic solution may therefore be to encourage a more developmental approach locally, centred on workforce strategies by HEE through the work of LETBs and local authorities, pending full implementation of the National Minimum Data Set.

- **A project to map the wider public health workforce**

The focus of this report is the core public health workforce. A suggested complementary activity may be to review the wider public health workforce, to build an understanding of how these staff engage with public health issues, how their public health training requirements are met, and how much interaction or movement there is between the core and wider workforces. It would, moreover, enable understanding of

the full extent of training and development needs across public health as part of the MECC initiative which emerged as part of work by the NHS Future Forum (NHS Future Forum, 2012).

The wider workforce would include all staff with at least a partial public health remit (the immunisation infographic shows how many staff groups this may be). Definition of scope would need to be tight, but the wider workforce would likely include staff with healthcare training (e.g. GPs, pharmacists, practice nurses, dentists), local authority policy teams (e.g. housing, transport) and many front line public servants (e.g. social workers, teachers, leisure centre staff). It may need to include public services delivered by provider organisations (e.g. private sector, third sector), whether commissioned by government or not.

- **A project to deploy horizon scanning techniques to specialist training for consultants/specialists**

The purpose of this project would be to build a better understanding of the demand and supply situation for senior public health staff, and in particular understand more the 'demand line': what factors could determine demand for senior public health staff in the future.

An enabler for a project of this kind is that data for consultants and specialists, whilst not perfect, would be available through a variety of sources, including the HSCIC, HEE (and its LETBs), the GMC, the FPH and the ADPH. This would mean that horizon scanning techniques as being carried out by the CfWI for PHE scientists (CfWI, 2014b), could conceivably be used to identify both possible factors and scenarios that might drive demand (and therefore supply) for public health consultants and specialists. In addition, as a number of recent surveys have shown (e.g. ADPH, 2014a; BMA, 2014; CfWI, 2014a; PHE, 2014c; RSPH, 2014), there are a number of issues that are affecting or have affected consultants and specialists in recent years— and so there may be a case for strengthening the evidence base for this workforce.

Together, these suggestions may raise the profile of public health workers, make the tracking of roles easier and give policymakers more opportunity to influence the size and skills of the workforce.

For further reading related to mapping the core public health workforce, please find the following documents at the links provided below:

- Mapping the core public health workforce infographic: www.cfwi.org.uk/keyfindingsinfographic
- Literature Review: www.cfwi.org.uk/publichealthlitreview
- Immunisation infographic and briefing paper: www.cfwi.org.uk/immunisationsinfographic

Further information: The National Minimum Data Set for public health

The *Public Health Workforce Strategy* (DH, PHE and LGA, 2014) stated that better access to data was needed to improve workforce planning and building capacity.

In the past, information about the majority of public health staff— especially those in consultant and specialist roles — was gathered through the Electronic Staff Record, which collects information from individual NHS organisations based on HR and payroll records. However, with a number of posts now located in local authorities following the 2013 reorganisation of public health— and therefore not collected through the Electronic Staff Record— public health data collection has become more pressing an issue.

In response, the Department of Health (DH) established a working group under its leadership to help develop a voluntary National Minimum Data Set for the public health workforce, on similar lines to that developed previously for social care between 2003 and 2005 (which faced similar data challenges, with the majority of staff based in either local authorities or the private sector). Members of the working group come from across the public health spectrum, including:

- The Association of Directors of Public Health
- The Centre for Workforce Intelligence
- The DH
- The Faculty of Public Health
- Health Education England (HEE) and representatives from local education and training boards
- The Health and Social Care Information Centre (HSCIC)
- The Local Government Association
- Public Health England (PHE)
- Skills for Care (DH, PHE and LGA, 2013)

The project will develop an outline dataset of the information organisations employing public health professionals need to collect, based on existing national parameters used by the HSCIC. The project will also confirm data collection mechanisms, and build on existing datasets locally and nationally to ensure consistency of definitions, particularly in workforce roles. The project is expected to be complete in the 2015-16 financial year, and will be voluntary for organisations outside the NHS.

The project builds on the wider Workforce Information Architecture project, which was set up by the DH in 2011 to develop a workforce Minimum Data Set (wMDS) across health and social care. The purpose of the wMDS was to ensure all organisations delivering care and funded by the NHS provide data on their current workforce and thereby support education and training commissioning, in the following areas (HSCIC, 2013b):

- Absence (i.e. sickness and absence rates)
- Deployment (i.e. areas of work)
- Education, training and development (i.e. registration/revalidation status)
- Organisation (i.e. employer)
- Personal/operational (i.e. demographic information)
- Staff movement (i.e. headcount, vacancy rates).

As part of this work, a number of organisations underwent mapping exercises to identify and ensure all roles and functions of strategic health authorities and primary care trusts were mapped onto the new NHS architecture, with the aim of supporting staff transfers into new organisations such as PHE. Mapping exercises were highlighted, for instance, in the transition policy for PHE (DH, 2013c).

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i. [Mapping project](#)

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- Dr Kate Ardern, Director of Public Health, Wigan
- Nick Armitage, Health and Social Care Information Centre
- Viv Bennett, Director of Nursing, Department of Health (DH)/Public Health England (PHE)
- Steve Brown, Assistant Director of Public Health, Devon
- Dr Paul Edmondson-Jones, Director of Public Health, York (Office)
- Nicola Hodgkiss, Academic Relationships and Contracts Manager, PHE
- Lauren King, Education Officer, Chartered Institute for Environmental Health
- Dr Anna Lynch, Director of Public Health, Durham (Office)
- Muriel Scott, Director of Public Health, Bedford/Central Bedfordshire/Milton Keynes (Office)
- Lesley Woodman, Workforce Information Manager, PHE

ii. [HEE case studies](#)

- Dr Michael Bannon, Post-graduate Dean, Health Education Thames Valley
- Mike Burgess, Associate Head of Workforce Planning, Health Education North West
- Janis Kirk, Head of Business and Operations, Health Education Thames Valley
- Gillian McLauchlan, Programme Manager, Public Health Workforce, Health Education North West
- Val Messenger, Deputy Director of Public Health, Oxfordshire County Council
- Gill Sadler, Programme Lead, Public Health Workforce, Health Education North West
- Premila Webster, Head of School - Public Health, Health Education Thames Valley

iii. [Immunisations infographic](#)

- Sandra Anglin, Assistant Head of Public Health Commissioning, Operations Directorate, NHS England (Corporate)
- Joanne Bosanquet, Deputy Director of Nursing, PHE
- Helen Donovan, Public Health Nursing Adviser, Royal College of Nursing
- Kenny Gibson, Head of Early Years, Immunisations and Military Health, NHS England (London Region)
- Michele Lawrence, senior lead nurse, PHE West Midlands Centre
- Dr Mary Ramsay, Head of Immunisation, PHE
- Vanessa Saliba, consultant in communicable disease control, PHE
- Joanne Yarwood, Head of Planning and Implementation, Immunisation, PHE

iv. [Public Health Reference Group](#)

- Roy Taylor, Vice-Chair, Governance Board, CfWI
- Dr Michael Bannon, Post-graduate Dean, Health Education Thames Valley
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- Nicola Close, Chief Executive, Association of Directors of Public Health (ADPH)
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- Sally James, Public Health Workforce Specialist, Health Education West Midlands
- David Kidney, Chief Executive, UK Public Health Register
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HEE case studies

As part of this project, two case studies explain how two HEE local education and training boards (LETBs) have approached understanding their public health workforce, given their new responsibilities in public health following the Health and Social Care Act 2012. These case studies were a collaborative effort between the CfWI and Health Education North West and Health Education Thames Valley.

Under HEE's mandate, HEE now has a *'critical role in commissioning education and training for public health specialists and other public health staff in PHE and local government, as well as in embedding public health capacity across the wider NHS, public health and social care system'*. It is therefore increasingly important for HEE to understand their capacity to shape public health.

The two case studies from Health Education North West and Health Education Thames Valley provide two contrasting examples of how LETBs have approached their new responsibilities in education and training commissioning. The objectives of this section are to:

- illustrate possible approaches for understanding the workforce
- identify potential issues to consider when examining the workforce
- stimulate debate around possible approaches to understanding the public health workforce
- support LETBs in their workforce planning for the public health workforce through the above three points.

It is important to note that similar work is taking place throughout all the 13 HEE LETBs in England, as these new organisations establish themselves within the public health system.

Case study 1: Health Education North West

Pen portrait

The population of the North West is seven million, spread across both urban and rural landscapes and facing some of the greatest challenges, including significant areas of deprivation, health inequality and chronic disease. The Health Education North West (HENW) local education and training board (LETB) has the largest workforce in England with approximately 450,000 staff, working in an estimated 15,000 organisations. The health and social care workforce of the North West - including acute, mental health, specialist (including specialist centre hospitals and tertiary care centres), primary care, social care, independent and voluntary sectors - form the largest employing sector within the region. Of the total 203,000 staff (headcount), 174,000 (FTE) work in patient health care across the 41 NHS providers and more than 1,000 GP practices. HENW is the largest statutory sub-committee of Health Education England (HEE), with a funding allocation of approximately £711 million.

The population of the North West is living longer and health is improving for many, but not all, of its residents.

- The health of the population in the North West is generally worse than the England average. However, levels of violent crime and excess winter deaths are lower than average
- Compared with other regions of England, men in the North West can still expect to live 2.9 years less than those in the South East, whilst women can expect to live 2.5 years less than those in the South West.
- The population of working age adults with no qualifications is higher in the North West at 12.8 per cent than the UK average of 11.8 per cent
- Since April 2008 there has been a steady increase in unemployment rates from 6.9 per cent to 8.9 per cent across the North West in March 2012. The most significant increase has been within the 18-24 year age group which saw a 7.1 per cent rise from 14.7 per cent (for the period April 2008 to March 2009) to 21.8 per cent in March 2012. The male population was particularly affected rising from 17.7 per cent to 25.2 per cent over this time period.

To ensure appropriate local influence and deliver on its responsibilities HENW is underpinned by three sub-regional local workforce and education groups (LWEGs), reflecting the detailed intelligence and networks of Cheshire and Merseyside, Cumbria and Lancashire and Greater Manchester areas. Membership of each LWEG has been determined to reflect professional, care sector and educational perspectives, which in turn, is supported by a progressive executive team and a robust and transparent stakeholder engagement framework.

HENW has determined four core priorities to bring focus and purpose to workforce and education investment and activity – the *Five Year Workforce Skills and Development Strategy* being the vehicle to ensure the necessary flexibility and co-production are in place to deliver a system which is responsive to change.

The four core transformational priorities of HENW are to:

- address the impact of the Francis Report and patient safety
- manage the economic environment by supporting skill mix changes and developing service improvement skills
- support and develop the transformational changes to the whole workforce including primary care, to reflect the change in services in the North West
- align to the NHS England Mandate and Public Health Outcomes Framework.

HENW's approach to understanding their public health workforce: a case study

HENW recognises it needs to support people to live longer, healthier and to lead more independent lives. To facilitate and enable this, existing and future workforces must understand and advocate for prevention and well-being in an appropriate manner. Early intervention and prevention is not only better at a personal but also an economical level.

A Public Health Workforce team has been created to drive this vision. The team comprises of four multidisciplinary public health professionals from across the health and social care system. The team's work fits into Health Education England's (HEE's) transformation agenda and is supported by the Head of Transformation. To champion public health at a LETB level, similar to Thames Valley, there is strategic representation from North West Directors of Public Health (DsPH) on both the LETB and Local Workforce and Education Group.

The team works across the public health system, collaborating with all 23 Directors of Public Health in each of the local authorities; three Public Health England (PHE) Centre Directors; and the North West Knowledge and Information Team on both workforce planning and development. It also works with provider organisations and academic institutions on public health skills development. The team is located within Blackburn with Darwen Public Health Department so that they can: keep up to date, 'reality check' their work, and ensure they remain embedded within the public health 'family' and function.

Below is a snapshot of some of the work the team has led over the last 12 months to support both planning and development of the public health workforce.

Leadership Support and Development - Grow Your Own' Programme

In collaboration with the North West Employers organisation, the team created a leadership programme for middle managers within public health across the Yorkshire and Humber and North East regions. The team successfully delivered the programme in the North West in 2013 and with funding from PHE North, a roll out in these other two regions has been agreed. The aim of the programme has been to nurture and support our existing staff to lead in their new environments. Three cohorts of public health managers totalling 150 people have participated. Evaluations highlight a thirst for leadership development and an appetite to network and share ideas with colleagues. Going forward the aim is to support that professional learning and development by creating a 'virtual' professional network of senior public health practitioners using a digital platform *Phlive*: www.phlive.org.uk

New Director of Public Health – 'Futures' Programme

In collaboration with Deloitte's Public Sector, a nine month developmental programme was designed for newly appointed leaders in public health with the aim to support them in affecting and influencing system change. This is complemented by self-facilitated group work and peer consultation and individual and group progress calls.

Systematic Approach to Public Health Workforce Intelligence and Planning

In *Investing in people for health and healthcare: workforce plan for England proposed education and training commissions for 2014-15*, HEE recognises the need to do more to 'understand better not just the demand and supply of the existing workforce but how we can invest in the wider workforce to drive real improvements in

the public's health'⁷. HENW has taken a phased approach to meet this aim. Under the Health and Social Care Act 2012, local authorities and PHE are responsible for delivering the Public Health Outcomes Framework and provide system leadership for public health. Understanding supply and skills gaps of this workforce will provide the foundation in meeting the needs of the whole system.

The first phase has defined the public health workforce as 'Local Authority Public Health teams, PHE Centres and Public Health Speciality Registrars'. The first phase outcomes to be delivered by June 2014 are outlined below:

1. Collate public health workforce data from 23 North West local authorities, three PHE Centres and Public Health Speciality Registrars
2. Gain an understanding of the size, structure and cost of the public health workforce on a local, supra local and North West footprint
3. Highlight shortages, surpluses and potential skills gaps on a local, supra local and North West footprint
4. Create priorities for action that will build the relevant skills and capacity needed.
5. Stimulate discussion with Directors of Public Health on producing a 'vision' for future Local Authority Public Health workforce to inform workforce planning.

Due to the lack of nationally agreed definitions and coding of the public health workforce, interrogation of existing data sources produced intelligence that did not reflect the workforce. A bespoke data collection mechanism was created. The analysis included consolidating and reviewing job titles with each role aligned to a proxy domain using the Public Health Outcome Framework/ Domains of Public Health.

The North West appears to be the first region to create a systematic approach to workforce planning for public health. An unexpected outcome of this work is the use of the North West consolidation job roles as the basis of the National Minimum Data Set for Public Health, due to be introduced in 2015, to which new workforce codes will be aligned.

This intelligence will also contribute to HENW's workforce planning processes. This work is a first step in identifying and understanding the public health workforce capacity and development needs. It is envisaged the second phase will focus on the public health workforce in provider organisations such as health improvement teams and tuberculosis nurses.

Public Health Skills Development

Working collaboratively with academic colleagues across the higher education sector in the North West, the team designed and commissioned an introduction to Public Health Science programme. The aim of the programme provided an introduction to individuals from across the health and wellbeing system to raise knowledge of the technical elements of public health.

Public Health Specialty Training Scheme –Transformation

The programme lead worked with Head of School of Public Health to create a transformation plan for the Specialty Training Scheme. The plan responded to the changing architecture of the care system so that specialist registrars could obtain experience in multiple parts of the system through their training period. It

⁷ Health Education England (2013) Investing in people for health and healthcare: workforce plan for England proposed education and training commissions for 2014/15. p52. Available at: <http://hee.nhs.uk/wp-content/uploads/sites/321/2013/12/Workforce-plan-interactive1.pdf> [Accessed March 2014]

sought to future proof the scheme against the possibility of more structural changes over the next 5-10 years. This plan was approved by the board.

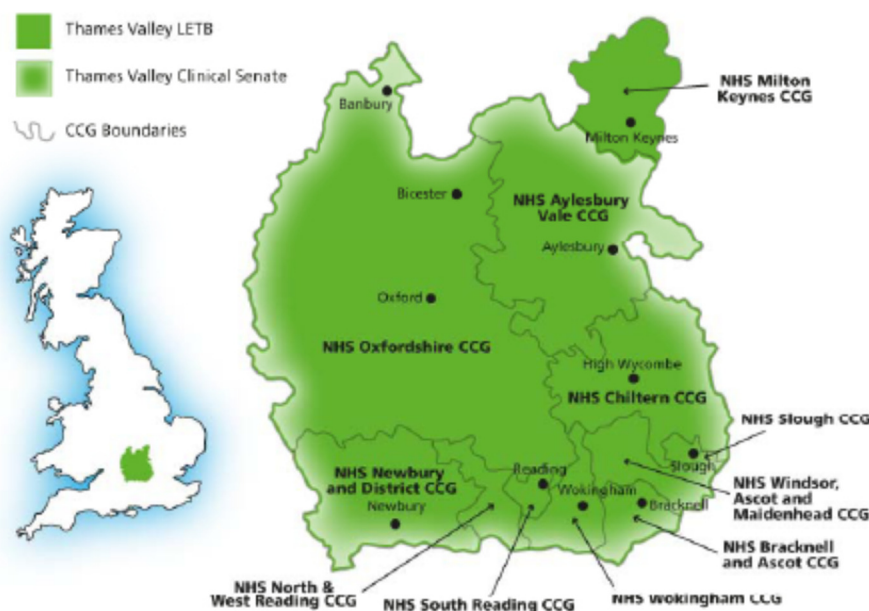
Looking forward

Many of the team's work themes are set to continue in 2014, such as the implementation of the first phase recommendations and commencement of Phase Two. The public health workforce in its various guises has huge potential to support the future picture of care for the North West therefore the team will support HENW's transformation agenda.

Case study 2: Health Education Thames Valley

Pen portrait

Health Education Thames Valley (HETV) covers the geographical area of Berkshire, Buckinghamshire, Milton Keynes and Oxfordshire; serving a population of around 2.3 million, with a funding allocation of approximately £160 million. HETV has nine NHS Trust members and supports an NHS workforce of 40,717 full time equivalent staff in the trusts and primary care. It has 10 commissioned universities providing non-medical education for the larger healthcare professions. The LETB area is coterminous with the Oxford Postgraduate Medical Deanery and is served by the medical school of the University of Oxford. The LETB aligns with the Thames Valley Area Team, the 11 clinical commissioning groups, nine local authorities and the Oxford Academic Health Science Network.



Thames Valley LETB geography showing clinical commissioning group and clinical senate boundaries

The region has a lower age profile than the country as a whole - 14.2 per cent of the population are past retirement age, compared to 19.1 per cent for England as a whole. In addition it has slightly fewer residents aged less than 15 years than the national average, with 18.2 per cent of residents compared to 18.9 per cent for England as a whole. Thames Valley is classified as an affluent area, the local authorities have lower levels of their population living in the most deprived lower super output areas (LSOAs), compared to the national average. LSOAs are a geographic hierarchy designed to improve the reporting of small area statistics in England and Wales and are built from groups of neighbouring [Output Areas](#) that have been automatically generated to be as consistent in population size as possible, and typically contain from four to six Output Areas. The minimum population is 1,000 and the mean is 1,500.

The population of the region generally enjoys good health, as measured across a range of factors:

- Residents in all areas of the region, except males in Reading, have a higher life expectancy than the national average.
- With the exception of Reading and Buckinghamshire, Thames Valley has a lower than average infant mortality rate.
- Oxfordshire, Buckinghamshire, Milton Keynes and most of Berkshire have a mortality rate from all cancers less than the national average. Reading is higher than the national average.
- Hospital admissions for alcohol-attributable conditions are less than the national average in all areas of Thames Valley.
- Mortality rates for circulatory diseases are less than the national average in all areas of Thames Valley, except Reading.
- The proportion of the population who smoke is less than the national average for all areas of Thames Valley, except Reading. All areas have less women smoking during pregnancy than the national average.
- The number of children in Year 6 classified as obese is lower than the national average in all areas, except Milton Keynes, Reading and Slough.
- The conception rate to under 18-year-olds is significantly lower than the national average across Thames Valley, except in Reading.

HETV's workforce development strategy *Tomorrow's People, Today: Workforce Development Strategy 2013 – 2025* outlines six priority themes under which the LETB will carry out their vision to ensure 'effective workforce planning and excellence in education and training to develop a highly capable, flexible and motivated workforce that delivers improvements in health for the population of Thames Valley'. The themes were developed in consultation with LETB members and partners and are linked to the relevant policies or evidence base:

- Compassion, dignity and respect
- Integrated and person-centred care
- Care closer to home
- Sustaining and investing in our staff
- Harnessing technology and innovation
- Improving training, quality and value.

HETV's approach to understanding their public health workforce: a case study

Anticipating the changes following the Health and Social Care Act 2012, HETV recognised that a wide range of people from several organisations would be responsible for 'public health'. It was important to ensure that the workforce had the appropriate knowledge and skills to meet the needs of the local population and to enable integration of public health into local systems and services. The following are some of HETV's approaches to understand the needs of their public health workforce and to facilitate the move to a more prevention-focused health system.

'Public Health is everybody's business'

HETV recognised that in order to develop an effective prevention-focussed health system public health will need to be embedded in the system. In order to demonstrate the LETB's recognition of the value and importance of public health and the fact that it is everybody's business HETV included a Deputy Director of Public Health from a local authority on the LETB Board.

The public health board representative leads the Making Every Contact Count (MECC) project for the LETB and contributes to the business planning process to ensure funding is available for MECC. A positive outcome of the collaboration between public health and secondary care is a pilot project where a 'health clinic' (funded jointly by the hospital trust and a charity) is available on the hospital site for staff and patients to get advice on lifestyle and preventative measures to improve and maintain the 'individual's health'.

The public health representative on the Board also advises the LETB regarding the wider public health workforce in relation to education and training. This has ensured that the public health voice is heard at Board level and that public health priorities for the area remain a focus of workforce planning and development.

Working with local authorities

The rationale for the change for local public health services moving from the NHS into local authorities (following the reforms of April 2013) was to better meet the needs of local populations, acknowledging the importance of local issues and the social determinants of health. Key to successful local implementation of the government's vision to improving the health of the public across the life course is the implementation of a new public health system at local levels through partnership working between local authorities and public health professionals who facilitate a well-trained, skilled and experienced workforce to deliver related services.

HETV has demonstrated a clear commitment to working with local authorities and health and well-being boards in taking a joined-up approach across the local health, public health and social care workforce in developing education and training across the whole sector. To prepare and enable the wider workforce to gain a better understanding of public health and their future roles, HETV funded a needs assessment to identify the education and training needs of the wider workforce. Following this, a collaborative programme with Oxford Brookes University resulted in the development of a range of pilot short courses for the public health workforce in Milton Keynes, Oxfordshire, Buckinghamshire and Berkshire (MKOBB). During the first phase in 2012-13, 83 participants from each of the MKOBB areas were drawn from networks known to each of the Public Health Development Leads and attended four of the six courses over a period of six months. The learning outcomes focused primarily on public health knowledge and skills, with basic levels of competence having been drawn from the national UKPHR standards at an agreed level of competence (Level 5 of the Practitioner Standards), and from the Public Health Skills and Knowledge Framework (PHSKF).

Following the evaluation of these courses, a number of proposals to progress the short courses programme was developed, and agreed to provide a sustainable approach to CPD development. Future courses will align programme content with national public health priorities and skills frameworks and provide more flexible

delivery methods - through face to face and on-line support. These courses will be provided to the public health workforce within the NHS, Local Authorities and the community/voluntary sectors.

Supporting the existing public health workforce

HETV works very closely with the Oxford School of Public Health. In addition, HETV's post-graduate Dean is also the lead Dean for public health nationally and therefore has an in-depth understanding of the needs and issues related to public health and emerging national and local priorities, which proves particularly useful.

The Oxford School of Public Health is one of the first multidisciplinary public health schools that targets and facilitates education and training for public health at all levels, including speciality registrars, public health practitioners and the wider workforce. The school is funded to provide support for the public health workforce, including some funding for CPD for consultants and directors of public health.

Following the introduction of registration for public health practitioners by the UK Public Health Register (UKPHR) to enable appropriate practitioners to apply for registration through portfolio submission, support is provided through 1-1 diagnostic help and portfolio writing workshops.

Support is also provided for courses for primary care and appropriate local authority colleagues to maintain and refresh their health protection knowledge and skills.

Learning from others

HETV is part of the Public Health Workforce Development Network bringing together LETB public health leads with PHE Centres in the West Midlands, East Midlands, East of England and Thames Valley. The network holds a teleconference every six to eight weeks and a face-to-face meeting every six months to look at public health job roles, approaches to understanding the workforce and to share good practice. This helps to learn from each other, share examples of good practice and identify common issues and themes where we can work together.

HETV is also working with its local PHE Centre as well as the PHE Centre in the south and south east to better understand its public health workforce through meetings, identifying placements, etc.

Public health in clinical specialties

The potential for enhancing the public health skills and capabilities of registrars in other clinical specialties was developed through the following innovative initiatives:

- **The 'Cochrane Fellow' post** was developed to allow registrars from clinical specialties to gain public health knowledge and skills relevant to their speciality. The post was a very successful initiative with excellent feedback from the first placement (a registrar from cardiology). The post was considered an excellent opportunity for registrars from clinical specialties, and the registrar presented his reflections on the usefulness of the post during the visit of the Chief Executive of Health Education England (HEE). The next candidate is due to start in mid-2014 and is a plastic surgery registrar
- **Public health secondment for paediatric registrars:** The Faculty of Public Health has worked with the Royal College of Paediatrics and Child Health to develop public health as a special interest (SPIN) module within paediatric training providing additional training/experience to enable the paediatrician to be the local lead and part of the clinical network providing for children who need specialist care. Thames Valley is one of the sites to pilot the secondment
- **Foundation trainees in public health:** The Oxford School of Public Health was one of the first schools to pilot public health placements for foundation trainees which are now embedded within the foundation programme. This has given the foundation doctors the opportunity to gain an

understanding of a career in public health and contributed in attracting medics to a public health career.

The specialist training programme

The Oxford School of Public Health has achieved a high success rate in obtaining National Institute for Health Research (NIHR) academic posts due to the excellent academic opportunities, both in research and teaching, for registrars. In addition, the school has developed academic and research opportunities for those from backgrounds other than medicine, not funded by NIHR.

The establishment of public health training placements within the Oxford University Hospitals NHS Trust has led the Trust to consider the possibility of developing a public health consultant post.

Priorities for the programme are as follows:

1. To support public health development in Thames Valley through working with the local economies to respond to workforce development priorities identified through the transition processes.
2. To continue to support practitioner registration through portfolios.
3. Funding to Oxford Brookes University to support a programme of locally delivered 'podules' for public health development.
4. To test different approaches for delivery of MECC across a range of health and social care organisations, using the intelligence gathered to inform the development of a MECC strategy for public health in the Thames Valley.
5. To work effectively across the health and social care economy, to ensure that Thames Valley is well placed to respond to emerging national and local priorities for workforce development.

Plans for the future

HETV is keen to maintain the good relationships with local authorities and the hospital trusts to ensure clear understanding of the role and functions of public health. This will be important with the current economic pressures facing local authority budgets.

References

The CfWI has split this into two sections: **key data sources by occupation or staffing group**, and general references referred to in the main report.

i. Key data sources by occupation or staffing group

Public health consultants /specialists

Before the 2013 reorganisation, data on medical and dental public health consultants working in the NHS was readily available from the HSCIC; the links below provide data from 2002 to 2012. Separate data is also available on registrars and trainees training to be medical and dental public health consultants:

- **Health and Social Care Information Centre (2013a)**, *NHS Staff Census 2002-2012, Medical/Dental* [dataset], <http://www.hscic.gov.uk/catalogue/PUB10394/nhs-staf-2012-medi-dent-detl-tab.xls>

Since 2013, this data is still collected by the Health and Social Care Information Centre (HSCIC), but is subject to significant caveats: staff in local authorities are not counted, and staff working in Public Health England (PHE) are not reported in public statistics. Thus while staff working in public health roles for the NHS are still collected, numbers were now noticeably diminished for 2013 vis-à-vis 2012 figures:

- **Health and Social Care Information Centre (2014a)**, *NHS Staff Census 2003-2013, Medical/Dental* [dataset], www.hscic.gov.uk/catalogue/PUB13740/nhs-staf-2013-med-dent-detl-tab.xlsx [Accessed on 25 March 2014]

Data on medical and dental consultants working in Public Health England is nonetheless collected by the HSCIC, and is available on request:

Health and Social Care Information Centre (2014c), *NHS hospital and community health services provisional monthly statistics: NHS staff in Public Health England by main staff group as at 30 September 2013* [dataset] [unpublished] However, there is no data available on public health consultants (and specialists) working in local authorities, although the BMA is currently working to establish the number of consultants in local authorities, as made clear in its 2013 submission to the House of Commons Health Select Committee (<http://data.parliament.uk/writtenevidence/committeeevidence.svc/evidencedocument/health-committee/public-health-england/written/3455.html>)

For the moment, more reliable sources of numbers working in public health at consultant or specialist level come from the following sources:

- **The General Medical Council (GMC) specialist register.** Headline Statistics are published monthly by the GMC on registrants in public health medicine: http://www.gmc-uk.org/doctors/register/search_stats.asp [Accessed May 2014]
- **The General Dental Council (GDC) specialist register.** Headline statistics are published monthly by the GDC on dental public health registrants: <http://www.gdc-uk.org/Newsandpublications/factsandfigures/Pages/default.aspx> [Accessed May 2014]
- **The UK Public Health Register (UKPHR).** Details of registrants are available on the UKPHR's register, the numbers of specialists can be identified through using search term 'DR' for dual registration and 'FR' for

‘defined specialist’ or ‘generalist specialist’ <http://www.publichealthregister.org.uk/member-search> [Accessed May 2014]

- **The Faculty of Public Health (FPH) register.** Details of people registered on the FPH database are available from the FPH on request.

Numbers of registrars and trainees for public health medicine and dental public health are tracked by Health Education England (HEE), with commissions for each year explained in their annual workforce plan. The 2013 workforce plan is below:

- <http://hee.nhs.uk/wp-content/uploads/sites/321/2013/12/Workforce-plan-UPDATE-interactive.pdf> [Accessed March 2014]

For all the data sources outlined above, data on consultants and specialists will typically count Directors of Public Health as consultants or specialists for the purposes of recording. However, while registrars and trainees in public health medicine and dental public health are counted in HSCIC and FPH data and are tracked by HEE, numbers of people taking the portfolio route are only tracked once they become registrants with the UKPHR.

Directors of Public Health

Directors of Public Health in HSCIC data were traditionally been considered as consultants in public health medicine/dental public health for purposes of recording [see above].

However, as the number of Directors of Public Health is small (131) and the position of Director of Public Health is statutory within a local authority; lists of Directors of Public Health are readily available in the public domain.

The list of current Directors of Public Health is available on websites hosted by the Association of Directors of Public Health (ADPH), and by the Department of Health (DH); both links are below.

- <http://www.adph.org.uk/about-adph/current-directors-of-public-health/> [correct as of 28 March 2014, includes Directors from Scotland, Wales and Northern Ireland in addition to those from England] [Accessed March 2014]
- https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/298433/DsPH_list_270314.pdf [correct as of 27 March 2014, only includes Directors from England] [Accessed March 2014]

Directors of Public Health may also be counted with data on consultants and specialists (see above).

Public health academics:

Data on public health academics working in medical and dental schools is collected on an annual basis by both the **Dental Schools Council** and the **Medical Schools Council**:

- **Dental Schools Council (2014)** *Staffing levels of Dental Clinical Academics in UK Dental Schools, 2013 data*, <http://www.dentalschoolscouncil.ac.uk/documents/2014-Clinical-Academic-Survey-Dentistry-July-2013-data.pdf> Reports are typically published in May each year for the previous calendar year (e.g. 2014 for 2013 data) [Accessed June 2014]
- **Medical Schools Council (2014)** *Staffing levels of Medical Clinical Academics in UK Medical Schools, 2013 data*, <http://www.medschools.ac.uk/AboutUs/Projects/Documents/2014-Clinical-Academic-Survey->

[Medicine-July-2013-data.pdf](#) Reports are typically published in May each year for the previous calendar year (e.g. 2014 for 2013 data) [Accessed June 2014]

It is important to acknowledge that the reports from the Medical and Dental Schools Councils only take into account clinical academics employed by universities with medical and dental schools— with other universities not taken into consideration.

Data is also available on request from PHE (Chief Knowledge Officer's Directorate).

Public health academics may also be counted as consultants or specialists and/or Directors of Public Health in official data (see above).

Public health scientists:

Some limited data is also available from the Health and Care Professions Council (HCPC), however this only considers the number of biomedical and clinical scientists registered in exercise of these professions and do not take into account whether scientists also practise within public health settings. Current numbers of biomedical and clinical scientists registered with the HCPC can be found here:

- <http://www.hpc-uk.org/aboutregistration/theregister/stats/> [Accessed March 2014]

More recent information on scientists employed by PHE was provided by PHE in response to the House of Commons Health Select Committee's 2014 report into their operations; PHE's submission to the Health Select Committee outlining their workforce is below:

- **Public Health England (2013d)** 'Additional follow up written evidence from Public Health England (PHE0022) ', <http://data.parliament.uk/writtenevidence/committeeevidence.svc/evidencedocument/health-committee/public-health-england/written/4332.html> [Accessed March 2014]

Additional data is available from the HSCIC on scientists employed by PHE on request: www.hscic.gov.uk

The Health Protection Agency (where many scientists working in public health roles were based before 2013) provided information on employee numbers within its annual reports within the financial statements. Their annual reports from 2004 to 2013 are available at the following link:

- <http://www.hpa.org.uk/webw/HPAwebandPageandHPAwebAutoListNameDesc/Page/1270833747126> [Accessed March 2014]

Public health scientists may also choose to register as specialists (see above) or practitioners (see below) with the UKPHR, although they are not distinguished by their profession:

- Specialists can be identified through using search term 'DR' for dual registration and 'FR' for 'defined specialist' or 'generalist specialist'; practitioners can be identified through using search term 'PR' for 'practitioner' <http://www.publichealthregister.org.uk/member-search> [Accessed March 2014]

The Centre for Workforce Intelligence (CfWI) is currently conducting a stocktake into public health scientists employed by PHE, using PHE data on its workforce (CfWI, 2014b). This stocktake is expected to report in summer 2014, and will provide further information on the workforce within PHE.

Public health knowledge and intelligence professionals:

Both Workforce Review Team (WRT) (2008) and Jenner, D et al (2010) provide historic background information on knowledge and health professionals pre-2010, both references are below.

- **Jenner, D et al (2010)** 'Developing the public health intelligence workforce in the UK ', *Public Health*, 124 (5), 248
- **Workforce Review Team (2008)** 'Public Health Benchmarking Tool ', <http://www.cfwl.org.uk/resources/tools/public-health-benchmarking-tool-2008> [Accessed on 13 March 2014]

More recent information on knowledge and intelligence professionals employed by PHE was provided by PHE in response to the House of Commons Health Select Committee's 2014 report into their operations, the Select Committee Report and PHE's submission outlining their workforce is below:

- **House of Commons Health Select Committee (2014)** *Health Committee- Eighth Report, Public Health England* <http://www.publications.parliament.uk/pa/cm201314/cmselect/cmhealth/840/84002.htm> [Accessed March 2014]
- **Public Health England (2013d)** 'Additional follow up written evidence from Public Health England (PHE0022) ', <http://data.parliament.uk/writtenevidence/committeeevidence.svc/evidencedocument/health-committee/public-health-england/written/4332.html> [Accessed March 2014]

Public health knowledge and intelligence professionals may also choose to register as specialists (see above) or practitioners (see below) with the **UKPHR**, although they are not distinguished by their profession:

- Specialists can be identified through using search term 'DR' for dual registration and 'FR' for 'defined specialist' or 'generalist specialist'; practitioners can be identified through using search term 'PR' for 'practitioner' <http://www.publichealthregister.org.uk/member-search> [Accessed March 2014]

Public health practitioners and managers

For all three categories, there is limited publicly available data on these groups, although engagement with the UKPHR suggests there are as many as 10,000 practitioners working in England and a 2008 benchmarking tool by the WRT found that there was a total of 9,170 FTE roles within health protection, health improvement, health services commissioning and health intelligence for England:

Workforce Review Team (2008) 'Public Health Benchmarking Tool ', <http://www.cfwl.org.uk/resources/tools/public-health-benchmarking-tool-2008> [Accessed on 13 March 2014]

Public health practitioners, managers and commissioners may choose to with the **UKPHR**; however as there are only nine local schemes of registration there are only 100 practitioners that are registered with the UKPHR:

- Practitioners can be identified through using search term 'PR' for 'practitioner' <http://www.publichealthregister.org.uk/member-search> [Accessed March 2014]

Membership of the Chartered Institute for Environmental Health (CIEH) is open to anyone working in, or with an interest in, environmental health or public health. Information on the number of members is available on request. In 2014 the CIEH had approximately 10,000 members; this considers people on their registration database (<http://www.cieh.org.uk>).

Public health nurses (health visitors/school nurses/other public health nurses)

As health visitors and school nurses work in the NHS and are protected titles, data availability is good compared to other public health roles, with data collected by the HSCIC. The figures for 2003-2013 can be found below, and in the case of school nurses distinguish between qualified school nurses and nurses working in school nursing:

- **Health and Social Care Information Centre (2014b)** *NHS Staff Census 2003-2013, Non-Medical* [dataset], www.hscic.gov.uk/catalogue/PUB13741/nhs-staf-2013-non-med-detl-tab.xlsx [Accessed March 2014]

Trainee numbers for health visiting and school nursing are tracked by HEE, with commissions for each year explained in their annual workforce plan. The 2013 workforce plan is below:

- <http://hee.nhs.uk/wp-content/uploads/sites/321/2013/12/Workforce-plan-UPDATE-interactive.pdf> [Accessed March 2014]

In addition, health visitors have been subject to consistent tracking centrally, with the DH committed to expanding the workforce by 4200 FTE from 2011 to 2015 under its 2011 *Health Visitor Implementation Plan*:

- https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/213110/Health-visitor-implementation-plan.pdf [Accessed March 2014]

However, numbers for other areas of public health nursing are not commissioned directly by HEE.

In addition, data is available from the Nursing and Midwifery Council (NMC) on the Specialist Community Public Health Nursing (SCPHN) Register, which provides the exact numbers for those who have chosen to go on that section of the register as either a health visitor, a school nurse, a family health nurse, an occupational health nurse or a general public health nurse. Statistics between 2001 and 2008 on numbers on the SCPHN register are available in the NMC's statistical reports on nurses and midwives:

- <http://www.nmc-uk.org/About-us/Statistics/Statistics-about-nurses-and-midwives/> [Accessed March 2014]

There is currently no data available in the public domain on nurses registered on the SCPHN section of the NMC register, although the Royal College of Nursing in 2013 published a factsheet on specialist nursing providing numbers for 2012:

- **Royal College of Nursing (2013a)** *RCN Factsheet: Specialist nursing in the UK* [http://www.rcn.org.uk/_data/assets/pdf_file/0018/501921/4.13 RCN Factsheet on Specialist nursing in UK - 2013.pdf](http://www.rcn.org.uk/_data/assets/pdf_file/0018/501921/4.13_RC_N_Factsheet_on_Specialist_nursing_in_UK_-_2013.pdf) [Accessed December 2013]

Nurses working in public health roles may also choose to register as specialists (see above) or practitioners (see below) with the UKPHR, although they are not distinguished by their profession:

- Specialists can be identified through using search term 'DR' for dual registration and 'FR' for 'defined specialist' or 'generalist specialist'; practitioners can be identified through using search term 'PR' for 'practitioner' <http://www.publichealthregister.org.uk/member-search> [Accessed March 2014]

Environmental health professionals:

The number of environmental health professionals is collected directly by the Office of National Statistics (ONS) in their Quarterly Labour Force Survey; the last published version (for April-June 2013) is below:

- www.ons.gov.uk/ons/rel/lms/labour-market-statistics/april-2014/table-emp04.xls [Accessed April 2014]

Data is also available from the Chartered Institute for Environmental Health (CIEH) on request; this considers people on their registration database (<http://www.cieh.org.uk>).

The number of people registered with the Environmental Health Registration Board (EHRB) (upon completing an environmental health qualification, with a degree the prerequisite for practice) is publicly available on the EHRB's website: <http://www.ehrb.co.uk/register.html> [Accessed March 2014]

Environmental health professionals may however be registered as specialists (see above) or practitioners (see below) with the UKPHR, although they are not distinguished by their profession:

Specialists can be identified through using search term 'DR' for dual registration and 'FR' for 'defined specialist' or 'generalist specialist'; practitioners can be identified through using search term 'PR' for 'practitioner' <http://www.publichealthregister.org.uk/member-search> [Accessed March 2014]

Local authorities

For looking into local authority (LA) roles, we made reference of the following documents, either provided to The CfWI directly or in the public domain:

- **Bedfordshire/Milton/Keynes/Central Bedfordshire: April 2014, provided by LA**
- **Cornwall: November 2013**, <http://www.cornwall.gov.uk/media/3625960/Public-Health-Team-Information-Sheet-November-2013-FINAL-d.pdf>
- **Coventry: April 2014**, http://www.coventry.gov.uk/download/downloads/id/11477/public_health_structure_chart
- **Devon: April 2014, provided by LA**
- **Durham: April 2014, provided by LA**
- **Haringey: November 2013**, http://www.haringey.gov.uk/haringey_public_health_structure_chart.pdf
- **Harrow/Barnet: August 2013**, http://www.harrow.gov.uk/info/100010/health_and_social_care/657/public_health-harrow_and_barnet
- **Hertfordshire: April 2014**, <http://www.hertsdirect.org/docs/pdf/p/phstructurechart.pdf>
- **Nottinghamshire: May 2013**, www.nottinghamshire.gov.uk/EasySiteWeb/GatewayLink.aspx?allId=262250
- **Wandsworth: May 2013**, http://webcache.googleusercontent.com/search?q=cache:wlsXtWBMLVQJ:www.wandsworth.gov.uk/download/downloads/id/5951/organisation_chart_correct_as_of_may_2013+andcd=1andhl=enandct=clinkandgl=uk
- **Wigan: April 2014, provided by LA**
- **York: April 2014, provided by LA**

In addition, the PHE and Local Government Association's joint 2014 report *Public health transformation nine months on: bedding in and reaching out* provides a good summary of the different models within local authorities, through using sixteen case studies across England:

<http://www.local.gov.uk/documents/10180/5854661/Public+health+transformation+nine+months+on+->

[+bedding+in+and+reaching+out+-+publication/ce0b8b36-c81d-44f7-ba91-b0836a9b4822](#) [Accessed on 17 February 2014]

Submissions

In addition, we received additional background information from the following organisations in March 2014:

- The ADPH
- The CIEH
- The FPH
- The UKPHR.

These have been referenced in the text as (ADPH, 2014b), (CIEH, 2014), (FPH, 2014b), and (UKPHR, 2014), this information is available on request.

ii. References in the main report

Acheson, Sir Donald (1998), *Independent Inquiry into Inequalities in Health Report*, <http://www.archive.official-documents.co.uk/document/doh/ih/contents.htm> [Accessed December 2013]

Association of Directors of Public Health (2014a), *English transition 2013 '6 months on' survey – summary results* <http://www.adph.org.uk/wp-content/uploads/2014/01/Final-Summary-Transition-6-Months-On.pdf> [Accessed March 2014]

British Medical Association (2014), *Findings from the public health survey*, http://bmaopac.hosted.exlibrisgroup.com/exlibris/aleph/a21_1/apache_media/7P3NCUP6YXK2E37NSGTE23YCI419V7.pdf [Accessed March 2014]

Centre for Workforce Intelligence (2014a), *Public health consultant and specialist survey 2013*, <http://www.cfwl.org.uk/publications/the-cfwl-public-health-consultant-and-specialist-staff-survey-2013/> [Accessed May 2014]

Centre for Workforce Intelligence (2014b), 'The CfWI announces two public health projects', <http://www.cfwl.org.uk/news/the-cfwl-announces-two-new-public-health-projects> [Accessed March 2014]

Dental Schools Council (2014) *Staffing levels of Dental Clinical Academics in UK Dental Schools, 2013 data*, <http://www.dentalschoolscouncil.ac.uk/documents/2014-Clinical-Academic-Survey-Dentistry-July-2013-data.pdf> Reports are typically published in May each year for the previous calendar year (e.g. 2014 for 2013 data) [Accessed June 2014]

Department of Health (2010), *Healthy Lives, Healthy People: our Strategy for Public Health in England*, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/216096/dh_127424.pdf [Accessed December 2013]

Department of Health (2011), *Health visitor implementation plan 2011-15*, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/213110/Health-visitor-implementation-plan.pdf [Accessed December 2013]

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