Maximizing the contribution of the public health workforce: the English experience
F Sim, K Lock & M McKee

Abstract In the United Kingdom, until the 1990s, specialist practice of public health was dominated by the medical profession. During the past decade, the contributions to specialist public health practice of people from diverse disciplines have become recognized, respected and valued. In parallel to this paradigm shift in culture in the specialist workforce, recognition is growing of the importance to health improvement of the routine activities of people in other jobs, whose daily work can have a significant impact on population health. These people include public health practitioners, such as environmental health officials, as well as others in a very wide range of occupations, from local government chief executive officers to catering assistants, who, although their actions can have a substantial influence on public health, would not traditionally have been viewed as part of the public health workforce.

Transforming opportunities for training and professional development to meet the diverse needs of these different groups within the public health workforce for them to recognize and fulfill their potential for health improvement is an important challenge, if we are to achieve continuing improvements in public health. Presenting England’s attempts to address the challenges of recruiting and training the range of people needed to deliver effective intersectoral public health may offer insights for those facing similar challenges in other countries.

Introduction
In many countries the structure of the public health workforce is based on a paradox. It is now widely accepted that improving public health requires intersectoral action and the combined efforts of people from many professions and disciplinary backgrounds. Yet within this workforce, one profession has stood out from the rest, in terms of its regulatory framework, training pathways and status. In many cases, physicians followed clearly structured career pathways involving the acquisition of certain qualifications until they reached positions of leadership that were reserved for those who had followed this route. In contrast, the workforce that they led contained many people who had come to public health through a myriad of pathways, often armed with specialist knowledge in some aspects of public health, but without either access to the breadth of training needed or the legal right to assume these positions of leadership.

This was the situation in England until recently. In this paper, we describe how England has adapted to the new reality of public health practice, recognizing the many and diverse contributions made to the public health workforce and putting in place the necessary training systems. We begin by summarizing these regulatory and professional changes before describing how the training needs of this workforce are being met. England’s attempts to address the challenges of recruiting and training the range of people needed to deliver effective intersectoral public health may offer insights for those facing similar challenges in other countries.

The changing workforce
In 1974 a structural reorganization transferred the former Medical Officers of Health from local government to the National Health Service (NHS), where they were granted specialist status, with equivalent pay and conditions of service to other medical specialists. As medical practitioners, they had always been required by law to be on a register maintained by the General Medical Council. Henceforth, as with other medical specialties, specialist status required completion of approved training including passing postgraduate medical examinations. This professional route was closed to the growing number of non-physician graduates (such as statisticians, epidemiologists, economists and experts in health promotion) working in public health departments.

By the late 1990s it became clear that this situation was becoming untenable given the evolving public health agenda and it became necessary to redefine the specialist workforce to include those people from other disciplines who were making a major contribution to public health practice.1

The resulting reform of public health training had to take account of several factors. The key issue was that training for specialist status involved a partnership between the NHS, which paid the salaries of those in postgraduate medical posts, and the Faculty of Public Health, a professional association that is part of the Royal Colleges of Physicians, which certified these posts as suitable for training and ran the examinations. The government has delegated responsibility to these Royal Colleges for setting standards for postgraduate training and professional practice. In 2000, following the precedent established by the Royal College of Pathologists which
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health workforce: specialist, practitioner
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Medical Officers in Scotland, Wales and
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Special theme – Public health education
England's changing public health workforce
had opened to non-medically qualified
laboratory scientists, the Faculty of
Public Health permitted membership
by examination for non-medically quali-
fied graduates. The Faculty developed a
revised curriculum, agreed in 2007, and
created common training requirements
for all public health specialists. In
parallel, training posts within the NHS
in England became multidisciplinary,
and most senior posts in public health
became open to both medically and
non-medically qualified public health
specialists.

Despite this co-ordination of train-
ing and employment an important
issue remained. Only one part of the
specialist workforce (those who were
medically trained) was now regulated,
leaving populations potentially vul-
erable to unsound professional practice.
In 2003, a new regulator, the United
Kingdom Voluntary Register for Pub-
lic Health Specialists, was established
with government support. Non-medical
specialists are now expected to register
before taking up senior posts in the
NHS in England.

Who makes up this
workforce?
These reforms addressed specialist train-
ing but also highlighted the recurrent
problem of how to define the bound-
aries of the public health workforce.
This issue was addressed by the senior
medical adviser to the United Kingdom
Government, the Chief Medical Of-
ficer for England (there are also Chief
Medical Officers in Scotland, Wales and
Northern Ireland, who advise the de-
volved administrations on areas within
their remit). In his 2001 report, he iden-
tified three major categories in the public
health workforce: specialist, practitioner
and wider workforce.

The specialist public health work-
force is easiest to define, comprising
people who have higher qualifications in
public health and who occupy positions
exclusively or substantially focused on
population health. Within this category
are individuals working at local, regional
and national level in the NHS, local and
central government, and higher edu-
cation, in teaching and research. Few
public health specialists are employed
in the private sector, although a grow-
ing number are in independent practice,
frequently resulting from the serial reor-
ganizations of the public health delivery
system over recent years.

The public health practitioner
workforce comprises many core disci-
plines – from health visitors and com-
munity nurses to health promotion
practitioners and environmental health
officers. Their common denominator is
day-to-day responsibility for influenc-
ing population health through front-
line, operational interventions with
individuals, families or local commu-
nities, rather than at a higher level of
policy or planning. Public health prac-
titioners may have obtained their core
education in areas such as teaching or
clinical practice, although some, such
as environmental health officers, may
have trained primarily in a core public
health discipline.

The most diverse of the three
categories is the “wider” public health
workforce, comprising people from all
sectors and at all levels of organizations,
from chief executives to front-line ser-
vice providers. They include, potentially,
journalists, pharmacists, social care staff,
teachers and workers in the retail, leisure
and hospitality sectors (Table 1). This
is a largely undefined and substantially
underutilized workforce in public health
terms. In 2002, the size of the wider
public health workforce in London
(population 7.5 million in 2005) was
estimated to be of the order of a quar-
ter of a million people. If even a fraction
of this wider workforce was properly
trained, empowered and motivated,
they could offer tremendous potential
for improving population health.

This category illustrates the ab-
sence of a hierarchy. While a catering
assistant may aspire to acquire the skills
to become a public health practitioner,
there is no expectation or requirement
that they should do so. However, it
seems less likely that a local government
chief executive will share such an aspira-
tion. The key challenge is to find ways
for the diverse members of the wider
workforce both to recognize that they
have a public health role and to ensure
they gain the competencies that will
enable them to fulfil the requirements
specific to their role.

Improving population
health
These three heterogeneous categories
have complementary roles in improving
population health. The role envisaged
for the specialist workforce is to act as a
catalyst to support evidence-based inter-
ventions that can be undertaken locally
by competent public health practi-
tioners and the wider workforce.

The English Department of Health has pub-
lished a Commissioning Framework for
Health and Well Being that emphasizes
the need to communicate to staff in the
NHS and in local government what
their potential roles might be. This
offers opportunities for public health
specialists but also creates challenges,
as recent National Health Service reor-
ganisations have reduced the specialist
workforce.

Experience so far confirms that
those in the practitioner workforce are
willing and able to enhance their public
health skills where they have strategic,
technical and professional support,
training opportunities, and scope for
career progression and organizational
development. Other research empha-
izes the positive role played by local
public health champions in health
promotion campaigns. However, many
clinicians do not view themselves as
promoters of public health, nor may
they have the competencies to deliver
effective public health interventions at
the individual patient level. This could
in part reflect the nature of undergradu-
ate medical and nursing curricula.
Public health typically plays a small part
in clinical curricula and is often isolated
from mainstream clinical teaching. The
situation seems little better in continu-
ing professional education; for exam-
ple, staff induction programmes in the
NHS rarely include public health topics
other than infection control through
hand washing.

Harnessing the contribution of the
wider workforce is challenging because
it is enormous, diverse and largely
ignorant of its own potential for im-
proving health. However, two reports
published by the United Kingdom
Treasury emphasized the crucial role
that non-specialists need to play.
These reports examined the determi-
nants of future health expenditure and
proposed a range of policy scenarios. In
the ideal “fully engaged scenario” the
general population are health-literate
and enabled to make healthy decisions.
This scenario was essential to achieve
the improvements in population health
needed to maintain a strong economy
and, by reducing the future burden of
preventable disease, an affordable publicly funded health service. However, little is known about the training needs of this wider workforce and how best to meet them.

A key issue in developing an effective wider workforce is whether the design of existing jobs supports a contribution to public health and whether potential role changes will help or hinder it. Although there is a growing body of research on the changing roles of the healthcare workforce, particularly skill mix changes in the medical and nursing workforce, there is little research on non-health-sector workers adopting health roles.

The limited research does offer some insights. Tensions within multi-agency health promotion coalitions have been dealt with by creating “boundary workers” who develop new “roles within roles”. This allows people to work at the interface between organizations, sticking to boundary issues that do not threaten the main agenda of any organization. Efforts to enhance functional flexibility of jobs may be welcomed as creating greater variety for staff, although possibly associated with increased work intensity and stress. Finally, it is important to understand how occupational and professional roles are interlinked, with continuous negotiation between different groups of workers, so that changes to the role of one group will have implications for others.

There is an urgent need for research that will identify what is needed to establish effective public health roles within jobs outside the traditional public health workforce, and what educational approaches, incentives and workforce development policies can most effectively empower this important group. However, this approach must be accompanied by policies to ensure that they have a defined and legitimized public health role within their job specification, allowing them to improve the health of populations in their work.

**Making it happen**

In the United Kingdom many elements are already in place to develop the capacity of public health, although they are not necessarily coordinated. The United Kingdom traditionally has a strong academic base in public health, with numerous postgraduate training opportunities. A 2005 survey of master’s-level courses revealed 58 courses in 45 British universities whose titles contained the term “public health”. Approximately half of these covered less than two of the five main knowledge areas required by the Faculty of Public Health for its diploma examination (which must be passed by those aspiring to be public health specialists in the United Kingdom). In contrast, there are many postgraduate courses that do not include the term public health but which clearly include some public health knowledge, such as epidemiology or health economics.

Discussions among employers and educational providers have identified a widely held desire for mechanisms to coordinate these activities. While recognizing the diversity of training content and methods, there are potential benefits to be obtained from exchanging experiences and ensuring synergy between training programmes and employment needs. This view has been influenced by some observed successes, such as the strengthening of public health within curricula for nursing, midwifery and environmental health training.

In 2006, the English Department of Health established nine regional Teaching Public Health Networks in response to the perceived need for wider coordination of training. The networks are intrinsically collaborative, seeking to break down historical boundaries between the further and higher education sectors,
The greatest challenge to improving public health capacity is engagement with the wider workforce and especially those employed in the nongovernmental sector. This is work in progress that has three elements: first, to engage in extensive discussions with the many organizations involved to highlight the contributions they can make to public health and to identify their perceived training needs; second, to learn from other relevant experiences. In 2004, the NHS in England adopted a Knowledge and Skills Framework defining knowledge and skills that all staff should be able to apply in their work to deliver quality services. It provides a consistent, comprehensive and explicit framework against which to review personal development, providing a systematic mechanism to increase understanding of public health among different occupational groups. Third, entry points must be identified that build on existing activities. For example, there is scope to introduce public health concepts into leadership programmes for public-sector workers such as head teachers.

Conclusion
Meeting the complex future challenges to public health will require the engagement of many people, from specialists and practitioners to a wider workforce comprising individuals making discrete contributions in their everyday work, often without realizing the health impact they could have. If these collective efforts are to achieve their full potential, several things must happen. The first is that those with the appropriate skills and expertise should not be confronted with a glass ceiling because of the particular education or career pathway they took. The second is that those who deliver public health interventions in their everyday work yet do not aspire to become public health specialists should be supported with appropriate training. Finally, communities must recognize the contributions to public health being made by many people who are unaware that they are fulfilling these roles.

All of these approaches require new ways of public health capacity-building. These must build on traditional and existing professional links, but must become more open to and inclusive of people from a wide range of educational and occupational backgrounds not previously the target of public health training. Delivery will require new educational partnerships and flexible approaches to training that can take account of the diverse needs of a workforce embracing people from all walks of life, from chief executives to school cooks. While these needs cannot be met by a “one size fits all” approach, it is also important to adhere to clear educational standards. There is a need to establish evidence for the contribution to population health of developing the role of the wider public health workforce. Such evidence, whether across the breadth of public health action, or, more realistically, in selected exemplar areas of public health work, would permit a shift from theory to an evidence-based identification of the contribution by the wider public health workforce to sustainable health improvement. Only then are decision-makers in the public and private sectors likely to invest in training and incentives for the wider public health workforce to fulfill its potential.

Competing interests: F Sim, K Lock and M McKee are members of the London Teaching Public Health Network; however, the views expressed in this article do not necessarily represent those of the network.

Résumé
Maximiser la contribution de la main d’œuvre au service de la santé publique : l’expérience britannique
Au Royaume-Uni, jusque dans les années 90, les spécialistes en santé publique étaient surtout des médecins. Au cours de la dernière décennie, les contributions à la pratique de la santé publique de spécialistes appartenant à diverses disciplines ont été reconnues, respectées et appréciées. En parallèle à cette évolution du modèle de culture pour la main-d’œuvre spécialisée, on reconnaît de plus en plus l’importance, pour l’amélioration de la santé publique d’autres activités professionnelles pouvant quotidiennement avoir un impact conséquent sur cette santé. Il s’agit notamment de

professionnels de la santé publique, comme les agents chargés de la santé environnementale, mais aussi d’une grande variété de professions, allant des chefs de gouvernement locaux aux employés de la restauration qui, malgré l’influence importante de leurs actions sur la santé publique, n’étaient traditionnellement pas considérés comme faisant partie de la main-d’œuvre au service de la santé publique.

Pour améliorer constamment la santé publique, il importe d’exploiter les opportunités de formation et de développement
professionnel pour répondre aux divers besoins des différentes catégories de main d’œuvre au service de la santé publique, en identifiant et en mettant en pratique leurs capacités à améliorer la santé. Présenter la tentative anglaise pour répondre aux problèmes de recrutement et de formation de l’éventail de personnes nécessaires pour délivrer des prestations intersectorielles de santé publique efficaces pourrait fournir des idées aux personnes confrontées à des problèmes similaires dans d’autres pays.

Resumen

Optimización del perfil del personal de salud pública: la experiencia británica

Hasta los años noventa en el Reino Unido los especialistas de la salud pública pertenecían en su mayoría a la profesión médica. Durante el último decenio, sin embargo, se ha constatado un creciente reconocimiento, respeto y valoración de la labor desempeñada por expertos de otras disciplinas en ese campo. Paralelamente a ese cambio de paradigma, se observa también un creciente reconocimiento de la importancia que para la mejora de la salud tienen las actividades habituales de personas de otras profesiones, cuyo trabajo diario puede tener gran impacto en la salud de la población. Entre ellos se encuentran profesionales de la salud pública, como funcionarios de salud ambiental, pero también otras personas con muy diversas ocupaciones, desde directores generales de gobiernos locales hasta ayudantes de servicios de restauración, los cuales, pese a la gran influencia que puede tener su trabajo en la salud pública, no han sido considerados tradicionalmente como parte de la fuerza laboral que actúa en esa esfera.

Transformar las oportunidades de formación y desarrollo profesional para atender las diversas necesidades de esos distintos grupos del personal de salud pública con miras a que reconozcan y lleven a la práctica sus posibilidades para mejorar la salud es un desafío importante que hay que afrontar si deseamos propiciar mejoras continuas de la salud pública. La presentación de las iniciativas emprendidas por Inglaterra a fin de superar los retos de la contratación y formación de todo el espectro de personal necesario para garantizar eficazmente la salud pública intersectorial puede servir para proporcionar algunas claves a quienes afrontan retos similares en otros países.

Malnútricion

A pesar de las numerosas iniciativas llevadas a cabo por expertos de diferentes disciplinas para dar respuesta a los problemas de salud pública en el Reino Unido, hay un creciente reconocimiento de la importancia que las actividades habituales de personas de otras profesiones tienen en la mejora de la salud. Entre ellos se encuentran profesionales de la salud pública, como funcionarios de salud ambiental, pero también otras personas con muy diversas ocupaciones, desde directores generales de gobiernos locales hasta ayudantes de servicios de restauración, los cuales, pese a la gran influencia que puede tener su trabajo en la salud pública, no han sido considerados tradicionalmente como parte de la fuerza laboral que actúa en esa esfera.

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Special theme – Public health education

England’s changing public health workforce

F Sim et al.