**Teaching Public Health Networks in England - an innovative approach to building public health capacity and capability**

Judy Orme, Paul Pilkington, Selena Gray, Mala Rao

Introduction

*The past decade has witnessed a growing recognition of the role of the wider determinants of health and that tackling those wider determinants requires public health to become everybody’s business and everybody’s responsibility. This tenet is underpinned by an assumption that everybody understands how these socio-economic determinants impact on health and how they as individuals can translate that knowledge into action to improve population health.*

*Teaching Public Health Networks were established in England in August 2006, supported by the Department of Health. Their objective was to catalyse collaborative working between the public health workforce and further and higher education to enhance public health knowledge in the wider workforce, with a view to enhancing capacity to tackle inequalities and meeting public health targets. This paper focuses on this major national initiative and examines the innovative approaches utilised and outcomes achieved. It aims to disseminate the learning from such a complex public health initiative, now in its third year of development, and to share examples of good practice.*

Background

In the UK during recent years there has been an increasing emphasis on public health education and training, not only for those working in specialist positions but also for those in what has been described as the “wider public health workforce”. This emphasis has stemmed primarily from a realisation that addressing many of the most serious public health challenges, such as obesity and climate change, requires collaborative working among a wide range of organisations, individuals and professions. Importantly, there is a recognised need to develop public health competencies within those who can, and have the potential to, influence the health of the population (DH, 2004; Orme et al., 2007). The most compelling evidence of this need for a paradigm shift in engaging the wider workforce in public health effort is presented by Derek Wanless in his now seminal report, which recommends ‘the fully engaged’ scenario as the best way of meeting health goals (Wanless, 2004).

Other related developments have highlighted the need for enhanced education and training in public health. The Public Health Skills and Career Framework, aimed at specialists, practitioners and the wider workforce, is designed to be a “route map” that will facilitate career development in public health. ([http://www.phru.nhs.uk/Doc\_Links/PHSkills&CareerFramework\_Launchdoc\_April08.pdf](http://www.phru.nhs.uk/Doc_Links/PHSkills%26CareerFramework_Launchdoc_April08.pdf)). It recognises that many of those working in public health are “underdeveloped, underutilised, and unregulated” and have little career direction (Skills for Health, 2008). The framework outlines key competencies, across nine levels of a public health practice and career escalator, which those working in public health should attain, or aspire to attain as part of their career development. It also enables the wider workforce to acquire public health competencies at a level appropriate to its individual members, to enhance its contribution to public health effort. This however requires sufficient provision of education and training opportunities to enable people to meet those competencies.

A third and related issue has been the consistent reporting of inadequate academic public health capacity in the medical schools in England (ref – Council of Heads of Medical Schools). Pooling of public health capacity across the medical school and other public health departments in a region, or across disciplines within a university is recognised as a means to address such shortages quickly but such collaboration has rarely been observed across disciplinary or organisational boundaries.

The Teaching Public Health Network (TPHN) strategy was a response to the need for improved access to and provision of public health education and training, both for the specialist and wider public health workforce. Launched in 2006, the overall model of the national TPHN involved a lead team within the Department of Health, overseeing 9 regional networks across England, each with their own support structure and infrastructure involving input from primary care trusts, higher and further education sector, regional public health groups, Regional Government Offices, public health observatories and other key stakeholders..

Their aims were to:

* Enhance the knowledge of everyone who can improve the public’s health through the sphere of influence of their work (building capacity and capability by changing curricula of key groups and developing educator capacity) and
* Create health promoting Universities and Colleges

Each regional network received funding from the Department of Health, and was required to prepare annual plans of activity. Although guided and led by a central team, regional networks were encouraged to develop innovative approaches to meeting the aims of the initiative. Sharing of experiences and knowledge exchange was a key feature of the TPHNs, with monthly teleconferences and quarterly national learning sets facilitating this collective learning.

The national lead for the TPHN, the Head of Public Health Development at the Department of Health (DH), undertook the responsibility to secure the support,ownership and involvement of key national level bodies and organisations. Nine regional leads were appointed, each with a core support team to complement the effort at national level with collaborative strategies for learning and development within their regions. Regular themed learning sets were organised by the DH lead, mainly in London, to stimulate networks and to share good practice. Heads of national organisations with a crucial role in supporting the work of the TPHNs were invited to participate in the learning sets. Regular telephone conferences were organised to share good practice, involve all regional teams in decision making and to discuss key issues of development and implementation. Regional teams were encouraged to take responsibility for chairing and delivering sections of the meetings, a mechanism which contributed further to regional engagement, leadership and sharing of good practice. Key themes included emerging national issues e.g. social marketing, public health workforce development, healthy universities and colleges and health literacy.

The flexibility provided by the umbrella regional TPHN model has catalysed a huge range of activity that has had a significant impact on certain areas of public health development in England. The networks have provided a process which can capitalise and energise existing resources towards common public health educational goals, and lever in additional resource to this end. Examples of this work will be given, and future challenges for the networks, including sustainability, will be discussed.

**Outcomes framework and indicators**

Providing a consistent framework for the measurement of outcomes from the TPHN activities was an essential but challenging task. It needed to allow for a degree of cumulative and realistic assessment of achievements through regular monitoring, without additional evaluation which would be costly and burdensome. Some of the difficulties inherent in evaluating an intervention like this include: the aim to create change in complex educational and service provision systems, the evolutionary nature of that change and the variability in processes and objectives dependent on local contexts. Utilising a well known health promotion planning and outcomes framework[[1]](#footnote-1), three capacity building headings are used to capture the breadth of activity of the national network initiative. These areas of activity are:

* i) Mobilising resources, people, money and materials
* ii) Building capacity through training and infrastructure development
* iii) Raising public and political awareness
1. Mobilising resources, people, money and materials

TPHNs have sought to mobilise resources, people and money to improve access to and provision of public health education and training. As outlined, each regional network has a steering group consisting of various stakeholders, including not only local health organisations and universities, but also regional NHS workforce leads, and representatives from regional bodies such as Government Offices and Strategic Health Authorities. However, it is the huge range of wider stakeholders, including those from health, education, built environment, transport, local government, business and voluntary sectors, which reflects the vast scope and potential of the wider public health workforce. Bringing these often disparate groups together, through joint events such as workshops and conferences, facilitates knowledge sharing in a way that otherwise would not be possible. For example, one TPHN has undertaken considerable work with the voluntary sector identifying public health training needs of their workers.

Although funded centrally, Teaching Networks have been successful in obtaining additional investment for a range of activities, including developing Continuing Professional Development (CPD) programmes, e-learning resources such as webcasting and skills assessment tools, undertaking mapping exercises to identify existing public health education and training provision, and conducting research. Investments range from several thousand pounds to several hundred thousand pounds.

Outcomes from TPHN activity are shared both within and between regions. Resources such as self-assessment tools, survey instruments, and mapping tools have been made available to a range of stakeholders for their own use.

1. Building capacity through training and infrastructure development

TPHNs have sought to build capacity in both the specialist and wider public health workforce through a number of means, including training and infrastructure development. This has included workshops and conferences focused on training needs of specific workforce groupings (such as health service, local authority, or voluntary sector staff), CPD events for professionals on specific public health topics (such as obesity) and also events designed to bring together different groups of professionals such as the public health workforce and built environment professionals. One network has funded the development of a short course on Healthy Urban Planning, delivered in various locations nationwide, which is aimed at both health and built environment professionals. Surveys have assessed training needs, including one identifying how service-based public health professionals can be supported to deliver public health training and education. This survey identified a large number of public health professionals who wanted to engage with teaching and training, and resulted in the commissioning of a teaching skills workshop at the annual regional Public Health Residential School. Further surveys of the wider public health workforce are being undertaken with a view to strengthening capacity and capability with targeted CPD programmes in the first instance. When one considers the power of this scoping activity nationally, the benefits of a well-managed and co-ordinated TPHN structure are persuasive.

The Networks have also sought to influence the training of a wide range of professionals, to better integrate public health skills and knowledge into the curricula of groups including medical students, built environment professionals, school teachers and those undertaking a range of educational courses, including Sport, Exercise and Health, pharmacy and the prevention and management of long term medical conditions.

An early exemplar has been the work of the South West TPHN in bringing together public health and built environment professionals (planners, architects and designers), building on the recent evidence on the impact of the built environment on public health and its role in promoting physical activity and tackling obesity (Frank et al, 2003; Barton, 2005; Rao et al., 2007; NICE, 2008). The South West Teaching Public Health Network has taken a lead in this areaof collaboration (Pilkington et al, 2008) (see Case Study 1).

A key aspect of the Networks has been the development of connections between different professional groups and organisations. In addition to the work with public health and built environment professionals, TPHNs have encouraged closer working between academic institutions, and between academic institutions and service-based organisations. Other connections include those between educational institutions and regional NHS workforce development leads – facilitating a shared understanding of training and education needs between NHS commissioners and service providers.

A key area for infrastructure development has been that of Healthy Universities based on the principle ‘practise what you preach’, and this has also been a strong focus for Teaching Network activity (see Case Study 2). Work has including a national survey to map current activity in this sphere, and regional meetings with Vice Chancellors that have resulted in a commitment to further develop the Healthy University concept across the Higher Education sector.

***Case study 1: Integrating built environment and public health professionals***

The Bristol Planning Law and Policy Conference is an annual event for planning and legal professionals across the South West of England. It is attended by key figures in the planning and law profession, from both the private and public sector. In November 2007, assisted by funding from the SWTPHN, the conference focused for the first time on the links between health and planning, with several keynote speeches to delegates on this issue. Following this, a workshop asked delegates to consider the links between planning and a wide variety of health issues. As a stimulus to discussion, the workshop used the “Health Map”, a new model of health determinants applied to the planning of human settlements (Barton and Grant, 2006; www.uwe.ac.uk/ishe). The Health Map had been designed to be a dynamic tool to provide a basis for dialogue and to provoke enquiry. The group of planners were surprised and enthused by the extent of the relationship between health and planning. However, there was a general feeling that as planners they did not have the requisite knowledge of health issues to be able to engage fully with the health implications of their work. A portfolio of short courses focused on planning, the built environment and public health has been validated to support the development of capacity and capability in this broad area of public health innovation ([www.uwe.ac.uk/spatialplanning](http://www.uwe.ac.uk/spatialplanning)). In addition, a series of learning sets between planning and public health professionals sought to promote sharing learning and understanding.

**Case Study 2: Progress towards creating Healthy Universities**

Universities are well placed to enhance the health and well-being of their students, staff and wider communities. Furthermore, learning related to health is likely to be more effective if educational environments are more conducive to health and well-being. However, although the concept of a Health promoting University emerged during the 1990s and was adopted by the World Health Organisation in 1998, further development had been slow until 2008 when the TPHN (driven by two regions in particular) adopted it as a major focus of their activity. As a result, there is increasing national and regional interest in encouraging universities to become healthier settings with discussion and debate at a number of key conferences e.g. HERDA-SW, AMOSSHE, IUPHE. As a result of a successful HEA bid an important national scoping study will report this year on the viability of establishing a national healthy university programme. To date this study has revealed a growth of interest and activity among HEIs in developing a national level programme. A range of barriers have been identified and a common challenge of securing and sustaining effective leadership for a ‘whole university’ approach has been highlighted. Additionally, the benefits of this approach would build on the success of Healthy Schools Programme and be consistent with current developments within Further Education.

A regional study funded by HERDA-SW Proof of Concept Funds is an example of an opportunity that emerged through a regional TPHN as the priorities for the network became clear. This study has identified examples of Healthy University initiatives in SW HEIs. Examples to date include a focus on the Positive Working Environment; a ‘Fit for Business’ initiative and ‘Feel Good February’ and ‘Sustainability Week’ initiatives. It is clear that the development of any holistic Healthy University approach in the South West Region is embryonic and lacks leadership both within individual universities and across the South West region. One aim of the regional study is to contribute to the development of a Regional Healthy University Strategy. The development of a regional strategy will utilise elements of the national TPHN model of delivery. Additional funding bids have been submitted to the Higher Education Funding Council for England (HEFCE) with a view to developing more strategic leadership within and between higher education institutions in England. Another outcome of TPHN work is the strengthening of the English National Health Promoting University Network.

Judy – for some unexplained reason my computer would not allow comments within the box, so I am listing them here. All acronyms in the box may have to be expanded. I would suggest that the ……. Lacks leadership (see 8th line from the bottom) is amended to …… is embryonic and leadership needs to be strengthened both within …… This may be less critical and negative!

1. Raising public and political awareness

The Networks have used a number of means to raise their profile, ensuring that the resources developed by them and available to those working in public health are utilised, as well as bringing additional stakeholders on board and making links across interdisciplinary and professional boundaries. Networks have presented at national, regional and local events, including the 2008 Faculty of Public Health conference. Every Network has its own website, which acts as an information portal for CPD events, holds resources such as podcasts and other teaching materials, and contains interactive features including skills assessment tools. The Networks have a common branding, with unique colours for each of the nine regions, and this is used on websites and promotional material. Networks also raise awareness through newsletters and stakeholder meetings.

**Discussion**

Improving public health capacity and capability requires that professionals and disciplines commit to collaborative working to create sustainable change in health and well-being within a joined-up policy environment. Creativity, commitment and innovative models of working are key to success in this endeavour. The move towards establishing regional Teaching Public Health Networks (Rao, 2006) supports the *Choosing Health* (DH, 2004) requirements of educating the whole workforce about the determinants of health. This Department of Health supported initiative recognises that it should involve not only the traditional public health workforce but also those for whom an appreciation of the public health approach and public health principles is vital if behaviour and practice are to lead to improvements in the health of the population. The need to change the mindset of not only staff working in health, but also other workforces was a clear challenge if major inroads were to be met in tackling inequalities and meeting health targets. The formation of a unique regional network model was considered to be a means of responding to the need for improved access to and provision of public health education and training and a way of developing focused work on curricula across universities, colleges of further education, the service and third sectors. It was also however recognised to be a massive undertaking which had not been attempted before [Sim, 2007].

Reflecting on the overall structure of the whole TPHN initiative and its achievements has been important in terms of highlighting the process of legitimisation to progress certain areas of collaborative working and to empower committed public health professionals to take forward key areas of recommended interdisciplinary public health activity. The two case studies illustrate such examples. It is also important to recognise some of the barriers to Network activities. Embedded in the aims of the TPHN is the commitment to working with the wider public health workforce i.e. professionals and practitioners who may not not necessarily see themselves as part of this wider workforce. Hence the awareness raising function has been key to the work of TPHN, but initially there were barriers to overcome to be able to engage and then to be able to make an impact.

Currently the challenges of effectively reaching a range of different groups remain. For the foreseeable future it is clear that some targeted TPHN activity is still needed to stimulate and champion innovative inter-professional work. An important question to consider now is, how a national perspective can be retained on this innovative public health activity?

The mobilisation of resources within the national network was achieved by using a distributive mechanism where each regional TPHN submitted a bid identifying the resources needed to achieve the proposed aims and objectives. The regional resources have then been managed in different ways. In one region, a steering group comprising of representatives from all universities and Teaching Primary Care Trusts (t-PCTs) and chaired by the regional lead became the decision making group. Through this small pump-priming funding was allocated to t-PCTs in the region in addition to an ‘integration and innovation’ fund being set up to encourage sub-regional bidding from organisations and groups to engage with relevant TPHN activity. This proved to be very important in terms of encouraging commitment and buy-in to the broad concept of improving public health capacity and capability. The competences and knowledge within the Public Health Skills and Career framework are proving invaluable for networks for benchmarking courses and also in relation to establishing appropriate competences for groups within the wider workforce.

One of the challenges in setting up national networks is how to ensure that their carbon footprint is as low as possible. Telephone and video conferencing proved to be important as did individual sustainable travel wherever possible. Hence the accessibility of location of any meetings was always considered.

Finally consideration is being given to the longer term sustainability of TPHN structure and activity. Partial funding is currently available until March 2010 and hence the strategy of integrating elements of the network into NHS public health regional structures where this synergy makes sense, is a distinct possibility.

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