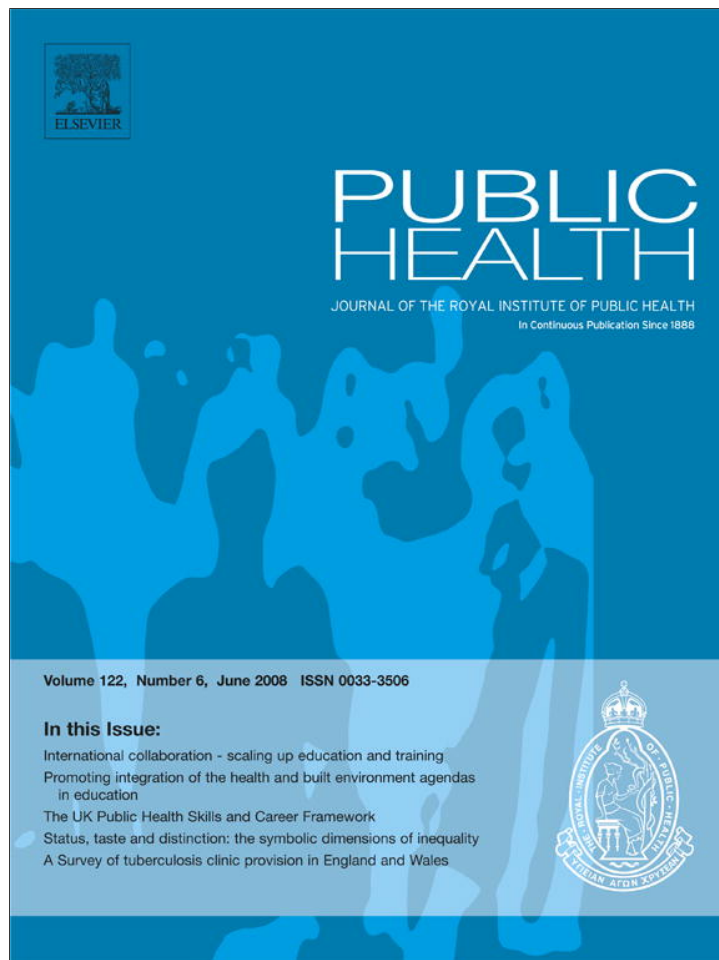


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Special focus—scaling up training and education

# Promoting integration of the health and built environment agendas through a workforce development initiative

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**Summary** There is a renewed and growing recognition of the links between public health and the built environment, which has underlined the need for improved joint working between public health and built environment professionals. However, currently there is little engagement between these two sectors. This paper outlines a workforce development initiative that aims to increase capacity for such joint working, through shared learning and reflection between professionals from the built environment sector and those from the specialist public health workforce. This paper demonstrates how shared learning through facilitated learning sets and other activities has identified issues that both hinder and potentially help the greater integration of health into built environment thinking. It documents a number of responses to the issues that have arisen, as well as suggesting ways forward and future work that can help to bring public health and built environment professionals closer together for the benefit of society.  
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## Introduction

There is a renewed and growing recognition of the links between public health and the built environment, which has underlined the need for improved joint working between public health and built

environment professionals. However, currently there is little engagement between these two sectors. This paper outlines a workforce development initiative that aims to increase capacity for such joint working, through shared learning and reflection between professionals from the built environment sector and those from the specialist public health workforce. The work documented here offers examples of how built environment professionals can be engaged in the public health

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agenda, and vice versa. It suggests ways forward and outlines future work.

## Background

Many of the most important advances in public health have come through improvement of the built environment, whether that be the sanitary reforms of the 18th century or air quality laws in the mid 1900s.<sup>1,2</sup> Built environment professionals, such as town planners, recognized the impact that they could have on health and were key stakeholders in the health improvement process.<sup>3</sup> However, as cities became seemingly healthier, the link between the built environment and the health of the population became less obvious. In developed countries, public health took an increasingly biomedical approach to health improvement, while in planning, political forces led to the dominance of a purely economic rationale. These trends contributed to a severing of the connection between public health and the built environment, with the different professions going their own way during the latter part of the 20th century.<sup>3</sup>

Recently, with the rising relative significance (and costs) associated with public health problems such as obesity, there has been an increasing recognition that the built environment has an important impact on the health and wellbeing of populations.<sup>4-7</sup> A recent comprehensive literature review found evidence of multiple associations between many factors in the built environment and health, including the design, planning and quality of streets, neighbourhoods and green space.<sup>5</sup> Certainly, the increase in childhood obesity being observed in the UK and other developed countries is considered, in part, to be the result of an 'obesogenic environment', where opportunities for physical activity are hindered through the built environment.<sup>8-10</sup>

As such, transformation of the built environment to promote health is one of the responses to the growing challenge of obesity. The Foresight report, 'Tackling obesity: future choices', modelled scenarios where health became integrated into the planning process, concluding that this would lead to positive impacts on obesity trends.<sup>11</sup> Subsequent reports from the National Institute of Clinical and Health Excellence and the Department of Health stress the importance of built environment professionals such as designers, architects, and spatial, town and transport planners for encouraging physical activity through careful design of the built environment.<sup>12,13</sup> These followed calls from the Royal Commission on Environmental Pollution to better integrate health con-

cerns into the design and management of urban areas.<sup>7</sup> Also, as recent evidence suggests, careful urban design can encourage sustainable and health-promoting modes of travel, through the provision of safe routes to schools and work, hence the built environment has an important role to play in the sustainability agenda.<sup>4,14</sup> The need to undertake strategic environmental assessments, sustainability appraisals and health impact assessments also provides a new imperative for planners and public health professionals to work in collaboration. Planners have expertise in the use of these tools, and public health professionals can contribute knowledge of the wider determinants of health, health needs assessment, setting objectives for health, and monitoring and interpreting health information.<sup>15</sup>

Despite the strategic thinking in documents such as 'Healthy weight, healthy lives' linking planning with health, there is a lack of real understanding of how this can be delivered at the grass roots level.<sup>12,13,16</sup> The specialist public health workforce, defined by the Chief Medical Officer as those who work at senior levels in public health with specific expertise in areas such as epidemiology, research methods and health promotion, have not generally worked alongside their built environment colleagues.<sup>17</sup> Meanwhile, the built environment sector only engages marginally with the health and wellbeing dimensions of their work. Little is known about whether current built environment professionals recognize their role in determining the health and wellbeing of the population. Sir Derek Wanless, in his report 'Securing good health for the whole population', recognized that engagement with the wider public health workforce is crucial for achieving the desirable 'fully engaged scenario', which would seek to maximize the preventative approach to tackling important health issues.<sup>18</sup> This is certainly needed in the case of built environment professionals, who are indeed part of this wider public health workforce.

Work has begun to address this issue. Bodies such as the Commission for Architecture and the Built Environment (CABE), Natural England, the UK Public Health Association (UKPHA), the National Heart Forum, the Department of Health and the World Health Organization (WHO), through their 'Healthy cities' programme, are working to bridge the gap between the built environment and public health sectors. Other interesting developments in this field include Scotland's Healthy Environment Network, and the North East Obesogenic Environment Network. However, it should be acknowledged that all these initiatives differ in terms of their potential impact and scope. Over the past 2 years, CABE has

been focusing policy attention on the role of the built environment in supporting public health through its 'Building a healthier future' programme. In contrast, the emphasis at Natural England has been on the role of the semi-natural environment and green urban spaces on health. The UKPHA has been working at a more strategic level with opinion formers and decision makers to create better connections between those working in public health and in the built and natural environment fields. The National Heart Forum, the Department of Health and the regional networks are, in the main, focusing on built environment and climate change issues, through a mixed programme of bringing forward policy changes and developing a better evidence base. The 'Healthy cities' programme, run through WHO in Copenhagen, demands a link between the public health functions and planning functions for the 90 cities involved in its fourth phase. Set in relation to all this activity, this paper outlines a specific workforce development initiative led by the South West Public Health Teaching Network (SWPHTN). The project described is seeking to bring regional public health and built environment professionals together through activities involving shared learning and reflection.

### **Aims and approach of the work programme**

The primary goal of the programme of work is to increase capacity for joint working between the public health and the built environment sectors. The methodology takes the project beyond research or training. Through embedding an action learning paradigm at the heart of the approach, the project provides an immediate interface between research into professional practice and developing better practitioner awareness.

Recent years have seen a rise in the quantity of partnership working on public health issues, initiated just over a decade ago by 'joined-up government' policies dictating partnerships through funding regimes such as single regeneration budgets and 'New deal for communities', and now taken forward through local area agreements.<sup>19</sup> Partnerships between local authorities and public health have been accelerated with the many joint appointment and coterminus boundaries stemming from the last round of health re-organization in the National Health Service. However, little attention is paid to the quality of, and meaningful outcomes from, the partnership working. The philosophy underpinning this programme is to generate a higher degree of synergy between the professions

involved. An action learning research approach is being adopted to enable the two professional groups, public health (initially focusing on members of the specialist public health workforce, including directors of public health and consultants in public health) and the built environment (with a focus on planners and architects), to connect through better understanding of the ethics, philosophy and core values of each profession.

To address the primary goal of increased capacity for joint working, two strands of work are being developed. Firstly, action learning sessions, designed as enquiry workshops, are being undertaken with specific groups of stakeholders. These have been deepening understanding and are slowly revealing insights into misconceptions on each side of this professional divide. Secondly, the project is developing a stable of flexible public health/built environment learning packages, informed by the action learning workshops. The work programme outlined in this paper was conducted during 2007, with further activities planned for 2008 and beyond.

### **Organizations involved**

This programme is led by the WHO Collaborating Centre for Healthy Cities and Urban Policy, which is based in the Built and Natural Environment School at the University of the West of England (UWE), Bristol. It was designated by WHO in 1998 in order to better integrate public health and settlement planning, design and development. The WHO Collaborating Centre has planners, architects and landscape architects as core staff as well as colleagues drawn from the Faculty of Health and Life Sciences at UWE. The Centre is responsible for advising WHO on healthy urban planning, and is at the forefront of the worldwide movement to create health-giving neighbourhoods, towns and cities. It has a track record of supporting and embedding interprofessional working into all its activities.

Funding for the programme has been provided by the SWTPHN. The Teaching Public Health Network initiative, funded by the Department of Health, is a means of responding to the need for improved access to and provision of public health education and training.<sup>20</sup> There is a recognition that knowledge and understanding of health determinants is vital not just for the traditional public health workforce, but for all those whose work can impact on the health of the population.<sup>21</sup> Launched in 2006, nine regional networks, which are partnerships between academic and service public health organizations, exist across England.

The programme outlined here is co-ordinated by a small steering committee drawn from the members of the SWTPHN and the WHO Collaborating Centre. It is accountable to the regional steering group of the SWTPHN.

### Initial scoping activities

At the outset of the project, two events sought to shape the direction of the work: a workshop based at the UWE; and a national learning set involving lead members of the regional networks.

The initial workshop at the UWE brought together academics from public health and built environment backgrounds. The workshop was designed to support enquiry into the understanding and misunderstandings about each other's disciplines. Each group, public health and built environment professionals, was invited to examine their own core values, professional competences and stakeholders, then to set out their understanding of those of the other group. Through sharing the outcomes of this exercise, the groups were able to reach a richer understanding of each other and also how their own profession was being portrayed. With both 'public health' and 'built environment' being collective terms for groups of disciplines with a common interest but a blurred boundary, the room for misunderstanding of positions and interests is great.

This workshop identified some key barriers. The different languages being used and different professional realms are leading to a lack of alignment of objectives and goals. It also became apparent that there was an ignorance of the benefits and perceptions of adverse costs, and also unrealistic thinking around changes that would be required to build closer relationships. The key strategic barrier is that the evidence coming from the public health disciplines is not visible enough; it is not presenting itself in a way that can easily be assimilated into the built environment design and planning processes.

A learning set, involving representatives from all of the regional networks, was also co-ordinated in the initial phase of the project. At this event, only public health professionals were present. Using a scenario technique, participants were placed in various roles to consider how to 'lever-in' more health benefits to the planning of a new primary school. Participants explored the motivations and constraints behind stakeholders in such a planning project, and considered what added value public health input could really bring to a planning situation. This is another powerful technique in better understanding the underlying dynamics in these multiprofessional situations.

Both these events were designed to 'surface' the issues that can get in the way of progress when bringing public health and built environment professionals closer together. These events assisted in the development of the work programme.

### Resulting activities

Following the initial scoping activities, the project planned two events in the South West of England. The structure and focus of these events was shaped by the scoping activities. The Bristol Planning Law and Policy Conference is a full-day 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 sectors. In November 2007, assisted by funding from the SWTPHN, the conference (attended by over 200 people) focused for the first time on the links between health and planning, with several keynote speeches to delegates on this issue. Following this, a 2-h workshop of 30 planners (who had registered to attend), supported by three public health specialists (who had been invited to participate), considered 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, designed to be a dynamic tool to provide a basis for dialogue and to provoke enquiry.<sup>22</sup> The group of planners were surprised and enthused by the extent of the relationship between health and planning. In particular, planners were surprised by the way in which their work could influence a wide range of health issues. However, there was a general feeling that as planners they did not have the requisite knowledge of these health issues to be able to engage fully with the health implications of their work.

The second event was the South West Public Health Residential School. This annual event attracts public health workers from across the South West of England. At the 2007 event, an afternoon workshop examined the links between the built environment and public health. This was attended by around 30 public health specialists, many being directors of public health, who had signed up for the session, with participation and support from three architects and three planners from the UWE's built environment faculty. The workshop encouraged the public health professionals to consider the perspectives from both professional spheres in terms of territory defended, core values and professional interests, with the aim being to identify shared stakeholders, concerns and

values between built environment and public health professionals. The workshop participants found that there was common ground. Both professional groups have a focus on populations and their environment. In addition, the built environment values of 'creating sustainable and eco-friendly neighbourhoods' is compatible with the public health values of 'tackling health inequalities and improving overall health'. The professional 'territory defended' as articulated by the participants in public health revolved around skills and expertise in health needs assessments, epidemiology, health protection and health services evaluation. In the case of the built environment professionals, control of the planning process, and building design and aesthetics were identified. The professional interests of the health professionals, including evidence-based interventions, statistics, evaluating effectiveness and engaging with wider agencies, surprised the built environment professionals who were present. The professional interests cited by the built environment professions that gave the public health fraternity a surprise were shaping communities, protecting wellbeing, taking an overview and balancing vested interests. A number of core values were explored by both groups, and this is where theory would predict that there would be the closest convergence; notions of social justice, improving quality of life and serving the community were common to both groups. The public health participants brought scientific rigour uniquely to the table, whilst the built environment professionals held the core value of functionalism in the creation of structures and neighbourhoods. The two groups were then brought closer together, through this identification of common ground, whilst recognizing potential barriers to greater partnership working. The session ended with a constructive dialogue about possible ways forward to improve partnership working; a key question being the relative merits, and differences between, training built environment professionals in public health or training public health practitioners in planning and design.

## Responses

The lack of visibility of evidence for how the built environment, and more specifically urban form, affects health was one of the key barriers identified in the workshops. Within the project, a remedy was sought. This was to start to compile an annotated bibliography of publications that would be of most use to practitioners and their educators in explaining the links. This database mainly comprises

systematic reviews and meta-studies as well as some well-argued commentaries. The plan will be to develop the project so that the selected publications can be made available on the web and disseminated to the intended audience.

The discussion of public health impacts is sporadic and disparate in the professional press in planning and architecture. It is important to raise awareness within these professions of how their activities impact on public health. In order to stimulate debate, pairs of built environment professionals have been given the role of 'public health champions'. Each pair consists of a lecturing professional at UWE and one in an external higher education institute in both planning and architecture. Using the evidence base referred to above, they are currently preparing material to be published in a range of professional journals.

A new series of short courses in healthy urban planning have been designed to help health and planning/design professionals to integrate their thinking and develop coherent spatial health promotion strategies. Launched in late 2007, eight 1-day courses on a variety of topics are now being offered across the country in locations including Bristol, York, Cambridge and Loughborough (Box 1). It is hoped that this programme will not only increase knowledge and understanding of the links between public health and the built environment, but will also act as a networking opportunity for professionals from both sectors. Take-up of the short course has been slower than expected, given the expanding agenda and national focus outlined in the Background section of this article. This is in marked contrast to the level of interest and demand generated by the conference workshop sessions. This is possibly due to the completely different markets and cost expectations in the two sectors, health as opposed to planning; these factors are currently being examined.

In addition to the short course, to increase flexibility and access to learning materials, an initial stable of six health-related topics is being developed using distance-learning computer-based delivery (Box 2). These are 1-day learning packages to be undertaken in the workplace. They focus on filling some of the knowledge and training gaps being identified as the enquiry workshops proceed. The distance-learning packages are due to be launched in 2008.

## Discussion

The work reported here represents only the initial steps to bring together the built environment and

public health workforce. This early work has been successful in identifying issues that both hinder and potentially help the greater integration of health into built environment thinking. This includes a lack of knowledge about health issues generally amongst built environment professionals, and a lack of easily available evidence, in the correct form, to advise built environment policy makers and practitioners of how the built environment (and, in particular, the urban form) affects health. This paper has outlined some of the responses to the issues that have arisen as part of this work programme. As well as these responses, a series of next steps are proposed, intended to develop the work further. At national level, it is proposed to develop a network for built environment faculties across the country, with the aim of better integrating (public) health understanding into built environment teaching and professional development. Links could also be developed with professional accrediting bodies, such as the Royal Town Planning Institute and the Royal Institute of British Architects. If health is to be embedded in the agenda of built environment professionals, a lead from these bodies is crucial. At regional level, learning sets across the South West, with public health specialists paired with built environment colleagues in their local area, may be a valuable way of developing further shared learning between public health and built environment professionals. It is envisaged that holding such a series of events will help to deepen understanding and promote closer working relationships, especially important set against the background of the Government's current housing growth agenda.<sup>23</sup>

This work represents the beginning of a dialogue between public health and built environment professions which seeks to bring the two professions back together. The programme of work has sought to create interprofessional spaces where issues relevant to both professions can be explored. Often this is the first time that such professionals have been in the same room as one another. However, the work is more than about creating a shared space. It is a facilitative process, using tools such as the 'Health map' and other task-oriented approaches to generate discussion and self-analysis. Such reflection is difficult in the day-to-day work environment.

The authors were surprised by the apparent lack of understanding and awareness between professionals who have so much in common and could benefit greatly from one another. The positive reactions of participants on both sides to seize the opportunity of closer working and developing a real

shared understanding was rewarding and indicative of the future potential of this area of work. This is crucial if strategic thinking is to be realized at the grass roots level.

## Conclusions

The programme of work outlined above is only the beginning of a process that seeks to better integrate the public health and built environment agendas. The work programme aims to be part of a dynamic, reactive process. In practice, this means that in parallel with further workshops, learning sets and the development of training, the researchers and participants will continually explore and challenge the barriers to progress and respond to issues as they arise. Bringing public health and built environment professionals together is likely to be challenging. However, this area of workforce development activity is crucial if major public health challenges such as obesity and climate change are to be tackled.

## Ethical approval

None sought.

## Funding

SWTPHN which is funded by the Department of Health.

## Competing interests

PP is currently the Co-ordinator of the SWTPHN, and MG is leading the work programme to promote integration of the health and built environment agendas, funded in part by the SWTPHN.

### Box 1. Content of short course on healthy urban planning.

Assessing the health impacts of projects  
 Climate change: implications for the human and natural environment  
 Green space: promoting health and well-being  
 Linking health and planning: a health map for urban planning  
 Neighbourhood planning for physical activity  
 Planning and designing healthy outdoor spaces for young people  
 Planning for an aging society  
 Understanding spatial planning for public health professionals

### Box 2. Distance-learning health-related topics.

Health impact assessment  
 Healthy sustainable communities  
 Designing and developing the healthy neighbourhood  
 A built environment approach to public health using the 'Health map'  
 Sustainability threshold analysis: the Spectrum approach  
 Plan making in health

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