A health map for the local human habitat

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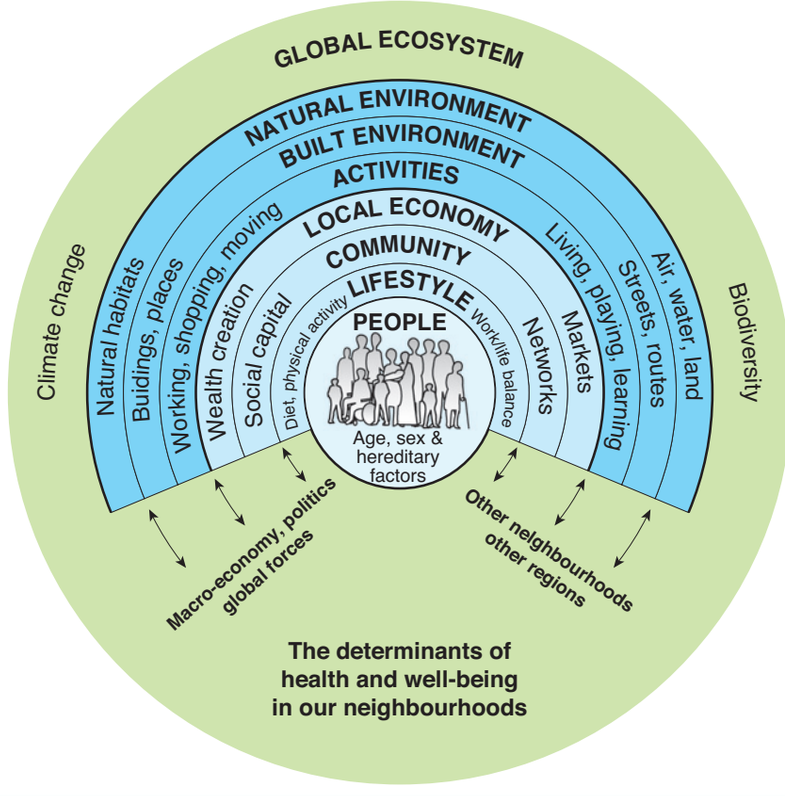
At the 2006 UK Public Health Association Conference, held in Telford in March, and the International HIA conference, held in Cardiff in the same month, there was much interest in a new model of health determinants being applied to the planning of human settlements. This 'health map' is presented here in its current form for the first time. The authors explain its purpose.

The environment in which we live is a major determinant of health and well-being. Modern town planning originated in the 19th century in response to basic health problems, but in the intervening years planning has become largely divorced from health. We have been literally building unhealthy conditions into our local human habitat. Recent concerns about levels of physical activity, obesity, asthma and increasing environmental inequality have put planning back on the health agenda. It is widely recognized that public health is being compromised by both the manner of human intervention in the natural world and the manner of development activity in our built environment.[1] However, taking action is not necessarily simple. The links between health and settlements are often indirect and complex. A tool to improve understanding and foster collaboration between planning and health decision-makers is badly needed.

The good news is that the impact of the natural and built environments on health is receiving increasing attention from both public health professionals and spatial planners. On the one hand, for example, the UK Public Health Association (UKPHA) has set up a Strategic Interest Group (StIG) for natural and built environments. This group devised a well-attended themed strand of some nine papers and a workshop at the recent UKPHA Annual Forum. In the spatial planning fraternity indications of interest can be seen in this year's Royal Town Planning Institute's conference on Spatial Planning and Health (16 February, Birmingham). To some extent this is being supported by legislative changes such as the introduction of Community Strategies and the new planning act (Planning and Compulsory Purchase Act 2004), which gives more emphasis to cross-sectoral work.

Figure 1

The health map



The new health map presented in Figure 1 has obvious and intentional antecedents in the health literature – Whitehead and Dahlgren's[2] much-quoted 1991 diagram that shows the relationship between health and the physical/social/economic environment. The other inspiration came from ecosystem theories and the principle of sustainable development.[3] Working as spatial planners advising the WHO Healthy Cities movement, the authors have tested, developed and re-tested a visual tool for both communicating and analysing the health-settlement relationship.[4,5] This version of the health map consolidates previous work. It has been refined through comments from members of the UKPHA StIG (including the Commission for Architecture in the Built Environment, English Nature, Countryside Council for Wales and Groundwork Trust), as well as WHO Healthy Cities and many individuals. The health map has been designed as a dynamic tool that provides a basis for dialogue and provokes enquiry. It has been deliberately composed to provide a focus for

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collaboration across practitioner professions (for example, planners, public health, service providers, ecologists, urban designers) and across topics (for example, transport, air quality, community development, economic development).

People are at the heart of the map, reflecting not only the focus on health, but also the anthropogenic definition of sustainable development.[6] All the different facets of a human settlement are reflected in the series of spheres which move through social, economic and environmental variables. The settlement is set within its bioregion and the global ecosystem on which it ultimately depends. Broader cultural, economic and political forces, which affect well-being are represented. Thus all the elements of the original Whitehead and Dahlgren diagram of the determinants of health are included, spread out to reflect the ecosystem of the local human habitat.

The urban development process, and more particularly the design and planning of settlements, reside in one sphere – *the built environment.* Thus planners can see their place in determining health. In direct terms, they can affect the quality of that environment, for example, housing. The importance of the model is that it can be used to analyse knock-on (indirect) effects, which are often much more significant in terms of health. Take a new road, for example, the pattern of human activity – travel behaviour and destinations – is changed. Activity, in turn, affects the local natural environment (air pollution) and the global ecosystem (greenhouse emissions). It also affects local economic efficiency and people's lifestyle choices (the likelihood of walking or driving). Lifestyle changes may well affect the pattern of social networks. It is apparent that every sphere representing health determinants – except the inherited characteristics – is affected to a certain extent. The model can help identify these processes and contribute to sustainability and health impact assessment.

A fuller presentation of the health map from the health perspective will be published later. For an explanation from the perspective of planning theory, a recent paper in *Built Environment*,[5] outlines some important developmental steps. Further comments on the diagram and its potential use are welcome.

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Healthy places, healthy people

The health landscape in this country is complex. While few of our current preoccupations in health are entirely new, their importance is brought into sharp focus by the extent and scope of the current building programme. The evolving healthcare agenda is increasing the attention given to health and well-being. It is also taking a large proportion of care out of the hospital environment and placing it into our communities.

This new context means reinvesting our energies into creating healthy, sustainable communities. CABE's first Health Week in May this year brought together a range of people from healthcare and public health, architecture and urban design, mental health and housing, research and consultation, to examine and debate the complexities of contemporary health, and to develop our understanding of healthy, sustainable communities. Health is just one factor of a successful neighbourhood, but it needs to be embedded in all discussions about the design and make-up of our communities.

However, we also have to understand more clearly the relationship between buildings that are designed for healthcare, and the design of neighbourhoods as a whole. Often these are separate endeavours, with different teams of professionals involved; it is crucial in today's healthcare environment to ensure that all our buildings, places and spaces, individually or collectively, make a positive contribution to the health and well-being of their communities.

HEALTH WEEK 2006

Historically, there are two examples of buildings for health that provide a wide range of health and social care for the community. The design of Finsbury