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• Special Issue: #healthyplanning – Securing Outcomes from United Action

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on the agenda

An update on the Association's activities and the wider policy landscape by TCPA Interim Chief Executive Hugh Ellis

utopia or trumpland?



We live in bewildering political times, not only with the slow unfolding chaos of Brexit, but with the equally dramatic election of Donald Trump as President of the USA. Both of these electoral outcomes reflect a dramatic change in the nature of global politics and both have a direct impact on the work of the TCPA.

Donald Trump's election means an end to the fragile global consensus on climate change agreed at Paris last year. The TCPA has spent 25 years working to understand the impacts of climate change and how a whole range of energy and design solutions could provide a powerful pathway to both a stable climate and a productive low-carbon economy. It has also been fearless in pointing out the failures of successive governments to communicate or prepare for the scale of the impacts that the nation will have to deal with.

The UN Paris Agreement was mankind's last chance to avoid exceeding 2°C of global temperature change, and the future is now bleak. We at the TCPA are often asked why the Association spends so much time on climate change when the issue has proved to be so politically unpopular in recent years. The answer is simply because climate change stands between us and everything we want to achieve in terms of a fair and sustainable future.

There is always hope that President Trump will engage with the compelling science of climate change, but if he does not and the Paris Agreement falls then almost everything in the way we plan, from the building fabric to the location of new places, will need to be re-thought.

Climate denial has been part of the powerful 'pre-enlightenment politics' of recent years, in which 'experts' and scientists are derided as being part of a mystical establishment conspiracy. Sowing social division has also been a key part of this agenda: scapegoating the poor or particular ethnic groups or the disparagement of women have marked a profound and regressive political realignment. But the promotion of division for political advantage is nothing new and, as the 20th century should have taught us, once unleashed it almost always ends in bitter violence.

One might argue that as a small organisation the TCPA should seek to try to keep out of these wider debates or that it should retreat into that comfortable rabbit hole of technical detail. In fact, it seems that the TCPA's role has become even more important. This is role comprises three parts:

- To fearlessly identify the challenges to the future of our society, from inequality to climate change to demographics.
- To construct a hopeful future based on a package of solutions.
- To make that hope a practical reality through a detailed understanding of implementing change.

The Association's work with Christine Whitehead on demographics and its forthcoming analysis of planning and climate change for the Joseph Rowntree Foundation are examples of the first of

'If we are to avoid 'Trumpland' we must all work harder to re-establish basic social values such as compassion, as well as finding shared ways of understanding the problems we face – like a basic belief in reason and evidence'

these objectives. Its detailed work on Garden Cities contributes on the second, and its work with the expanding and highly successful New Communities Group, and with the Green Infrastructure Partnership, fulfils the last.

Two other ingredients are also required if we are to succeed in offering progressive outcomes. We need to be honest and admit that we have not engaged enough with those communities who have too often been left behind. We have neglected

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their lived experience and often failed to offer solutions that would make their lives better. The #Planning4People campaign has moved us on, but, three years after the TCPA published the *Planning out Poverty* report, social justice is still not a mainstream concern of a great deal of planning practice.

And there is the issue of collective action. It has to be the role of the TCPA to build consensus – to try to draw conflicting interests together and where possible to act as a catalyst for change. The Secretary of State for Communities and Local Government's appearance at a TCPA New Communities Group briefing at the end of October was a welcome step in a wider project of forging common interests. The content of the Housing White Paper will test whether the Government is interested in reducing inequalities in that most basic of public goods, a home.

But, of course, we have to go much further in breaking down division between competing NGOs and political and commercial interests to create a sense of a collective commitment to basic common aims for the future of our communities. If we are to avoid 'Trumpland' we must all work harder to re-establish basic social values such as compassion, as well as finding shared ways of understanding the problems we face – like a basic belief in reason and evidence.

Above all, for every problem we identify we need a practical solution. In the face of Trumpland the TCPA must construct the hope of a collective and inclusive future.

• Hugh Ellis is Interim Chief Executive of the TCPA.

- we are: independent and open to all who want better places
- we have achieved: greener cities, new towns, and better homes
- we create: ideas, knowledge, publications, campaigns, and independent policies
- we aim to: secure homes, empower communities, and deliver a sustainable future

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Making planning work

- Planning & Climate Change Coalition
- European projects
- Reuniting health and planning
- Green Infrastructure Partnership

securing health outcomes from united action

Guest Editors Carl Petrokofsky, Andre Pinto and Janice Morphet introduce the Special Issue and reflect on recent progress in reuniting health with planning and on what remains to be done to bring health and wellbeing onto a par with other planning considerations

In a Special Issue of *Town & Country Planning* on 'Reuniting Health with Planning' published in November 2014, the Guest Editors observed:

'This Special Issue of Town & Country Planning taps into the current momentum around attempts to better understand both the influence of the built and natural environments on our health and the role of spatial planning in shaping places that help us to maintain good health.'¹

It was in this spirit that the TCPA asked us to organise another Special Issue devoted to health and planning; and it is worth asking how the situation has progressed in the two years since the previous Special Issue appeared.

In its submission to the House of Lords Select Committee on the Built Environment, Public Health England (PHE) noted that:

'Some of the UK's most pressing health challenges – such as obesity, mental health issues, physical inactivity and the needs of an ageing population – can all be influenced by the quality of our built and natural environment. [...] the considerate design of spaces and places can help to promote good health; access to goods and services; and alleviate, and in some cases even prevent, poor health and thereby have a positive impact on reducing health inequalities.'²

This is an aspiration few would argue against and, as the authors in this Special Issue point out, this is in fact government policy, as set out both in the National Planning Policy Framework (NPPF) and in the 'Health and wellbeing' section of National Planning Practice Guidance.³ When the NPPF was published in 2012, it included, for the first time, a section on 'Promoting healthy communities', heralding the return of planning to the territory of its origins: providing a solution to the problems created by insalubrious industrial towns in the 19th century.

As Janet Askew, then President of the RTPI, said in June 2015:

'Health problems such as obesity, chronic heart disease, stress and mental health issues are intricately linked to the physical environments in which people live and work. Cities need growth, but at the heart of that must be citizens' wellbeing. It makes economic sense, and good planning can help to achieve both.'⁴

Since the Special Issue was published two years ago, some progress has been made in reuniting health with planning. Nevertheless, we still believe there is some distance to go until health and wellbeing is on par with other planning considerations. But there is hope. As Bruce Laurence from the Association of Directors of Public Health points out in this Special Issue, public health teams have now firmly embedded themselves into local authorities. They have real opportunities to work across council services such as planning, regeneration, transport, leisure, licensing, and environmental health to address the wider, underlying determinants of health.

Indeed, in the past two years, many local authorities have grabbed these opportunities and made great strides in developing strong working relationships between their public health, planning and housing departments, thereby gaining a better understanding of each other's focus, ways of working, interpretation of evidence and organisational cultures. For example:

• *Healthy-weight environment:* With the support of the TCPA, PHE and the Local Government

Association (LGA), local authorities up and down the country have hosted a range of workshops to consider how to translate the principles set out under the 'Reuniting Health with Planning'⁵ or 'Planning Healthy-Weight Environments'⁶⁸ projects into action. As Michael Chang of the TCPA highlights, these experiential workshops have helped to consolidate ongoing initiatives in many areas – stimulating greatly improved working relationships between planners and public health colleagues, particularly in two-tier areas. Indeed, a series of practical lessons and sensible steps have emerged from these workshops.⁷

- **NHS Healthy New Towns:** The NHS *Five Year Forward View*⁹ recognised that new town developments and the refurbishment of urban areas offer an opportunity to design modern services from scratch and build in health as an integral element of town design. As Sara McCafferty explains, the Healthy New Towns programme is a significant shift for the NHS and illustrates its recognition that good urban and housing design promotes healthy lifestyles and supports the building of strong communities, so helping to prevent illness, promote health, and improve the delivery of cost-effective healthcare in new ways.
- PHE's Healthy People, Healthy Places programme: The creation of PHE's Healthy People, Healthy Places programme¹⁰ is, in itself, a clear indication of an increased awareness that the biggest public health challenges we face in the UK at the moment have a spatial component – and that spatial planning has to be part of the solution. Since its inception, the programme has tried to help foster conditions for joint working and to help public health teams in local government harness their potential and influence the decision-making processes in local town and country planning.
- **Evidence base:** Meanwhile, the basic science underpinning the links between health and the built and natural environments has continued to grow apace, with growing evidence of linked economic returns on investment.

The development of the evidence base and its application to place, including how such application fits into the wider context of the planning system, is a key theme that emerges from several of the articles in this Special Issue.

In the 1972 one of the fathers of modern public health practice, Archie Cochrane,¹¹ set out the challenges for evaluating policies and services:

- Is it effective (i.e. does it work)?
- Is it efficient (i.e. is it being delivered economically)?
- Is it equitable (i.e. is it fair)?

For planning, the challenge is substantially different. When planners talk about the 'evidence base' they are quite often referring to spatial-based approaches that have been shown to support the objectives of the planning system, as set within planning policy and regulations and substantiated by relevant case law and appeal decisions. This theme is explored in the article by Laurence Carmichael and colleagues, emerging from a collaborative seminar series held by five universities and PHE over the past 18 months.

Although the concept of the 'evidence base' may be somewhat different for the planning and public health professions, the purpose of planning is to help 'achieve sustainable development',¹² 'which should be seen as a golden thread running through both plan-making and decision-taking'.¹² Planning has 'a social role – supporting strong, vibrant and healthy communities'.¹² The central questions for health services policy posed by Cochrane can thus surely be applied to planning issues. The challenge for public health, in the context of planning decisions, is often to try to demonstrate the effectiveness of action evidenced by randomised controlled trials and systematic reviews of the literature, and how this applies to 'place'.

As Claire Griffiths, Emma Wilkins and Michelle Morris report from their work on obesity, never has this issue been more focused than in consideration of hot-food takeaways and their role in contributing to obesity. Although some (public health) colleagues may not necessarily agree with some of their conclusions, few would disagree with the 'methodological challenges' which the team have raised in relation to attempts to find 'consistent associations between the food environment and obesity'. The team go onto imply - using the time-honoured public health prevention principle (the precautionary principle) - that practitioners should not necessarily wait until we have the perfect evidence to support action. However, both research and policy need to better consider the interplay between people and place characteristics.

Nevertheless, there still remains a challenge for local planners and public health practitioners when presented with an application for yet another hotfood takeaway in a particular locality – although there are good examples up and down the country of how these issues are being dealt with in ways which meet Cochrane's questions within a planning context. Dealing with such practical issues on the cusp of health and planning remind us that our health is determined largely by four factors:¹³

- **Person:** Who you are (your age, sex and genetic heredity).
- Behaviour: What you do (your individual lifestyle and behaviour – do you smoke; take drugs; stay active; and have a job, education and social networks?).
- **Place local:** Where you live (does your lived-in environmental infrastructure support you in staying healthy?).

• **Place – global:** Where you don't live (how global environmental conditions such as climate change affect your health and wellbeing).

The complex interplay between behaviour and place is illustrated in the article by David Ogilvie, Jenna Panter and Cornelia Guell, who found in a recent study that a range of benefits emerged from the provision of a guided busway and cycling infrastructure in Cambridgeshire. Their study also demonstrates the increasingly common finding that infrastructure developments which are good for health are also good for both the environment and the economy.¹⁴

Focusing more on behaviour without the benefit of significant infrastructure investment, and in a more rural workplace situation, the article by Rachel Lee shows how to begin to bring about greater levels of walking and physical activity. But she recognises that it is essential to provide appropriate infrastructure to people's place of work if we are to make truly significant modal shifts away from the car to walking and cycling.

Although a range of health issues such as diet and physical activity illustrate the complex interplay between the provision of infrastructure and behaviour, others are more firmly fixed. 'Hardwiring' the design of our homes, neighbourhoods and communities for health from the outset is bound to pay health dividends and can set the conditions that help healthy choices to become the easier choices.

Helen Pineo asks whether it costs extra to build a healthy place, and, having posed the question, provides an answer that is at odds with what is often heard at industry events. She provides evidence in terms of the health costs to the wider community that arise when we do not build health in from the start, and shows how we all pay the costs of unhealthy neighbourhoods. Similarly, Sue Adams examines the benefits and challenges of planning healthy, sustainable homes and neighbourhoods for an ageing population – and gives examples of where such approaches are being applied.

The articles by Stephen Naylor and Emma Cariaga highlight examples where, variously, NHS Property Services, developers and land agents have been trying to apply the principles of healthy design from the start. The challenge now is to roll out such approaches across the country, to build healthy communities with sustainable housing. And from a transport and planning perspective Scott Witchalls, Bob Pinkett and Dawn Wylie point out how the wider benefits of integrated transport planning to make communities truly accessible can potentially yield significant benefits for individuals' mental wellbeing, as well as their physical health.

These articles raise another important issue: the processes available through the planning system to

support a more systematic analysis of the impact, or potential impact, of development plans on health. The articles by Jenny Dunwoody and Paul Johnson and by Ben Cave and colleagues consider the interrelationships between Environmental Impact Assessment (EIA) and Health Impact Assessment (HIA) – especially in light of impending EU regulation in May 2017 (which, as far as we can tell, will be transposed into UK law, notwithstanding the result of the June referendum on British membership of the EU).

Both sets of authors highlight the practical processes and steps that can be taken to help planners, public health colleagues, assessment practitioners and developers to see how health impacts can be better integrated into existing EIA practice; and how implementation of the recommendations from HIAs can do much to minimise the negative aspects and enhance the positive aspects of major projects, to benefit local communities' health and wellbeing. A key message seems to be to ensure 'early engagement' between all interested parties (especially at the pre-application stage) – this can help to maximise impact and reduce re-design and other costs for builders and developers.

As the contributors to this Special Issue illustrate in their broad-ranging and insightful articles on the policy and practice of planning and health, we now have the political framework in place through the NPPF and National Planning Practice Guidance; we have the structures in place through the Joint Health and Wellbeing Boards; we have the processes in place though Joint Strategic Needs Assessments and EIAs and HIAs; and, since public health teams moved into local government, we have the people in place – notwithstanding sometimes in different tiers of local government. Now we just need to make 'it' happen.

Limited resources in the public sector continue to challenge our good intentions to make 'it' happen, everywhere, but, as the authors throughout this Special Issue demonstrate, good practice abounds across the county. As Daniel Masterson observes from Stoke-On-Trent, imaginative use of resources has allowed behavioural insights from health psychology to be brought into play in a more proactive way to better address the complex underlying causes of health and ill-health, as well as to support better working between different groups of professionals.

We have a challenge to try and make 'it' happen everywhere – consistently, systematically and underpinned by a strong evidence base to support evidence-informed decision-making. The dangers of not getting 'it' right everywhere is to build up longterm costs – often to the most vulnerable individuals and most deprived communities in our country – for our health, our environment and our economy. And Archie Cochrane's questions remain as valid as ever, for both public health and planning, in addressing planning issues – namely:

- Is it effective (i.e. will it improve health)?
- Is it efficient (i.e. will it reduce healthcare costs)?
- Is it equitable (i.e. will it reduce health inequalities)?

The past two years have seen significant progress in reuniting health with planning – despite the challenging economic conditions facing the public sector. We must build on this, and think big and start small – but whatever you do, start now!

• Carl Petrokofsky is a Public Health Specialist leading the Healthy Places Team at Public Health England. Andre Pinto is a Town Planner working for Public Health England on the Healthy Places Team. Janice Morphet is Visiting Professor at the Bartlett School of Planning. The views expressed are personal.

Notes

- 1 A. Ross and C. Petrokofsky: 'Back to the future?'. *Town & Country Planning*, 2014, Vol. 83, Nov., 468-70
- 2 Building Better Places. Report of Session 2015-16. Written Evidence (BEN0186) by Public Health England. House of Lords Select Committee on National Policy for the Built Environment.TSO, Feb. 2016. www.parliament.uk/documents/lords-committees/builtenvironment/Combined-evidence-volume.pdf
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- 4 L. Edgar: 'RTPI calls for integrated health and growth planning'. *The Planner*, 29 Jun. 2015. www.theplanner.co.uk/news/rtpi-calls-for-integrated-health-and-growth-planning
- 5 A. Ross, with M. Chang: Reuniting Health with Planning Healthier Homes, Healthier Communities. How Planning and Public Health Practitioners Can Work Together to Implement Health and Planning Reforms in England. TCPA, Jul. 2012. www.tcpa.org.uk/healthyplanning

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- 12 National Planning Policy Framework. Department for Communities and Local Government, Mar. 2012. www.gov.uk/government/uploads/system/uploads/ attachment_data/file/6077/2116950.pdf
- 13 See Hugh Barton and Marcus Grant's settlement health map – in H. Barton and M. Grant: 'A health map for the local human habitat'. *Journal of the Royal Society for the Promotion of Health*, 2006, Vol. 126 (6), 252-253. dx.doi.org/10.1177/1466424006070466
- 14 See also Working Together to Promote Active Travel: A Briefing for Local Authorities. Public Health England, May 2016. www.gov.uk/government/publications/activetravel-a-briefing-for-local-authorities

Your feedback on this Special Issue...

This Special Issue of *Town & Country Planning* is the third focusing on reuniting health with planning, following previous Special Issues published in February 2007 and November 2014. The TCPA and the Special Issue Guest Editors would welcome feedback on this Special Issue from readers, to help inform the contents of future planning and health Special Issues.



A short survey, of only nine questions, has been prepared, at www.surveymonkey.co.uk/r/TCPAHealthJournal

Your support in completing the survey would be greatly appreciated.

For further information on the TCPA's Reuniting Health with Planning initiative, or to discuss issues raised in bringing together health and planning, please contact Michael Chang, Project and Policy Manager at the TCPA, on **Michael.Chang@tcpa.org.uk** or **0207 930 8903**

building health and wellbeing into the built environment – the role of directors of public health in local authorities

Bruce Laurence looks at the opportunity for public health teams to help weave health into the fabric of our built environments, drawing on examples from some of the approaches that have been used in the South West of England

Our built environment impacts on health and wellbeing in limitless ways, whether through individual dwellings, the planning of our urban and rural communities, or the transport links between them. Therefore one of the most exciting results of public health teams moving from the NHS into local authorities is that they can now work more closely with services such as planning, regeneration, housing, leisure, transport, licensing, environmental services and public protection. The Association of Directors of Public Health¹ enables public health workers to identify good practice, share experiences and engage in discussions of policy and practice with the Government and important organisations such as the TCPA.

Directors of Public Health have generally found that colleagues in local government already understand well how their work impacts on health and wellbeing, and so they have focused on building on that understanding and contributing something new to the discussion – for example through the use of Health Impact Assessment (HIA) tools, detailed evidence summaries, and examples of good practice. But above all they have used their energy and enthusiasm to ensure that health, wellbeing and the reduction of health inequalities become central goals of all policies and organisations in a locality, in order to obtain tangible improvements.

The establishment of Health and Wellbeing Boards, as a result of the Health and Social Care Act 2012, has also been a potential facilitator of this approach. These Boards were created to provide system leadership through bringing together local partners whose activities impact on health and wellbeing, to set local priorities, align strategies, hold partners to account and in some cases drive specific areas of work forward.

Generally Health and Wellbeing Boards have looked widely across the determinants of health and have gone some way towards highlighting the importance of factors such as local economies, built environments, housing and travel networks to improving health and reducing inequalities. However, they are limited by having little direct budgetary control, whether in health and social care or in other services. And, since there are so many potential partners on these Boards, they have often been made up mostly of representatives from health services and adult or



Overview visualisation of Hanham Hall in Bristol – 195 zero-carbon homes, including 65 affordable units; green infrastructure will be managed by a Community Development Trust

children's council services, with other sectors taking more intermittent rather than core roles.

Just a few examples taken from one of the English regions illustrate the range of approaches that have been used in the past couple of years by public health teams.

In Bath and North East Somerset a large part of the Bath Riverside area is being regenerated, with old and derelict industrial sites giving way to modern housing, office, retail and leisure provision, alongside an improved road network. The public health team led a process of HIA on the draft masterplan for this area using the simple but powerful Spectrum tool developed at the University of the West of England.²

This has enabled the plan to be measured and scored, on a five-point colour scale with a mix of objective and subjective measures, against a locally derived set of criteria and then refined on the basis of judgements made. So, for example, two of the criteria used were 'promoting social interaction and connections between the development and neighbouring communities' and 'promoting healthy lifestyles'. The discussion that flows from these criteria draws on available evidence, best practice and the views of local residents and other stakeholders. The masterplan and the initial HIA both begin at a high level, but as plans become more local and concrete the same questions can flow through each stage of the process.

In Plymouth the public health team have been energetic in exploring the use of Plymouth City Council's planning application consultation process to improve health and mitigate risks in areas where people's health is poorest. Detailed responses to ten planning applications were made, of which half had a direct influence on the decision that was taken. Two applications were turned down on public health grounds - one for a hot-food takeaway, which it was felt would be detrimental to local people maintaining a good diet and avoiding obesity: the other for a housing development where it was felt that the community would find itself without sufficient transport links or access to local services and where the design would lead to social isolation and limit residents' opportunities for physical activity. Yet another application was modified when it was felt that a potential suicide hazard could be reduced.

These interventions required a considerable amount of evidence-gathering and mastery of both the technical and the political elements of working in the Council.

Devon has a long history of partnership between the public health team and planning and development colleagues across both county and district councils. Recently there has been a focus on a new community being built in Cranbrook. The masterplan for this settlement sets out East Devon District Council's ambition for a healthy, vibrant and sustainable town, fit for the future, which prioritises education, employment, social inclusion and connectedness.

The HIA for Cranbrook³ has highlighted that the settlement's extremely young demographic could benefit from a new approach to ill-health prevention and early intervention, using modern technologies, and a co-located health and wellbeing campus will become a base for this work. There has been academic input into the way that development can promote walking and cycling in the new town, improving connectedness and opportunities for healthy physical activity. As a result of this joint working, Cranbrook has been selected as one of NHS England's Healthy New Towns. This status opens the way for greater technical input and the capacity to provide a rigorous evaluation of the project.

At South Gloucestershire Council the public health team wrote a briefing for the housing and planning departments on the health and wellbeing implications of space standards. They gathered available evidence on the impact of overcrowding on both physical and mental health, including research findings on such diverse effects as the spread of infectious diseases, mental vitality, and the development of children's speech. They also used this evidence to highlight

'One could reasonably argue that improving health should be a central and deliberate outcome of any building or development programme'

the importance of having sufficient houses that could be used by people in wheelchairs and with other disabilities. When there is such a pressing need for new and affordable housing it is important that standards of decency and adaptability to people's changing needs are maintained, and work like this helps to make that case.⁴

Not all work is limited to one local authority area. The West of England sub-region has produced a Joint Spatial Plan in order to distribute new housing and developments fairly and rationally across four local authority areas, including the larger settlements of Bristol, Bath and Weston-super-Mare and a number of smaller towns and rural areas. The plan includes a number of different options for comparison.

The well established West of England public health network submitted a response to the draft plan, highlighting in particular how options might differentially promote active transport, health equity, access to green space and healthy food, and the minimisation of air pollution.⁵ This sort of approach ensures that considerations of health and wellbeing are prioritised early in the process and then built in as plans become more developed. Another response was submitted from the Local Nature Partnership, which also has representation from public health but particularly focuses on the protection of important landscapes and biodiversity.⁶

Using the World Health Organization definition of health as 'a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity',⁷ one could reasonably argue that improving health should be a central and deliberate outcome of any building or development programme. The Association of Directors of Public Health, both as a representative body for public health opinion and through the actions of Directors of Public Health and their teams in all local authorities, is at the forefront of a new wave of weaving health into the fabric of our built environments and creating better futures for our citizens.

• Dr Bruce Laurence is Director of Public Health at Bath and North East Somerset Council. The views expressed are personal.

Notes

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- 4 The briefing is not published online, but for further information contact fionna.vosper@southglos.gov.uk
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- 7 See who.int/about/definition/en/print.html

taking stock - and future challenges

Michael Chang looks at the recent work and continuing ambitions of the TCPA's Reuniting Health with Planning initiative

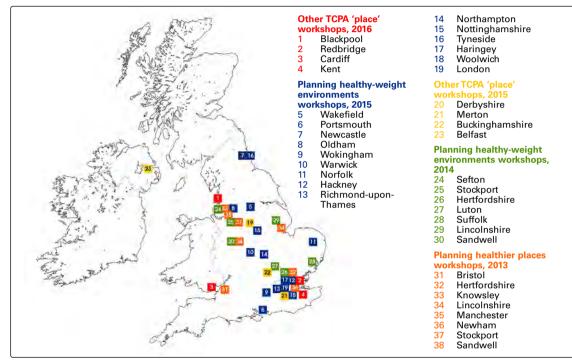


Fig. 1 Locations of workshops held under the TCPA Reuniting Health with Planning initiative

There seems to be a *When Harry Met Sally* effect taking hold: since public health functions moved back into local authorities in 2013, more and more local authorities are beginning to take notice of – and take action on – integrated planning and health agendas. The TCPA's Reuniting Health with Planning initiative has built up a good picture of practice around the UK through delivering 38 locality-specific workshops with local authorities between 2013 and June 2016 (see Fig. 1). Presented with good practice from path-finding councils, other local authorities are beginning to see planning as a positive tool for change and are convening seminars and workshops.

The TCPA's initiative continues to run at the forefront of the health and planning debate, producing guidance publications and, most importantly, engaging local authorities through local workshops and events. Having opened in England, the initiative is now reaching Wales and Northern Ireland as the TCPA has developed planning for health guidance specific to the different planning and health systems in England, Northern Ireland and Wales.

The initiative has four interrelated strands:

- capacity-building, to engage and help train local authority teams and their partners such as Health and Wellbeing Boards and Clinical Commissioning Groups;
- guidance, to give advice and offer greater clarity on including a range of healthy planning topics within local policies and decision-making processes and structures;
- **research**, to identify and understand practicebased challenges and highlight good practice; and

• *dissemination*, to maximise outreach and the dissemination of learning.

Healthy new developments and healthy-weight environments

Recent efforts in the Reuniting Health with Planning initiative have focused on planning for healthy-weight environments. It has become clear that there is no single way of working on planning for health issues: each place has its unique population profile, geography and health issues, such as levels of obesity - not to mention its unique political and institutional arrangements. But based on learning from practical action in the 14 areas involved in the Reuniting Health with Planning initiative through locality workshops, and - with the support of the Local Government Association (LGA), Public Health England's obesity and healthy places teams, research organisations such as Leeds Beckett University and local authorities - in March 2016 the TCPA produced, for the LGA, Building the Foundations: Tackling Obesity through Planning and Development,¹ which outlines suggestions for taking local action.

It also builds on the 2014 project publication, *Planning Healthy-Weight Environments*,² which sets out six elements of healthy-weight environments as a means of developing cross-sectoral conversations on the environment and health issues (see Fig. 2). For any local area still in the early stages of exploring ways to engage more effectively with town planners or developers on the health, and specifically the healthy-weight, implications of individual planning applications, using the six elements as a framework can be a useful start.

Ultimately, the aims of the initiative are to ensure that those elements that we would associate with healthy places, based on the evidence of what is effective, are built into 'everyday' developments, and not just designated 'healthy' new buildings and places; and to ensure that the good practice that has been highlighted by the initiative is mainstreamed into planning and public health teams across the country.

Renewed opportunities for more integrated and effective planning for health in Wales

The recently enacted Well-being of Future Generations (Wales) Act 2015 places a duty on public bodies in Wales, including local planning authorities and Local Health Boards, to contribute to meeting national wellbeing goals, including the goal of 'A healthier Wales'. At the same time, the Planning (Wales) Act 2015 strengthens the plan-led system of preparing Local Development Plans and making planning decisions to achieve sustainable development and contribute to meeting the wellbeing goals.

During 2016 the Wales Health Impact Assessment Support Unit and Public Health Wales commissioned the TCPA to develop a guidance briefing to introduce planners to the public health system and public health professionals to the planning system, and to highlight opportunities within key stages within the systems, such as (Local Development Plans), for more integrated working between planners and public health professionals, to help deliver wellbeing and sustainability outcomes.

Drawing on a well received workshop with local practitioners held in May 2016, the briefing, *Planning for Better Health and Well-being in Wales* (published at the end of November 2016), contains diagrams, tables and flowcharts which aim to clarify the applicable processes and protocols in both the planning and health domains. The TCPA is hopeful that further work will apply the briefing's guidance locally through workshops and supporting publications.

Health outcomes and the new planning system in Northern Ireland

In April 2015 Northern Ireland's new district councils were given statutory planning functions. For the first time in decades, local councils were responsible for both plan-making and for deciding on the grant permission on individual planning applications. To help local authorities carry out these new roles, the Northern Ireland Housing Executive commissioned the TCPA, with Belfast Healthy Cities, to draw together the links between the issues and to provide guidance on how best to use the new planning powers and responsibilities for community planning. The work was also supported by the EU SPECIAL (Spatial Planning and Energy for Communities in All Landscapes) project.

Following two preparatory workshops held in late November in Cookstown and Belfast, *Delivering Sustainable Healthy Homes and Communities in Northern Ireland*³ was published to help district councils implement key national policies, including the newly published Strategic Planning Policy Statement (SPPS), and to facilitate better collaborative working relationships between professionals across different sectors – in housing, planning and health, and particularly through community planning.

Action to sustain the agenda

A number of seminal reports have recently been published, most notably the *Building Better Places* report produced by the House of Lords Select Committee on National Policy for the Built Environment in February 2016⁴ and the House of Commons Health Select Committee inquiry on public health post-2013 in August 2016.⁵ The findings and recommendations of these reports validate the TCPA's efforts over the last year and set the scene for future activities. But these reports also illustrate a lack of nuanced understanding and appreciation of the context within which current practice is framed – for example on the plan-led system and policies already contained in current

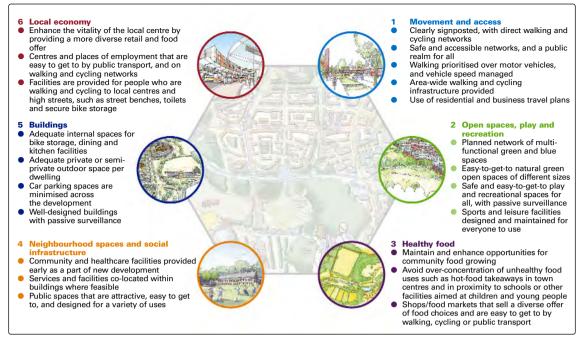


Fig. 2 Elements of a healthy-weight environment – for consideration when assessing development proposals Source: Planning Healthy-Weight Environments²

national planning policy, viability issues, professional skills development, and the site politics which planners are confronted with on a day-to-day basis when dealing with the issues on the ground at the planning applications stage.

In taking the Reuniting Health with Planning initiative forward, the TCPA's efforts to reunite health with planning will focus on two issues:

- Developing clarity of understanding and further guidance on development viability – an issue that has been consistently raised by practitioners, together with calls for greater engagement with, and buy-in from, developers. A project will aim to engage directly with developers and particular development examples through the 'six elements of healthy-weight environments' framework.
- Providing greater clarity and guidance on planning for 21st century healthcare. There is a legal duty on local planning authorities and Clinical Commissioning Groups to co-operate on the provision of health infrastructure when preparing local planning documents,⁶ and local authority planners are seeking greater clarity and guidance on healthcare infrastructure. A project will hold local workshops and develop planning guidance to assist the planning and commissioning processes, and so ultimately lead to greater efficiencies in the NHS.

• **Michael Chang** is Project and Policy Manager at the TCPA and leads its Reuniting Health with Planning initiative. The views expressed are personal.

Notes

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The Reuniting Health with Planning initiative

Keep informed by following tweets @CulturePlanning as the TCPA builds the Reuniting Health with Planning initiative in 2017 and beyond – and see the TCPA's 'Planning and Health' webpages, at www.tcpa.org.uk/Pages/Category/health, for resources produced by the initiative to date. Anyone interested in involvement in the initiative, or seeking further information, is very welcome to contact the TCPA, on Michael.Chang@tcpa.org.uk

healthy new towns for the 21st century

Sara McCafferty outlines the aims and approaches of the NHS Healthy New Towns programme, with its emphasis on testing new ideas and promoting health and wellbeing through built environment design

The NHS recognises the significant impact that the built environment has on people's wellbeing and the potential opportunities to more effectively create built environments which encourage and enable health and independence. The NHS *Five Year Forward View* (FYFV) articulates the key challenges to the sustainability of health and care services, and presents a compelling vision for how future health and care services should be designed and delivered.¹

One key message within the FYFV is the need for a more holistic integration of the services and environments accessed by individuals, patients and communities. It recognises the impact of the built and natural environments on people's lives and impresses the need to harness and shape these to proactively have a positive health impact.

The NHS Healthy New Towns (HNT) programme, which was launched in 2015,² is designed to encourage local areas to work together to incorporate the active promotion of health and wellbeing through built environment design. New developments provide an opportunity to test out new ideas and promote active travel and innovative use of space design to pave the way for the future healthful places.

Following a competitive application process, ten HNT demonstrator sites – that set out ambitious proposals to radically redesign health and care service delivery to promote health through cohesive neighbourhoods – have been selected to work with NHS England. These ten sites present a diverse portfolio which includes variation in approach, development type, size, and geographical location. Sites are at different stages of development, with some based on brownfield land, while others are erecting new buildings, or repurposing exiting assets.

All the sites have been working actively to progress planning permission, design joint housing plans, and co-develop Section 106 requirements which incorporate and promote healthful design – ranging from work on how to create a healthy school at Cranbrook, to developing designs for an innovative health campus at Whitehill & Bordon, to building dementia-friendly homes at Whyndkye Farm.

It is important that that policy links between health and planning are translated into physical development to generate beneficial change;³ and this is an opportunity that HNT is focused on.

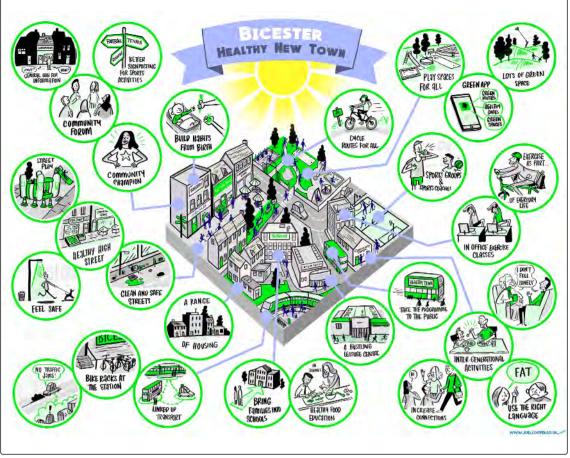
This summer, leaders from HNT demonstrator sites congregated in Westminster to share the context and visions for their healthy new towns. This helpfully provided insight into the different populations, or anticipated populations, and the environmental, geographical and socio-political factors at each site. Furthermore, it illustrated a number of key themes that are being progressed by numerous sites. The application and development of these ideas across a variety of settings provides useful opportunities for learning, and the dissemination and evaluation strand of this work programme will be capturing evidence to maximise the generalisability and spread of these findings.

Of these themes three are most likely to be of interest to the planning community, as set out in the following three sections.

Promotion of active travel and healthful food choices

Proactive planning at the design stage to encourage active travel in communities enables the strategic placement of key buildings, such as schools and other community assets, and the design of safe, convenient and appealing paths to promote walking or cycling. The impact of green and blue space on improving population health has been well documented, and the use of green space for community activities has been associated with improved community cohesion and wellbeing.⁴

Optimising the use of these spaces, alongside active travel infrastructure, can help nudge individual behaviour towards increased physical activity and time spent outdoors, which can improve health and wellbeing.⁵ Restrictions on fast-food outlets and unhealthy food provision, combined with the



The ambitions for Bicester as a Healthy New Town generated by local community stakeholders

promotion of an affordable healthy food offer, using planning and licensing powers at the design stage, can also assist in encouraging residents to make healthier food choices.⁶

New care models

Cherwell District Council

Traditional models of healthcare delivery are increasingly being identified as unfit for future needs. Ambitious and innovative thinking about alternative mechanisms for delivering the right care to the right people in the right place is a key element that every demonstrator site has prioritised. This embodies a shift from the traditional model, with a reliance on hospital admissions for treatment, to infrastructure that supports the delivery of joined-up care in community settings and facilitates patient/client independence and the delivery of care in patients' homes where appropriate.

Under the remit of the New Care Models programme,⁷ the HNT programme will aim to dissolve traditional barriers – connecting primary and secondary care, health and social care, and mental and physical health – by managing systems of care, integrating services around the needs of the patient, and addressing existing barriers to change.

The community will co-design local services so that there is greater active-patient involvement, and learning will be applied across the health system to promote peer learning, fast learning from best practice, and the application of innovations across the system.⁸ Innovations under way in the HNTs include the development of a primary-care-led multiprofessional 'health campus' in one town and the incorporation at building stage of life-course suitable houses which can be fitted with digital monitoring and assistive technologies to enable patients to manage conditions in their own homes and live independently for longer.

Life-course public realm

Well designed public spaces that aim to accommodate those with the greatest needs, such as young children and older adults, will be required in developing places that cater for the contemporary and future needs of their residents. In particular, barriers to mobility such as uneven or discontinuous pavements, high kerbs, a lack of resting places, poor lighting or an insufficient number of safe pedestrian crossings can have significant implications. Design that addresses these barriers to enable optimal mobility can help older people to maintain their independence and participate in the wider community, and so lead to improved wellbeing.⁹

The World Health Organization (WHO) has promoted the concepts of age-friendly cities and lifetime neighbourhoods through its Age-friendly Environments Programme. It advocates cities that are inclusive and accessible environments that promote active ageing and can adapt their structures and services to be accessible to and inclusive of older people with varying needs and capacities. The concept of a lifetime neighbourhood has been defined as 'a place where a person's age doesn't affect their chances of having a good quality of life. The people living there are happy to bring up children and to grow older - because the services, infrastructure, housing, and public spaces are designed to meet everyone's needs, regardless of how old they are.'10

The HNT sites are actively working to consider how the built environment can best be designed to address community needs across a range of dimensions, including social participation and inclusion, community support, health services, and transport.

Implications for planning

These factors highlight the importance of planners and housing developers sharing their expertise and working with colleagues in health and other sectors if the HNT ambitions are to become reality. NHS England is backing these efforts with a wide-ranging package of support that connects sites to subject matter experts, to policy-makers, and to each other. The emphasis in this phase is on further developing viable ideas that challenge the status quo, will deliver improvements in health, and can be deployed at scale across the country. To ensure buyin at a local level, the HNT programme is supported by funding to release local leaders' time and provide capacity for local community engagement, as well as an early focus on evaluation and capturing learning.

Extracting learning effectively and creating shareable insights is a key objective of the programme, which aims to spread ideas and practices in three layers: between local partners in each demonstrator site; between the ten sites; and beyond at a national level.

Understanding the way in which aims can be brought to fruition in different contexts, and understanding how different professions and communities need to work together to make that happen, are key goals of the HNT programme.

• Dr Sara McCafferty is Senior Strategy Programme Manager with NHS England. The views expressed are personal.

Notes

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reuniting the evidence base for health and planning – lessons from an ESRC seminar series

Laurence Carmichael, Karen Lock, David Sweeting, Tim Townshend and Thomas Fischer look at the lessons on the health and planning evidence base, evidence-sharing and integration that have been emerging from an ESRC seminar series bringing together academics and planning and public health professionals

The transfer of public health functions from the NHS back into local authorities in 2013 represents an opportunity to improve the health and wellbeing of the population through planning. This is in line with policy set out in the National Planning Policy Framework (NPPF), issued in 2012, which at various points mentions the need for planning to support local public health and healthy communities.

However, consideration of the determinants of wellbeing and local population health needs in planning decision-making is impeded by a number of barriers. These are rooted in the contrasting knowledge bases, institutional settings, professional networks, and legislative and policy environments in which planning and public health practitioners traditionally work. A multi-disciplinary series of eight ESRC-funded seminars (over the period 2015-2017) has been bringing together academics and practitioners across England to address these challenges and consider opportunities for inter-sectoral collaboration.

The seminars have repeatedly highlighted two issues. The first is the demand from planning and public health professionals to improve both their mutual understanding of the uses of evidence and the methods and instruments available to achieve this. The second is a call for better approaches to sharing evidence and good practice that are fit for purpose within an increasingly resource-poor local authority environment. How might these issues be addressed?

Mutual understanding of the uses of evidence – a necessary step towards policy integration

The fundamental issue is that planners operate within a rigid statutory system of adopted policies and plans, while public health practitioners are more accustomed to advocating proactive strategies in response to population health needs. To be able to work together effectively, they need to better understand each other's professional backgrounds, work-related processes and legal and policy frameworks, and how these influence the conceptualisation and use of evidence in practice.¹

The central purpose of planning is to achieve sustainable development through plan-making and decision-taking.² It exists to promote economic

growth and social progress, to deliver high-quality homes and healthy communities, to meet the challenges of climate change, and to enhance the natural environment. Evidence in planning is based on case studies and is shaped by guidance and key laws (such as the Planning and Compulsory Purchase Act 2004). In essence, the evidence base for supporting built environment interventions is linked to planning processes, instruments, visions, objectives and delivery mechanisms. Moreover, the planning process is about understanding and acting with planning practices, vocabularies and stakeholders, and implementing and co-producing outcomes.

Although the public health function in local authorities is also shaped by strategy and policy, the fundamental aim of public health practice is often articulated more broadly. For example, 'Public health is about creating the conditions in which people can live healthy lives for as long as possible.'³ Public health decisions are taken based on the consideration of current local knowledge, uncertainties, and social and economic issues, and will always consider the research evidence base.

Evidence in public health is often defined in scientific terms and draws on research from a wide range of disciplines, such as economics, various social sciences, epidemiology, health services research, and medical sciences. It covers topics ranging from individual risk factors and health outcomes (including physical activity, diet, obesity, and sexual health, and the harmful effects of alcohol, illicit drugs, tobacco, gambling, unemployment and poor housing), to interventions, policies and service delivery.

It has long been recognised that a better understanding of systems thinking is required in order to fully consider health impacts that may be related to various social, economic or environmental factors - see, for example, the obesity system map identified in the Foresight report of 2007.⁴ Indeed, there is already a strong and growing evidence base linking aspects of the built environment and health.⁵ Public health knowledge can help support the creation of sustainable communities - one of the key purposes of planning - through facilitating walkable environments, enhancing transport and traffic planning, improving housing, and supporting the availability of high-quality green spaces and other opportunities for increased physical activity and improved mental health.

With regards to the instruments and methods available to achieve a better integration of health into planning, different types of impact assessments play an important role. On the one hand, there is Health Impact Assessment (HIA), which is applied in a wide range of policy, plan and project situations.⁶ However, it is not a statutory instrument. On the other hand, Strategic Environmental Assessment (SEA) for plans and programmes and Environmental Impact Assessment (EIA) for certain projects are statutory instruments and can play a key role in integrating health into planning. SEA is applied to local, transport, waste, energy, minerals and other plans, and the underlying European Directive (Directive 2001/42/EC) explicitly asks for human health to be considered.⁷

In the UK EIA is applied about 700 times every year to large projects giving rise to significant environmental impacts. The new EIA Directive (Directive 2014/52/EU), which will come into force in May 2017, for the first time explicitly requires human health to be considered, possibly through a type of integrated EIA/HIA.⁸

Better approaches to sharing health evidence and good practice to inform planning policy

However, given the divergent disciplinary traditions, processes, governance and institutional arrangements that are in place, integrating public health and planning priorities is a challenging task. Traditionally, planning decisions are made on a case-by-case basis, considering information on local factors relevant to a specific area. In contrast, public health considers evidence at a broader population level, which may not have direct links to a particular development, or a geographical location, and thus may not appear to be directly relevant to planning. Public health practitioners and planners need to work more closely locally to address this mismatch, to better translate the wider evidence base to a local context, and to find appropriate ways to evaluate local policies and innovations, thus increasing the 'local evidence base'.

There are, however, already good examples of how to integrate public health evidence into planning practice. One approach is to allow public health evidence to filter through the planning process, in essence mainstreaming it through strong policy hooks. Bristol's development management policy 14 (Policy DM14)⁹ requires an HIA for developments likely to have a significant impact on health and wellbeing. The policy is the result of a long-standing co-operation between Bristol City Council and the WHO Collaborating Centre at the University of the West of England (UWE), Bristol. It promotes co-operation between health colleagues and planners, supporting greater understanding among the professional groups.

From Conwy County Borough Council, we also learn that leadership at executive level is key to promoting the use of HIA. The local public health team has a strong advocacy and influencing role to play, but HIA needs to be championed by the council executive team too, to promote awareness among council officers of their contribution to health and wellbeing impacts.

Another way to integrate advances in public health evidence bases is to adopt specific 'healthy' planning policies – for example restricting hot-food takeaways in close proximity to schools and youth



High-quality public space in Copenhagen – public health knowledge can support the creation of sustainable communities

facilities, where they have been proved to influence behaviour harmful to health. It has been demonstrated that a policy hook is not always necessarily needed to impose healthy planning on developers. In *Copeland v London Borough of Tower Hamlets*,¹⁰ the Administrative Court ruled that, in failing to take into account the proximity of a secondary school with a healthy eating policy as a material consideration, Town Hamlets Council had acted unlawfully in granting planning permission for a takeaway, even though there was no Council planning policy relating to this issue.

In Bicester, a novel way forward is being taken by developing a strong consortium approach to place-based and proactive planning and design, implementing the principles put forward in the Farrell Review¹¹ on improving levels of connectedness between institutions and professions, as well as levels of public engagement. Residents are given the opportunity to learn how to *make the ordinary better* within planetary boundaries, by participating in creating healthy living together, from the promotion of warm and comfortable homes, to active lifestyles, social activity and internet connectivity. Another key aspect of place-making in Bicester is that monitoring is already required by planning consent, through which the success of measures can be assessed.

At a strategic level, Public Health England recommends the integration of Joint Strategic Needs Assessments and Health and Wellbeing Strategies as part of the evidence base informing the development of Local Plans, hence influencing the shape of the local physical environment.

Challenges and opportunities for inter-sectoral integration

Looking forward, one of the challenges in moving towards a more inter-sectoral approach to health and planning is the need for new approaches to professional training and organisational capacitybuilding in every local authority. Realistically, widescale change across England is unlikely within the current context of ever-decreasing local finances. However, opportunities remain in each area for public health to support the delivery of sustainable development polices and plans, and to input evidence strategically into key local planning policies where they can have important effects on the local population, be they transport, housing, green space or air quality policies.

As evidence on the role of the built environment on health mounts, finding ways to integrate public health data and evidence into planning policy-making can have wider policy and governance implications. The viability clause in the NPPF has given rise to much debate as to whether it causes sound planning decisions to be circumvented. Understanding the long-term impacts of new development on health could help rebalance the meaning and testing of viability, potentially contributing to redressing the balance of power. Using Joint Strategic Needs Assessments and sharing health data to inform Local Plans could support the mainstreaming of systems thinking, or at least inform more complex built environment interventions.

Engaging with communities to generate the health evidence base for Local Plans could also contribute



Public health practitioners and planners need to work more closely to translate the wider evidence base to a local context

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to a more participatory, proactive planning system. And despite the fact that further research is needed to consider its effectiveness and also to develop its use at a strategic level, HIA has been identified as a useful tool to facilitate the inclusion of health considerations and integrate local knowledge into planning decision-making, in particular in the context of SEA and EIA (see, for example, Glasgow City Council's City Plan 2, of 2009, which included an HIA for one part of the city – the HIA of the draft East End Local Development Strategy¹²).

None of these changes will happen overnight. However, the seminar series has demonstrated that there is an appetite for change – and that closer working between public health and planning professionals has the potential to deliver real benefits and healthier communities.

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associating food environments with obesity?

Robust evaluation of both the evidence base and the methodological approaches taken is vital in considering the impact of food environments on obesity, say **Claire Griffiths**, **Emma Wilkins** and **Michelle Morris**

In the UK two-thirds of adults, a quarter of 2-10 year olds and a third of 11-15 year olds are overweight or obese.^{1,2} The harmful effects of obesity are felt not only by individuals, through worsened health risks, but also by society as a whole – obesity-related illnesses cost the NHS an estimated £6.1 billion a year, and as a result obesity is a cross-government national priority in the UK.

The direct cause of excess weight can be presented simply as a surplus of energy intake relative to energy expenditure. However, a complex interplay between behavioural, biological and environmental factors is thought to influence this energy balance equation, both directly and indirectly.^{3,4} The most comprehensive investigation into obesity and its causes, undertaken as a Foresight project,⁵ described obesity as a complex problem that requires action from individuals and society across multiple sectors. The Foresight obesity system map identifies over 100 potential variables, with an even greater number of proposed interrelated causal pathways. The food environment, broadly conceptualised to include any opportunity to obtain food, is one of the four major areas on the obesity system map.⁵ Perhaps as a result of this, much attention has recently focused on action to modify the food environment as part of efforts to reduce obesity levels.

Expressively characterising the influence of the environment, the term 'obesogenic' (an environment that hinders sufficient physical activity and promotes excessive intake of food, thereby making obesity more likely to occur) is commonly used. This concept is not new: 15 years ago it was suggested that interventions to create less obesogenic environments present relatively low-cost means to help reduce obesity.⁶ UK policy-makers have now engaged with this idea and have actioned decisions on matters such as the location of fast-food outlets. While most agree that such decisions are unlikely to have negative effects in terms of countering obesity, a concern is that the evidence base to support such decisions being positive is equivocal at best. The concept of an environmental effect on obesity is intuitively appealing. However, identifying the *actual* role (over the *assumed* role) of the food environment is central to improving the prevention and treatment of obesity.

Recent systematic reviews⁷⁸ in which supermarkets were hypothesised to have a positive effect against obesity, and fast-food outlets and convenience stores were hypothesised to have a negative effect, demonstrate the inconsistent evidence base in relation to the food environment and obesity. They conclude that, despite a large number of studies, there is limited evidence for associations between local food environments and obesity. Although these reviews are US-centric, this lack of consensus is also reflected in the UK literature.

A UK paper that is widely referenced in both academic and public health arenas reports⁹ that exposure to takeaway food outlets in the home, work, and commuting environments (of adults) combined was associated with marginally higher consumption of takeaway food, a greater body mass index, and a greater likelihood of obesity. Similar findings have also been reported in child populations.¹⁰ However, others state that there is little support for the concept that exposure to fast-food outlets in the local neighbourhood increases the risk of obesity.^{11, 12}

It is possible that the failure to find consistent associations between the food environment and obesity may be due to methodological challenges. Researchers and practitioners face a myriad of methodological questions which have considerable consequences for the interpretation of outputs yet are seldom discussed or considered. There seems to be a focus on headline statements, which in some instances are unqualified or misguided, leading to policy decisions that are not evidence based.

Methodological considerations

To avoid unqualified recommendations, researchers should be encouraged to report their methodological choices, and practitioners should interpret conclusions in the light of said choices. Caution should also be exercised in collating study findings that have employed different approaches.

Table 1¹⁰⁻²¹ highlights some of the fundamental decisions that impact the results of any study investigating the role of the food physical environment and obesity. This is a relatively new area of research, and while methods and approaches to analyses are developing there is little in the literature to guide decisions other than studies that demonstrate the impact of these decisions.¹³ At a time when a wealth of data sources is emerging, consistency in reporting of methods is of the utmost importance. We do not make recommendations here; we simply highlight the importance of transparent reporting, enabling policy-makers and practitioners to consider the evidence base through a critical lens.

An example of best practice

Translational research applies findings from basic science to enhance human health and wellbeing. The key to ensuring the translational element of research in this field is collaborative working that includes all key stakeholders. An example of best practice in such multi-disciplinary working to overcome the methodological challenges is provided by the ESRC Strategic Network for Obesity, the fundamental aim of which is to understand how best we can use big data to tackle obesity.

To collect sufficient data to understand obesogenic factors for a given region is nigh on impossible, due to expense and timeliness. For the same reasons such collection is not scalable nationally or internationally. An attractive solution is to make best use of multi-sector 'big data' from both existing and emerging sources. Such data include details of grocery transactions from retailers, objectively measured physical activity from wearable devices, and self-reported dietary data from mobile phone apps.

In addition to these intuitive data sources, we can also learn from more tangential data sources on travel movements, including smart ticketing and smart motorways. Local-area crime data could add valuable insight into whether people avoid physical activity such as active travel because they do not feel safe walking through their neighbourhood. The volume, variety, velocity and veracity of this range of data sources, and others complementary to obesity research, introduce new ways of working. There is unanimous agreement that using big data to understand the role of the obesogenic environment offers great potential, in a number of crucial ways:

- more timely evaluation of interventions using big data to guide policy;
- novel linkage of consumer data sources to health records;
- the use of big data to complement national diet and nutrition and lifestyle surveys; and
- the use of different data sources across the life course.

With these opportunities also come challenges in the shape of rigorous ethical and governance considerations, the need for effective engagement with data partners and the public, and the recruitment of researchers with the appropriate skills to carry out the work.

Recommendations – learning from the past and applying lessons to the future

There is considerable debate in the literature about the relative importance of people and/or place characteristics in predictions of health-related outcomes. Most empirical studies have concluded that where you live matters for health, although probably not as much as who you are.^{22,23} However, it has also been suggested that improvements in public health will be achieved by a greater focus on place.²⁴

When we consider obesity as the outcome (rather than health-related outcomes more broadly), the evidence in relation to the food environment is equivocal and not well placed to support some of the recommendations currently being proposed. This is not to say that practitioners should wait for the evidence to provide the answer; there are many examples of innovative thinking and novel approaches from around the UK, and these practices should be encouraged. However, what is often missing is robust evaluation. It is important that researchers and practitioners learn from best practice and inform the evidence base along the way. This will require collaborative working across multiple disciplines and sectors.

Most of the research that informs this ongoing policy debate fails to consider the interplay between people and place characteristics. Insightful analyses have considered these factors in isolation, but, despite pleas to do so, few have considered the interplay between these domains. Understanding this interplay will not only advance the evidence base but will also be of great consequence to the ongoing policy debate and improvements to public health.

In epidemiological terms, mere proximity to a food outlet may not be a good measure of exposure – as has been demonstrated where physical distance to food outlets has been unrelated to obesity risk. This

Table 1 Overview of methodological considerations

Definition of the environment	Environment metrics include administrative boundaries, ¹⁰⁻¹² Euclidian buffers (various sizes) ¹¹ and network buffers (various sizes). ^{12, 14-16} All of these are arbitrary, and it is likely that none actually represents the locations used to buy food. New-generation studies are beginning to show that most people do not shop for food in their immediate neighbourhoods and that 'neighbourhoods' are likely to vary from person to person. ^{17, 18} US studies have demonstrated that distance may not be the limiting factor, and for this reason researchers should consider moving away from a home-centric approach. ¹⁸
Classification of outlets	Schemes used to classify food outlets are mixed: some adopt the proprietary classifications (which vary by data source); ^{10-12, 15} others re-categorise outlets based on their own definition. ^{14, 19-21} The methods employed for grouping outlets also vary considerably. In many instances, a simple stratification is often applied to classify food outlets, such that fast-food, takeaways and convenience stores are typically identified as 'unhealthy', while grocery stores and supermarkets are used as a proxy for 'healthy' food. This over-simplified classification ignores the important fact that 'healthy' and 'unhealthy' food can be purchased almost anywhere.
Secondary data sources	Studies rely on secondary data sources to establish the location of food outlets: some use Ordnance Survey points of interest (POI) data, ^{14,21} some use local authority data, ^{11,12,15} and still others use <i>Yellow Pages</i> . ²⁰ Commercial and alternative secondary data sources also need careful reporting in order that evidence can be effectively interpreted. With new and emerging big data, this area of reporting is a moving target.
Access metrics	Intensity metrics that are indicative of the density of food outlets within a given area are ubiquitous. However, their metrics are not consistent across studies. Some employ count per capita, ^{10,12,19} others use count per area, ^{11,14,16} and still others use a simple binary measure representing access to a food outlet or not. ¹⁵ Many use the term density, when what is actually measured is count – this is an important distinction. Proximity measures are used in many studies. The main methods are Euclidian distance ^{19,20} and the more comprehensive network distance. ¹⁶ While these measures do represent the 'accessibility' of food outlets, researchers tend to measure distance to the closest, and it has been observed that people do not visit their most proximal outlet, with other factors of accessibility, such as food prices, being more determinative in outlet choice, particularly among more deprived populations. ¹⁸
Statistical analysis	Interpretation is dependent upon the particular type of statistical method applied. Almost all studies conduct statistical tests; however, the procedures differ considerably. A good example of this is the widely referenced paper by Burgoine and colleagues. ⁹ As part of their analyses they 'controlled for the availability of supermarkets to account for food environment 'context', specifically to allow for the fact that takeaway type foods can also be purchased from supermarkets, and therefore to minimise confounding'. While this is an interesting concept in the analyses of takeaway food exposure, the inclusion of supermarkets proved to be crucial. Without the inclusion of supermarkets, associations between combined takeaway food outlet exposure, consumption of fast food and body mass index were attenuated towards the null (i.e. no evidence of a relationship).
Context	There are inherent complexities in terms of data collection, and as a result many studies are focused on one specific geographic area. ^{9, 11} Local-level analysis is, of course, a fundamental part of the puzzle; however, caution should be exercised in generalising findings between geographic regions.

does not necessarily mean that geographical locations are unimportant. The lack of an association between proximity and obesity outcomes possibly tells us that simple models of opportunity to access food are inappropriate. It is well understood that obesity is a complex behaviour, and it is therefore reasonable to suggest that we do not have a good model of environmental exposure – not that geographical locations are inherently unimportant. In addition, factors which can now be assessed through new forms of big data – such as the food actually purchased, the range or choice of food available, the size and quality of food outlets, the impact of advertising, and the cost of food – may be more important determinants of adiposity than simple measures of exposure.

Looking to the future, in order to effectively understand and address the global problem of

obesity, greater emphasis needs to be given to consistent reporting of data and methodological approaches, particularly when considering the effect of the environment. This is crucial if obesity research is to be meaningfully synthesised in a whole-system context and presented to policymakers at local, national and international scales.

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MoreLife deliver weight management and health improvement programmes to individuals, families, local communities and within workplaces.



The ESRC Strategic Network for Obesity is an international network of experts interested in using big data to tackle obesity, drawing on data and experience from members of the Leeds Institute for Data Analytics and Consumer Data Research Centre.

For more information

To find out more about any of our current projects and research activities, or if you have you own research ideas you wish to discuss, please get in touch: **obesity@leedsbeckett.ac.uk**



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buses, bicycles and building for health -

lessons from an evaluation of the cambridgeshire guided busway

David Ogilvie, **Jenna Panter** and **Cornelia Guell** consider the range of benefits that have emerged from the provision of a guided busway and cycling infrastructure in Cambridgeshire



Fig. 1 The Cambridgeshire Guided Busway route Source: www.thebusway.info

Our environment is shaping our behaviour and our health, whether we realise it or not. For example, it affects how much physical activity we are able to undertake where we live and work. Being active is good for us because it reduces the risk of diabetes, heart disease and other chronic diseases. Unfortunately most of our time is now spent sitting, whether in the car, at a desk or on the sofa. Many efforts to promote physical activity have focused on the individual, for example by recommending exercise to patients with a medical problem. However, considering the needs of the entire



© Cambridgeshire Guided Busway – used by pedestrians and cyclists, as well as guided buses

population could produce broader, more sustained health benefits.

Walking or cycling for transport offers a relatively easy way to integrate exercise into daily life, and improving transport infrastructure to support walking and cycling to and from work – active commuting – could be key to helping more people to be more active. But our towns and cities are not always well designed for these activities, and good evidence on how changing our environment affects how we move around has been slow to emerge. As researchers, we took the opportunity presented by a 'natural experiment' in Cambridgeshire to evaluate the effects of new transport infrastructure on travel behaviour, physical activity and related wider health impacts among commuters.

Evaluation of the Cambridgeshire Guided Busway

The study was based around the opening of the Cambridgeshire Guided Busway, the longest guided busway in the world. Cambridge lies 80 kilometres north of London and has a distinct cycling culture related to its flat topography, its large student population, and the traffic congestion in its historic city centre.

A guided busway along the course of a disused railway line was proposed in 2001 to tackle

increasing traffic congestion on trunk roads into Cambridge. The Cambridgeshire Guided Busway, which was opened in 2011, links towns and villages to the north-west of the city with the Science Park, the city centre and the Biomedical Campus on the southern fringe (see Fig. 1). Buses run on a completely segregated guideway along most of the route, and a new high-quality path for pedestrians and cyclists is provided alongside the guideway.

With its new bus rapid transit services, park-andride sites and traffic-free walking and cycling route, the busway offers a variety of alternatives to encourage commuters to leave their cars at home. With funding from the National Institute for Health Research, a team led by the Medical Research Council Epidemiology Unit at the University of Cambridge set out to investigate the effects of the busway.¹ We assessed the health, travel and physical activity patterns of over 1,100 adults who lived within 30 kilometres of Cambridge and commuted to work in the city in 2009. We followed up as many of them as possible until 2012, using annual surveys and additional in-depth measurements. We also surveyed over 1,700 busway users in 2012 and carried out a set of qualitative studies.

The health contribution of multi-modal commuting

Where people live in relation to their workplace depends on their life stage and socio-economic circumstances. In Cambridge the cost of housing in the city means that people tend to move out as their families grow, and this naturally has a major bearing on how they travel to work. However, we showed that distance need not present an obstacle to incorporating substantial quantities of walking or cycling into longer journeys made by car or public transport. By measuring the energy expenditure associated with specific travel patterns such as commuting by bus, or driving to a park-and-ride site and walking or cycling the last leg of the journey, we showed that these 'multi-modal' commuters could achieve more than half of the Chief Medical Officers' recommended weekly 'dose' of physical activity through their commute alone.²

Use of the busway

Most users we stopped and interviewed on the busway were using it to travel for work, business or study. More than half were surveyed while travelling by guided bus, and more than half of these indicated that their current trip would previously have been made by car. One-quarter of cycle trips were also said to have replaced a car trip. While men were more likely than women to have cycled on the busway, we found no evidence of a social gradient in guided bus use or walking. This suggests that the 'tram-like' guided bus service may have broader social appeal than conventional bus services.

People living closer to the busway were more likely to use it than those living further away, and this relationship was stronger in people living outside urban areas. In other words, people in rural settings seemed more likely to be influenced by the provision of the new transport infrastructure, perhaps reflecting the fact that those living in urban areas have more existing transport options available to them and shorter distances to travel.

Impacts of the busway

We found that, after it opened, those who lived closer to the busway were more likely than those who lived further away to have:

- shifted away from using the car to travel to work;
- increased the time spent cycling, for commuting and for recreation; and
- reduced their commuting carbon dioxide emissions.

These results remained even after adjusting our analyses to take account of numerous other potential explanations for why people's mode of travel might have changed, including moving home or changing job.

We wondered if people might have compensated for adopting a more active commute by doing less physical activity in their spare time, but we did not find any evidence that they had. We also found a stronger effect on active commuting among those who were least active before the busway opened, suggesting a particular benefit among those with the greatest potential health gain.

Implications

Over 150 cities worldwide now have bus rapid transit systems, mostly introduced as a more affordable and flexible way of improving mobility and reducing carbon dioxide emissions than traditional metro or light-rail systems.³ A guided busway is, of course, only one of many specific ways in which central or local government might seek to improve infrastructure to promote more sustainable transport.

Nevertheless, together with a growing body of evidence from across the UK and around the world, our study shows that changing the design of transport systems can indeed encourage a shift from car use towards walking and cycling.⁴ In particular, it has highlighted the health dividend of multi-modal commuting and the potential for shifting travel behaviour among people living outside the urban areas that have tended to be the focus of most previous research. These are important steps on the road to healthier lives for all of us.

• David Ogilvie, Jenna Panter and Cornelia Guell are with the MRC Epidemiology Unit and the UKCRC Centre for Diet and Activity Research (CEDAR) at the University of Cambridge. This project reported here was funded by the National Institute for Health Research Public Health Research Programme (project number 09/3001/06). The views and opinions expressed here are those of the authors and do not necessarily reflect those of the Public Health Research Programme, NIHR, the NHS or the Department of Health.

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health inequalities in the urban fringe and rural localities

Rachel Lee reports the outcomes of a pilot project in a rural workplace setting to encourage a change in people's attitudes to walking

As the UK charity for everyday walking, Living Streets runs campaigns and projects that identify and overcome barriers to walking. We want walking to be the natural choice for short journeys and for part of longer journeys by public transport. Our projects tend to focus on urban areas, where the evidence suggests that the majority (78%) of short car trips under five miles could be replaced with walking, cycling or public transport.¹

However, in 2015 the opportunity arose to work with Public Health England (PHE) to test, in a rural location, behaviour change interventions, developed in urban settings, aimed at increasing the amount that people walk. Our purpose was to investigate the barriers that prevent workers in rural workplaces from walking more and how these could be overcome. This article discusses our findings.²

Rationale

Making walking safer and easier can help to address social and health inequalities. The Programme Development Group preparing NICE (National Institute for Health and Care Excellence) guidelines on walking and cycling found that the 'variation in levels of walking among groups in terms of gender, race or socioeconomic status is probably the smallest for any type of physical activity'.³ Everybody walks somewhere, some of the time. In contrast, most adult cyclists in most areas of England are male and middle-aged; black and minority ethnic groups cycle the least.³

Nevertheless, people living on the urban fringe and in rural areas may find that their opportunities for walking (as a form of active travel) are limited by the poor quality of their street environment (for example a lack of footways), inadequate public transport provision, and the distance they need to travel to reach their destinations. This is a problem because as a nation we need to exercise more. Getting more people walking could help to reduce the risk of several major health conditions by between 20% and 60%, including heart disease, stroke, type 2 diabetes, colon and breast cancer and Alzheimer's disease.⁴ The 2012 Health Survey for England reported that 45% of adult women (aged over 16 years) and 33% of men do not meet national physical activity guidelines.⁵

Urban-rural fringe

The urban-rural fringe is where town and country meet. Gallent and Shaw⁶ describe how 'towns and cities are laid out on a template of streets and squares, [but] fringe uses have a far looser structure'; whereas the former 'may be integrated and connected, fringe uses may be fragmented and disconnected'. Defining what we mean by 'rural areas' is more difficult, but a consistent theme is that it is a non-urban space characterised by low population density.⁷

Dispersed land use patterns produce fewer places within walking distance, and small populations reduce the economic viability of public transport. A recent survey by the Campaign for Better Transport revealed that 63% of local authorities had cut supported bus services in England and Wales.⁸ This encourages car dependency and limits the mobility and access to education, employment and social activities of people without recourse to vehicular transport.

Living Streets' rural pilot

PHE's Porton Down site in Wiltshire was our testing ground. It was ideal because it is sited in a rural location (near Salisbury, with a large workforce (800 staff to provide a large pool of potential participants), and an organisational culture predisposed towards a health and wellbeing focus. Some 90% of the staff live within 15 miles of the workplace. The interventions piloted were in addition to measures implemented through the site travel plan and included:

- co-producing a walking campaign;
- Living Streets' 'Walk Doctor' consultations (a 'Walk Doctor' event is where a Living Streets representative wears a white coat – as the 'doctor' – as a means of engaging people and promoting walking face to face);
- PHE Porton Down's 'Walk at Work Week'; and
- a two-week 'Team Challenge'.

Our involvement was timed to coincide with Living Street's 'National Walking Month', which takes place each year in May. In 2015, as in the previous year, one week was set aside to co-ordinate activities around walking to work – 'Walk to Work Week' (WTWW). The development of an on-site walking campaign was a team effort led by the Health and Safety Manager (who also led the onsite wellbeing team) and the Environmental Manager (responsible for the travel plan), supported by Living Streets. The team's view was that it was not feasible for the majority of staff to walk to and from work.

Results

Living Streets held a 'Walk Doctor' event on 6 May 2015 and 22 people took part. This type of event is a light-hearted way of talking to people about the benefits of walking. Unsurprisingly, the majority of

staff questioned (95%) travelled to work by car or van; 5% said that they walked to work – no-one said they cycled, shared a car or used the shuttle bus/local bus service. For most, the idea of walking to work or walking for part of the journey was daunting because of the quality of the walking infrastructure and the lack of public transport – as the following quotes illustrate:

'The distance from the main station is the main factor, but there are no safe footpaths, and the bus operates at inconvenient times.'

'The main road is dangerous, with a lot of traffic! I wouldn't feel safe walking or cycling.'

These results showed staff members' resistance to walking to work, but there was interest in the idea of walking *at* work. Promotional materials were supplied to the wellbeing team to help draw attention to opportunities for walking during the working day in preparation for Porton Down's bespoke 'Walk *at* Work Week'. The team came up with a range of ideas, such as lunchtime walks, walking meetings, creating walking maps, and pedometer challenges. Staff were still encouraged to sign up to the Living Streets' website, where they could log their miles, minutes or steps walked and compete with colleagues to climb the leaderboards and earn virtual badges. Thirty four members of staff signed up and walked a collective of 355



Everybody walks somewhere, some of the time – getting more people walking could help to reduce the risk of several major health conditions, but at present walk-to-work journeys are not always safe or attractive

miles – this compared with a national average of five employees per workplace.⁹

Living Streets also provided the wellbeing team with ten Living Streets 'Workplace Walking Championship' boxes, containing a range of games and props for team activities, to support staff promotion and participation in a bespoke two-week walking challenge. This took place during 15-29 June 2015 and allowed the wellbeing team and wellbeing champions time to recruit team members after 'Walk *at* Work Week'. Over the two weeks, nine teams (of between five and eight members) collectively walked 301,970 steps, the equivalent of walking over 142 miles.

Over a three-week period more than 50 people got involved in walking activities organised by Living Streets and PHE's wellbeing champions. This showed that walking interventions developed in an urban setting can be adapted for rural locations. The pilot made a relatively big impact and was a success given the very short duration of the project, the level of resources (the wellbeing team consisted of only four people), and a general resistance to the idea of walking to work among staff primed to understand health and wellbeing benefits.

Conclusions

Talking about health benefits rather than walking helped to reframe the conversation and attract people's interest. Everybody is different; some people responded to the competitive element of WTWW, whereas others appreciated the social dimension of getting to know their colleagues better. A package of measures may be more effective than any one measure by itself.¹⁰ Although current staff were resistant to changing their travel habits, new staff might be persuaded to try cycling or public transport when they start their employment. The availability of parking space at work has been negatively associated with commuting actively,¹¹ and the travel plan (currently being revised) includes measures to reduce the number of spaces available to singleoccupancy vehicles.

However, in order to address health and social inequalities, and promote a modal shift away from the car to walking and cycling, it is essential to provide appropriate infrastructure to people's place of work. Public health evidence suggests that 'spatial factors positively associated with cycling include the presence of dedicated cycle routes or paths, separation of cycling from other traffic, high population density, short trip distance, proximity of a cycle path or green space and (for children) projects promoting 'safe routes to school''.12 Investing in cycleways and footways (in some case shared-use routes) could form part of every public health and development brief – for example in Neighbourhood Plans or through Local Enterprise Partnerships – for out-of-town and rural industrial estates.

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the value of healthy places – for developers, occupants and society

Helen Pineo outlines the evidence for why it is wrong to believe that it simply 'costs extra' to build healthy places, and argues that we all pay the costs of unhealthy neighbourhoods

Does it cost extra to build a healthy place? Gauging by responses from debates at industry conferences, the implied answer is yes. But delve into the detail of economic analyses by various public and private sector organisations and a different picture emerges. Building healthy places – with walkable streets, safe homes, access to healthy food, and publicly accessible amenities – should not be seen as an additional line on a development's cost sheet. Many healthy design measures are features of good design which not only benefit people's health and wellbeing, but also create better places with higher commercial value and lower environmental impact.

In the literature, planners are simultaneously blamed for the rise of chronic diseases by facilitating sedentary lifestyles through urban sprawl and hailed as keepers of the solutions to this problem.¹ In practice, growth patterns are not the simple result of land use policy. A complex set of economic, environmental and social forces determine how and where new development occurs, within the constraints of a highly political system. It is the role of planners and design teams to integrate health into all aspects of policy and design at all scales. In doing so, they will ensure that healthy communities are not seen as a 'nice to have' element (and thus compromised when other competing factors such as affordable housing and climate change mitigation are calculated), but rather a normal part of good design and sustainable development.

The cost of unhealthy communities

We all pay the cost of unhealthy neighbourhoods through taxes to fund health and social care services and through lost productivity. Globally, chronic diseases are the largest burden of ill-health.² Many of these expensive 'lifestyle diseases' are preventable, and are strongly influenced by the built environment. In the UK they account for £7 out of every £10 spent on health and social care,³ and lost productivity is estimated to cost \$84 billion annually in the USA alone.⁴

The impact of unhealthy environments is not spread evenly across society: less affluent people tend to die younger than more affluent people.⁵ Poor people are also more likely to live in neighbourhoods which are worse for health, with poorly maintained homes and public spaces, poor access to services, and higher exposure to air and noise pollution.⁶ Low-quality housing in the UK has been estimated to cost the National Health Service £1.4 billion in first-year treatments.⁷

The responsibility for tackling these complex health challenges cannot sit solely with health professionals. Planners, design teams and developers can all play a part in creating healthpromoting environments, often without compromising returns – and in some cases even increasing property sale and rental values.

The financial value of healthy communities

A number of studies have quantified the higher value of properties in healthy communities. In 2016 the Royal Institution of Chartered Surveyors (RICS) found that new large-scale developments with high-quality urban design have a higher commercial value (by between 5% and 56%) than comparable new properties in the local area.⁸ The features that were deemed to contribute to this increased value included design, layout, density, housing mix,



Street scene in New York – walkable neighbourhoods are one of the most important health-promoting features in the built environment and are also shown to create higher value for residential properties

transport services, community facilities, shops, green/open space, environmental sustainability, and community engagement. All of these features are important for health and wellbeing. Young families were willing to pay more for terraced properties in some of these developments than they were for cheaper semi-detached properties in the area because the new developments provide access to denser, walkable communities with multiple amenities.

The Urban Land Institute's (ULI's) Building Healthy Places Initiative has produced a number of publications and a healthy design toolkit. A 2014 ULI report looked at 13 developments with healthy design features, including indoor air quality, active design, fitness amenities and programmes, lighting, and social interaction. Developers reported that the development costs of these features were a 'minimal percentage of the overall development budget' and 'were well worth the cost and contributed to the projects' overall success⁹ One of the case study projects was the masterplanned community of Mueller, near Austin, Texas, with 5,700 homes (being developed in phases up to 2020). The two universities studying the new community found that residents in the early phases have increased their physical activity levels by 40-50 minutes per week.

Efforts to quantify the walkability of the built environment have led to the development of a commercial tool, Walk Score, which rates the walkability of addresses in the US and some international countries, including the UK, based on a combination of population density, access to services and street layout.¹⁰ One study of US cities found that houses with high walkability scores, as measured by Walk Score, sold at values of \$4,000-\$34,000 higher than homes with average walkability scores.¹¹ This demonstrates the value of living in accessible communities.

The financial value of healthy buildings

The buildings that we live and work in can also significantly affect our health and wellbeing. Productivity – including measures of employee absenteeism, task completion, student performance and even retail sales – is a quantifiable link to health and wellbeing to which building owners are beginning to pay attention. In 2013, the World Green Building Council (WGBC) reported inconsistency in research on financial metrics related to buildings and productivity, and that this inconsistency has resulted in a certain level of scepticism within industry, which 'continues to under-invest in the occupant experience, missing out on what is potentially its greatest return on investment'.¹² The WGBC report cites studies associating healthy design features such as better lighting, daylighting, ventilation and views outside with increased productivity (11-23%), higher retail sales (15-40%) and higher test scores (5-14%), among other measures.¹²

Housing has long been a focus of public health and planning professionals, going back to 19th century challenges of overcrowding and the problems caused by burning fuels indoors. These remain significant issues in low-income countries. but most people in the UK no longer think of homes as a cause of health issues. But poor-quality housing can expose people to noise, indoor air pollution and extreme temperatures, causing a range of adverse health outcomes, including respiratory disease, heart disease and even death.¹³ A Saint-Gobain commissioned survey of 3.000 UK homeowners and renters' perceptions of health and homes in May 2016 found that 30% were willing to pay more for a home that did not compromise their health and wellbeing (with buyers accepting a higher cost than renters).¹⁴

Designing healthy homes and buildings does not necessarily require additional materials and technologies. Building orientation and design can be used to provide adequate daylight, temperature control and views outside, yielding positive health benefits. Integrated design will ensure that potential tensions (such as daylighting and solar gain) are addressed at the early stages, avoiding costs and unintended consequences.

Multiple benefits to society

Designing healthy buildings and communities can be done in a cost-effective way which delivers benefits to occupants and society at large while maintaining competitive returns to landowners and developers. Healthy design should not be seen as an add-on that can only be achieved on high-value developments. It needs to be integrated into all schemes, but especially in affordable housing where residents are more likely to be suffering from multiple health burdens.¹⁵

Planners should not feel ill-equipped to draft healthy planning policies or review development proposals in relation to health impacts. Specialist knowledge and Health Impact Assessment may be required for large plans and projects, but all planners can make use of existing guidance from the TCPA and others to incorporate healthy design principles in their daily work. Healthy planning and design measures can also help in delivering other strategic planning objectives related to local economic development, community cohesion, and climate change. These co-benefits should not be underestimated.

Public health colleagues can act as a valuable resource for strategic policy development and for reviewing the health impact of large schemes. They can provide crucial evidence about local health challenges and the potential costs/benefits of improvements to the built environment. The World Health Organization's Health Economic Assessment Tool (HEAT) can also help planners to estimate the potential value of new cycling and walking infrastructure.¹⁶

According to The King's Fund, 'high standard' spatial planning can result in '£50, £168 and £50 for planning interventions that promote walking, cycling and insulating homes respectively for every £1 spend on the planning process'.¹⁷ Designing communities for health makes sense financially and is not a special endeavour – it's just good design. Planners can build up a case to justify policies based on local health needs, but many design measures can be achieved at no additional cost, and may in fact bring a greater return on investment.

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older people and health –

not all about care homes

Sue Adams examines the benefits and challenges of planning healthy, sustainable homes and neighbourhoods for an ageing population

In discussions about reconnecting planning and health it is striking that limited attention is given to demographic change, and specifically population ageing. The House of Lords inquiry report *Ready for Ageing*?¹ concluded that government and society were 'woefully underprepared' for population ageing and that 'there has been a collective failure to address the implications [of population ageing] and without urgent action this great boon could turn into a series of miserable crises'. So why is this issue not at the forefront of planning debates?

Housing, health and ageing - inextricably linked

With 90% of older people living in mainstream homes, just 6% in age-specific housing (sheltered, retirement, and extra care) and 4% in care homes, the design, suitability and condition of the general housing stock and the wider built environment is crucial to later-life health and wellbeing. The role of planning in reshaping existing neighbourhoods as well as in influencing new housing developments has never been more important. And yet the planning profession seems to have overlooked the pivotal role that it could be playing in addressing population ageing, the key social change and policy challenge of the 21st century.²

Constructing a positive response to an ageing society is an area in which planning and public health have much to contribute, as environment, health and older age are particularly intertwined. The majority of healthcare needs arise in later life (the Nuffield Trust has identified that over 40% of the NHS budget is spent on those aged over 65 years), and improving health through better housing offers significant potential fiscal gains. In addition, the quality of housing in the early years is an important determinant of later-life health prospects, and so is relevant to wider public health and prevention agendas.

The built environment impacts on many of the health conditions that are more common in older

age, including cardiovascular and respiratory diseases, stroke, arthritis and mental health, and also contributes to one of the most common laterlife health risks – that of accidental falls, which, according to The King's Fund, costs the NHS over £2 billion each year.

BRE's conservative estimate of the annual cost of poor housing to the NHS is £1.4 billion.³ The cost to the NHS, in first-year treatment costs of those in the poorest housing among older households (55 years plus), is around £624 million.⁴ As the NHS is facing unprecedented demands, it is surprising that so little attention is paid to planning a healthy built environment in order to prevent or reduce healthcare needs, particularly in later life.

Quantity versus quality?

With national housing policy focused on a stated ambition to build a million new homes, a Conservative Party manifesto target of building 200,000 new starter homes and delivery of these homes now embedded in the Housing and Planning Act 2016, addressing housing quality – and specifically the need to make new homes healthy, good places to live across the life course – seems to have fallen off the radar. Is it really good enough to have any sort of roof over your head, let alone a toehold on the home-ownership ladder, particularly if that starter home is too small to swing a cat in, inaccessible and not environmentally sustainable?

The House of Lords Select Committee on National Policy for the Built Environment highlighted its concerns about planning for housing quality versus quantity in its recent report, *Building Better Places*,⁵ stating that 'we are concerned that the overall emphasis on speed and quantity of housing supply appears to threaten place-making itself, along with sustainable planning for the long-term and the delivery of high quality and design standards'. The Committee also called for 'greater joint working between health and planning professionals and better local monitoring of health impacts resulting from the built environment'.

In 2014-15, 47% of households in England contained a person aged 55 or over,⁶ and 74% of household growth up to 2039⁷ will be accounted for by households headed by someone aged 65 or over. Despite this potentially significant market, there are few initiatives to actively plan for or address a growing demand for homes that are better designed for ageing well. All too often, planners are portrayed as the bête noir, standing in the way of building new homes. However, if there is a single profession which should be taking the long view and making homes healthy for current and future generations, it is planning.

'There is still a long way to go on coherent planning for ageing, particularly on the need to acknowledge the diversity of experience during older age'

Planning for and building better housing that sustains health and extends independent living in later life will also result in substantial revenue benefits for local authorities. For example, reducing expenditure on residential care for an ageing population is of crucial importance to local authority social services. By planning a mix of accessible, healthy, well located mainstream housing, with a modest supply of specialist and supported housing, alongside efficient systems for adaptation and repair of the current housing stock, costly care home admissions can be delayed or avoided.

As only 7% of existing homes have the four basic accessibility features (level access, flush threshold, wide doors and circulation space, WC at entrance level),⁸ every new home built to such standards is a precious resource for an ageing population – and clearly there is great scope for increasing the scale and efficiency of making home adaptations.

Taking the long view on housing tenure and ageing is also an important consideration for planning, as these factors have a direct impact on council expenditure, particularly as responsibility for welfare (for example housing benefit) transfers to local councils. The seismic shift from home ownership to private renting will not only impact on population health, but will also, in the longer term, result in escalating housing benefit costs, as lower-income renters retire on low pensions. The Strategic Society Centre has estimated that this tenure shift will result in *extra* annual housing benefit costs of £8.13 billion for pensioner households by 2060.⁹ As housing wealth is increasingly used to pay for residential care in older age, decline in home ownership will significantly impact on costs to social services.

The recently constituted Local Government Association Housing Commission includes health and ageing in its remit. It is to be hoped that these longer-term revenue considerations will help to shape its final conclusions and recommendations for future home-building.

Drivers for change

All too often, meeting immediate performance targets and reacting to crises are the drivers of action on health, social care, welfare and housing. The issue of population ageing simply falls between the cracks. Through working together, planning, public health, the NHS and social services can better analyse characteristics of the local population, consider future projections, profile the housing stock, and then work towards Local Plans which will help to create healthier communities in the medium to longer term. The policy trends of devolution, alongside the integration of health, care and (hopefully) housing, make this course of action even more of an imperative.

At a national level one of the initiatives aiming to promote inclusion of housing in health and care integration is the national Memorandum of Understanding (MoU) to Support Joint Action on Improving Health through the Home,¹⁰ which sets out a number of shared principles, aims and actions. Originally initiated by NHS England, it has been signed up to by the Department of Health, the Department for Communities and Local Government, NHS England, Public Health England, the Association of Directors of Adult Social Services and many other national bodies. It would be good to see planning involved here too. Some localities are now using this national framework as the basis for creating a local MoU, including Nottingham, Cambridgeshire and Worcestershire.

Local examples are emerging of population ageing, health and accessible housing being addressed in Local Plans and housing strategies. London¹¹ has been ahead of the curve for a number of years in specifying Lifetime Homes standards¹² in all new homes. For more than a decade, older people in Newcastle upon Tyne have pioneered efforts to make their city age-friendly.¹³ More recently, West Lancashire Borough Council has both set Lifetime Homes standards as a minimum for all new homes (unless there are exceptional reasons not to do so) and also systematically addressed housing and ageing in its Local Plan.¹⁴ In its last housing strategy Sheffield City Council set out 'design policies for space standards, lifetime homes and wheelchair access [to] guide the design of new homes'.15

One of the ways that planning can shape the built environment to help improve health in later life is through active engagement with local older people in the design, planning and 'future-proofing' of homes and neighbourhoods. A number of local authorities are involved in the UK Network of Age Friendly Cities – for example, Care & Repair England has recently worked with members of the Manchester Age Friendly Design Group to produce a practical street design guide.¹⁶ Leeds City Council is also working closely with the Leeds Older People's Forum to develop its Local Plan and housing strategy.¹⁷

Keep it simple?

There is still a long way to go on coherent planning for ageing, particularly on the need to acknowledge the diversity of experience during 'older age', the duration of which may now extend to nearly half a lifetime, if we count 50 years of age as the starting point and as reaching 100 years becomes increasingly common.

It is vitally important to understand local populations in terms of health inequalities, life expectancy versus healthy-life expectancy differentials, and planning for the housing and related services required for a diverse older population. There is a world of difference between a fit, healthy 65 year old living on a good pension in a high-value, good-quality home, and an 85 year old living with multiple long-term health conditions on a limited income in a low-equity, nondecent home. Again, there is a great opportunity for planning and public health to combine their skills, knowledge and talents for applying solid data and evidence in order to avoid simplistic 'solutions' to the so-called 'problem' of ageing.

Health and Wellbeing Boards are potentially key to a more strategic, integrated approach. However, while Directors of Public Health are often major players in this arena, planning leaders are not necessarily at the table.

It is curious that one of the most positive achievements of the past century, that of dramatically extending life expectancy, is now portrayed as a wholly negative social development. Undoubtedly the massive improvements to housing and the built environment, which planning and public health can be rightfully proud of, have played a pivotal role in delivering longer life expectancy.

We now urgently need professions that will stand back from the 'social Armageddon' construct of ageing, challenge the negative 'demographic time bomb' narrative, and instead apply hard data and evidence to decision-making, rather than prejudice, wishful thinking and commercial interests. Considered rationally, population ageing is just a social change that can be managed – and who better to do this together than public health and planning?

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thinking together, planning together, delivering together

Stephen Naylor explains how collaboration between health and other public sector bodies has been the key to the recent successful delivery of health and other public infrastructure in the North East



The main entrance of Houghton Primary Care Centre

Collaborative working between public service partners is nothing new. In April 2009 HM Treasury's *Operational Efficiency Programme* stated:

'Greater collaboration also needs to be encouraged at the local level [...] local authorities should be pivotal in developing such collaborative approaches. [...] LSPs should be encouraged to play a role in the development of asset management strategies across different local or regional providers.'¹

In the current climate of radical reductions in public infrastructure spending, the importance of

working together is paramount, particularly as health education, health prevention and wellness are of increasing importance. There are a range of reasons why health bodies and the rest of the public sector should work in partnership and consider the integration of their facilities:

- support for an integrated approach to health with a focus on prevention;
- the maximisation of infrastructure savings, while minimising loss of services;
- access to a wider variety of 'enabling' funding streams;

- efficiency of shared uses and greater flexibility;
- improved communication between integrated teams;
- strategic solutions that support real 'nodes' of service provision;
- improved accessibility (either as a campus or facilities under one roof); and
- the sharing of project and procurement skills and strengths between organisations.

There are, of course, many challenges in forging such partnerships, including:

- differences in technical standards (design, construction and operation);
- the complexities of service level agreements;
- culture clashes;
- procurement mechanisms;
- legal agreements;
- achieving confidentiality standards across organisations; and
- accepting and coping with shared risks building trust.

Beyond national initiatives, openly communicating the challenges that each partner faces through local estates groups, facilitated by councils, has proven to be the single most important mechanism to drive efficiency in public infrastructure in the North East of England. Often infrastructure development/delivery plans can capture much of the macro-scale intent behind such integrated thinking. Examples of positive outcomes have included co-ordinated disposals of unwanted sites; integration of health, library, housing, leisure and educational services in multifaceted facilities; improvements to transport infrastructure (whether it be cycle networks or additional bus services to service 'nodes'); and collective strengthening of local community 'hubs'.

Three examples set out below are illustrations of possible approaches.

Houghton Primary Care Centre

Houghton Primary Care Centre in Houghton-le-Spring, near Sunderland, adjoins an existing leisure centre that was refurbished as part of the new-build health contract. Services provided by the Primary Care Centre include:

- minor injury treatment and x-ray;
- 24 rehabilitation beds;
- a range of healthy lifestyle services, such as help on smoking cessation and weight management;
- community physiotherapy;
- a musculoskeletal clinical assessment and treatment service;
- substance misuse and alcohol services;
- cardiovascular disease services;
- a community garden;
- diabetes screening; and
- a primary care mental health service.

There is also potential for a range of outpatient activities.

The benefits of integrating the existing leisure centre and the new health facility were:

- cost savings in procurement and shared space, car parking, etc.;
- efficiency of scale operationally maintenance, security, and a shared rehab gym;
- an integrated health promotion programme;
- an attractive offer to staff;
- access to a unique 'central' site with good links to neighbouring areas, including Durham; and
- shared use of space meeting/community rooms, a café, and a wellness gym.

Particular challenges were the integration of funding programmes and a series of complex land transactions, including liaison with Sport England to build over long-abandoned tennis courts.

Houghton Primary Care Centre is considered a flagship development of low-carbon construction, with low lifecycle emissions and the aspiration that the building will be used as an exemplar development from which other organisations can draw inspiration. One of the key environmental drivers for the project was to achieve a BREEAM Healthcare rating of 'Outstanding'. This essentially challenged the design and construction of the project in terms of improving its energy performance standards and reducing emissions of carbon dioxide. The mandatory requirements of BREEAM Healthcare dictated that the facility achieved an EPC (Energy Performance Certificate) asset rating of 25 or less via the incorporation of low- or zero-carbon technologies. Suitable technologies that were adopted included:

- photovoltaic panels;
- solar thermal panels;
- ground source heat pumps;
- wind turbines; and
- natural cooling through the use of thermal mass in cooling chimneys and an undercroft.

Washington Galleries Health Centre and Library

Washington Galleries, in Washington, Tyne and Wear, was built in the 1970s and consists of a shopping centre, a health centre, a library, a transport interchange, and a police station. All were originally separate buildings, constructed with a concrete frame, concrete cladding and aluminium single-glazed windows.

In 2009 the Primary Care Trust and Sunderland Council decided to remodel and refurbish both the health centre and the library under separate contracts. Through discussion at the local estates forum it was agreed to link the buildings together for the first time and share a single main entrance. A single 'meet and greet' reception and open-plan library and GP surgery waiting area allowed a reduction in the amount of seating, as attending



Left: Galleries Health Centre and Library – there is a seamless link between the library and the health waiting area, both internally and externally. Right: Park Lane Surgery – GP surgery on the ground floor, with flats above

relatives etc. can use the library facilities rather than take up space in the health centre. The space released in the health part of the building was used to accommodate additional consulting rooms.

A pharmacy was also integrated into the councilowned library space, which continues to provide a significant rental stream, with much of the construction cost also covered by a premium payment.

Sustainability was a major driver for the refurbishment – as it has been on other healthcare projects in the North East. However, improving the patient environment and increasing clinical capacity and efficiency were just as important. Safeguarding the library with strong rental income from the pharmacy and providing access to health education material to improve patient outcomes demonstrates the strong mutual service benefit of the integration of the two facilities.

Park Lane Surgery

Gentoo Housing developed a new city-centre, multi-storey apartment building in Sunderland, originally for private sale. Once nearing completion, sales were proving difficult to achieve, and the block was converted to house the elderly. At the time the ground floor had not been fitted out and was available for other uses. After discussion at the estates forum it was converted into a new GP surgery – Park Lane Surgery – for a nearby practice that was operating in the basement of two terraced houses. Again the estates forum proved crucial, as it enabled Gentoo to share city-wide opportunities that could offer cost-effective solutions for wider public services.

Conclusion

In summary, key success factors include the following:

- partnership which can be the key to all parties going further, faster;
- a willingness to build long-term relationships and trust;
- a willingness to take risks and understand that there will be 'give and take' on the relative benefits to each partner on different schemes;
- engagement and good communication at all levels during all parts of the process;
- engaging the public and demonstrating the real benefits to the user (one-stop shops/nodes to access a wide range of services), stressing the positives of any change and what the community will retain, not what it may lose;
- robust project organisation budgets, reporting procedure, and management;
- true commitment at all levels of the organisations from the chief executive down;
- using reform as a catalyst building upon the principles of innovative, integrated and shared service delivery; and
- the establishment of a partnership default position.

• Stephen Naylor is Managing Director of Projeeco Ltd. The views expressed are personal.

Note

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thinking creatively to make strong health-supporting neighbourhoods

Emma Cariaga looks at how the private sector can help to create strong, healthy neighbourhoods that can provide support and opportunities for social connections to be created and maintained, now and for years to come

Planning has always been about marrying the forces of the physical environment with the desires of those who choose to occupy it. A lot is expected from the planning process, but too often it is preoccupied with the hot topics of space standards, aesthetics and periodically a heightened focus on design and quality. Of course, it is expected that planning should try to solve all society's ills – and in fact it has achieved some success in the past with employer-led developments such as Bournville and Port Sunlight and at Letchworth Garden City and Hampstead Garden Suburb.

However, it is only quite recently that there has been a renewed focus on what 'place' can do for our health. Perhaps the recent shift towards linking health and planning is due to a growing awareness of the fundamental demographic shifts under way and the rise of the ageing population. By 2035, for the first time, the over-60s could outnumber the under-16s as a proportion of the total population. This will change the way we plan for high-quality places, with a need to consider and specifically address the ageing population and their differing sets of needs.

This shift also comes at a time when our public finances are under extreme pressure and when much will need to be delivered with less. The NHS is unable to sustain the levels of care previously offered, owing to pressures on budgets and growing demand from an ageing population. Given our dwindling budgets, questions need to be asked about the role of the planning system and the built environment in encouraging and promoting healthy lifestyles. In addressing these questions we will need to take a fresh look at what the future of healthcare should be and the extent to which services can be delivered more efficiently by, for example, converting to digital services to reduce costs – all while improving quality.

The answers to these questions have a bearing on the built environment. What will a future GP surgery look like? Will we need to 'go to the doctor' in a few years' time, or will this be an online service that can be accessed more conveniently from the home or workplace? We should be looking at what the planning of neighbourhoods can do to encourage and maintain good health, and to produce environments that can be adapted as our needs change over time.

Aside from changes in the population's age profile there are societal changes afoot that are worth considering in the context of healthy neighbourhoods. There are growing levels of deprivation among many communities which impact on health. These can be physical, such as obesity, but also mental: levels of loneliness are at an all-time high – and not just among older people.

In 2014 the Office for National Statistics found Britain to be the loneliness capital of Europe. We are less likely to have strong friendships or know our neighbours than residents anywhere else in the EU, and a relatively high proportion of us have



A view over the Canada Water Opportunity Area - there is potential to develop a healthy neighbourhood for the future

no-one to rely on in a crisis. In 2010, research by Professor John Cacioppo at the University of Chicago¹ found loneliness to be twice as bad for older people's health as obesity, and almost as great a cause of death as poverty. Many of the older generation often still have strong social connections and benefit from venues where they meet friends; however, younger people are increasingly becoming more isolated and reliant on online networks with less physical contact.

Why have we become such a lonely nation, and does the built environment have a role to play here? Our history of creating great places shows us that we can influence change for the better. We need to revive our place-making skills to create great places for the future. We need to make strong, healthy neighbourhoods which can provide vital support and opportunities for social connections to be created and maintained, now and for years to come.

Canada Water

At Canada Water in Southwark, with 46 acres and starting with a blank sheet of paper, we at British Land are busy working out what a healthy neighbourhood for the future could look like. Canada Water is one of the London Mayor's Opportunity Areas, and we are tasked with delivering a new urban centre for London, capable of accommodating 3,500 new homes and workspaces for up to 20,000 people. In addition, the location has scope for up to 1 million square feet of retail and leisure uses. Located on both the Jubilee and London Overground tube lines and part of the renaissance under way along the capital's South Bank, Canada Water is well placed to become a model for urban healthy living. British Land is a long-term owner and manager of property across the UK, and our plan for Canada Water is to use our breath of experience to create a great place with income streams across a wide spectrum of uses. As a majority single landowner working in partnership with Southwark Council, we are developing a vision and resulting masterplan which will address some of the challenges of current city life and offer an alternative.

The exciting challenge at Canada Water is to generate a Central London location for work, learning, fun and living which will evolve over the next 10-15 years and create spaces and buildings that not only suit our lifestyles today, but can be adapted over time. We are exploring building typologies with inherent flexibility to change function and form in the future – simple buildings which may provide great workspaces today could be living accommodation in a few years' time.

Our flexible buildings will challenge the need for complicated systems – why can't we use costeffective alternatives, such as naturally ventilated 'breathable' buildings where you can open the window whether you are in your office or your home? These buildings will encourage incidental exercise – for example raising the visual profile of stairs and making them beautiful and fun to use. We could even financially incentivise able-bodied users to take the stairs by charging a notional amount for the lift – one only has to look at the impact of the introduction of a 5p charge for plastic bags, which has reduced usage by 85% in little over a year.

Creating great healthy places is more than just about what is done with the physical space – our customers tell us that, to attract and retain the best talent, workspaces need to be places where their staff can feel part of something. Employees aspire to work for companies whose ethics are good and in places where they will be able to socialise as they work. It's not just about an in-house gym or a staff coffee shop, but about allowing businesses to interact with the communities around them. We will be creating world-class public spaces and leisure facilities for staff to enjoy and incorporate into their work environment.

Beyond workspace and leisure, our neighbourhood at Canada Water will provide up to 3,500 new homes. Again, our approach is perhaps a little different from the norm, and we are evaluating products and tenures which will challenge the standard approach. We want this new neighbourhood to knit in with the existing community, and so we have been researching its make-up - who already lives there, and why they like it. Many are long-standing residents whose families have established themselves. They want new homes of all types to cater for their children who are leaving home or for grandparents who want to stay close. We don't want to create 3,500 cookie-cut apartments with a homogeneous demographic. Instead, we want Canada Water to be a place where you want to live whether you are eight or 80.

'Given limited public funds, the private sector will be asked to do more to help, by providing services or facilities to meet wider objectives, including those related to health'

We want to provide a range of homes that appeal to a wide audience, ensuring that we create a meaningful mixed and balanced community. Typical city centre residential schemes segregate people through marketing or by design, leaving large areas dominated by certain groups. We would like Canada Water to attract all ages and be somewhere that can provide homes affordable on a wide range of incomes.

Our products range from student living, co-living, key worker and discounted market rent homes,

right through to supported elderly housing and stepdown elderly care, alongside more mainstream offerings. All can potentially co-exist in the same area, often mixed within a block. The value of social interaction across people of different ages, living alongside one another, is that it can create relationships and value for everyone. Facilitating social connections and a sense of belonging is an aspiration we have for Canada Water, and one which can have huge benefits for the health and wellbeing of those who will live, work or play here.

Planning has a huge role to play in enabling the development of healthy neighbourhoods, but their delivery is ultimately the responsibility of the developer. Given limited public funds, the private sector will be asked to do more to help, by providing services or facilities to meet wider objectives. including those related to health. Traditionally, this has been achieved through negotiation, and latterly using scheme viability as a tool to determine the levels of surplus available. While now widely used, this has created a confrontational approach, and perhaps the time is now right for a different discussion. It is the responsibility of all parties to think creatively about how best to deliver great places which encourage social connections and put health - both physical and mental - at the heart of the debate.

• Emma Cariaga is Project Director, Canada Water with British Land. The views expressed are personal.

Note

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transport planning and mental wellbeing benefits

Scott Witchalls, Bob Pinkett and Dawn Wylie consider how integrated transport planning can help to make communities truly accessible, potentially yielding significant benefits for mental wellbeing as well as physical health



Cycling through the park - transport, mobility and accessibility are crucially linked to mental wellbeing

For many years, transport planning and its successes were typically measured in terms of reduced travel times and reduced congestion and delays. Various 'predict and provide' models are still used to focus primarily on the physical infrastructure needed to get the masses from A to B (or to new place, C) as quickly and efficiently as possible based on predicted travel demand.

In more recent years, we have seen a shift towards delivering improved accessibility by all means of transport, not just the car. However, many transport professionals too often consider that their objectives have been met if a place can be accessed by bus, rail, walking, cycling and by car, irrespective of convenience or practicality and with little thought given to the true accessibility of communities.

Some transport behaviour change projects, such as personalised travel planning (PTP) programmes, have been developed to achieve wider social outcomes for a broad cross-section of society, recognising that effective local transport services can open up wider life opportunities for the communities they serve. PTP programmes not only include consideration of accessibility and active travel, but

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also provide the means to encourage and enable people to interact more widely with the world beyond their front door, particularly for their social and leisure activities. This can potentially yield significant benefits for individuals' mental wellbeing, as well as their physical health. While economic benefits remain a key driver in transport scheme appraisal, health benefits should now be considered much more holistically. We are not talking just about, for example, more active travel leading to a healthier workforce in a physical sense, with less absenteeism due to ill-health and hence better productivity, but, even more so, about the mental wellbeing of employees, residents and communities.

The role that transport plays in mental health is very much in the public eye, with reports on the levels of stress created by lengthy commutes¹ and a national campaign to combat loneliness² that has identified transport and mobility as key tools. For the elderly or housebound, access to transport and therefore social and community engagement can make the difference in averting depression.

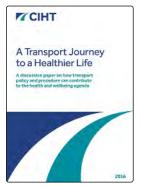
It is clear that there is a need for joined-up strategy on transport and public health services, as it is evident they have many shared objectives. It is not just about the built environment, but also about lifestyle in the context of mobility and connectivity – encouraging a greater uptake of

'It is clear that there is a need for joined-up strategy on transport and public health services, as it is evident they have many shared objectives'

travel options across the board, rather than just the easy wins, such as more walking and cycling for the already able and fit. We have started to see the mental health and wellbeing agenda evolving to link to access and travel options in which transport, environment and planning teams can combine and work jointly with health professionals. This includes work on several of the development projects earmarked by NHS England as 'Healthy New Towns'.³

More recently, the Chartered Institution of Highways and Transport and Peter Brett Associates co-authored study, *A Transport Journey to a Healthier Life*,⁴ discovered just how vital so-called 'non-essential' travel (such as trips to the shops or to visit friends) is to mental wellbeing. The approach and benefits still need to be more widely adopted and recognised as releasing value to the community and to the economy. Factors to consider include:

 Multi-disciplinary approach – working not just across individual departments or service areas in



The Transport Journey to a Healthier Life report

transport and planning, but with a range of external partners, including public health.

- **Funding** an emerging trend within recent Growth Deal and Local Sustainable Transport Fund bids for councils to partner with the NHS through their public health teams to achieve better health outcomes from focused sustainable transport investment.
- **Expectation** from politicians that public funding will be used wisely; and from communities that they will see tangible benefits.

Case studies

There is a growing body of evidence that effective transport investment leads to enhanced mobility and access to services, in turn bringing measurable health and wellbeing benefits:

Plymouth City Council's personalised travel planning project: Launched in 2012, Plymouth City Council's Plymotion scheme⁵ has successfully engaged with 84,000 households and over 50 businesses. To understand the reasons for its success, the team has undertaken a four-year longitudinal study. This review has collected comprehensive mode share data and anecdotal evidence that demonstrates that access to social and community activity and more sustainable/ active methods of travel have made people feel significantly better in themselves:

'I was in a bit of a dark place, then the advisors called, and I almost didn't open the door. But I did, and they were so genuine, it made me want to get out, do something active, aim for something.'

'I think this sort of thing is so beneficial in getting people out and about that otherwise might be isolated. It gives you something to do, something to look forward to, and that can mean so much to some people.'

'The Access Plymouth service means I'll be able to get out and about a bit more, as I struggle to walk. It means I can get to appointments without having to use expensive taxis, and can

Healthy Planning - Securing Outcomes from United Action



'Simply asking people the right type of questions at the doorstep underlines why a joint approach by transport and healthcare planners is essential'

go out for lunch and that kind of thing, because at the moment I hardly go out because of the walking involved. But if I can get out, socialise a bit, get the mental health better too, and then go to physio and things, I want to go and be able to take my son for a walk on the waterfront.'

- Social and economic benefits of community transport in Scotland: Research was undertaken for Transport Scotland⁶ to help the Scottish Government prioritise funding to meet local transport needs. In rural areas in particular, there were found to be significant benefits to volunteers involved in operating community transport; several of whom had previously suffered mental health issues, which improved through their involvement with community transport and a strong level of social interaction.
- A health and wellbeing strategy for countryside services, East Sussex: As part of the evidence developed for its new countryside access strategy,⁷ East Sussex County Council explored both the direct and indirect health and wellbeing benefits of maintaining access to the Council's countryside assets (footpaths, byways and country parks). It sought to meet the greatest community needs with a strategic commissioning approach that focused on understanding need, not just demand or supply. The analysis identified a significant multiplier of health and wellbeing benefits against costs, recognising the need for short-term transport investment (from a council budget) to deliver long-term health benefits (saving future NHS costs).

The messages from the above studies (and many others from across the UK) underline the fact that we must work across all service areas, and look out for potential signs where a community could benefit from improved accessibility, beyond just the fairly common travel-to-work assessments that are used.

It is clear that simply asking people the right type of questions at the doorstep underlines why a joint approach by transport and healthcare planners is essential. It can help to identify pockets of deprivation and individuals or communities whose physical health and mental wellbeing could be enhanced by the strategic joint commissioning of transport services, bringing efficiencies and economic benefits to both councils and the NHS.

Since the Government produced its *Smarter Choices* report⁸ in 2005, there has been an increasing level of understanding that effective transport planning is not just about tackling congestion and journey times, but also about focusing on delivering broader life opportunities and key community outcomes, and on just helping people to 'feel' better.

• Scott Witchalls is a Partner with Peter Brett Associates, Bob Pinkett is a Partner with Peter Brett Associates, and Dawn Wylie is a Senior Associate with Peter Brett Associates. The views expressed are personal.

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how to include health in EIA?

Jenny Dunwoody and Paul Johnson consider how the revised EIA Directive might be applied to assessments of the health effects of major development projects



Arup

The revised EIA Directive should prove helpful in integrating health assessments into in the design of new development

The revised EU Environmental Impact Assessment (EIA) Directive (2014/52/EU),¹ which is not yet enshrined in UK law, is now being implemented on some major development and infrastructure projects in the UK. The requirement for EIA to consider, among other things, the direct and indirect significant effects of projects on 'population and human health' is one of the new areas for assessment, the previous Directive having simply referred to the need to assess effects of development on 'human beings'. The revised Directive has to be transposed into UK legislation by May 2017.

Following the UK's recent referendum vote to leave the EU, the Department for Exiting the European Union is working on the mechanisms to make that happen, but until it does the UK is a full member of the EU, with all relevant legal obligations. The Scottish Government has, in August 2016, commenced a public consultation exercise on incorporating the new Directive into Scottish legislation, but the UK Government has yet to do so.

The challenge for health assessment practitioners

A key challenge for assessment practitioners is how to align health assessment with the EIA model, the aim being to produce an integrated output for the public and decision-makers to review as part of the consultation and consenting process. In the absence of guidance on integrating health into the EIA process, various approaches are being adopted which are yet to be tested through the decision-making process. The practice of Health Impact Assessment (HIA) has evolved as a separate form of assessment in parallel to EIA and differs from the EIA model of defining baseline conditions, assessing 'likely significant effects', applying mitigation measures, and then assessing the residual effects after mitigation has been applied.

How do we include health in EIA?

The wording of the EIA Directive indicates that human health is a key factor to be assessed, along with a range of other more 'traditional' environmental topics such as air quality, biodiversity, climate and cultural heritage. In practice, health is a cross-cutting discipline, and does not sit comfortably within EIA as a discrete topic. The Directive strengthens the screening and scoping provisions for EIA, but in our experience it is rare for appropriate authorities to define what they wish to see in an HIA. It is usually left to practitioners to develop an acceptable way forward, making use of the limited guidance available.

One solution may be to include an assessment of health effects within each relevant EIA topic, so that

socio-economic, community and environmental impacts would follow through to the resultant health effects. This would require EIA practitioners to consider health effects as part of their assessment, and would deviate from established EIA practice by placing health and environment on an equal footing. Alternatively, and perhaps the most likely solution, a health chapter may be included alongside the environmental assessment chapters which is more expansive and contains a number of 'topics within a topic', to reflect the multiple determinants of health such as noise, green space, employment and so on.

Whichever solution is chosen, health assessment, together with EIA, should be an iterative process so that developing project design can be influenced at an early stage by emerging health outcomes. Recommendations from the health assessment process, if implemented, can do much to minimise the negative aspects and enhance the positive aspects of major projects to benefit local communities' health and wellbeing.

When does an 'effect' become a 'significant effect'?

A key question for health and EIA practitioners in assessing a major project is deciding what constitutes a 'significant' health effect. We usually focus on defined communities rather than individuals or the population at large. But how many people within a

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community must be affected, and to what extent, before an effect is considered 'significant'? And can the effects of development on health be accurately predicted and measured?

The health and wellbeing of people within a community is the product of diverse and interconnected causal factors, making it difficult to predict changes and to attribute them to a specific factor such as an aspect of a development project. There will always be greater certainty about the existence of a social or environmental impact with the potential to influence health than about the consequent health effect.

Practitioners have developed approaches to predicting effects on wellbeing in a broad, gualitative sense, concluding with recommendations to improve health outcomes by influencing the determinants of health. Rather than defining baseline conditions against which change is assessed, a profile of the health and social status of the community is developed in order to judge its vulnerability to change. In the majority of cases health effects are not defined in terms of metrics such as incidence of a disease or condition within the population. There are exceptions, such as the effects of air and noise emissions on specific measurable health outcomes. However, less tangible mental and physical health and wellbeing effects arising from wider social, economic and environmental changes are both crucial and difficult to substantiate.

'HIAs have become increasingly systematic and structured, using assessment criteria to describe the pathway by which a development may lead to a health effect... While this goes some way towards providing a defensible assessment for a robust EIA, it stops short of providing clarity on whether the health effects will be 'significant''

How do we explain health effects?

In response to these issues, HIAs have become increasingly systematic and structured, using assessment criteria to describe the pathway by which a development may lead to a health effect. This means describing the nature and duration of an environmental or social change caused by a specific aspect of a development, the size and sensitivity of the population exposed to the impact, and the strength of evidence pointing to a potential health effect. While this goes some way towards providing a defensible assessment for a robust EIA, it stops short of providing clarity on whether the health effects will be 'significant'. Further research work and guidance is needed if assessments are to be of value to those developing projects and the decisionmakers who approve or reject them.

Where will the guidance come from?

An established framework for integrating health into EIA may arise through the publication of new guidance, or from the testing of health assessments within EIA through public consultation, the decisionmaking process or the courts. Initial attempts to define significance are likely to be subject to challenge, and this must be balanced against the risk of nonconformance arising from applying current HIA approaches in the context of an EIA.

Clearly there is a need for further guidance on assessment techniques. A jointly developed approach between bodies such as the Institute of Environmental Management and Assessment, the Royal Town Planning Institute and practitioners such as local authority Public Health Directors, public health observatories and the health assessment support networks in England, Scotland and Wales would be immensely useful.

• Jenny Dunwoody and Paul Johnson are with Ove Arup & Partners. The views expressed are personal.

Note

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amending the EIA directive –

an opportunity for health, environmental assessment and planning

Ben Cave, Josh Fothergill, Ryngan Pyper and Gillian Gibson look at the opportunity presented by the revised Environmental Impact Assessment Directive to incorporate health and wellbeing considerations into EIA

The European Directive that frames the conduct of Environmental Impact Assessment (EIA) was amended in 2014. This short article is intended to show how this is an opportunity, for all Member States of the European Union (EU), to address health and wellbeing. There is a tight timeframe in which those concerned with health and wellbeing can act to define the way that health should be considered in EIA, but this article suggests some steps that can be taken. It concludes with some reflections on the implications, for the UK, of the referendum on EU membership that was held in June 2016.

Environmental Impact Assessment and health

EIA informs and supports certain applications for development consent (i.e. projects that are likely to have significant effects on the environment). These include projects such as airports, express roads, nuclear power stations, and certain types of agricultural, extractive industry, urban development and flood-relief projects.

EIA is part of environmental assessment, which in turn is part of planning and environmental management. Work in these sectors can contribute to achieving important public health goals by protecting and improving environmental, social and economic factors.¹ Environmental assessment has been identified as an important opportunity to help address some key public health issues,²⁻⁵ although the way in which this should be done has yet to be fully agreed. EIA is one part of a wider system of environmental assessment and spatial planning which aims to ensure a high level of protection of the environment and human health. There are thus opportunities to address health and wellbeing from the strategic to the local level.

Changing requirements

The EIA Directive has been amended⁶ and provides an opportunity across all European Member States to, at a minimum, take stock of the public health input to EIA. The changes must be transposed into national legislation by May 2017. Under the present Directive, EIAs need to consider the significant effects of a proposed project on human beings, as well as on a range of other topics. While human health is named in the rationale for the Directive there is no explicit reference to human health as a core topic. The amended Directive names the core topics as (emphasis added):⁶

- (a) population and human health;
- (*b*) biodiversity, with particular attention to species and habitats;
- (c) land, soil, water, air and climate;
- (*d*) material assets, cultural heritage and the landscape;
- (e) the interaction between the factors referred to in points (a) to (d).

The Directive states that for each topic the EIA shall identify, describe and assess in an appropriate manner, in the light of each individual case, the direct and indirect significant effects of a project.

The amended Directive also requires the consideration of direct and indirect significant effects due to major accidents and/or disasters relevant to the project. When a project is subject to EIA there will, therefore, be a requirement to ensure that health effects are considered early in the design and that any likelihood that the project will give rise to significant health effects is identified. This is an opportunity to protect, and promote, health and wellbeing.

What next?

The inclusion of human health as one of the topics that must be considered in each EIA creates challenges and opportunities for both decision-makers (such as planners) and health stakeholders (especially the existing public/national health sector). This should drive planning teams to work closely with both public health teams and other interested parties. Planning teams and their public health counterparts should agree when and how health expertise should be brought into the EIA process. Early engagement will help to identify, and to maintain a focus on, the important issues, and to deliver proportionate assessments.

The ways in which competent authorities respond to EIAs will differ across Member States. We suggest that departments responsible for public health should be actively engaged by departments responsible for planning and development. This aligns with core principles of public health:

- to protect the public from disease or other dangers to health; and
- to improve people's health.

Health Impact Assessment (HIA) has built up a wealth of good practice, some of which could be drawn into EIA to meet the new requirements in relation to population and human health.⁴ We do not suggest that HIA needs to be conducted each time an EIA is conducted. It would be disproportionate to draw all HIA tools and guidance into EIA.

The Directive leaves key questions to Member States to decide, including how health should be defined, and what constitutes a significant health effect. In the next 12-24 months, EIA practice in every Member State will determine answers to these questions. An appropriate, effective and efficient response is untenable without input from health professionals.

Consultation provides a window of opportunity

There is a window of opportunity during which the way that health is addressed within EIA will be determined. The way in which this process moves forward and the organisations involved in influencing it are yet to be determined. The consideration of health will be inconsistent, and may prove inadequate, if planners do not engage with public health colleagues during this debate and in the subsequent application of the amendments in EIA practice. In the UK, Scotland⁷ and Wales⁸ are currently consulting upon how the amended Directive should be transposed. At the time of writing, England and Northern Ireland had not launched their equivalent consultations.

Principles

We offer here five key principles that can be used to guide discussions between planning teams and public health teams. These principles are informed by the revised EIA Directive, by accepted principles for HIA^{9,10} and by Environmental Risk Assessment:¹¹

- **Comprehensive approach to health:** Physical, mental and social wellbeing are determined by a broad range of factors across all sectors of society (known as the wider determinants of health). The consideration of population and human health should be guided by considering all factors that influence the health of individuals and communities.
- **Proportionate:** The assessment should be proportionate. The initial screening of population and human health issues should focus on whether the effects are likely to be significant. Where these effects are found likely to be significant, additional effort should focus on identifying and gaining commitment to avoiding or reducing any adverse effects.
- **Consistency:** The assessment, its process and conclusions should be in harmony with relevant policy, procedural guidance and scientific consensus. If they are not, the assessment should explain why they differ. The assessment should show awareness of precedent (where it is available) and good practice in previous assessments of population and human health in environmental assessment and in stand-alone HIA. However, consistency does not imply blind adherence to guidance and precedent at the expense of local context and/or the need for innovation.
- **Equity:** The distribution of health effects across the population should be considered, paying specific attention to vulnerable groups and commitments to actions to improve the proposed development project for affected groups.
- **Reasonableness:** The findings of the assessment should balance emerging evidence and current policy, and should be in accordance with scientific consensus. The assessment process should follow an acceptable, explicit logic path and retain common sense in applying relevant guidance. The assessment should be based on evidence and sound judgment.

The UK and the EU – looking ahead

The EU plays an important role, both directly and indirectly, in protecting and improving public health across all its Member States.¹² The broader public

Table 1

Health in EIA action plan for planning teams - complete-circulate-use-review-update

State of preparedness for health in EIA	Who, how and when
Who is the planning nominated contact for matters to do with EIA?	
Who is the public health nominated contact for matters to do with EIA?	
How do public health know when an EIA is starting?	
How have resources for obtaining public health input into EIA been formally recognised within budgets and job descriptions?	
How does the public health team know when to contact the planning team?	
What are the mechanisms and who is responsible for public health input to:	
Stage A Screening opinions	
Stage B Scoping opinions	
Stage C Assessment discussions	
Stage D Formal consultation	
Post EIA Mitigation and monitoring	
What expectations for the coverage of population and human health within EIA should be raised with the developer from the outset to ensure an effective and proportionate assessment?	
What are the mechanisms for highlighting relevant local health priorities and opportunities to the developer and the local planning team?	
What local public health issues are indicative of 'significant' health effects (positive or negative)? And how are these important local issues communicated to the developer?	
What public health training opportunities are available for those wishing to develop a specialism?	
When will this action plan be reviewed to check that it is up to date?	

health implications for the UK of departure from the EU are not clear.^{13,14} From a sectoral perspective, the implications for the health sector depend, as for other sectors, in large part on the way in which Brexit is negotiated and the resulting relationship

between the UK and the EU.^{15,16} The process to renegotiate the terms of the UK-EU relationship has yet to start, but it has given added spice, for UK practitioners, to the transposition of the EIA Directive. Gross uncertainty is a new, and less than welcome, feature of the UK's policy context, and the future for environmental assessment in the UK depends on the resulting relationship between the UK and the EU.¹⁷ The current assumption is that the EIA Directive will be transposed as planned. While EIAs will evolve in due course, as determined by the current and future governments, the EIA Directive appears likely to continue to inform EIA practice in the UK. Planners and public health professionals need to ensure that human health is properly defined and considered.

Key messages

As noted above, EIA is one part of a wider system of environmental assessment and spatial planning, and so the amended EIA Directive should prompt public health and planning teams to engage with one another – but it should not be the sole focus of their joint work.

Key messages with regard to EIA are that planning teams can take action now with their counterparts in public health teams. Planning teams and public health teams should consider building up knowledge about ways to address health in EIA. Planning teams and public health teams should consider contributing to national consultations on changes to the EIA regulations and raise the agenda for national guidance on health in EIA. Planning teams and public health teams should be ready to present a joint approach to the future practice of health in EIA (from spring 2017).

An important first step is to set up a meeting between the municipality planning team and the team responsible for public health, to discuss how health fits into environmental assessment, i.e. Strategic Environmental Assessment and Sustainability Appraisal as well as EIA. Table 1 is offered as a discussion point to generate a shared understanding of the determinants of health in the municipality.

• Ben Cave is with Ben Cave Associates, Josh Fothergill is with the Institute of Environmental Management and Assessment, and Ryngan Pyper and Gillian Gibson are with Ben Cave Associates. This article draws upon work conducted with Public Health England. The views expressed are personal.

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uniting health psychology and planning

Daniel Masterson explains how efforts to support professional working to reunite health with planning and address the underlying causes of health and ill-health in Stoke-on-Trent have benefited from using behavioural insights from health psychology



'The challenge is not simply ingraining health into planning; it is conveying a modern definition of health, establishing how planning can influence the wider determinants of health and health behaviour, and understanding the issues that planners face in prioritising health'

As suggested by the title of the TCPA's 'Reuniting Health with Planning' programme of work, the unification of health and planning is not a new concept. Many authors in numerous health and planning guidelines have highlighted the joint genesis and outlined the synergy between the domains, yet the challenge of ingraining health into planning policy and development management remains.

From a planning perspective, the debate is equally perplexing, as 'health' is already considered in policy and planning decisions. The National Planning Policy Framework (NPPF) clearly states (in para. 69) that 'the planning system can play an important role in facilitating social interaction and creating healthy, inclusive communities'. Planning policies and decisions should consider the effect (including cumulative effects) of pollution on health (para. 120), and should 'mitigate and reduce to a minimum other adverse impacts on health and quality of life arising from noise from new developments' (para. 123). There is reference to opportunities for sport, national trails and local green space.

The challenge is not simply ingraining health into planning; it is conveying a modern definition of health, establishing how planning can influence the wider determinants of health and health behaviour, and understanding the issues that planners face in prioritising health. In short, we need to consider not only reuniting health and planning, but uniting health psychology and planning.

Becoming a World Health Organization 'Healthy City' in 1998, Stoke-on-Trent City Council demonstrated a high level of political and executive commitment to reducing health inequalities across the city. Recognising that the way we perceive and interact with the surrounding built and natural environments has a profound impact on health, efforts were made to integrate spatial planning and health as a mechanism to achieve joint objectives.

'Drawing on the advice of the health psychologist, planners have the capacity and expertise to convey the benefits of undertaking an HIA. Developers are shown that by undertaking an HIA they are demonstrating engagement and consultation with local communities'

As part of this work, a *Healthy Urban Planning* Supplementary Planning Document (SPD)¹ was developed to ensure that health and health inequalities would be included as legitimate considerations when planners make decisions about future development in the city. The SPD provides guidance on healthy urban planning and sets out requirements for a Health Impact Assessment (HIA) to be undertaken on residential developments consisting of 200 units or more and on commercial developments of 10,000 square metres or more.

However, it soon became clear that integrating health into policy alone was not sufficient to reunite health with planning. Two years after the policy was formally published, HIAs were not being consistently applied. An assessment of the challenges of applying the policy in practice identified a need both to provide a health perspective in the development management process and to further support planning policy so as to embed health within the Local Plan. To address this challenge, Stoke-on-Trent City Council collaborated with Staffordshire University to recruit a full-time health psychologist, based within the Council's planning policy section, with the following objectives:

- Undertake *research* to listen to planners and explore the challenges they experienced.
- Provide *evidence* for the inclusion of health matters in planning decisions.
- Incorporate a *health perspective* into the Local Plan and other policies.
- Act as a planning specialist and *consultant* throughout the development management process.
- Apply health and psychology principles in action and *report best practice*.

The research undertaken by the health psychologist included a listening exercise in order to understand the challenges that planners face in embedding health matters into planning policy and development management. This not only identified a range of unforeseen issues but also identified how best to overcome them from a planning perspective. It is beyond the scope of this article to report on the full methodology and analyses – the findings and subsequent recommendations will be reported elsewhere. However, this article outlines preliminary findings in two themes that emerged from this research: communication and capacity.

There was consensus among planning officers that developing robust planning policy is crucial; however it was considered that policy alone was not sufficient. Although the *Healthy Urban Planning* SPD was in place, officers felt that health remained a 'bolt on' at the end of the planning process. This was partly because developers felt that an HIA would not add value to an application and that health matters were already addressed in other considerations.

Officers also felt that there was confusion over what benefit an HIA would provide in contrast to other impact assessments. Highlighting a communication challenge between health and planning, the additional benefits of undertaking an HIA were not being conveyed. Naturally, this lack of communication in relation to HIAs was reflected in communication between planning officers and developers. Planning officers felt that a lack of capacity and expertise in relation to healthy urban planning prevented health considerations being applied in large-scale applications. Even if HIAs were undertaken, the recommendations were unlikely to have been implemented by the developer at the later stages of development, due to cost and feasibility. From a planning perspective, the key

solution was to provide capacity at the pre-application stage and to negotiate health considerations early on in the development process.

This newly adopted approach is already beginning to show signs of success. The *Healthy Urban Planning* SPD is now being followed and applied, with large-scale developments undertaking HIAs. Drawing on the advice of the health psychologist, planners have the capacity and expertise to convey the benefits of undertaking an HIA. Developers are shown that by undertaking an HIA they are demonstrating engagement and consultation with local communities, taking into account those directly affected by their proposals and delivering sustainable development.

More importantly, developers are liaising with the Healthy Urban Planning Officer during the preapplication stage to identify ways to promote health benefits and mitigate any potential negative impacts early on. This early involvement has proved to be essential, as following HIA recommendations becomes more challenging further down the planning process. The Healthy Urban Planning Officer also provides input into corporate projects across the city, providing evidence to support walkability, permeability and cycling infrastructure.

Involving a health psychologist in writing the Joint Local Plan, with Newcastle-under-Lyme Borough Council, has allowed the local authorities to consider human behaviour and to outline how our environment can influence our health and wellbeing. For example, the Joint Local Plan issues paper acknowledged that the quality of the surrounding environment can influence a person's health, and that this can be either a positive or a negative influence.²

As part of preparation for work on the Joint Local Plan, both councils considered how planning can directly and indirectly influence health and how these influences can be measured. A number of healthy urban planning indicators were identified from the Public Health Outcomes Framework (PHOF)³ and agreed upon with the planning teams from both local authorities. These identified strengths and areas requiring focus from a healthy urban planning perspective in both policy-making and when reviewing planning applications.

The Joint Local Plan is in the early stages of preparation, and so work has also been undertaken to strengthen Stoke's draft *Hot Food Takeaway* SPD.⁴ Applying the research skills of the health psychologist, a review of national planning appeals was undertaken to establish the most robust hot-food takeaway policies at appeal. The review highlighted that, when a hot-food takeaway policy was applied appropriately, health was highly likely to be an acceptable reason for refusal. However, a large number of appeals were brought about because the policy was not applied appropriately. For example, an exclusion zone in a policy that may

have applied only to secondary schools was used to justify the refusal of a hot-food takeaway near a primary school. This review is currently being updated and will be published shortly.

Although a great deal has already been accomplished, new and emerging challenges have been identified in reuniting health with planning in Stoke-on-Trent. While many of these issues will be overcome by the work undertaken on the Joint Local Plan, some require action at a political level and a national approach. Some also require collaboration across local authorities. Members of the West Midlands Public Health and Planning Group have been collaborating to develop a West Midlands developer toolkit, based on the experiences and expertise within Birmingham City Council, Stoke-on-Trent City Council and Dudley Metropolitan Borough Council. This will provide clear guidelines for developers to demonstrate how they can positively influence health and wellbeing through the design of their development. Understanding the perspective and behaviour of developers is a further benefit of incorporating psychology in planning.

To further advance the City Council's work, its public health section has recently funded a health psychologist in training, to support the Healthy Urban Planning Officer and to work on the Council's Age Friendly Cities project. In collaboration with Staffordshire University, the health psychologist in training provides four days per week of capacity during their two-year placement. As part of this extremely cost-effective approach, the trainee receives a tax-free bursary, tuition fees and a suitable placement for professional development. The approaches undertaken by Stoke-on-Trent City Council will be monitored and the benefits reported - and anyone interested in learning more is welcome to contact the author, on daniel.masterson@staffs.ac.uk or daniel.masterson@stoke.gov.uk.

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design matters

We just have to start somewhere if we are to avoid the hugeness, complexity and wicked nature of the healthy places problem overwhelming us, says Matthew Carmona

building healthy places – just start somewhere!



It is often said that we are the first generation who will live longer than our children. Others say that our children will still live longer than us but will be plagued by poor health for much of their later lives. Neither seems very appealing, but to what degree is the built environment to blame?

The recent House of Lords Select Committee on National Policy for the Built Environment (which I advised) was certainly convinced that as a nation we need to take more concerted action. It argued: 'Our evidence has illustrated that a poor quality built environment and poor quality places can have significant negative impacts for health, wellbeing, prosperity and happiness'; and concluded that: 'Some of the UK's most pressing health challenges – such as obesity, mental health issues, physical inactivity and the needs of an ageing population – can all be influenced by the quality of our built and natural environment.'¹

A wicked problem

But the link between health, wellbeing and place is what we term a 'wicked' problem; meaning that it is difficult to even properly identify and frame the problem, let alone address it. This is because of the sheer complexity of the issues, the diffuse lines of responsibility for solutions, and the absence of clear and tangible links between intervention and outcomes.

If we take the problem of our increasingly alarming levels of obesity and the knock-on implications these have for our health, including levels of heart disease, cancer and diabetes, then we might postulate two possible policy responses.

First, there is the medical solution. For example, we could invest in research leading to the development of an anti-obesity pill to be taken en masse to solve the growing problem. On the face of it, this solution would seem to deliver a tangible and direct benefit from a single, clearly defined product, with clear knock-on commercial benefits for UK plc. And we could all continue to lead our unhealthy lifestyles!

By contrast, second, there is a preventative solution. We could, for instance, design (or redesign) the built environment to encourage us to do more exercise through walking and cycling more and thus avoid getting fat in the first place. It sounds simple, but this second solution is in fact infinitely more complex, involving numerous interconnecting elements, diffused responsibilities, difficult-to-trace impacts, and the vagaries of human action. Moreover, even if we did make the environment more conducive to leaving our cars behind, there is no guarantee that we would necessarily do so. Despite humanoids largely relying on walking to get around for 2.8 million years, and only on our cars for the last 100 or so of that, our reliance on cars is a habit that is now very difficult to break.

The wicked nature of the problem means that the potentially transformative nature of a highquality built environment (as seen in cities such as Copenhagen or Montpelier) remains poorly understood by politicians, the public and industry; and socially (and environmentally) unsustainable processes of urban growth and management continue on the basis of flawed and outmoded knowledge and a failure to understand, let alone capture, the value of healthy places. If that persists, then we will have only the one solution to our future health problems: the medical one.

A good crisis (or two)

If, as we hear regularly on the news, we have a public health crisis in the UK, and the option of living increasingly 'medicalised' lives doesn't seem particularly attractive, the good news is that it is never too late to start what will inevitably be a long-term process of changing the built environment, and our lifestyles, accordingly. At least that was the key message of the inspirational BIG MEET 6: 'Healthy Places' conference organised at UCL in October by the Place Alliance.

There is also a new imperative wrapped up in a second crisis relating to the funding situation of the NHS. Thus when we hear that 10% of the NHS budget is already directed towards treating diabetes (largely type 2), and that this is due to rise to 17% over the next 25 years, then it is time for our national decision-makers to sit up and take notice. Winston Churchill famously said that we should 'never let a

design matters



Copenhagen, a cycle-friendly city

good crisis go to waste', and this conflation of two crises must provide the incentive we need to make the necessary investments in the built environment to deliver the much larger and sustained savings in our medical bills not too far down the line. The House of Lords Select Committee report,¹ for example, quotes evidence that it received from BRE that improvements to the housing stock alone could generate huge savings to the NHS, 'in the region of £1.4-2 billion per year for England'.

This is certainly a case that Ann Marie Connolly was very keen to make at the 'Healthy Places' conference, arguing that strong evidence has convinced Public Health England (for whom she is Director of Health Equity and Impact) that a focus on the short trips that could easily be made by active modes of travel (predominantly walking and cycling) could have huge potential health and health cost/benefits for society. Sustrans, for example, has suggest that 23% of trips under a mile and 33% between one and two miles are taken by car, and that making routes more direct and more attractive might significantly reduce these figures.² For Ann Marie, such interventions offer a particularly strong economic case for action.

For her part, Jessica Allen of UCL's Institute of Health Equity convincingly demonstrated that the health costs of a poorly designed built environment (for example increasing physical disability, poor mental health, and higher levels of traffic accidents) are not only real, but fall inequitably on the already most deprived in society. Furthermore, these inequalities seem to be persisting through time, and correlate very strongly with life expectancy. Consequently, if we want to prioritise our limited resources to have the greatest 'return on investment', it is clear where we should start: in those neighbourhoods that already suffer from the poorest-quality built environment, combined, most likely, with the worst health outcomes.

But where do we go from there? The discussions at BIG MEET 6 revealed a number of important insights that suggest where – starting with one that might seem somewhat unpalatable for a researcher such as myself.

Not rocket science (it's far more complex than that!)

Sarah Wigglesworth argued that we don't need research so much as action, as we already largely know what is necessary to create and retrofit built environments for clear health benefits. Despite this, based on her own research she recommended prioritising:

- stewardship of attractive local centres with a range of facilities;
- access to safe and attractive green spaces;
- investing in a pedestrian- and cycle-friendly public realm;
- adopting sufficiently generous internal space standards in new homes; and
- of particular importance for older people, designing-in opportunities for socialisation.
 While all of these prescriptions sound simple,

While all of these prescriptions sound simple, buried within each one is a hugely complex series of challenges that need to be addressed and overcome, particularly when relating the health agenda to the places where most of us live: existing rather than new areas. These concern the lack of funding, fragmented responsibilities, rapidly changing lifestyles (internet shopping, for example), poor management practices, and the physical limitations of many places, etc., etc., etc. – indeed, all the sorts of things that led the late, great Professor Sir Peter Hall to comment that, by comparison with the great scientific challenges of our time (he used the example of getting a man to the moon), these sorts of multi-faceted human governance and design problems are infinitely more complicated.

Nick Grayson from Birmingham City Council (the first 'Biophilic City' in the UK) argued that real progress on the healthy places front is hampered by a collective low ambition that besets local authorities. Thus, instead of recognising the potential for nurturing a real net gain through development practices, there tends instead to be a much more limited 'no net loss' approach. This, he suggested, is a consequence of our models of urban governance, which are still rooted in a 19th century view of the city rather than in the sorts of whole-systems thinking about complex organisations (for example local authorities) and complex environments that is necessary today to break down the silos between planning, public



Healthy streets include places to stop and rest

health, transport, environmental health, leisure services, and so forth.

Others agreed, arguing that a cross-sectorial 'place directorate' approach within local government was required in order to better co-ordinate services around an agenda such as healthy places, and better capture and internalise the savings generated by investing in the built environment – for example, an expenditure on one budget, such as transport, leading to a larger saving in another, such as social care.

Get inspired

For this reason, hearing about the success of the '20's Plenty for Us' campaign was hugely inspiring. At the heart of this is the very simple proposition that by slowing down vehicles we make streets more walkable, less polluted, safer and more liveable and attractive. And, rather than doing this through a 'bums and spines' approach (by installing speed bumps in selected locations), we simply impose a universal speed limit of 20 miles per hour in urban areas and eventually drive a new social consensus about what is acceptable. With every 1 mph reduction in speed, Rod King (father of '20's Plenty') argued, we see a 6% reduction in casualties, alongside very significant ongoing benefits for health at very little public cost. The idea has been taken up by local authorities around the country, and 20 mph zones now cover 14 million people, with 250 local campaigns helping to ensure that the initiative remains 'community led but establishment endorsed'.

'20's Plenty' is potentially a 'quick win' for many places, but a long-term perspective and investment in healthy places will also be required. A helpful metaphor was provided by Rhiannon Corcoran of the University of Liverpool, who argued that cities are human ecosystems that need nurturing (just like natural ones), with perceptions of place quality and community wellbeing strongly linked to what places look and feel like. Thus, living in an environmentally unattractive neighbourhood can very quickly make residents feel worse about themselves, and this can result in a spiral of decline, both personally, and ultimately of the whole place.

At BIG MEET 6 a number of case studies were offered, providing concrete evidence that it is possible to be both proactive and long term in this area in order to raise ambitions and position the health agenda at centre stage. The first, from Stokeon-Trent, was presented by Daniel Masterson, a man with the title Healthy Urban Planning Officer. Stoke-on-Trent is a city with multiple endemic planning, health and environmental challenges, but has recognised the importance of the historic link between health and planning and now has someone to continually bang the drum. In doing so, Daniel offered three simple lessons that might seem obvious, but typically are not implemented:

- Get in early into the development process, building the health agenda firmly into planning and reducing the risk to developers by making aspirations clear.
- Policy is not enough: to deliver on the agenda officers need to negotiate health outcomes on a development-by-development basis.
- Local politicians and senior officers need to be brought on board by showing them just how a health-based approach can make a real difference.

Second, and moving down south, Bruce McVean from Transport for London demonstrated the sophisticated model that TfL has been developing as a means to trace and ultimately influence how healthy (or not) streets are. In this 'whole street' approach the ambition is to give greater choice so that citizens can choose more healthy patterns of mobility over less healthy alternatives. Ten criteria are measured for a 'healthy street':

- the extent to which people choose to walk or cycle;
- active travel extends across all walks of life;

- roads that are easy to cross;
- availability of shade and shelter;
- places to stop and rest;
- reasonable levels of noise;
- people feeling safe;
- things to see and do;
- people feeling relaxed; and
- the air is clean.

The TfL tool, it is hoped, will help to drive more informed decisions about future street investments and bring health aspirations firmly into the mix.

Third, and moving from the whole street to its parts, Rupert Bentley Wells, who for ten years worked as Arboricultural Officer in the London Borough of Hackney, demonstrated how the humble tree can bring beauty, shade, pollution reduction and sense of place to city streets, as well as a means to engage communities in their built environment. This he did by encouraging local residents to look after and protect his newly planted trees; in the process imparting a sense of ownership, both of the tree and the place, and helping to reverse those previously mentioned negative associations with place that can play into an equally negative sense of personal wellbeing. Hugging a tree, it seems, really can have an impact on our health!

Do something!

A final contribution came from Matt Bell, of the Berkeley Group, one of the nation's largest housebuilders. Matt was extremely honest, arguing that for housebuilders the health agenda is not yet on their radar, largely because local authorities never raise health as a concern. In a room full of professionals and others already sold on the crucial importance of place to the health agenda, the intervention was a brave one and a salutary reminder of the journey that still needs to be travelled, not least to join up health and planning.

For Berkeley, the journey is likely to be shorter than for most housebuilders, as the company is very clear that it is building social as well as physical infrastructure, and already has the wellbeing of residents as a key corporate objective, building on and developing out of its now well established place-making credentials.

Thus, Matt Bell argued, we should shape highquality places that (Abraham Maslow style) reflect a pyramid of need. This starts with the new homes themselves; these in turn should be an integral part of a mixed-use environment; this should be designed as a real place that reflects the best placemaking practices; it should be carefully managed over time to allow the place to mature with grace; and ultimately a sense of community should emerge that, hopefully, will act as a key bulwark against ill-health. In other words, get the place right and the public health agenda will look after itself.

Returning to the NHS, the Healthy New Towns demonstration programme offers real potential to move a stage further and to explore the potential of integrating a more explicit health-based approach from the start of new development. Across the ten demonstration projects the intention is to combine good place-making and community-building practices with new ways of delivering healthcare and smart technologies, for example to help older people to live longer in their own homes.

In the context of *tabula rasa* developments it should certainly be possible to plan for both the built environment and health and wellbeing service delivery without the sorts of legacy constraints that dog so many established neighbourhoods. But this leaves the question, what then where this is not the case?

BIG MEET 6 concluded that in both our personal and professional lives we just have to start somewhere if we are to avoid the hugeness, complexity and wicked nature of the healthy places problem overwhelming us, creating a ready excuse to do nothing. The event provided plenty of readymade examples of where we might begin, and the surfeit of reports in this area that have been published by a diverse range of organisations over the last few years suggests a growing momentum and set of practices that can be imitated.

I, for one, have bought a Brompton and have started cycling to work (at least for part of the way) and am writing this article to help spread best practice. What will you do? Do something!

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Notes

- Building Better Places. Report of Session 2015-16. House of Lords Select Committee on National Policy for the Built Environment. TSO, Feb. 2016. www.parliament.uk/built-environment
- 2 Connect2 Greenways Design Guide. Sustrans. Section 16; 'Usage and monitoring'. www.sustrans.org.uk/ sites/default/files/documents/guidelines_16.pdf

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