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Urban planning as an enabler of urban health: Challenges and good practice in England following the 2012 planning and public health reforms

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ABSTRACT

This article synthesises the challenges faced by the English (urban) spatial planning system to become an enabler of urban health and explores some keys features of the evidence base, policy tools and policy implementation issues that urban planners need to be aware of to become health enablers. It draws on good practice identified in an Economic and Social Research Council (ESRC) seminar series involving over 500 academic researchers and practitioners between 2015 and 2017. A number of key recommendations emerged out of the project. First, planning and health agendas must align at the local level. Second, the evidence base of health priorities must be locally relevant. Third, robust tools can support the creation of frameworks for delivering health outcomes through planning. And finally, adequate resources are necessary to develop the capacity of key place-making stakeholders.

1. Introduction

In 2012, two major reforms introduced by the UK central government offered prospects for urban (spatial) planners, in England and Wales, to become enablers of urban health. The first reform was the reorganisation of public health functions. This gave local authorities responsibility for the health of their local population (Gov.uk, 2012a); placed Directors of Public Health and public health teams within local government; and set up new Health and Wellbeing Boards to provide integrated guidance over local population health. This brought public health under the same local authority as urban planners in unitary authorities and supported closer working in two tier areas.

The second reform was a significant overhaul of the spatial / town and country planning system, ostensibly to make it less complex and more accessible. This introduced the National Planning Policy Framework (NPPF) (Gov.uk., 2012b) – the first national planning policy to specifically mention the need to promote healthy communities - and associated Planning Practice Guidance (PPG) (Gov.uk, 2014). This seemed like a perfect opportunity to ensure that planners regained their 19th century function, lost along the years, as agents for the improvement of the public's health. However, research on the pre 2012 English context suggested a number of challenges for delivering this planning for health agenda, including 'silo' thinking, lack of awareness and requisite resources and a largely reactive planning regime (Carmichael et al., 2012; Carmichael et al., 2013). It was timely to examine the extent this situation had actually changed in the years following the two reforms, in particular as local government had been under intense pressure over the same period with severe austerity related cuts to budgets and associated reductions of personnel across most departments.

Set against this background, this article identifies the challenges faced by the English (urban) spatial planning system to become an enabler of urban health and explores what evidence base, policy tools and resources for policy implementation are needed to support this.

The paper begins by scoping the overarching debates and current evidence on the wider determinants of health and the potential importance of urban planning for health and sustainability as drawn from current literature. These themes were then used to inform a series of

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academic-practitioner debates, seminars and roundtables with academics, practitioners and policymakers between 2015 and 2017. The events were in turn used to gather evidence on challenges and opportunities for the English planning system to support the creation of healthier communities and showcasing examples of good practice. A number of key recommendations emerged including the necessity for aligning planning and health agendas at local level; the need for a locally relevant evidence base of health priorities; the need for robust policy tools that can support high standards for delivering health outcomes through the discretionary planning system and adequate resource and capacity for key place-making stakeholders.

2. The broad context: built environment, health and the role of spatial planning

2.1. The rise of urbanisation and its impact on health

A wide range of factors influence human health, from genetics and individual behaviours, to upstream determinants such as socio-economic status, the physical environment and climate change. In the era of global urbanisation, the rise of non-communicable diseases (NCDs) and rapid climate change, research has identified a number of urban planning principles essential to deliver human health and wellbeing outcomes. The built environment, including the composition and shape of human settlements, transport and green infrastructure, has been identified as an important determinant of health worldwide. The places where we spend our lives have a profound impact on our physical, mental, social, environmental and economic well-being (Barton, 2009; Barton et al., 2015) as well as on health equity (Marmot et al., 2010, 2013).

In the 21 st century, cities around the world are facing new demographic and health challenges, including rapidly growing urban populations - 50% globally, 75% of the European population and 83% of the UK population live in urban areas (Eurostat, 2016; World Bank, 2016). Our towns and cities face two key issues that show a clear pathway between land development policy and health outcomes: priorities for allocation of resources and poor urban design. Combination of these two elements impacts on environmental, physical and mental health as well as on health equity in the following ways:

first, Urbanisation has generally been associated over time with increased life expectancy and economic growth. However, it has also been associated in recent years with mounting demand for resources to support human activity and putting pressure on land for a variety of uses, such as housing and transport infrastructure, as well as on the availability of green space (Grant et al., 2017). The result is that prevailing causes of mortality and ill health in urban populations in developed economies have shifted from infectious to NCDs, partially linked to the use and allocation of resources and environmental risks of city living, for instance increased exposure to air pollution and also influences levels of healthy behaviours (Reis et al., 2015). Many cities have failed to tackle air pollution, which is now the single largest environmental health risk in Europe (WHO, 2016a) and largely associated with road transport. Inadequate water management is also a key issue and has led to a lack of safe drinking water and/or flooding. Such issues have huge human and financial costs (McCoy et al., 2017; The Guardian, 2016);For Wilkinson (Wilkinson, P. in Carmichael et al., 2017b) *the greatest opportunities for health tend to arise through changes that relate to personal choice and behaviour, but such changes have been shown to have comparatively modest impact on greenhouse gas reductions which mainly depend on significant infrastructure change*. These changes include, for instance, a highly energy efficient building stock, ease of low-cost active transportation and increased access to green spaces (Woodcock et al., 2009; Watts et al., 2015).

second, sedentary lifestyles are a key area of concern and low levels of physical activity are an important risk factor for obesity and many NCDs including cardiovascular disease and cancers (Reiner et al., 2013). WHO ranks inactivity as the 4th leading cause of global mortality (2009). Urban design can influence the level of physical activity as well as the take up of active travel (Saelens et al., 2003; Townshend, 2010; Sallis et al., 2016; De Nazelle et al., 2011; Audrey et al., 2014; Almanza et al., 2012; Carmichael et al., 2017a; PHE, 2017) and there is increasing evidence that the high incidence of so-called 'lifestyle diseases' (for example type-II diabetes and cardiovascular disease) can be found in areas of poor urban planning and design. Access to green spaces has been identified as a necessary component of healthy urban living with green spaces frequently having a positive impact on physical, mental and social well-being (Mitchell, 2013; WHO, 2017). Poor housing too has an impact on both physical and mental health (WHO, 2011; European Foundation for the Improvement of Living and Working Conditions (Eurofound, 2016; Prüss-Ustün et al., 2016). More generally, poor urban planning and design can restrict healthy lifestyle choices, while encouraging unhealthy ones (e.g. limiting access to healthy food);

third, urban living can also drive health inequalities (WHO, 2016a; Allen and Allen, 2015; Townshend and Lake, 2017). Those on low incomes or marginalised groups are more likely to be exposed to greater environmental risks, such as traffic danger especially from living nearer to roads with heavy traffic, air pollution and the effects of cold, damp homes associated with living in poor housing stock (Braubach et al., 2011). Research in the UK shows a wide range of health inequalities mirroring deprivation trends (Marmot et al., 2013). For example, lack of healthy behaviours in the UK's more deprived areas is a key health problem (Townshend, 2017). The effect of ageing can also lead to increasing health inequalities, and WHO has suggested building 'age-friendly' communities and cities to tackle this issue (WHO, 2007);

2.2. The growing international recognition of planning as an enabler of health

Urban planning is central to managing complexity (socio-economic and environmental) in territorial context and securing win-win policy solutions. Planning is a key public activity for regulating land development (Carmichael et al., 2013), harnessing local knowledge through consultation, interpreting health evidence and regulating urban design. Research shows that policies regulating land use, connectivity and density, transport and green infrastructure offer a pathway to improved health outcomes (Nieuwenhuijsen, 2016).

International and national policy-makers now seek to develop more sophisticated models of urban governance and integrated urban policies to deliver sustainable development. Hence the role of spatial planning and the land development process to support health is becoming more prominent. Since the mid-1990s, the European Sustainable Cities and Towns Campaign with the participation of the WHO-Healthy Cities has explored the relationship between health and planning. The UN Sustainable Development Goal (SDG) 11 aims to make cities and human settlements inclusive, safe, resilient and sustainable. Other SDGs aim to promote public health improvements in cities. Many of the 169 SDG targets relate closely to the urban level with a dominant urban design and planning dimension (housing, transport, water management, air quality (UN, 2015)). UN Habitat III's New Urban Agenda also re-emphasises the commitment to sustainability, requiring a rethink of the way we build, manage and inhabit cities (UN, 2016; WHO, 2016b). At a European level, the EU Urban Agenda is encouraging collaboration between national and local policy-makers to tackle urban challenges. Two of the EU Urban Agenda's priorities have land development dimensions; air quality and housing, in order to contribute to SDG 11 (European Commission, 2017). However, the impact of EU policy in the future, dependent on how the UK leaves the EU is unclear (see Fischer et al., 2018a).

2.3. The erosion of planning as place-making in England

As international research and policy link urban places and health, a

Table 1
summary of findings from the seminar series.

Topics framing the seminar series	Challenges for planning to enable health	Opportunities and good practice for planning to enable health
1. Public health evidence for spatial planning: who should supply health evidence to planners and what should be the coverage, scale and presentation of public health evidence to meet the needs of spatial planning?	Lack of a joined-up knowledge base between planning and public health: - Public health studies not necessarily informed by issues at heart of planning practice and policy-making - Evidence exist but there are gaps - Health risks and determinants isolated rather than considered jointly - Multi factorial determinants make evidence difficult to translate - Evidence not presented in way that facilitates decision-making (view from planning) - Evidence base dismissed by policy-makers (view from public health) - Evidence base does not quantify cost and impact on health Planners generally not involved in local public health assessment that might require built environment interventions.	Public health sector (academic studies and public health practitioners) has wealth of studies and data to supply generic and local evidence to planners Planners must demonstrate they respond to local needs in local planning and other relevant local policies: - Evidence of local needs is available in Joint Strategic Needs Assessment and health and wellbeing strategies Potential use of impact assessments to mainstream health evidence into planning: - Impact Assessment (IA), in particular HIA or health in EIA / SEA can ensure that planners seek advice from public health on the impact of new developments on health - IA can provide use of local evidence in planning decisions
2. The importance of spatial policy for health: what are the policies that can ensure the consideration of health in planning policies and decisions?	Inconsistency in national planning policy (NPPF) and erosion of place making through planning: Pressures for housing delivery undermine the place-making role of planning - Planners are enablers for the housing market, focus on housing delivery rather than broader community outcomes - Short termism: viability testing, permitted rights, limited scope for health in material considerations, limited resources for enforcement: all undermine core healthy planning principles - Limited scope for local authorities to impose standards not stated in the NPPF	Policy integration: - Importance of national policy AND local planning systems to ensure standards are met - NPPF and NPPG promote core healthy planning principles and encourage cross sector working - Integration at strategic and development management level needed locally - Examples pf good practice: Bristol, Stoke on Trent, Stockport, Gateshead - Alignment of planning policy priorities with health and sustainability strategies - Development of standards for development management - Ensuring that a planning voice is heard on HWBs and that public health voice is heard on significant local planning decisions (esp in 2 tier areas) Potential use of impact assessments to mainstream health into planning: - NPPF recommends use of HIA but HIA tools not statutory; however, the consideration of health in EIA and SEA is a statutory requirement Policy integration requires cross-sector collaboration - Effective integration: understand other sectors' practices and procedures - Dedicated staff Integration of planning and design into health sector's prevention agenda
3. The implementation gap: what are the shared knowledge and capacity building resources needed to ensure implementation, who are the stakeholders and what are the key partnerships in planning policies and decisions?	Reinventing the wheel: - few mechanisms in place for effective learning of good practice Under-resourcing of the planning system: - Limited resources to enforce conditions placed upon developers Lack of public funding to build new homes and overreliance on the private sector market and viability which undermine standards.	Housing and the role of various stakeholders in the development process: - Need to open up housing market to focus market back on communities, rather than just housing numbers, - BUT with regulatory role for planning Cross-sector and multi-stakeholder partnerships for shared knowledge, vision and policy: - Case study: NHS England's Healthy New Towns Impact Assessment can facilitate stakeholder involvement in planning decisions. Joint training at national and local level for planners, public health and other professionals involved in design and building of the public realm can facilitate joint working

key concern in the English context remains the erosion of England's urban planning as a public service delivering quality housing, sustainable development and a holistic management of place. Notwithstanding the good intentions of the National Planning Policy Framework (NPPF), in many areas the function of planners as urban development 'enablers' has been constricted by the need to deliver millions of new homes in an environment where land and property development is driven by the private sector and profit margins. This is highlighted by research elsewhere (see for example House of Lords, 2016; TCPA, 2017a; Sheppard et al., 2014). Symptoms of the lack of place management include for instance the fact that less than 13% of new homes are within walking distance of public transport (House of Lords, 2016). Over the period 2015–2017, 20% of the estimated 23 million households in England lived in a non-decent home (MHCLG, 2018a). In addition, the cost to the NHS of poor quality housing has been estimated to be £1.4 billion annually by BRE research (Nicol et al., 2014).

Practitioners state that this situation undermines the role of planners for ensuring positive outcomes of development for the local community. Short termism in viability testing, permitted rights, limited scope for health in material considerations and severely constrained resources to enforce conditions or support the long-term management of places are specific concerns for planning practitioners. These can also

have the effect of promoting private sector interest over wider long term health benefits for the community (House of Lords, 2016).

In this context, where major reforms to integrate health goals into urban planning are thwarted by short termism of policy and major cuts in planning services, how likely it is that planning can fully function as health enabler?

3. Methodology

To examine these issues, a series of interdisciplinary seminars funded by the ESRC was launched in 2015. Their intention was to examine national and local challenges for the English planning system to deliver urban health and explore key aspects of policy-making enhancing the role of planning as health enabler, including the role of the evidence base to inform policy, the types of policies and tools required and issues of resources for policy implementation. Eight seminars took place between 2015 and 2017 at locations in Bristol, London, Liverpool and Newcastle to provide geographic spread across English regions. These brought together 500 delegates from academia and practice, public, private and voluntary sectors, covering a range of disciplines, including public health, spatial planning, transport planning, urban design and architecture. These included planning and health leads from local authorities, key academics researching in the field and national policy makers. The seminars were arranged as a series of keynote and expert lectures and interactive workshops. The workshops were divided into small group sessions, led by a member of the project team, or other suitably briefed researchers where necessary. Session leaders were responsible for ensuring all voices were heard and that discussions remained focussed. Each team had an allocated note taker to record discussions. Each seminar also had a senior academic as a 'lead'. It was their responsibility to sift through the qualitative data (notes and transcripts) collected at each seminar and identify key themes and debates; these were in turn collated by the project lead.

The qualitative data can be considered as co-created between academic and practitioner voices and included discussion on and reflection of academic projects, policy and practice debates and good practice case studies (database: name of authors – removed for anonymity, 2017b). The overall range of issues and challenges to be discussed throughout the seminar series with national and local stakeholders had been identified through scoping previous research which had explored health integration into plan and project appraisals as well as into local plan and land use strategies, using a systematic review of evidence and case studies previously published (Carmichael et al., 2013).

The scoping exercise revealed a number of inter-related themes in the public health and planning literatures that were used to frame the seminars and explore similar issues in the post 2012 environment of public health and planning reforms. These were:

1 Public health evidence for spatial planning: who should supply health evidence to planners and what should be the coverage, scale and presentation of public health evidence to meet the needs of spatial planning?
2 The importance of spatial policy for health: what are the policies that can ensure the consideration of health in planning policies and decisions?
3 The implementation gap: what are the shared knowledge and capacity building resources needed to ensure implementation, who are the stakeholders and what are the key partnerships in planning policies and decisions?

Data collected in the eight seminars was then analysed thematically using nvivo software to identify and discuss challenges, opportunities and good practice in healthy planning at national and local levels within these three overarching themes. The following three sections present and discuss the findings. Table 1 below summarises them.

4. Key findings and discussion: public health evidence for spatial planning

4.1. Challenges in the current English context

In the context of planning policy, a number of issues emerged, linked to the need to continue to develop a robust evidence base to inform policy development (Carmichael, 2017). Many seminar participants were aware of the evidence that is currently available, and which may be used in planning and place-making.

There was a consensus that currently the evidence base is not joined-up and that much of the required evidence is not currently available in a format that is useful for decision-making – especially at a local level. An architect summed up this point and its impact on the lack of interventions tackling multiple risk factors: [it is] *difficult as 'health and wellbeing' is siloed in small projects like NHS Healthy New Towns. There is an evidence base especially if you take the broader concept of determinants of health and well-being, including crime. First issue is joining up the issues*. Another participant identified the problem that *causes and effects are overlaid; there are multi-factorial determinants (of health) which make (the evidence) difficult to interpret.* Multiple interactions between determinants of health makes it difficult for clear conclusions and practical recommendations to be drawn.

Practitioners expressed their concern that academic studies were often not well enough informed by the types of questions that practice and policymaking require; that the political nature of planning and the realities of day to day practice and pressure inherent in the system are not addressed. Furthermore, academic researchers do not necessarily present their findings in ways that facilitate decision-making. An alternative view put forward by public health stakeholders is that the evidence base is sufficient, but that decision makers are often not able, or not always willing to act in accordance with evidence-based recommendations. A Director of Public Health, for instance commented *that in my work as Director of Public Health often planners and other local authority decision makers may not want to hear* (about the evidence base). Within local authorities, it was suggested that decisions were more likely to be 'evidence-informed' than 'evidence-based' and to focus on local area priorities.

Seminar participants also emphasised that the evidence emerging from the academic literature about the long-term health outcomes of spatial design interventions does not translate easily into estimates of the specific benefits and cost savings when a development is proposed; developers are often focussed on relatively short-term gain. One participant representing the planning profession stated that monetarisation of the issue is important. *Developers can easily say how much a unit costs to build but we don't have any comparable ability to look at direct and indirect costs of health and social impacts of a development.* [We] *need to be able to do this to make a case.* In addition, conflicts arise between health outcomes and commercial outcomes (for example, viability testing). Where possible, health-improving interventions should align with the broader interests of planners and developers, as this will help to secure their inclusion in new proposals. The case is harder to make when such health-improving interventions constrain development, for then they are likely to be challenged by developers.

To this end, our findings broadly reflect other research on evidence to inform decision-making in other policy sectors with an impact on the social determinants of health (including housing, planning and transport). Research showed that much of the available evidence is either not readily usable, not politically feasible, or contravenes legislation (Lorenc et al., 2014; McGill et al., 2015). Local practitioners are often unclear about how they can apply evidence of intervention outcomes from academic studies (including health outcomes). They frequently discount academic research as insufficiently relevant to their local area and practice, and instead use a range of other information sources including local routine data, expert consensus and policy reports (McGill et al., 2015).

Finally, practitioners highlight their struggle with the continuous emergence of a new evidence base. This reflects past research that questioned whether planning processes are able to cope with the required level of experimentation, flexibility and iterative learning (Rydin et al., 2012). Major professional bodies have also critiqued the lack of proactive planning to deliver on healthy environments (RTPI, 2014; TCPA, 2017b).

4.2. Opportunities and good practice: prioritising the local evidence base

Seminar participants observed that broad and/or national trends in health did not necessarily translate that easily to local situations. Planning officers stated their need for a usable local evidence base. In order to achieve this, however, change in local policy and practice is required.

Local public health strategies, including Directors of Public Health Annual Public Health Reports and the mechanisms to assess local population needs (i.e. Joint Strategic Needs Assessments (JSNAs) and Health and Wellbeing Board Strategies (HWBSs) are key for aligning these agendas. However, policy integration is difficult, according to the stakeholders consulted. A Director of Public Health stated *Health and Wellbeing Board membership, as well as their level of influence, vary widely between different local authorities*, and many HWBs have no representation from planning. Another participant stated that in addition, local JSNAs and local HWBSs often do not reference the importance of the built environment at all, for instance referencing Local Development Plans. Recent research by TCPA confirmed that only 22% of local plans refer to HWBSs (TCPA, 2018).

Practitioners asserted that the development of a local evidence base through JSNAs and HWBSs offers a useful learning mechanism for the healthy planning agenda to develop over time. In practice, however, there is also a need to build the capacity and skills of planners to effectively use and integrate the information derived from local JSNAs and other health data as well as the evidence from research and guidance from a variety of stakeholders – including those from built environment organisations. In England, evidence from the RTPI, the TCPA, and the active travel organisation Sustrans were used by Stoke on Trent, for example, but this is rare. An urban designer stated that there is a *need to support local practitioners: good practice guides or written evidence are not enough. Urban designers and planners need to visit and see how things work elsewhere.* [There is a] *need to liberate people, giving them time for reflection. Sharing of good practice should be global not local.*

5. Key findings and discussion: spatial policy and tools for health

5.1. Challenges: Inconsistencies in national planning policy

The NPPF and the PPG acknowledge the built environment as a determinant of health and planning as an instrument for creating healthy communities. Core “healthy” planning principles are listed in national policy and include quality design, affordability, reduction of pollution, empowerment, mixed-use, heritage, public transport, high quality open spaces, and high quality homes. NPPF and PPG also encourage cross-working between local public health and planning teams, both, at plan and project levels. However, a number of legal issues in the land development process impede the pursuit of this higher objective. These include viability testing and permitted development rights.

The so-called 'viability clause' in the NPPF allows planning decisions to be made in deviation from stated Local Plan policy. The reason is that the Government is keen to encourage development to come forward in order to provide more homes, and financial viability is a key driver in whether development comes forward in a market-led development context. In this context, DCLG (2013) has argued that 'stalled schemes due to economically unviable affordable housing requirements result in no development, no regeneration and no community benefit'. Local authorities might have adopted high standards for health and wellbeing, yet planning is compelled to allow profits for developers. Financial viability is an important consideration in planning decision making. For example, in Barrow upon Soar Parish Council ([2014] EWHC 274 (Admin)), Collins *J* says that “Paragraph 173 [of the NPPF, 2012] makes the obvious point that planning permissions should not be granted unless the development in question is viable”. As a consequence, it has remained difficult for local planning authorities to meet affordable housing targets on individual developments despite the evidence that access to affordable homes is an element of social equity, hence key to sustainable development (Corburn, 2015; Allen and Allen, 2015).

The viability clause sits within a wider narrative of ‘other material considerations’. Section 38(6) of the Planning and Compulsory Purchase Act 2004 states that ‘if regard is to be had to the development plan for the purpose of any determination to be made under the Planning Acts, the determination must be made in accordance with the plan, unless material considerations indicate otherwise’. This essentially means that where an adopted Local Plan is in place, decisions should be made in accordance with policy unless there is good reason to do something different. The viability of a scheme is an important material consideration, and will typically be presented as a key driver for changing scheme requirements to ensure viability, and therefore deliverability. More generally, the particular characteristics of a site and development proposal can lead to variations in schemes, including deviating from policy potentially concerning important matters such as affordable housing, green infrastructure, design standards, and layouts. Whether something is a material consideration or not is a matter of determinable fact, but the weight (influence and importance) placed upon a given consideration is for the decision maker to determine on a case by case basis. This is a key foundation stone in the ‘discretionary’ planning system in operation in the UK and ultimately means policy is important, but only a starting point in some cases to shape negotiations around what is actually possible on a given site (Sheppard, A et al. 2014).

Permitted Development Rights are a further area of note, and highlight what some see as perversity and contradiction in planning at the national level (Clifford, 2018). Since 2010, permitted development rights with prior approval (for example converting offices into residential use or agricultural buildings into reuse) allow significant (and potentially beneficial) change to occur, but without comprehensive oversight which may allow an otherwise undesirable development to take place. These Permitted Development Rights, including arrangements for the Prior Approval, exclude the opportunity for stakeholders, most notably the Local Planning Authority, to influence schemes. Rather than going through the full Express Planning Permission routeway, schemes can instead go ahead with little ability to influence them. This can open the opportunity for change to occur in the absence of effective planning and thus undermines efforts to support the delivery of sustainable and healthy communities as intended and stated in the NPPF. Furthermore, these conversions are therefore exempt from having to contribute to wider infrastructure and place-making that other new developments have to support. They preclude the effective management of place both, at macro levels (location of development and associated access to social, economic and physical infrastructure, and affordable housing provision) and at micro levels (non-conformity with space standards, lack of influence over amenity provisions, cycle storage, bin storage). These specific changes represent a dangerous precedent where the planning system can be undermined and circumvented. The perversity of these arrangements is equally significant, undermining policy and presented intent to deliver healthy sustainable developments.

5.2. Opportunities and good practice in spatial policy and tools for health

The issue of assessments of viability seems far from being resolved. Since the seminars took place the revised NPPF (MHCLG, 2018b) attempts at settling viability upstream at local development plan stage

rather than development management, but it is too early to evaluate the success of this strategy. Research in the meantime is exploring whether a wider set of metrics could be used to assess viability of development projects. Values may focus on specific sectors/themes and links between the built environment and various health outcomes (physical health, mental health, environmental health, accidents, health equity). Values can set benchmarks for assessing public investment development projects (Eaton et al., 2017).

Within the national policy context, it might be that opportunities for planners to enable health comes from good practice at local level, despite a recurrent issue raised in the seminars, namely that a great deal of 'reinventing the wheel' was going on in local authorities, with few mechanisms for effective learning of good practice from each other highlighted.

Some local authorities have found ways to integrate public health into planning policy, either at strategic level, in core strategies (i.e. the strategic element of their Local Plan) or at urban development project level in their Site Allocations and Development Management Policies. Good practice in Stoke on Trent, Bristol and Stockport shows how this might be realised by integrating health and planning agendas. The importance of aligning local authority agendas on place, poverty, inequality and the economy is seen as essential by stakeholders consulted to achieving integrated policy-making (see also Carmichael et al., 2017a). This initiative was also supported by Public Health England representatives.

Stoke on Trent, Bristol and Stockport have embedded healthy planning principles into their core strategies. The Bristol City Council core strategy encourages a pattern of development and urban design that promotes good health and wellbeing and provides good places and communities to live in (Bristol Core Strategy Policy 21). Stoke on Trent adopted a Healthy Urban Planning Spatial Planning Document in 2012 to feed into its core strategy to "contribute positively to healthy lifestyles". Stockport has aligned planning policy targets around sustainability and health with other Council strategies and partner organisation agendas to promote sustainable development. Areas of focus include, for instance, health inequalities, life expectancy, childhood obesity and green infrastructure.

The three authorities have followed through their strategies at development management level by developing standards helping to shape new urban developments. In Bristol, Policy DM10 regulates food and drink uses, in particular tackling environmental health concerns as it would be expected (e.g. noise, smells, litter), as well as access and safety issues. But the policy also aims to promote healthy eating habits by limiting fast food takeaways in close proximity to schools and youth facilities where they would be likely to influence behaviour harmful to health, a planning issue that has been widely promoted for public health gains (Townshend and Lake, 2017).

Seminars also identified the potential of Impact Assessments to mainstream consideration of health evidence into planning practice. The WHO has been a strong advocate of Health in All Policies, and one of the key priorities of WHO's Health 2020 strategy (WHO, 2013) is the development of Health Impact Assessment (HIA) as an implementation tool. Evidence from the seminars suggests that HIA is currently used occasionally in the UK, while Environment Impact Assessment (EIA) is routinely applied to large infrastructure projects and has been statutory in the UK since 1988. Furthermore, Strategic Environment Assessment (SEA) is applied to all local (spatial) plans in England within the overall context of Sustainability Assessment (SA) and has been statutory since 2004. EIA is seen as an important entry point for the consideration of health impacts in new infrastructure and built environment projects (see the special issue 2018-1 of the journal Impact Assessment and Project Appraisal on 'health in impact assessments; Fischer and Cave, 2018), however, currently EIA can only be partly effective in supporting a healthy development agenda as it is used only about 700–800 times every year in the UK in large projects with significant environmental impacts (Carmichael et al., 2016b). Furthermore, EIAs consider impacts on environmental health issues (air quality, noise, water, ground conditions) rather than focusing on broader health outcomes (Pettit, 2012; Cave et al., 2017; Fischer et al., 2018b). Margaret Douglas, presenting on the role of impact assessment (her focus was Scotland, but this applies to England too) suggested that when it comes to new developments, advice is sought from planners on bats, buildings and burns but not on the impact on the health of our children.

England has not adopted a national Health in All Policy approach, though the NPPF recommends use of HIA for large planning applications and consultation with public health teams. Some local authorities have already started using HIA as part of their healthy planning tools. Again Bristol and Stoke on Trent were examples of good practice requiring HIA for example for large housing projects (100 houses and 200 houses respectively). Moreover, in Stoke on Trent, public health teams have planners identify health indicators and healthy urban planning principles to use in HIA. Such use showed the impact of HIA on design, in particular tying together projects (e.g. wayfinding), improving access for all (e.g. raised and contrasted curbs) and age friendly benches or use of trees (e.g. shade, reduce flood risk). From the current practices in Stoke on Trent, Bristol or Stockport, it is clear that impact assessment (IA) can facilitate stakeholder involvement to identify potential concerns, can help addressing concerns before they become a problem, and can mitigate issues that may be raised by officers and decision makers. IA can also provide a structured framework for engagement and evidence of consultation with communities. If applied using rigorous evidence and a strong methodology, IA responds to objectives of both, national planning and public health policies by offering a transparent and analytical tool to support the delivery of sustainable development and health outcomes.

However, practice in Stoke on Trent, Bristol and Stockport and elsewhere still does not yet represent a wider national trend and there is a need to reflect on why HIA / health inclusive EIA / SEA (Fischer et al., 2010) has not been more successfully implemented despite several decades of experience. One explanation given by stakeholders was that planners are influenced less by guidance and checklists but more by other sources of information, including professional networks and case studies of practice in other local authorities as well as judicial reviews of planning decisions. The difficulty in being able to monitor the benefits that result from IA was cited as an important barrier to a more widespread application. The need for practitioners to be trained in the use of HIA / health inclusive IAs was also cited, in particular in relation to how they ask the right questions to developers, and how they assess the health evidence with which they are presented.

6. Key findings and discussion: resources for healthy planning policy implementation

6.1. Challenges of implementation

A key challenge in the post 2012 context remains under-resourcing of the planning system and a heavy reliance on a small number of large construction firms to deliver housing.

Local authorities now frequently lack resources and capacity to ensure that effective proactive enforcement can be operationalised, including monitoring and compliance functions (Sheppard, A, et al., 2014). This was supported by many comments made at the seminars. For example, design variation and the potential omission of minor design details provided by the developers (e.g. benches, secure bike storage, green infrastructure) can exacerbate unhealthy environments. But with development management structures often under severe pressure this level of detail is difficult to track. Monitoring enforcement/compliance must include checking implementation of conditions brought forward by any Section 106 agreement (i.e. the provision of monies or goods in kind by developers to mitigate against the impacts of a new development, secure affordable housing) and Community Infrastructure Levy (a levy that local authorities can choose to charge on new

developments in their area to finance healthcare or other infrastructure), but again such issues are not always followed up.

As outlined above, local authorities face key challenges around delivering developments that promote healthy behaviours and nowhere is this more acute than in relation to housing. To ensure that planners can work as health enablers requires them to look beyond the use of the right evidence base in planning or the development of the right standards and policy tools. The public sector has no significant resources to deliver housing targets and relies on the private sector with short term financial objectives rather than long term health and sustainability ambitions. The challenge is to convince private developers that they can too contribute to shaping healthy communities by endorsing design standards which promote active living, mixed use and mixed income developments without damaging their financial interests. The housing market needs to be organised in a way that housing associations and small and medium enterprises (SMEs) entering the housing market for delivery of more houses, in particular to support mixed communities, are supported. One participant asked *Why has the SME market disappeared? There is a need to de-risk for smaller developers and housing associations*. Participants suggested reforming the land offer by incentivising the planning and building of whole communities rather than simply focusing on the number of dwellings as well as increasing the opportunities to build on brownfield sites. One of the advantages of rebalancing the business model to local focus is to rebalance incentives on building communities and not houses confirmed a participant. However, the role of planning should not be underestimated, even in market driven environments. As one developer participant put it "we do not do health because no one is asking us to".

6.2. Opportunities and good practice in implementation

Between the finish of the ESRC seminar series and writing of this article, some of the issues raised have begun to resonate at national level. In particular the UK Government has seemingly recognised the lack of investment in public sector housing and has recently indicated that an extra £2bn is to be allocated to the sector (PM Teresa May speaking at the 2018 National Housing Federation conference). In addition, in July 2018, a new NPPR was published, with a view *to support strong, vibrant and healthy communities, by ensuring that a sufficient number and range of homes can be provided to meet the needs of present and future generations; and by fostering a well-designed and safe built environment, with accessible services and open spaces that reflect current and future needs and support health, social and cultural well-being* (MHCLG, 2018b).

Whether the new NPPF will support, promote or hinder new urban developments which place a greater emphasis on health than is currently the case will need to be evaluated in the future. One thing which is certain is that the key challenges for evidence, partnership working and strong policy integration by practitioners at national and local level will remain. Policy integration such as the one described in section 5 requires an effective, tried and tested cross-sector collaboration between planning and public health and other relevant teams. Pre-2012 research showed that best practice in England depended not so much on the planning system per se, as on leadership, commitment, knowledge of politicians and practitioners involved. The barriers to health integration included organisational and professional silos, ignorance, lack of resources and a reactive planning regime (Carmichael et al., 2013).

Post-2012 practice showcased in the seminar series emphasised that the process of integration takes time and requires knowledge integration to break down silos between public health, built environment and other sectors. For instance, close collaboration between various key actors, local health, planning and transport teams, climate change and food policy teams and University researchers started in 2008 in Bristol, leading to the development of a strategic healthy planning agenda, with a dedicated healthy planner spearheading its implementation at individual planning application level.

In Gateshead, an initiative between planning and public health to tackle fast food outlet proliferation quickly realised the need to also cooperate with colleagues from environmental health, since only they had a comprehensive understanding of where existing outlets were located. By working across the three interest areas, the local authority managed to introduce guidance banning new fast food outlets (use class A5 in the English planning system) in any ward not meeting childhood obesity targets – in effect a total ban across the entire authority. A seminar participant recounting the process emphasised the need for proactive members from each of the authority's departments as well as a willingness to take time to understand each other's practices and procedures. The importance of dedicated staff is also demonstrated in Stoke on Trent where the adoption of a Spatial Planning Document on Healthy Urban Planning (2012) in its core strategy policy failed to be implemented until communications channels were formalised and resources allocated. A Health Psychologist joined the planning team full time in 2014 to engrain health in the Local Plan. In Stockport, a joint appointment (called 'impact assessment officer') co-funded by the public health and planning teams ensures that public health is embedded into the planning team.

The NHS England Healthy New Towns programme is an example of a national pilot across 10 sites designed to create healthier communities through cross sector and multi-stakeholder partnerships and which can demonstrate the role of planners as health enablers. A presentation at one of our seminars on the Bicester Healthy New Town project, opened up the debate on this topic. The NHS Healthy New Town programme which started in 2015 is a new venture for the NHS, launching it into the area of land development to shape new towns, neighbourhoods and communities to promote health and wellbeing, prevent illness and keep people independent (NHS England, 2017). The programme places the planning process and urban design at the heart of its prevention agenda, in particular highlighting the importance of Local Plans, Section 106 agreements and masterplans, as well as acknowledging the role of specialist housing, public green and blue spaces, public transport, walkable and cyclable environments in supporting healthy lifestyles. Ten demonstrator sites focusing on new housing developments have been identified and governance is based on developing a shared vision between key built environment and health stakeholders and actors in the development process, and using urban design principles encouraging healthy and sustainable living. A policy manager for the NHS England Healthy New Towns programme felt it was important getting partnerships in place to bring the evidence forward: *All NHS England Healthy New Towns project groups are asking 'where is the evidence?' There is evidence out there but may be understood differently by different groups.* Developing local partnerships together can help ensure that healthy built environment principles and guidance put forward by national built environment champions are implemented at the local level.

Bicester also uses planning policy to monitor the success of measures introduced. These developments are still in their early phases but it will be interesting to evaluate, once the development is delivered, whether this function of planning helps deliver the healthy design on the ground.

7. Conclusion

This paper summarises the results of an innovative nation-wide seminar series across England for planning and public health practitioners, academics and government policy officials whose aim was to explore what progress had been made since the introduction of major reforms to planning and health at the local level. Challenges remain to ensure that planners truly become health enablers. However, progress has definitely been made since an earlier review of the situation (Carmichael et al., 2013) and some local authorities are making progress in integrating policy. A number of conclusions can be drawn from the analysis of the issues raised by over 500 participants at the eight seminars.

First, on the evidence base, public health evidence base needs to

take a more prominent role in supporting planning decision-making, but to do so the evidence must evolve to suit the needs of practitioners.

At a practical level and in the short term, the evidence base provided in JSNAs, in health and wellbeing and other local health strategies (for example obesity, healthy eating, physical activity, dementia, health inequality) should be more prominent in informing local plans than at present. Sharing health data, such as in JSNAs, to inform Local Plans could support the mainstreaming of systems thinking, and inform more complex built environment interventions. The legal status of public health and other relevant strategies (e.g. green infrastructure) would be reinforced if integrated into Local Plans.

Second, on the issue of planning policy tools and in the short to medium term, the public health evidence base needs to be translated into healthy planning principles, standards and indicators guiding healthy development (see for instance an attempt by one of the project partners (PHE, 2017). Local planning policies can restrict urban features promoting unhealthy behaviour, e.g. restricting hot-food takeaways in close proximity to schools and youth facilities. However, indicators offer more comprehensive guidance to plan healthy developments and inform planning policies (e.g. fast food takeaways) if they cross reference local public health policies and targets. For instance, Gateshead's use of childhood obesity targets in their Supplementary Planning Guidance provides a much firmer footing on which to make planning decisions and fight appeals, than more generic targets of for example preventing fast food outlets with 400 m of schools (FUSE, 2018). Developing targets for the development of housing and infrastructure (cycle lanes; green spaces e.g.) which promotes more activity, less reliance on motorised transport provides the potential for win-wins for health as well as the environment and the economy at the same time.

The priority given to short term viability as well as systems construct challenges could work to counteract the focus on sustainable, healthy communities promulgated in the rest of the NPPF. Robust planning policy can create a firm foundation to support effective and successful decision making in a discretionary planning system. Similarly, maximising the opportunities to derive funding from Section 106 and Community Infrastructure Levy income can enable local authority scale positive change to occur; the wider local authority resource challenge is of note here, with other priorities likely to be in competition for funds. The long term view and evidence of the importance of creating healthy sustainable environments, though, should be used to substantiate action.

However, the whole development process and its culture need to evolve and will only do so with the buy-in from the key stakeholders and actors of development. The research suggests that in those authorities that have made real progress with integration, this is driven by key individuals able to bridge the public health-planning gap, understand sectoral priorities and how institutions work to break through silos and promote joint agendas, tools and practice. The case studies of Bristol, Stoke-on-Trent, Stockport have demonstrated this point. The importance of academic-practice links and collaboration has also been emphasised in Bristol for instance to develop and implement the concept of healthy planning.

In the longer term, the planning system needs to be smart and able to evolve in view of the emerging evidence base. The planning framework needs to be able to cope with some level of experimentation. We need to move to a model advocated by Rydin et al (2012) where there is scope for more flexibility and iterative learning. In this context, impact assessments (IAs; in particular HIA and health inclusive SEA and EIA) can play a key role. This can enable local authorities to build institutional capacity, create processes, policies, lines of accountability and engage with communities. Yet, the practice of IA (HIA and health inclusive SEAs / EIAs) needs to be revisited as it is currently not effectively used by local planning authorities consistently across England in order to support healthy planning. There is currently a lack of capacity to conduct IAs effectively.

Third, key resources for delivering healthy planning include both financial investment and a consortium approach. The recent public announcements of new money for the housing sector and greater ambition of the 2018 NPPF could in theory make it easier for local authorities to adopt optional standards promoting health. However, any realistic changes to national policy require for land development stakeholders to buy into the available public health evidence, namely that promoting health and wellbeing can reduce cost on the NHS, help the housing market to thrive and the local economy to grow. More research needs to focus on the health costs of bad urban design, offer new models for testing viability that would ensure the common purpose of planning without deterring private sector interests. Proving the marketability of 'healthy' design would also be key to persuading the private sector it is worth investing in. Local planning authorities can start by promoting a consortium approach to place-based, pro-active planning and design.

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