Chapter 3

The local health environment

Chapter lead
Tim Elwell-Sutton[1], Louise Marshall[1], David Finch[1], Jo Bibby[1]

Chapter authors
Tim Elwell-Sutton[1]

1 The Health Foundation

01 Introduction

Viewing people's health as the primary asset for our nation would revolutionise the way decisions are made at national and local levels, putting health and wellbeing at the heart of all policy. By 2040, this could transform our local communities and the lives of the people who live in them. There could be clean air to breathe and warm, secure homes to live in. The built environment could make it easy for people to be active and enjoy green space. The cheapest, and most easily-available food, could be healthy food. Everyone could have enough money to meet their basic needs and have meaningful work to do. Local communities could be places where people turn to each other for support and no-one would be left out.

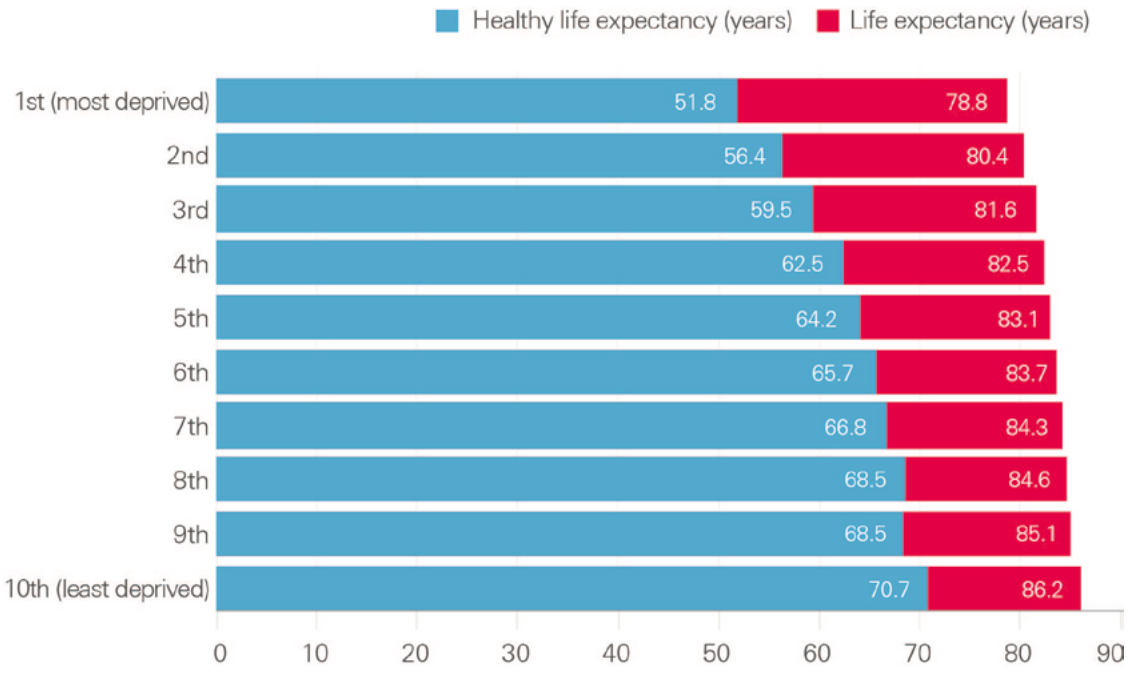
The health environment includes all of these factors and more. There is abundant evidence that when these conditions are in place, most people lead long, healthy, and productive lives.[1] In this chapter, we consider the evidence for how a healthy environment can improve health. We then explore three fundamental changes at national level that could shift the focus of policy and action from treating and managing disease to creating health in order to provide an enabling context for local leadership. Throughout, we highlight some of the opportunities this would create for communities to lead healthy lives.

02 How the environment shapes our health

The environment people live in has an enormous impact on their health through both direct and indirect channels. The direct impacts are perhaps the most widely understood. Polluted air, for example, is known to have a strong, direct effect both on short-term and long-term health outcomes.[2,3] Similarly, damp or cold housing has been shown to have an impact on respiratory health.[4]

The indirect impacts of the health environment have more complex causal mechanisms but nevertheless have a powerful effect on people's health. The relationship between poverty and poor health has been comprehensively studied over many decades.[1,5,6] While national life expectancy has improved significantly over the past 50 years, certain patterns have persisted. For example, people living in more deprived areas consistently have shorter lives and longer periods of poor health at the end of them. Figure 3.1 shows that women in the most deprived communities in the UK can expect on average to spend 27 years, or one third of their lives, in poor health. Figure 3.2 illustrates some of the mechanisms linking inadequate income to poor health.

Figure 3.1 Total life expectancy and healthy life expectancy at birth by decile of index of multiple deprivation, females 2014–16



Source The Health Foundation, 2018

Economic and social environments can affect health through material, psychosocial, and behavioural pathways.[7,8]

- The material effects of low income on health include, the difficulties low-income families face in being able to afford a healthy diet.[9]
- The chronic stress caused by having an inadequate income is a physiological mechanism linking poor economic circumstances to poor health outcomes.
- Behavioural pathways include the fact that health-damaging behaviours such as smoking and substance misuse are strongly associated with poor economic and social environments, in particular adverse childhood experiences.[10,11]

While individual choices can mitigate some of these effects, people's choices are constrained and structured by the environment they experience across the course of their lives. For example, choices about diet are strongly affected by the affordability and availability of healthy food, while choices about physical activity are limited by the built environment and transport infrastructure. Reducing health inequalities will not be possible without action to create healthier environments.[1] Interventions that seek to change behaviour without addressing the wider environmental constraints on choice, therefore, are likely to have limited impact.

Large numbers of people are currently exposed to sub-optimal conditions, which means there is enormous potential to improve health through creating better environments. Ensuring that all parts of the country had the highest levels of air quality, for example, could result in 40,000 fewer deaths each year.[2] With one in five people in the UK currently living in poverty*,[12] it is clear that the potential to improve the economic environment for large parts of the population is huge. If, by 2040, everyone had the type of environment currently only available to the most affluent sections of society, people would live longer, healthier, more productive lives with fewer years of ill health.

Figure 3.2 The relationship between money, resources and health

Source *The Health Foundation*

* Joseph Rowntree Foundation define poverty in their report as 'when a family has an income of less than 60% of median income for their family type, after housing costs'.

03 National context for a healthy environment

Creating healthy local environments can only be done within an overarching, national context which encourages health creation as a goal of equal importance to wealth creation and values healthy environments at least as much as treatment of ill health. Three fundamental changes in thinking and practice would be required at national level to put health at the heart of our civic priorities and encourage the creation of the healthiest environments possible for local communities:

- An expanded view of health. 'Health' would be understood as more than just an absence of disease, it would be seen as a vital asset contributing to social and economic value;
- An expanded view of community success. Civic leaders, be they local government officials, elected councillors, business leaders or civil society heads, would measure success in terms of health of the local population, not just economic output;
- An expanded view of how to intervene. Healthy communities would be understood as an outcome of a multitude of interdependent elements that make up a connected and adaptive system and interventions would be shaped accordingly.

04 Expanding our view of health

The British public generally understands health as being an absence of disease (see Box 3.1). This perspective runs through policy making, with the result that much public debate about improving health focuses on better treatment of illness.[13] By contrast, a society which prioritised health would think of it as an asset, a stock which is worth investing in, and something which can be positively enhanced at any age by a healthy environment.[14]

Figure 3.3 outlines the importance of a wide range of physical, economic and social factors as determinants of health. Such an expanded view of 'health' could fundamentally change the debate around improving health in England from one which is primarily focussed on health-care services, to one which recognises the vital importance of creating a healthy environment in which people can flourish.

The challenge involved in making this shift can be seen in a poll of public attitudes to the NHS in April 2018, which found much greater support for further investment in emergency healthcare than in preventative public health measures (see Figure 3.4). Recent work from The Health Foundation has identified a number of the cultural models that underlie these attitudes including an understanding of health as an absence of illness (see Box 3.1).

Box 3.1 An expanded view of health: more than an absence of disease

Qualitative research commissioned by The Health Foundation identified a number of 'cultural models' present in public thinking in the UK. The 'absence of illness' model was prominent and involves implicitly defining health by what it is not, rather than by what it is. Health is seen as the absence of illness. Health is assumed to be the default state of the body and the mind before the inevitable accumulation of pathologies and dysfunctions over time. Because people define health negatively, in conversations about what good health involves, participants consistently brought up illness and poor health.

"I think good health is waking up in the morning and feeling happy and not being full of aches and pains. Good health is never having to go to the doctors. Ironically, good health is never having to use the NHS. I say ironically because of how much I respect the NHS, but, if I never have to use it, […] that's good health."

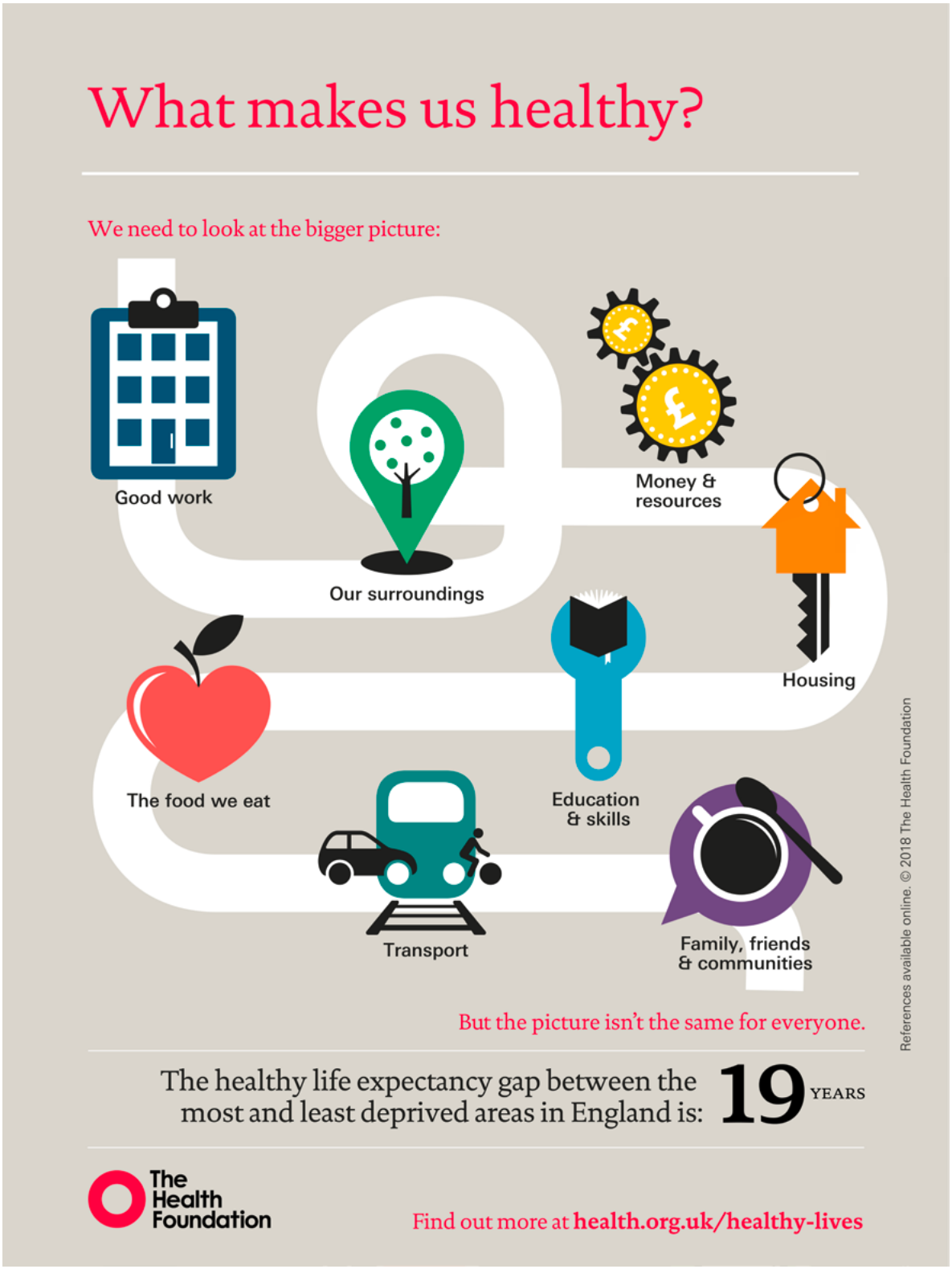
Public participant.

An alternative, broader understanding of health held by many public health experts is that good health means people experiencing physical and mental wellbeing, being able to make meaning of their lives, and having the sense of control needed to pursue life goals. This perspective opens the possibility that people can experience good health at advanced ages and even when they have some physical illness.[i]

References

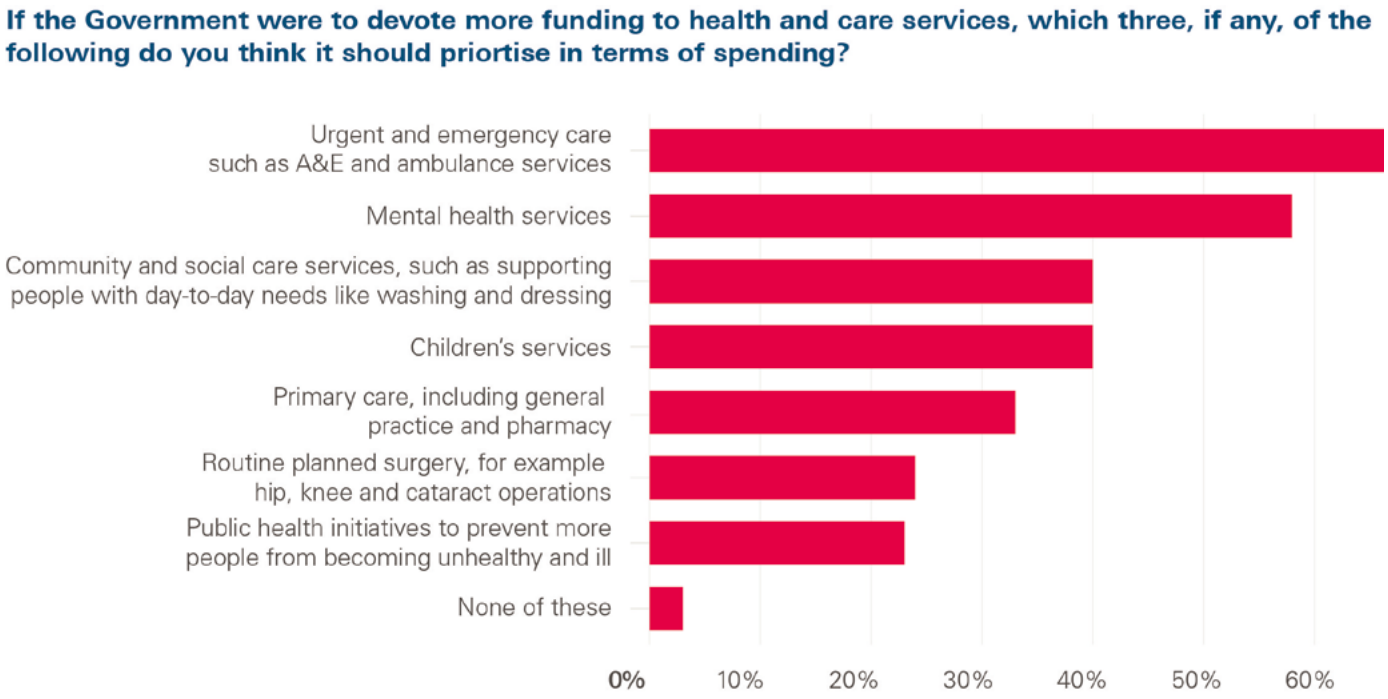
[i] L'Hote, Emilie; Fond, Marissa; Volmert, Andrew. 2018. "Seeing Upstream: Mapping the Gaps between Expert and Public Understandings of Health in the United Kingdom." Frameworks Institute.

Figure 3.3 What makes us healthy?



Source The Health Foundation

Figure 3.4 Public priorities for future spending on health and care services



Source Ipsos MORI (2018) NHS at 70: Public attitudes to the health and care system

05 An expanded view of success

An expanded understanding of what it means to be healthy needs to be coupled with new ways of measuring the success of policy at both national and local levels; measures which go beyond traditional economic indicators, such as employment and income. Economic theory often assumes that creating economic growth will translate naturally and inevitably into improved wellbeing yet the unsustainable impact that economic growth can have on the natural environment suggests that this is not necessarily true.[15,16] Indeed, there is no guarantee that economic growth leads automatically to improved health since certain forms of growth can create commercial and social environments which damage health.[17] This is leading to increasing recognition that measurement of economic and social progress should go beyond measurement of Gross Domestic Product to encompass wider measures of population wellbeing.[18,19] The World Bank has called for countries to start measuring 'human capital' as a way of motivating investment in health-enhancing sectors.[20] New Zealand has recently become the first country in the world to commit to setting budgets on the basis of wellbeing rather than economic growth (see Box 3.2).[21]

More rounded ways of measuring success would allow all policy to be evaluated in terms of the contribution it would make to maximising health and wellbeing. This would also allow trade-offs between different forms of capital to be examined and debated in an informed way. The economic benefits of increasing employment rates, for example, could be weighed against the wellbeing problems created by low-quality, insecure jobs.

This way of thinking about and measuring success could transform the way in which decisions are made at all levels, putting health and wellbeing at the heart of all policies. At local level, rather than focussing on economic growth and the financial sustainability of services, the health and wellbeing of the local population would be considered the most important measure of an area's progress. This would lead to different prioritisation decisions being made. Areas such as Sure Start centres, which have seen significant funding reductions in recent years, would be valued not only for the good they do in themselves but also as creating the conditions needed for a flourishing community and local economy.

Box 3.2 Expanding our view of success: putting wellbeing at the heart of government policy in New Zealand

In 2019, the New Zealand Government will publish its first "Wellbeing Budget", in which priorities will be explicitly structured around intergenerational wellbeing. This is part of a strategy to put population wellbeing at the heart of government decision-making.

"We're starting from a position where the received wisdom – that creating economic wealth makes everyone better off by creating bigger and better businesses, higher employment, more savings and spending, an increased tax take, and a greater ability for government to support those who are vulnerable or in poverty, ill health or deprivation – is no longer seen as a guaranteed ticket to a better place." David Lovatt, 2018

A key element of this strategy is the development of a "Living Standards Dashboard" which is being led by the Treasury to give government a more rounded picture of success.

This is thought to be the first attempt by any country to integrate wellbeing formally into its national budget-setting processes. This has the potential to fundamentally change the way in which government decisions are made, opening the door for health and wellbeing to be considered a key measure of national success and a contributor to other forms of development.

Sources

Lovatt, David. 2018. "Budget 2018: Public Sector. Recalibrating the Budget for wellbeing." In Analysis. Deloitte.
Morrissey, Suzy. 2018. "The Start of a Conversation on th eValue of New Zealands Human Capital." In, edited by The Treasury. Wellington: New Zealand Government.
National Audit Office. 2018. "Financial Sustainability of Local Authorities." In. London: NAO.
Smith, Conal. 2018. "Treasury Living Standards Dashboard: Monitoring Intergenerational Wellbeing." In. Wellington: Kotata Insight.

06 An expanded view of how to intervene

An expanded understanding of what makes people healthy requires an expanded understanding of the multitude of factors which interact to produce health outcomes. Many of the major health challenges facing the UK population – including rising levels of obesity and poor mental health – have multiple causes and consequences. They are both products of and components in complex adaptive systems. Yet the most common policy responses are approaches designed to change individuals' behaviour or treat clinical problems, without sufficient regard to the context in which they occur. As Rutter et al. put it in 2017[22];

> *"Population health problems that emerge as a property of a complex system cannot necessarily be solved with a simple, single intervention, but the interacting factors within the system can potentially be reshaped to generate a more desirable set of outcomes, through a range of actions targeted throughout the system."*

A complex adaptive systems approach to many health challenges is required. Organisational boundaries and budgets, and criteria by which services are commissioned and paid for, can all act as barriers to thinking and operating as a system. One example is the complex division of responsibilities and budgets for preventing and treating mental ill health between different parts of the NHS, local authorities, and the education system.[23] Creating an effective community-level response to such complex issues is challenging. It requires decision makers to act as part of a system, thinking beyond the narrow responsibilities of their own organisations and budgets to effect community-level change. At present, such cross-sector thinking is often discouraged by performance management targets which are focused on processes rather than population health outcomes.

Because systems are dynamic and adapt over time in response to changes, taking a complex adaptive systems approach can help in predicting long-term impacts of actions, and planning a long-term approach to improving population health. A systems approach, therefore, needs a different way of evaluating whether and why interventions have had their desired impact, one focused on broader, more dispersed impacts of interventions.

Box 3.3 Applying a systems lens to young people's mental health

Young people's mental health and wellbeing is now of primary concern to policy makers but the predominant focus remains on early identification and treatment services for mental illness, rather than promotion and maintenance of good mental health. Effective prevention requires a deeper understanding of the many factors that influence young people's mental health, and how these interrelate.

The Health Foundation convened a group of professionals and young people to map system influences on mental health. This process of mapping the system – while just a first step in taking a systems approach – was an effective mechanism for bringing people with diverse roles in young people's lives together, starting conversations, and helping them understand wider perspectives. The resulting map visually demonstrated the breadth of the influences on young people's mental health and highlighted connections not previously recognised by those working in any single part of the system. The map helped identify gaps in current services, gaps in evidence, as well as a mismatch between what was considered important, and what received the most funding.

System mapping exercises will only ever represent the perceptions of those present – who to involve is therefore critical – but mapping of this kind is a valuable first step in planning policy and practice which can influence complex issues and create healthier environments at community level.

07 Local leadership for a healthy environment

Changing the national context, in the way described earlier in this chapter, would help to transform community-level leadership.

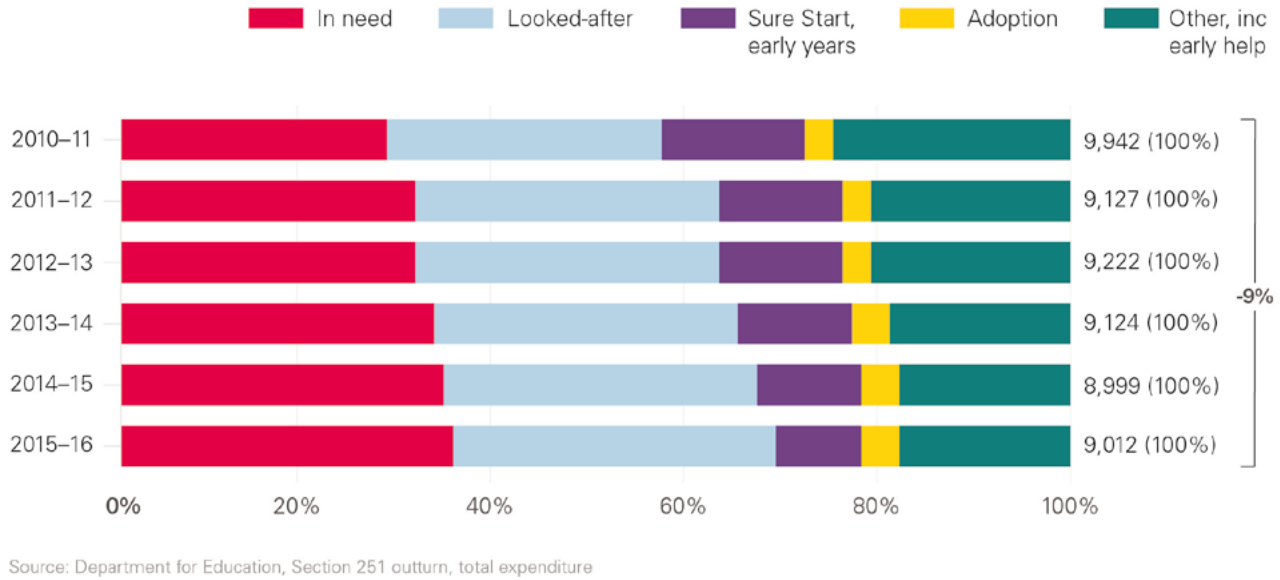
Local government has a pivotal role to play in creating healthy local environments. At present, however, the ability of many local authorities to make long-term investments in improving health, is constrained by a combination of budget cuts[24,*] and growing demand for services. In this context, national and local incentives dictate that attention is focused on fixing immediate problems at the expense of long-term investments. This is illustrated by Figure 3.5 which shows that overall reductions in spending on children's services between 2010 and 2016 were born disproportionately by preventative, health-creating services such as Sure Start, early years education services, and early help (social care). These services have long-term benefits for the whole child population, by creating healthy educational and social environments at a crucial point in children's lives. Spending on Sure Start and early years services, for example, fell by 44% over that period, while spending on the acute needs of the relatively small number of children in the statutory social care system (children in need and looked-after children) increased by 10% over the same period.

Within a national context that supports the creation of good health, civic leaders would be empowered and incentivised to make decisions differently, prioritising a healthy environment over short-term service provision. Rather than improving people's health being a niche interest, advocated for by public health professionals, the health of the population could become a shared value, something which could be seen by all as a common measure of success.

With the financial resources and incentives needed to invest in health and wellbeing, local leaders could prioritise investments in early years services, in green space, and in the infrastructure needed for sustainable, active travel; investments which would enhance health and prevent disease. It could also change the way that local authorities work with other sectors. Rather than attracting private sector investment solely on the basis of its likely council tax contributions, civic leaders could encourage businesses which bring benefit to local populations, and have a strong record on workforce wellbeing. They could also procure services from local organisations which benefit the local community.

The business sector too, has the potential to have a significant, positive impact on health, by treating population health and wellbeing as a core part of their purpose rather than an adjunct to profit-making.[25] However, evidence shows that benefit to local people, even from large business investments in a locality, depends on how they work with local communities. Analysis of Amazon's investments in the United States, for example, shows that, while the local authorities have often offered large tax incentives to encourage investment, new Amazon warehouses lead to an increased number of warehouse jobs in a county, but no overall increases in employment due to job losses caused in other sectors.[26]

Figure 3.5 Total spending on children's services (£ million), across all 152 English local councils, 2010-11 to 2016-16



Source Department for Education, Section 251 outturn, total expenditure

* The National Audit Office reported a 32.6% fall in spending between 2010/11 and 2016/17, excluding social care spending.

The voluntary, community and social enterprise (VCSE) sector also has an important part to play in shaping the health environment of our communities. VCSE organisations often have a better understanding of local needs and are better at harnessing local assets than the private or public sectors. Current involvement of the VCSE sector in service planning and provision is limited. Rather than being treated as equal partners who co-design services for their local communities, VCSE organisations are often the subjects of consultation exercises which have limited influence on the final shape of services. Public sector commissioners tend to favour large, generic contracts which provide a range of services across a wide geographic area. The size and complexity of these contracts make it hard for local organisations to bid to deliver them and the resulting services are often so generic that they offer poor access to some of the most vulnerable sections of the population, such as those who need translation services or are stigmatised by their health condition.[27]

Working in close partnership with the VCSE is one important part of a wider approach to empower local people to shape their own health environment. Too often, services are designed and delivered in ways which make people passive recipients of help rather than active partners in making their community a better place.[28] Similarly, prevailing approaches to outcome measurement and performance management tend to reduce complex human experiences to simplified data points, with the result that improvements in outcome measures do not always correspond to improved experiences for service beneficiaries.[29] Making people agents who can design and deliver solutions to their own health needs will be a vital part of creating a healthy environment.

Box 3.4 Reducing childhood obesity through community-wide action

An example of the way in which local leadership can change the health environment and improve health is found in the EPODE* approach to tackling childhood obesity. This grew out of a pilot study in two French towns which successfully reduced levels of obesity compared to control towns which had similar levels of child obesity at the start of the study.[i] Although it took 8 years for improvements to become evident, by 2004 (12 years after the programme started) 8.8% of children in the pilot towns were overweight compared to 17.8% in the control towns. Although this programme began with school-based interventions, the programme quickly widened since:

> *"…it was apparent that interventions targeting schools alone were not sufficient, and that progress was only made when the mobilization of the population became more generalized at community level and involved schools, pre-schools, local sports and parents' associations, catering structures, health professionals, elected representatives, and local stakeholders from the public and private-sectors."*[ii]

From this initial pilot, the EPODE approach was developed and is described as a "capacity-building approach for communities to… prevent childhood obesity". The four factors that emerged as being vital to enable this change were:

1) political commitment at national, state and local level amongst those able to influence environments and childhood settings;
2) sufficient resources to fund services and evaluation;
3) support services including social marketing and community work;
4) scientific evidence to guide implementation.

The success of this programme in tackling one of the most intransigent public health issues of our time was remarkable and illustrates the importance of the local leadership issues explored above. Nevertheless, efforts to replicate this success have had mixed results with evaluations suggesting that adaptation to local circumstances is critical for success.[iii]

* EPODE is a French acronym which stands for: 'Ensemble Prévenons l'Obésité Des Enfants' and translates as "Together Let's Prevent Childhood Obesity"

References

i Romon, M.,et al. 2009. 'Downward trends in the prevalence of childhood overweight in the setting of 12-year school- and community-based programmes', Public Health Nutr, 12: 1735-42.

ii Borys, J al. Study Group. 2012. 'EPODE approach for childhood obesity prevention: methods, progress and international development', Obes Rev, 13: 299-315.

iii van der Kleij, M. et al. 2016. 'Unravelling the factors decisive to the implementation of EPODE-derived community approaches targeting childhood obesity: a longitudinal, multiple case study', Int J Behav Nutr Phys Act, 13: 98.

Box 3.5 The potential of policy modelling to inform cost-effective, equitable health policy

This box was kindly provided by
Chris Kypridemos, Brendan Collins, Martin O'Flaherty, Simon Capewell of University of Liverpool

The utility of Policy Simulation Models (PSMs)

Innovations in modelling methods and computer science have allowed researchers to develop more realistic, individual-level policy simulation models (PSMs). These PSMs can produce estimates and comparisons of contrasting potential policies to inform a wide range of stakeholders and decision makers. PSMs combine evidence from a range of disciplines and sources such as demographics, surveys (e.g. Health Survey for England), economic data (e.g. Living Costs and Food Survey), and systematic reviews of health interventions. These models can then estimate and compare the cost-effectiveness of specific policies and their potential effects on equity and health.

Randomised controlled trials (RCTs) are currently seen as the gold standard in establishing causality and effectiveness. However, RCTs can be expensive, prolonged and impractical or unethical for some population health issues, such as smoke-free legislation, or applying the UK soft drinks industry levy. PSMs can be embedded at all levels of policy decision making (research strategy, scoping, implementation or evaluation). PSMs cannot provide cast-iron answers about the future, but they can inform decision making, widely used in economics, meteorology, transport and business, but less so in public health.

Applications

We recently used our IMPACTNCD model to estimate the cost effectiveness of different future scenarios for NHS Cardiovascular Disease Health Checks across the UK, and in a city such as Liverpool. This work, co-designed with stakeholders, helped decision makers to quantify and understand the potential effects of changing how Health Checks were commissioned and how this could impact health inequalities locally. We modelled five scenarios: (A) current implementation of a NHS Health Check; (B) current + implementation 'targeted' toward most deprived areas; (C) 'optimal' implementation which assumes optimal coverage, uptake, treatment, and lifestyle change; (D) current implementation plus structural population-wide interventions targeting unhealthy diet and smoking; Scenario (E): these structural interventions plus 'targeted' implementation.

This suggested that combining Health Checks with diet and tobacco policies would make primary cardiovascular prevention much more effective. The results have fed into the local CVD strategy and have informed Liverpool decision making and future commissioning.

Future Applications

In the future, Life-course PSMs will be able to include wider determinants of health (including income, education, employment and housing) and compare diverse disease and economic outcomes. Making these applications "open source" and open access will ensure that they are more transparent, open and participative, and minimise unnecessary duplication of work. Such PSMs might offer user-friendly interfaces enabling decision makers and analysts to create and test their own scenarios, an exciting future indeed.

Figure A **Generic structure of policy simulation models**

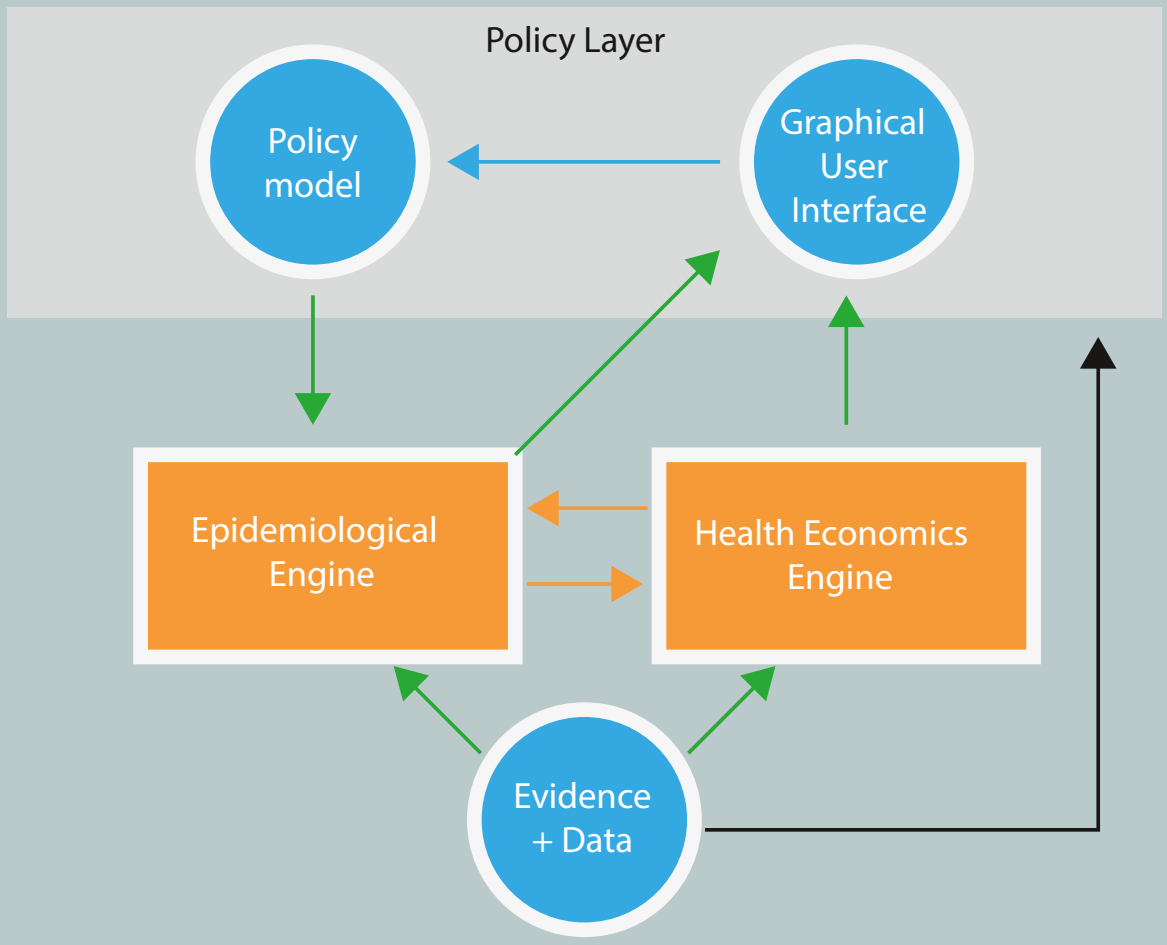
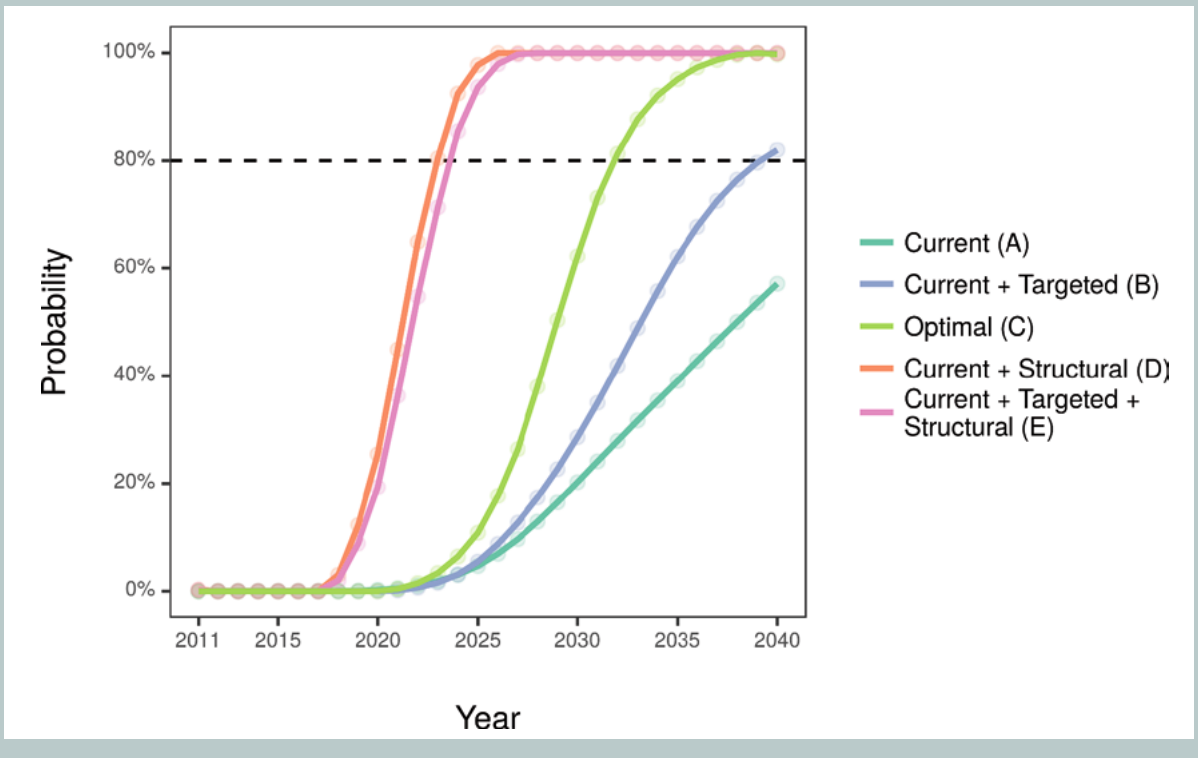


Figure 3.6B **Comparison of probability of cost-effectiveness over time (based on £20,000/QALY threshold) of Health Checks scenarios for Liverpool, from 2010-2040**



Box 3.6 Healthcare and devolution in England

This box was kindly provided by
Martin Rogers, Policy Officer, British Academy

On 1st April 2016, Greater Manchester gained control of its combined health and social care budgets, more than £6 billion per annum. Further devolution of this nature has the potential to greatly impact the landscape of health services. But devolution poses the question which gets far too little attention: do people want national standards, or local variation?

The devolution enacted across the UK from the late 1990s saw Scotland, Wales and Northern Ireland gain greater powers and responsibilities for many areas, including their health services. So far this devolution has been fairly uncontroversial beyond issues around the Barnett formula. Resulting in Scotland offering certain services free at the point of use not available in England. Now areas within England are beginning to experience some devolution, starting with Greater Manchester. Devolution within England initially focused on economic growth but has become increasingly about the 'integration of services'. This has the potential to impact service delivery.

No devolution agreement can include any of the Secretary of State's core duties, and no devolved areas are exempt from national NHS requirements. Health services in Greater Manchester will remain centrally regulated and subject to the NHS Mandate, for example. But plenty of other aspects are in scope for local control.

In theory devolution has the potential to improve health services, not only by being better tailored to local needs but by becoming place-based and thus comprehensive. There are three primary areas of health devolution in Greater Manchester: commissioning, public health and integration. Borough-level Health and Wellbeing Boards were established in an attempt to ensure that services are provided in a joined-up way.

British Academy work on devolution has identified support for greater devolution of health services to integrate, adapt and tailor services to local areas. Our work highlighted a desire among the stake holders we engaged for services to be tailored to the needs of an area rather than subject to direction from the centre. We touched on the importance of integrating services, specifically moving from service provision and regulation which to assessing outcomes in a specific area.

Advocates of devolution say that it has the potential to improve health by providing place-based, comprehensive and integrated services that are preventative as well as reactive. But how comprehensive and integrated the services are may be crucial to their success e.g. increased spending on mental health may be ineffective if other services or actions place greater demand on mental health services.

Nor is integration and localisation a panacea. Integration can be effective in terms of treatment but it is not a way to provide services on the cheap. And the question of money and resources is a live one for questions of devolution because there remains a question about divergence. The upside is the ability of places to tailor services to their area. But the other side of that coin is the risk of 'postcode lotteries'. Services in areas with many older people can be set up to cater for their needs, while areas with younger and more diverse populations will have greater freedom to adapt to those needs. Many of the stakeholders we worked with were positive about the freedom from central direction.

But divergence in service quality, access and availability between areas is controversial. The public tend to be resistant to 'postcode lotteries' in service provision. Our work highlighted that politicians are reluctant to devolve responsibility without an accompanying system of accountability that is sufficiently robust. This is especially the case in devolved politics as those at the level of the central government may be blamed by the public for 'post code lotteries' even if devolution means that they are not responsible.

So far, Greater Manchester has taken the first steps towards health devolution. But to have a truly functional, devolved healthcare system it may be necessary to devolve accountability. Thus far there has been a level of administrative devolution. Political devolution must surely follow to complete the package. Devolution can only be truly established when service users and politicians do not blame central government, but engage locally to discuss and debate choices.

The success of devolution for healthcare may rest on the devolution of not only powers over the direct aspects of health but on greater powers over the wide variety of factors which impact health, and accountability for them. But without specific measures which act as a muscular system of redistribution and equalisation in the widest sense, devolution may threaten to reinforce existing inequalities. The balance between local empowerment, central accountability and redistribution is one that must be openly discussed, and ideally settled, before devolution can truly move forwards.

The insights in this piece result from a roundtable held in Manchester in January 2018. Attendees included a former Minister of State in the Department of Health, central and local government officials, health professionals and academics.

References

[i] British Academy. Governing England: Devolution and public services. Pgs 4-9. British Academy 2018. Available online: https://www.thebritishacademy.ac.uk/sites/default/files/Devolution%20and%20public%20services.pdf

08 Conclusion

The vision set out in this chapter, of creating a health environment which allows people in this country to flourish physically, mentally and socially, is aspirational but not unachievable. It would require fundamental changes to the way health is understood, the way decisions are made and the way resources are prioritised at every level. Yet, the examples highlighted throughout the chapter show that many of the necessary changes in thinking and practice have already begun in some areas. The challenge is to create a national climate in which these ways of working become the norm, rather than the exception. How this would look at community level would vary from place to place, as communities work together with civic leaders to shape their environment in ways that are best suited to local conditions and values. If this happened, by 2040 the health environment in this country could be one which enables people to live healthy lives as part of a healthy society.

09 Chapter authors' suggestions for policy

- A legislative framework is put in place requiring the long-term impact of policy decisions on health and health inequalities to be considered, following the model of Wales' Future Generations Act.
- Measures of wellbeing and human capital – which more fully incorporate health – are developed and used to inform decision-making at national and local levels.
- The UK Corporate Governance Code should require businesses to report impact of their action on the health and wellbeing of employees, customers and communities.
- A cross-government health inequalities strategy be developed and implemented with delivery backed by accountability mechanisms at national and local levels.

10 References

1. Marmot, Review. 2010. "Fair society, health lives: Strategic review of health inequalities in England post 2010." In. London.
2. Royal College of Physicians. 2016. "Every breath we take: the lifelong impact of air" In. London: RCP.
3. Chief Medical Officer. 2017. "Annual Report of the Chief Medical Officer, 2017, Health Impacts of All Pollution – what do we know?" In, edited by CMO. London.
4. Gibson, Marcia, Mark Petticrew, Clare Bambra, Amanda J. Sowden, Kath E. Wright, and Margaret Whitehead. 2011. 'Housing and health inequalities: A synthesis of systematic reviews of interventions aimed at different pathways linking housing and health', Health & Place, 17: 175-84.
5. Black, Douglas, Peter Townsend, Nick Davidson, and Margaret Whitehead. 1988. Inequalities in health: The Black Report; The health divide (Penguin: Harmondsworth).
6. Acheson, Donald. 1998. "Independent inquiry into inequalities in health: report." In.: HM Stationary Office.
7. Marmot, Michael, and Richard G. Wilkinson. 2001. 'Psychosocial and material pathways in the relation between income and health: a response to Lynch et al', BMJ, 322: 1233-36.
8. Bell, Ruth. 2017. "Psychosocial pathways and health outcomes: informing action on health inequalities." In. London: Public Health England.
9. Jones, Nicholas RV, Annalijn I Conklin, Marc Suhrcke, and Pablo Monsivais. 2014. 'The growing price gap between more and less healthy foods: analysis of a novel longitudinal UK dataset', PLoS One, 9: e109343.
10. Dube, Shanta R., Vincent J. Felitti, Maxia Dong, Daniel P. Chapman, Wayne H. Giles, and Robert F. Anda. 2003. 'Childhood Abuse, Neglect, and Household Dysfunction and the Risk of Illicit Drug Use: The Adverse Childhood Experiences Study', 111: 564-72.
11. Ford, Earl S., Robert F. Anda, Valerie J. Edwards, Geraldine S. Perry, Guixiang Zhao, Chaoyang Li, and Janet B. Croft. 2011. 'Adverse childhood experiences and smoking status in five states', Preventive Medicine, 53: 188-93.
12. Joseph Rowntree Foundation. 2017. "Households below a minimum income standard 2008-9 to 2015-16." In. London: JRF.
13. Levay, Kevin; Gibbons, Clara; Down, Leann; O'Neil, Moira; Volmert, Andrew. 2018. "Only Part of the Story: Media and Organisational Discourse about Health in the United Kingdom." In.: Frameworks Institute.
14. Marshall, Louise; Finch, David; Cairncross, Liz; Bibby, Jo. 2018. "Health as an asset: Building evidence on the social and economic value of health." In.: Health Foundation.
15. Jarvis, Michael, Glenn-Marie Lange, Kirk Hamilton, Deval Desai, Barbara Fraumeni, Bram Edens, Susana Ferreira, Haizheng Li, Lopa Chakraborti, and William Kingsmill. 2011. The changing wealth of nations: measuring sustainable development in the new millennium.
16. Lovatt, David. 2018. "Budget 2018: Public Sector. Recalibrating the Budget for wellbeing." In Analysis. Deloitte.
17. Lange, Simon, and Sebastian Vollmer. 2017. 'The effect of economic development on population health: a review of the empirical evidence', British Medical Bulletin, 121: 47-60.
18. Fitoussi, JP, A Sen, and JE Stiglitz. 2008. "Commission on the measurement of economic performance and social progress." In CMEPSP-Issues Paper, July.
19. Coyle, Diane; Mitra-Kahn, Benjamin. 2017. "Making the Future Count." In Indigo Prize winning entry.
20. Lim, Stephen S., Rachel L. Updike, Alexander S. Kaldjian, Ryan M. Barber, Krycia Cowling, Hunter York, Joseph Friedman, R. Xu, Joanna L. Whisnant, Heather J. Taylor, Andrew T. Leever, Yesenia Roman, Miranda F. Bryant, Joseph Dieleman, Emmanuela Gakidou, and Christopher J. L. Murray. 2018. 'Measuring human capital: a systematic analysis of 195 countries and territories, 1990–2016', The Lancet, 392: 1217-34.
21. The Lancet. 2018. 'Tackling inequalities to improve wellbeing in New Zealand', The Lancet, 392: 254.
22. Rutter, Harry, Natalie Savona, Ketevan Glonti, Jo Bibby, Steven Cummins, Diane T. Finegood, Felix Greaves, Laura Harper, Penelope Hawe, Laurence Moore, Mark Petticrew, Eva Rehfuess, Alan Shiell, James Thomas, and Martin White. 2017. 'The need for a complex systems model of evidence for public health', The Lancet, 390: 2602-04.
23. Turner, Trevor. 2014. 'Improving mental health services in England', British Medical Journal, 348.
24. National Audit Office. 2018. "Financial Sustainability of Local Authorities." In. London: NAO.
25. A Blueprint for Better Business, The Health Foundation. 2018. "How Can Business Contribute to People's Health? A guide for leaders." In. London: A Blueprint for Better Business.
26. Jones, Janelle; Zipperer, Ben. 2018. "Unfulfilled promises – Amazon fulfilment centres do not generate broad-based employment growth." In. Washington DC: Economic Policy Institute.

27. Public Health England. 2016. "Review of partnership and investment in the voluntary sector." London.

28. Wilson, Richard;, Chstina; Cornwell, Esther; Glanaga, Nick; Nielsen, and Halima; Khan. 2018. "Good and bad help: How purpose and confidence transform lives." In. London: NESTA.

29. Lowe, Toby, and Rob Wilson. 2017. 'Playing the Game of Outcomes-based Performance Management. Is Gamesmanship Inevitable? Evidence from Theory and Practice', Social Policy & Administration, 51: 981-1001.