# Are we expecting too much from the NHS?

Helen McKenna





### With thanks for expert advice from:

Emma Spencelayh and Peter Stilwell (The Health Foundation), Mark Dayan (the Nuffield Trust), Elaine Kelly (Institute for Fiscal Studies), and David Buck, Dan Wellings and Leo Ewbank (The King's Fund).

© The Health Foundation, the Institute for Fiscal Studies, The King's Fund and the Nuffield Trust, 2018. Not to be reproduced without permission.

Designed by Soapbox, www.soapbox.co.uk

ISBN: 978 1 910953 53 2

## **Key findings**

- The public strongly identifies with the values and founding principles of the NHS.
  However, while satisfaction with services remains high by historical standards,
  recent polling suggests people are becoming increasingly concerned about the
  NHS, particularly in relation to lengthening waiting times and the level of funding
  provided by the government.
- Resources for health care are finite; all health systems are required to make choices about how to allocate funds. However, a prolonged funding squeeze combined with rising demand has resulted in the NHS having to take increasingly difficult decisions at both local and national level, with the NHS currently struggling to meet core standards within its budget. The announcement in June of additional funding for the NHS is welcome but it does not provide the long-term cure that would restore it to full health. Further hard choices lie ahead and polling suggests the public is reluctant to accept measures perceived as 'rationing'.
- Underpinning the NHS is the idea of a contract between the individual and health services. In England, the NHS Constitution sets out the public's rights and the NHS's commitments, together with individual responsibilities. Most people accept they have a responsibility to contribute to their own health and wellbeing.
- However, the most important influence on people's health is the economic, physical and social environment in which they live. Consequently, while the NHS and individuals can play their part, it is essential that together, national and local government use the levers they have at their disposal (such as tax and regulation) to foster healthy environments. New polling suggests that the public are more receptive to such interventions than politicians often suppose.

## Introduction

The relationship between the public and the NHS is complex. Often described as 'a national religion', the NHS is the thing that makes people feel most proud to be British and regularly tops polling on the most important issues facing the country (for example, see Ipsos MORI 2018).¹ However, while many people strongly identify with its values, there is often debate about whether the service is sustainable in its current form. This complexity extends to people's relationship with their own health, which is influenced by a range of factors, including genetic characteristics, behavioural factors and the environment in which they live. This complex interplay of factors raises the question of the extent to which people are responsible for their health or whether it is determined by factors beyond their control.

In this paper, we explore the public's expectations of the NHS, the balance between meeting those expectations and living within a constrained budget, and the question of who is responsible for keeping us healthy.

## Is the NHS meeting our expectations?

Support for the founding principles of the NHS is unwavering. Although public satisfaction with the service remains high by historical standards, there is evidence that people are becoming less satisfied with NHS services. With waiting times for treatment rising, polling suggests that people think the government has not invested the resources required for the NHS to meet the standards expected of it.

In 1942, six years before the NHS was launched, Sir William Beveridge proposed that "medical treatment covering all requirements will be provided for all citizens by a national health service". His report's description of the health service was part of a wider vision for a welfare state characterised by shared responsibility between the state and the public.<sup>2</sup>

In the 70 years since the NHS was established, governments have pursued different visions of the service. However, the idea of a 'contract' between the NHS and the public has endured and from time to time, governments have sought to renew it. In England, for example, the 1991 Patient's Charter set out people's rights and responsibilities in relation to NHS services. In 2009, the NHS Constitution updated this, establishing patient rights to treatment within maximum waiting times and outlining people's "personal responsibility" to make "a significant contribution" to their health and wellbeing.<sup>3</sup> Scotland passed the Patient Rights Act in 2011,<sup>4</sup> resulting in the introduction of a Charter of Patient Rights and Responsibilities in 2012.<sup>5</sup>

Although other aspects of the welfare state have changed over the years, Beveridge's vision of a national health service remains intact. Seventy years on, despite widespread social change, fluctuations in the economy and changes in government, the NHS as an institution enjoys unwavering public support. In England, around 90% of people support the founding principles of the NHS (ie, that the NHS should be free at the point of delivery; that it should provide a comprehensive service available to everyone; and that it should be primarily funded through taxation) (see Figure 1) and 77% believe the NHS should be maintained in its current form.<sup>6</sup>

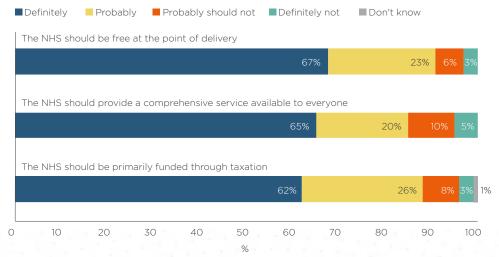


Figure 1: Support for the founding principles of the NHS

Question asked: "For each of the following statements, please tell me the extent to which you think the principle should still apply to NHS services today."

Base: 1,151 English adults, aged 15+, interviewed face-to-face in August 2017.

Source: The King's Fund/Ipsos MORI.

The same polling exercise found that a substantial majority (73%) of the UK public report that, overall, their expectations of the NHS are being met.<sup>7</sup> Other measures of public opinion that ask more granular questions, however, suggest a more complex picture. While public support for the NHS as an institution remains steadfast, overall satisfaction with the running of the service has recently started to fall. The longstanding British Social Attitudes (BSA) survey<sup>a</sup> found that public satisfaction with the NHS overall was 57% in 2017 – down 6 percentage points on the previous year (see Figure 2).<sup>8</sup> At the same time, overall dissatisfaction with the NHS jumped 7 percentage points to 29% – its highest level since 2007. The fall in satisfaction with GP services (to 65% in 2017) was particularly marked – a 7 percentage point drop from the previous year and down from 80% in 2009.

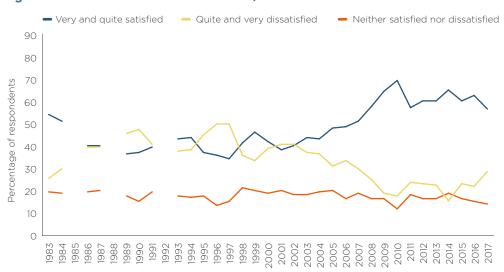


Figure 2: Public satisfaction with the NHS, 1983-2017

Question asked: "All in all, how satisfied or dissatisfied would you say you are with the way in which the National Health Service runs nowadays?" Question was not asked in 1985, 1988 and 1992.

Source: The King's Fund and Nuffield Trust analysis of NatCen Social Research's BSA survey data.

Looking further at the BSA survey data reveals more about what underlies this dissatisfaction. The four main reasons people gave for being dissatisfied with the NHS overall were: staff shortages; long waiting times; lack of funding; and government reforms. This suggests many people think the government has not been delivering its side of the contract by providing sufficient resources and the right policies and that the NHS is not delivering the standards of care people have been led to expect. Across all four UK countries and multiple services (eg, emergency care, planned care and cancer care), targets are being missed (see Box 1), although in an international context, waiting times for treatment in the UK appear to be roughly average, compared with those in similar countries.

a The British Social Attitudes survey is run by the National Centre for Social Research. It has been conducted on an annual basis since 1983. The latest survey was carried out between July and October 2017 and asked a nationally representative sample of 3,004 adults in England, Scotland and Wales about their satisfaction with the NHS overall, and 1,002 people about their satisfaction with individual NHS and social care services.

### Box 1: Performance against key waiting time targets across the UK

#### **A&E** waiting times

All four countries in the UK have the same standard for A&E waiting times: 95% of people attending A&E should be admitted, treated or discharged within four hours. For the past three years none of the countries has achieved this consistently. All four countries saw a significant drop in performance this winter (2017/18). In March 2018, 87.9% of patients were admitted, treated or discharged within the four-hour target in Scotland. In England the figure was 84.6%, while in Wales it was 75.6%. The lowest performance, 65.1%, was in Northern Ireland.

#### Waiting times for non-urgent referrals (planned care)

Each country has a different standard for how long patients can expect to wait for a non-urgent referral. The standards are:

- In England, 92% of patients should wait no more than 18 weeks.
- In Scotland, 90% of patients should have completed a first treatment within 18 weeks of referral.
- In Wales, 95% of patients should wait a maximum of 26 weeks.
- In Northern Ireland, 55% of inpatients should wait a maximum of 13 weeks, while 50% of outpatients should wait a maximum of 9 weeks.

All four countries are consistently failing to meet these standards. However, while over the past three years performance against the targets in England, Scotland and Northern Ireland has deteriorated, in Wales there has been an improvement.

### Cancer

All four countries have a range of waiting time targets in place for tests and treatment after cancer diagnosis. The broadest of these is the standard that there should be a maximum of 62 days from urgent referral to first treatment for cancer. All four countries have this standard, but there are differences in the detail underpinning them, so it is not possible to compare them.

Over the past three years none of the countries has met its own target. Wales has seen a slight improvement, performance in Northern Ireland and Scotland has worsened, while in England it has remained relatively stable.

While the BSA provides us with insight into the public's attitudes towards the NHS overall, patient experience surveys tell us about people's direct interactions with services such as general practice and hospitals. Overall, most people in England continue to say that they have had a good experience of care in the NHS. However, as with the BSA data, scores for some measures, particularly in primary care, 11 have dipped following a number of years where patient experience held up remarkably well despite the pressures on the NHS. For example, the national GP Patient Survey for England shows that the proportion of respondents rating their overall experience of making a GP appointment as good fell from 79.3% in 2012 to 72.7% in 2017. 12 While this remains relatively high, particularly given the well-known challenges facing general practice today, 13 the downward trend is worrying. 14

## Balancing expectations and funding constraints

Despite the announcement of additional funding for the NHS, there remains a tension between public expectations and finite resources. People are sensitive to the consequences of rationing, suggesting that politicians should be more honest with the public about the hard choices that still lie ahead.

Why is the NHS currently struggling to meet some of its own core standards?

At the heart of the contract between the NHS and the public is the fact that the NHS is primarily funded through taxation. Although it is free at the point of use, it is ultimately paid for by the people who use it. However, as a tax-funded system, it must operate within the budget set by the government. In recent years this has become increasingly difficult because of a prolonged funding squeeze and rising demand for services. But while the tension between meeting demand and staying in budget has been growing and is now particularly severe, it is not new.

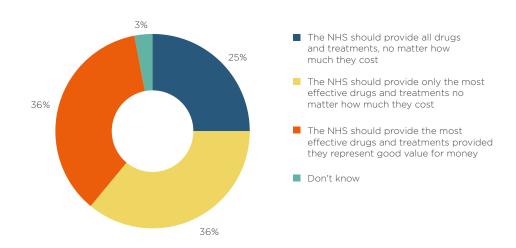
The financial resources available for health care are finite; consequently, all health care systems – regardless of how they are organised and financed – are faced with difficult choices about prioritising how those finite resources are used. The NHS is no different and, to some extent, 'rationing' of health services has always existed.<sup>15</sup> But do people accept this reality? Polls suggest they do, but only to a limited extent. For example, when asked, some people are willing to rule out free cosmetic surgery,<sup>16</sup> and delay treatment for certain procedures for people who are overweight or who smoke.<sup>17</sup> However, these types of choices have relatively limited impact in resource terms and denying treatment to certain groups of people conflicts with the core values of the NHS.

In practice, within the constraints of its legal obligations the NHS has different tools to help it balance activity and funding (a common example is its use of waiting lists, but others include introducing eligibility thresholds for treatments and limiting resources such as equipment or staff). However, local prioritisation decisions can result in variations in care. For example, in England, access to IVF treatment varies by clinical commissioning group (CCG); in some areas, women under 40 are eligible for three cycles of IVF, whereas in others women can only access one cycle and a few areas do not offer any access at all. Polls show the public dislikes local variation and the 'postcode lottery' it creates, with two-thirds of the public in England believing that NHS treatments should only be available if they are available everywhere. 20

Other decisions are taken nationally. The National Institute for Health and Care Excellence (NICE) recommends whether new treatments should be provided by the NHS in England based on how cost effective they are. These decisions can prove controversial. For example, NICE's decision in 2015 to turn down breast cancer drug Kadcyla (trastuzumab emtansine) for use on the NHS because of its high cost provoked strong criticism from breast cancer charities and the drug's manufacturer, Roche.<sup>21</sup> Since then, the drug has been made available to patients – first via the Cancer Drugs Fund and subsequently, via a commercial access agreement between NHS England and the manufacturer.

This highlights the difficulty of balancing public expectations with the finite resources available, a balance that has become increasingly hard to strike in the face of tightening funding constraints. This is underlined by polling conducted by Ipsos MORI for this project, which found that the majority of UK respondents think cost should not be a factor in deciding whether to fund medicines on the NHS (25% stated all medicines should be funded regardless of cost, with another 36% thinking that only the most effective drugs should be funded no matter how expensive) (see Figure 3). This perhaps explains why political leaders are reluctant to confront the public with hard choices. However, after almost a decade of austerity, the NHS is having to increasingly ration care. While the announcement of additional funding for the NHS is welcome, it is not a long-term cure. Tough decisions lie ahead and it will be difficult to reduce financial deficits among NHS providers, get back on track in delivering national waiting time standards and bring about further improvements in services like cancer care, mental health and general practice. Politicians need to be much more honest with the public about what the NHS can deliver with the resources it is given. The Welsh Government's Prudent Healthcare initiative provides an example of involving staff and the public in a more honest conversation about what the NHS cannot or should not do.<sup>22</sup>

Figure 3: Views on NHS provision of drugs and treatments



Question asked: "Which of the following statements most closely matches your view?"

Base: 2,083 UK adults aged 15+.

Source: Ipsos MORI polling commissioned by The Health Foundation, conducted in May 2018.

## Who is responsible for keeping us healthy?

The NHS plays an important but relatively minor role in keeping people healthy. The most important influence on people's health is the economic, physical and social environment in which they live. Governments can influence this environment, fostering better health outcomes for their populations, by using targeted taxes and regulations. Polling suggests that the public may be more receptive to government intervention through tax and regulation than politicians often suppose.

People's health is determined by a complex interaction between their individual characteristics and behaviour, their interaction with health services, and the environment in which they live. It is widely accepted that, while all these factors are important, the most significant are the so-called wider determinants of health – the physical, social and economic conditions in which people are born, raised and live. This helps to explain the yawning gaps in healthy life expectancy between different parts of the UK.<sup>23</sup> For example, a female born between 2014 and 2016 in the Orkney Islands, can expect to live more than 18 years longer in good health than a girl born in Manchester (with the comparable figure for men being slightly more than 15 years).<sup>24</sup>

The idea of a contract between the NHS and the public, which started with Beveridge and lives on in the NHS Constitution, is founded on individuals having responsibilities as well as rights. Polling conducted by Ipsos MORI for this project found that when asked about responsibility for ensuring people stay generally healthy, 86% of the UK public thought the individual has a 'great deal of responsibility' with a further 11% indicating a 'fair amount of responsibility' (see Figure 4). The same polling also suggested that the majority of people think it is 'very easy" or 'fairly easy' to engage in a range of healthy behaviours (for example, 68% stated they found it 'very easy' or 'fairly easy' to take at least 30 mins of exercise a day) (see Figure 5).

A great deal of responsibility

Not very much responsibility

No responsibility No responsibility

The individual

86%

11%

2%

The NHS

17%

51%

24%

8%

The national government

17%

44%

Local authorities

13%

42%

The food and drinks industry

37%

38%

18%

7%

0 10 20 30 40 50 60 70 80 90 100

Figure 4: Views on responsibility for people staying healthy

Question asked: "How much responsibility, if any, do you think that each of the following have for ensuring that people generally stay healthy?"

Base: 2,083 UK adults aged 15+.

Source: Ipsos MORI polling commissioned by The Health Foundation, conducted in May 2018.

■ Very easy Fairly easy ■ Neither easy nor difficult Fairly difficult ■ Very difficult Limit how much alcohol you drink to 14 units per week 19% Eat no more than 6 grams of salt per day 29% Eat at least 5 portions of fruit and vegetables per day 30% Take at least 30 minutes of exercise per day 27% 0 10 20 30 40 50 60 70 80 90 100 %

Figure 5: Views on how easy or difficult people find it to undertake healthy behaviours

Question asked: "How easy or difficult is it for you to...?"

Base: 2,083 UK adults aged 15+.

Source: Ipsos MORI polling commissioned by The Health Foundation, conducted in May 2018.

However, this optimism does not appear to translate into practice. Seven in ten adults in England do not meet government guidelines in relation to two or more key risk factors of poor diet, physical inactivity, excessive alcohol consumption and smoking, <sup>25</sup> all of which are linked to ill health and increased risk of non-communicable diseases, such as cancer, heart disease and diabetes, <sup>26</sup> and premature death. <sup>27</sup> Ill health linked to being overweight or obese is estimated to have cost the NHS in England more than £6 billion in 2014/15. <sup>28</sup> Current estimates suggest that nearly a third of children aged 2 to 15 in the UK are overweight or obese. <sup>29</sup> The personal cost for children living with a lifetime of obesity is considerable; they are more than twice as likely to die prematurely. <sup>30</sup> Further, income inequality is associated with health inequalities; <sup>31</sup> the uneven distribution of risk factors contributes to five-year-olds from the poorest income groups being twice as likely to be obese as their counterparts from the most well-off groups, and by age 11 they are three times as likely. <sup>32</sup>

The NHS has an important role to play in improving people's health by providing services that are focused on the specific needs of local populations; improving how it cares for people with long-term conditions; and making use of its economic power and role as a large employer (with more than 1 million employees) to promote healthy working conditions.

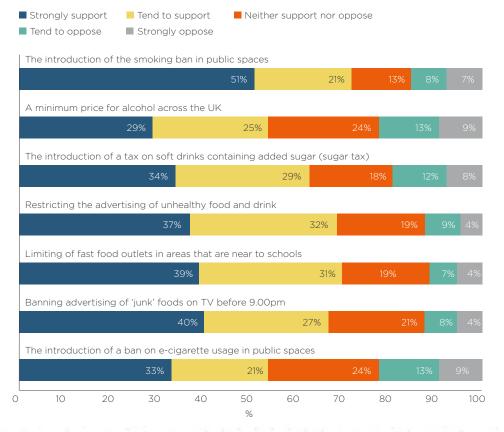
However, in England, health improvement is primarily the responsibility of local authorities (although the NHS undertakes functions such as screening programmes). Local authorities are well placed to shape the factors that impact on the wellbeing of their local populations: where people live, work and play, the housing they live in, the green spaces around them, and their opportunities for work and leisure. Gateshead Council, for example, is using its planning powers to restrict the presence of takeaway shops near schools and in areas with a high prevalence of childhood obesity.<sup>33</sup>

Yet in recent years the public health funding given to local authorities has been squeezed: the 2015 Spending Review announced reductions of nearly 4% a year<sup>34</sup> (adding up to a real-terms cut in spending of at least £600 million a year by 2020/21, on top of more

than £200 million already cut from public health budgets in 2015/16). This has resulted in reductions to public health services such as tobacco control, child health and sexual health services, and cuts to other services that have an impact on our health (eg, transport, housing and economic development). This is a false economy, as investments in public health aim to reduce ill health and, therefore, demand on the health service, both now and in the future.

Beyond its funding and policy decisions about the NHS, national government makes other decisions that can have an important impact on the health of the population. Decisions over infrastructure, including transport, housing and public services, can be used to promote health. Legislation and tax policy can also make a significant difference. The ban on smoking in public places, for example, has led to a significant reduction in the number of people who smoke and changed attitudes towards tobacco consumption. In April this year the UK became one of the few countries to introduce a tax on sugary drinks, with the result that manufacturers are reformulating products to reduce the amount of sugar they contain. In Scotland, minimum unit pricing for alcohol has been introduced<sup>35</sup> (and the Welsh Government looks set to follow suit). 36 Polling conducted by Ipsos MORI for this project suggests the public is more receptive to this type of intervention than governments often assume. For example, 54% of respondents indicated they 'strongly supported' or 'tend to support' a minimum unit price for alcohol, while 70% indicated they 'strongly supported' or 'tend to support' limiting fast food outlets near schools. There is also net support for other measures which are yet to be introduced, eg, banning junk food advertising on television before 9.00pm (see Figure 6).

Figure 6: Views on support for or opposition to public health interventions by the government



Question asked: "To what extent do you support or oppose government intervention in the following areas of public health?"

Base: 2,083 UK adults aged 15+.

Source: Ipsos MORI polling commissioned by The Health Foundation, conducted in May 2018.

## **Conclusion**

Seventy years on from the establishment of the NHS much has changed in the delivery of care, but some things have remained more consistent. The public, for example, remains steadfast in its support of the service and its founding principles. Similarly, the tension between the finite funding available for services and rising demand for care persists. This is particularly acute today and is manifesting in, among other things, the longer waiting times that are contributing to rising public dissatisfaction. Although the recent announcement of additional funding for the NHS is welcome, it is likely that further hard choices lie ahead.

People recognise their role in adopting healthy lifestyles, but in practice the wider environment makes it difficult for many to act on this. As a result, the challenges facing the NHS cannot be solved by the service and the public alone. The success of the smoking ban and early encouraging indications from the soft drinks industry levy underline the role of tax and regulation, and our polling suggests surprisingly strong public support for these types of intervention. If government is serious about improving the public's health, it must do more to tackle the wider determinants of health through a more co-ordinated approach to policy-making.

### References

- Ipsos MORI (2018). 'Ipsos MORI issues index May 2018'. Ipsos MORI website.
   Available at: www.ipsos.com/ipsos-mori/en-uk/ipsos-mori-issues-index-may-2018-nhs-and-brexit-are-still-seen-publics-top-issues (accessed on 19 June 2018).
- 2. Beveridge W (1942). Social insurance and allied services [online]. Cmd 6494. BBC website. Available at: www.news.bbc.co.uk/1/shared/bsp/hi/pdfs/19\_07\_05\_beveridge.pdf (accessed on 13 June 2018).
- 3. Department of Health (2015). NHS Constitution for England. Available at: www.gov.uk/government/publications/the-nhs-constitution-for-england (accessed on 19 June 2018).
- 4. Patient Rights (Scotland) Act 2011. Available at: www.legislation.gov.uk/asp/2011/5/contents (accessed on 13 June 2018).
- 5. The Scottish Government (2012). Your health, your rights: the charter of patient rights and responsibilities [online]. NHS Inform website. Available at: www.nhsinform.scot/publications/charter-of-patient-rights-and-responsibilities-document (accessed on 13 June 2018).
- Evans H, Wellings D (2017). 'What does the public think of the NHS?' The King's
  Fund website. Available at: www.kingsfund.org.uk/publications/what-does-public-think-about-nhs (accessed on 13 June 2018).
- 7. Evans H, Wellings D (2017). 'What does the public think of the NHS?'
  The King's Fund website. Available at: www.kingsfund.org.uk/publications/what-does-public-think-about-nhs (accessed on 13 June 2018).
- 8. Robertson R, Appleby J, Evans H (2017). *Public satisfaction with the NHS and social care*. London: The King's Fund. Available at: www.kingsfund.org.uk/publications/public-satisfaction-nhs-2017 (accessed on 13 June 2018).
- 9. Robertson R, Appleby J, Evans H (2017). *Public satisfaction with the NHS and social care*. London: The King's Fund. Available at: www.kingsfund.org.uk/publications/public-satisfaction-nhs-2017 (accessed on 13 June 2018).
- Dayan M, Ward D, Gardner T, Kelly E (2018). How good is the NHS? London: Nuffield Trust, Institute for Fiscal Studies, The Health Foundation, The King's Fund. Available at: www.nuffieldtrust.org.uk/NHSat70 (accessed on 26 June 2018).
- GP Patient Survey (2017). 'Surveys and reports'. GP Patient Survey website.
   Available at: www.gp-patient.co.uk/surveysandreports (accessed on 13 June 2018).
- 12. GP Patient Survey (2017). 'Surveys and reports'. GP Patient Survey website.

  Available at: www.gp-patient.co.uk/surveysandreports (accessed on 13 June 2018).
- 13. Baird B, Charles A, Honeyman M, Maguire D, Das P (2016). *Understanding pressures in general practice*. London: The King's Fund. Available at: www.kingsfund.org.uk/publications/pressures-in-general-practice (accessed on 13 June 2018).

- 14. Baird B, Wellings D (2017). 'Patient experience of GP surgeries: it's getting in that's the problem'. Blog. The King's Fund website. Available at: www.kingsfund.org.uk/blog/2017/07/patient-experience-gp-surgeries-its-getting-thats-problem (accessed on 13 June 2018).
- 15. Klein R, Maybin J (2012). *Thinking about rationing*. London: The King's Fund. Available at: www.kingsfund.org.uk/publications/thinking-about-rationing (accessed on 13 June 2018).
- Survation (2018). Topical poll [online]. Survation website. Available at: www.survation.com/wp-content/uploads/2018/02/Daily-Mirror-Final-Tables.pdf (accessed on 13 June 2018).
- 17. Smith C, Coates S (2015). 'Ration care for alcoholics, smokers and obese, say voters'. *The Times* website, 1 January. Available at: www.thetimes.co.uk/article/ration-nhs-care-for-alcoholics-smokers-and-obese-say-voters-hbphls5pbxx (accessed on 13 June 2018).
- 18. Klein R, Maybin J (2012). *Thinking about rationing*. London: The King's Fund. Available at: www.kingsfund.org.uk/publications/thinking-about-rationing (accessed on 13 June 2018).
- 19. Fertility Fairness (2017). 'Number of CCGs offering 3 IVF cycles has halved since 2013'. Fertility Fairness website. Available at: www.fertilityfairness.co.uk/number-of-ccgs-offering-3-ivf-cycles-has-halved-since-2013/ (accessed on 13 June 2018).
- 20. Evans H, Wellings D (2017). 'What does the public think of the NHS?' The King's Fund website. Available at: www.kingsfund.org.uk/publications/what-does-public-think-about-nhs (accessed on 13 June 2018).
- 21. William H (2016). 'Breast cancer charity condemns "disastrous" recommendation to block pioneering treatment'. *The Independent*, 29 December 2016. Available at: www.independent.co.uk/news/breast-cancer-latest-charity-treatment-nice-disastrous-recommendation-a7499741.html (accessed on 15 June 2018).
- 22. Welsh Government (2016). 'Prudent Healthcare'. Welsh Government website. Available at: www.gov.wales/topics/health/nhswales/about/prudent-healthcare/?lang=en (accessed on 13 June 2018).
- Public Health England (2017). 'Chapter 5: inequality in health' in 'Health Profile for England'. UK government website. Available at: www.gov.uk/government/ publications/health-profile-for-england/chapter-5-inequality-in-health (accessed on 13 June 2018).
- 24. Office for National Statistics (2017). 'Health state life expectancies, UK: 2014 to 2016'. ONS website. Available at: www.ons.gov.uk/ peoplepopulationandcommunity/healthandsocialcare/healthandlifeexpectancies/bulletins/healthstatelifeexpectanciesuk/2014to2016 (accessed on 13 June 2018).
- 25. Buck D, Frosini F (2012). Clustering of unhealthy behaviours over time: implications for policy and practice. London: The King's Fund. Available at: www.kingsfund.org.uk/publications/clustering-unhealthy-behaviours-over-time (accessed on 19 June 2018).

- 26. Chan M (2017). 'Non-communicable diseases: the slow motion disaster' in *Ten years in public health* 2007–2017 [online]. World Health Organization website. Available at: www.who.int/publications/10-year-review/ncd/en/ (accessed on 13 June 2018).
- 27. Khaw KT, Wareham N, Bingham S, Welch A, Luben R, Day N (2008). 'Combined impact of health behaviours and mortality in men and women: the EPIC-Norfolk prospective population study'. PLOS Medicine, vol 5, no 3, e70. Available at: www.journals.plos.org/plosmedicine/article?id=10.1371/journal.pmed.0050012 (accessed on 13 June 2018).
- 28. House of Commons Health Committee (2018). *Childhood obesity: time for action* [online]. Eighth report of session 2017–19. Parliament.uk website. Available at: www.publications.parliament.uk/pa/cm201719/cmselect/cmhealth/882/88202.htm (accessed on 13 June 2018).
- 29. Public Health England (2017). 'Health matters: obesity and the food environment'. UK government website. Available at: www.gov.uk/government/publications/health-matters-obesity-and-the-food-environment/health-matters-obesity-and-the-food-environment--2 (accessed on 13 June 2018).
- 30. House of Commons Health Committee (2018). Childhood obesity: time for action [online]. Eighth report of session 2017–19. parliament.uk website. Available at: www.publications.parliament.uk/pa/cm201719/cmselect/cmhealth/882/88202.htm (accessed on 13 June 2018).
- 31. Rowlingson K (2011). Does income inequality cause health and social problems? [online]. Joseph Rowntree Foundation website. Available at: www.jrf.org.uk/report/does-income-inequality-cause-health-and-social-problems (accessed on 13 June 2018).
- 32. HM Government (2016). 'Childhood Obesity: A Plan for Action'. UK Government website. Available at: www.gov.uk/government/publications/childhood-obesity-aplan-for-action (accessed on 19 June 2018).
- Gateshead Council (no date). Hot food takeaway Supplementary
   Planning Document. [online]. Gateshead Council website. Available at:
   www.gateshead.gov.uk/article/3089/Hot-food-takeaway-Supplementary-Planning-Document (accessed on 19 June 2018).
- 34. The King's Fund, Nuffield Trust, Health Foundation (2017). 'Autumn Budget 2017: what it means for health and social care'. The King's Fund website. Available at: www.kingsfund.org.uk/publications/autumn-budget-2017-what-it-means (accessed on 13 June 2018).
- 35. Scottish Government (2018). 'Minimum unit pricing'. Scottish Government website. Available at: www.gov.scot/Topics/Health/Services/Alcohol/minimum-pricing (accessed on 13 June 2018).
- 36. Public Health (Minimum Price for Alcohol) (Wales) Bill. Welsh government website. Available at: www.senedd.assembly.wales/mglssueHistoryHome.aspx?IId=20029 (accessed on 13 June 2018).

To mark the BBC's coverage of the NHS's 70th birthday in July 2018, researchers from the Health Foundation, Institute for Fiscal Studies, The King's Fund and the Nuffield Trust have joined forces for the first time, using combined expertise to shed light on some of the big questions on the NHS.

### The Health Foundation

The Health Foundation is an independent charity committed to bringing about better health and health care for people in the UK. Our aim is a healthier population, supported by high quality health care.

### **Nuffield Trust**

The Nuffield Trust is an independent health think tank. We aim to improve the quality of health care in the UK by providing evidence-based research and policy analysis and informing and generating debate.

### Institute for Fiscal Studies

The Institute for Fiscal Studies is Britain's leading independent microeconomic research institute. The goal of the IFS is to promote effective economic and social policies by better understanding how policies affect individuals, families, businesses and the government's finances.

### The King's Fund

The King's Fund is an independent charity working to improve health and care in England. We help to shape policy and practice through research and analysis; develop individuals, teams and organisations; promote understanding of the health and social care system; and bring people together to learn, share knowledge and debate. Our vision is that the best possible health and care is available to all.



