- Blencowe H, Cousens S, Jassir FB, et al. National, regional, and worldwide estimates of stillbirth rates in 2015, with trends from 2000: a systematic analysis. Lancet Glob Health 2016; 4: e98–108.
- 2 Lawn JE, Blencowe H, Waiswa P, et al. Stillbirths: rates, risk factors, and acceleration towards 2030. Lancet 2016; 387: 587–603.
- 3 Costeloe KL, Hennessy EM, Haider S, Stacey F, Marlow N, Draper ES. Short term outcomes after extreme preterm birth in England: comparison of two birth cohorts in 1995 and 2006 (the EPICure studies). BMJ 2012; 345: e7976.
- 4 Smith LK, Hindori-Mohangoo AD, Delnord M, et al. Quantifying the burden of stillbirths before 28 weeks of completed gestational age in high-income countries: a population-based study of 19 European countries. *Lancet* 2018; published online Sept 27. http://dx.doi.org/10.1016/ S0140-6736(18)31651-9.
- 5 WHO. Stillbirths. 2018. http://www.who.int/maternal\_child\_adolescent/epidemiology/stillbirth/en/ (accessed Sept 13, 2018).
- 6 de Bernis L, Kinney MV, Stones W, et al. Stillbirths: ending preventable deaths by 2030. Lancet 2016; 387: 703–16.
- 7 Frøen JF, Cacciatore J, McClure EM, et al. Stillbirths: why they matter. Lancet 2011; 377: 1353-66.







## Disentangling the burden of disease in the UK: what now?

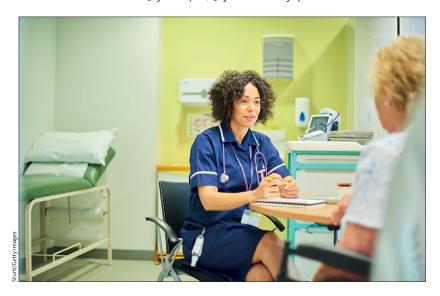
Published Online October 24, 2018 http://dx.doi.org/10.1016/ S0140-6736(18)32429-2 See Articles page 1647 "I wouldn't be here today if it were not for the NHS" was Professor Steven Hawking's response¹ to an American newspaper that used him as an example to highlight the deficiencies of the UK National Health Service (NHS) by writing, "People such as scientist Stephen Hawking wouldn't have a chance in the UK, where the National Health Service would say the life of this brilliant man, because of his physical handicaps, is essentially worthless".²

Since the NHS is celebrating its 70th anniversary, it is timely to take stock of what has been achieved thus far in terms of population health. Over the past 150 years or so, people in the UK have seen tremendous increases in the number of years they could expect to live. In 1871, the average newborn girl would live about 45 years (vs 41 years for boys); by 2016, this life expectancy had almost doubled to 83 years (vs 79 years for boys). Much of this increase

in life expectancy was, at least initially, due to improvements in public health, such as the provision of clean drinking water, safe sewage disposal, and improved food safety. Advances in medicine and health care played an increasingly important part too, raising—at the time of the creation of the NHS in 1948— hopes that all diseases could be cured.<sup>4</sup> Indeed, as new interventions became progressively available to treat common conditions, there were remarkable reductions in death rates from conditions that were potentially amenable to health care,<sup>5</sup> including heart disease<sup>6</sup> and treatable cancers.<sup>7</sup>

However, as people live longer, an increasing number are living with often multiple, long-term conditions. As the UK analysis of the Global Burden of Disease Study 2016 by Nicholas Steel and colleagues<sup>8</sup> in The Lancet shows, the number of years lived with disability now surpasses the number of years of life lost. The study provides important insights into the patterns of disease burden across the devolved nations of the UK, across English local authorities, and over time. Some findings are perhaps not surprising; the mortality burden has remained highest in Scotland from 1990 to 2016,9 and in the most deprived local authorities compared with the least deprived, by over two times. However, Steel and colleagues add granularity by providing detail down to the local level that, as the authors note, "can support various local, regional, and national actions", including the development of integrated care systems.

Here is where the challenge lies. Over half of the mortality burden is attributable to behavioural risk factors, such as tobacco use, poor diet, alcohol and drug use, and low physical activity, and to environmental



factors, such as air pollution. The authors highlight the key role that health services should have by prioritising primary prevention. Indeed, one of the core functions of the proposed integrated care systems in England is to place greater emphasis on population health and preventing ill health.10 Yet, as Steel and colleagues also acknowledge, much of the need for action lies outside the immediate control of the health service. Thus, an effective strategy needs to consider the wider context within which people live and efforts should go beyond targeting the individual, taking greater account of the organisational and system levels in particular. Strategies also need to go beyond the healthcare context to fully consider the broader influences that affect people's lives. As Rutter and colleagues<sup>11</sup> have highlighted, the achievement of meaningful effects on complex multi-causal problems (eq, obesity) requires a multifaceted approach that cannot solely rely on a series of single, unlinked interventions that require the individual to act (for example, making healthy choices on the basis of traffic light labelling of food or taking up exercise on prescription). Such interventions tend to have low reach and widen health inequalities. There is a need for a wider policy framework that is mindful of the potential tensions and unintended consequences of policies that are not consistent, recognises the influence of powerful corporate actors in undermining public health policies that seek to promote health,12 and creates a policy environment that provides the means for those who are asked to implement change to acquire the capacity and competence to do so.

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I declare no competing interests.

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- Hawking S. "I would not have survived": Stephen Hawking lived long life thanks to NHS. The Guardian, March 14, 2018. https://www.thequardian. com/science/2018/mar/14/i-would-not-have-survived-nhs-enabledstephen-hawking-to-live-long-life (accessed Sept 19, 2018).
- Investor's Business Daily. How house bill runs over grandma. 2009. https://cdn.factcheck.org/UploadedFiles/IBDArticlesaspx.htm (accessed Sept 19, 2018).
- Office for National Statistics. How has life expectancy changed over time? 2015. https://www.ons.gov.uk/peoplepopulationandcommunity/ birthsdeathsandmarriages/lifeexpectancies/articles/ howhaslifeexpectancychangedovertime/2015-09-09 (accessed Sept 19, 2018).
- Snow S. The NHS at 70: the story of our lives. Lancet 2018; 392: 22-23.
- Nolte E, McKee M. In amenable mortality—deaths avoidable through health care—progress in the U.S. lags that of three European countries Health Affairs 2012; 31: 2114-22.
- Unal B, Critchley JA, Capewell S. Explaining the decline in coronary heart disease mortality in England and Wales between 1981 and 2000. Circulation 2004; 109: 1101-07
- Rachet B, Maringe C, Nur U, et al. Population-based cancer survival trends in England and Wales up to 2007: an assessment of the NHS cancer plan for England. Lancet Oncol 2009; 10: 351-69.
- Steel N, Ford JA, Newton JN, et al. Changes in health in the countries of the UK and 150 English Local Authority areas 1990-2016: a systematic analysis for the Global Burden of Disease Study 2016. Lancet 2018; published online Oct 24. http://dx.doi.org/10.1016/S0140-6736(18)32207-4.
- Hanlon P, Lawder RS, Buchanan D, et al. Why is mortality higher in Scotland than in England and Wales? Decreasing influence of socioeconomic deprivation between 1981 and 2001 supports the existence of a "Scottish Effect". Public Health 2005; 27: 199-204.
- NHS England. Breaking down barriers to better health and care. 2018. https://www.england.nhs.uk/wp-content/uploads/2018/06/breakingdown-barriers.pdf (accessed Sept 19, 2018).
- Rutter H, Savona N, Glonti K, et al. The need for a complex systems model of evidence for public health. Lancet 2017; 390: 2602-04.
- McKee M, Stuckler D. Revisiting the corporate and commercial determinants of health. Am J Public Health 2018; 108: 1167-70.

## Financing the SDGs: mobilising and using domestic resources (1) for health and human capital



Under the 2015 Addis Ababa Action Agenda on financing for development, countries pledged to reach the Sustainable Development Goals (SDGs) primarily using domestic resources.1 The Global Financing Facility for Every Woman and Every Child (GFF), launched at the Addis Ababa summit, advances this agenda by working with ministries of finance and health to link development assistance to increased domestic health investment.

On Nov 6, 2018, we are co-hosting GFF's first replenishment event in Oslo, Norway, to expand GFF's crucial work to improve maternal, child, and adolescent health and nutrition outcomes. We will also be cohosting a linked conference a day earlier, on Domestic Resource Use and Mobilisation for health (DRUM). Many countries today are testing health financing policies that hold promise for generating the funds needed to achieve the health-related SDGs (SDG3+)