A health index for England: opportunities and challenges

Responding to the government's prevention green paper

Tim Elwell-Sutton, David Finch, Hugh Alderwick
## Contents

**Introduction** 3

1. Why develop a new national health measure 5

2. What would a new health measure look like – and what are the potential problems? 7

3. What measures of health should we use? 10

4. How could government get the most out of a national health measure 12

**Conclusion** 14

**About the authors** 15

**Notes** 12
Introduction

In this long read, we explore the government’s proposal to make health a core measure of government success by creating a national health index for England.

We consider how a national measure of health might be constructed, what it could include, and how it could be embedded in government decision making.

The surge of action on climate breakdown across the world in recent months is a reminder that a short-term focus on economic growth can have long-term consequences for the planet and humanity. While industrialisation has brought huge benefits, it has also created unintended consequences that could be disastrous. What’s the value of higher GDP if it comes at the cost of human health and wellbeing?

The limitations of using GDP as a primary measure of national success have been discussed for many years, but it wasn’t until this year that one country – New Zealand – took the bold step of moving beyond GDP through its wellbeing budget. Now governments of other countries, including the UK, are questioning whether this kind of approach could be right for them too.

Green paper

The government’s recent green paper Advancing our health: prevention in the 2020s proposes the creation of a new health index for England, ‘to help us track the health of the nation, alongside other top-level indicators like GDP.’

The idea, first aired in the Chief Medical Officer’s 2018 annual report, has divided opinion. Some would like to see a measure of the nation’s health as a top-level national indicator, while others feel that we already have more than enough data on health to guide policymaking and that new measures will help only if they drive policy in a meaningful way.
What the green paper says about the health index

We will: launch a new health index to help us track the health of the nation, alongside other top-level indicators like GDP.

See page 5

As recommended by the Chief Medical Officer for England in her 2018 Annual Report, we will develop and launch a new Composite Health Index. The Index will provide a visible, top-level indicator of health, and can be tracked alongside our nation’s GDP. It will measure changes in health over time and, along with other indicators, can be used by the government to assess the health impacts of wider policies. This is part of a broader shift towards viewing health as one of the primary assets of our nation, contributing both to the economy and to the happiness of the population.

See page 61

Our key points

- We welcome the recognition of health as one of the primary assets of our nation and support the central proposal that the nation’s health should be considered a key measure of national success.

- To assess the complex nature of health, a suite of measures would be more effective than a single composite measure. However, there is a case for a single headline measure of health – such as the share of the population with good health – supported by a suite of measures that provide more detail to guide decision making.

- If a new measure of health is to make a real difference, it will need to be supported by structures that embed health impacts with key decision making processes and have strong cross-party and public support.
1. Why develop a new national health measure?

The green paper proposes a new index ‘as part of a broader shift towards viewing health as one of the primary assets of our nation, contributing both to the economy and to the happiness of the population.’ The Health Foundation supports the idea of putting health measures at the centre of national policy, but have concerns about the proposed approach.

Health as an asset

At the Health Foundation, we have championed the concept of health as a national asset, and this forms the cornerstone of our healthy lives strategy. This framing acknowledges that good health is not only an important value in its own right but an essential foundation for a flourishing economy and society. It considers health not solely as an individual attribute but, when considered across a whole population, as a ‘stock’ that can either rise or fall depending on the circumstances that people experience.

Ideally, policymaking across the whole of government (including early years development, education, housing and good quality work) would be designed to improve ‘health stock’ by creating the conditions for people to lead healthy lives. However, the long-term nature of the investment required means that short-term competing interests often divert away the time and attention needed.

Improving health

Using overarching measures of health across government to track the impact of policy might help tackle this, by making it easier to consider people’s health as an outcome of policy (in other words, a key measure of success) as well as an input (an important prerequisite for achieving other outcomes, such as economic growth).

Viewing people’s health as an asset could encourage policymakers to prioritise actions that create the right conditions for healthy lives, tipping the balance in favour of the long-term investment and policy action required.

In recent years, the UK has seen disinvestment in many of the things that keep people healthy, such as public health, welfare, preventative children’s services. At the same time, an increasing amount of government spending has been poured into reactive services, to mop up avoidable problems in areas such as health care, temporary housing and children’s services.

Similarly, other areas of government policy – from taxation of food and drink to economic development strategies – have long-term consequences for health and are at risk of being overly influenced by short-term political pressures.
Advocates for a national health index see it as a means of rebalancing government investment (of financial and political resources) away from short-term fixes and towards long-term health creation.

Viewing people’s health as an asset could encourage policymakers to prioritise actions that create the right conditions for healthy lives, tipping the balance in favour of the long-term investment and policy action required.
2. What would a new health measure look like – and what are the potential problems?

The green paper suggests that the national health index should be a composite. This type of measure combines several different indicators into a single score. This makes them complicated to construct but easy to read. In the Chief Medical Officer’s original proposal, the index would include measures across three domains:

- health outcome measures (such as mortality)
- modifiable risk factors (such as smoking)
- social determinants of health (such as child poverty).

The intention was that the index could be used to calculate a single measure or score of health but could also be disaggregated into its three component parts.

Composite measures are already used in various parts of public policy. One example is Ofsted inspections, which use a mix of data to produce summary ratings of school performance – placing schools in four categories, from ‘outstanding’ to ‘inadequate’. Another is NHS England’s overall patient experience score, which takes into account results from a variety of individual patient survey questions (for example, how long people wait for care, and whether doctors and nurses listened to what they had to say) and combines the results into a 0-100 score. The resulting aggregate measure of patient experience can be tracked and compared over time.

In a similar way, we would expect a composite health index to be designed to provide a simple summary of progress over time – though we don’t know exactly what this would look like.

Composites can be attractive to policymakers. They promise a simple, easy-to-understand summary of performance in whatever is being measured, rather than a long list of indicators that may feel hard to interpret. They can be easy to communicate (‘things are getting better’). And they offer a potential political tool to push issues up the policy agenda. For example, both the social mobility index and the World Bank’s Human Capital index have helped draw attention to their respective concerns.

But composites come with big problems – particularly for something as complex as people’s health.

**Conceptual problems**

The first set of problems is conceptual. Health is multi-faceted, shaped by the interactions of social, economic, environmental and other factors. The green paper suggests using the health index alongside GDP, but there are significant differences between the two measures. GDP captures the output created across all areas, sectors and actors (private, public and individuals) in the economy,
with each of those elements captured as a cash measure. But converting the various factors and conditions that affect health into a single measure is far harder.

The concept of health stock could be measured either in terms of people’s current subjective physical and mental state (for example, using self-rated health or subjective wellbeing measures) or in terms of medical conditions and events (such as mortality or diagnosis of disease). But equally important are the likely future trajectories of people’s health, measured through health risk factors, such as whether people smoke, have poor quality housing, or have high levels of work-related stress.

Understanding these multiple dimensions of health – both current and future – would need many indicators, each providing different and valuable information with potential relevance for policy. A summary health index combining some set of these indicators may provide superficial clarity, but would mask the more complex reality that sits underneath. It could also obscure good or poor outcomes, or improving or declining outcomes, on indicators within the summary score.

**Technical problems**

The second set of problems is technical. The choice of indicators that make up the composite will partly be driven by what indicators are available – **availability bias** – and may not accurately reflect the concept being measured. Even if a single set of indicators for health is agreed, how will the constituent parts be combined and weighted to construct a single score or measure of health?

**Previous experience** shows that this is no simple task – even for much simpler concepts than health. For example, the choice of weights for different indicators (in other words, the relative importance given to indicators when combined to form a single index) will ultimately be down to value judgements. These judgements can’t be dodged: simply giving each item equal weighting (the same as giving them ‘no’ weighting) implies that each measure is equally important for our health.

To confuse things further, if several of the indicators are highly positively correlated with one another, then **equal weighting could produce skewed results**. And all of these assumptions would likely need to be reviewed regularly to maintain relevance. But this isn’t simple either, as any changes to indicators and weightings would make the summary score less comparable over time.

**Behavioural problems**

A third set of problems is behavioural – in other words, how decision makers respond to the index. Policy priorities may be distorted by the choice of indicators included in the index, or the way they are weighted, at the expense of those that are not. And aggregation of indicators may disguise poor performance on some measures, potentially reducing incentives to address them.

A major risk of a composite health index is its potential to mask inequalities. While it could be designed in a way to track health inequalities (for example, it could be presented for different levels of
deprivation) there would be a danger that improvements in inequalities in one indicator (say, smoking prevalence) could mask deteriorations in another area (such as mortality).

A single national figure could also mask trends in health inequalities between regions. This could be addressed by providing data at appropriate sub-national levels. However, getting the right footprint for regional calculation of the index would be a complex task, guided by administrative boundaries and the availability of data at local level.

**Bhutan’s Gross National Happiness Index**

One country that has adopted a composite score as a top-level national indicator for evaluating policy is Bhutan, with its *Gross National Happiness Index*. An important feature of Bhutan’s index that it can be decomposed by demographic characteristics and by geography, as well as by its nine domains: psychological wellbeing, health, education, time use, cultural diversity and resilience, good governance, community vitality, ecological diversity and resilience, and living standards.

Ultimately, the design of any measurement framework must be driven by its purpose. While measurement is an essential tool for guiding policy, it risks unintended consequences. If the aim of the health index is to help rebalance government priorities and investment towards policies that promote health, alternatives to a composite index might be more effective in achieving it. Government departments might benefit more from tracking performance against a range of health indicators to which their policy decisions can best contribute, without combining these indicators to produce a single – potentially problematic – index.

For example, the Department for Transport might be held accountable for key health measures related to air pollution and active travel, while the impact of other departments could be judged against measures related to the food system, such as the sugar and salt content of food. Several departments may be required to make a contribution to improvements in the same indicators – and, when taken together, the indicators would need to form a coherent framework for thinking about health and the multiple factors that shape it. A similar approach has been attempted in the *New Zealand Living Standards Framework (LSF) Dashboard*.

Given the major issues with composites, this kind of approach – based on a framework of health indicators, rather than a composite measure that seeks to combine them into a summary health index – may be a more coherent way of using measurement to embed health considerations across government.
3. What measures of health should we use?

A comprehensive measurement framework for health would need to draw on a range of data and sources. It would need to consider how it uses measures of ill health alongside measures of good health and measures of risk alongside measures of protective factors.

Whereas some areas of economic and social policy have headline measures (such as GDP, the employment rate or child poverty), that is not the case with health. This is partly a reflection of the complexity of the issue.

Current measures of health

Currently, the most widely used summary measure of health is life expectancy. This provides a useful overarching measure of progress because it is based on death rates. However, there are significant lag times between changes in the population and changes in life expectancy. For this reason, it doesn’t capture the current health of the bulk of the population, nor the experiences that influence their health. Healthy life expectancy is an alternative measure but has similar drawbacks to life expectancy (which is, in any case, used in the calculation).

While self-rated health is captured in some surveys, it is rarely used as a standalone indicator and can be hard to interpret. Also, depending on methods and sample sizes, survey-derived metrics may fail to hold up robustly at a local level – something that is vital to understand trends and evaluate policy, not just to track broad population health.

The NHS has access to a great deal of administrative data, which may provide a more objective assessment of people’s health (or, rather, illness) than self-reported surveys, and can be robust at a local level. However, the NHS can only capture the point at which a person’s health needs becomes sufficiently acute that they interact with the health care system. So, this would not, in itself, capture the overall health stock of the nation.

Alternative options

Alternative options that are more appropriate to a measure attempting to sum up health stock might include indicators such as obesity, drug and alcohol abuse, and sexual health. These form a key part of the existing Public Health England suite of indicators (the Public Health Outcomes Framework). The quality of this data at a local level is variable but it would help target action on specific health problems as well as giving an indication of future health outcomes.

All the measures described above provide some indication of people’s current and likely future health, but these health outcomes are themselves a consequence of the social, economic, commercial and environmental conditions in which people live: the wider determinants of health.
So, to be effective in highlighting decisions that could improve or diminish people’s health, some of these wider determinants would need to be taken into account. For example, New Zealand’s Living Standard’s Framework includes measures across housing, social connection, income and consumption, alongside measures of mental health, physical health, and subjective wellbeing.

Identifying the components of a health measurement framework and exploring the most appropriate way to combine them are important stages in moving towards a greater recognition of the importance of health to the country. But it is equally important to ensure that the measure is effectively used to make health-improving policy choices, and that it becomes an accepted part of decision-making processes for the long term.
4. How could government get the most out of a national health measure?

The success of any framework that assesses the nation’s health will depend as much on how it is used as on its technical validity. A measure that is ignored by policymakers or subject to token review will not help change priorities in the way that’s needed.

Experience suggests that the effectiveness of key metrics in government depends on how much political support they receive. For example, the movement to create, publish and make greater use of measures of wellbeing in the policymaking process was originally championed by David Cameron as Prime Minister. The Office for National Statistics now regularly publishes a dashboard of measures of wellbeing, and in recent years wellbeing has greater recognition within the Treasury’s green book (the guide to assessing policy choices).

However, with prime ministers and their priorities changing over time, wellbeing does not yet appear to have become a key deciding factor in government decision-making processes in the way that changes to household income, or impacts on employment are taken into account.

Supportive structures

Any index is far more likely to be effective, and to survive changing political priorities, if it is accompanied by other supportive structures, such as an independent body that monitors progress by government. The independent commissioner model is an approach that has been employed in England (through the Children’s Commissioner and Social Mobility Commission) and in Wales (through the Future Generations Commissioner).

Given the importance of long-term investments to support a healthy population, any index would have limited effectiveness without appropriate incentives. Legislation, such as the Welsh Well-being of Futures Generations Act, is one way to embed long-term thinking in government. It places a legal duty on public bodies to work together in the interests of promoting long-term sustainable development.

However, any legal duty to consider wider issues in policymaking can become a tick-box exercise. For example, health impact assessments are required for key government decisions but have not had their intended impact.

So, if a legislative duty to consider health metrics across government is implemented, it will be important to consider how to enforce the spirit, as well as the letter, of that duty. In Wales, the implementation of the Well-being of Future Generations act is backed by additional structures. At the national level, the Future Generations Commissioner has a remit to provide high-profile
independent scrutiny of the implementation of the Act. Locally, multi-agency public service boards were set up to deliver the wellbeing goals of the Act.

Cross-party consensus

Even formal supportive structures in themselves are no guarantee of long-term implementation unless cross-party consensus is forged on an issue. For example, the Child Poverty Act 2010 created a legal commitment to end child poverty by 2020, but new legislation was later taken to abolish the legal duty entirely. By contrast, the introduction of auto-enrolment for pensions, which began under a Labour government in the 2000s, was developed by the coalition government at the start of this decade and continued to be implemented under Conservative governments since 2015. A clear and well-evidenced case for reform has helped maintain political buy-in to the policy aim of widespread private provision. Forging such a consensus for health improvement would be an important step if a health measurement framework is to be used effectively and would help leverage long-term investment to improve health.

Putting health at the heart of government

Many key decisions about health are made at local level. So, in order to ensure greatest value, a health measurement framework would also need to be integrated into local decision making processes. Indeed, the devolution of powers to combined authorities (for example, Greater Manchester and West Midlands) has made it increasingly important for long-term considerations to be taken into account at sub-national levels.

Internationally, there will be opportunities to learn from New Zealand, where the government published its first Wellbeing Budget in 2019. This budget required ministers in all government departments to show how their funding bids would contribute to wellbeing priorities. Allocations were based on wellbeing analysis, taking into account economic, social, environmental and cultural outcomes for current and future generations.

It is too early to tell what impact this will have, and whether it will be adopted for the long term. However, the intention was to move beyond GDP as a primary measure of policy success and to put wellbeing considerations at the heart of government in a systemic way.

If done well, an index or health dashboard could help decision makers in local authorities and combined or regional authorities to make better long-term decisions about investing in the conditions that create good health. These might include, for example, guiding complex decisions about investment in short-term health and social care services versus services such as Children’s Centres, which have a long-term impact. However, to have an impact, any new measure would need to have the right supporting structures around it.
Conclusion

With life expectancy stalling and inequalities in health growing, there is an urgent need for decision makers across government to treat health as one of the nation’s most important assets. A national measurement framework for health, if well constructed and implemented, could play a part in this.

This is likely to need a suite of health indicators rather than just a single-figure index, although a headline measure of health could be used in addition to sit alongside other top-level indicators such as GDP and employment. The metrics included would need to be broad enough to encompass the wider determinants of health and subjective measures of wellbeing, as well as more conventional measures such as morbidity and mortality.

However, the challenges are not solely technical. Any new measure would need to be taken seriously by government and garner strong cross-party and public support. Government must also find ways to quickly embed any new measures within its processes. This might mean:

- mandating the use of the measures in key decision-making processes such as departmental spending allocations
- developing a legislative framework to require decision makers to take into account the long-term health consequences of their actions
- setting up an independent office to hold government to account.

Without the right supporting structures around it and a consensus for its use, any new national measure of health – however well constructed – risks simply measuring rather than influencing, and becoming sidelined when the public or political mood shifts. But a credible, widely accepted national means of measuring the nation’s health that genuinely drives decision making could make a real difference to the future of health in this country.
About the authors

- Tim Elwell-Sutton (@tim_esPH) is Assistant Director of Strategic Partnerships at the Health Foundation
- David Finch (@davidfinchrf) is a Senior Fellow at the Health Foundation
- Hugh Alderwick (@hughaldervick) is Assistant Director of Strategy and Policy at the Health Foundation

Notes

- This long read was published originally at 15.26 on 3 October 2019 at the following address: https://www.health.org.uk/news-and-comment/blogs/a-health-index-for-england-opportunities-and-challenges