



Whose Health Is It, Anyway?



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*For Lisa and for Willem*



# Foreword

The health of nations has never been a more pressing concern for governments and societies around the world as it is today. Even before the pandemic began, our ageing and growing populations, living with more co-morbidities, presented significant challenges to health systems and economies globally. The costs associated with treating and managing the heightened burden of ill-health have consumed a greater share of government budgets, while the links between poor health and productivity have become an issue of increasing concern. The COVID-19 pandemic has brought all of these factors, and the inequalities across health drivers and outcomes, to the fore in the most abrupt way. At this moment of crisis, there is a necessity to be candid, and to look at these challenges differently to mitigate the worst effects of the pandemic, and to rebuild once the worst has passed. This book is therefore both timely and relevant to the single most important issue of today and tomorrow-our collective health.

Dame Sally has a life-long track record of innovation and leadership on major issues in healthcare. She pioneered the establishment of the National Institute for Health Research (NIHR), which transformed the NHS's approach to clinical research with over £1 billion of funding to foster closer collaboration between academia and health services. As England's first female Chief Medical Officer (CMO), Dame Sally has led the advocacy and awareness of Anti-Microbial Resistance (AMR). Resulting in this issue being placed on the UK National Risk Register, work she continues to contribute to as the United Kingdom Special Envoy on AMR.

In her 2018 CMO's annual report, *Health 2040 - Better Health Within Reach*, Dame Sally and Jonny examined what health could look like in 2040 through an aspirational lens grounded in evidence, and in turn, what adaptations to our healthcare systems might be needed to realise this. The recommendation for a composite 'Health Index' was the first of its kind in attempting to reposition how governments view health – namely as an asset to our nation. This book, born out of the ideas and vision in that report, goes much further in seeking to address the major issues we face together today.

Throughout all nine chapters of this book a unique analysis of the challenges facing the public's health today is presented, furnished with



examples, illustrations and innovative proposals for moving forward and transforming our health. Fresh insights into why our health matters to each of us both individually and collectively as society, are put forward - although we are living longer, more of these years are spent in poor health and this will continue to impact more people in years to come. In characteristic style, they harness a vision for positive change by going much further than just diagnosing the problem; they dissect the drivers (making the point that our health is not inevitable, these are not 'determinants') of the wider health environment through novel approaches. This encompasses well described social drivers of health, to more novel commercial drivers of health, capturing both how they drive the world and the environment that we live in. They also draw on the positive commercial drivers of old as demonstrated throughout the COVID-19 pandemic. The third section of the book focuses on the healthcare system. Their vision of transforming healthcare systems from 'importers of illness to exporters of health' is supported by the compelling case of the potential reward in achieving this goal, and the imperative to do so, alongside pragmatic, yet innovative, approaches that embrace emerging technologies and data analytics.

Having made the case that health is 'our most untapped opportunity for prosperity and fairness', as individuals, employers and nations, Dame Sally and Jonny close by posing the question 'Whose health is it, anyway?' Their compelling conclusion that we all must 'value health' differently is both prescient and powerful. The framework they propose to achieve this across the health ecosystem, including the wider health environment and the healthcare system - is thought provoking and forward looking in equal measure, providing much food for thought for policy makers around the world.

Professor the Lord Darzi of Denham OM KBE PC FRS  
Co-Director, Institute of Global Health Innovation,  
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# Acknowledgements

The idea to write this book originated from Dame Sally's Annual Report of the Chief Medical Officer 2018, *Health 2040—Better Health Within Reach*, for which Jonny was Editor-in-Chief. The report aimed to give an ambitious vision of what the future of health could be, grounded in evidence. The report, published in December 2018, included 15 chapters, 14 of them being authored by external contributors across academia, policy, and industry from around the world. Along with several workshops and dozens of interviews, these chapters provided the framing for our core thesis of this book—that far from being a cost, or drain on society, health is our greatest untapped opportunity for prosperity and happiness in the 21st century. We thank all of the authors of chapters and case studies as well as our colleagues in the CMO's office for their work and support in the development of that report.

Developing and writing this book has allowed us to think beyond our immediate next steps for health, and our current crises and challenges to imagine what could be possible if society valued the opportunities that health brings. As we were writing, COVID-19 spread across the world and showed us the fragility of our health and health systems and how important both are to economies and wider society. This free-thinking has been thought provoking and we have both greatly enjoyed our discussions and debate together and with others about what health means to societies and what repositioning this could mean for the future. Jonny thanks Sally for her support and guidance throughout this project and beyond.

We thank several colleagues for their invaluable and detailed comments on draft sections of this book—particularly Martin Stewart-Weeks, Jonathan Grant, John Hood, Catherine Falconer, Roy Lilley, and Connor Rochford. The text is richer and the narrative more clear thanks to your input. We thank Kate Kirk for her work in editing and bringing this book to a conclusion over the final few weeks and Tony Holt for designing the book cover. Our immense thanks to Ara Darzi for kindly contributing the Foreword to our book and his thoughtful words.

Above all, we are grateful to our families for their tireless support and encouragement throughout this project and the work around it.



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## About the authors

Professor **Dame Sally C. Davies**, GCB, DBE, FRS, FMed Sci is a haematologist by training, specializing in sickle cell disease. She joined NHS Research and Development in 1998, as Regional Director for North-West Thames Region. She was appointed Director General for Research and Development in the Department of Health in 2004, serving until 2016. In that role she established the National Institute for Health Research (NIHR) in 2006 and led its development as Inaugural Director until 2016. In 2010 she was asked to be interim Chief Medical Officer (CMO), and became the CMO for England and Senior Medical Adviser to the UK Government in 2011. She was awarded a DBE in 2009 and GCB in the 2020 New Year Honours. She was elected a Fellow of the Royal Society in 2014 and a Member of the National Academy of Medicine, USA, in 2015. She has won many prizes for her work and globally is best known for her championing of the need to take action to prevent and mitigate Antimicrobial Resistance (AMR) as well as her central role in delivering the sequencing of one hundred thousand full genomes of patients in the NHS.

Dr **Jonathan Pearson-Stuttard**, FRSPH, is a public health physician and epidemiologist at Imperial College London. Since completing his medical training at the University of Oxford, he has been awarded multiple competitive clinical-academic research positions from NIHR and the Wellcome Trust. His research has two main streams spanning non-communicable disease epidemiology, using big data and simulation modelling of health, economic, and inequality outcomes to inform public health policy, and investigating the increasing multimorbidity and diversification of patients with chronic diseases such as diabetes. He was Editor-in-Chief of the Annual Report of the Chief Medical Officer 2018, *Health 2040–Better Health Within Reach*, which made several key recommendations, including the development of a Composite Health Index, which is currently being developed by the Office for National Statistics. Jonathan is also vice-Chair of the Royal Society for Public Health and Head of Health Analytics at Lane, Clark & Peacock and regularly comments in the media on a range of research and policy issues.



# 1

## Introduction

As the final chapters of this book were being drafted, the COVID-19 pandemic had already claimed the lives of hundreds of thousands of people around the world. At the time of writing, the first wave has receded in some countries and lockdowns begin to ease, livelihoods of whole nations have been left in the balance and economic and societal progress has been halted and, in some cases, reversed.

The COVID-19 pandemic has meant that health, in the negative sense, has dominated our news cycles since early in 2020. Bulletins have announced the lives lost daily to the virus, dramatic falls in equity markets, plummeting GDP forecasts, rising unemployment, and entire industries being brought to a standstill. Hospitality, entertainment, sports, the arts, construction, and manufacturing all halted at the beginning of the pandemic, and months later, some are yet to re-start.

The dependency of the global economy upon the health of its citizens has been laid bare by COVID-19. The prosperity and happiness of communities and nations has been devastated by illness, and the fragility of society has been clearly revealed. Worse still, the glaring inequalities in lived experiences have translated into shocking differences in survival rates among different communities.

It is time to re-think how we value and address our health in a complex and interdependent world.

### **A fragile economic and political model**

To protect the lives of citizens from COVID-19 today, leaders have been forced to gamble with tomorrow.

COVID-19 has rapidly and devastatingly demonstrated just how intertwined our health is with the world—and the economies—in which we live. GDP and short-term economic prosperity, the coveted prize for governments over past decades, have been revealed as dependent on the



health of nations today and tomorrow, and politicians see their best-made plans for the economy and domestic agenda in tatters.

In addition, the disruption of industries and jobs coupled with urbanization had already affected the lives of many unequally. Where local economies had been stifled or broken up, differences in abilities and opportunities for finding alternative stable employment and income resulted in left-behind communities, particularly in rural areas and locations that were formerly manufacturing hubs.

On top of this, we are using fossil fuels, plastics, and antibiotics to the long-term detriment of our environment and planet, a poor legacy for our children and grandchildren. The Baby Boomer generation has unintentionally broken the inter-generational contract and the young of today are the first generation who cannot expect to be as, or more, comfortable than their predecessors. For many, therefore, it seems difficult to be optimistic about the future.

In the maelstrom of COVID-19, ministers have found themselves in the unenviable position of having to choose one unpalatable, and previously unthinkable, option over another, each with inherent trade-offs, the consequences of which will only become clear in the future, perhaps long after the decisions have been made.

Health systems have pivoted to focus almost entirely on coping with the pandemic, leaving many people needing tests or treatments for other conditions, such as cancer and cardiovascular disease, in limbo, and non-urgent procedures being postponed—we will only know the true and full impact of this in the coming months and years. In parallel, government borrowing has soared and expensive rescue packages have been put in place to mitigate the worst effects of the pandemic.

Alongside the economic and health challenges of COVID-19, trust in our leaders has eroded to an all-time low. We have had several examples of the so-called elite behaving dreadfully in recent years, abusing their position and rightly losing public trust. This is not new, and examples where unethical behaviour by a few individuals have had a hugely damaging effect have included the 2008 global financial crisis and the 2009 Parliamentary expenses scandal in the UK. The latter highlighted outrageous abuses of an archaic system where public money was used for private gain by Members of Parliament, including to buy an ornamental duck house and to pay for repairs to a privately owned moat.

COVID-19 has thrown up yet more examples of this type of behaviour. Senior public officials, doctors, and academics have flouted the lockdown

rules that they themselves developed and insisted on. This has inevitably led the public to conclude that our leaders believe the rules do not apply to them; they are seemingly entitled to live by different rules and do not have to practice what they preach.

Not surprisingly, given these flagrant abuses of power, politicians are the least trusted profession in the UK. Even before the pandemic, an Ipsos MORI poll in November 2019 found that UK politicians in general were trusted to tell the truth by a mere 14% of the population (below advertising executives as the next worst at 17%), and government ministers were trusted by 17%, down 5% since 2018 [1].

If we cannot trust our leaders to guide us in the best of times, how can we trust them to lead us in the worst of times? The erosion of societal trust can be dangerous. A lack of trust coupled with a perception of unfairness leads to discontent and anger, which in turn can translate into populism, new nationalism, and angry groupings which often cross borders. Conversely, the same ‘new power’ that these groups are using to foster discontent, largely social media, can also be used for better outcomes. Collective citizen influence is on the rise as a force for good, and gives us cause for hope.

The Ipsos MORI poll that showed how little we trust our politicians also revealed that nurses are the profession most trusted to tell the truth, at 95%. Yet too often their employer, the NHS (the largest employer in the UK), becomes a political football, from Brexit and £350 million on the side of a bus to the recent general election where the NHS was the most important issue to voters, even more so than Brexit. Those working in the health sector urged politicians to stop playing fast and loose with statistics about health-care and spend. In the 2019 UK general election campaign, for example, the chief executive of the NHS Confederation, which represents hospitals across the country, pleaded on the very first day of the campaign for politicians not to ‘weaponize’ the NHS.

*... disingenuous claims about extra funding, or promises that create unrealistic expectations, may be tempting in the heat of the election battle, but they do the health service no favours.*

Chris Hopson, NHS Confederation CEO

The disconnect between the public’s trust in the NHS and the politicians’ use of it as a short-term, vote-winning tool has shown to be yet another challenge for those on the front line coping with COVID-19.

## Experiences of health were already different before COVID-19 came along

Before COVID-19, the world was generally in a better state than most people assumed. Nearly 1.2 billion fewer people lived in extreme poverty in 2015 compared with 1990 [2], and life expectancy was rising all over the world—in the UK, for example, life expectancy has increased from 69 to 81 over the past 60 years. By most measures these two parameters, poverty and life expectancy, have continued to improve.

But the figures mask two key issues, namely increasing relative inequality and long-term health conditions that impact on years lived in good health. Despite decreases in absolute numbers living in poverty, inequalities are rising and the difference between the richest and the poorest is increasing in many societies. Being in work in the UK is not a guarantee of being out of poverty. In addition, although people are living for many more years, an increasing number of these years are lived in poor health with one or more long-term conditions, or multimorbidities, that profoundly impact quality of life, even if the quantity of life is there.

The inequalities across and within societies have been brought to the fore by COVID-19. Worsening inequalities reduce communities to states of deprivation, where life expectancy, far from increasing, actually starts to decrease, where rates of smoking fail to match the general downwards trend, and where children are born into a precarious educational and social environment which impacts their chances and opportunities for the entirety of their lives.

Increases in life expectancy have led to the phenomenon of ageing populations, where the ratio of the population of working age to that of those in retirement begins to reverse, and the traditional model of today's taxes paying for today's pensions and social services starts to break down.

On top of this, longer lives are not necessarily, nor indeed frequently, healthier lives. The chances of contracting or developing a condition such as diabetes, cancer, or cardiovascular disease are higher the older you are, and are coupled with risk factors such as smoking or obesity. Although we have become better able to treat these conditions to keep people alive, we may not be able to cure or mitigate the condition to allow the sufferer to live well. The consequences are debilitating and the treatments add mounting costs to an already strapped set of services. To make matters worse, one of the key risk factors for a number of conditions, obesity, is on the rise. In the UK in 2017,

nearly one third of adults were obese, and another third were overweight and at risk of becoming obese. Furthermore, women in the most deprived areas had overweight and obesity rates 11% higher than those in the least deprived areas [3]. According to the Organisation for Economic Co-operation and Development (OECD), the UK was the most obese country in Western Europe in 2015 [4].

Inequalities compound the complexities of the relationship between health and economic productivity, between quality of life and length of life, and between health-harming and health-promoting environments. Looking ahead, we cannot afford to try and address each of these issues separately, health is part of a much bigger picture.

## **We cannot afford to keep muddling through**

We now find ourselves in a situation where there are no quick fixes. We face extraordinarily interconnected health, economic, and political issues, and the sticking plaster approach of shoring up a creaking system is not sustainable. Populations are ageing, multimorbidities are rising, care costs are increasing, and there is a lack of resilience in the system.

COVID-19 is the extreme end of illness, or absence of health, affecting our lives. But illness was regularly in the media before COVID-19, too. The cost of ill health and conditions such as obesity hit our news headlines weekly, or so it seemed, with worrying forecasts warning us of how much more it will cost to maintain a health service as our population ages, or headline-grabbing pledges by political parties to invest billions into systems that are struggling to cope with rising demand.

It was easy for such stories to become normalized and lead to the belief that we will always find a way to muddle through and be OK in the end. When we look a little closer, however, we find that the extra investment that we saw in the headlines is not to transform a service and hence our health as we might have hoped, but better likened to a extra spot of paint, covering over the cracks for today, in the hope of services continuing, or at least surviving, for now.

Politicians of all parties have become used to exploiting the illusion of quick fixes that take the complex challenges of health systems out of the headlines, whilst no doubt being aware of the magnitude of the task required to genuinely transform health services. This is why some have promoted the idea of taking health outside of politics altogether. The concept is not without