The main goal of patients consenting to participation in phase 1 studies is to find effective treatments for their cancer. ¹⁰ The main objective of the oncologists who refer them to the phase 1 study team is to offer them access to an innovative therapeutic opportunity. Chihara and colleagues should be commended for having provided to the scientific community a clear demonstration that both groups are right in their choice.

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A historic opportunity for universal health coverage in India



The milestone of India's 75th anniversary of independence on Aug 15, 2022, offers an opportunity to reassert the country's commitment to realising universal health coverage (UHC). The first such effort predates independence, with the 1946 Bhore Committee report.1 India's colonial ruler, the UK Government, had simultaneously commissioned the Beveridge Report (1942), which led to the birth of the UK National Health Service in 1948. The Bhore Committee recommended a similar national health-care system for India with guiding principles that have stood the test of time (panel). However, the government of the newly independent India shelved the recommendations, focusing its scarce resources on addressing the consequences of 200 years of pillage by British colonisers and on the traumatic partition of the country. Successive governments sought to address some of the recommendations of the Bhore Committee in a piecemeal way. In 2019, India's health system ranked in the bottom third decile of 204 countries, with an effective UHC coverage index score of 47 out of 100; by contrast, the UK was in the highest decile with a score of 88.2

Despite weak UHC in India, the country has improved many health indicators since independence. Notable examples include the doubling of life expectancy at birth from 32 years in 1951 to almost 70 years in 2020,^{3,4} driven by a reduction in the infant mortality rate from 145 per

1000 livebirths in 1951 to 28 per 1000 livebirths in 2020,⁴⁵ and increased coverage of childhood immunisation. The prevalence of many infectious diseases, including tuberculosis, malaria, and diarrhoeal diseases, has substantially reduced. India's health-care delivery system and its medical and nursing education, biotechnology, and pharmaceutical sectors have flourished. India produces an estimated 90 000 physicians every year, more than any other country.⁶⁷ One of India's most remarkable human resource achievements is its volunteer community health

Panel: Guiding principles of the Bhore Committee report¹

- No individual should be denied adequate medical care because of inability to pay
- Health services should provide all the consultant, laboratory, and institutional facilities needed
- Health programmes must lay special emphasis on preventive work
- As much medical relief and preventive health care as possible should be provided to the vast rural population
- Health services should be located close to the people to ensure maximum benefit to the community
- Active cooperation of the people is needed in the development of the health programme
- A Ministry of Health that enjoys the confidence of the people and secures their cooperation should be responsible for the health programmes
- A doctor should be a social physician protecting the people

For the Lancet Citizens'
Commission website see www.
citizenshealth.in

workforce, led by the redoubtable ASHA (Accredited Social Health Activist workers), over 1 million of whom have had crucial roles in the reduction of maternal and infant mortality.⁸ ASHA workers were recognised in the 2022 WHO Director-General's Global Health Leaders Award for connecting the community to primary health-care services and have had a significant role in expanding COVID-19 vaccination coverage.⁹ Although controversy persists about the true impacts of the COVID-19 pandemic in India, with the government rejecting independent estimates of deaths related to COVID-19,^{10,11} as of July 23, 2022, 66% of India's population has been fully vaccinated with COVID-19 vaccines produced in the country.¹²

Yet compared with other regional and middle-income countries, India's health outcomes trajectory has lagged, as multiple health indicators show. With the exception of Pakistan, India has the lowest life expectancy of all south Asian countries. Bangladesh, whose health indicators were worse than India's at its independence in 1971, has now overtaken India on many indicators, such as life expectancy and infant mortality. Further, child and maternal malnutrition remains a key issue, with India ranking at 101 in the Global Hunger Index in 2021, below Bangladesh, Pakistan, and Nepal. Additionally, there are wide disparities in health outcomes between different socioeconomic groups and regions within India, notably related to place of residence, income, gender, and caste.

Arguably, the biggest flaws in India's health-care system are its fragmented architecture and lack of accountability that contribute to poor quality of care in both public and private sectors. However, the notable successes of some southern states show that the quantity and quality of public services is a tractable problem.²⁰ Private health care is often accompanied by rampant profiteering. Despite repeated promises by the Indian Government to increase public spending on health, less than 1% of gross domestic product is spent by the state on health, far below the recommended 5% for UHC.^{21,22} The out-of-pocket expenditure for health care in India continues to exceed 50% of total health expenditures,²¹ with catastrophic health expenditures affecting two-thirds of the poorest households.^{23,24}

There has been a growing political will to reform India's flawed health system with new policies such as the National Health Policy (2017), the National Health Protection Mission,²⁵ and the proposed public health

management cadre.²⁶ Various health schemes have been introduced over the past decade, such as the National Digital Health Mission and the Aarogya Sanjeevani public insurance by the Insurance Regulatory and Development Authority of India, West Bengal's Swasthya Sathi group health insurance scheme, Odisha's Biju Swasthya Kalyan Yojna health coverage, and New Delhi's *mohalla* clinics. Perhaps, most importantly, there is a growing political appetite in some quarters for a rights-based approach to health, exemplified by the Mental Health Care Act and Right to Health laws in several states.²⁷

Building on such efforts and aiming to advance UHC in India, the Lancet Citizens' Commission is examining the barriers and opportunities to realising UHC.28 The Commission is bringing together stakeholders from across the existing schisms of Indian health care and ensuring that citizens' voices are heard. Since its launch in 2021, the Commission has organised its efforts around five workstreams: governance, technology, financing, human resources, and citizens' engagement. We now comprise 24 Commissioners and a network of over 100 fellows and 20 institutions contributing to a range of research initiatives, including evidence syntheses, theory of change workshops, a representative population survey, and a case study of districts selected on their performance on a newly developed UHC index adapted from the WHO methodology.29

Beyond the research, the Commission has evolved into a cross-sectoral platform for UHC-related discussions. Key to this engagement is the Commission's website. Ultimately, the Commission will need to make evidencebased and citizen-informed recommendations that address key structural challenges to realising UHC in India, including the growing commercialisation of and mistrust in the health system; the ill-defined roles of AYUSH (practitioners of systems of medicine other than allopathy) and the private sector; the inefficiency of public spending and the indemnity insurance models; the inadequate accountability and poor quality of care; the disempowerment of nurses and denial of worker rights to ASHAs; the role of technology; and the lack of citizens' engagement. Once the work of the Commission is complete, we intend to leverage our wide stakeholder engagement to support implementation of our recommendations by state governments, civil society, and professional organisations with an accountability mechanism to steer India towards UHC.

VP is a co-founder of Sangath, India. GK serves on the Boards of the Coalition for Epidemic Preparedness Innovations and MSD Wellcome Trust of Hilleman Laboratories Pvt Ltd. KM-S is the Executive Chairperson, Biocon & Biocon Biologic. TK is a co-founder of Jana Care, a chronic disease diagnostics company, but is no longer involved with the company and is a founding adviser in other life-sciences companies through Jana Sciences LtC that include General Prognostics Inc, Faunatech Solutions Pvt Limited, and StataDX Inc with no direct operating or stewardship roles in any of these companies. VP, KM-S, GK, and TK are the Co-Chairs and AM is a Commissioner of the Lancet Citizens' Commission. AM and SB declare no competing interests.

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Use the remaining carbon budget wisely for health equity and climate justice



According to the Intergovernmental Panel on Climate Change (IPCC), the estimated remaining carbon budget from 2020 onwards to limit the global average temperature increase to 1.5°C above pre-industrial levels with a probability of 67% is about 400 Gt carbon dioxide or 1150 Gt carbon dioxide for limiting this

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