Universal health coverage is the vital link when health care is a public health good

The COVID-19 pandemic has exposed vulnerabilities in both national health systems as well as the global health governance system. As described by Arush Lal and colleagues (November, 2022),[1] universal health coverage (UHC) is inextricably linked and paramount to building health system resilience.

Basic definitions of economic goods help clarify this link. Diagnostic testing is foundational to understanding and responding to epidemics, as demonstrated by the COVID-19 pandemic. Identifying the main beneficiary of testing—that is, whether it is a public or private good—is of critical importance because of its implications for optimising supply and demand.

Diagnostic testing is mainly performed as health care, provided to an individual to guide disease-specific treatment for that individual. That is, diagnostic testing is in this sense primarily a private good because it provides benefit first and foremost to the individual who consumes the test. Demand and consumption are therefore rational. Further, providers of care have an incentive to provide diagnostic testing for health care when their services are adequately covered and paid for (and, too often, vice versa). This is the basic premise of health-care financing: people have a health need that generates demand, and financing mechanisms raise and pool revenue in order to purchase services that match demand with supply. UHC deals with the extent of health financing, as it aspires to provide coverage for essential health services to the full population with financial risk protection.

However, the COVID-19 pandemic exposed a vulnerability of the health-care model of diagnostic testing. Particularly early in the pandemic before COVID-19-specific treatment options existed, care was entirely supportive.[2] A positive test largely did not change case management, but it was nonetheless essential—not for the individual, but for public health. Although diagnostic testing had little impact on case management, it unquestionably provided the backbone of disease surveillance to break chains of transmission, guiding measures such as precautions and isolation, quarantine, contact tracing, and other public policy. Testing, in other words, was more public than private good; some private benefit was incurred, but society was an outsize beneficiary of testing an individual.

Within this publicness is the major challenge for policy makers: markets fail to produce public goods when individuals must absorb costs but share benefits. In the case of COVID-19, the benefit to an individual was often insufficient to absorb the costs (in time, money, comfort, or effort) of being tested. Compounding the challenge was the lack in many countries of a commensurate response to such a low incentive to be tested. Health-care conceptions do not deal adequately with the public nature of infectious diseases, since they still treat them as primarily privately held. COVID-19 testing was orphaned in a no-man's land between health care and public health, lacking enough demand to overcome individual costs while lacking enough financing to overcome low demand. This no-man's land—an unacceptable failure to link health care and public health—was a market failure that greatly undermined health security.

Market failures are prime targets for public intervention. The public benefit of testing for real-time disease surveillance is true irrespective of the universality of health coverage, but the inclusive nature of UHC opens the possibility for creating large risk pools of public finance that can be leveraged for their redistributive capacity—the power to cross-subsidise among low and high need, such as among healthy and sick or young and old.[3] Redistributive capacity can also be leveraged to cross-subsidise between private and public health goods, bridging the health-care and public health divide, particularly to cover low-demand, truly public health-care services such as some communicable disease testing. Thus, redistributive capacity within a UHC scheme is the natural—indeed, vital—financing mechanism that can link the often disparate worlds of individual health care, which is so often about "private" benefit, and public health, which, as the name implies, benefits all.

I declare no competing interests.

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1 Lal A, Abdalla SM, Chattu VK, et al. Pandemic preparedness and response: exploring the role of universal health coverage within the global health security architecture. *Lancet Glob Health* 2022; **10:** e1675–83.

2 WHO. Clinical management of severe acute respiratory infection when novel coronavirus (nCoV) infection is suspected: interim guidance 12 January 2020. 2020. https://www.who.int/publications/i/item/10665-332299 (accessed Nov 25, 2022).

3 Mathauer I, Vinyals Torres L, Kutzin J, Jakab M, Hanson K. Pooling financial resources for universal health coverage: options for reform. *Bull World Health Organ* 2020; **98:** 132–39.