Measuring the gap to universal health coverage

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Universal health coverage (UHC) is a fundamental global public health objective. It is part of the Sustainable Development Goals[1] and a strategic priority of the World Bank and WHO.[2] UHC includes access to quality essential health-care services for all. In *The Lancet Public Health*, Mark Moses and colleagues[3] assess the evolution of outpatient visits and inpatient admissions by age and sex for 195 countries from 1990 to 2016. The study also estimates the main drivers of the changes in volumes of outpatient visits and inpatient admissions, as well as their unit costs. The costs required to close the gap in UHC are then calculated by multiplying these unit costs with the additional health-care services required to meet a UHC standard for utilisation.

Moses and colleagues found utilisation rates varying across countries by a factor of ten. High-income countries generally had higher utilisation rates than did low-income countries but there were many exceptions to this pattern. The range in unit cost estimates was much larger than in utilisation rates, with costs (in international dollars [I$]) per outpatient visit ranging from I$2 in several African countries to I$478 in the USA and costs per inpatient admission ranging from I$87 in the Central African Republic to I$22 543 in the USA. Selecting the Netherlands as reference for a UHC standard of utilisation, the additional global cost to meet this standard amounted to I$1177·69 billion (95% uncertainty interval 896·05–1456·56). Globally, only seven other countries reached this standard, most of which were European. However, a third of the remaining countries would incur in costs below 1% of their gross domestic product (GDP) to reach the reference UHC standard for utilisation. Conversely, another third of countries would incur in costs between 2% and 5% of GDP, and 23 countries in costs greater than 5% of GDP.

Progress to UHC standard was somewhat sobering because the substantial increase in outpatient visits and inpatient admissions from 1990 to 2016 was mainly driven by population growth and ageing and only marginally by increasing utilisation rates. Nevertheless, there was a substantial increase in utilisation rates in some countries such as China, Indonesia, and Turkey.

The study makes a substantial contribution to a better understanding of the challenges in reaching UHC. The global assessment of the current levels of outpatient visits and inpatient admissions by combining and harmonising a massive number of data sources is remarkable, as is the decomposition of changes in utilisation over time. Previous assessments have mainly focused on the provision of essential services and the availability of health-care resources[2] and on health service utilisation rates in high-income countries rather than in their low-income and middle-income counterparts.[4]

The study also makes several methodological contributions. The most challenging task is probably the need to determine the gap in health-care utilisation in relation to the country-specific disease burden, as measured by disability-adjusted life-years (DALYs). This is crucial because a higher disease burden will require more health-care services to reach UHC but improved access and quality of health care will simultaneously contribute to a reduction in disease burden. Moses and colleagues thus estimated a standardised disease burden by removing the effects of access and quality of health care.[3] This procedure illustrates the value of the Global Burden of Disease project[5] for furthering research and health policy. The unit costs of outpatient visits and inpatient admissions were calculated by using the National Health Accounts and estimated utilisation rates,[3] a procedure that is likely to be useful in further studies.

The study results also reveal some of the remaining challenges in determining a UHC standard for utilisation and the costs of reaching this standard. First, the quality of health-care services is likely to differ substantially between countries. This is illustrated by the much higher gap in purchasing power-adjusted health-care spending than in health-care utilisation rates. Comparing, for example, India and the Netherlands in 2015, we find a ratio of one to 22·4 per-capita health-care spending,[6] whereas Moses and colleagues find a ratio of one to 1·6 for outpatient visits per counterfactual DALY and of one to 2·4 for inpatient admissions per counterfactual DALY. This large difference is most likely also due to a substantial difference in the quality of services; for example, several studies have documented the often very low quality of care in India[7] or the lack of access to basic surgical procedures in hospitals in many low-income countries.[8] Second, inefficiencies

in current health-care systems should be considered when calculating the additional costs of UHC. These inefficiencies might affect the production of health-care services as well as the type of services provided. The Netherlands appear to be relatively efficient in this regard[9] and certainly more so than the USA.[10] The costs required to close the gap in UHC will thus be affected by the cost of the increased service quality required to meet the standard in the reference country, as well as by the efficiency in the production of these health-care services.

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We declare no competing interests.

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