Methods for guiding health investments: which approach informs decision-making best?

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In the global health context, two key concepts are often considered in order to guide how priorities for spending on healthcare are decided: the first is **disease burden**, which measures how much a disease affects people and is often used in studies that estimate the global burden of diseases. The second is **cost-effectiveness**, which considers how much health improvement we get for the money spent and is often used to illustrate which interventions should be targeted by policymakers.

While both approaches are valuable, each gives only part of the picture. Knowing that a disease causes a large health burden does not tell us how much we could actually improve health through treatment. On the other hand, knowing that a treatment is "cost-effective" tells us that it improves population health and is value for money, but not necessarily how much overall impact it would have across the population. Looking at them together offers a more complete picture of where healthcare spending can make the greatest difference.

Our research demonstrates how a metric called *population net health benefit* can bring together components of disease burden and cost-effectiveness into a single measure, expressed in disability-adjusted life years (DALYs) averted, which is an overall measure of health gained. The metric estimates how much total health an intervention can deliver by considering how many people need the intervention, how much it improves their health, and what we might forgo by choosing it over other options. This helps to capture the intervention's overall impact, allowing decision-makers to understand its effect on disease burden and effectively communicate its value. By applying our method to four examples of interventions, we show how it is possible to capture a richer picture of the impact of spending across the patient population.

This approach has the potential to become routinely used in health planning, whether designing health benefits packages, setting research priorities, or evaluating new technologies. It can also highlight the benefits of removing implementation barriers and supporting negotiations with donors and partners. While it should not be the only factor in setting priorities, *population net health benefit* is a valuable metric. It can help decision-makers weigh up trade-offs, make strategic decisions and advocate for smarter and larger health investments.

Read the full paper, funding sources and disclaimers in Applied Health Economics and Health Policy.

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