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Health opportunity costs: tomorrow won't be the same as today

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Deciding whether to fund healthcare programs involves weighing up their expected costs and health benefits over time. Most healthcare gives rise to costs and/or health outcomes occurring in future years as well as in the current year. A vaccine, for example, may incur costs now and health benefits only years later. Committing to provide antiretroviral therapy for HIV/AIDS may also mean committing to costs now, but will produce benefits now as well as in the future.

Spending some of the budget for healthcare on one program means that money is not available to fund other healthcare programs. Every decision therefore has a "health opportunity cost", which represents the health that society could have gained from using the resources involved to fund the next best alternative program instead. If only the current year is considered, some vaccines might appear to have no health benefit, and, in fact, negative overall net health effects as the money required to fund them would not be available to fund other healthcare programs. Therefore, future costs, benefits and health opportunity costs need to be considered.

To account for future costs and benefits, we often use a process called discounting, which means giving less weight to them than to costs and benefits in the present, reflecting society's preference to experience healthcare now rather than delay it until the future. Guidelines for discounting in low- and middle-income countries (LMICs) are available (e.g., from the World Health Organization, the Bill and Melinda Gates Foundation), but do not make explicit recommendations for how future health





opportunity costs should be treated. As a result, health opportunity costs are treated as growing at a constant rate or not at all.

However, health opportunity costs are likely to change over time as economic growth speeds up, slows down or even reverses, and as the burden of disease and the mix of available healthcare change. The way in which health opportunity costs change will probably differ between countries.

Our research provides estimates of health opportunity costs over time for a range of LMICs. We apply the evidence to the analysis of a healthcare intervention with country-specific time streams of costs, benefits and health opportunity costs in each year in which they occur, following the framework set out in our earlier research. Our results show that the application of existing guidance for economic evaluation may tend to underestimate the value of health-related projects in LMICs.

Policy-makers who make decisions on the funding of healthcare programs need to be aware of the need to account for future health opportunity costs and how they might change over time.

Read the article in Health Policy and Planning.

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