

## Why data is the most cost-effective investment for health technology assessment in South Africa

The National Department of Health published the *Health Technology Assessment (HTA) Methods Guide*<sup>[1]</sup> in 2022 with the aim of strengthening HTA practice and informing decisions on the inclusion or exclusion of medicines from the national Essential Medicines List. The National Health Insurance (NHI) Act 20 of 2023<sup>[2]</sup> has further legislated the establishment of an HTA function to guide decisions on which health technologies should be prioritised for inclusion in the NHI benefits package. The Act provides for the initial establishment of a Ministerial Advisory Committee on HTA to develop policy, engage stakeholders and promote HTA processes, with the ultimate goal of creating an independent HTA agency.

While the formal institutionalisation of HTA in South Africa (SA) is relatively recent, the use of HTA to inform healthcare decision-making is not. HTA has long been applied, albeit in a fragmented manner, across both the public and private sectors. In the public sector, HTA principles inform the selection of essential medicines, while in the private sector, various role-players undertake forms of HTA to generate evidence for prescribed minimum benefits. What has been lacking is a co-ordinated, transparent and system-wide approach.<sup>[3]</sup>

Globally, countries that have made sustained progress toward universal health coverage rely on HTA to guide the allocation of limited healthcare resources.<sup>[4,5]</sup> HTA is a multidisciplinary, systematic process for evaluating the properties, effects and broader impacts of health technologies, including medicines, medical devices and procedures, to inform decision-making in order to promote an equitable, efficient and high-quality health system.<sup>[6]</sup>

However, HTA is only as robust as the data on which it is based. Weak or incomplete data can undermine HTA processes, leading to poorly informed decisions, inefficient resource allocation and, ultimately, suboptimal health outcomes. In the context of NHI, inadequate data risks the funding of services without a clear understanding of their value for money, with potentially serious implications for the financial sustainability of the health system.

To support effective HTA under NHI, SA must invest deliberately in both data systems and the skills required to analyse and interpret data. Several data sources already exist, and have been used to inform cost-effectiveness and budget impact analyses. These include unit cost data from government sources such as the Uniform Patient Fee Schedule, the Medicine Price Registry and the Master Health Product List. However, critical gaps remain. Data on service utilisation, patient outcomes and real-world effectiveness of health technologies are limited, and many SA economic evaluations rely heavily on effectiveness estimates and patient-reported outcomes derived from other countries. In addition, important inputs such as locally derived utility weights and an explicit

cost-effectiveness threshold have not yet been formally adopted in policy, despite emerging local research.<sup>[7,8]</sup>

For HTA to be meaningful and credible, SA must prioritise investment in routinely collected data that reflect local service delivery realities, are linkable across costs, utilisation and outcomes, and are fit for analytical purposes rather than collected solely for reporting compliance. International experience demonstrates that such investments yield substantial returns by enabling transparent priority-setting, defensible rationing decisions and long-term cost containment.

As fiscal pressures intensify and concerns about the affordability of NHI grow, HTA offers a critical tool for navigating these challenges, but only if it is underpinned by credible, high-quality data. Data should therefore be treated as foundational health-system infrastructure, alongside human resources, information technology systems, hospitals and clinics. Countries such as Thailand and the UK built effective HTA systems through sustained investment in data, institutions and technical capacity over time.<sup>[9]</sup> SA faces a similar choice. Investing in data is not a luxury; it is arguably the most cost-effective investment the country can make to ensure that NHI delivers equitable, efficient and sustainable healthcare.

**E Thsehla** 

*School of Health Systems and Public Health, Faculty of Health Sciences, University of Pretoria, South Africa*  
evelyn.thsehla@up.ac.za

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