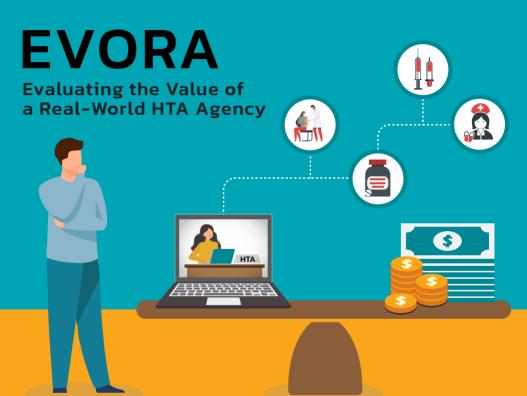
BOOKLET



As countries develop their health systems on the path to Universal Health Coverage (UHC) (#LeaveNoOneBehind), many countries are experimenting with the development of a health technology assessment (HTA) agency in order to set priorities for health benefit packages, make go/no go decisions about innovative new health interventions, and/or support pricing negotiations. In this brief, we provide new evidence about the value a HTA agency provides, and suggestions for policy makers about how that value can be measured and enhanced.

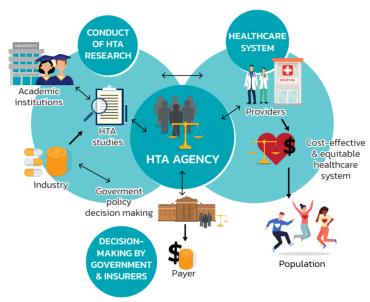
What is

Health Technology Assessment

Health Technology Assessment (HTA) is "the systematic evaluation of properties, effects and/or impacts of health technologies and interventions... The approach is used to inform policy and decision-making in health care, especially on how best to allocate limited funds to health interventions and technologies. The assessment is conducted by interdisciplinary groups using explicit analytical frameworks, drawing on clinical, epidemiological, health economic and other information and methodologies." World Health Organization¹



What is a HTA agency



HTA agencies are embedded within a HTA system. This system involves the production of HTA studies and other knowledge products, often in partnership with academic institutions. HTA agencies may also request submissions from industry. One customer for HTA studies is government and/or insurers who shape provider behaviour through payment of providers, but providers may also use HTA reports directly – particularly if these HTA reports include or form the basis of clinical guidelines or other specifications of good practice. HTA agencies typically engage closely with clinical staff who work in provider organisations, as a sound knowledge of provider behaviour is critical for the production of high quality, relevant HTA reports. The end–customer of the HTA agency, however, is the insured population, which receives higher quality, more equitable and more cost–effective care thanks to the agency's work.

The literature tells us that HTA reports generate value through a **6 Step** process – the "delivery chain"

Awareness.

The relevant stakeholder must know of the HTA report.



Policy decision.

The policy decision should cite the HTA report.

Acceptance.

The relevant stakeholder must see the HTA report as valid and a legitimate basis for action.



Practice.

There should be "clear and measurable" changes in clinical practice in line with the policy decision and thus the report.

Policy process.

The policy process should explicitly utilise the HTA report.



Outcome.

Health and economic outcomes should be realised on the basis of the changes in practice.

Gerhardus, A., Dorendorf, E., Rottingen, J.–A. and Santamera, A., 2008. What are the effects of HTA reports on the health system? Evidence from the research literature. In: M. Velasco Garrido, F. Kristensen, C. Palmhoj Nielson and R. Busse, eds., Health Technology Assessment and Health Policy-Making In Europe. Current status, challenges, and potential. World Health Organisation, pp 109–136.

There are several delivery chain studies, how can I tell how good they are?

Are you convinced by the study's

Attributability

Did change happen because of report or would it have happened anyway?

Competence

Has change been implemented in a high quality and cost-effective way for the appropriate population?

Effectiveness

Has the change delivered the benefits which were expected?

Soundness

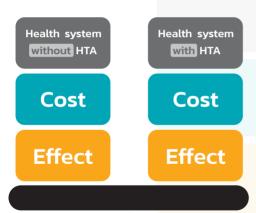
Was the change the right thing to do anyway?

And can the success of a HTA agency be reduced to the success of its reports?





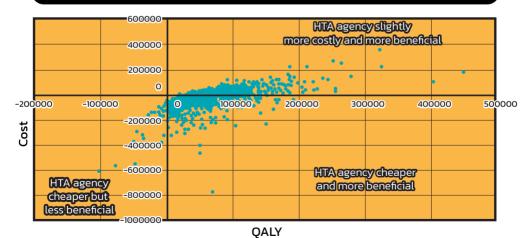
How can we tell whether HTA makes a difference?

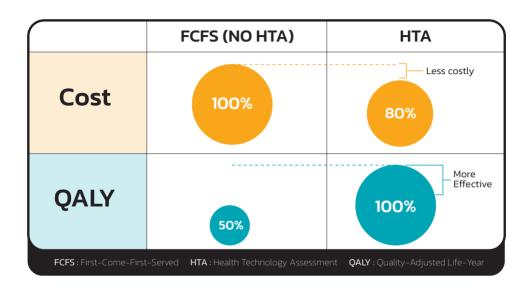


We take a simulation-based approach which allows us for the first time to directly compare health expenditures and outcomes in a scenario where a HTA agency exists, with those health expenditures and outcomes in the counterfactual scenario where no such agency exists. We compare health expenditures and outcomes for a country which uses HTA with the health expenditures and outcomes the same country would experience if it used a naive comparator prioritisation approach based on first-come-first-served (ECES)

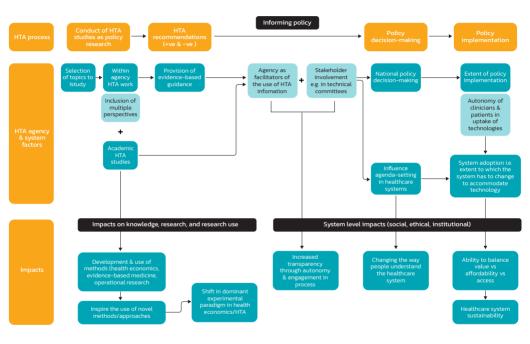
Our simulated HTA agency makes decisions on the basis of a cost per Quality-Adjusted Life Year (QALY) rule, with a threshold set so that it will accept roughly half of available health technologies. We then compare it with a situation where the country accepts technologies on a first-come-first-served basis, without considering cost-effectiveness. Our simulation generates 1000 randomly generated scenarios – each scenario can be thought of as a single funding cycle, and each dot in the figure below represents one scenario. For each scenario, the figure shows the incremental gain (in costs and QALYs) from using a threshold rule instead of a first-come-first-served approach. As can be seen, the threshold rule leads on average to higher health benefits for the population and lower costs for payers. Inspection of the scenarios showed that in no scenario are costs higher and health benefits lower with the threshold, than with first-come-first-served approach demonstrating the power of cost-effectiveness analysis.

Incremental cost-effectiveness (cost-effective. minus counterfact.)

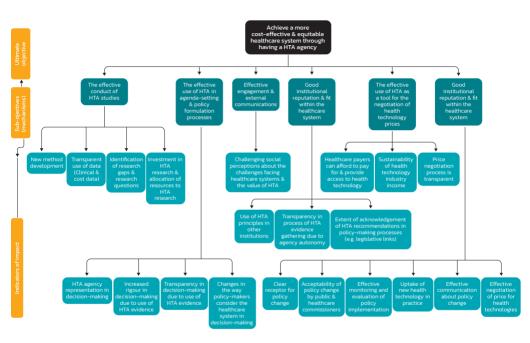




One of the examples (based on data from the UK) shows that a HTA agency can reduce costs by 20% while doubling health benefits. However, within the simulation, it is possible to change how strict the HTA agency is (by changing the cost/QALY threshold). A stricter agency will save more money while generating smaller additional health benefits. A less strict agency will save less money but contribute more to population health. However, the simulations show that a HTA agency will never increase costs and reduce benefits.



We conducted interviews with senior figures in the international HTA community, with backgrounds in several different countries (Australia, Canada, Thailand, Kenya, and the United Kingdom). We asked people to tell us what their HTA agency does and how it adds value.



What these experts told us is that HTA does not lead to change directly, but only through the mediation of several other actors in the health system. Thus, the value of a HTA agency very much depends on the fit of the agency within the health system and relationships with key stakeholders, as much as — or perhaps even more than — the activities undertaken within the agency itself.

Our key messages

Appraise.

EVORA simulation to study

how HTA could save your country money and help vour population live longer and better!

Evaluate.

Think about how you will track whether your HTA reports have been implemented and your HTA agency is embedded within your health system. Use the references in our literature review and our checklist to help you.

Outcomes.

Don't forget that HTA is all about improving population health! So build your data systems so that you can track health outcomes and demonstrate the value!

