## The broad societal, health and economic benefits of medicines and vaccines for patients, carers and the Australian community should be considered in HTA evaluations

- Health Technology Assessment (HTA) evaluations generally focus on direct benefits and costs, but should also consider important indirect impacts to ensure that the value of innovative medicines and technologies are appropriately assessed.
- "Second order effects", or the societal benefit for HTA, could include the reduced burden on carers, productivity impacts in workforce participation and flow on economic impacts.
- The impact on carers is an important consideration that is considered in HTA in the UK, the Netherlands and Canada, but not Australia.
- The 2022 Independent HTA Review is an important opportunity to introduce bold reforms that will aim to speed up Australians accessing new, innovative medicines by evolving the HTA evaluation process to include second order effects in the calculation of cost effectiveness.


## Possible policy solutions

1. Develop agreed criteria for situations where second order effects on patients and/or their carers should be included in the HTA assessment process. Examples may include:

- High priority medical conditions based on the agreed National Health Priorities
- Conditions that have a direct and substantial impact on carers (and consequently society)
- Conditions that affect patient productivity
- Treatments that have a measurable impact on carers and patient productivity

If a new medical technology meets these conditions, the indirect costs and benefits should be included in the base case economic evaluation.
2. Develop workable methodologies for the transparent inclusion of second order effects or patient benefits in the HTA assessment process.

## How are medicines valued?

The Pharmaceutical Benefits Advisory Committee (PBAC) and Medical Services Advisory Committee (MSAC) take primarily a health-only budget perspective capturing direct benefits to the patient and direct costs to the health budget. In practice, there is inconsistency in how these benefits and costs are accepted and important wider indirect benefits and costs to the patient, their family/carer and other Government budgets are largely disregarded.

Benefits that are often excluded from the calculation of cost effectiveness include productivity gains, tax revenue, social welfare impacts, carer impacts, National Disability Insurance Scheme (NDIS) impacts as well as benefits valued by patients. The approach taken by the Government in funding COVID-19 vaccines incorporated indirect costs and benefits on the broader economy, which highlights that indirect costs and benefits can be pragmatically included into HTA evaluations to reflect the true value of innovative health interventions.

While sponsors do develop analysis of these wider benefits, the PBAC and MSAC guidelines relegate these effects to a supplemental analysis, and they are not given much weight as the primary focus is on the health and/or PBS/MBS budgets.

## Broader perspectives of value

Improved health can deliver increased economic and standard of living outcomes. The Australian Government's Office of the Chief Scientist ${ }^{1}$ estimates that, if a $10 \%$ health improvement were applied to the entire working age population ( 18 to 69 years), the expected change in GDP would be around $0.216 \%$, or $\$ 2,801$ million. There is a growing body of evidence around the non-health benefits that medicines deliver, as well as the impact on hospital budgets. For example:

- Health strategies to treat and control illnesses can help recover \$1.9 billion in lost super from early retirement and return $\$ 3.9$ billion to the economy ${ }^{2}$
- The economic impact of Primary Progressive Multiple Sclerosis has been estimated at $\$ 418$ million in 2018, with an effective treatment estimated to improve economic outcomes up to $10 \%^{3}$
- The cost of early retirements due to ill health on GDP was estimated to be $\$ 45.3$ billion in 2017 and expected to increase to $\$ 53.4$ billion in 2025. Effective health programs, such as listing of new medicines, can reduce these costs by up to 20\%

Other HTA agencies such as those in the UK, Canada and the Netherlands consider carer/family member impacts in their guidelines and methods for HTA. In Australia, these are only considered as a scenario analysis in limited circumstances.

[^0]Figure 1: Carer and Family Member Utility in selected HTA Agencies (adapted from Basarir et al. ${ }^{4}$ )

| HTA Agency | Statements from Methods Guide | Base case/ scenario |
| :--- | :--- | :--- |
| NICE <br> (England) | Perspective on outcomes: all direct health effects, <br> whether for patients or, when relevant, carers. | Base case |
| CADTH <br> (Canada) | Target population may include patients and their <br> informal carers (i.e., unpaid carers). Researchers <br> should consider any potential spillover impacts (such <br> as due to changes in the level of care required by <br> patients beyond those individuals for whom the <br> interventions are being targeted). | Base case if carer is <br> considered part of <br> the target <br> population |
| ZiN | Economic evaluation is carried out and reported from <br> (Netherlands) <br> the societal perspective. All relevant societal costs <br> and benefits, irrespective of who bears the costs or <br> to who the benefits go, should be taken into account <br> in the evaluation and reporting. | Base case |

## Feedback

Do you have any thoughts on the policy ideas in these papers? We'd love to hear your feedback! Please let us know at this email address: HTA-Reform@medicinesaustralia.com.au.

[^1]
[^0]:    ${ }^{1}$ Australian Government Office of the Chief Scientist, The importance of advanced biological sciences to the Australian economy, Australian Government, Australia, 2016 https://www.science.org.au/support/analysis/reports/biological-science-importance-economy
    ${ }^{2}$ Rasmussen B, Sweeny K, Welsh A, Maharaj N, The McKell Institute: Our Health Our Wealth, The Impact of III Health on Retirement Savings in Australia, The McKell Institute, Australia, August 2018 https://medicinesaustralia.com.au/wp-
    content/uploads/sites/52/2018/09/Our-Health-Our-Wealth-full-report.pdf
    ${ }^{3}$ Brown LJ, Li J, Brunner M, Snoke M, La HA, Societal costs of primary progressive multiple sclerosis in Australia and the economic impact of a hypothetical disease-modifying treatment that could delay disease progression, Journal of Medical Economics, 2021; 24:1, pg 140-149
    https://www.tandfonline.com/doi/epub/10.1080/13696998.2021.1872585?needAccess=true
    NOTE: This Discussion Paper is not a final position paper. It has been developed as a conversation starter and to support discussion and feedback

[^1]:    ${ }^{4}$ Basarir H, Brockbank J, Knight C, Wolowacz S, The Inclusion of Utility Values for Carers and Family Members in HTAs: A Case Study of Recent NICE Appraisals in the UK, RTI Health Solutions, UK, 2019
    https://www.rtihs.org/sites/default/files/29662\%20Basarir\%202019\%20The\%20inclusion\%20of\%20the\%20utility\%20values\%20for\%20car ers\%20and\%20family\%20members\%20in\%20HTAs\%20a\%20case\%20study\%20of\%20recent\%20NICE\%20appraisals\%20in\%20the\%20UK.p df
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