The Value of Vaccines

Ensuring Australia keeps pace with community values and international practice

The role of the community in engaging on vaccination issues is essential

The value the Australian community places on vaccines is an important policy question which is not often debated. When determining which vaccines to recommend, experts in our assessment system make a number of judgement calls on behalf of the Australian community. Some of these judgement calls are technical, however some are also value-based judgements that relate to: how our community values extending lives; which treatments or disease areas should be prioritised; and what benefits and costs are meaningful to individuals and society and should therefore be in scope for assessments.

However, across a range of issues, preventive interventions like vaccines are undervalued by the current assessment processes when compared to therapeutic medicines. This may result in delayed, limited or a lack of access to new vaccines. There are recent examples of clinically recommended vaccines that have not been recommended by the Pharmaceutical Benefits Advisory Committee (PBAC) and are not listed on the National Immunisation Program (NIP). These vaccines are therefore only available through state or territory-based programs or by private prescription. In some cases the barriers faced result in applications to be listed on the NIP simply not being submitted at all.

GSK has written a policy paper outlining the current challenges to how prevention and vaccines are valued. We have identified three urgent updates to current practice, all of which are immediately actionable and do not require reform or legislation. We have the right system with the right expertise and updates recommended here will ensure that we keep pace with international practice and community values. To get their assessments right, the experts need to hear from the community.

The full policy paper is available on our website at au.gsk.com/en-au

1 Take a broader perspective of costs and benefits outside the health system

Current situation

The current assessment process typically limits the scope of review to only the benefits and costs relevant to the patient and to the health system. Assessment does not typically include the broader societal impact of vaccines - like National Disability Insurance Scheme (NDIS) payments, psychological health of parents and carers, welfare payments, or productivity losses even when there is quality evidence to demonstrate these broader considerations.

Why this matters

Survivors of vaccine-preventable diseases may face immediate impacts (for example, temporary inability to work) and/or life-long consequences (for example, need for ongoing disability support) that come with significant costs to families, communities and governments. If these impacts and costs are ignored, the full value of preventing these diseases is underestimated and inaccurate.

Recommendation !

A broader perspective should be adopted within our system, accounting for costs and benefits outside the health system where there is evidence available.

Examples of what costs and benefits the PBAC will consider

Counted by the PBAC	Not typically counted by the PBAC
☑ Drug or vaccine cost	☒ NDIS payments
☑ Time spent in hospital	☒ Quality of Life for parents and carers
☑ Medicare services	☒ Community-based healthcare services
☑ Quality of life for patient	☒ Lost income to parent or carer
	☒ Welfare payments to patient
	☒ Outbreak control costs to government
	☒ Psychological health of parents and carers
	☒ * Other

* Specialist disability accommodation, specialist education support, lost tax revenue for government, long term disability support, respite costs, housing modifications, antimicrobial resistance. This is not an exhaustive list.

2 Apply lower discount rates

Current situation

Experts in our system have the job of determining the value of health benefits from vaccines, even when those benefits may not materialise for a number of years. When considering these future benefits, health economists apply discount rates to reflect an assumption that society prefers benefits now over benefits in the future. Australia uses a 5% discount rate, which is highest of comparable countries.

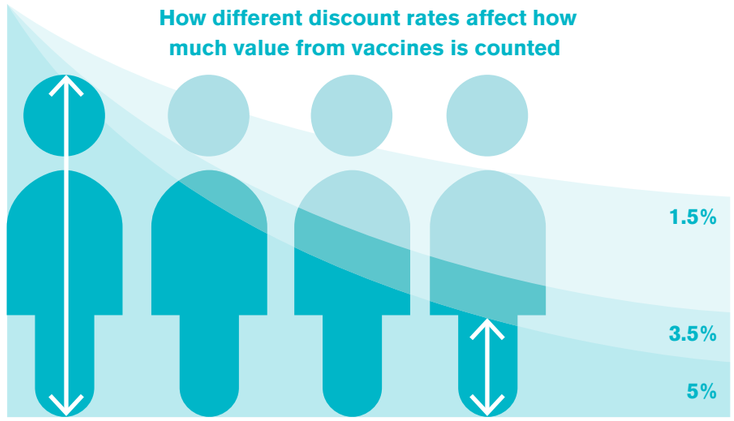
Why this matters

Because future health benefits from vaccines are discounted, it means they are considered to be worth less than immediate health benefits. This has a big impact on valuing prevention as compared to valuing medicines, which often have an immediate benefit in treating sick patients.

Recommendation !

Adopting a lower discount rate, in line with international practice (for example, the UK and New Zealand use 3.5% and Canada uses 1.5%), will place greater value on lives saved through prevention. Discount rates are meant to account for societal preferences, making it critical that society has a say in how prevention may be undervalued at the current rate.

How different discount rates affect how much value from vaccines is counted



Start: the health benefits of a vaccine that are immediate are fully valued, but discount rates impact how benefits are valued if they happen to accrue later (as is often the case with prevention interventions)

In 30 years' time: as years pass, the ongoing benefits from a vaccine are significantly discounted by the experts.

- at a 5% discount rate (AU), about 1/4 of the impact of a vaccine is included
- at a 3.5% discount rate (UK/ NZ), about 1/3 of the impact of the vaccine is included
- at a 1.5% discount rate (Canada), about 2/3 of the impact of the vaccine is included

Adapted for Australian context from Meningitis Research Foundation. Cost effectiveness methodology for vaccination programmes https://www.gov.uk/government/consultations/cost-effectiveness-methodology-for-vaccination-programmes. Last accessed 2 July 2019

3 Remove the disadvantage applied to prevention through current "willingness to pay" thresholds

Current situation

The PBAC has the difficult job of determining which treatments across different disease areas represent "value for money". To get a consistent assessment across different interventions, they use a common, generic measurement - determining how many "Quality Adjusted Life Years" (or QALYs) are saved for each intervention. A QALY represents one year of perfect health.

To compare value across disease areas, the PBAC then applies a "willingness to pay" threshold - this is the maximum cost the government will pay for each life year/QALY that is gained. Technically this threshold, or cost per life year, is called the Incremental Cost-Effectiveness Ratio (ICER). Currently, the PBAC considers that government should pay less for life years saved through large prevention programs compared to life years saved by therapeutic medicines.

Why this matters

A lower willingness to pay for new prevention programs puts up a stricter hurdle for vaccines. This may mean that new vaccine programs are not recommended for funding. If a new cancer treatment costs $80,000 to save a year of life, and a new vaccination program costs $80,000 to save a year of life - the current disadvantage in the system could mean the cancer treatment is recommended but the vaccine is not.

Recommendation !

The system should not disadvantage prevention programs, and apply the same "willingness to pay" for lives saved by prevention or by therapeutic medicines.

Example of government "willingness to pay" based on intervention