

The value of health technology

An exploration

Dr Henry Cutler
Director
CENTRE FOR THE HEALTH ECONOMY

11 November 2015



Some principles of value

- **Value is relative**
 - There is always some alternative to new health technology
 - Opportunity cost of new technology given budget constraints
- **Value is complex**
 - Can be difficult to identify and measure, changes all the time, differs across HT 'types'
- **Value can be costly**
 - Marginal benefit from HT requires upfront investment
- **Value can be conditional**
 - On other values, experiences and perceived needs
 - On other health technology
- **Value means different things to different stakeholders**

The value of health technology

- **Patients**
 - Improved health outcomes
 - Increases welfare directly as people value health
 - Increases welfare indirectly, allowing people more time to produce income / undertake leisure activities
 - Reduced health risks (e.g., prevention, monitoring devices)
 - Reduced out-of-pocket costs (direct and indirect)
 - Improvements in other health care system performance dimensions (e.g., continuity)
- **Society**
 - Option value for potential future users
 - People in society may value health technology differently depending on their health status and income
 - Positive externalities from a healthier society
 - Meeting social objectives (e.g., horizontal and vertical equity through improved access)
 - Improved social welfare

The value of health technology

- **Government (as a payer)**
 - Improved health of Australians
 - Directly valued between \$60,000 to \$80,000 per QALY
 - Also values flow-on effects, such as greater workforce supply and improved productivity
 - Reduced health care costs
 - Directly via greater technical efficiency and indirectly via avoided health care events
 - Meeting its own stated objectives (e.g., equal access to health care based on equal need)
- **Private health insurers**
 - Improved health of members
 - Reduced short term costs (e.g., reduced hospital stay length)
 - Reduced long term costs (e.g., less readmissions)
 - Reduced expenditure risk (e.g., prevention, monitoring devices)
 - Increased demand for private health insurance

The value of health technology

- **Manufacturer**
 - Increased sales, revenue and profits
 - via increased demand for services and unit price
 - Increased return to equity holders
 - Recouping sunk costs associated with R&D investment
 - Increased capacity to invest in further R&D
- **Clinicians / providers**
 - Improved health outcomes
 - Increased effectiveness
 - Reduction in harms and adverse outcomes
 - Increased revenue associated with care
 - via increased demand and supply, and increased unit price
 - Reduced costs associated with providing care (e.g., more efficient use of time)
 - Increased timeliness and support for decision making

Differences and conflicts

- **Differences within stakeholders in terms of ‘how much value’**
 - Some patients may not value health technology because the ‘cost’ of improved health is too great (e.g., end of life care)
- **Differences across stakeholders**
 - Value of life for individual vs government (e.g., PBAC threshold vs VSLY)
 - Value of health technology for patient vs clinician
- **Conflicts across stakeholders leading to tensions**
 - Reduced costs for government vs increased revenue for manufacturers
- **Perceived difficulty in measuring some values, or determining which values are ‘most important’**
- **Unclear how to reconcile perspectives, or fund according to value**



MACQUARIE
University

Thank you

END

Dr Henry Cutler
Director
Centre for the Health Economy

E: Henry.cutler@mq.edu.au

P: +61 2 9850 2998

Acknowledgements

I would like to acknowledge the contribution Dr Bonny Parkinson made in undertaking research for this presentation