Cost-effectiveness thresholds in Australia

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Thresholds are here to stay, unless…

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in Australia…

- PBAC define acceptable ICERs for new drugs that meet an unmet clinical need:
  - Clinical need for new drug is established
  - Decision model adapted to define base case ICER
  - Non-ICER factors considered:
    - Importance of the unmet need
    - Budget impact
    - Uncertainty
  - Acceptable ICER defined

Public Summary Documents

- ICERs reported by categories, between:
  - $15,000 and $45,000; $45,000 and $75,000; $75,000 and $105,000

- Example:
  - "Drug X was recommended to be listed on the Pharmaceutical Benefits Schedule, it's ICER is between $45,000 and $75,000"

Evolocumab example (2017)

- “The PBAC noted the pre-PBAC response (p1) adjusted the model for FH patients with ASCVD to include ███████ -year time lags in CV mortality benefit increasing the ICER from $15,000/QALY - $45,000/QALY gained in the base case to $15,000/QALY - $45,000/QALY gained for a ██ -year lag….
- The PBAC expected cost-effectiveness for evolocumab should be achievable for the high need and well-defined FH populations if a ██████ -year time lag is incorporated, with a corresponding price adjustment to reflect this delayed mortality benefit.”

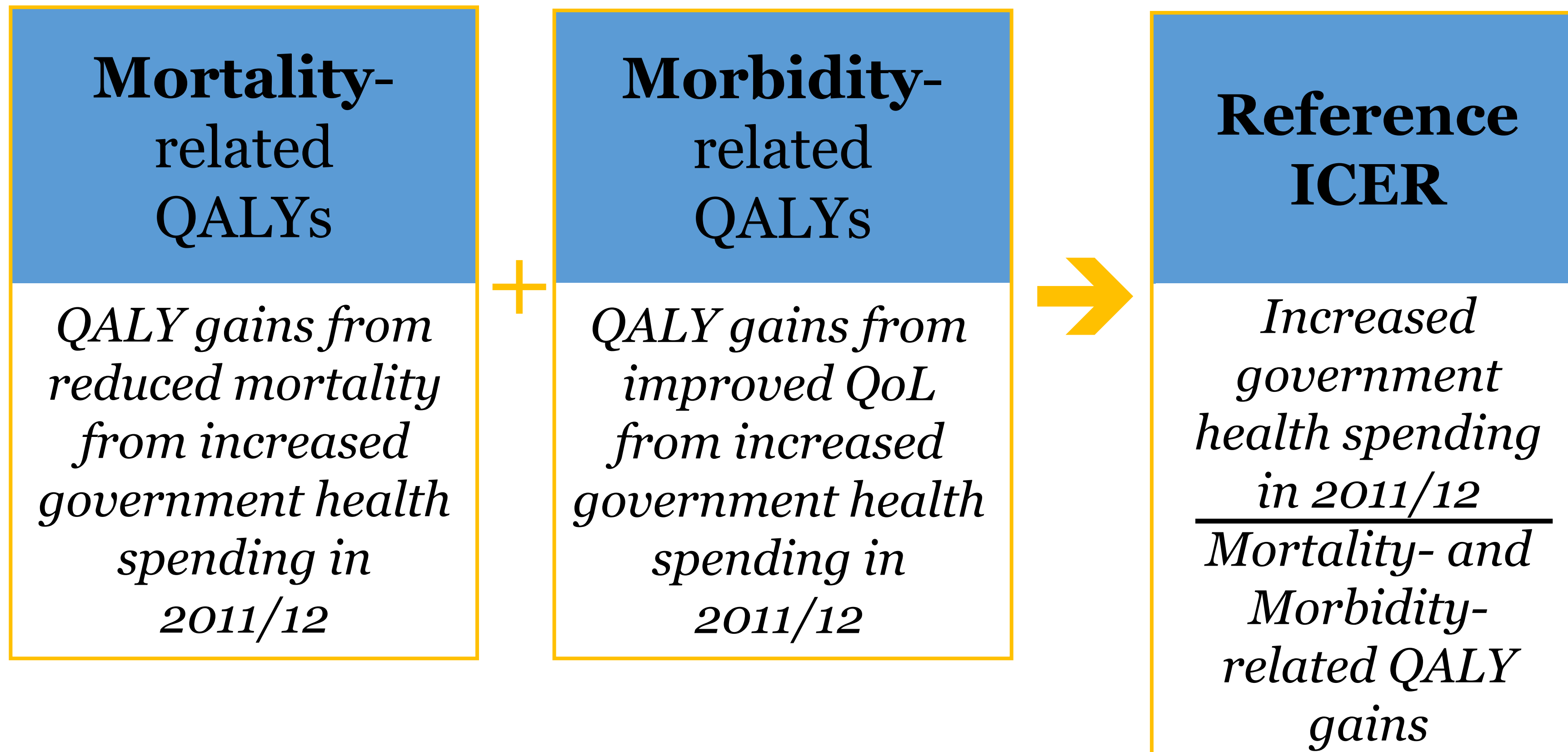
https://www.pbs.gov.au/info/industry/listing/elements/pbac-meetings/psd/2017-11/evolocumab-psd-november-2017

Threshold estimate: Opportunity cost

- Based on expected QALY gains associated with marginal differences in health expenditure

- Rationale:
  - A new pharmaceutical should generate at least the QALY gains
  - that we <u>expect</u> to gain from increasing health expenditure
  - by the amount required to fund a new drug

The Adelaide approach



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Reference ICER

$$\frac{\Delta \text{ per capita health spending}}{\Delta \text{ per capita mortality- \& morbidity-related QALYs}}$$

$$\frac{\$219.9}{(0.0013 + 0.0066)}$$

$28,033 per QALY

95% CI $20,758 to $37,667

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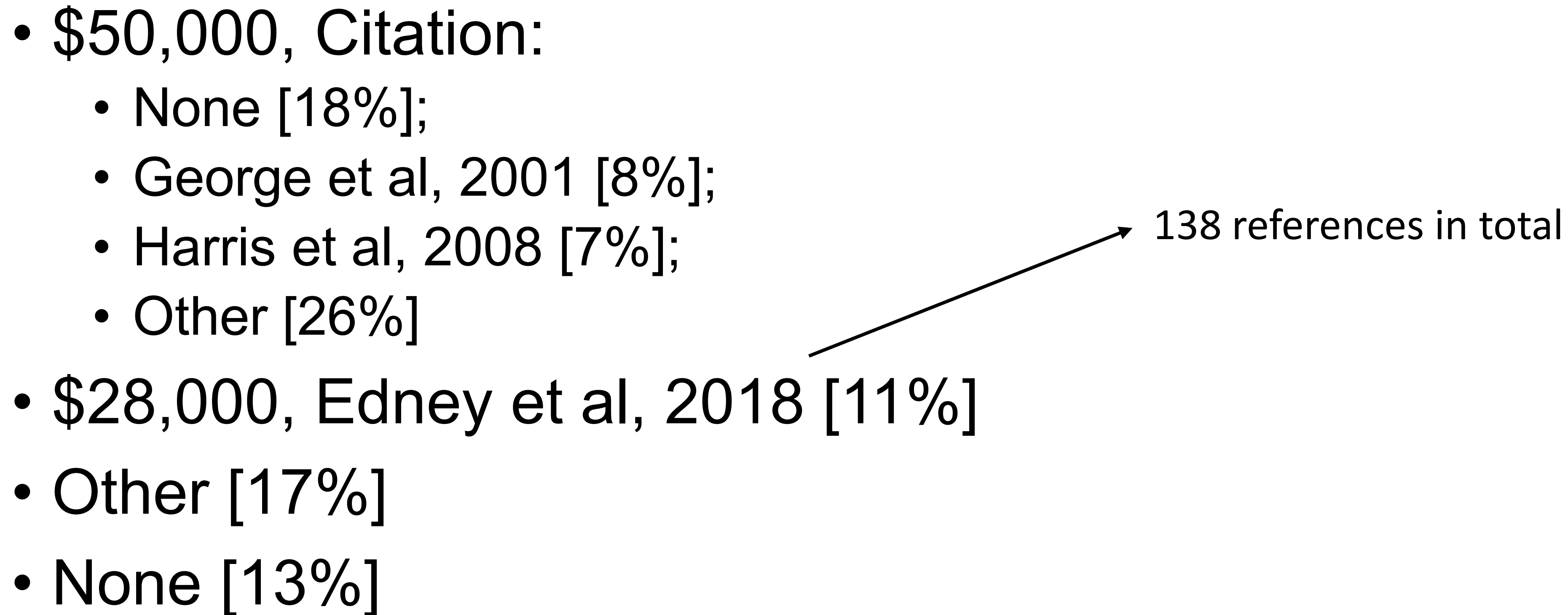
Edney et al, Pharmacoeconomics 2018

Referenced ICER thresholds [2018-20]



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Vallejo-Torres et al, Applied Health Economics and Health Policy 2021

Implicit & Flexible vs. Explicit & Fixed

- PBAC threshold is implicit and flexible
  - Does any country have a fixed threshold?
  - Is any country completely explicit?
- Implicit: “suggested or hinted at but not directly stated”
- Hints:
  - Importance of the unmet need
  - Budget impact
  - Uncertainty