WHY I HATE MCDA FOR HEALTH TECHNOLOGY ASSESSMENT

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Overview

- Value based coverage using cost effectiveness analysis
- Recap Multi-criterion Decision Making –
- Does MCDA do anything that Value Based Reimbursement doesn’t?
- Summary
Value based coverage

Value per $1,000

New Willingness to Pay

Willingness to Pay

Budget

Health care expenditures

Health care expenditures

Graph showing Value per $1,000 for New Willingness to Pay and Willingness to Pay against health care expenditures.
Value based coverage

Value per $1,000

Willingness to Pay

New Willingness to Pay

Health care expenditures

Budget

Net Benefit of changing how health care $$ are spent
# MCDA (a la Dionne et al 2015)

<table>
<thead>
<tr>
<th>Category</th>
<th>Effectiveness</th>
<th>Adoption Feasibility</th>
<th>Risk of Adverse Events</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity</td>
<td>Strength of evidence</td>
<td>Epidemiology of Disease</td>
<td>including severity</td>
</tr>
<tr>
<td>Innovation</td>
<td>Disease prevention/health promotion</td>
<td>Patient autonomy</td>
<td></td>
</tr>
<tr>
<td>Societal Benefit</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Value per $1,000

Better value

Worse value

Willingness to Pay

0

Current treatments covered by health care system

Treatments not covered by the health care system

Budget

Health care expenditures

Effectiveness

Feasibility

Adverse Events

Equity

Strength of Evidence

Epidemiology

Innovation

Prevention

Autonomy

Societal Benefit

Innovation

Prevention

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Value per $1,000

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Autonomy

Societal Benefit
Decision maker’s valuation of the orphan therapy and each relevant comparator

$V_i = hP_1i, P_2i, ..., P_Ji, Q_1i, Q_2i, ..., Q_Ki$

where $i$ represents the treatment

Value placed on any treatment by each stakeholder

$P_{ji} = f_jv_1, v_2, ..., v_n$

where $i$ represents the treatment and $j$ the stakeholder

Value placed on any treatment by each value proposition

$Q_{ki} = g_kv_1, v_2, ..., v_n$

where $i$ represents the treatment and $k$ the value proposition

Potential decision-bearing factors

- Cost-effectiveness
- Feasibility of Dx / Tx

Potential value-bearing factors ($v_1, v_2, ..., v_n$)

- Disease-related
- Treatment-related
- Population-related
- Socio-economic-related

‘Opportunity cost’-determining factors

- Cost of treatment
- Budget impact

When making a coverage decision, the decision maker compares its valuations of the orphan therapy, its relevant comparators, and the opportunity cost of each
Summary

The field of CEA methods research has spent the last 20 years helping decision makers address the problems that MCDA merely describes.