

WHY I HATE MCDA FOR HEALTH TECHNOLOGY ASSESSMENT

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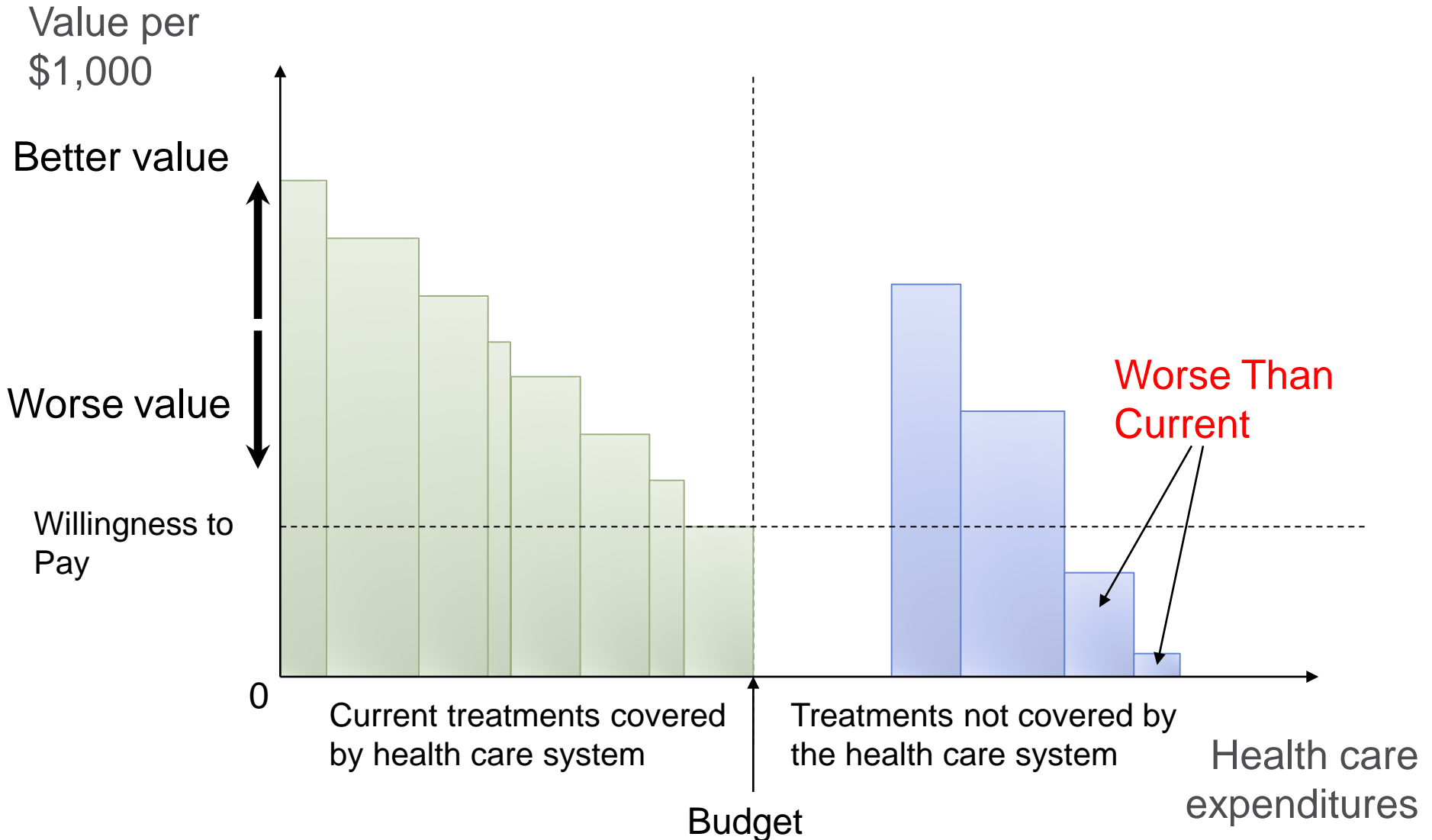
Capital Health Endowed Research Chair in Emergency
Medicine Research

University of Alberta

Overview

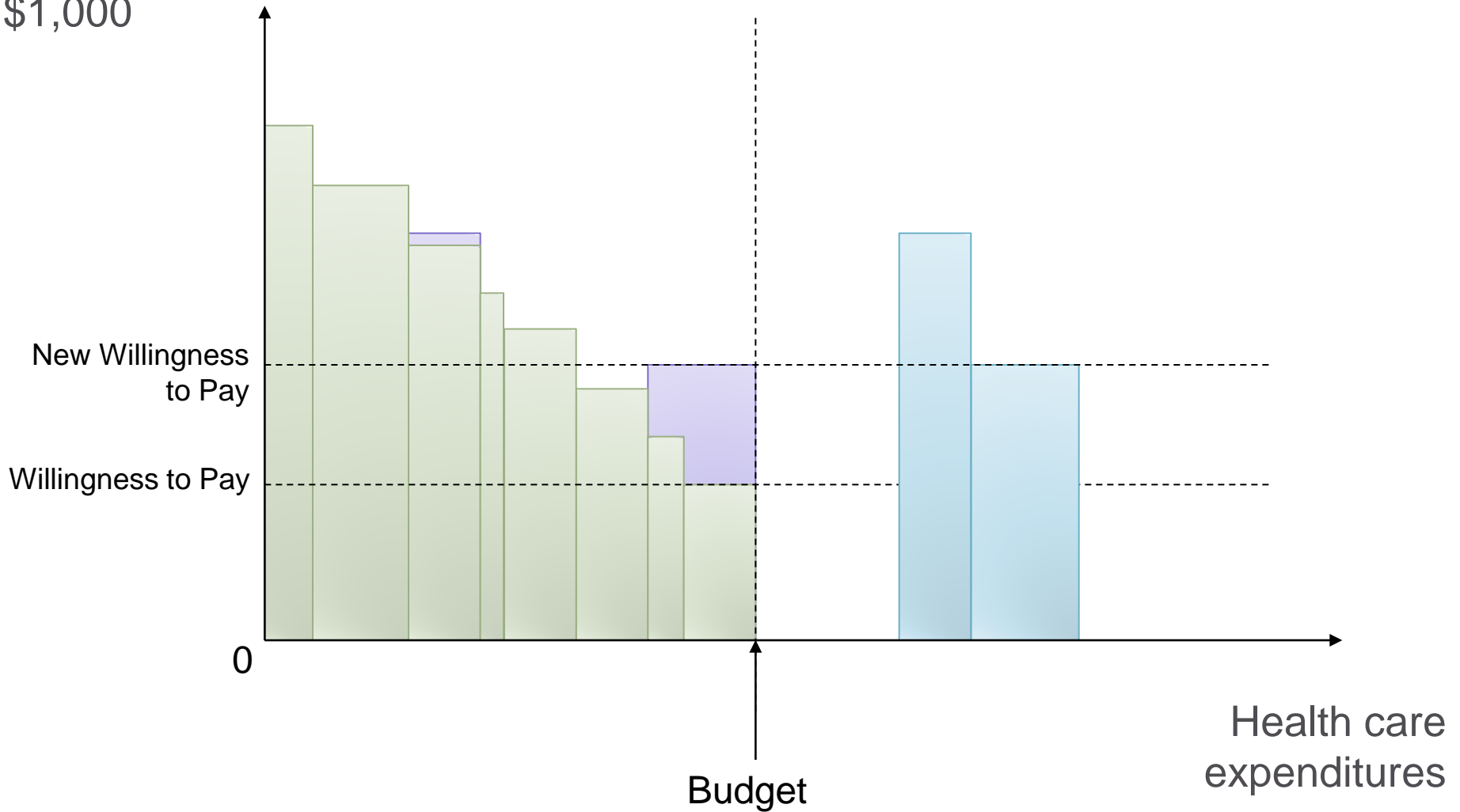
- Value based coverage using cost effectiveness analysis
- Recap Multi-criterion Decision Making –
- Does MCDA do anything that Value Based Reimbursement doesn't?
- Summary

Value based coverage



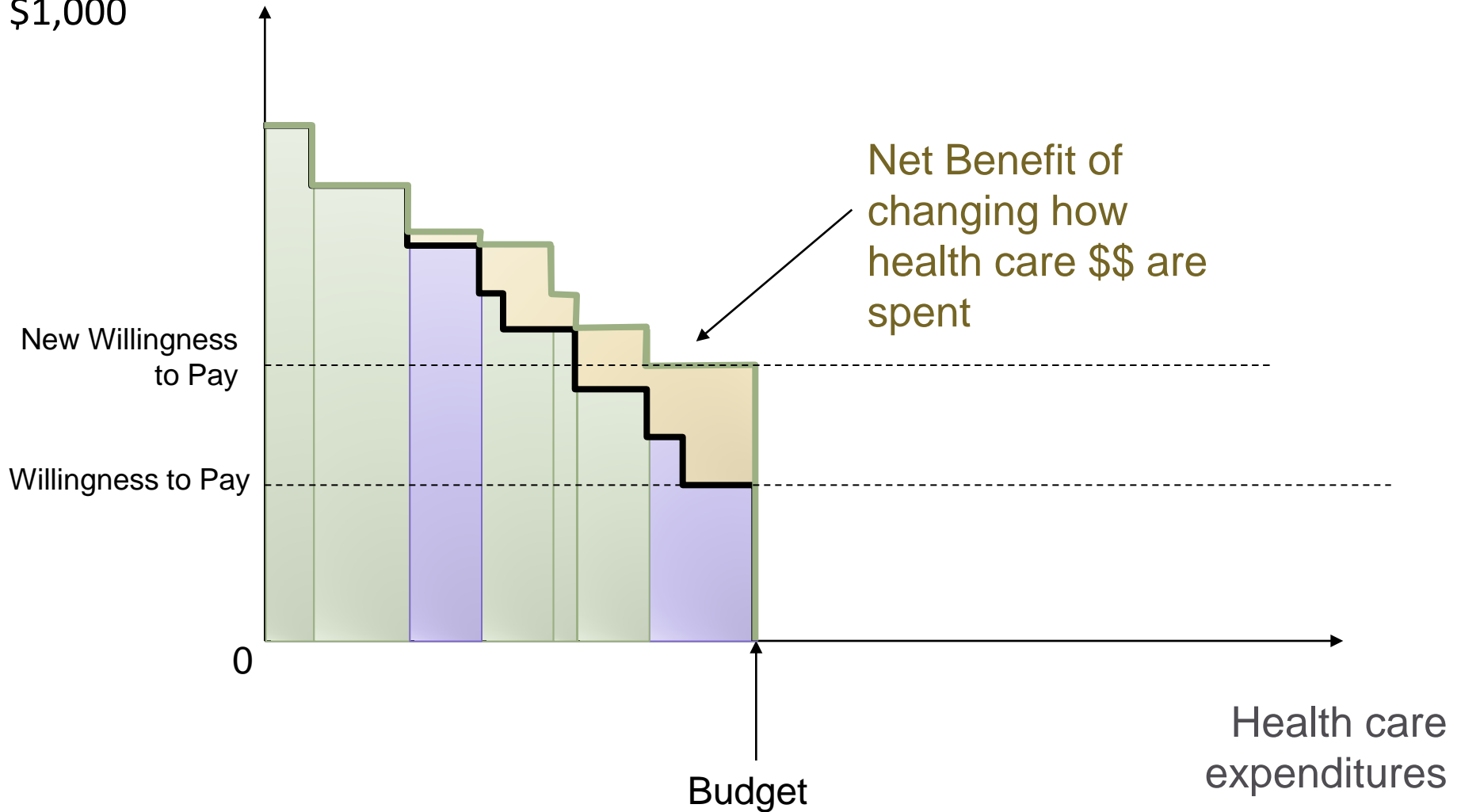
Value based coverage

Value per
\$1,000



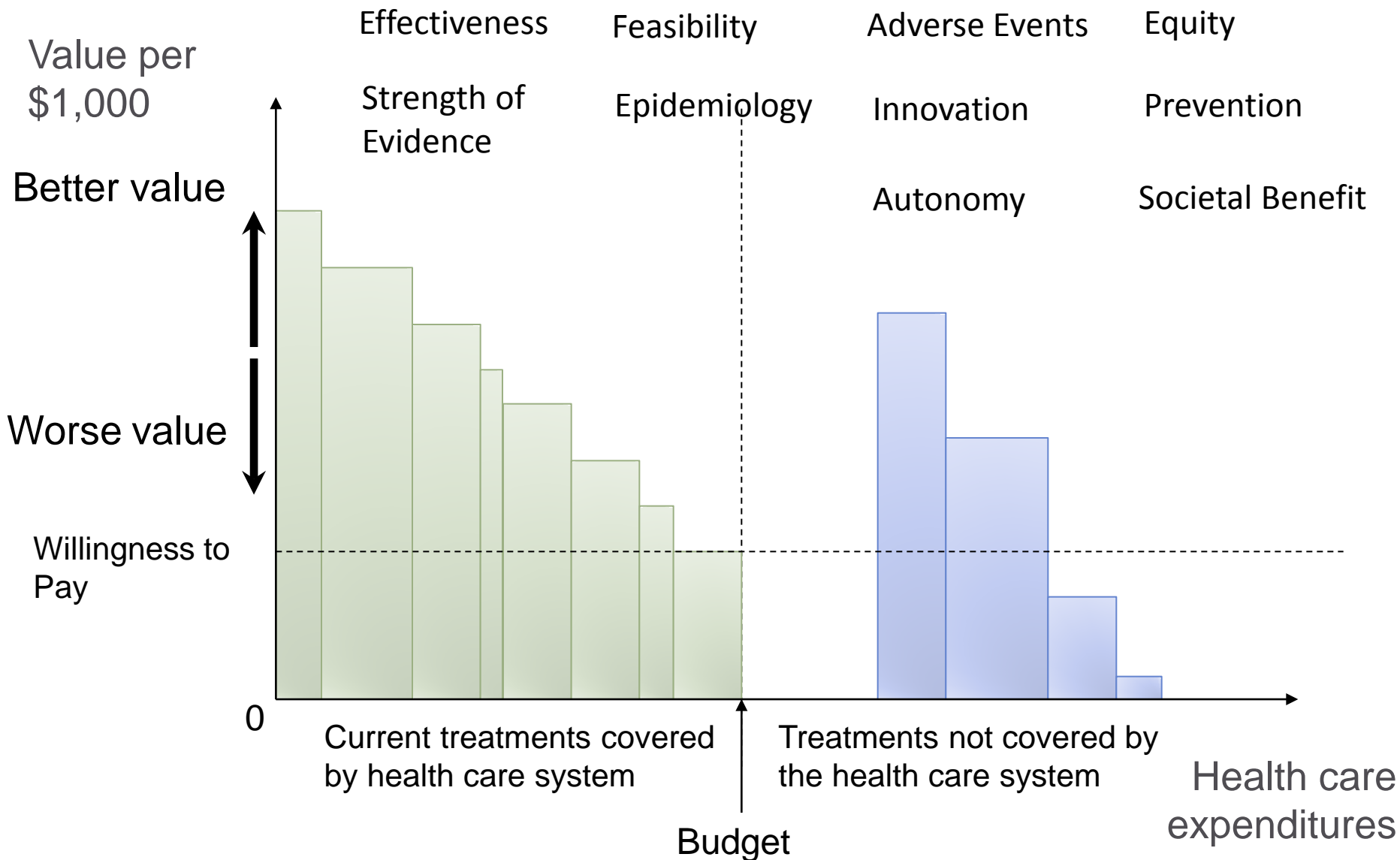
Value based coverage

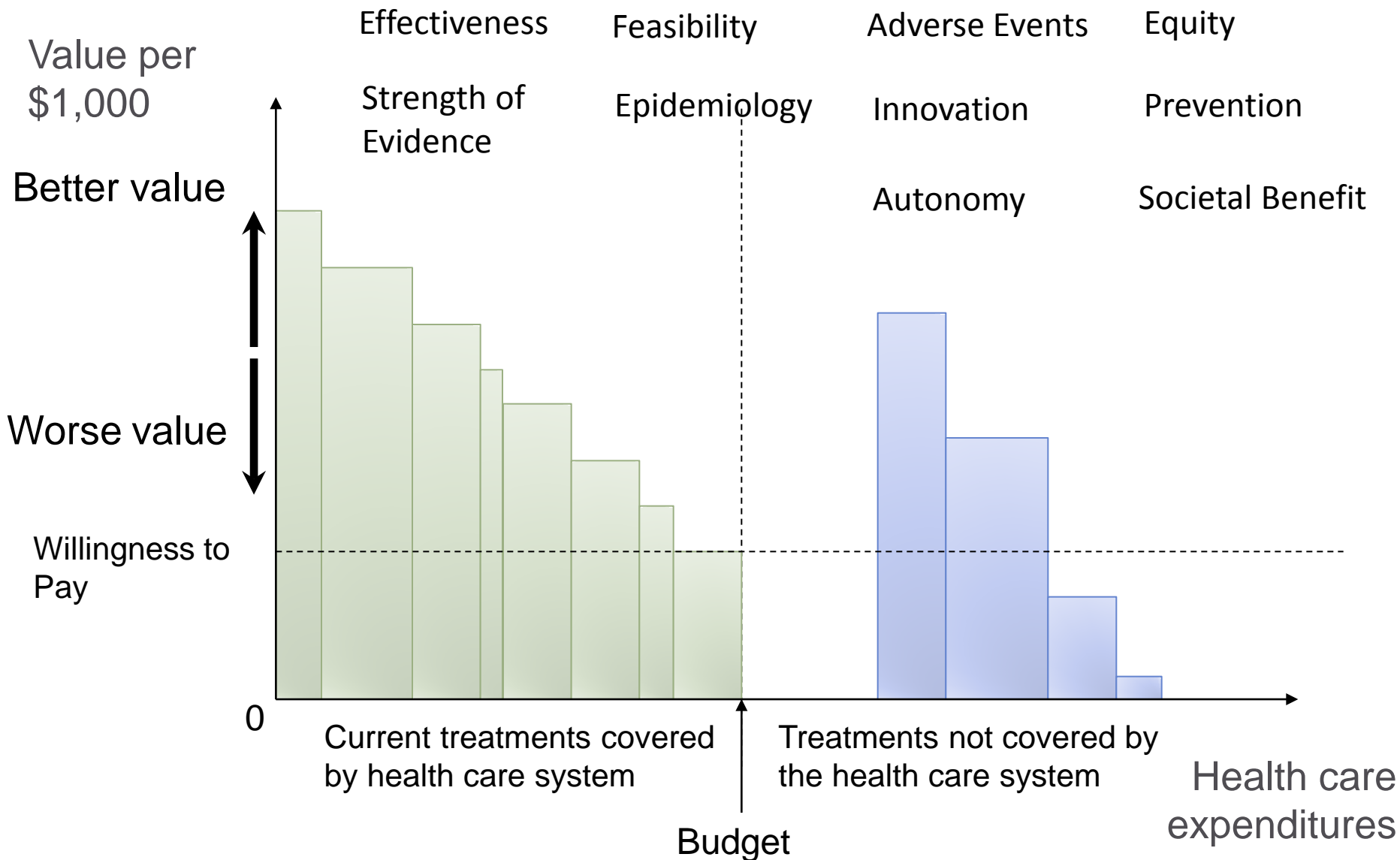
Value per
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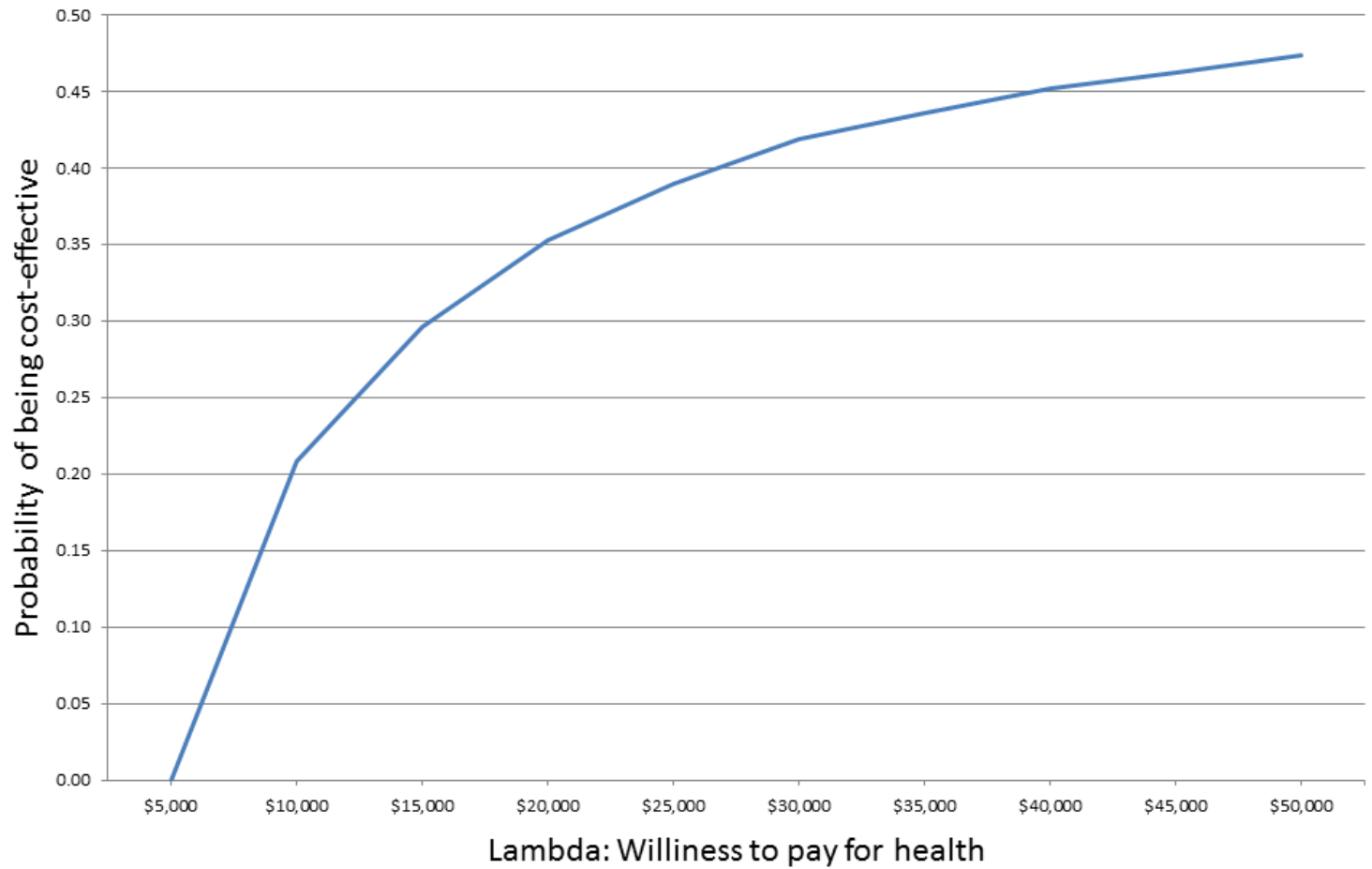
MCDA (a la Dionne et al 2015)

Effectiveness	Adoption Feasibility	Risk of Adverse Events
Equity	Strength of evidence	Epidemiology of Disease including severity
Innovation	Disease prevention/health promotion	Patient autonomy
Societal Benefit		



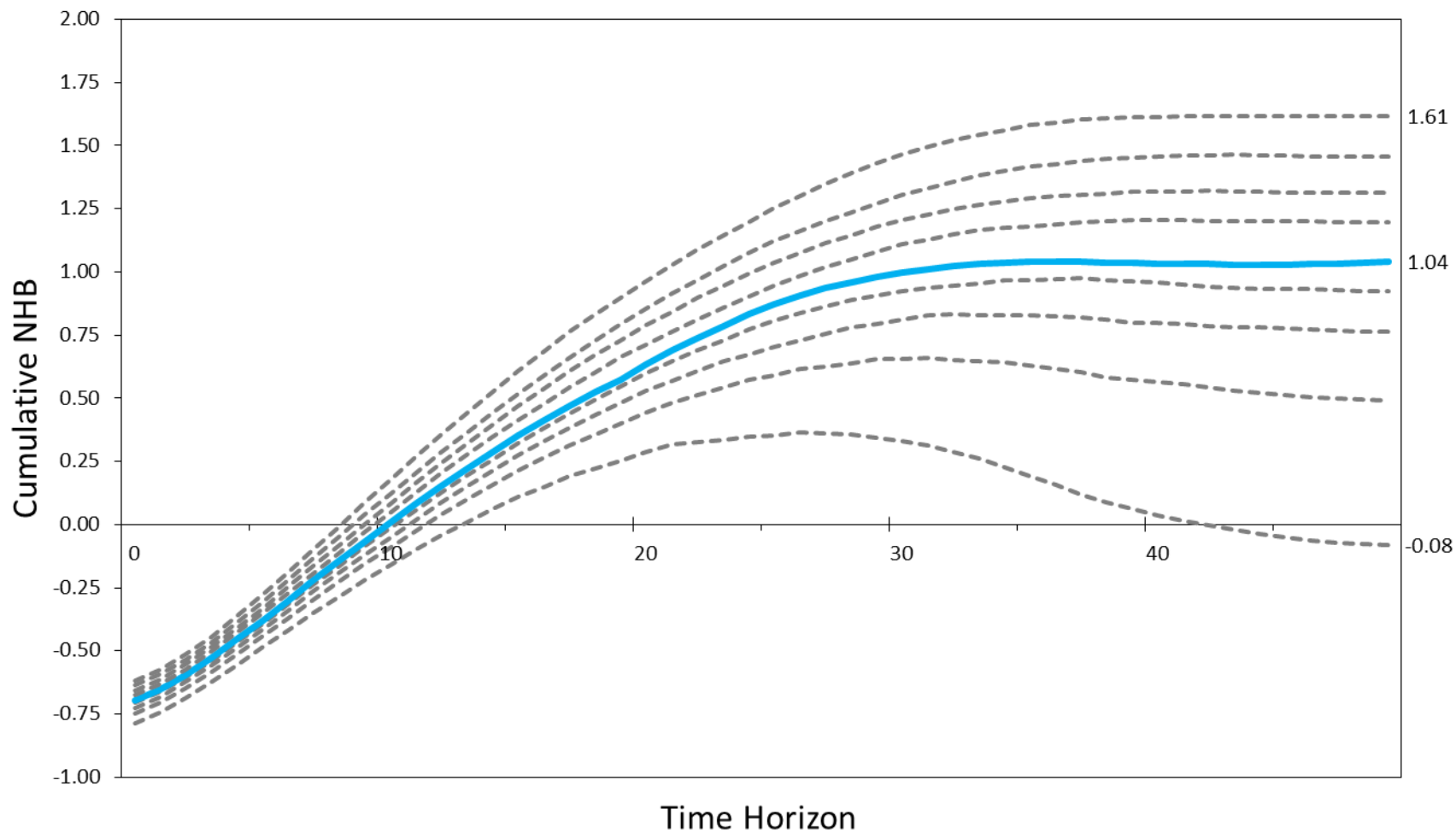


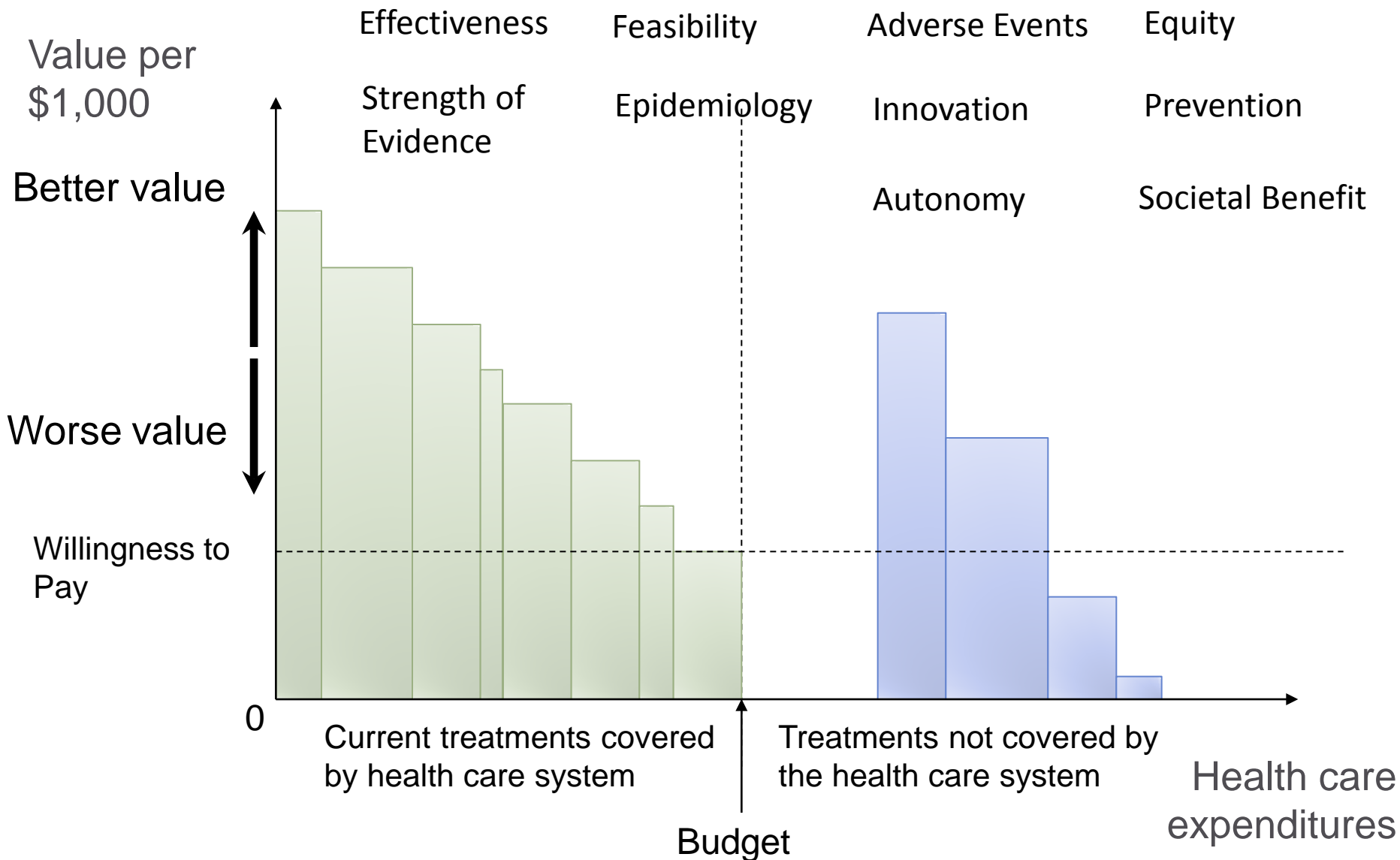
Cost-Effectiveness Acceptability Curve

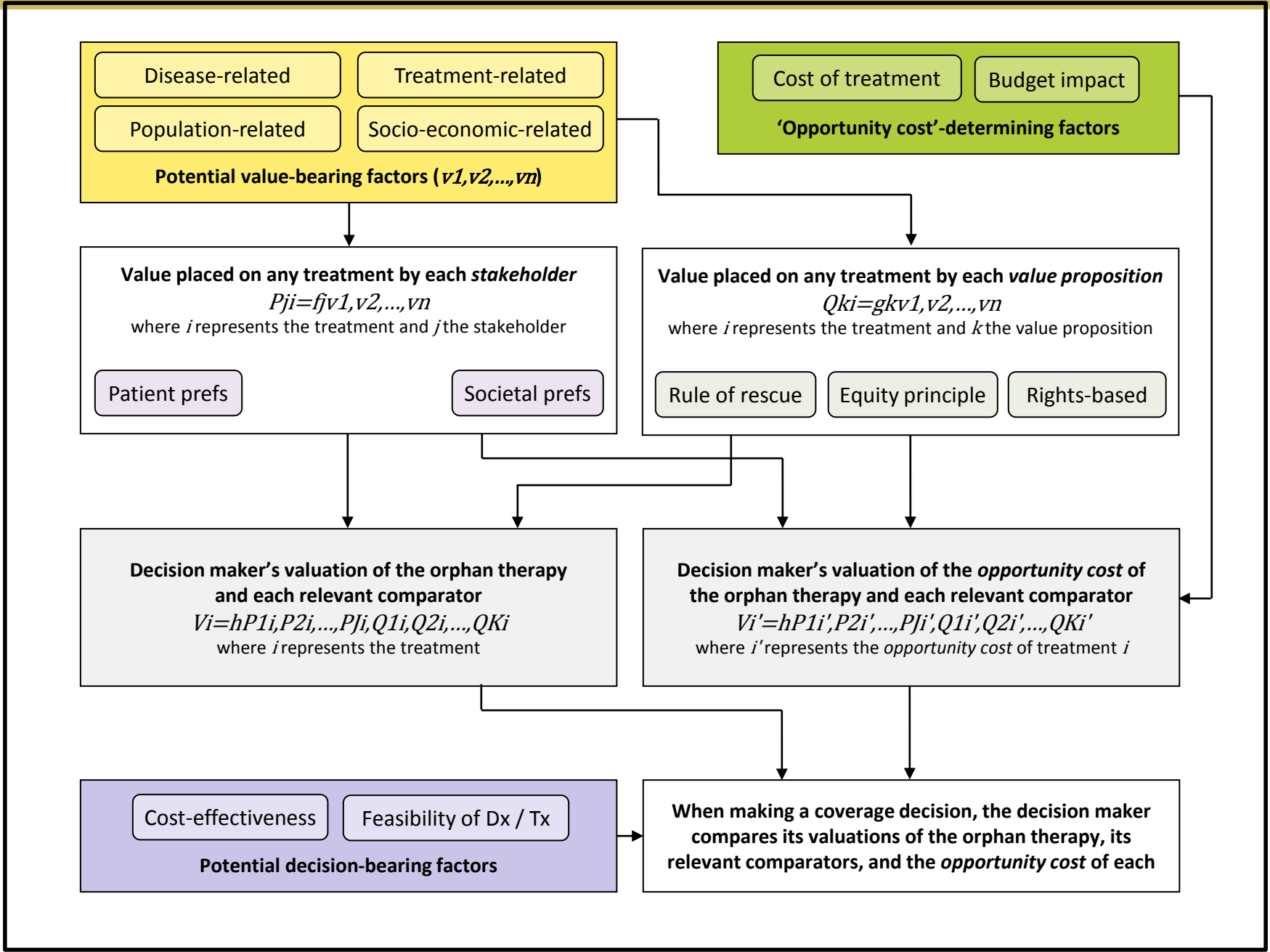




Net Benefit Probability Map







Disease-related Treatment-related

Population-related Socio-economic-related

Potential value-bearing factors (v_1, v_2, \dots, v_n)

Cost of treatment Budget impact

'Opportunity cost'-determining factors

Value placed on any treatment by each stakeholder
 $P_{ji} = f_j v_1, v_2, \dots, v_n$
 where i represents the treatment and j the stakeholder

Patient prefs Societal prefs

Value placed on any treatment by each value proposition
 $Q_{ki} = g_k v_1, v_2, \dots, v_n$
 where i represents the treatment and k the value proposition

Rule of rescue Equity principle Rights-based

Decision maker's valuation of the orphan therapy and each relevant comparator
 $V_i = h P_{1i}, P_{2i}, \dots, P_{ji}, Q_{1i}, Q_{2i}, \dots, Q_{Ki}$
 where i represents the treatment

Decision maker's valuation of the opportunity cost of the orphan therapy and each relevant comparator
 $V_{i'} = h P_{1i'}, P_{2i'}, \dots, P_{ji'}, Q_{1i'}, Q_{2i'}, \dots, Q_{Ki'}$
 where i' represents the opportunity cost of treatment i

Cost-effectiveness Feasibility of Dx / Tx

Potential decision-bearing factors

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.