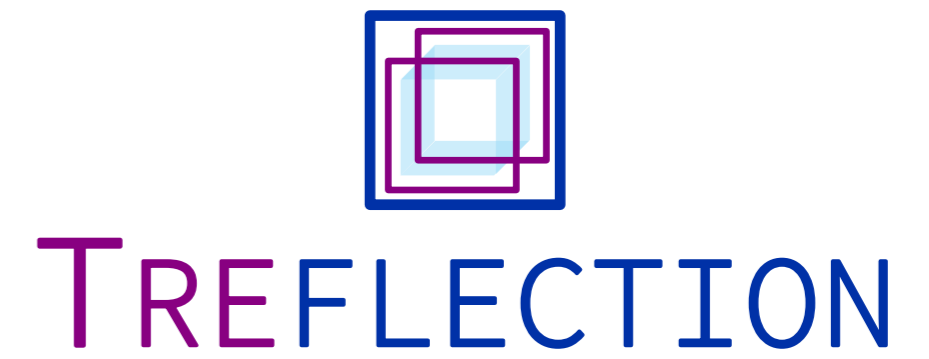
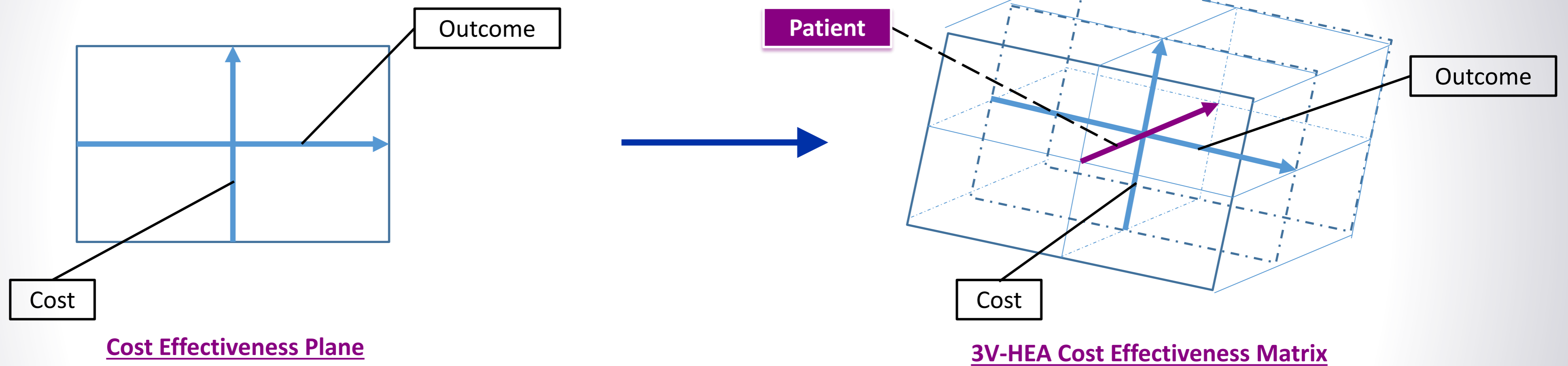


Three-Variable Health Economic Analysis (3V-HEA): Adding the Patient Perspective as the Z-Axis

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Treflection



Transformation of the Cost Effectiveness Plane to the 3V-HEA Cost Effectiveness Matrix: Addition of the Patient Perspective as the Z-Axis

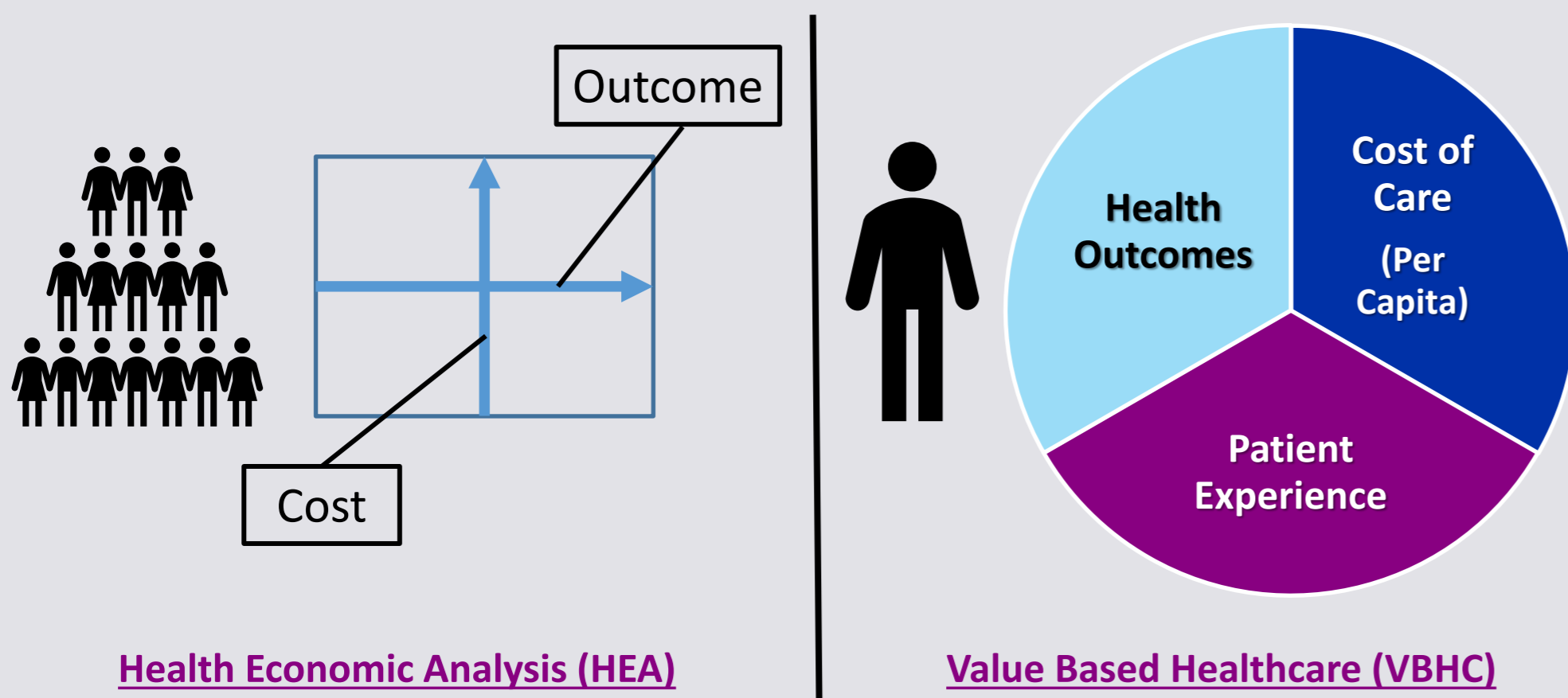


CONCLUSION

- 3V-HEA holds enormous potential to advance value assessment for use in:
 - Informing HEA coverage decision making by including the individual patient perspective
 - Standardizing the reporting of the three variables from VBHC programs

INTRODUCTION

Two, Complimentary Healthcare Value Assessment Paradigms



Attribute	Health Economic Analysis	Value-Based Healthcare
Purpose	Provide actionable data for resource-allocation decisions	Solve societal problem of spiraling healthcare costs by evolving to patient-centered data collection
Temporal Application	Single, discrete decision	Continuous improvement
Perspective	Health system or societal	Patient
Perception of Scientific Basis	Well-established	Limited to date
Outcomes	Generic (e.g., QALY)	Disease-specific
Applicability of Results to Decision Making	Clear and direct	Unclear
Service Delivery Focus	Clinicians	Patients

QALY = Quality adjusted life year

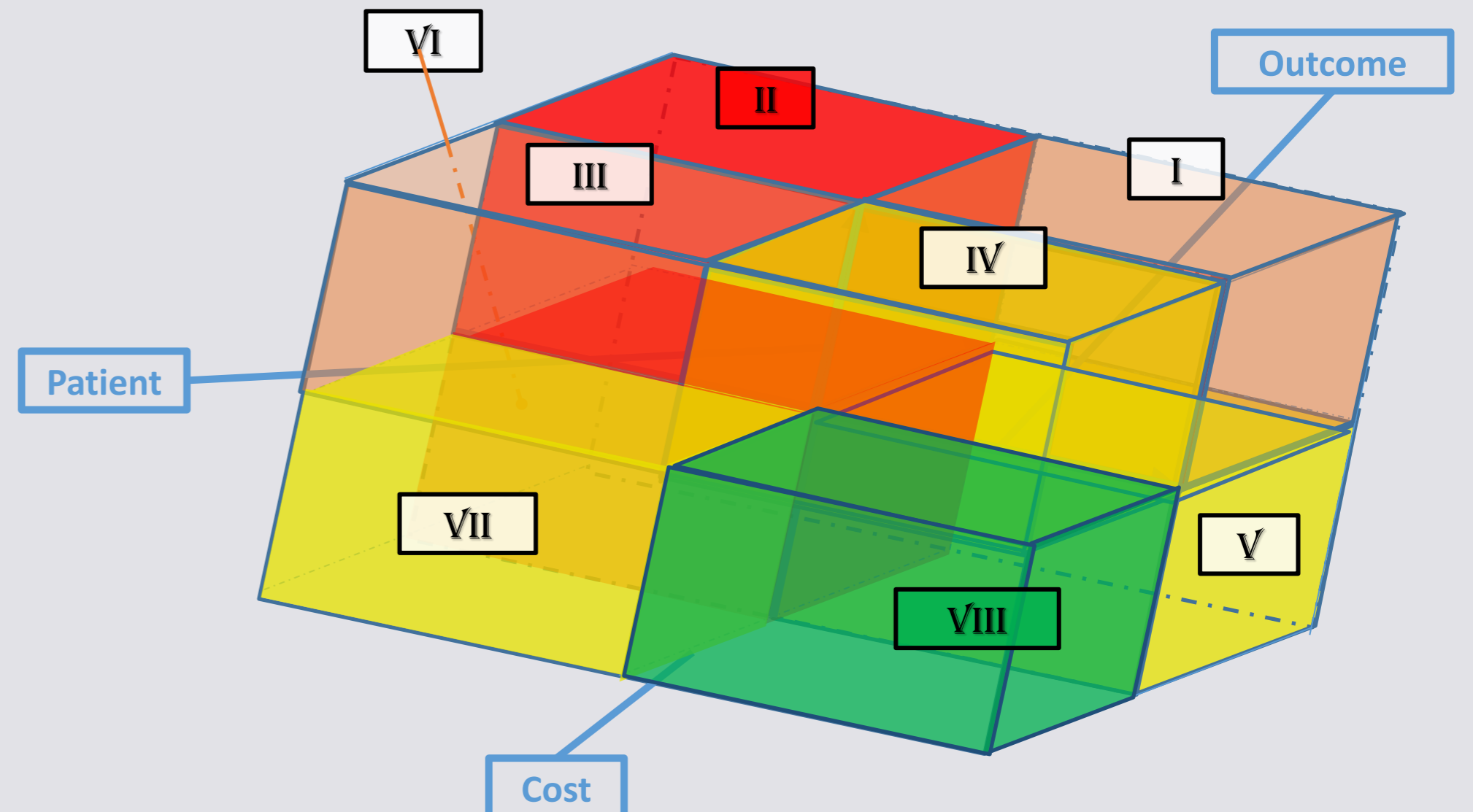
The Need for Cross-Stakeholder Perspective Value Assessment

- Although recent HEA recommendations¹ require data from two, distinct perspectives (from among that of the society, health system/payer, and patient) no method has allowed simultaneous comparison of outcomes generated across the two perspectives, so personal cost impact has been subjugated as a line item in health system level costs.
- Multi-perspective comparisons have potential to apply the triple value healthcare model² which aims to simultaneously address individual level value, along with both technical and allocative value at the population level.

OBJECTIVE

- To develop a method for comparing three outcome and/or cost variables from a value assessment that leverages the best combined attributes of HEA and VBHC principles

RESULTS



- Red (II):** Dominated (II): 3 Variables negative
- Yellow (IV, V, VII):** Favorable (IV, V, VII): 2 Variables positive; 1 variable negative
- Orange (I, III, VI):** Unfavorable (I, III, VI): 2 Variables negative; 1 variable positive
- Green (VIII):** Dominant (VIII): 3 Variables positive

- Each octant in a 3V-HEA bears a consistent positional relationship to the standard of care axes that can be used to drive decision making:
 - Interventions with incremental results falling in Octant VIII are adopted
 - Results falling in Octants I, II, III, and VI are rejected, and
 - Results in Octants IV, V, and VII must be adjudicated

Representative Use Cases

- Assessment of Cost-Effectiveness including Both Clinician and Patient Perspectives (VBHC)
 - Requires single score reflection of patient outcomes
 - e.g., ICHOM Standardized data set-driven derivation of the "VBHC-QALY"³
- Personalized Shared Decision-Making Aide
- "Triangulated" Shared Decision-Making⁴ Aide
- Triple Value Healthcare Model² directed program assessments

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