

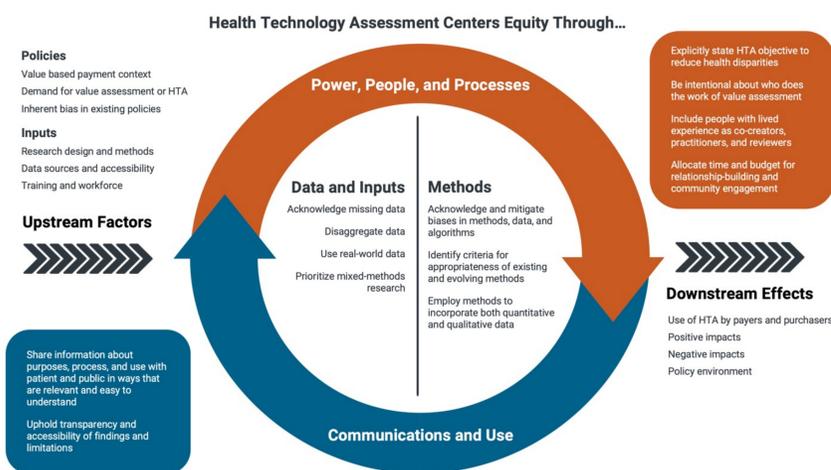
BACKGROUND

- Prior multi-stakeholder interviews revealed a broad consensus that **there is no value without equity**, requiring an intentional focus on equity from the beginning through the entire HTA process.
- The *IVI Health Equity in HTA Framework* (Figure 1) provides a consensus-developed resource to drive practice change by all stakeholders in the HTA ecosystem.
- Practical guidance is needed on how to incorporate this framework into HTA, including a need to identify potential data approaches or methods from the current literature to ensure an equity-focused HTA process.

STUDY OBJECTIVE

This review aims to identify potential data approaches and methods to incorporate equity considerations in health economic evaluations and health technology assessments (HTA).

Figure 1. IVI Health Equity in HTA Framework



METHODS

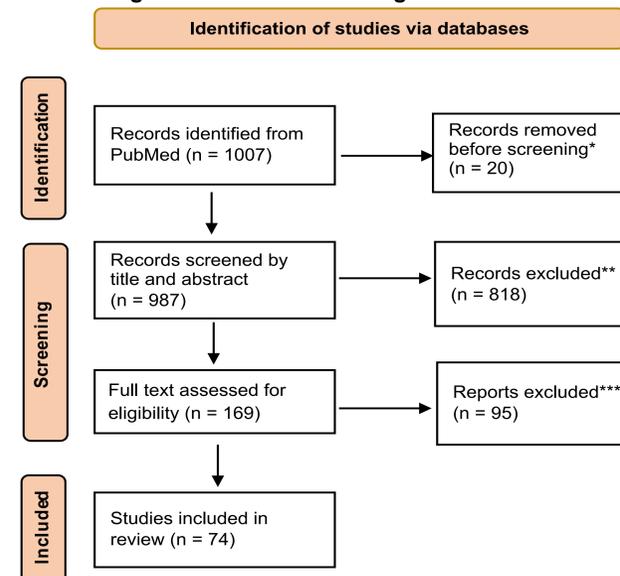
- We searched PubMed to identify literature published during 10 years prior to January 19, 2023, that proposed data approaches, analytic methods, or frameworks to facilitate equity-informed economic evaluations.
- Inclusion criteria were: (1) peer-reviewed; (2) published in English; (3) proposed, discussed, or used methods to consider equity, disparity, or social determinants of health in economic evaluations.
- We excluded articles that: (1) only documented disparity or inequity problems, (2) were conceptual discussions without providing methodologies or framework, or (3) simply reported subgroup analyses without considering equity as an objective of the study.
- Identified studies were generally grouped into the following categories:
 - Engagement and process:** discussed stakeholder engagement and processes for equity-driven HTA and roles of stakeholders during the evaluation process.
 - Methods and data:** included frameworks, methods, or data resources that can operationalize equity-centered evaluations.
 - Communication and use:** discussed how to communicate HTA to disparate audiences, including patients, to highlight potential biases or missing subgroup data that may potentially exacerbate inequities when used for decision-making.

- These domain categories had been identified through preliminary literature reviews and inputs from 40 stakeholders with various backgrounds (academia, clinician, industry, patient groups, etc.) via individual interviews and roundtable discussions.
- Considering a given article could be categorized to more than one domain, we describe our findings separately for each domain.
- Four researchers performed parallel independent screening of abstracts. Full-text review was conducted by two reviewers, and discrepancies were discussed and resolved. Data analysis was conducted using Microsoft Excel®.

RESULTS

- Of the 1,007 articles identified in the initial search, 74 studies were included in the review (Figure 2).
- Nine studies (12%) were related to engagement and process, 58 studies (78%) were related to methods and data, and 16 studies (22%) were related to communication and use. (Studies could fall into >1 category.)

Figure 2. PRISMA Diagram of Article Screening and Review



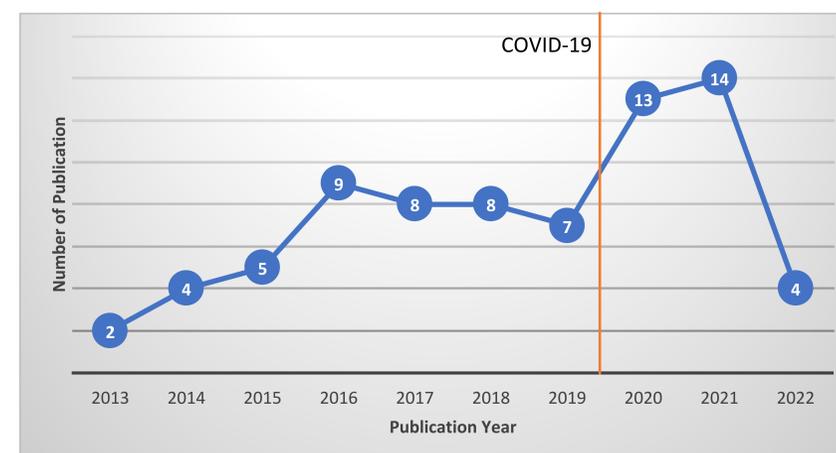
* Duplicate records removed (n = 1) / Records removed because non-English (n = 19)

** Reasons to exclude: Documentation only / No equity consideration in HTA / Not related to analytic methods / Uncertain or lack of information

***Reasons to exclude: Not related or applicable to HTA / Equity is not study focus or objective

- Figure 3 provides an overview of included studies categorized by publication year. Publications gradually increased from 2013 to 2016 and remained relatively constant through 2019. Another peak is reached after COVID-19.

Figure 3. HTA Equity-focused Articles by Publication Year



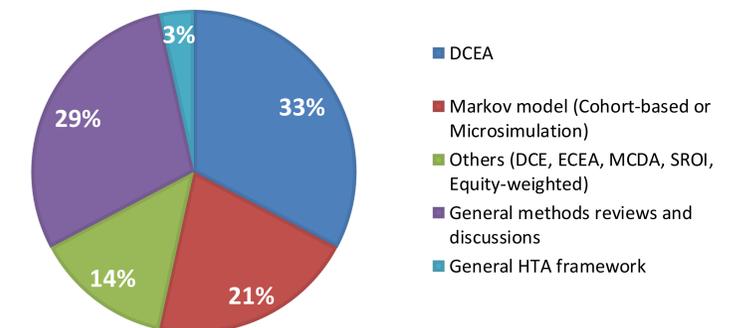
CONTACT

> Email: michelle.cheng@thevalueinitiative.org

> Website: <https://thevalueinitiative.org/health-equity-initiative/>



Figure 4. Studies Categorized under Methods and Data Domain (n=58)



Abbreviations: DCEA – Distributional Cost-Effectiveness Analysis; DCE – Discrete Choice Experiment; ECEA - Extended Cost-Effectiveness Analysis; MCDA – Multi-Criteria Decision Analysis; SROI – Social Return on Investment

- Figure 4 shows the types of articles classified under the Methods and Data domains (n=58).
- Distributional cost-effectiveness analysis (DCEA) was the most frequently used or discussed method (n=19).
- 12 studies used Markov-model approaches with a focus on equity. Cohort-based model analyses generally compared results among subgroups to account for potential intervention impacts on health disparities. Microsimulation models included individual characteristics associated with SDOH to account for potential disparities in intervention outcomes.
- An equity-focused HTA framework¹ and checklist² have been developed but the literature does not reflect their use in current practice.
- Several articles focused on methodology discussions and reviewing potential barriers to conducting equity-focused HTA, with a key challenge being lack of disaggregated data to perform equity-informed evaluations.

CONCLUSIONS

Equity-related health economic literature has focused more on methods, with less attention to engagement processes or communication of results.

Data challenges limit equity-focused economic evaluation in practice.

This broad review of equity in economic evaluation processes, data, methods, and communications/use shows that more comprehensive equity-focused evaluation frameworks or guidance may be necessary to increase the use of equity-informed methods in HTA.

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