

CALL FOR PAPERS

Early Economic Models in Health Technology Assessment and Healthcare Decision Making

Value in Health

Overview

Early economic models are increasingly used to inform decisions throughout the life cycle of pharmaceuticals, medical devices, diagnostics, digital health technologies, and other healthcare innovations. Developed when evidence is limited, these models integrate available evidence, assumptions, and uncertainty at an early stage of development, these models can support research prioritization, product development, clinical trial design, pricing and reimbursement strategies, and health technology assessment (HTA) preparedness.

As healthcare systems face growing resource constraints and rapidly evolving innovation pipelines, the role of early economic modeling has expanded considerably. Yet substantial methodological and practical challenges remain.

Value in Health invites submissions for a special collection of papers dedicated to advancing the science and application of early economic models. This themed section seeks to provide a comprehensive forum for methodological innovation, empirical applications, best practices, and critical reflections on the use of early economic models across diverse healthcare settings.

Topics of Interest

The Editors welcome original research articles, methodological papers, reviews, perspectives, and empirical case studies addressing topics including, but not limited to:

Methodological Advances

- Novel approaches to early cost-effectiveness modeling
- Value of information analysis in early-stage decision making
- Structural uncertainty, model conceptualization, and modeling under extreme uncertainty
- Bayesian approaches, adaptive modeling frameworks, and dynamic and iterative modeling approaches throughout product development
- Integration of artificial intelligence and machine learning in early economic models

Please direct any content-related questions to Guest Editors **Dalia Dawoud, PhD** (dalia-dawoud@cytel.com), **Matthew Taylor, PhD** (matthew.taylor@york.ac.uk), or **Haitham Tuffaha, BPharm, MSc, MBA, PhD** (haithamtuffaha@cancerqld.org.au). Submissions received before **April 1, 2027** will have the best chance of being published in *Value in Health* in 2027. All invited papers will undergo the journal's peer-review process before the Editors make final decisions about papers to be included in this themed section of *Value in Health*.

Authors should submit manuscripts through the journal's online submission system at <https://mc.manuscriptcentral.com/valueinhealth> and be sure to indicate in their cover letter that the paper is to be considered as part of the Early Economic Models theme.

Applications in Technology Development

- Early models informing clinical trial design
- Target product profile development, go/no-go decisions in research and development, and portfolio prioritization and investment decisions
- Early HTA and reimbursement planning
- Applications in pharmaceuticals, medical devices, diagnostics, gene and cell therapies, and digital health technologies

Evidence Generation and Data Challenges

- Use of expert elicitation
- Real-world evidence in early modeling
- Surrogate endpoints and intermediate outcomes
- Data requirements and evidence-generation strategies
- Management and communication of uncertainty
- Integration of evidence synthesis methods into early modeling

Decision Making and Policy

- Use of early economic models by manufacturers, HTA agencies, payers, and investors
- Early scientific advice and joint stakeholder engagement
- Cross-country perspectives on early HTA
- Decision thresholds and willingness-to-pay considerations in early development
- Ethical and policy implications of early economic assessments
- The role of early modeling in sustainable healthcare innovation

Reporting, Validation, and Good Practice

- Best-practice recommendations and reporting standards for early economic models
- Transparency and reproducibility
- Model validation approaches
- Lessons learned from successful and unsuccessful applications
- Stakeholder perspectives on model credibility and usefulness