

Artificial Intelligence for Healthcare Decision Making

Value in Health

Interest and investment in the development of tools or methods that rely on artificial intelligence (AI) algorithms to improve health or healthcare is increasing. Propelling this renewed interest is a growing amount of electronic data about individual health, population health, and consumer choice.

The aim of this themed section is to publish a collection of papers that focus on key questions related to the value of AI for healthcare to create a body of work aimed at moving the field forward in a way that minimizes the potential unintended consequences and maximizes the utility of this technology. The Editors are primarily interested in articles that focus on addressing policy and methodological questions to advance the field rather than on articles describing new AI-powered tools. Authors may choose to address 1 or more of the questions outlined below or may pose additional methods or policy-relevant questions related to the value of AI technologies for improving health and healthcare.

Topics of interest include, but are not limited to:

- What are the appropriate methods to evaluate AI tools and devices when conducting health technology assessments?
- How should the validation approach for healthcare AI tools differ based on the characteristics and applications of the tool?
- What cost-effectiveness or cost-utility methods should

be used to evaluate the long-term value of healthcare AI tools, and which impacts should (by definition) improve with usage?

- How can a government assess the value and applicability of an AI tool that was developed in another country for local use?
- What approaches are different countries using to regulate (market access, pricing, etc) AI technologies? Is there any evidence to suggest that some approaches are better than others?
- What are the business models behind different types of healthcare AI tools?
- What are the outstanding liability questions related to the use of AI tools in clinical settings?
- What payment models should be used for healthcare AI tools? How does this differ depending on characteristics of the tool?
- What are best practices for maintaining data privacy when AI tools that use sensitive health information are developed, validated, deployed, and maintained?
- What approaches can ensure that AI tools do not exacerbate existing inequities?
- What information about an AI tool needs to be made available to decision makers, including hospital administrators, clinicians, patients, payers, and regulators? How does this differ depending on characteristics of the tool?

Please direct any content-related questions to the Guest Editors, Thomas Rapp, PhD (thomas.rapp@u-paris.fr) and Danielle Whicher, PhD, MHS (dwhicher@gmail.com). Submissions received before **June 30, 2021** have the best chance of being included in this themed section. Final decisions regarding ultimate acceptance rest solely with the Editors. Authors should submit manuscripts through the journal's web-based tracking system at <https://mc.manuscriptcentral.com/valueinhealth> and be sure to classify their submissions for the Artificial Intelligence themed section.