pValue
Evidence for Decisions

Pharmaceutical Value (pValue) applies and tests novel methods for value assessment that encourages stakeholder engagement and promotes value-based decision making. pValue is a recipient of the PhRMA Foundation's Value Assessment Initiative Centers of Excellence Award.

Overview

Traditional measures of value used in cost-effectiveness analyses are not, by definition, fully comprehensive or sufficiently flexible to allow for the inclusion of all criteria that patients, payers, clinicians or other health care stakeholders understand to be important. Multi-criteria decision analysis (MCDA) offers a scientifically rigorous decision-making tool capable of including multiple criteria that are important to stakeholders. MCDA has been applied in a variety of sectors, such as investment banking and environmental management, but applications in U.S. health care decisions have been limited.

MCDA can improve decision making in health care by engaging key stakeholders and capturing and weighing criteria not found in traditional measures of value, for example novelty, severity of disease, quality of evidence and family burden. By encouraging a comprehensive understanding of value, MCDA offers an opportunity to systematically weigh non-traditional aspects of value that fall outside traditional measures.

The University of Colorado's pValue initiative will explore how MCDA can add information on value to improve decision making in health care.

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Ongoing Activities

- Review applications of MCDA and where it may show promise for use in coverage and reimbursement decision making
- Educate stakeholder communities on MCDA techniques
- Develop pilot MCDA tools for innovative therapies (e.g. rare diseases and oncology)
- Partner with patient, payer and clinician communities to identify and compare criteria that are important to them
- Test impact of adding MCDA to traditional value assessments, versus traditional value assessment alone, on health care decision making

https://pharmacy.cuanschutz.edu/research/research-centers/pvalue

Video
- **PhRMA Foundation Centers of Excellence: Spotlight on pValue**

Infographics & Primers
- **Multi-Criteria Decision Analysis in Health Care Value Assessment**

- **A Clear Path Toward Achieving Value in Health**

Recent Publications
- **Stakeholder Perception of Pharmaceutical Value: A Multicriteria Decision-Analysis (MCDA) Educational Case Study for Value Assessment in the United States**
  Under Review April 2021

- **Criteria for Inclusion in a Multiple Criteria Decision Analysis: Comparing Patient and Payer Preferences for Additional Value Criteria**
  Under Review February 2021

- **Criteria and Scoring Functions Used in the Value Assessment of Rare Disease Therapies: A Systematic Literature Review of Multi-Criteria Decision Analysis Tools and Value Frameworks**
  PharmacoEconomics. April 29, 2021

- **How MCDA Can Drive Better Value Assessment**
  Voices in Value. April 28, 2021

- **Toward Modified Impact Inventory Tables to Facilitate Patient-Centered Value Assessment**
  PharmacoEconomics. March 24, 2021

- **Using PCORI to Advance Patient-Centered Values**
  Fierce Healthcare. November 6, 2019

- **Complementing Coverage and Reimbursement Decisions with Multi-Criteria Decision Analysis**
  American Journal of Managed Care. May 27, 2019

Presentations
- **Multi-Criteria Decision Analysis: Can it Help Make Value Assessment More Patient Centered?**
  November 19, 2020. Virtual Webinar
  R. Brett McQueen, PhD – Assistant Professor, Co-Investigator, pValue, University of Colorado School of Pharmacy
  Hosted in partnership with The National Health Council and The National Pharmaceutical Council

- **The Next Generation of Value Assessment: Including the Patient Voice**
  November 12, 2019 Ronald Reagan Building, Washington, D.C.
  Jonathan D. Campbell, PhD, Director of pValue
  Slide Presentation can be accessed here.

Spotlight on Patient-Centered MCDA: Toward Modified Impact Inventory Tables

To consistently incorporate patient-centeredness in our applications of MCDA, we are using a two-step process and collaboration that engages patients, providers and researchers. First, we plan to educate patients on value assessment and subsequently elicit and prioritize criteria that are of high value to patients when deciding on a treatment. Step one will improve patients' understanding and literacy of value assessment in addition to informing our second step that applies MCDA to real-world treatment scenarios. Second, we will use the patient prioritized criteria from step one to directly inform the assessment of value of real-life treatment case examples through MCDA. Step two will ensure that patient preferences for value criteria around real-life examples are included in the multi-stakeholder MCDA applications. An expanded summary of our process can be found in the in-press publication in *PharmacoEconomics*, titled "Toward Modified Impact Inventory Tables to Facilitate Patient-Centered Value Assessment."