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# A systematic review of cost-utility analyses in HIV/AIDS: implications for public policy.

[Hornberger J](#), [Holodniy M](#), [Robertus K](#), [Winnike M](#), [Gibson E](#), [Verhulst E](#).

The SPHERE Institute/Acumen, LLC, Burlingame, California, USA.  
jhornberger@cedarecon.com

## Abstract

**OBJECTIVES:** To determine whether gaps exist in published cost-utility analyses as measured by their coverage of topics addressed in current HIV guidelines from the Department of Health and Human Services (DHHS).

**DESIGN:** A systematic review of US-based cost-effectiveness analyses of HIV/AIDS prevention and management strategies, based on original, published research.

**METHODS:** Predefined criteria were used to identify all analyses pertaining to prevention and management of HIV/AIDS; information was collected on type of strategy, patient demographics, study perspective, quality of the study, effectiveness measures, costs, and cost-effectiveness ratios.

**RESULTS:** One hundred and six studies were identified; 62 described strategies for averting new HIV infections, and 44 dealt with managing persons who are HIV positive. The quality of studies was generally high, but gaps were found in all studies. Especially common were omissions in reporting data abstraction methodology and discussions of direction and magnitude of potential biases. Among the 22 most highly rated papers (score of 90 or higher), only 1 was cited in the guidelines, and 3 papers reported on interventions that were superseded by newer approaches. Using a USD 100,000 threshold, the guidelines usually endorsed interventions found to be cost-effective. Exceptions included recommending postexposure prophylaxis (PEP) for populations in which PEP is unlikely to be cost-effective and not recommending primary resistance testing in treatment-naïve persons, although the intervention was reported to have a cost-effectiveness ratio of less than USD 50,000.

**CONCLUSIONS:** Despite an abundant literature on the cost-utility of HIV/AIDS-targeted strategies, guidelines cite relatively few of these papers, and gaps exist regarding assessments of some strategies and special populations.

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