Questionnaire to assess relevance and credibility of modeling studies for informing health care decision making: an ISPOR-AMCP-NPC Good Practice Task Force report.

Abstract

The evaluation of the cost and health implications of agreeing to cover a new health technology is best accomplished using a model that mathematically combines inputs from various sources, together with assumptions about how these fit together and what might happen in reality. This need to make assumptions, the complexity of the resulting framework, the technical knowledge required, as well as funding by interested parties have led many decision makers to distrust the results of models. To assist stakeholders reviewing a model's report, questions pertaining to the credibility of a model were developed. Because credibility is insufficient, regarding relevance of the model results were also created. The questions are formulated such that they are readily answered and they are supplemented by helper questions that provide additional detail. Some responses indicate strongly that a model should not be used for decision making: these trigger a "fatal flaw" indicator. It is hoped that the use of this questionnaire, along with the three others in the series, will help disseminate what to look for in comparative effectiveness evidence, improve practices by researchers supplying these data, and ultimately facilitate their use by health care decision makers.

Keywords: credibility, good practices, modeling, quality assurance, validity.

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