

Combining cost-effectiveness results into a single measurement: What is the value?: Authors response

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Dear Editor,

We appreciate the authors' insight on the combining cost-effectiveness (CEA) results. Two major concerns raised by Jin et al were the heterogeneity across CEA studies and the usefulness of combined CEA results. Even though there is still a need for methodological improvement of meta-analysis of CEA results, its result could probably aid policy decision making.

Potential heterogeneity is an important issue when performing meta-analysis of CEA results. To minimize heterogeneity, stratified analyses by the level of country income, type of CEA study, perspective, and other important assumptions are needed.¹ However, heterogeneity is still present after stratified analyses, i.e., about two-thirds of recently published meta-analyses of CEA results showed substantial heterogeneity.² A recent study indicated that the variation in willingness-to-pay (WTP) might play a major role; applying a uniform WTP threshold across studies was a successful strategy to mitigate heterogeneity.² However, other sources of heterogeneity remain to be explored and addressed by different strategies.

It is best to use country-specific CEA for policy-decision making but, not every country has such data. As such, the combined CEA results could provide empirical data to aid a policy decision. Recently, The Immunization and Vaccine-related Implementation Research Advisory Committee (IVIR-AC) of the World Health Organization agrees that the quantitative evidence generated from meta-analysis of CEA results was useful to support clear policy recommendations and can facilitate

decision-making in resource-strained settings where context-specific CEAs are not available.³ However, like the authors the Committee note that the differences in methodological heterogeneity, industry-sponsor bias, and other important characteristics must be carefully considered when performing evidence synthesis for policy decision making.

Contributors

PD and SV drafted the letter. All authors provided significant suggestions and approved the final letter.

Declaration of interests

PD, SV, LML, AT, and NC declare no competing interest. PL and RH work for the World Health Organization. The authors alone are responsible for the views expressed in this publication and they do not necessarily represent the decisions, policy, or views of the World Health Organization.

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