AmerisourceBergen
Xcenda

ARE US PAYERS GETTING TO GRIPS WITH COST-EFFECTIVENESS ANALYSIS?

Michael Drummond, PhD[1] | Jackie Gladman, BPE[2] | Janet Hughes, MSE, CPC-A[2]
Mitchell Wendover, BA[2] | Paula Hilton, MHA[2] | Allen Lising[2]

1 Centre for Health Economics, University of York, United Kingdom
2 Xcenda, AmerisourceBergen

1. BACKGROUND

In many countries, it has become customary to use cost-effectiveness analysis (CEA) as part of a broader approach to health technology assessment (HTA) to make decisions about the adoption of new technologies. However, this approach has been more common in countries with a national or social health insurance system, where a single payer is making an adoption decision for a large group of "enrollees," and often the whole population of the country is concerned.

However, in countries like the United States (US), with many payers operating in a wide range of settings, the use of CEAs is much more complicated. It is unlikely that the results of a single study are applicable in all settings, and the interpretation and use of CEAs may require expertise that is not always available locally. While the value for money and budgetary responsibility are important in all settings, the use of CEAs by US payers and other healthcare decision makers has been limited.

Nevertheless, this situation may be changing. CEAs comprise 37% of the worldwide literature of cost per quality-adjusted life-year studies published up to 2018.[1] In addition, several groups, most notably the Institute for Clinical and Economic Review (ICER), are making CEAs more accessible to US decision makers. The objective of this study was to assess the current use of CEAs by US decision makers, the challenges that they currently face in using CEAs, and the ways in which these could be resolved.

2. METHODS

A semi-structured questionnaire (Appendix 1) was developed based on the findings of a narrative review of previous international surveys of decision makers on the use of HTA, including studies from the US.[2-4] Particular care was taken to distinguish between the use of CEAs and other activities, such as reviewing the clinical data or conducting a budget impact analysis. The survey was conducted with active decisions makers using the FormularyDecisions™ platform from August 11 to September 4, 2020. Those agreeing to participate were offered a small incentive (worth $25), and the aim was to obtain at least 100 responses.

3. RESULTS

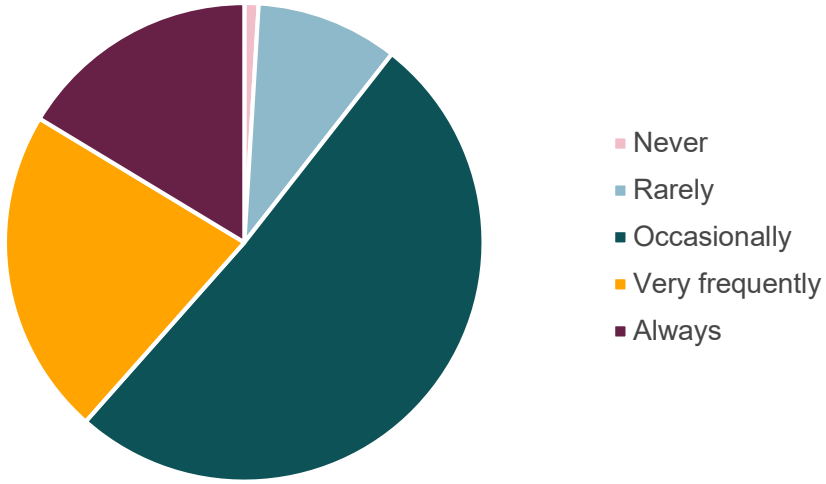
3.1 Respondent characteristics

Responses to the survey were obtained from 104 decision makers, of whom 23% worked in national organizations and 77% were regional. The main organizations represented were health plans/managed care (47%), pharmacy benefit managers (18%), academic medical centers (8%), and hospitals, health system and integrated delivery networks (21%). A total of 57% of respondents identified themselves as pharmacists (clinical, drug information, other), 15% as pharmacy or associate directors, and 12% as managers/supervisors and other (6%). They described their various roles in drug review and approval as making coverage recommendations including prior authorization criteria (43%), conducting clinical reviews (13%), preparing or presenting drug reviews (27%), voting on coverage decisions (14%), and negotiating contracts with manufacturers (3%).

3.2 Use of CEAs

The frequency of use of CEAs as part of the decision-making process for new drugs or other technologies is given in Figure 1.

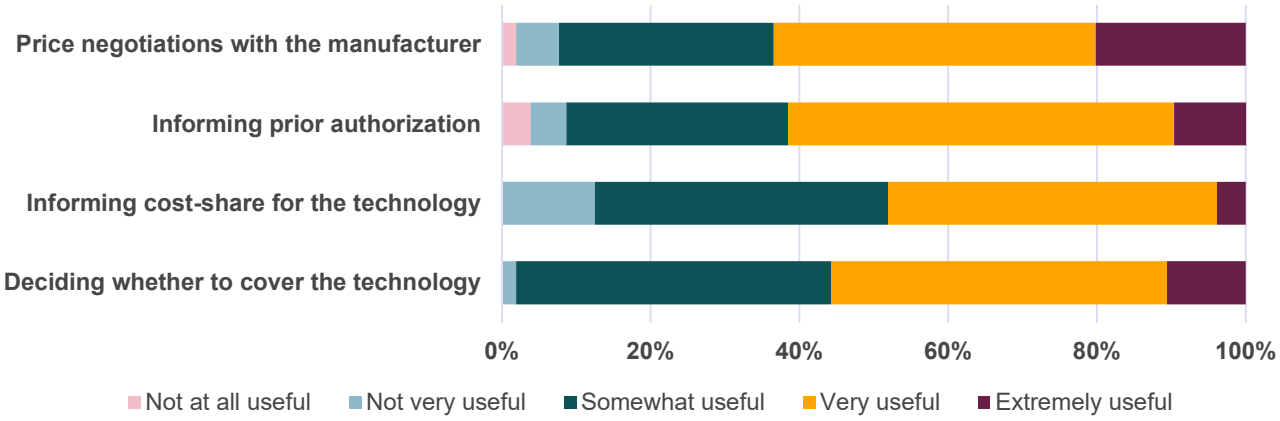
Figure 1. How Often Do You Conduct CEAs as Part of Your Decision-Making Process?



In order to conduct CEAs, respondents stated that their organization had access to a contracted vendor or subscription service (58%), a pharmacist with training in health economics (55%), an outcomes researcher/quality-of-life specialist (34%), or health economist (30%).

The ways in which respondents found CEAs useful were fairly evenly spread across the various types of decisions, as shown in Table 1.

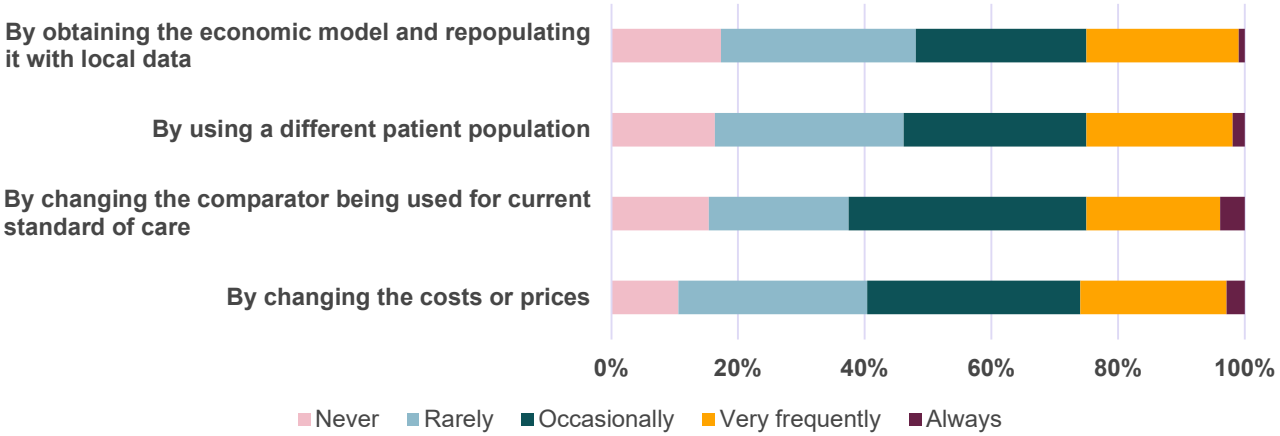
Table 1. Usefulness of CEAs by Category of Decision (N=104)



Conducting CEAs could involve conducting a study internally or making use of an external assessment. As expected, the external CEAs most often consulted—as measured by the weighted average of the Likert scale scores (maximum 5, minimum 0)—were ICER reports (3.42) and manufacturer dossiers (3.34). The ways in which respondents found these external assessments useful mirrored those in Table 1.

The use of external assessments may often require some adaptation in order to make them relevant to the local situation. The types of adaptations that respondents reported are shown in Table 2.

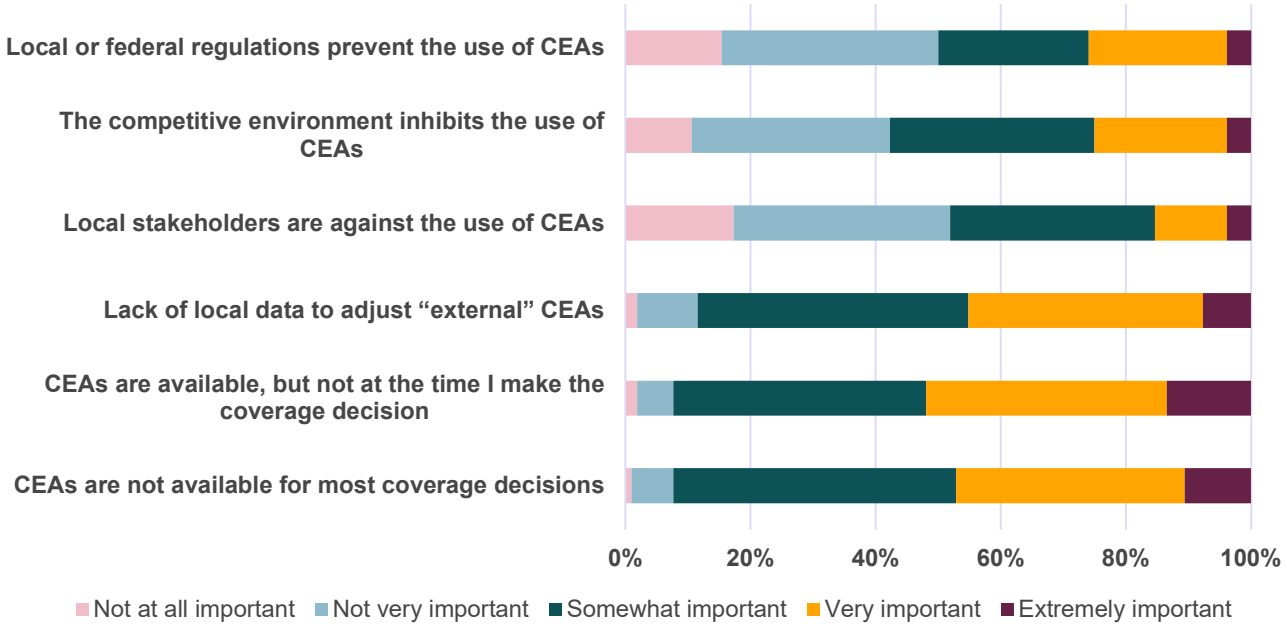
Table 2. Ways That External CEAs Are Adapted for Local Use (N=104)



3.3 Challenges in using CEAs

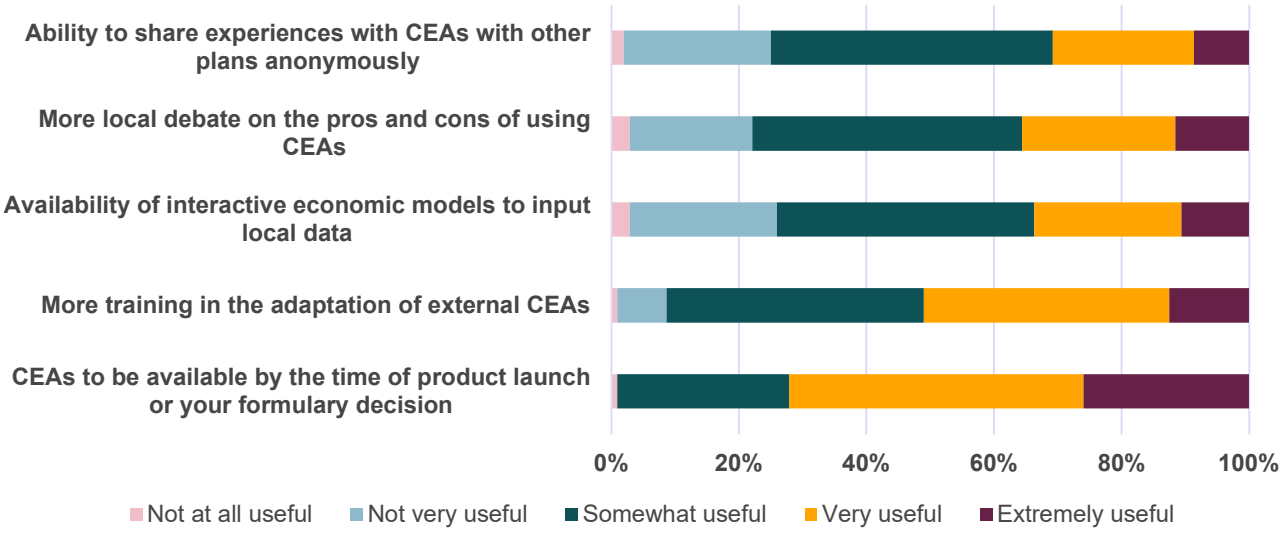
Respondents in previous surveys have mentioned a number of challenges in using CEAs in decision making. These can be classified as (i) practical challenges that can potentially be resolved, such as unavailability of CEAs or local data, or (ii) structural challenges that may be harder to address, such as legal constraints or lack of stakeholder buy-in. The responses given are shown in Table 3. These are encouraging, in that the structural challenges, in the top 3 rows of the table, appear to be the least important.

Table 3. Challenges in the Use of CEAs in Decision Making (N=104)



Finally, respondents were asked about initiatives that could be taken to facilitate their use of CEAs. As shown in Table 4, there are a number of practical changes that decision makers felt could be useful, such as making CEAs available by the time coverage decisions have to be made, making interactive economic models available, offering more training in how to adapt externally produced CEAs, and increasing the availability of local data for adapting external CEAs for local use.

Table 4. Possible Initiatives to Facilitate the Use of CEAs (N=104)



4. CONCLUSIONS

This study suggests that US payers are getting to grips with CEAs. However, there is still wide variation in the use of these analyses, with around 10% of decision makers rarely using them and only around 35%–40% using them more than occasionally. It is also important to point out that "use" of these analyses can have a number of meanings. CEAs may be used to inform the decision over whether or not to cover the technology but could equally be used to inform cost-sharing, prior authorization criteria, or price negotiations with the manufacturer.

Decision makers were consulting externally conducted analyses and adapting them for local use, rather than conducting many analyses of their own. Therefore, the use of CEAs is most likely to be increased by making these external analyses more timely, in relation to the coverage decision, and more adaptable for local use.

The main limitation of this study is that, like all surveys, it relies on self-reporting. While there is no doubt that decision makers generally consider economic factors to be important, the role of particular analyses in decision makers' deliberations is difficult to assess with a high degree of precision. It would be useful to have details on how a cost-effectiveness study impacted a particular decision. Data of this type are available from the reports of some HTA bodies, most notably the National Institute for Health and Care Excellence (NICE) in the United Kingdom.[5] However, in the US, these data are rarely publicly available because of commercial-in-competence considerations.

Recent payer activity from FormularyDecisions™ on the use of ICER reports indicates that payers are spending 23–50 minutes reviewing report sections, albeit primarily (42%) managed care/healthcare companies.[6] Along with the consistency of the responses in this study, it suggests that interest in at least consulting CEAs is becoming substantial.

Acknowledgments

The authors are grateful to Jon Campbell, Dan Ollendorf, Emily Tsiao, John Watkins, and Kai Yeung for comments on the questionnaire used for the survey.

5. REFERENCES

1. Kim DD, Silver MC, Kunst N, Cohen JT, Ollendorf DA, Neumann PJ. Perspective and costing in cost-effectiveness analysis, 1974–2018. *Pharmacoeconomics*. 2020;38(suppl A). doi:10.1007/s40273-020-00942-2

2. Brogan AP, Hogue SL, Vekaria RM, Reynolds I, Coukell A. Understanding payer perspectives on value in the use of pharmaceuticals in the United States. *J Manag Care Spec Pharm*. 2019;25(12):1319-1327.

3. Chambers JD, Chenoweth MD, Neumann PJ. Mapping US commercial payers' coverage policies for medical interventions. *Am J Manag Care.* 2016;22(9):e323-328.

4. Trosman JR, Van Bebber SL, Phillips KA. Health technology assessment and private payers' coverage of personalized medicine. *J Oncol Pract.* 2011;7(3S):18s-24s.

5. NICE. NICE technology appraisal guidance. Accessed November 2020. https://www.nice.org.uk/about/what-we-do/our-programmes/nice-guidance/nice-technology-appraisal-guidance

6. Lee J, Lising A, Tennant L. 5 years of ICER—insights and impact on payers. AMCP webinar. September 15, 2020. Accessed November 2020. https://www.amcp.org/Resource-Center/formulary-utilization-management/5-years-icer-insights-and-impact-payers

6. APPENDIX 1

SURVEY OF US PAYERS ON THE USE OF HEALTH TECHNOLOGY ASSESSMENT

Introduction

The objective of the survey is to gain information about US payers' experiences with assessing health technologies, such as drugs or devices. The term, "health technology assessment," is quite broad and encompasses activities that most payers engage in, such as reviewing clinical data and conducting budget impact assessments. The particular interest in this survey is in cost-effectiveness analysis, which implies conducting an analysis to assess whether any additional costs from adopting the new technology are justified by the benefits it provides. This analysis would be in addition to a consideration of the clinical data or an assessment of budget impact.

1. **Based on the definition above, would you say that your organization conducts cost-effectiveness analyses (CEAs) as part of the decision-making process for new drugs or other health technologies?**

□ Always

□ Sometimes

□ Never

2. **What expertise do you have available in your organization to conduct CEAs?**

□ Pharmacist with training in health economics

□ Outcomes researcher/quality-of-life specialist

□ Health economist

□ Access to a contracted vendor or subscription service

Any general comments on issues of expertise:

3. **In what ways do you think CEAs could be useful?**

	0 = Not Useful					5 = Very Useful
Deciding whether to cover the technology	0	1	2	3	4	5
Informing cost-share for the technology	0	1	2	3	4	5
Informing prior authorization	0	1	2	3	4	5
Price negotiations with the manufacturer	0	1	2	3	4	5

4. Do you ever consult CEAs conducted from outside your organization?

	Always	Sometimes	Never
ICER reports			
Manufacturer dossiers			
Reports from bodies outside of the US (eg, NICE in the UK, CADTH in Canada)			
Tufts University CEA Registry			
Other sources (please specify)			

5. If you consult CEAs from outside your organization, in what ways do you find these useful?

	Always	Sometimes	Never
To help you think through the issues			
To provide useful data on clinical effectiveness			
To provide useful data on costs			
To make a decision on the likely cost-effectiveness of the technology			
In other ways (please specify)			

Any general comments on using external analyses:

6. Do you ever adapt a CEA from elsewhere to make it more relevant to your local situation?

	Always	Sometimes	Never
By changing the costs or prices			
By changing the comparator being used for current standard of care			
By using a different patient population			
By obtaining the economic model and repopulating it with local data			
By making other adaptations			

Any general comments on making local adaptations:

7. How important do you think the following challenges are for your use of CEAs?

	0 = No Challenge					5 = Major Challenge
CEAs are not available for most coverage decisions	0	1	2	3	4	5
CEAs are available but not at the time I make the coverage decision	0	1	2	3	4	5
Lack of local data to adjust “external” CEAs	0	1	2	3	4	5
Local stakeholders are against the use of CEAs	0	1	2	3	4	5
The competitive environment inhibits the use of CEAs	0	1	2	3	4	5
Local or federal regulations prevent the use of CEAs	0	1	2	3	4	5
Other challenge not mentioned (please specify)	0	1	2	3	4	5

8. How would you rate the following initiatives in facilitating your use of CEAs?

	0 = Not Useful					5 = Very Useful
CEAs to be available by the time of product launch or your formulary decision	0	1	2	3	4	5
More training in the adaptation of external CEAs	0	1	2	3	4	5
Availability of interactive economic models to input local data	0	1	2	3	4	5
More local debate on the pros and cons of using CEAs	0	1	2	3	4	5
Ability to share experiences with CEAs with other plans anonymously	0	1	2	3	4	5
Participation in external bodies that conduct CEAs	0	1	2	3	4	5
Other initiative not mentioned (please specify)	0	1	2	3	4	5