

Value Frameworks to Set Tongues Wagging: Analysis of Opinions and Discussions on Key Value Frameworks

Katarzyna Koczula,¹ Katie Noon,² Rose Wickstead,² Wrik Ghosh,¹ Chibuzor Uchea,¹ Jeanette Kusel²

¹Costello Medical Consulting Ltd, Cambridge, UK; ²Costello Medical Consulting Ltd, London, UK

Objective

- To review and evaluate online discussions and opinions on five existing value frameworks: ICER, ASCO, MSKCC and NCCN in the US, and NICE in the UK.

Background

- With increasing global concern over the rising cost of healthcare affecting the reimbursement of novel therapies, the implementation of adequate methods to measure the relative value of these therapies is of high priority.
- In the United Kingdom (UK), the National Institute for Health and Care Excellence (NICE) has long been established to evaluate the cost-effectiveness of new health technologies.¹
- In the United States (US), no such national system exists. More recently, several institutions have developed value frameworks that aim to provide an explicit and transparent way to analyse the value of these therapies.²⁻⁵ Each of these frameworks have adopted vastly different methodologies and are yet to be fully validated.
- Since the establishment of the Institute for Clinical and Economic Review (ICER), value frameworks have been the subject of widespread debate amongst a range of stakeholders, much of which has taken place online in discussion forums and blogs.

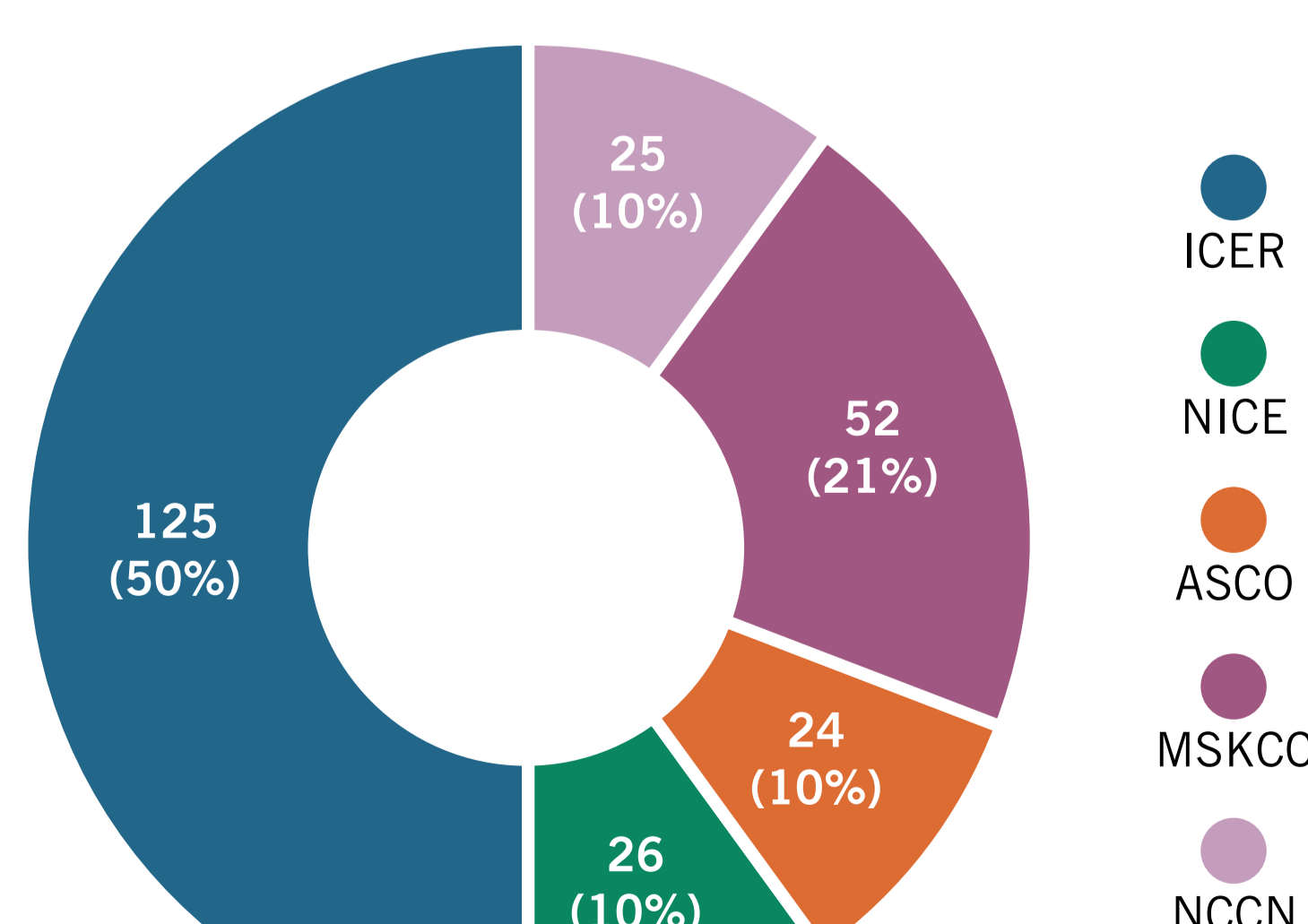
Methods

- A pragmatic literature review was conducted using Google between the 2nd and 12th January 2017. Search terms included the full names of the five value framework organisations of interest and their common abbreviations (ICER, American Society of Clinical Oncology [ASCO], Memorial Sloan Kettering Cancer Centre [MSKCC], National Comprehensive Cancer Network [NCCN] and NICE), alongside the phrase 'value framework'.
- The first 60 results for each search term were screened for relevance; eligible records included journal articles, blogs and open letters that reported opinions or comments on the relevant value frameworks. Websites of the organisations themselves, or records containing self-directed promotion or evaluation were excluded.
- Individual opinions and comments were extracted from each record, classified as positive, negative, or neutral, and categorised according to four pre-designated themes: transparency, patient-focus, methodology, and impact.

Results

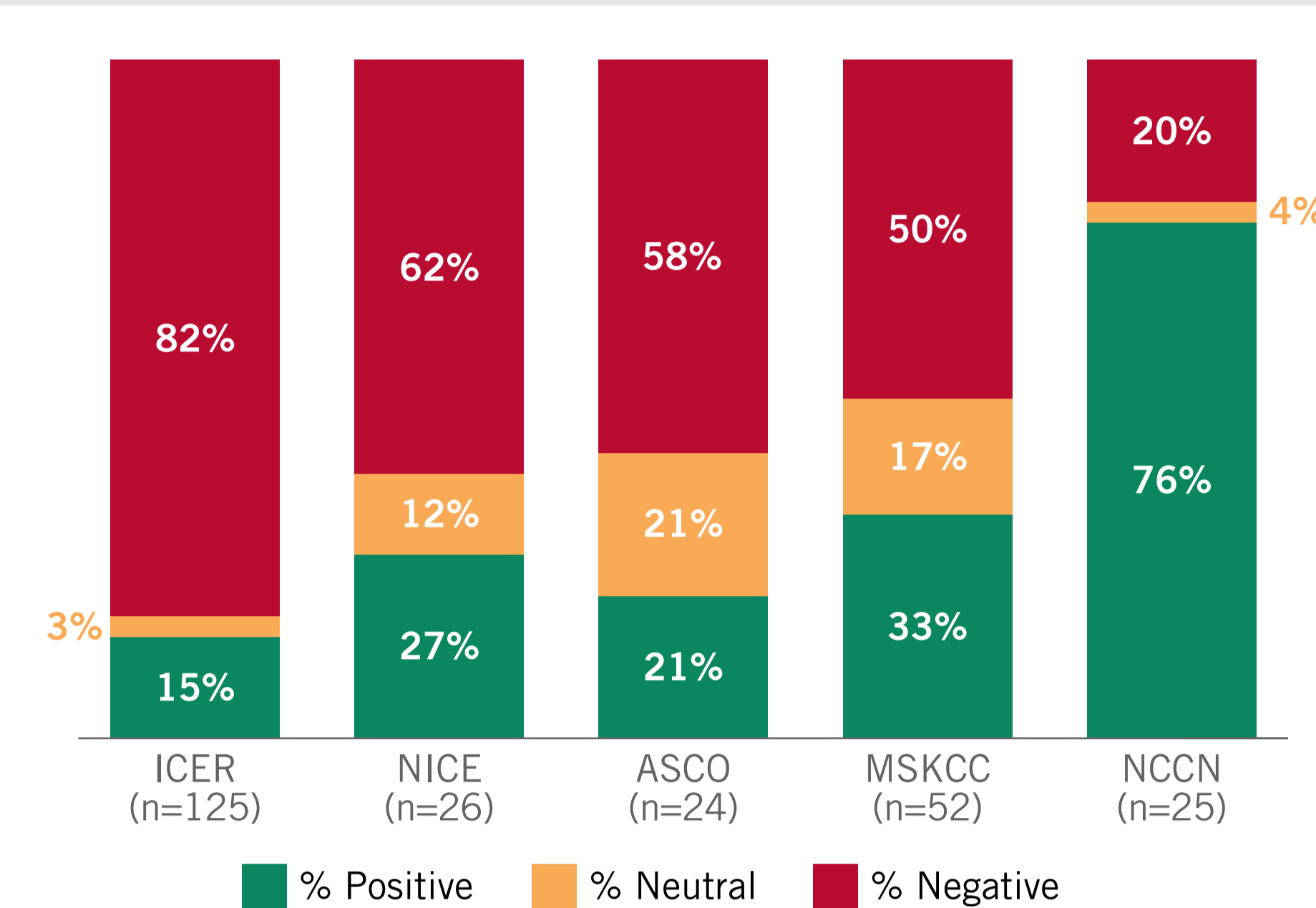
- A total of 67 relevant records across the five value frameworks were included from the literature review, providing 252 opinions for analysis.
- The largest proportion of opinions identified (125/252; 50%) were attributable to ICER (Figure 1). Of these, 82% (102/125) were classified as being negative, rendering ICER to be associated with the greatest proportion of negative online opinions of all the value frameworks investigated (Figure 2).
- Relatively few online discussions were identified for the NICE, ASCO, and NCCN value frameworks (Figure 1). Similar to ICER, a large proportion of the opinions identified for NICE were negative (16/26; 62%). In contrast, the NCCN framework was associated with the largest proportion of positive and neutral comments (80%; 20/25) (Figure 2).
- ICER was discussed by a wide range of stakeholders, including healthcare professionals, academics, pharmaceutical industry representatives, patients and patient representatives (Figure 3). Common criticisms

Figure 1 | Proportion of total opinions identified for each of the value frameworks



ASCO: American Society of Clinical Oncology; ICER: Institute for Clinical and Economic Review; MSKCC: Memorial Sloan Kettering Cancer Centre; NCCN: National Comprehensive Cancer Network; NICE: National Institute for Health and Care Excellence.

Figure 2 | Proportion of positive, negative, and neutral opinions for each value framework



ASCO: American Society of Clinical Oncology; ICER: Institute for Clinical and Economic Review; MSKCC: Memorial Sloan Kettering Cancer Centre; NCCN: National Comprehensive Cancer Network; NICE: National Institute for Health and Care Excellence.

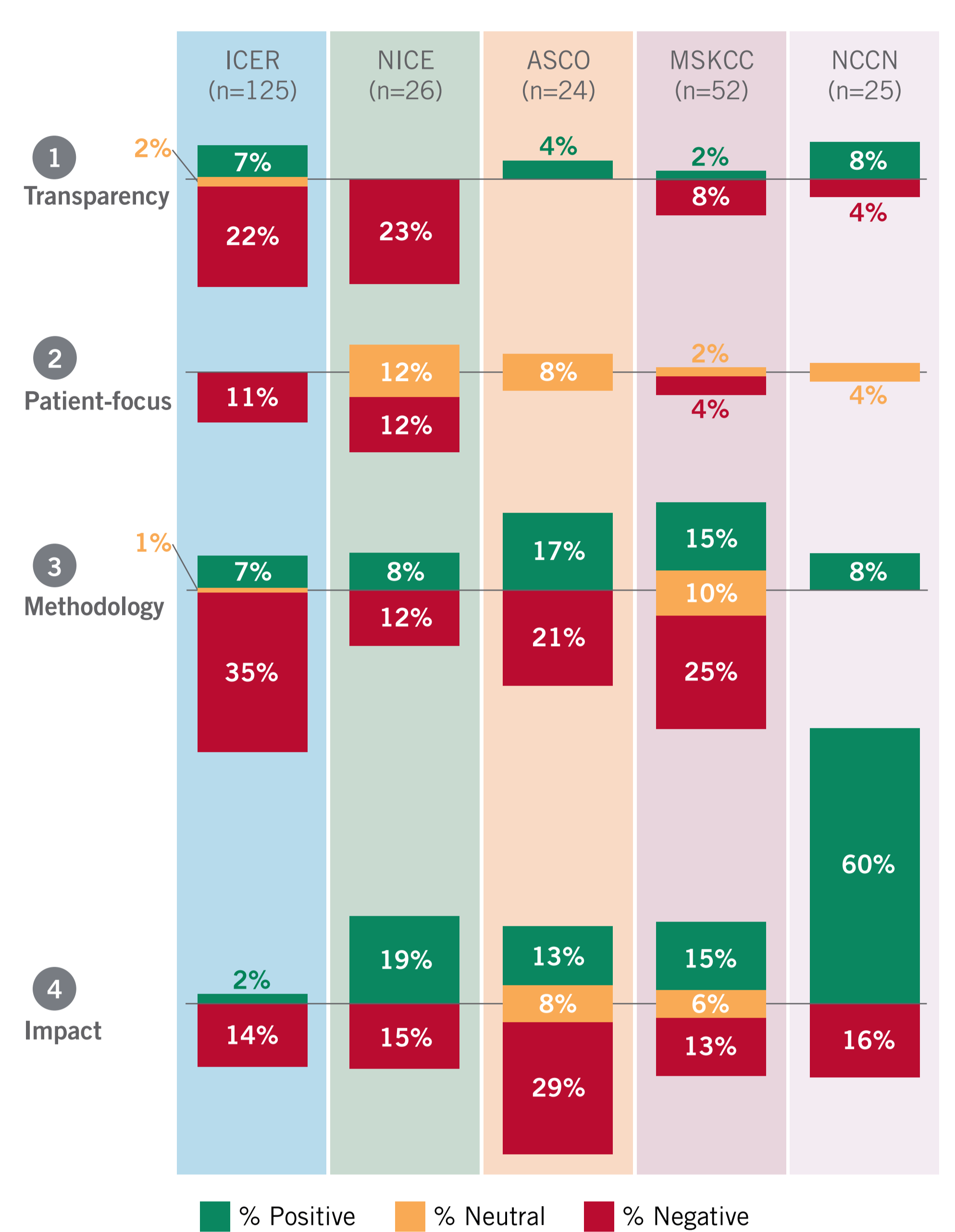
of ICER were related to a lack of transparency and reproducibility of their economic models, and a need for more patient-centered evidence.

- Based on opinion topic, the methodologies employed by each value framework were the most frequently discussed feature (38% of all opinions identified). Regarding the impact of the value frameworks, NCCN was associated with a much higher proportion of positive comments (60%) compared with the other frameworks (all <20%) (Figure 4).

Discussion

- Numerous positive and negative comments were identified for all five value frameworks across each of the four themes, highlighting the controversial nature of these emerging tools.
- ICER's framework proved to be both the most widely discussed and most controversial of the value frameworks. This may be a result of ICER's open request for feedback in July 2016, to which they have since published online articles in defense of the criticism received.⁶
- NCCN appeared to be the most positively received framework, which may be linked to their reputation for producing evidence-based clinical guidelines.⁷
- Interestingly, the impact and usefulness of the outputs from each value framework were widely discussed, with varying proportions of positive and negative comments identified across all frameworks highlighting the ongoing debate surrounding the future utility of these tools.

Figure 4 | Categorisation of opinions on each value framework by theme



ASCO: American Society of Clinical Oncology; ICER: Institute for Clinical and Economic Review; MSKCC: Memorial Sloan Kettering Cancer Centre; NCCN: National Comprehensive Cancer Network; NICE: National Institute for Health and Care Excellence. Percentages are calculated as a proportion of the opinions identified for each value framework, respectively.

- Limitations of this study include the use of Google only, subjective opinion selection and non-systematic screening of relevant websites.

Conclusions

- Value frameworks are a topic of great discussion and debate online, with varying opinions on their methodology, impact, transparency and patient-focus from a wide range of stakeholders.
- ICER stands out as the most widely discussed value framework, and may be considered the most controversial.

Figure 3 | Selected opinions on ICER



CEO: Chief Executive Officer; ICER: Institute for Clinical and Economic Review; PhRMA: Pharmaceutical Research and Manufacturers of America. Please note that the above opinions have been self-selected to demonstrate the variety of online opinions identified for ICER and do not represent the most commonly identified views.

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