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Background

- Health economics and outcomes research (HEOR) is relevant to clinical decision-making, particularly in oncology. Cancer treatments are often costly, time-consuming, and exacting to a patient's well-being. Additionally, the treatment landscape can be crowded and is continually evolving.
- HEOR can inform clinical practice by helping clinicians choose the most effective treatment both in terms of costs and patient outcomes.
- However, HEOR is not taught in medical or nursing schools,¹ and clinicians report difficulty accessing this research.^{2,3}
- Although most patients cite clinicians as a source of information for treatment options and effectiveness, only 10% of clinicians who treat chronic or rare conditions described themselves as being very familiar with major elements of HEOR, such as comparative effectiveness research.²

Objective

- The aim of this research was to quantify clinician exposure to HEOR in an accessible setting by examining posters and publications from the American Society of Clinical Oncology (ASCO) annual meeting from the last 10 years.

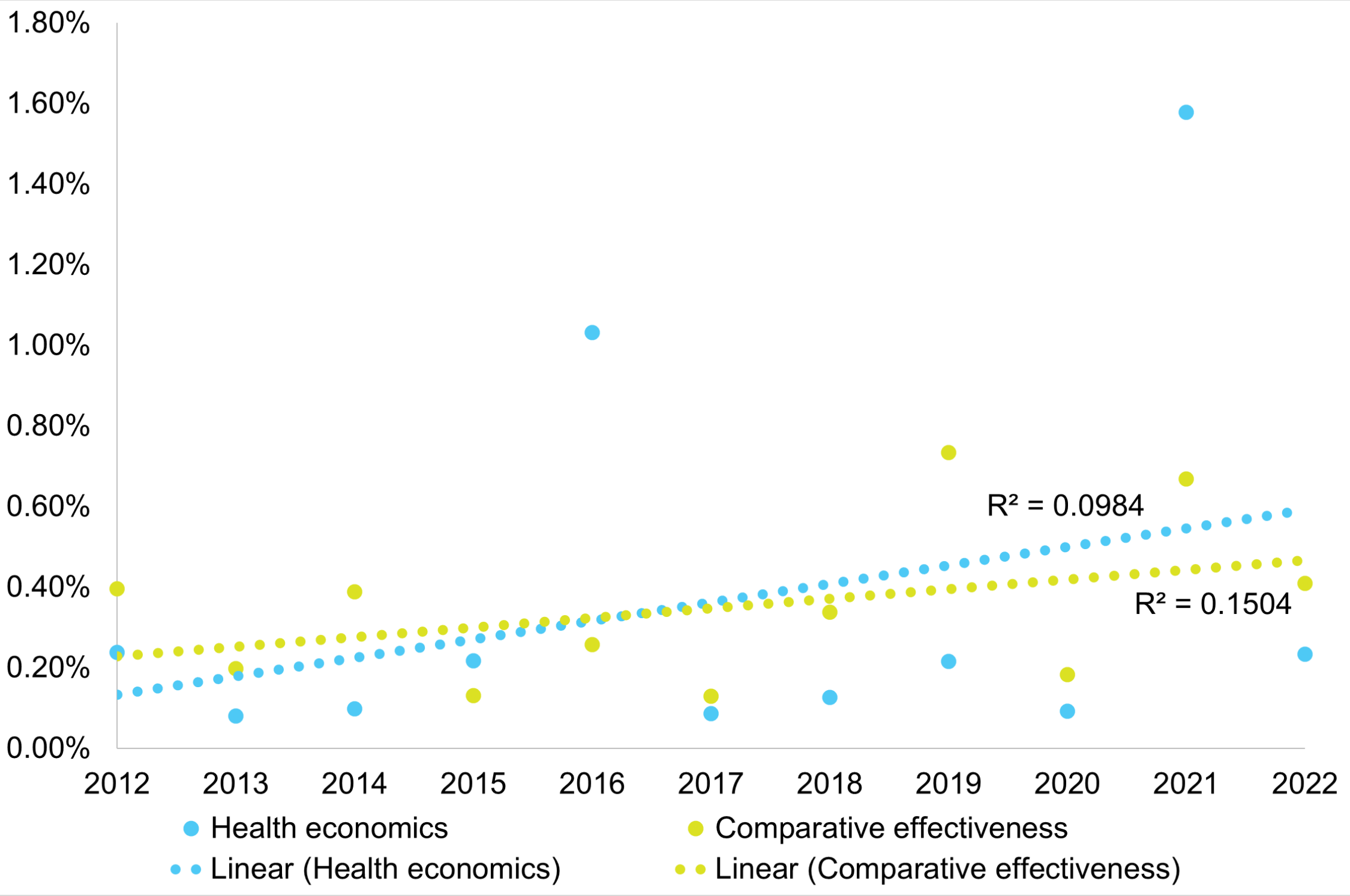
Methods

- ASCO annual meeting posters and publications from 2012 through 2022, indexed in the ASCO meetings online database (<https://meetings.asco.org>), were examined to obtain a general understanding of trends over time.
- Search terms included "health economics" (HE) and "comparative effectiveness" (CE).
- Subsequent analyses explored specific subtopics under these umbrella terms:
- HE: search terms included "budget impact," "cost-utility," and "cost-effectiveness."
- CE: search terms included "network meta-analysis" (NMA), "indirect treatment comparison" (ITC), and "matching-adjusted indirect comparison" (MAIC).

Results

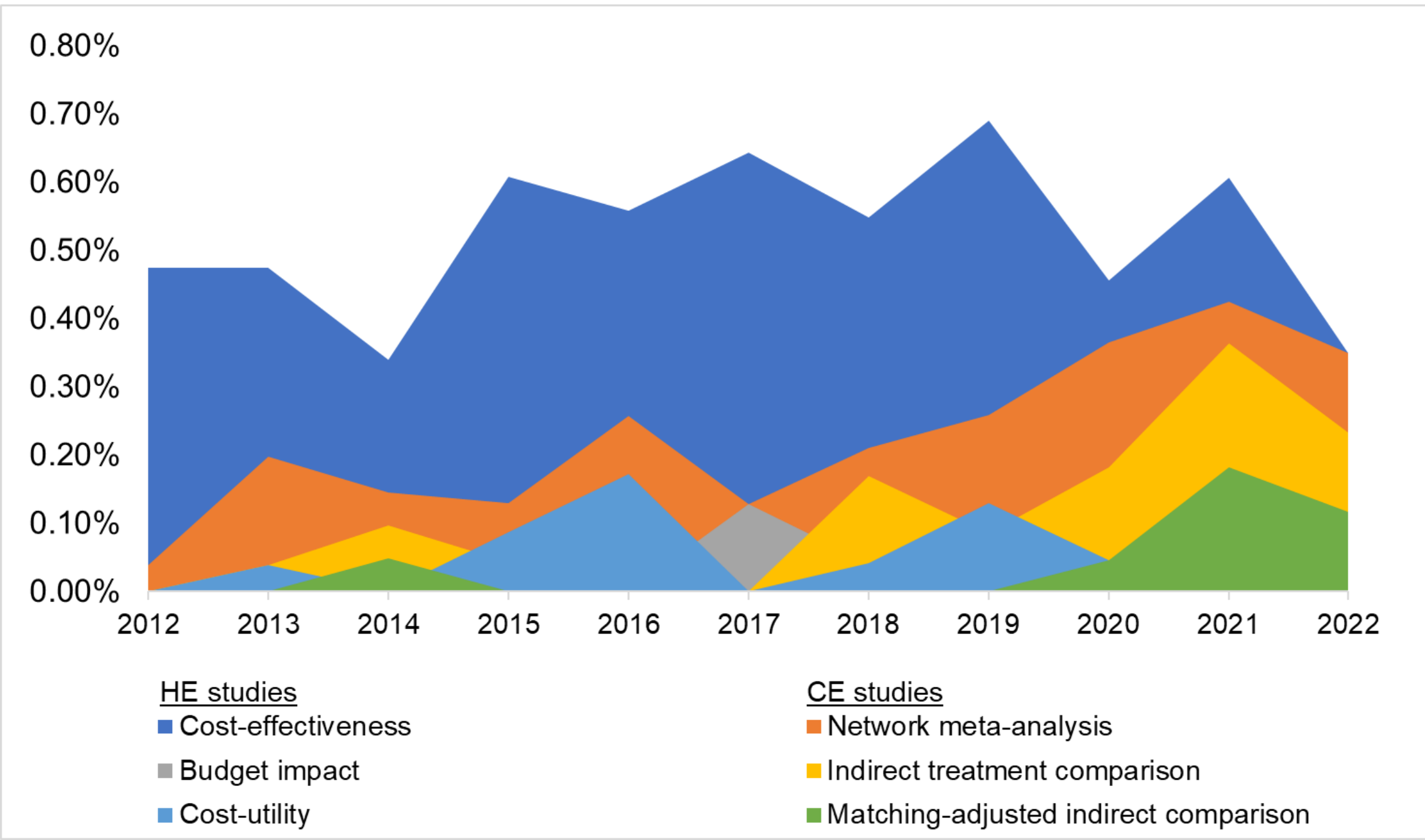
- From 2012 to 2022, there were 27,744 ASCO annual meeting posters and publications. Overall, only 0.32% and 0.35% utilized the terms HE and CE, respectively.
- An initial examination of trends over time showed that less than 2% of ASCO annual meeting posters and publications were HEOR focused, with little change between 2012 and 2022 (Figure 1).

Figure 1. HE and CE posters and publications at ASCO



- The results of the HE and CE subtopic analyses also indicated that the proportion of HE publications largely remained stable from 2012 to 2022 (2012 to 2017: 0.6% [n=83]; 2018 to 2022: 0.6% [n=88]) (Figure 2).
- However, the subtopic analyses revealed an increasing trend for CE analyses, with the number of relevant publications nearly tripling in the second half of the 10-year period (2012 to 2017: 0.2% [n=28]; 2018 to 2022: 0.6% [n=82]).

Figure 2. HE and CE subtopic posters and publications at ASCO

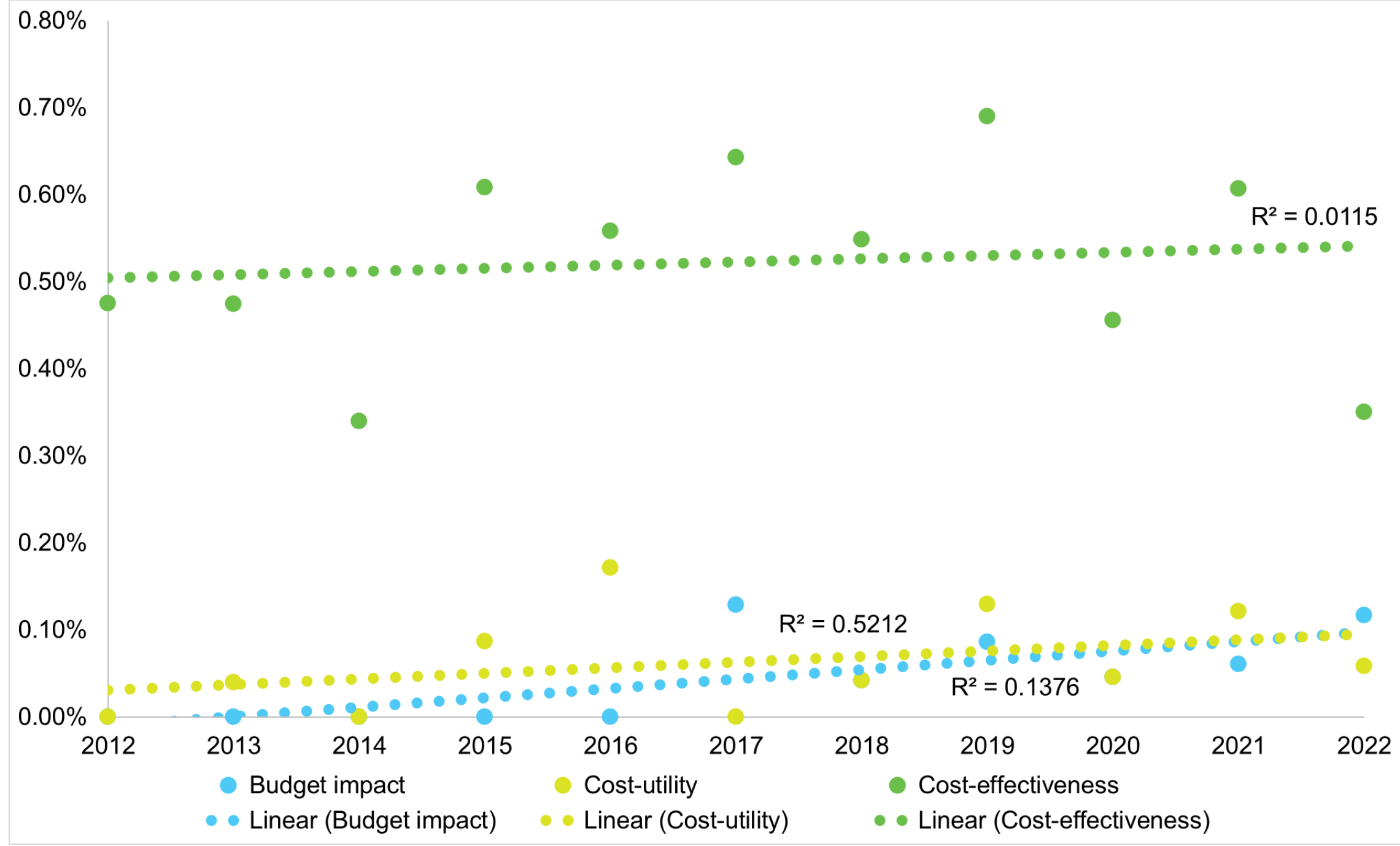


Abbreviations: CE, comparative effectiveness; HE, health economics

HE analysis

- Cost-effectiveness analyses were the most common HE publication, representing a substantially higher proportion of analyses than budget impact models and cost-utility analyses (mean overall percentage: 0.5%) (Figure 3).
- Less than 0.1% of HE publications included budget impact or cost-utility analyses (mean overall percentage: 0.05% and 0.06%, respectively).

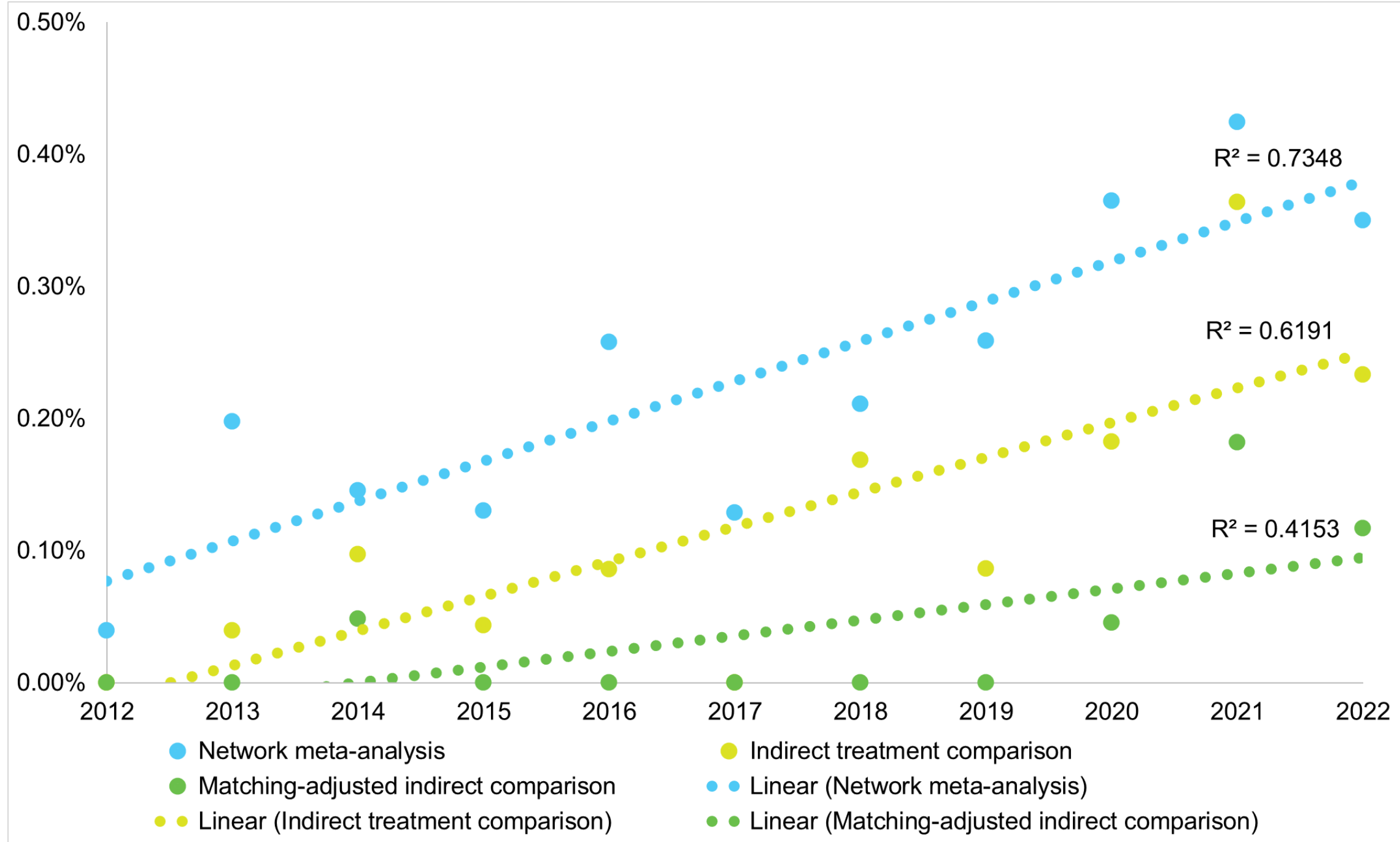
Figure 3. HE subtopic posters and publications at ASCO



CE analysis

- NMAs were the most common type of CE analysis (mean overall percentage: 0.23%) (Figure 4).
- From 2012 to 2022, there were almost six times as many NMA publications as MAICs (0.23% vs 0.04%) and nearly twice as many NMAs as ITCs (0.23% vs 0.12%).

Figure 4. CE subtopic posters and publications at ASCO



Discussion

- Although HEOR can drive value-based care and improve patient outcomes in oncology, the results of this study suggest that limited information in this area has been presented at a large, representative clinical congress over the past 10 years.
- Some types of HEOR publications, such as CE research, appeared to be on the rise at the ASCO annual meeting, but still represented less than 1% of all posters and publications.
- Given these low percentages, the likelihood of a clinician seeing HEOR posters or publications at a conference in any given year is incredibly low.
- Increasing access to HEOR at clinical conferences is especially important because more than 75% of surveyed clinicians (n=750) agreed that this research can improve the quality of patient care, yet over 33% reported a lack of research training.⁴
- To meet this need, the National Cancer Institute Division of Cancer Control and Population Science recommended in 2022 that HE symposia be offered as part of cancer treatment society meetings.¹
- A coordinated effort to bring clinicians and health economists together for focused meetings that promote collaboration can be facilitated by professional organizations such as ASCO,¹ potentially in partnership with ISPOR.

Conclusions

- Although clinicians report that HEOR can improve the quality of patient care, many lack training in this expertise and are not exposed to relevant data and findings at clinical conferences.
- HEOR professionals should expand their dissemination efforts by considering ways in which they can present their research at clinical congresses, with a focus on the clinical implications of their findings.

References

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