

Pre-Approval Information Exchange (PIE) in the US. Trends Following the Passage of the PIE Act: Where Are We Now?

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Introduction

PIE is information that manufacturers can share with healthcare decision-makers (e.g., payers) before FDA approval of a new product or indication.¹ Interest in PIE has grown during recent years due to a number of events including the release of FDA guidance on PIE in June 2018¹ and the PIE Act becoming law in the US in December 2022.² More recently, Version 5.0 of the Academy of Managed Care Pharmacy (AMCP) Format, which includes additional guidance on PIE, was introduced in April 2024.³

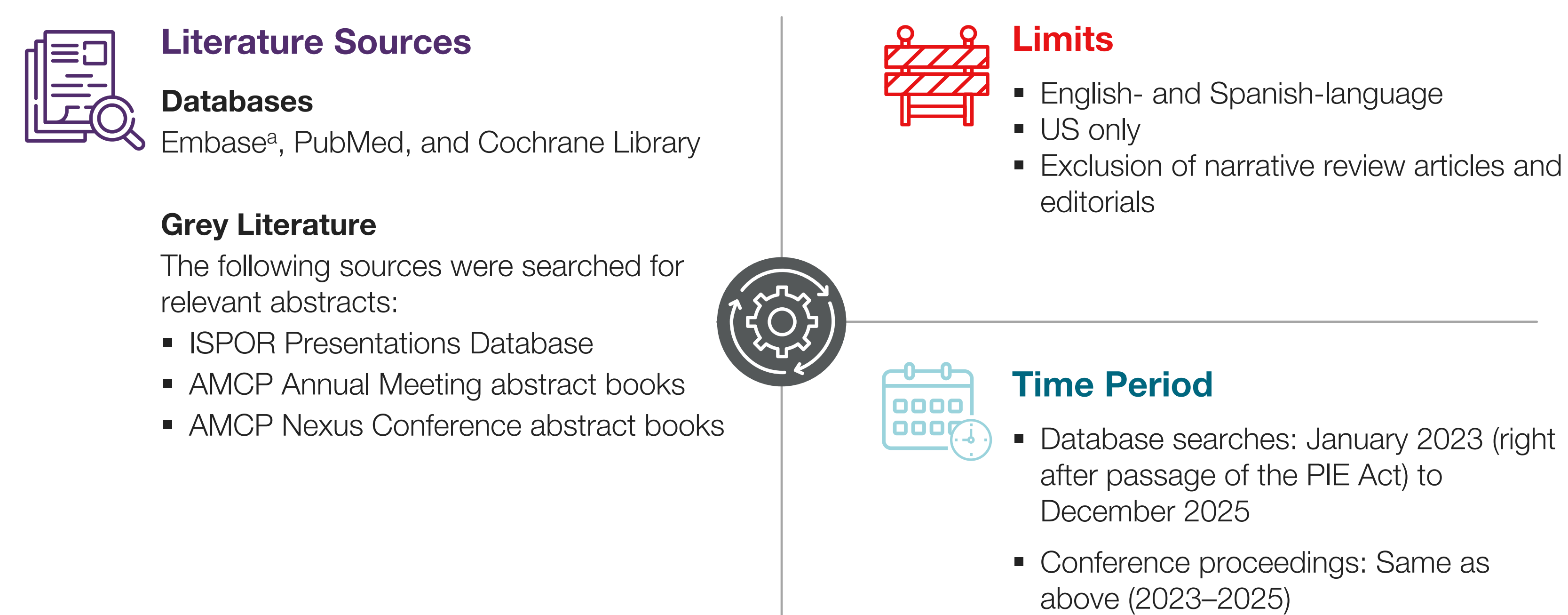
Objectives

The main objective of this targeted literature review (TLR) was to explore trends in PIE since the passage of the PIE Act (2023–2025) and compare them with trends from 2017 to 2022, when PIE was guided by FDA recommendations.

Methods

A TLR was conducted in PubMed, Embase, and Cochrane using keywords (e.g., pre-approval, information, exchange) related to PIE in the US (Figure 1).

Figure 1. TLR Data Sources and Limits



^a Conference proceedings were searched as part of the Embase searches, since this database indexes conferences. Key conferences were also checked manually with grey literature searches. Abbreviations: AMCP = Academy of Managed Care Pharmacy; Embase = Excerpta Medica Database; ISPOR = The Professional Society for Health Economics and Outcomes Research; PIE = pre-approval information exchange; TLR = targeted literature review

Abstracts were screened to identify those containing or likely to contain information on PIE; those deemed unlikely to be relevant were excluded. Full-text articles or posters were then reviewed for all potentially relevant abstracts, and those without relevant PIE information were excluded.

Results

Healthcare decision-makers are interested in PIE for expedited FDA approval pathways, rare diseases, cell and gene therapies, and oncology products.⁴⁻⁷

A 2024 web-based survey of healthcare decision-makers (N=41) reported that 66% noted that PIE is important or extremely important for products under expedited approval pathways by the FDA.⁶ In addition, 49% felt that PIE would accelerate patient access to products for oncology, rare diseases, and cell and gene therapies.⁶ Similarly, in a 2022 double-blind, web-based survey, healthcare decision-makers (N=17) ranked oncology and rare diseases as the second and third most interesting therapeutic areas for PIE.⁴ Finally, a 2025 online survey of healthcare decision-makers (N=18) rated PIE as very to extremely important for orphan drugs and cell and gene therapies (78%).⁷

When exploring changes before versus after the passage of the PIE Act using an earlier TLR, similarities and differences were identified

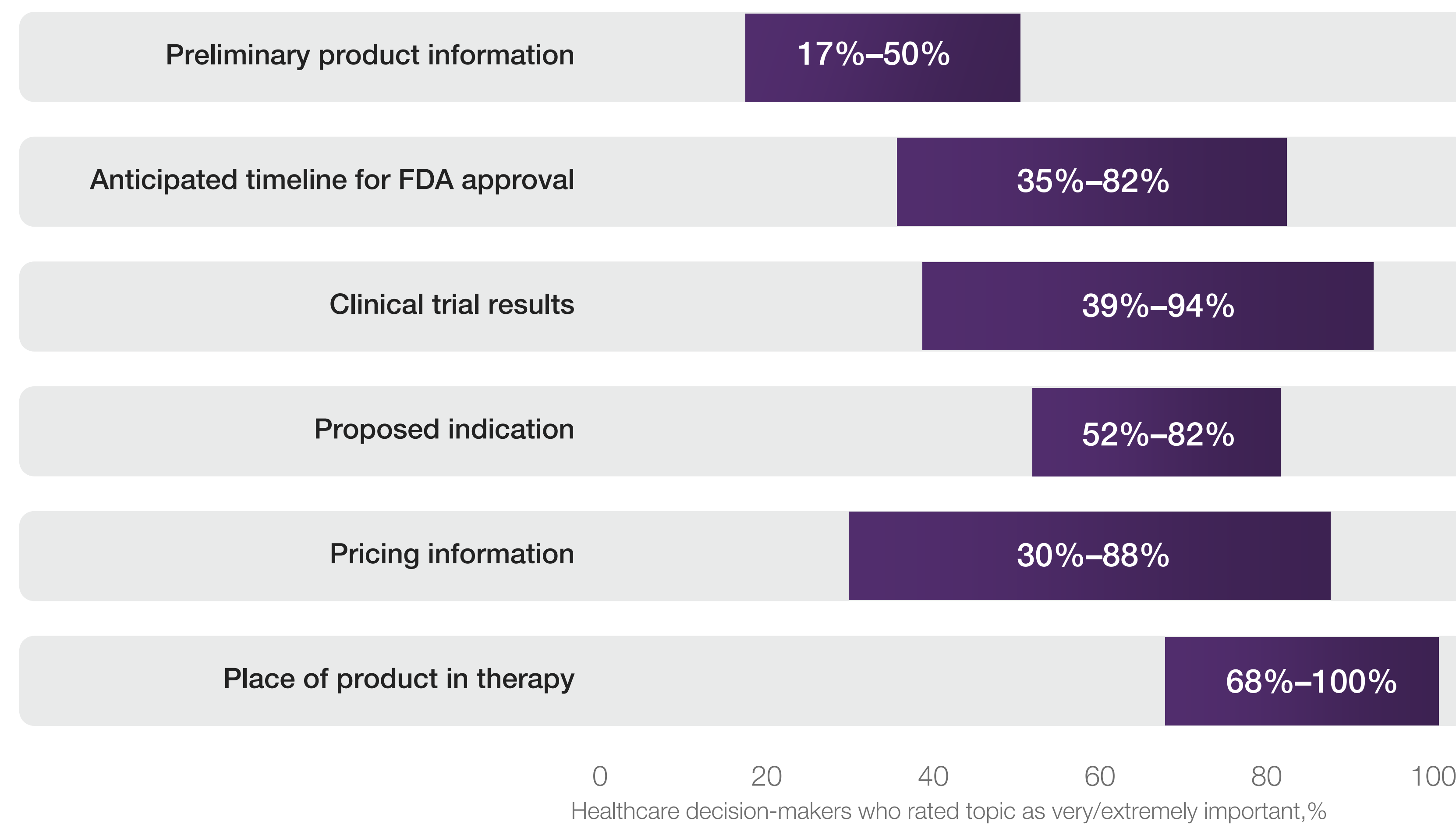
Since no studies that compared outcomes before and after the passage of the PIE Act were identified in the current TLR, an earlier TLR was used to explore changes before versus after the passage of the PIE Act.^{8,9}

The most important pieces of information that are shared during PIE have not changed since the passage of the PIE Act, but the key information may vary by product category and approval status

Across surveys from 2017 to 2025, healthcare decision-maker ratings of the most important information manufacturers should share for PIE included the product's place in therapy, proposed indication, and clinical trial results (Figure 2).^{4,5,7,10-13}

Results (continued)

Figure 2. Most Important Information to Share for PIE Rated by Healthcare Decision-makers



Abbreviation: PIE = pre-approval information exchange

Interestingly, clinical disease burden (33%–50%) and healthcare resource utilization (22%–50%) were identified as important topics only in surveys published after the passage of the PIE Act (2024–2025), while other topics (e.g., pricing, clinical trial results) were rated similarly both before and after its enactment.^{4,5,7,9,13} Because the FDA guidance and the PIE Act specifically mention including information on pricing and clinical trial results, but not disease burden and healthcare resource utilization,^{1,2} the increased importance of disease burden and healthcare resource utilization after the passage of the PIE Act may reflect an evolution in the types of information that manufacturers share during PIE engagements. However, in line with the results of an earlier TLR,⁹ the current review did not identify information about which types of PIE are most important to manufacturers, making it difficult to verify this observation.

More recently, it has become apparent that the most important PIE to share with healthcare decision-makers may vary by product category and approval status (e.g., add-on indication, accelerated/fast-track approval status).^{6,13-16} For certain products, like cell and gene therapies and products for rare diseases, healthcare decision-makers may value a broader range of information for PIE (e.g., disease overview, treatment landscape) in addition to commonly prioritized topics (e.g., product indication, pricing, clinical trial results, FDA approval timeline).^{15,16}

The PIE Act has not changed when healthcare decision-makers prefer to receive PIE.

Healthcare decision-makers still prefer to receive PIE 4 to 12 months before anticipated FDA approval.^{6-8,13,14,16,17} For example, an online survey conducted from 2018 to 2020 reported that the majority of healthcare decision-makers preferred to receive PIE 4 to 12 months before FDA approval during 2020.¹⁷ Similarly, a 2024 online survey of healthcare decision-makers (N=20) found that most preferred to receive PIE either 0 to 6 (45%) or 6 to 12 months before launch (40%).¹³ In addition, a 2023 double-blind web-based survey of healthcare decision-makers (N=45) reported that most (71%) preferred to receive PIE within 6 months before FDA approval, although nearly a quarter of healthcare decision-makers (24%) preferred receiving PIE 7 to 12 months before approval.¹⁴ The lack of change over time may not be surprising since the FDA guidance and PIE Act do not give specific recommendations regarding exactly when PIE can be communicated prior to approval.^{1,2}

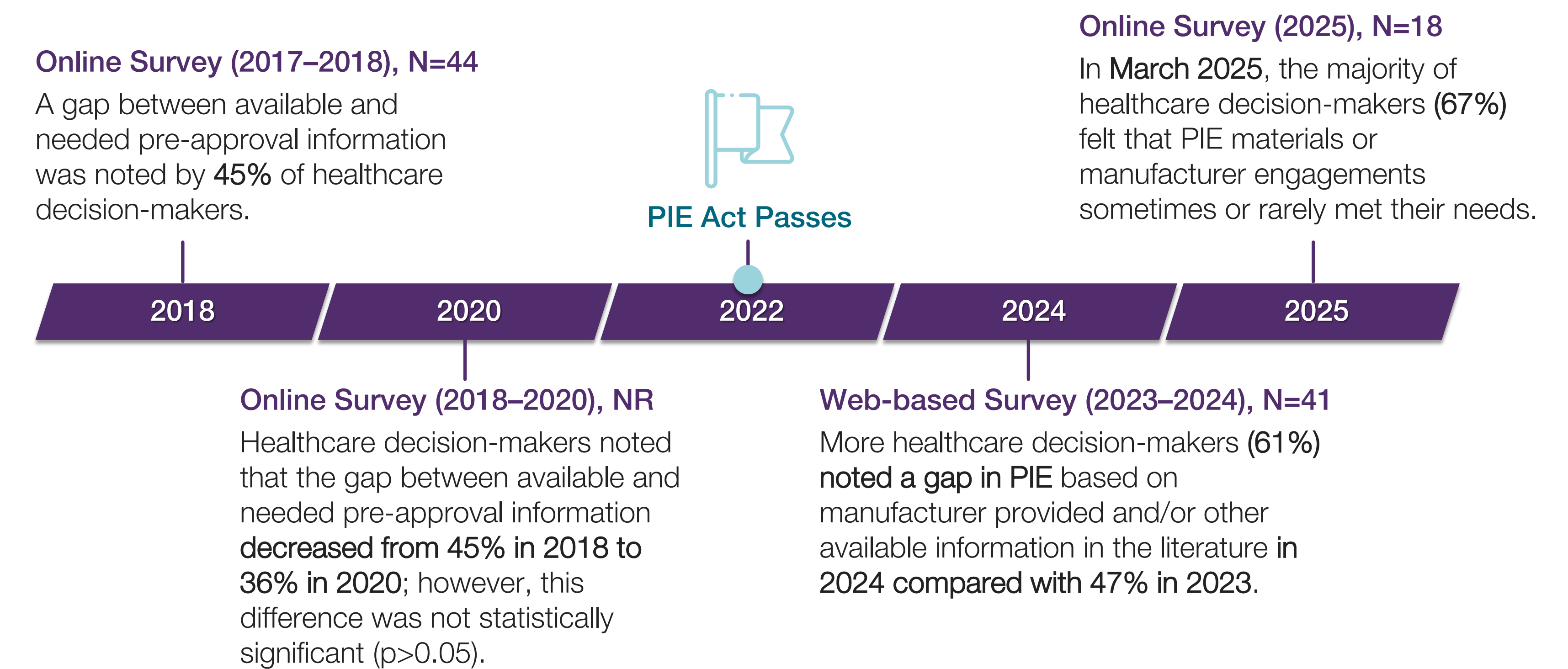
The PIE Act has not changed the proportion of healthcare decision-makers that receive an unsolicited pre-approval dossier.

The proportion of healthcare decision-makers receiving an unsolicited pre-approval dossier from a manufacturer appeared to be similar before and after the PIE Act (50%–60%).^{18,19} In a double-blind web-based survey of healthcare decision-makers from 2023 (N=45), 54% received pre-approval dossiers in an unsolicited manner frequently or sometimes.¹⁹ Similarly, an online survey reported that the frequency of healthcare decision-makers (N=44 for 2018; N=47 for 2019) who always, frequently, or sometimes received an unsolicited pre-approval dossier from a manufacturer was 60% in 2019 and 50% in 2018.¹⁸ Together, the data suggest that manufacturers may not be sharing unsolicited pre-approval dossiers more frequently since the passage of the PIE Act. The observed trend suggests that the legislative safe harbor provided by the PIE Act²⁰ has not significantly increased the unsolicited (i.e., proactive) sharing of pre-approval dossiers by manufacturers. Unfortunately, no recent data from manufacturers were available to confirm this trend.

The pre-approval information gap may be widening.

Up to two-thirds of healthcare decision-makers noticed a gap in available PIE (47%–67%) in surveys after the PIE Act, although surveys from before the PIE Act suggested that this gap was closing (Figure 3).^{7,11,17,19,21,22} Overall, recent evidence suggests that healthcare decision-makers feel that the pre-approval information gap may be widening.

Figure 3. Reported Gaps in Available PIE Over Time



Abbreviations: NR = not reported; PIE = pre-approval information exchange

Conclusions

The passage of the PIE Act does not seem to have changed which types of PIE are most important to healthcare decision-makers or when they prefer to receive it. However, studies published since the passage of the PIE Act suggest that the importance of specific PIE topics may vary by product category and approval status. Unfortunately, significant gaps in the literature exist: no studies that compared outcomes before and after the passage of the PIE Act and no studies covering the manufacturers' perspective were identified in our TLR.

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