

Background

- Guidelines recommend Human Epidermal Growth Factor Receptor 2 (HER2) testing for all newly diagnosed breast cancer patients, as it informs treatment decisions.¹
- With the increasing availability of HER2-low targeted therapies for patients with metastatic disease, it is crucial to understand real-world testing and treatment patterns in community oncology settings.
- The partnership between Ontada® and The US Oncology Network® enables a unique learning health system approach to using real-world data and targeted clinician education to evaluate and improve guideline-concordant oncology care delivery in practice.^{2,3}

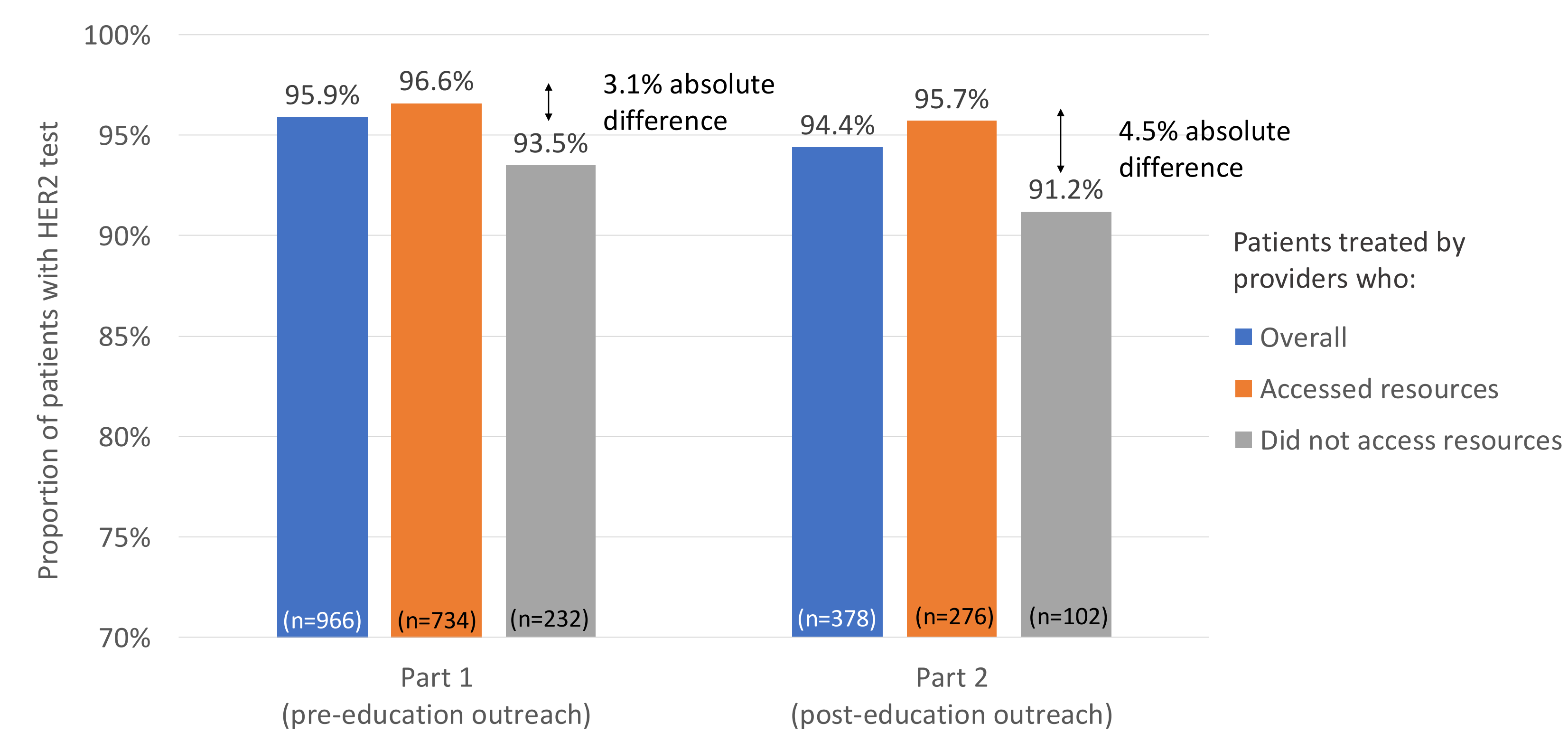
Objective

To evaluate how a learning health system approach in community oncology, leveraging real-world data-informed, evidence-based educational outreach, supports the adoption of updated guidelines for HER2 testing and HER2-low treatment.

Results

- The education outreach group was comprised of 4,536 providers who voluntarily engaged with educational resources within seven months of launch; providers not engaging with resources served as the comparator.
- HER2 testing was nearly ubiquitous before and after educational initiatives, 96% (n= 966) and 94% (n=378), respectively (Figure 2).
- Receipt of guideline-concordant therapy increased from 62% (n=236/292) to 71% (n=102/130) for HER2 low patients treated by providers in the education outreach group but did not change in the comparator group (63% pre- and 64% post-initiative; Figure 3).

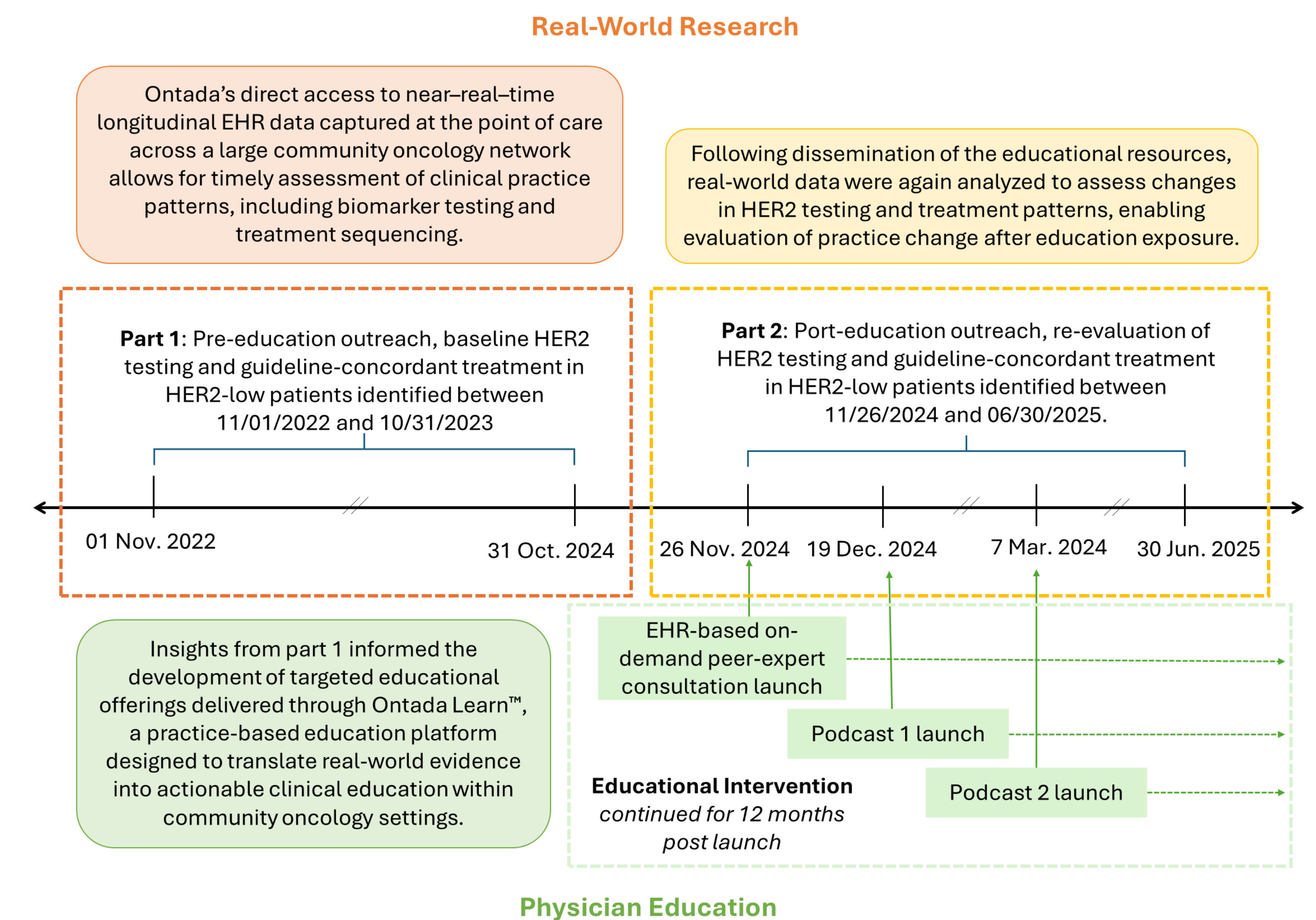
Figure 2: HER2 testing pre- and post- education outreach



Methods

- The program design integrated a physician educational initiative and real-world data (RWD) studies of structured electronic health record (EHR) data from patients diagnosed with metastatic breast cancer (mBC) and treated in community oncology practices using the iKnowMed EHR. (Figure 1)
- EHR data were used to characterize HER2 testing and treatment trends – including concordance to NCCN guidelines⁴ – before and after the educational initiative.
- The education initiative consisted of an EHR-based, on-demand peer-expert consultation and two podcasts that reported on the RWD testing and guideline-concordant treatment results.

Figure 1: Project design



Conclusions

A targeted educational initiative that integrated RWD insights improved concordance with national treatment guidelines for HER2-low mBC patients in a community oncology setting.

This program demonstrated that real-world data can be used to efficiently inform and assess the effectiveness of educational initiatives on clinical behavior.

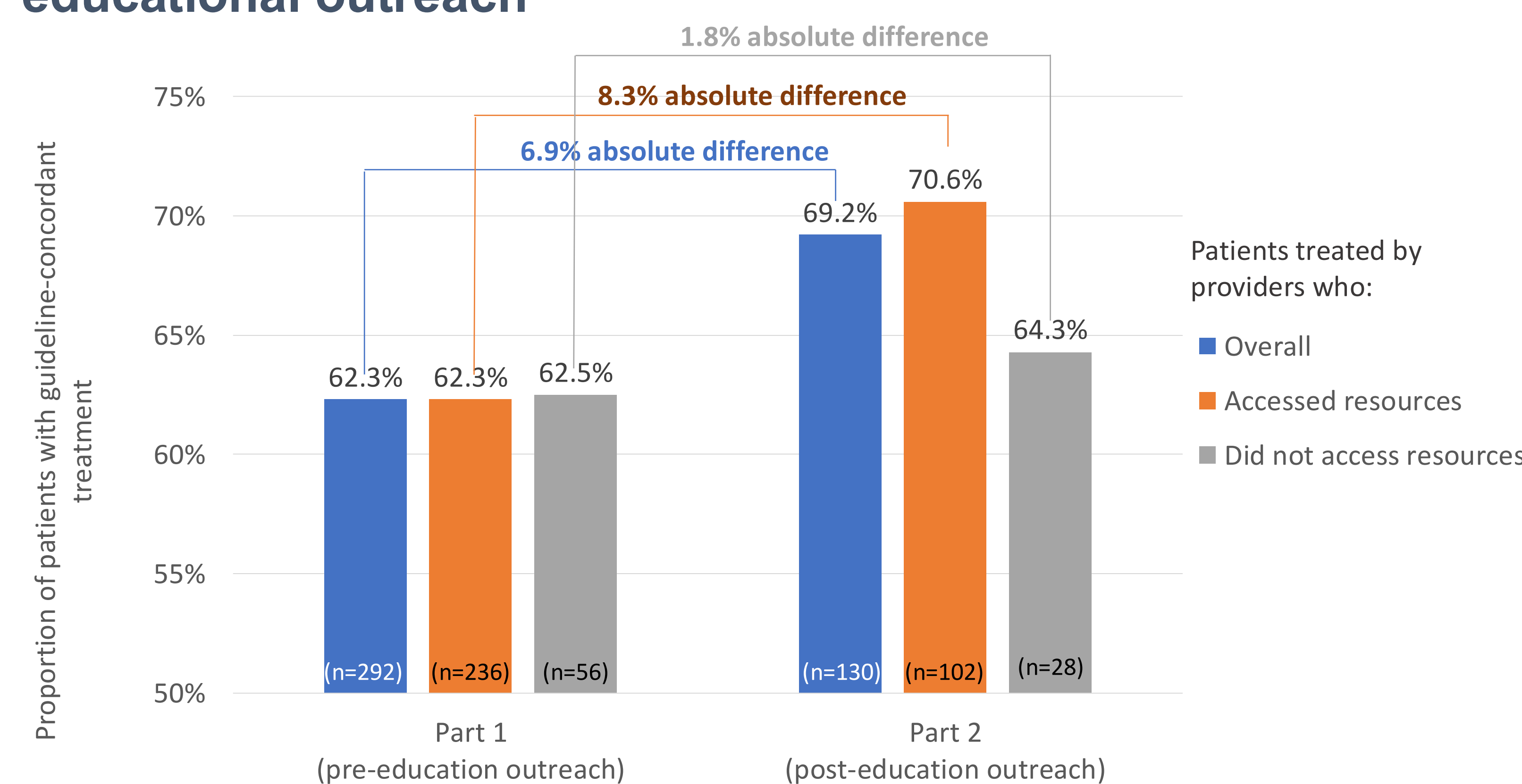
Leveraging RWD and strategic quality improvement initiatives can bridge the gap between evolving guidelines and clinical practice, positively influencing provider behavior and accelerating knowledge translation to optimize patient outcomes.

This closed-loop design, using real-world data to identify gaps, inform education, and subsequently measure impact, represents a scalable model for generating evidence and translating knowledge in community oncology through a learning health system approach.

Limitations

- This was a descriptive analysis by design and was not intended for inferring causality of educational interventions. It is possible that physicians who interact with educational resources are fundamentally different from those who do not.
- We were unable to quantify participants' level of engagement with the podcasts, including the extent to which each episode was listened to.
- These analyses relied on secondary use of structured EHR data and are subject to misclassification, including coding errors of omission and commission, and errors in start and stop dates for treatments. As a result, it is possible that the proportion of non-concordance observed is artificially inflated, although this should be constant in parts 1 and 2.

Figure 3: NCCN Guideline-concordant treatment pre- and post-educational outreach



Reference:

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- Hermes L, et al. Framework for Integrating Physician Stakeholder Feedback into Real-world Data Studies. Poster presented at: 2025 ISPE Annual Meeting.
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- National Comprehensive Cancer Network. (2025). NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®): Breast Cancer (Version 4.2025, April 17, 2025). National Comprehensive Cancer Network, Inc.



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