#557: Association of patient navigation with cancer health spending among Medicare Advantage members: A difference in differences analysis

Samyukta Mullangi, MD, MBA[1][2], Scott Worland, PhD[1], Brad Hill, MS[1], Alphan Kirayoglu[1], Robert J. Green, MD[1], Kumar Dharmarajan, MD, MBA[3], Ravi B. Parikh, MD, MPP[4], Dawn L. Hershman MD[5]

[1]Thyme Care, [2]Tennessee Oncology, [3]Clover Health, [4]University of Pennsylvania, [5]Columbia University Medical Center

Background

- Patient navigation can help patients overcome health care system barriers and facilitate timely access to health care throughout the cancer experience, but is an intervention that has not scaled.

- Research from single institutions makes interpretation of generalizability and potential for scale difficult. Further, ROI has not been validated in commercial populations.

- Thyme Care is a venture–funded digital health company that is able to provide virtual patient navigation services at scale.

- Thyme Care is contracted with several regional and national payers who have delegated financial risk of sub–populations with cancer.

- This study assesses the association between virtual, third–party provided patient navigation and changes in total episode spending among Medicare Advantage members with cancer on active therapy.
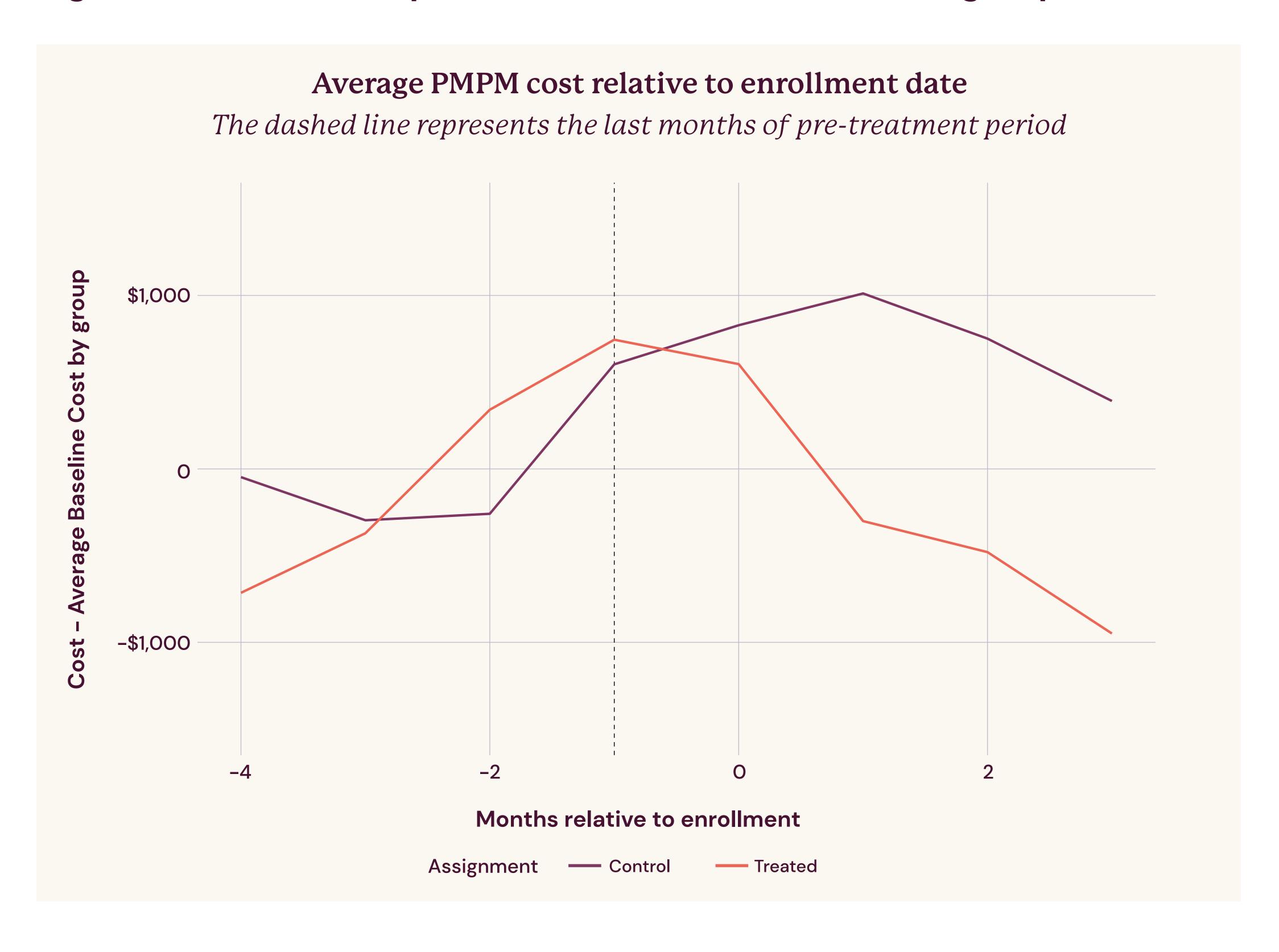
Methods

- **Design:** Retrospective cohort analysis

- **Data source:** Claims data and administrative data from a regional MA payer, Clover, for the New Jersey market

- **Study population:** 446 matched members between March 2022 and February 2023, representing 3,005 distinct member–months. Analyses include all MA patients with breast cancer, chronic leukemia, lung cancer, lymphoma, multiple myeloma, prostate cancer, and small intestine/colorectal cancer.

- **Outcome:** Spending outcomes in the period following systemic drug therapy initiation.

- **Analysis:** Difference–in–differences, with staggered enrollment.

> Virtual patient navigation provided by an external third-party was associated with reductions in total episode spending in Medicare Advantage.
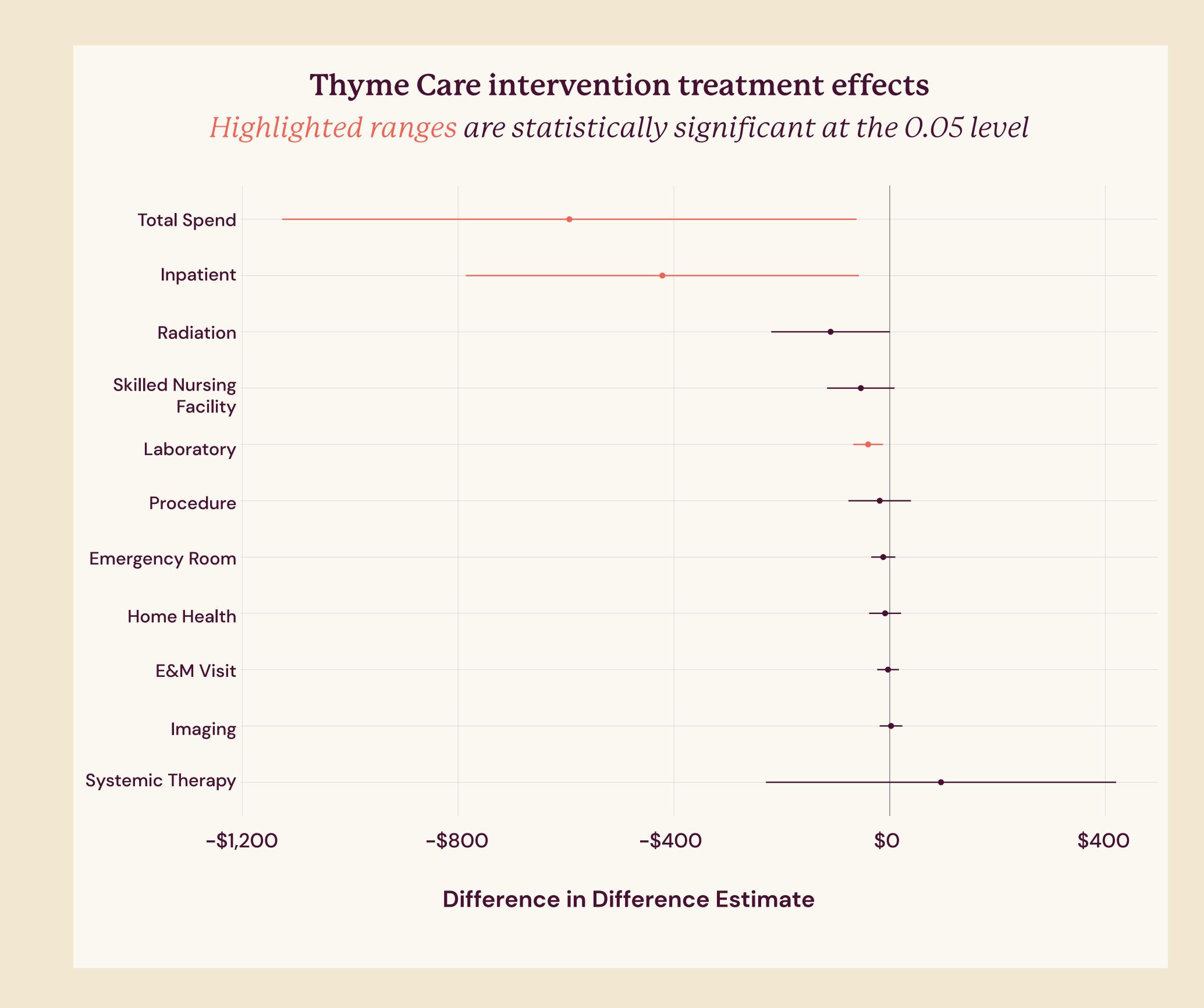
Results

Figure 1. Baseline and performance trends for the two groups

Average PMPM cost relative to enrollment date
The dashed line represents the last months of pre-treatment period

Translates to a DiD estimate of –$594 PMPM reduction in TCOC in the navigated cohort.

Figure 2. Unadjusted comparison of total episode payments in navigated and control cohorts

Thyme Care intervention treatment effects
Highlighted ranges are statistically significant at the 0.05 level

DiD estimates are PMPM.

Conclusions

- Virtual patient navigation provided by an external third–party was associated with significant reductions in total episode spending for Medicare Advantage members.

- *These findings are consistent with a previous unpublished study that used propensity–matched cohorts to assess the efficacy of Thyme Care's model, suggesting that they are robust to inclusion of different time periods and using different methods of analysis.*