certilytics

BrainstormAI® Model Library

Propensity Models (CAMPR)

An ROI modeling process that generates accurate estimates of a clinical program's impact on savings.

Our Approach

As part of the shift to value-based care healthcare organizations are building comprehensive suites of clinical programs aimed to improve clinical and financial outcomes.

But, how can healthcare leaders measure the ROI of each clinical program and understand its true financial impact?

At Certilytics, we know that many existing ROI measurement solutions fail to control for covariation and confounding, and don't establish an accurate estimate of program savings – limiting the ability for healthcare leaders to understand the direct effect each program has on outcomes.

So we built our Propensity Models (CAMPR) using causal modeling to overcome confounding, delivering to our customers an **Advanced Causal Analysis of Internal or External Clinical Programs.**

What is Causal Modeling?

- Causal modeling is a newer branch of statistics designed to overcome confounding, leading to unbiased estimates
- Causal ROI studies are extremely detailed and difficult to perform and scale across the ecosystem of clinical solutions available in the market

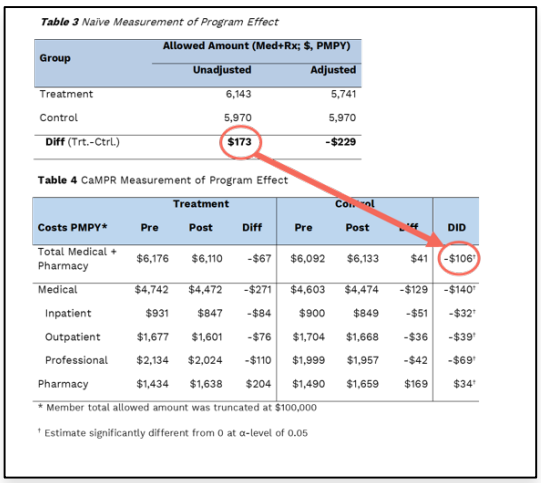

Table 3 Naïve Measurement of Program Effect

Group	Allowed Amount (Med+Rx; $, PMPY)	
	Unadjusted	Adjusted
Treatment	6,143	5,741
Control	5,970	5,970
Diff (Trt.-Ctrl.)	**$173**	**-$229**

Table 4 CaMPR Measurement of Program Effect

Costs PMPY*	Treatment Pre	Treatment Post	Treatment Diff	Control Pre	Control Post	Control Diff	DID
Total Medical + Pharmacy	$6,176	$6,110	-$67	$6,092	$6,133	$41	-$106†
Medical	$4,742	$4,472	-$271	$4,603	$4,474	-$129	-$140†
Inpatient	$931	$847	-$84	$900	$849	-$51	-$32†
Outpatient	$1,677	$1,601	-$76	$1,704	$1,668	-$36	-$39†
Professional	$2,134	$2,024	-$110	$1,999	$1,957	-$42	-$69†
Pharmacy	$1,434	$1,638	$204	$1,490	$1,659	$169	$34†

* Member total allowed amount was truncated at $100,000

† Estimate significantly different from 0 at α-level of 0.05

About Our Propensity Models (CAMPR)

CAMPR leverages Certilytics data structures and tools (like CORE® Clinical Episode Grouping) to automate key components of the causal modeling process, including:

- Data quality checks
- Pre-configured sets of confounders and covariates, including SDOH
- Strategies for handling eligibility and dropout
- Strategies for ensuring parallel trends
- Relevant outcomes like utilization and allowed amount by service type and benefit
- Bootstrap analysis for developing empirical confidence intervals
- Outlier and other analyses for checking the validity of results
- Synthetic data strategies for confirming the accuracy of the overall causal framework

Do you need help determining the true ROI of your clinical programs?

MEET WITH OUR TEAM TODAY!

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Learn More

Explore how our AI-driven solutions are helping make healthcare more efficient and affordable at **certilytics.com**