

IMPROVING CARE VIA TIMELY HEALTH INFORMATION EXCHANGE: A BLUE CROSS AND BLUE SHIELD OF LOUISIANA ADT REFERRAL PROGRAM EVALUATION

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Background

- Admission-discharge-transfer (ADT) is a clinical message that the electronic health record generates. An episodic event such as an emergency department (ED) visit or hospitalization (IP) triggers ADT.
- Blue Cross and Blue Shield of Louisiana (BCBSLA) has a system to receive ADT messages in near real time and generate referrals to the Care Management team so they may provide prompt interventions.
- The interventions may include health coaching, personalized disease self-management skills for members, and other support to help members adhere to recommended treatment plans. The goal is to improve quality of care and reduce healthcare costs.
- The purpose of this study is to evaluate the effect of timely referrals for Care Management interventions.

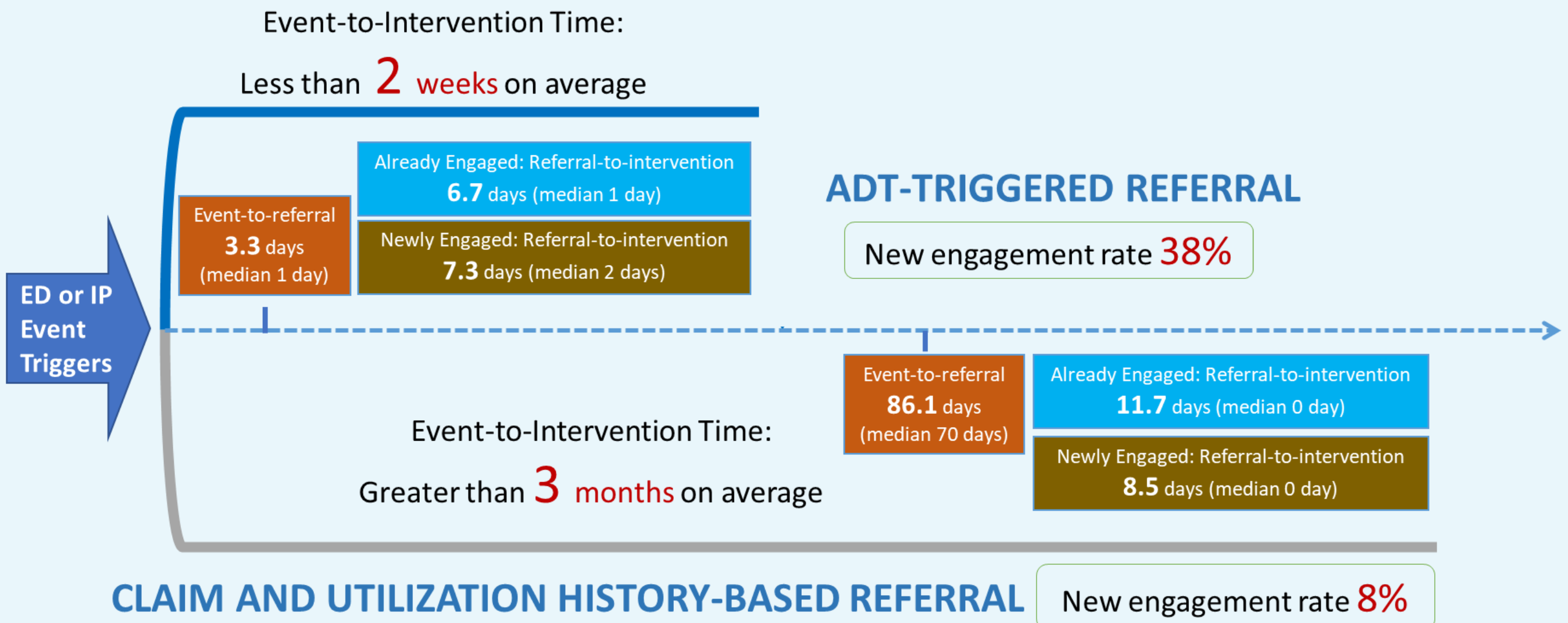
Methodology

- Study population: BCBSLA members with ED or IP events that triggered referrals and are eligible for the Care Management (CMDM) program
- Cohort definition:
 - ❖ ADT: ADT-triggered referral right after ED or IP event
 - ❖ Control (other referral): Claim and utilization history-based referral right after ED or IP event
- Inclusion: Continuous medical coverage (6 months of pre-/post-trigger event month)
- Exclusions: Younger than 18, non-Louisiana residents, status of hospice, nursing home, transplant, COVID-19 hospitalization or death during evaluation period
- Descriptive analysis was used for assessing the periods of time of Event-to-Referral and Referral-to-Intervention among members with an episodic event who were referred by a timely ADT referral or a claim-and utilization-based review and referral (control group).
- Healthcare utilization and costs were investigated between referrals from the ADT system and control group using propensity score matching (PSM) with indexed timeline and difference-in-difference (DID) analysis.



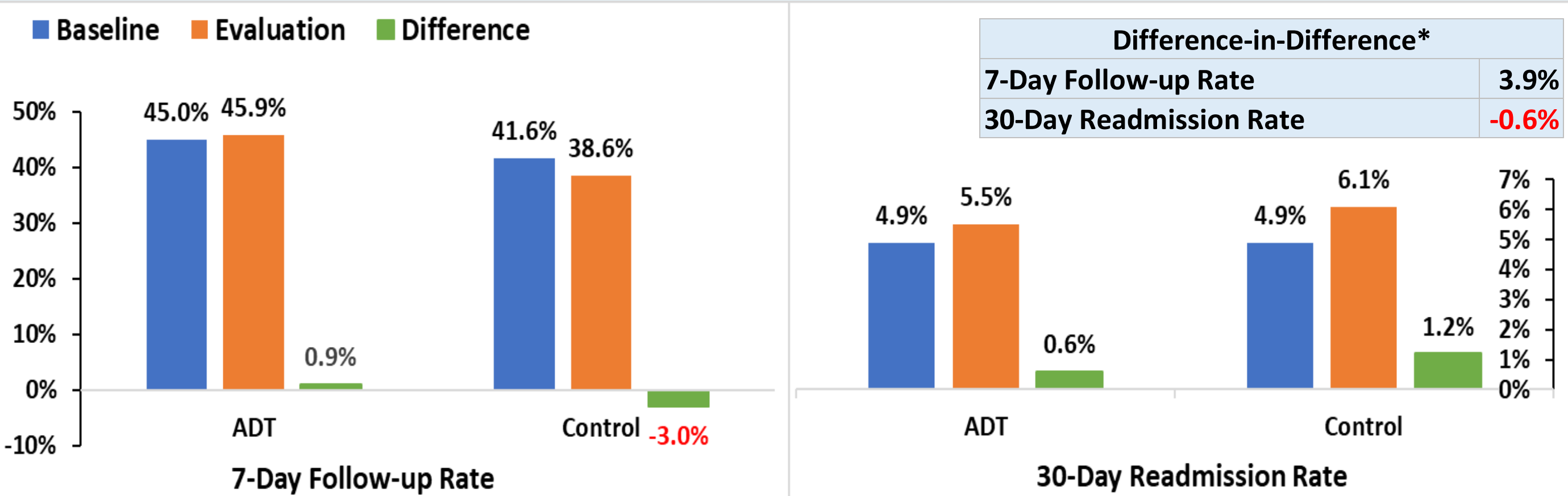
Results

Figure 1. Timely Referral + Higher Engagement Rate



- A total of 12,915 and 33,892 members were selected in ADT and control cohort, respectively.
- The ADT group experienced a significantly shorter time Event-to-Referral than the control group [mean 3.3 (median 1) days vs. 86.1 (median 70) days, $p < 0.0001$].
- The engagement rate was 4.7 times higher for those in the ADT group than the control group (38% vs. 8%).
- There were no significant differences in the duration of Referral-to-Intervention across the two cohorts, indicating the Care Management team responds in the same time manner regardless of referral sources.

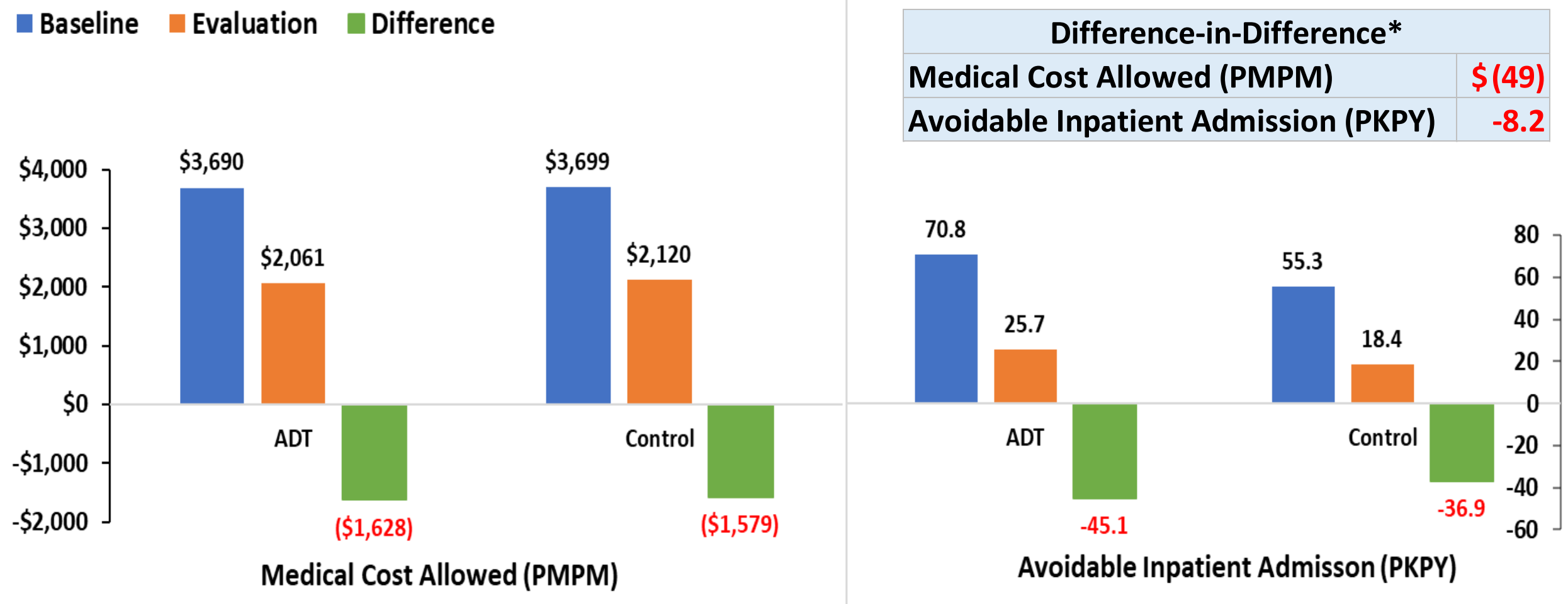
Figure 2. Short-Term Benefit on Follow-up Rate and Readmission Rate



*Difference in Difference = Change of ADT – Change of Control

- 4,662 members were selected for each cohort in the final DID analysis after PSM with exclusions applied.
- The timely referral from ADT with action from Care Management improved the 30-day readmission rate and the 7-day follow-up of hospital discharge rate. There were no statistically significant differences.

Figure 3. Healthcare Cost and Utilization

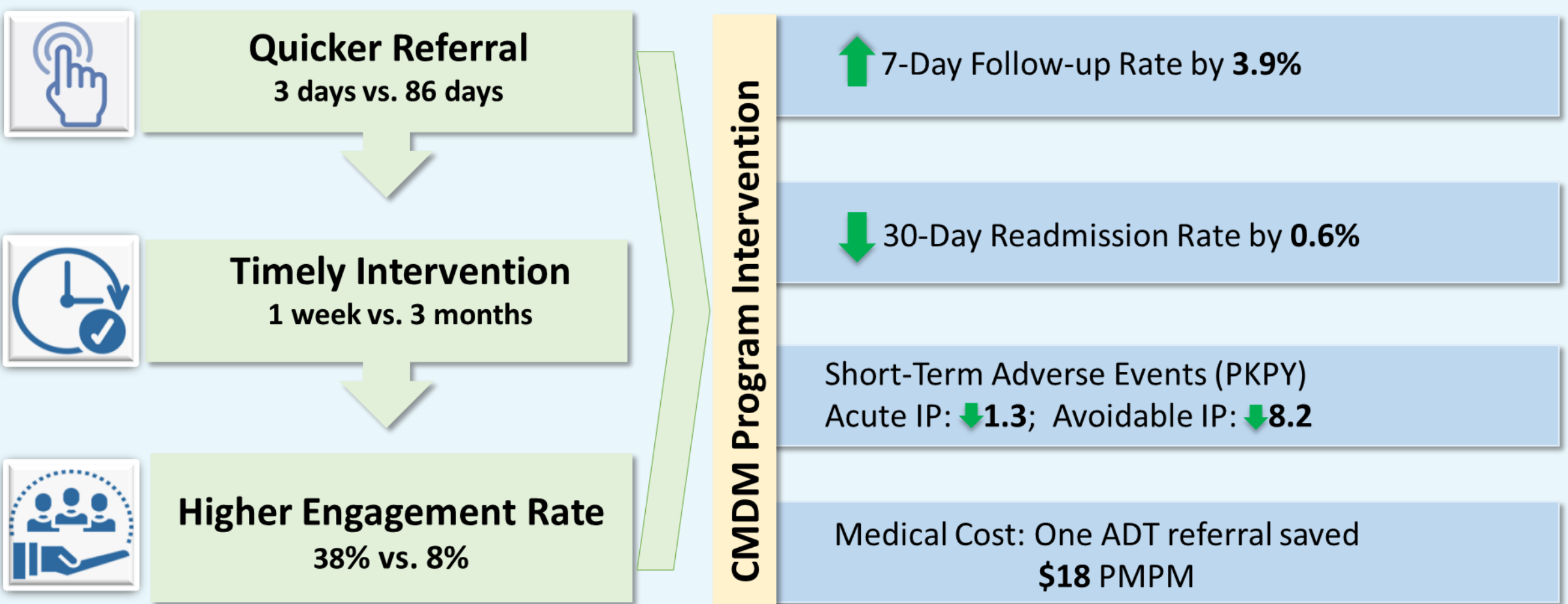


*Difference in Difference = Change of ADT – Change of Control

PMPM: Per member, per month
PKPY: Per 1,000, per year

- Timely referral from ADT significantly decreased avoidable inpatient admissions by 8.2 PKPY.
- Reducing adverse inpatient events drove \$49 PMPM savings on medical cost, although it was not statistically significant.
- One ADT referral saved \$18 PMPM when translating \$49 PMPM savings to 12,915 ADT referrals.

Conclusion



- BCBSLA's member referrals prompted via the near real-time ADT system shortened the time between event and referral.
- Decreased avoidable hospitalizations were a result of increased Care Management engagement rate.

References

Thapa B, Li X, Galárraga O. Impacts of Community-Based Care Program on Health Care Utilization and Cost. Am J Manag Care. 2022;28(4):187-191. <https://doi.org/10.37765/ajmc.2022.88862>