Counterpart Health

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Bridging the Divide: Counterpart Assistant Use by PCPs in Underserved Chronic Disease Populations Associated with Earlier Diagnosis and Less Frequent Hospitalization.

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Executive summary

The Counterpart Assistant (CA) platform empowers Primary Care Providers (PCPs) who care for patients in socioeconomically disadvantaged neighborhoods (SEDN Patients), with advanced clinical technology not usually available to resource constrained practices.

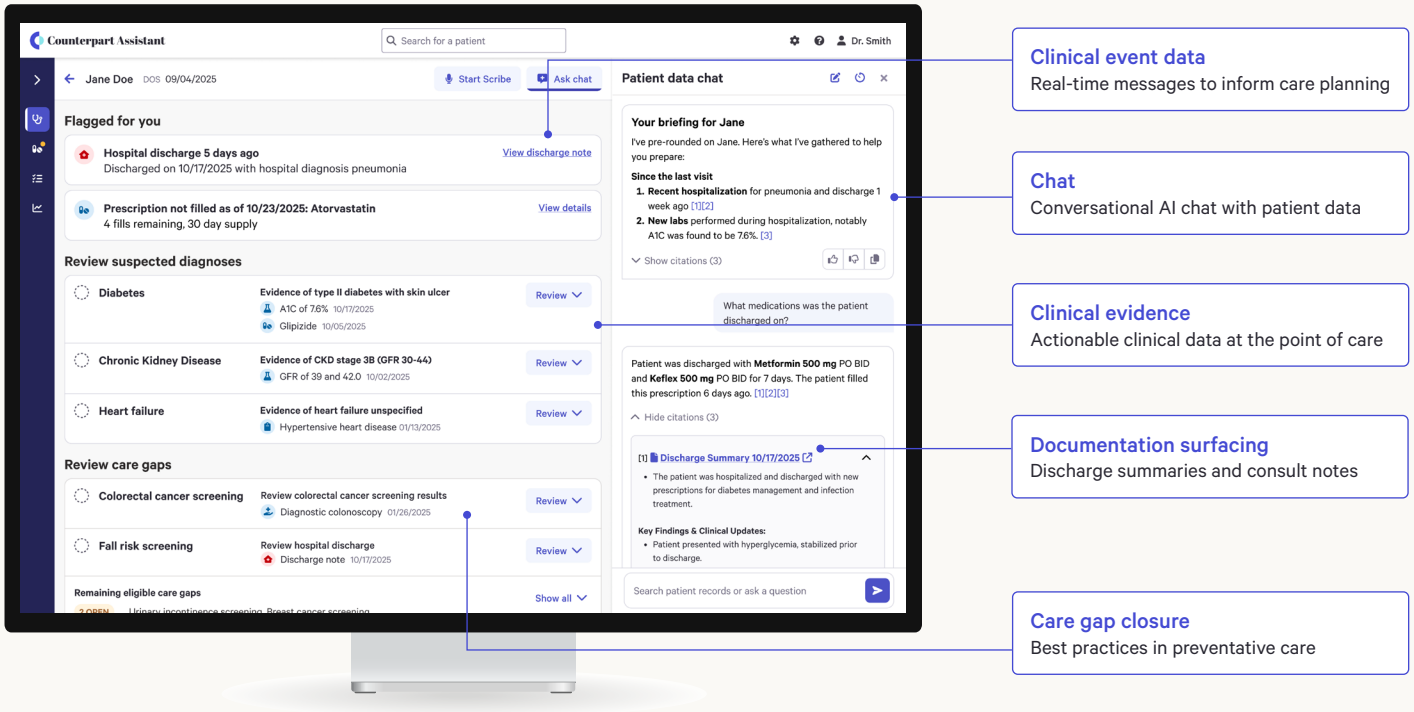
- **Higher diagnosis rates:** Patients from disadvantaged neighborhoods having a relationship with a PCP that uses CA (CA PCPs) were more frequently diagnosed with various chronic conditions for the first time in their first year of joining a Clover Health Medicare Advantage (MA) plan from a non-Clover MA Plan: diagnosis rates for diabetes were 75% higher; for chronic kidney disease (CKD), 89% higher; for congestive heart failure, 89% higher; and for chronic obstructive pulmonary disease (COPD), 70% higher.

- **Diagnosis at earlier stages:** Patients from this population who had CKD or diabetes were also first diagnosed at earlier clinical stages of disease. For CKD patients, initial clinical markers reflected CKD Stage 2, on average, versus Stage 3A. And for diabetes patients, A1C levels were, on average, 0.3% lower.

- **Less frequent acute care utilization:** A relationship with a CA PCP was associated with significantly less acute care utilization: fewer all-cause inpatient hospitalizations (ranging from -7.6% to -21.2%) and 30-day readmissions (ranging from -11.5% to -20.8%) across all four studied chronic diseases.

FIGURE 1

Counterpart Assistant: Bringing advanced technology to resource-constrained practices



Counterpart Assistant in *resource-constrained* practices

Primary care in high Area Deprivation Index (ADI) neighborhoods is frequently delivered by small, non-urban practices operating with limited care-coordination infrastructure and fragmented clinical data. In these settings, delays in diagnosing chronic conditions and interruptions in longitudinal follow-up are common, contributing to higher utilization of acute care. High ADI is a validated proxy for neighborhood socioeconomic disadvantage [1] and has been consistently associated with greater chronic disease burden and worse outcomes [2]. Patients living in these areas often present with multimorbidity and social constraints that complicate routine monitoring and care access.

CA is designed to address these practical barriers at the point of care. CA consolidates information from multiple data streams in real time and surfaces patient-specific clinical insights that align with current guidelines and best practices (Figure 1). By embedding these insights directly into the primary-care workflow, CA aims to reduce missed opportunities for earlier diagnosis and to support sustained, guideline-based management over time.

For resource-constrained practices, CA also serves as an on-ramp to infrastructure they may not typically purchase or maintain. The platform supports dynamic connectivity to regional health-information exchanges, ingests admission/discharge/transfer (ADT) messages to inform care planning, and surfaces external clinical data such as hospital summaries and specialty consult notes all inside a point of care workflow. In effect, CA can deliver enterprise-grade data services to small clinics, improving care coordination and reducing the likelihood that critical information is missed between care settings.

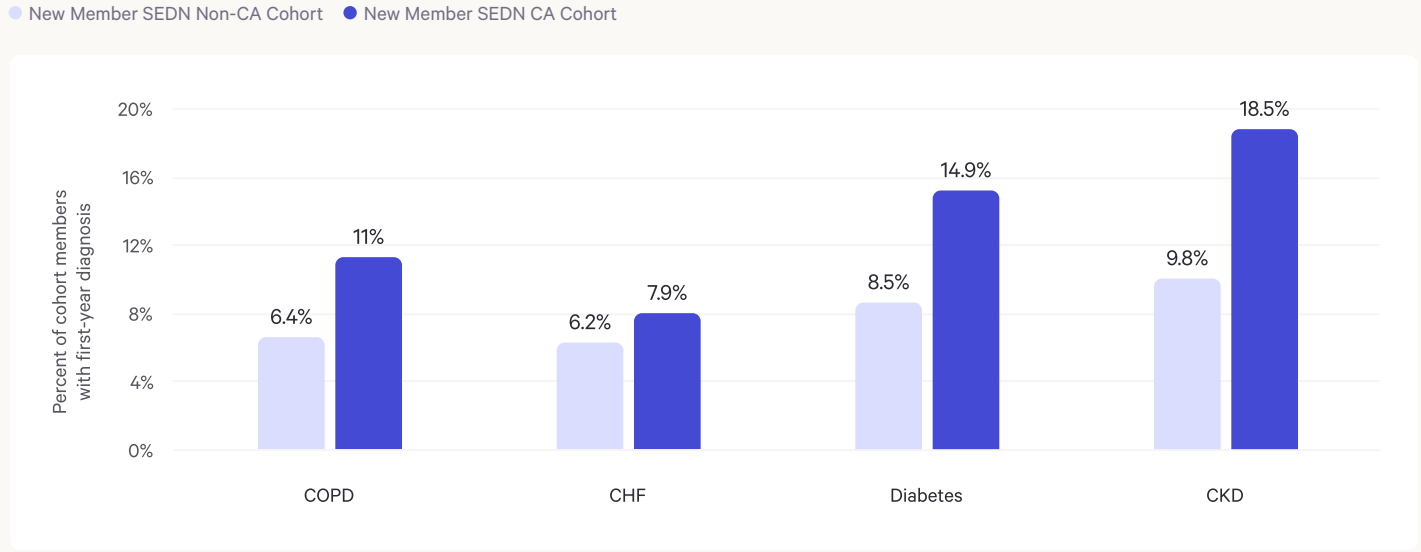
This whitepaper examines whether Clover MA plan members residing in socioeconomically disadvantaged neighborhoods (as defined by those in the highest quartile ADI, 8-10) (SEDN Patients) who are attributed to a CA PCP have measurable differences in clinical detection of chronic disease and acute care utilization. Building on prior analyses that linked CA use to greater detection and fewer hospitalizations in the broader population for members with chronic disease [3,4,5,6,7], this work focuses specifically on SEDN Patients to assess whether similar associations are observed where the operational, delivery, and access challenges are greatest.

Early diagnosis of chronic conditions among underserved members seen by PCPs utilizing CA

SEDN Patients frequently encounter delayed recognition of chronic conditions, reflecting structural barriers that suppress guideline-concordant screening and follow-up. Prior work has shown that adults in the most deprived communities have substantially lower odds of completing recommended screenings compared with those in the least-deprived communities [8], with similar patterns evident in lower rates of chronic disease management, such as in diabetic A1C screening [9]. In this context, technology that consolidates data and prompts action at the point of care can raise detection rates in primary care.

FIGURE 2

Patients from disadvantaged neighborhoods with a CA PCP showed a higher frequency of new diagnoses (diabetes, CKD, CHF, or COPD) during their first year in a Clover MA plan



To investigate this within the SEDN Patient population, for each of the in-scope chronic diseases (diabetes, CKD, COPD, and CHF), we examined new members from high ADI neighborhoods who joined a Clover Health MA plan from another non-Clover MA plan without a prior diagnosis of the disease known to Clover (for each disease, the New Member SEDN Group), and the timing of their initial diagnosis of the disease, if any. Those members from each New Member SEDN Group who were attributed to a CA PCP (for each disease, the New Member SEDN CA Cohort) were more likely to receive a first known diagnosis of the relevant disease within their first year of joining their Clover MA plan when compared with those members attributed to a non-CA provider who had not received a CA visit (for each disease, the New Member SEDN Non-CA Cohort)[1]. For diabetes, 15.1 percent of the New Member SEDN CA cohort received a new diagnosis within their first year of joining their Clover MA plan compared with 8.4 percent in the New Member SEDN Non-CA cohort (an ~79.8 percent higher diagnosis rate) ($p < 0.001$; Figure 2). For CKD, the rates were 18.5 percent in the New Member SEDN CA Cohort versus 9.8 percent in the New Member SEDN Non-CA Cohort (an ~88.8 percent higher diagnosis rate) ($p < 0.001$). For CHF, the rates were 7.9 percent in the New Member SEDN CA Cohort versus 6.2 percent in the New Member SEDN Non-CA Cohort~ (an ~27.4 percent higher diagnosis rate) ($p < 0.05$). And for COPD, the rates were 10.9 percent in the New Member SEDN CA Cohort versus 6.4 percent in the New Member SEDN Non-CA Cohort (an ~70.3 percent higher diagnosis rate) ($p < 0.001$).

These cross condition differences are notable in both magnitude and consistency. Observing higher first year detection for diabetes, CKD, heart failure, and COPD within the same SEDN populations suggests that a point of care integrated technology like CA can support chronic disease identification in resource constrained primary care clinics.

[1] One constituent of providers that regularly use CA are those providers employed by Clover Health or its affiliates (Clover Employed Provider). In an effort to disassociate potential impact of having a relationship with a Clover Employed Provider from the potential impact of CA, specifically, our study excluded members who were attributed to a Clover Employed Provider. In determining the PCP to which a member was attributed, if any, we used the most recent attribution data available from the Clover MA plans. We then evaluated whether that PCP was "live" on CA during the relevant period, meaning the PCP had an actively registered CA user account during the period.

Early stage at diagnosis for CKD and Diabetes

Chronic diseases such as CKD and diabetes carry risk that rises with time spent undiagnosed. Current guidance encourages early confirmation and staging so that reno-protective and cardio-protective therapy can begin before irreversible decline (See ADA and KDIGO Guidelines) [10, 11]. In high ADI settings, missed labs and fragmented records can delay that first anchoring assessment. We examined whether members in the CKD and diabetes New Member SEDN CA cohort presented at earlier clinical stages at the time of the first known diagnosis for CKD and diabetes, respectively. CHF and COPD were not included for this analysis because there is no reliable single quantitative biomarker to summarize at the population level (e.g., glomerular filtration rate (GFR) for CKD, and A1C for diabetes).

Among those members with incident CKD or diabetes, those in the corresponding New Member SEDN CA Cohort had more favorable biomarkers at index diagnosis. For CKD, the mean estimated GFR at first known diagnosis was 69.7 milliliters per minute per 1.73 square meters (corresponding to Stage 2 CKD) in the New Member SEDN CA Cohort compared with 51.8 (corresponding to Stage 3A CKD) in the New Member SEDN Non-CA Cohort. This 17.9-unit difference is approximately 34.6 percent higher (stat difference $p < 0.001$), consistent with identification one stage earlier for many patients (Figure 3A). For diabetes, the mean hemoglobin A1C at first known diagnosis was 6.81 percent in the New Member SEDN CA Cohort compared with 7.12 percent in the New Member SEDN Non-CA Cohort (stat diff $p < 0.05$), an absolute difference of 0.31 percentage points (Figure 3B).

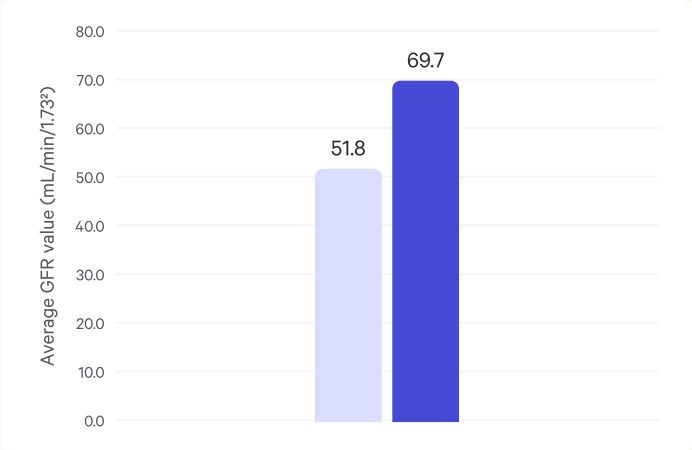
Detection of these diseases at these better biomarker levels broadens the clinical window for early preventative disease-modifying care. Earlier CKD staging enables initiation of ACEI/ARB and SGLT2 therapy where appropriate, tighter blood-pressure and albuminuria targets, and a monitoring cadence that slows decline. Earlier diabetes identification near diagnostic thresholds supports timely counseling and pharmacotherapy tailored to renal and cardiovascular risk. Thus, in high ADI care settings, CA supports PCPs in establishing diagnosis sooner, both temporally, and by clinical stage, for both diabetes and CKD, when interventions have greater leverage.

FIGURE 3

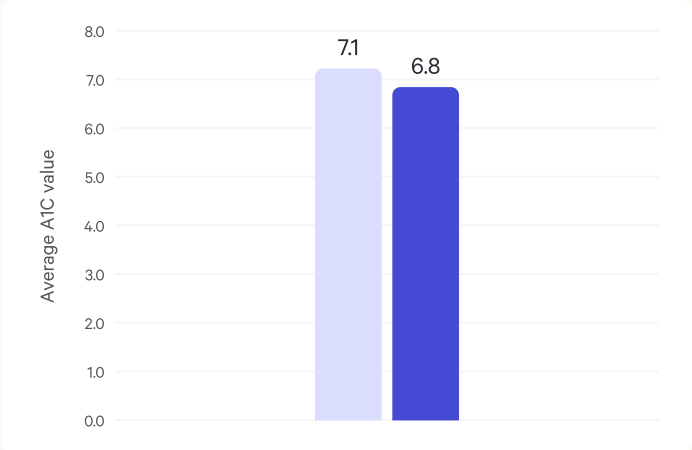
Patients from disadvantaged neighborhoods with a CA PCP were first diagnosed with CKD and diabetes at earlier clinical stages

New Member SEDN Non-CA Cohort New Member SEDN CA Cohort

a. Average initial GFR for CKD patients first diagnosed after switching to Clover MA



b. Average initial A1C for diabetes patients first diagnosed after switching to Clover MA



Lower hospitalizations and 30-day readmissions in SEDN CA members with established chronic disease

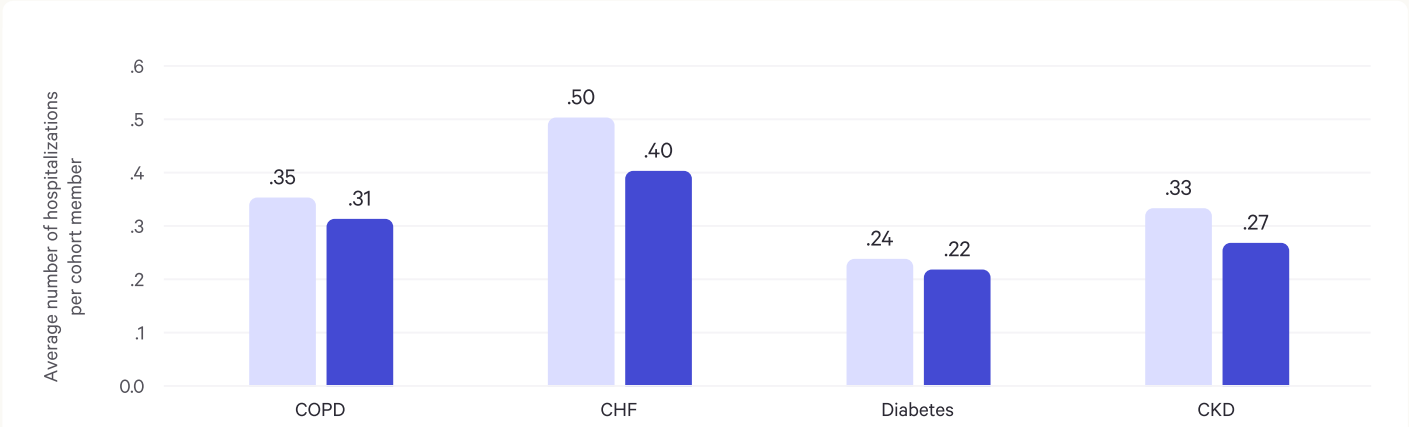
Patients living in socioeconomically disadvantaged neighborhoods have higher baseline reliance on acute care, and care transitions are a frequent failure point for small practices. Contemporary guidance across heart failure, COPD, CKD, and diabetes emphasizes medication optimization, timely post-discharge contact, and early outpatient follow up to reduce preventable returns to the hospital. We assessed whether SEDN Patients attributed to a CA PCP experienced different rates of inpatient hospitalizations and 30-day readmissions during the measurement year.

FIGURE 4

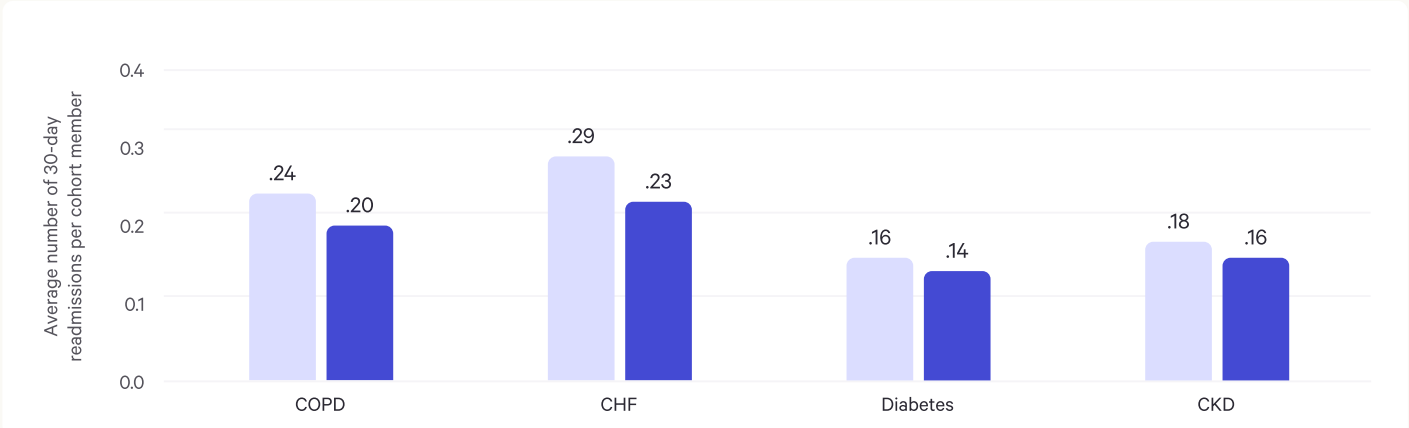
A relationship with a CA PCP is associated with lower hospitalization rates in diabetes, CKD, CHF, and COPD patients from disadvantaged neighborhoods

Non-CA SEDN Cohort CA SEDN Cohort

a. Average number of hospitalizations for patients from disadvantaged neighborhoods



b. Average number of 30-day readmissions for patients from disadvantaged neighborhoods



For purposes of this study, the SEDN CA Cohort for each disease (again, diabetes, CKD, CHF, and COPD) was defined as all members from high ADI neighborhoods attributed to a CA PCP that had a diagnosis of the disease known to Clover. Conversely, the SEDN Non-CA Cohort for each disease was defined as all members from high ADI neighborhoods that had a diagnosis of the disease known to Clover who were attributed to a non-CA provider, and had not received a CA visit[2]. Mean all-cause inpatient hospitalizations per member were lower in the SEDN CA Cohort compared with the SEDN Non-CA Cohort for each condition studied. For diabetes, the means were 0.219 versus 0.237, 7.6 percent lower on a relative basis ($p < 0.05$). For CKD, the means were 0.274 versus 0.326, 16.0 percent lower on a relative basis ($p < 0.05$). For CHF, the means were 0.390 versus 0.495, 21.2 percent lower on a relative basis ($p < 0.05$). And for COPD, the means were 0.310 versus 0.347, 18.1 percent lower on a relative basis ($p < 0.05$). Thirty-day readmissions per member followed the same pattern: for diabetes, 0.137 versus 0.162, 15.4 percent lower on a relative basis ($p < 0.05$); for CKD, 0.161 versus 0.182, 11.5 percent lower on a relative basis ($p < 0.05$); for CHF, 0.228 versus 0.288, 20.8 percent lower on a relative basis ($p < 0.05$); for COPD, 0.200 versus 0.242, 17.4 percent lower on a relative basis ($p < 0.05$) (Figure 4).

Taken together, these lower rates of acute care utilization across multiple conditions within a single SEDN population are notable. The direction and magnitude of the differences are consistent with more reliable outpatient management and tighter transition processes in clinics using CA. In practical terms, CA surfaces discharge alerts through ADT messages, highlights recent hospital and specialty notes, and prompts follow-up tasks during routine visits, each of which can contribute to lowering the likelihood that a hospitalization occurs or that a patient returns to the hospital within 30 days.

Discussion

In conclusion, CA's focus on early detection, tracking of disease progression and severity, and proactive interventions at the point of care supports value-based care in high ADI neighborhoods. This case study reflects Clover Health's experience of CA as a practical platform that enables primary care teams in resource-constrained settings to prevent, detect, and manage chronic disease for socioeconomically disadvantaged members.

The data presented demonstrates that new SEDN Patients attributed to a CA PCP who joined a Clover MA plan from another non-Clover MA plan were more likely to receive their first known diagnosis after plan enrollment across diabetes, CKD, CHF, and COPD, and were identified at an earlier stage for CKD (higher mean eGFR) and diabetes (lower mean A1C). The data also demonstrated that SEDN Patients attributed to a CA PCP experienced fewer all-cause inpatient hospitalizations and 30-day readmissions during the measurement year. These associations are consistent with a shift toward proactive, longitudinal care in clinics that face material operational constraints.

Limitations of analyses and interpretation include the retrospective nature of this real-world analysis and the possibility of residual confounding effects despite cohort design. Efforts to mitigate and minimize confounding effects included cohort design that CA exposure was the primary difference between groups, and also that demographic/ADI makeup between CA and non-CA groups were similar.

This case study builds on earlier work by showing that CA can streamline delivery and support more consistent, guideline-aligned care in socioeconomically disadvantaged settings - core practices for managing complex chronic conditions.

[2] See footnote 1.

Methods and statistical analyses

For the two studies analyzing diagnosis rates and timing among new Clover MA plan members, we focused on (1) members who joined a Clover MA plan from a non-Clover MA plan between 1/1/22 and 1/1/24; (2) who had no known diagnosis of the pertinent chronic condition before joining the Clover MA plan; and (3) remained a Clover MA plan member for at least one full calendar year between 2022 and 2024 (inclusive). For the first study discussed in this paper, discussing diagnosis rates, the first known diagnosis of the pertinent chronic condition had to have occurred within the member's first year of joining the Clover MA plan. For the second study, discussing diagnosis at earlier clinical stages, the first known diagnosis of the pertinent chronic condition could have been at any time between when the member joined the Clover MA plan and 12/31/24. Finally, for the hospitalization analysis, we focused on patents who were Clover MA plan members for at least one month in 2024. The member must have had a known diagnosis of the pertinent chronic condition from any time on or before 12/31/24, irrespective of when the member joined the Clover MA plan, and we only counted hospitalizations with an admission date occurring in 2024. Only members who were socioeconomically disadvantaged, as defined as having a zip code in a neighborhood in the highest quartile of ADI, were included in the analysis; extended ZIP+4 data [2] was utilized where available for more accurate labeling of ADI to members. Four major chronic conditions were examined: diabetes, CKD, CHF, and COPD[3]. For the biomarker analyses for CKD and DM, the nearest biomarkers in time prior to the first known date of diagnosis was utilized in the dataset. Finally clinical outcomes of hospitalization and 30-day readmission were examined, analyzing available claims data associated with the members.

Appropriate statistical methodology was utilized to determine the significance of our findings utilizing standard Python libraries, including NumPy for data handling, SciPy for the chi-square and Fisher tests, and Statsmodels for Poisson and negative-binomial regressions. Event counts for clinical outcomes were analyzed as discrete event counts. Because each subject contributed observations over an equal exposure window (one study period per person), the primary comparison of interest was the mean event rate between cohorts. To test for statistical significance between the rates, we modeled counts with a Poisson distribution and tested the null hypothesis of equal rates using a two–sample Poisson rate test. Given that many of our datasets had large variance exceeding the mean, we also performed sensitivity analysis by additionally checking statistical significance with a negative-binomial generalized linear model.

Recognizing that differences between the cohort outcomes might extend beyond the means, we also performed a chi-squared test of independence on the full contingency table of event count groups. This non-parametric test evaluates whether the entire distribution of counts differs, capturing shifts in both the probability of having any events and the probabilities of higher-order counts. Because very high counts were sparse, we performed two versions of this test: full K-level table using all distinct count categories; and collapsed 2 × 2 table (0 vs ≥ 1 events, or another clinically relevant threshold) to isolate differences in event incidence. Significance for tests was assessed at $\alpha = 0.05$ (two-sided).

To evaluate differences in clinical biomarkers between CA and non-CA groups, we employed the one-sided Mann-Whitney U test, to test the hypothesis that HbA1c and GFR biomarker values were clinically better in the CA cohorts compared to the non-CA cohorts. To establish the initial biomarker value, the nearest value to date of diagnosis within 120 days was utilized. The Mann-Whitney U test was selected due to non-normal distributions identified by Shapiro-Wilk tests ($p < 0.05$) in the datasets.

[3] We employed the Neighborhood Atlas published by the University of Wisconsin School of Medicine and Public Health (https://www.neighborhoodatlas.medicine.wisc.edu/, ref 2) to map Zip+4 data to ADI data. For all analyses, we used the most recent ADI data available through this source as of October 1, 2025. For members for whom we did not have ZIP+4 data (and instead only had the ZIP) we used the most frequently occurring ADI value in the ZIP code.

Further sensitivity analysis was also performed to examine for any differences between cohorts. When comparing member attributes in the CA SEDN Cohorts vs those in the Non-CA SEDN Cohorts, there were no substantive differences in age (CA 72.97 years old vs non-CA 73.35 years old), sex (CA 54.89/45.11female/male ratio vs non-CA 55.73/44.27), or historical comorbidities as measured by Charlson or Elixhauser scores (Charlson 2.605 vs 2.716, Elixhauser 3.528 vs 3.644). Similarly, we tested for any member attribute differences in the New Member SEDN CA and New Member SEDN Non-CA cohorts including age (CA 72.61 vs non-CA 74.15 years), sex (CA 53.96/46.04 female/male ratio vs non-CA 57.57/42.43).

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