



MARCH 2026

*Advancing Preventive Health Outcomes:* Counterpart Assistant's Impact on Flu Prevention and Acute Care Utilization

**Authors**

David Tsay, Maddy Eisenbraun, Neil Miller, Rylan Larsen, Naren Santhanam

EXECUTIVE SUMMARY

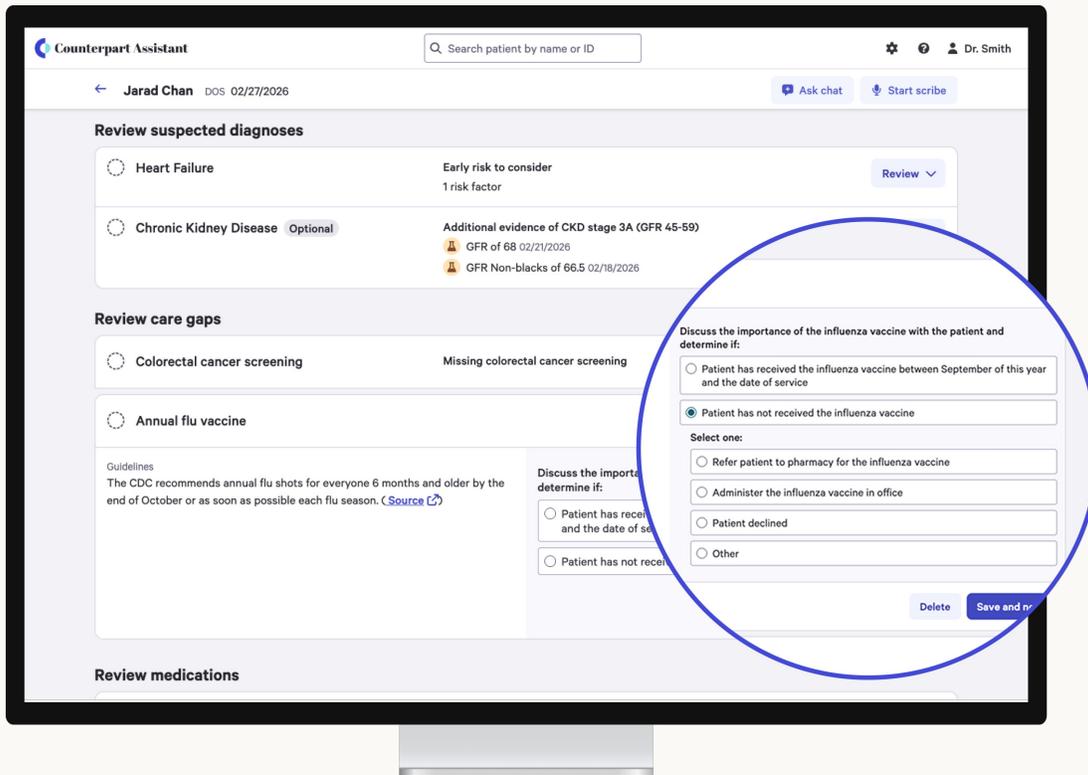
*Counterpart Health empowers primary care providers (PCPs) to better manage preventive care and associated complications by leveraging its flagship software platform, Counterpart Assistant (CA).*

In this study, we examined the association between having a relationship with a PCP who uses CA (CA PCPs) and: (1) flu vaccination rates (1.39 fold higher); and (2) subsequent risk of flu-related acute care events (up to 22% lower):

- **CA promotes preventive care insights at the point of care** by identifying patients eligible for flu vaccination and providing clinical recommendations to the provider. Analysis indicates that patients having a relationship with a CA PCP were **1.39 times more likely** to be vaccinated than those in the Non-CA cohort (RR 1.39; 27.81% vs. 20.06%). Furthermore, patients whose providers completed the in-platform flu insight were **1.89 times more likely** to be vaccinated than those in the CA Cohort whose providers did not engage with the task (31.29% vs. 16.52%; RR 1.89).
- **A relationship with a CA PCP was also associated with a lower rate of flu-related acute care utilization** (inpatient hospitalizations and ED visits) for patients with certain high-risk chronic diseases. For patients with chronic obstructive pulmonary disease (COPD), such relationship was associated with a **17% lower incidence rate** of a patient experiencing at least one flu-related acute care event (RR 0.82; 906 vs 1,097 patients per 100,000). Similarly, for patients with congestive heart failure (CHF), such relationship was associated with an **11% lower incidence rate** (RR 0.887; 773 vs 871 patients per 100,000).
- **A relationship with a CA PCP was also associated with a lower total volume of flu-related acute care encounters** across these high-risk groups. For COPD patients, such relationship was associated with **22% fewer flu-related acute care encounters** (IRR 0.777; 1,011 vs. 1,297 events per 100,000). Similarly, for CHF patients, such relationship was associated with **18% fewer encounters** (IRR 0.822; 852 vs. 1,035 events per 100,000).

FIGURE 1

Counterpart Assistant: Delivering flu-related clinical insights at point-of-care



# Counterpart Assistant supports flu preventative care *at point-of-care*

Counterpart Health, via CA, facilitates better chronic disease management by focusing on prevention, earlier detection, and longitudinal management. Effective chronic disease management is essential to achieving success in value-based care, directly influencing patient outcomes and addressing complex health requirements. Beyond simply maintaining a patient's functional capacity and well-being, robust preventative care is crucial for controlling overall healthcare costs and providing value-based care.

Influenza remains a significant cause of morbidity and mortality among Medicare beneficiaries, particularly those with high-risk profiles [1]. Recent clinical data demonstrates that approximately 90% to 95% of adults hospitalized with the flu have at least one underlying chronic medical condition [2]. For members with chronic conditions such as COPD or CHF, an acute flu episode can lead to severe complications such as respiratory exacerbations that necessitate inpatient hospitalization [3, 4]. The clinical burden of influenza is particularly pronounced in the Medicare population, as elderly patients with COPD have 3 to 7 times higher 30-day flu-related readmission rates compared to matched patients who avoided infection [5]. Similarly, elderly heart failure patients with flu are 95% more likely to experience acute respiratory failure and 75% more likely to require mechanical ventilation [6]. Effectively avoiding flu-related acute care complications including ED visits and hospitalizations requires personalized and preventative care strategies with patients in the Medicare population [7].

PCPs across the Clover Health network utilize CA to access real-time, patient-specific clinical insights that help them identify, manage, and treat chronic conditions earlier in their course (Figure 1). By fusing dozens of health-data streams with up-to-date clinical guidelines, CA delivers actionable recommendations right at the point of care. Within the CA platform, a dedicated clinical feature specifically targets seasonal flu respiratory prevention; for eligible members, the platform surfaces a real-time clinical insight to discuss the importance of preventative immunization with the member and determine whether they would benefit from this protective measure. This proactive intervention underscores CA's role in enabling value-based care by supporting annual preventative health measures, and thus, acute care utilization prevention strategies.

This case study examines CA's potential impact on immunization rates and subsequent acute care utilization within Clover Health's Medicare Advantage (MA) population. Notably, a relationship with a CA PCP was associated with significantly higher immunization rates, which difference was further heightened when the PCP actively engaged with CA's flu insights. Moreover, a relationship with a CA PCP was associated with both a lower risk of flu-related acute care utilization (emergency department visits and inpatient hospitalizations) among both COPD and CHF patients, as well as fewer acute care events in these populations.

## *Driving preventative action* through in-platform clinical insights

Effective chronic disease management requires a proactive approach to preventative health, particularly for high-risk populations where seasonal illnesses can lead to severe clinical deterioration. We first analyzed whether a relationship with a CA PCP was associated with higher rates of immunization against influenza. By leveraging real-time clinical insights, CA surfaces specific recommendations to providers at the point of care, identifying members who would benefit from these preventative measures. To evaluate the association between CA use and clinical action, we examined flu-related healthcare utilization data among two cohorts of patients who were Clover MA plan members: (1) members attributed to a PCP live on CA during the 2024 and 2025 flu season periods (defined as Sept-March) (the "CA Cohort", n=74,566); and (2) members who did not have any CA touch in the same period and were attributed to a PCP that was not live on CA in that period (the "Non-CA Cohort", n=44,971)<sup>1</sup>.



The data demonstrates that a relationship with a CA PCP is associated with meaningfully higher uptake of preventative immunizations (Figure 2). Patients in the CA Cohort achieved a 27.81% immunization rate, compared to 20.06% in the Non-CA Cohort. This represents a highly statistically significant absolute lift of 7.75 percentage points (RR 1.39;  $p < 0.001$ ). By integrating up-to-date clinical guidelines directly into the provider workflow, the platform helps bridge the gap between identified preventative needs and the execution of clinical interventions.

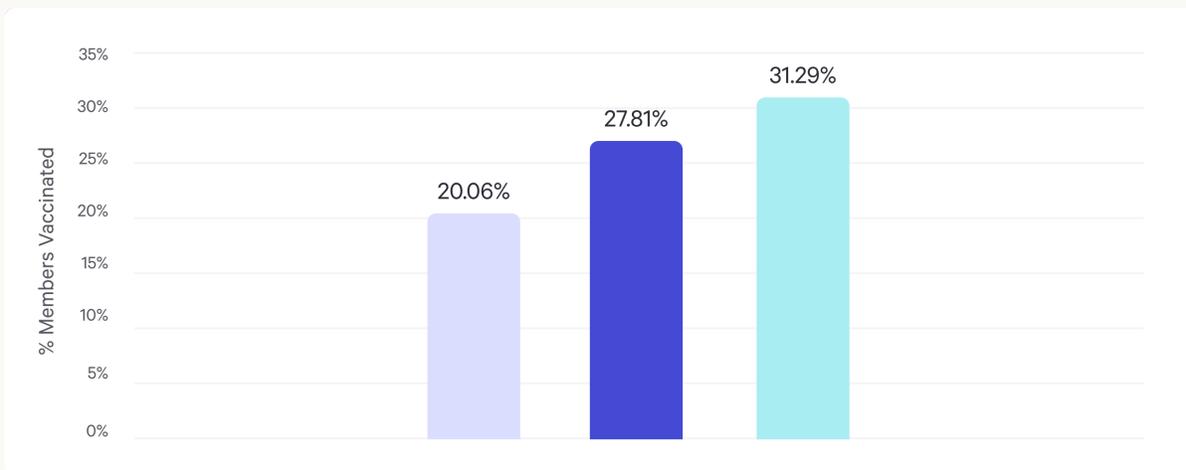
Within the CA Cohort, we further examined whether there was a higher immunization rate among members whose PCP completed CA's flu task in connection with a visit with the member (the "CA Cohort with Flu Clinical Insight"). The immunization rate for these CA Cohort members was 31.29% (Figure 2). In contrast, for CA Cohort members whose PCPs did not complete CA's flu task, the rate was 16.52%. Because the vaccination rate among the group where the flu insight was not engaged is similar to the rate observed in the Non-CA Cohort, these findings imply that the CA platform-driven clinical insight may have been the primary driver of this increased preventative medicine effect. This additional lift (RR 1.89;  $p < 0.001$ ) underscores that the platform's ability to identify and surface preventative needs can directly impact the delivery of protective care.

These findings indicate that a relationship with a CA PCP may help promote a shift toward proactive and longitudinal care strategies. Specifically, the data suggests that in-platform clinical insights can help drive increased preventative immunizations. This level of ongoing management is essential to stabilizing patient health and preventing acute episodes, particularly for members with multiple comorbid conditions where robust preventative care is necessary to reduce the risk of secondary complications.

FIGURE 2

### Higher flu immunization in patients seen by CA PCPs with flu clinical insights

● Non-CA Cohort ● CA Cohort ● CA Cohort with Flu Clinical Insight



counterparthealth.com

## Counterpart Assistant use associated with *fewer flu-related hospital visits*

The clinical burden of influenza-related complications is particularly pronounced among older adults with underlying chronic conditions, where an acute episode can lead to respiratory exacerbation and clinical deterioration. Data from the Centers for Disease Control and Prevention (CDC) and established clinical literature indicate that individuals with chronic lung or heart disease face a four-fold increase in the risk of flu-related hospitalization compared to the general elderly population [5, 6].



Identifying high-risk patients and supporting preventative care is one of the most effective strategies for reducing acute episodes that lead to emergency department visits and inpatient hospitalizations. To evaluate whether a relationship with a CA PCP was associated with better flu-related clinical outcomes, we examined healthcare utilization data among cohorts of members with COPD and CHF diagnoses. Specifically, we analyzed both the percent of members with at least one flu-related acute care encounter (defined as emergency department visits or inpatient hospitalizations), and the average total number of such encounters.

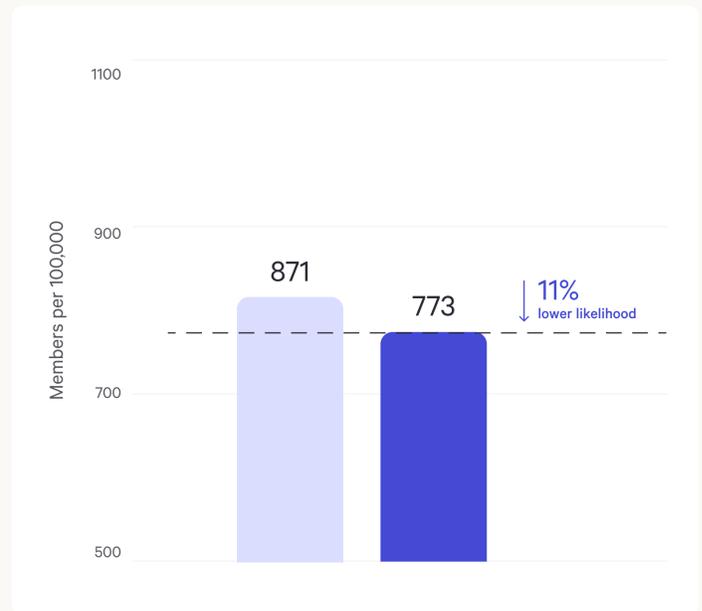
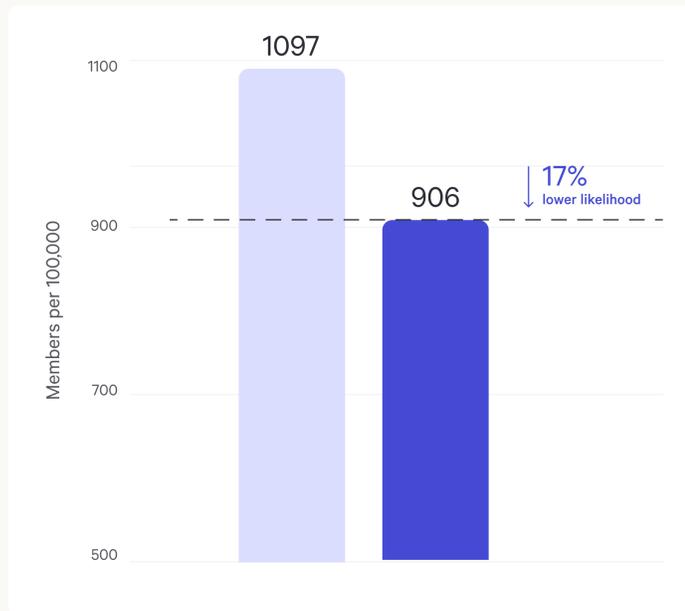
The first analysis reveals that a relationship with a CA PCP was associated with a lower incidence rate of flu-related acute care encounters over the two-year study period. With respect to COPD patients, we observed that those in the CA Cohort (the “COPD CA Cohort”) had a lower risk of having any flu-related acute care encounter (defined as ≥ 1 hospitalization or ED visit) than those in the Non-CA Cohort (the “COPD Non-CA Cohort”): 906 vs 1,097 patients per 100,000 experienced at least one flu-related acute care event. That’s ~190 fewer patients per 100,000 and an estimated ~17% lower likelihood of any flu-related acute care encounter in the COPD CA Cohort (unadjusted RR 0.82, 95% CI 0.67–1.02; one-sided Fisher’s exact p < 0.05). With respect to CHF patients, we observed that those in the CA Cohort (the “CHF CA Cohort”) had a lower risk of having any flu-related acute care encounter than those in the Non-CA Cohort (the “CHF Non-CA Cohort”) over the study period: 773 vs 871 patients per 100,000 experienced at least one acute care encounter, or ~98 fewer patients per 100,000 (RR 0.887, ~11% lower). This result was directionally favorable, approaching statistical significance on a one-sided Fisher’s exact test (p = 0.123, LR 0.887, 95% CI 0.730–1.077).<sup>2</sup>

FIGURE 3

### Lower risk of flu-related acute care in COPD and CHF patients with CA PCPs

● COPD Non-CA Cohort ● COPD CA Cohort

● CHF Non-CA Cohort ● CHF CA Cohort



counterparthealth.com

A relationship with a CA PCP was also associated with significantly fewer acute care encounters on average, a key metric for evaluating the cost-effectiveness of preventative management in value-based care. The COPD CA Cohort demonstrated a utilization rate of 1011 events per 100,000 persons compared to 1297 events per 100,000 persons in the COPD Non-CA Cohort, representing 22% lower total utilization (IRR 0.777, 95% CI 0.636–0.949; one-sided Fisher’s exact p < 0.01). Similarly, the CHF CA Cohort showed a total utilization rate of 852 events per 100,000 persons compared to 1035 in the CHF Non-CA Cohort, reflecting 18% lower total utilization (IRR 0.822, 95% CI 0.686–0.986; one-sided Fisher’s exact p < 0.05).



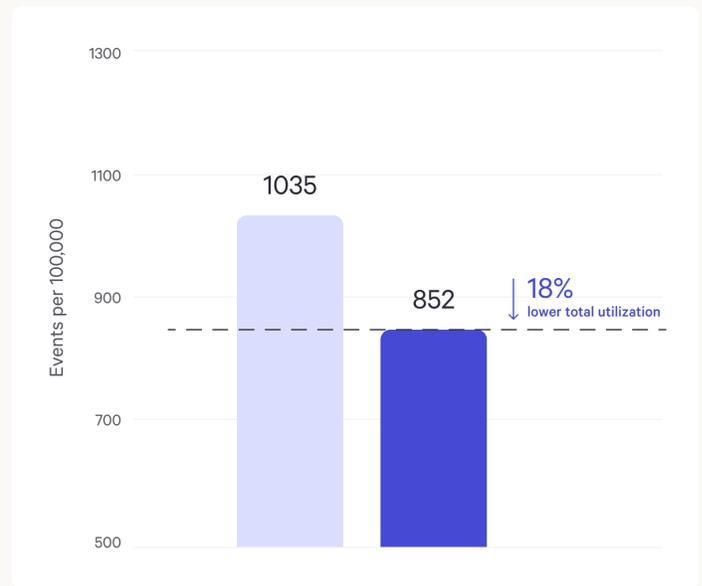
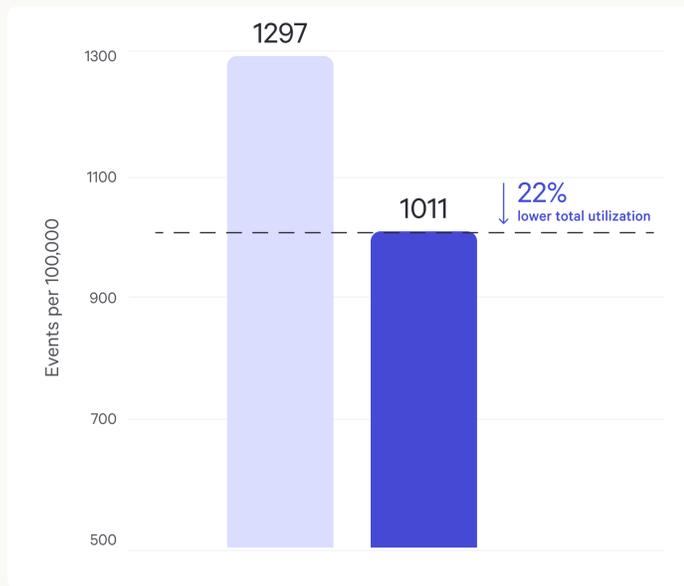
These results reflect a significant association between having a relationship with a CA PCP and lower rates of flu-related acute care utilization among the studied high-risk chronic disease populations. The observed clinical risk and total event volume suggest that CA supports a shift towards proactive preventative strategies that are essential for managing complex conditions and controlling overall healthcare costs. By facilitating higher rates of immunization through point-of-care insights, CA proves to be an asset for PCPs navigating the complexities of reducing the healthcare burden associated with seasonal respiratory illness.

FIGURE 4

Lower incidence of flu-related acute care in COPD and CHF patients with CA PCPs

● COPD Non-CA Cohort ● COPD CA Cohort

● CHF Non-CA Cohort ● CHF CA Cohort



counterparthealth.com

## Counterpart Assistant: Scaling preventative care to *reduce acute care risk and utilization*

In conclusion, CA's ability to surface actionable clinical insights and facilitate proactive interventions underscores its role in enabling effective value-based care at the point of care. This case study validates the experience of Clover Health plans, demonstrating that CA serves as a transformative platform that empowers PCPs to prioritize preventative health measures, such as influenza immunization, for high-risk populations. The data presented reflects that a relationship with a CA PCP is correlated with meaningfully higher immunization rates, including a 1.89 times higher likelihood of vaccination, driven by the active processing of platform-driven clinical insight.

The data also reflects a lower incidence rate and lower total volume of flu-related acute care utilization among COPD and CHF patients attributed to a CA PCP. This notable difference in hospitalizations and emergency department visits strongly suggests that CA helps support a crucial shift toward proactive and longitudinal care strategies. By helping PCPs reduce the incidence rate of acute events, CA enables lower clinical risk for adverse outcomes in vulnerable populations where a single respiratory infection can lead to permanent functional decline.

Furthermore, the significantly lower total utilization volume, representing a 22% and 18% reduction in acute encounters for these cohorts, suggests a clear pathway toward greater cost-effectiveness in managing high-risk cohorts. By addressing gaps in preventative care before they escalate into high-cost inpatient stays, CA provides a scalable mechanism for managing the compounding risks of multimorbidity while controlling the overall healthcare burden.

Limitations of this study include the retrospective nature of this real-world data analysis, in which there is no control over data collection or exposure variables. While this analysis attempts to limit bias by comparing cohorts in which CA usage by their PCP is the primary difference, the nature of this retrospective study design means there may be other unmeasured influencing factors not fully captured in the dataset. In addition, our ability to capture all true flu-related vaccination and acute care events is limited by claims data accessible as true events may not be fully captured by CPT and ICD-10 codes.

This case study builds on earlier substantive work by demonstrating how CA can significantly enhance patient outcomes and streamline healthcare delivery through proactive, continuous clinical care. By bridging the gap between clinical guidelines and point-of-care execution, CA provides the infrastructure necessary to manage complex chronic conditions effectively. This is a fundamental requirement for improving long-term health outcomes and reducing the overall burden on the healthcare system.

## Methods and statistical analysis

This study utilized a retrospective cohort design to evaluate the association between a member's relationship with a CA PCP and specific clinical outcomes related to influenza prevention and acute care utilization. All analyses examined diagnosis and claims data from Clover Health Medicare Advantage plan members for whom this data was available. We examined clinical outcomes of interest, specifically immunization claims data and flu-related acute care utilization as defined as any ED visit or hospitalization, over a defined measurement period of 24 months spanning the 2023 and 2024 calendar years.

Appropriate statistical methodology was utilized to determine the significance of our findings utilizing standard Python libraries, including NumPy for data handling, SciPy for the Fisher exact tests, and Statsmodels for rate calculations. Event counts for clinical outcomes were analyzed as discrete event counts. Because each subject contributed observations over an equal exposure window of 2 years, the primary comparison of interest was the mean incidence rate between cohorts. We performed a Fisher exact test on the full contingency table of event counts. 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 high event counts were sparse in seasonal respiratory data, we focused on the  $2 \times 2$  table, comparing 0 vs  $\geq 1$  events, to isolate differences in clinical risk and event incidence. Significance for tests was assessed at  $\alpha = 0.05$ .

Further sensitivity analysis was performed to examine for any differences between cohorts to ensure our findings were not driven by baseline demographic or clinical imbalances. When comparing member attributes in the CA Cohort ( $n=74,566$ ) versus those in the Non-CA Cohort ( $n=44,971$ ), there were no substantive differences in average age, CA 72.8 years old vs Non-CA 72.5 years old, or sex, CA 53.6% female vs Non-CA 56.6% female. Clinical complexity was also balanced across groups as measured by the average Charlson score (CA 2.59 vs Non-CA 2.49) or Elixhauser Score (CA 3.62 vs Non-CA 3.35) ensuring that the cohorts represented a similar clinical segment of the Medicare Advantage population. Similar findings were found when comparing member attributes in the COPD cohorts (age CA 73.8 vs Non-CA 73.7; sex CA 50.7% vs 54.0% F, Charlson score CA 2.80 vs Non-CA 2.88, Elixhauser Score CA 3.86 vs Non-CA 4.29) and CHF cohorts (age CA 74.1 vs Non-CA 74.4; sex CA 51.1% vs 54.5% F, Charlson score CA 2.75 vs 2.92 Non-CA, Elixhauser Score 3.79 CA vs 4.22 Non-CA).

## References

1. Iuliano AD, Roguski KM, Chang HH, et al. Estimates of global seasonal influenza-associated respiratory mortality: a modelling study. *The Lancet*. 2018;391(10127):1285-1300.
2. Centers for Disease Control and Prevention (CDC). Influenza Hospitalization Surveillance Network (FluSurv-NET). Underlying Medical Conditions Among Adults Hospitalized with Laboratory-Confirmed Influenza. January 2024.
3. Centers for Disease Control and Prevention. Flu & People with Certain Medical Conditions: Chronic Lung Disease and Heart Disease. National Center for Immunization and Respiratory Diseases (NCIRD). Updated 2025.
4. Centers for Disease Control and Prevention (CDC). “Underlying Medical Conditions and Risk of Influenza-Associated Hospitalization.” *CIDRAP News & Perspective* 2025.
5. Bazell C, Alston M, et al. “Variation in Prevalence and Burden of Chronic Obstructive Pulmonary Disease by State and Insurance Type in the United States.” *Chronic Obstr Pulm Dis*. 2025;12(1).
6. Khan MS, Sreenivasan J, Lateef N, et al. Trends in 30- and 90-Day Readmission Rates for Heart Failure: An Analysis of the National Readmission Database. *Circ Heart Fail*. 2021;14(4):e007880.
7. Prevention and Control of Seasonal Influenza with Vaccines: Recommendations of the Advisory Committee on Immunization Practices — United States, 2025–26 Influenza Season. *MMWR*. 2025;74(32).

<sup>1</sup> One constituent of providers that regularly use CA are those providers employed by Clover Health or its affiliates (“Clover Employed Providers”). 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.

<sup>2</sup> Members of the CA and Non-CA Cohort were included in the COPD and CHF iterations of those cohorts so long as they had a known diagnosis of COPD (ICD-10 codes J43.X, J44.X) or CHF (I50.X, I09.81, I11.0, I13.X) respectively, at any time before January 1, 2026; the diagnosis did not have to have been documented during the study period, or before the acute care events measured in the study.