Seniors Receiving In-Home Clinical Visits Realize Improved Outcomes and Receive More Preventive Services

As seniors age, their health status often worsens as diseases accumulate and progress. One way to improve or maintain seniors' health outcomes over time is to **actively engage them through in-home clinical visits that close and prevent gaps in care** by assessing health risks, identifying preventive care opportunities, and supporting primary care delivery. This research examines eight core measures of care for Medicare Advantage members who received their first in-home clinical visit in 2017 and then received follow-up visits in 2018 and 2019. It finds that **89% of seniors avoided more gaps in care and 60% had fewer gaps in care after two years.**

During these 45 to 60 minute visits with nurse practitioners or physicians, seniors receive:

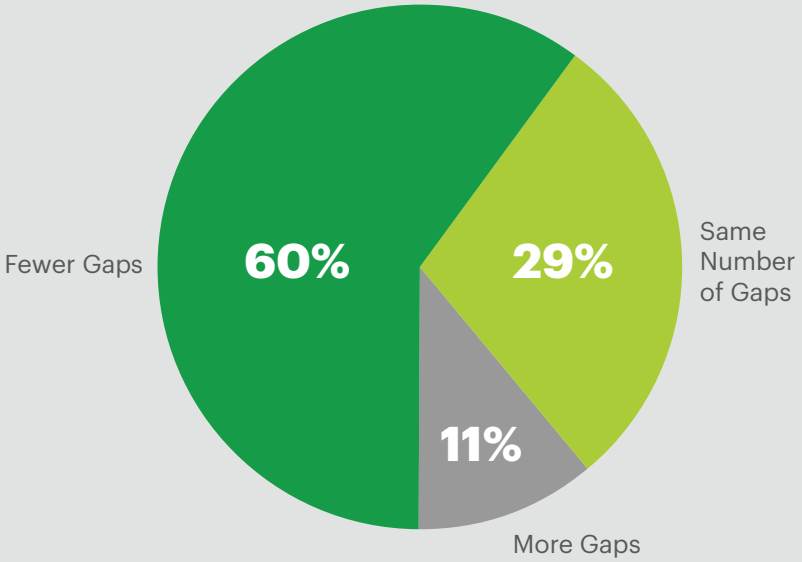
- A physical exam, including a comprehensive health assessment, and appropriate referrals for follow-up medical care
- A review of their health history, care plan, and current medications
- Screenings for behavioral health issues and social determinants of health
- An assessment of their home environment
- A list of items to discuss with their primary care provider, who receives a detailed summary of the visit

Overall Impact on Seniors: Closing and Preventing Gaps in Care

Across eight measures that include **clinical outcomes, access to care, and preventive services**, among seniors who received two follow-up in-home clinical visits:

- **60% had fewer gaps in care**
- **29% had the same number of gaps in care**
- **11% had more gaps in care**

89% of Seniors Avoided More Gaps in Care



Closing Individual Gaps in Care

Seniors who received **two follow-up in-home clinical visits** experienced the following results:

- **45% improvement** on average across eight measures, when a gap in care was identified for a specific measure at the first visit
- **86% maintenance** on average across eight measures, when there was no gap in care for a specific measure at the first visit

Clinical Outcomes

13-point net increase (from 62% to 75%) in seniors **avoiding stage 2 hypertension** among those starting with high blood pressure

- **67% improvement** among those starting with stage 2 hypertension
- **80% maintenance** among those starting without stage 2 hypertension

27-point net increase in seniors experiencing **pain relief** among those starting with chronic pain

- **29% improvement** among those starting with chronic pain
- **98% maintenance** among those starting with some relief from chronic pain

Access to Care

4-point net increase (from 93% to 97%) in seniors with **a primary care provider**

- **91% improvement** among those starting without a primary care provider
- **97% maintenance** among those starting with a primary care provider

40-point net increase in medically complex seniors receiving **new medication treatments** following a comprehensive medication reconciliation

- **54% improvement** among medically complex seniors
- **87% maintenance** among medically complex seniors

Preventive Services

2-point net increase (from 73% to 75%) in seniors with a current **flu vaccination**

- **35% improvement** among those starting without a current vaccination
- **90% maintenance** among those starting with a current vaccination

11-point net increase (from 49% to 60%) in seniors with a current **Tdap/TD vaccination**

- **26% improvement** among those starting without a current vaccination
- **74% improvement** among those starting with a current vaccination that was due to lapse during the study period

23-point net increase (from 37% to 60%) in seniors with a current **Prevnar 13 vaccination for pneumonia**

- **37% improvement** among those starting without a current vaccination
- *Maintenance occurs by default as individuals require only one vaccination after age 65*

3-point net increase (from 65% to 68%) in seniors with a current **colon cancer screening**

- **23% improvement** among those starting without a current screening
- **76% maintenance** among those starting with a current screening that was due to lapse during the study period

Methodology

Data used for this research study were extracted from deidentified electronic records generated during in-home clinical visits provided by Optum HouseCalls to UnitedHealthcare Medicare Advantage (MA) members. Information captured during these visits was entered contemporaneously into the member's individual electronic record via a tablet by the clinician conducting the visit.

The study population includes 189,985 UnitedHealthcare MA members who: (1) received their first in-home clinical visit in 2017 when they were 65 or older; (2) received visits in each of 2018 and 2019; and (3) had an opportunity to improve from the 2017 baseline on at least one of the tracked measures. Of the UnitedHealthcare MA members meeting the first two criteria, 4% did not meet the third.

The 2017 to 2019 study period was chosen to track the status of individual members who received visits in consecutive years. An end year of 2019 was selected to avoid the influence of the COVID pandemic. A start year of 2017 was selected to preserve a robust study population and allow for continuity in a sufficient number of measures. Because HouseCalls assessments are updated regularly to reflect new clinical protocols, and the wording of questions can be changed to improve their effectiveness, longer study periods would further limit the number of measures that can be tracked consistently and precisely over time. For the small number of individuals receiving more than one visit within a calendar year, only data from the first visit of each year were used.

This study analyzes eight measures of clinical outcomes, access to care, and preventive services that met the following inclusion criteria: data were readily quantifiable; data were valid for at least 95% of members subject to the measure; data resulted from the same assessment or clinician prompts throughout the study period; there were no changes to applicable clinical protocols during the study period; and member outcomes could be meaningfully influenced by provider follow-up.

For each member, performance on each measure for 2017 and 2019 was compared and categorized as: improvement, decline, or no change. An opportunity to decline with no change represents maintenance of a closed gap; an opportunity to improve with no change represents a missed opportunity to close a gap. Certain metrics were not applicable to all members. For example, members with a total colectomy were not analyzed for current colon cancer screening. On average, for each measure, 83% of members were analyzed.

Members were categorized into one of the following groups: fewer gaps in care with no new gaps, which reflects improvement on at least one measure with no decline; fewer gaps in care, which reflects net improvement resulting from more improvements than declines; no net change, which reflects an equal number of improvements and declines; and more gaps in care, which reflects net decline resulting from more declines than improvements.

For each measure, the percentage point ("point") increase reported represents the net change in the share of members with closed gaps in care from 2017 to 2019. For most measures, the improvement rate represents the share of members starting with a gap in care in 2017 for whom there was no gap in care in 2019; the maintenance rate represents the share of members starting without a gap in care in 2017 for whom there was no gap in care in 2019.

- For the hypertension measure, the threshold for high blood pressure is 120/80 and the marker for stage 2 hypertension is 140/90. To qualify as achieving lower blood pressure, a member starting with stage 2 hypertension had to end the study period without it. The share of the study population that qualified for this measure is 78%.
- For the pain relief measure, there are three potential outcomes: no relief, partial relief, and full relief. Members starting with partial relief could either improve or decline during the study period; thus, no start and end points for the percentage of members experiencing pain relief are reported. The improvement rate represents the share of members with chronic pain in 2017 who experienced partial or full relief by 2019; the maintenance rate represents the share of members with partial relief from chronic pain in 2017 who continued to experience such relief or who reported full relief by 2019. The share of the study population that qualified for this measure is 48%.

- For the primary care provider measure, improvement occurs when a member starting without a primary care provider selects or is assigned one. Maintenance occurs for some members without action or intervention.
- For the new medication measure, a medically complex senior is defined as having six or more new diagnoses during the study period (one more than the median). This measure assesses relative changes between member complexity and medication regimen throughout the study period; thus, no start and end points for the percentage of members receiving new medication treatments are reported. The improvement rate represents the share of members with six or more new diagnoses whose medication regimen increased by two or more medications by 2019. The maintenance rate represents the share of members with six or more new diagnoses whose medication regimen varied by no more than one total medication by 2019. The net increase represents the improvement rate minus the share of members with six or more new diagnoses whose medication regimen declined by two or more medications by 2019. The share of the study population that qualified for this measure is 46%.
- For the flu vaccination measure, a current vaccination is defined as an annual vaccination.
- For the Tdap/TD vaccination measure, a current vaccination is defined as a vaccination in the previous 10 years. The maintenance rate is adjusted to reflect that an estimated 20% of the study population would need an updated vaccination during the study period.
- For the Prevnar-13 vaccination measure, a current vaccination is defined as a vaccination after age 65. The maintenance rate is neither calculated nor included in measure averages because individuals require only one vaccination after age 65.
- For the colon cancer screening measure, a current screening is defined as a colonoscopy within ten years, a flexible sigmoidoscopy within five years, and/or a fecal occult blood test within one year. The maintenance rate is adjusted to reflect that an estimated 25% of the study population would need an updated test during the study period.

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