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Examining home health care use among Medicare Advantage enrollees

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Presentation roadmap

1. Background
2. Data and analytic methods
3. Findings on MA enrollees' use of home health care
4. Findings on MA and FFS beneficiaries' use of home health care
5. Limitations of our study
6. Discussion and next steps

Commissioners have expressed interest in understanding the use of post-acute care in MA

- Home health care is the most frequently used post-acute care among FFS beneficiaries
  - Covers treatment for beneficiaries needing skilled care in their home
  - May be used after an acute inpatient hospitalization or SNF stay, or without a prior institutional stay
- In October 2024, we assessed the completeness of MA home health data sources using 2021 data and presented initial unadjusted estimates of home health care use among MA enrollees compared with FFS beneficiaries

Note: MA (Medicare Advantage), FFS (fee-for-service), SNF (skilled nursing facility). Medicare home health care consists of skilled nursing, physical therapy, occupational therapy, speech therapy, aide services, and medical social work provided to beneficiaries in their homes.

Source: Medicare Payment Advisory Commission. 2024. *Data Book: Health Care Spending and the Medicare Program*. Washington, DC: MedPAC.

Combining encounter with OASIS data provides a more complete view of MA enrollees' use of home health care nationwide

- Of MA enrollees with a home health encounter record or OASIS record in 2021: 87% had both (matched), 7% home health encounter only, 6% OASIS only
  - Indicates that reporting is incomplete in both data sources
  - Suggests that existing studies that rely solely on OASIS data may understate use for MA enrollees
- In contrast, the match rate was 98% for FFS beneficiaries with home health records
- Combining the data helps to validate the data sources

Note: OASIS (Outcome and Assessment Information Set), MA (Medicare Advantage), FFS (fee-for-service).
Source: MedPAC analysis of 2021 enrollment, home health encounter data, claims, and OASIS data from CMS. Kim, et al. 2025. Home health care use among Medicare beneficiaries From 2010 to 2020. *Medical Care Research and Review,* Feb. 19; Jones et al. 2025. Racial disparities in end-of-life home health use in Medicare Advantage vs traditional Medicare. *JAMA,* Jan. 27. Burke, R. E., I. Roy, F. Hutchins, et al. 2024. Trends in post-acute care use in Medicare Advantage versus traditional Medicare: A retrospective cohort analysis. *Journal of the American Medical Directors Association* 25, no. 10 (August 15); Skopec, L., P. J. Huckfeldt, D. Wissoker, et al. 2020. Home health and post acute care use in Medicare Advantage and traditional Medicare. *Health Affairs* 39, no. 5 (May): 837–842; Loomer, L., C. M. Kosar, D. J. Meyers, et al. 2021. Comparing receipt of prescribed post-acute home health care between Medicare Advantage and traditional Medicare beneficiaries: An observational study. *Journal of General Internal Medicine* 36, no. 8 (August): 2323–2331; Ma, C., M. Rajewski, and J. M. Smith. 2024. Medicare Advantage and home health care: A systematic review. *Medical Care* 62, no. 5 (May 1): 333–345; MedPAC's June 2024 report to the Congress.

Expand upon prior work by incorporating beneficiary, plan, and provider characteristics

- We estimated differences in home health care by plan type and by payer (MA vs. FFS) after adjusting for beneficiary characteristics
- We examined:
  - Overall rate of home health care use
  - Visits per beneficiary among home health care users
- We incorporate information from a small number of informal interviews conducted with HHAs

Note: MA (Medicare Advantage), FFS (fee-for-service), HHA (home health agency).

Data and analytic methods

Our analytic sample reflects counties with more complete MA home health care data, 2021

- Among MA enrollees, home health encounter and OASIS data match rates varied by county (from 71% to 97%)*
- Our analytic samples included Medicare beneficiaries residing in counties with at least an 85% MA data match rate
  - 35 million beneficiaries (70% of all Medicare beneficiaries)
  - 2.9 million used any home health care
  - 2.3 million were matched home health care users

Note: OASIS (Outcome and Assessment Information Set), MA (Medicare Advantage). Our analytic sample included only beneficiaries with 12 months of Part A and B coverage who did not switch payers during the year (see your mailing materials for the full set of inclusion criteria). "Matched home health care users" included those with both a home health encounter (or claims) record and an OASIS start or resumption of care assessment (your reading materials contain more detail).
*10th to 90th percentiles across counties.

Source: MedPAC analysis of enrollment, home health encounter data, claims, and OASIS data from CMS.

Beneficiary, plan, and HHA characteristics used in our analysis

- Demographics: Age, race, disability, low-income status, geography
- Health status:
  - Claims/encounters: Acute care hospitalization
  - OASIS: Activities of daily living (e.g., ability to dress, walk); clinical items (e.g., vision, surgical wounds)
- MA plan types: HMO vs. PPO, provider-sponsored plan, plan has home health cost sharing
- HHA types: Ownership and type, size, geography, star ratings

Note: HHA (home health agency), OASIS (Outcome and Assessment Information Set), MA (Medicare Advantage), HMO (health maintenance organization), PPO (preferred provider organization).

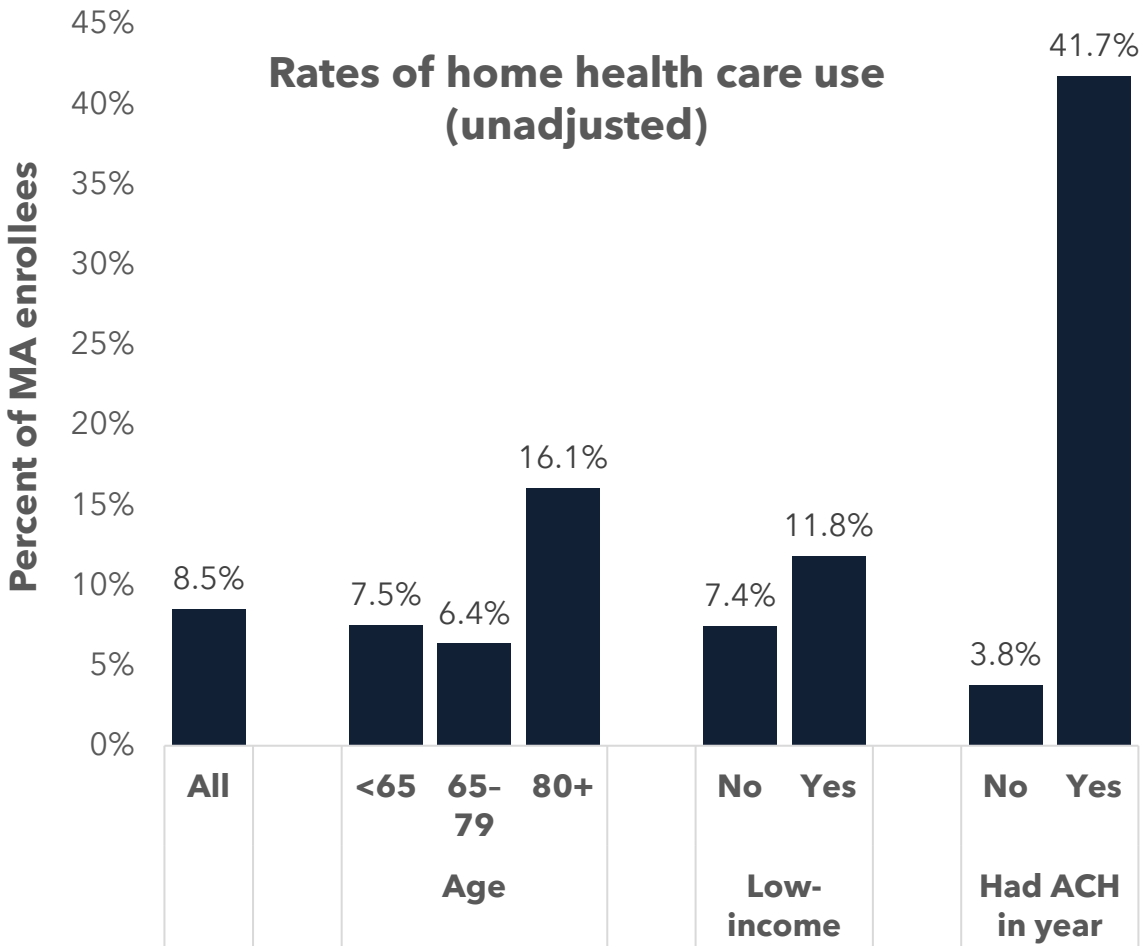
Multivariate regressions used to analyze home health care

- Two dependent variables:
  - Any home health care use
  - Visits per home health care user
- Included beneficiary characteristics (visits per beneficiary regressions included OASIS health-status variables)
- Controlled for geography using county-level fixed effects
- Tested for differences by plan attributes and by payer (MA, FFS)
- Stratified results by presence of acute care hospitalizations

Note: OASIS (Outcome and Assessment Information Set), MA (Medicare Advantage), FFS (fee-for-service). All regressions were run with ordinary least squares with standard errors clustered at the county level.

Findings on use of home health care by MA enrollees

Use of home health care was higher among MA enrollees who were older, had low incomes, and had a hospital stay (unadjusted), 2021



- Overall, 8.5% of MA enrollees used home health care
  - Higher among those who were older, had low incomes, and had an ACH stay in the year
- Visits per user also varied
  - 18.2 per user, on average
  - More visits among those who were older, had low incomes, had a prior hospital stay, and had greater impairment or severity

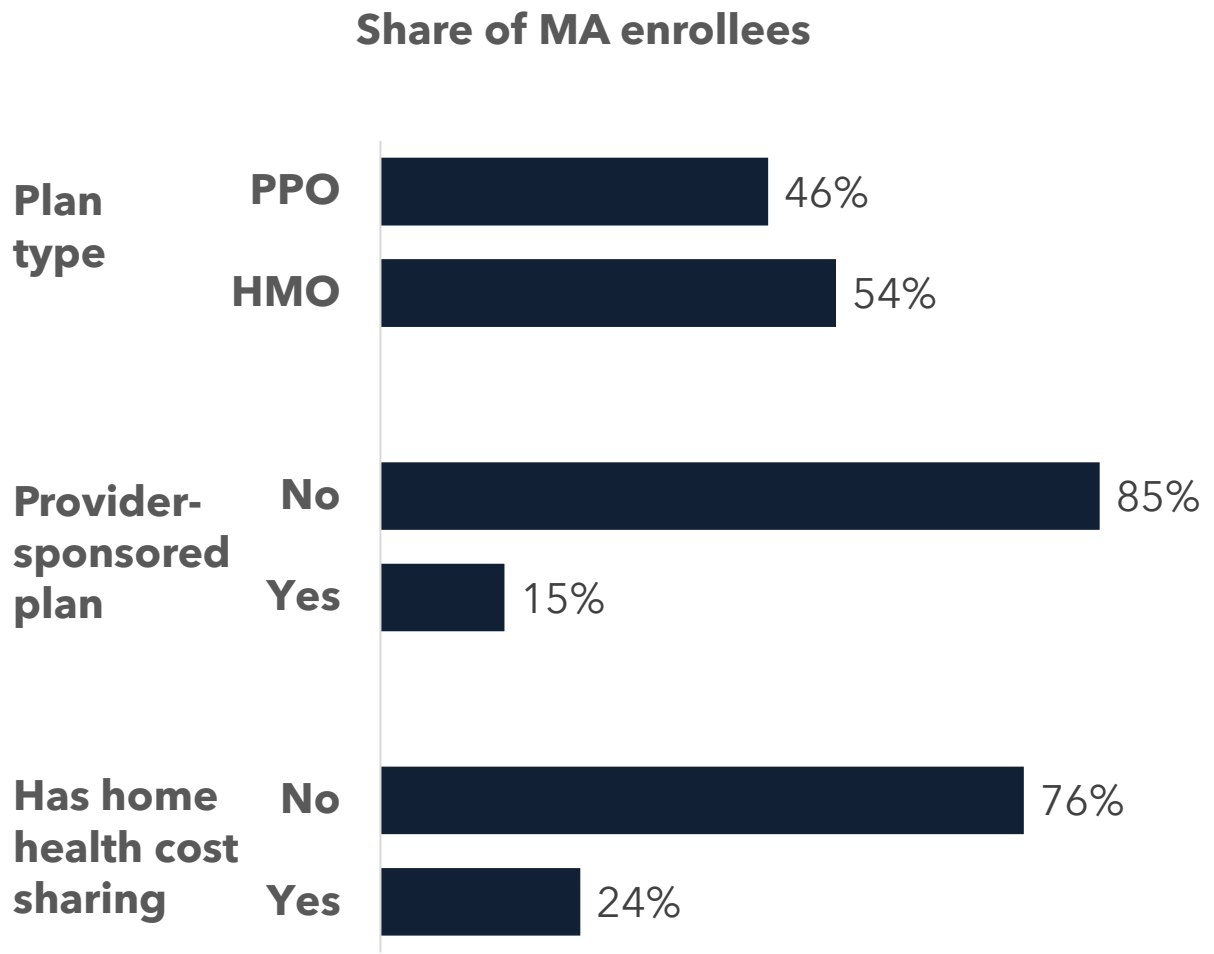
Note: MA (Medicare Advantage), ACH (acute care hospitalization). Home health care use is the number of enrollees with a home health encounter record or OASIS (Outcome and Assessment Information Set) record in the year divided by all MA enrollees. Rates were not adjusted for beneficiary characteristics.

Source: MedPAC analysis of enrollment, home health encounter data, home health claims, and OASIS data from CMS.

MA plan attributes that may affect home health care use, 2021

- PPO and HMO plans often have different networks
- Provider-sponsored plans affiliate with hospitals, physicians, or health systems
- Home health cost sharing might include deductibles or per visit copays (in contrast to no cost sharing for home health care in FFS)

Note: MA (Medicare Advantage), PPO (preferred provider organization), HMO (health maintenance organization), FFS (fee-for-service).
Source: MedPAC analysis of enrollment and plan benefit data from CMS and MMIT Directory of Health Plans.



PPO plans were associated with more home health care visits per beneficiary (adjusted), 2021

	Regression-adjusted mean		Difference (percent)
	PPO	HMO	
Probability of home health care use	8.5%	8.4%	0.08 (0.9%)
Visits per home health care user	18.8	17.9	0.85* (4.6%)

Note: PPO (preferred provider organization), HMO (health maintenance organization). Among Medicare Advantage (MA) enrollees, we separately regressed any home health care use and visits per user on beneficiary characteristics, an indicator for plan type, and county-level fixed effects. Differences and percents were calculated on unrounded data.
* Indicates statistical significance at the 1% significance level with Bonferroni corrections for multiple comparisons.

Source: MedPAC analysis of enrollment, MA home health and inpatient encounter, home health claims, Outcome and Assessment Information Set (OASIS), Medicare Provider Analysis and Review file, and plan benefit data from CMS.

Provider-sponsored plans were associated with fewer home health care visits (adjusted), 2021

	Regression-adjusted mean		
	Provider-sponsored plan	Not a provider-sponsored plan	Difference (percent)
Probability of home health care use	8.4%	8.4%	-0.02 (-0.2%)
Visits per home health care user	16.8	18.6	-1.75* (-9.5%)

Note: Among Medicare Advantage (MA) enrollees, we separately regressed any home health care use and visits per user on beneficiary characteristics, an indicator for provider-sponsored plan, and county-level fixed effects. Differences and percents were calculated on unrounded data.
* Indicates statistical significance at the 1% significance level with Bonferroni corrections for multiple comparisons.

Source: MedPAC analysis of enrollment, MA home health and inpatient encounter, home health claims, Outcome and Assessment Information Set (OASIS), Medicare Provider Analysis and Review file, and plan benefit data from CMS and the MMIT Directory of Health Plans.

Home health cost sharing was associated with less home health care use (adjusted), 2021

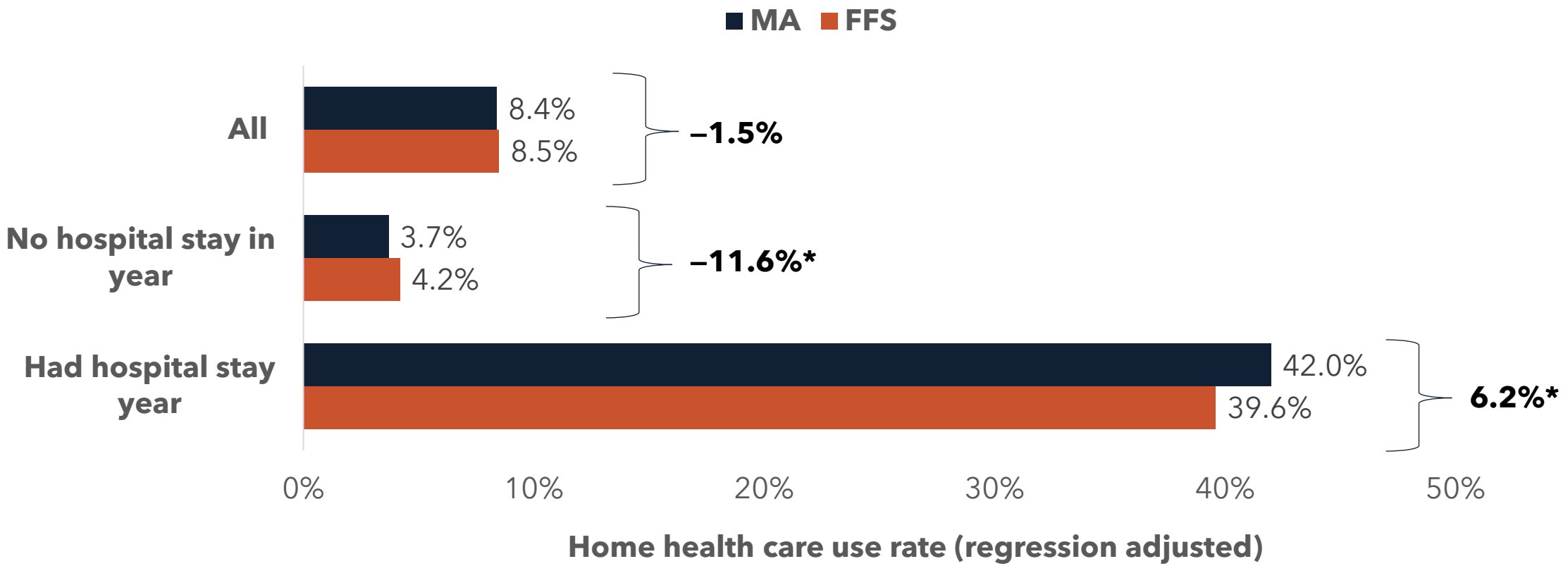
	Regression-adjusted mean		
	Has home health care cost sharing	No home health care cost sharing	Difference (percent)
Probability of home health care use	8.0%	8.6%	–0.56* (–6.7%)
Visits per home health care user	17.9	18.4	–0.55* (–3.0%)

Note: Among Medicare Advantage (MA) enrollees, we separately regressed any home health care use and visits per user on beneficiary characteristics, an indicator for plans with home health care cost sharing, and county-level fixed effects. Differences and percents were calculated on unrounded data.
* Indicates statistical significance at the 1% significance level with Bonferroni corrections for multiple comparisons.

Source: MedPAC analysis of enrollment, MA home health and inpatient encounter, home health claims, Outcome and Assessment Information Set (OASIS), Medicare Provider Analysis and Review file, and plan benefit data from CMS.

Findings on MA and FFS beneficiaries using home health care

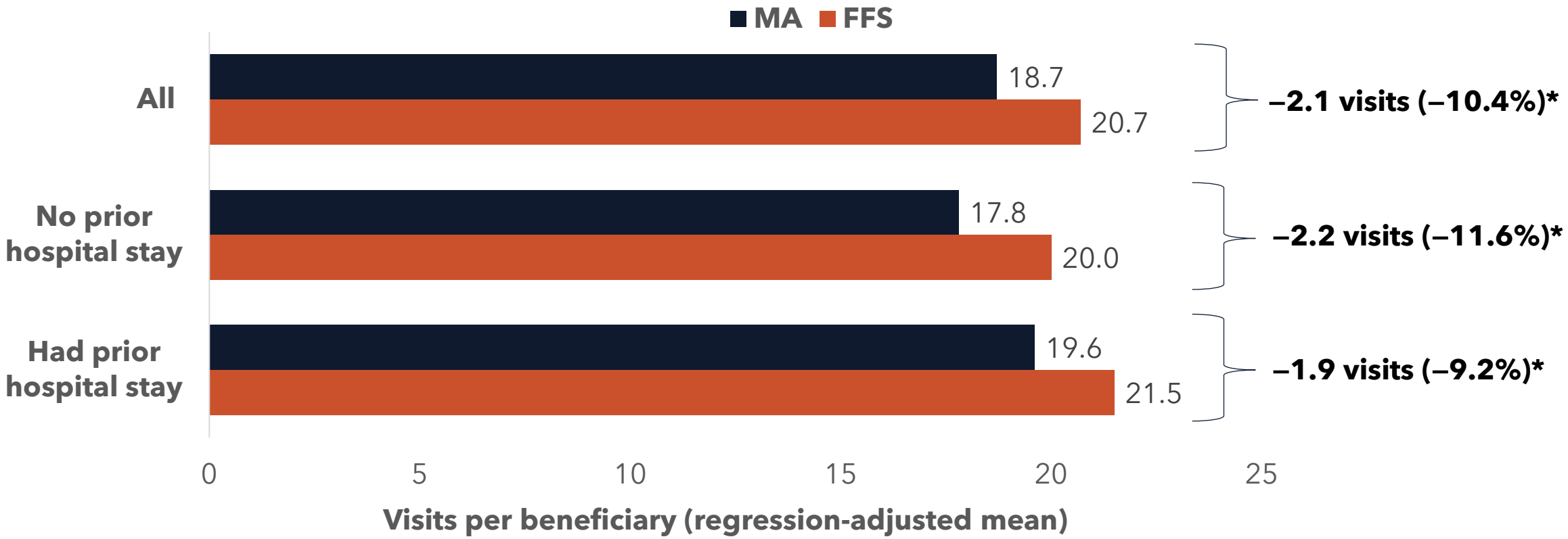
MA and FFS rates of home health care use differed depending on having a hospital stay (adjusted), 2021



Note: MA (Medicare Advantage), FFS (fee-for-service). Among all Medicare beneficiaries, we regressed an indicator for whether the beneficiary had any home health care on the beneficiary characteristics, an indicator for enrollment in MA, and included county fixed effects. We ran the regression separately for beneficiaries with and without a hospitalization in the year. Differences and percents were calculated on unrounded data.
*Indicates statistical significance at the 1% significance level with Bonferroni corrections for multiple comparisons.

Source: MedPAC analysis of enrollment, MA home health and inpatient encounter, FFS home health claims, and Medicare Provider Analysis and Review file data from CMS.

MA home health care users had fewer visits than FFS users (adjusted), 2021



Note: MA (Medicare Advantage), FFS (fee-for-service). Among all Medicare beneficiaries who used home health care, we regressed visits per user on beneficiary characteristics, an indicator for enrollment in MA, and included county fixed effects. We ran the regression separately for beneficiaries with and without a hospital stay prior to the start of home health care. Differences and percents were calculated on unrounded data.
* Indicates statistical significance at the 1% significance level with Bonferroni corrections for multiple comparisons.

Source: MedPAC analysis of enrollment, MA home health and inpatient encounter, FFS home health claims, and Medicare Provider Analysis and Review file data from CMS.

Controlling for differences in the HHAs used by MA and FFS beneficiaries did not change findings, 2021

- Fewer HHAs treated MA enrollees than FFS beneficiaries
  - 7,000 HHAs treated at least 20 FFS beneficiaries; 4,600 HHAs treated at least 20 MA enrollees (4,300 HHAs treated both)
- HHAs with high MA share tended to be large, urban, more likely to be freestanding nonprofit
- Controlling for the HHA providing treatment, we still estimated 1.8 fewer (adjusted) visits among MA enrollees (9.2% fewer)*

Note: MA (Medicare Advantage), FFS (fee-for-service), HHA (home health agency).
*Estimate was statistically significant at the 1% significance level.

Source: MedPAC analysis of enrollment, MA home health encounter, FFS home health claims, Outcome and Assessment Information Set (OASIS), cost report, and provider of services data from CMS.

Limitations of our study

- Trade-off between representativeness and data completeness when limiting to counties with higher data match rates
- MA enrollees could receive in-home visits through supplemental benefits not included in the Medicare home health benefit
- We are unable to determine the appropriate level of home health care use
- The broader acute and post-acute care landscape (e.g., SNFs, IRFs) affects home health care use

Note: MA (Medicare Advantage), SNF (skilled nursing facility), IRF (inpatient rehabilitation facility).

Discussion

- Questions
- Feedback for future work

Next steps

- June 2025 report to the Congress