Evaluation of the IAH Demonstration Final Report

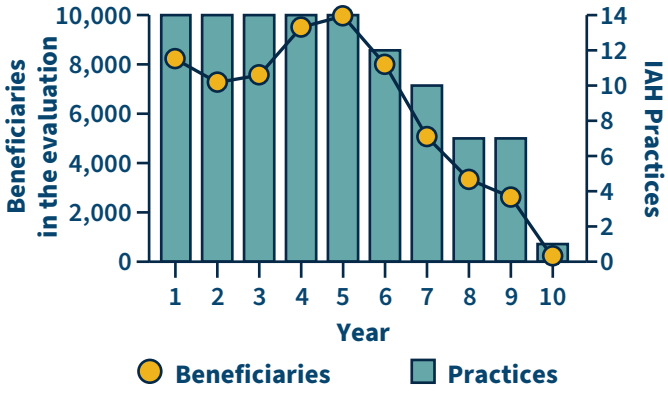
Executive Summary

The Independence at Home (IAH) demonstration was a Congressionally mandated test of whether home-based primary care (HBPC) and a payment incentive for HBPC practices reduced hospital and emergency department (ED) use, lowered Medicare spending, and improved health outcomes. HBPC refers to services that primary care clinicians provide in a beneficiary's home rather than in an office.

The IAH demonstration began in 2012. It was limited to beneficiaries in traditional Medicare who were chronically ill and needed help with daily activities, such as eating and dressing.

IAH included practices that had been providing HBPC for years before the demonstration began in 2012. During the demonstration, these practices continued their general approach to providing HBPC, such as by providing frequent visits at home to identify problems before they worsened and developing strong relationships with beneficiaries and caregivers. IAH practices' general approach to providing HBPC may have reduced spending and improved health outcomes. Over the demonstration's 10 years, the number of practices and IAH beneficiaries declined as practices left the demonstration, several of which joined other alternative payment models (Exhibit ES.1).

Exhibit ES.1. *The number of IAH practices and beneficiaries in the evaluation decreased starting in Year 6*



Source: IAH demonstration data and Medicare claims, 2012–2023.

The demonstration offered an opportunity for IAH practices to earn performance-based incentive payments annually. The amount of the incentive payment a practice received, if any, depended on whether their beneficiaries' Medicare spending was less than a spending target and whether the practice met specified thresholds on certain quality measures. The opportunity to receive this incentive payment was intended to motivate IAH practices to improve how they delivered HBPC, which may have reduced spending and improved health outcomes.

Practices reported making minor changes to try to reduce hospital and ED use in response to the demonstration. For example, some practices implemented formal processes to identify beneficiaries at highest risk for hospital use and checked in with those beneficiaries via telephone between visits.

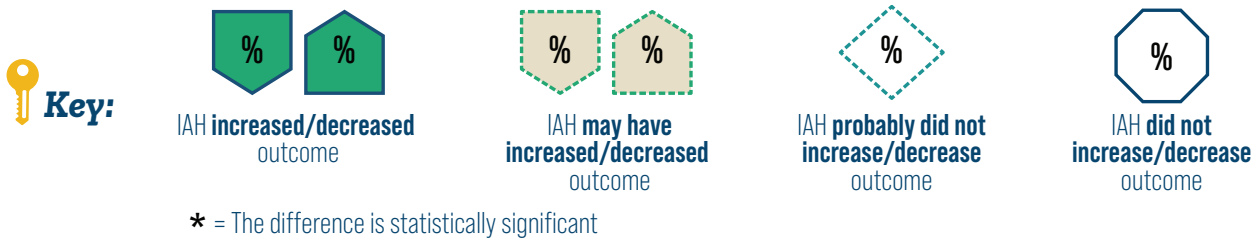
Mathematica, an independent contractor, analyzed claims, survey, and interview data to determine whether the IAH demonstration met its goals. To assess several outcomes, the final report presents the results of two main analyses:

- **Performance-year analysis for new and existing users of HBPC.** This analysis describes how the demonstration affected outcomes for IAH beneficiaries over 10 performance years. It compares (1) the change in outcomes for new and existing users of HBPC during the demonstration relative to new and existing users in the year before IAH began with (2) the change in outcomes over the same period for groups of similar beneficiaries who did not receive HBPC. The results reflect a weighted average of results for each of the 10 performance years. When this report refers to the effect of the demonstration, it means the effect of the opportunity to earn the demonstration payment incentive on spending and other outcomes.

- **Three-year analysis for beneficiaries new to HBPC.** This analysis describes how starting HBPC during the demonstration affected outcomes for up to three years. It compares (1) the change in outcomes for the approximately one-quarter of IAH beneficiaries who were new users of HBPC compared to those same individuals before they started HBPC with (2) the change in outcomes for a comparison group of similar beneficiaries who did not receive HBPC. IAH outcomes were measured in the first, second, and third years after initiation of HBPC.

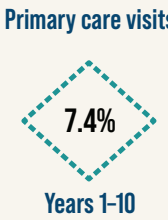
The final report examines 10 topics identified by the IAH authorizing legislation to be tested and analyzed by the evaluation. For most topics, we categorized results to assess whether IAH met its goals according to levels of evidence, presented in the key below. A summary of the findings for all legislation topics is in Exhibit ES.2.

Exhibit ES.2. *Summary of findings from the evaluation*



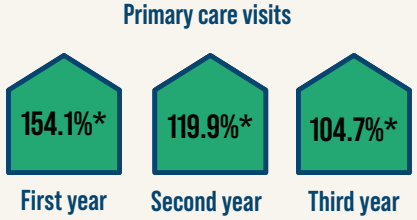
Did IAH improve access to services?

Performance-year results for all beneficiaries



The demonstration probably did not increase primary care visits because it did not change IAH practices' general approach to HBPC for new and existing users of HBPC. Primary care visits include visits with primary care clinicians at home as well as in offices and clinics. The estimated increase of 7.4% was equivalent to less than one extra visit (0.7) per beneficiary per year. Evidence that the demonstration caused an increase in primary care visits was weak.

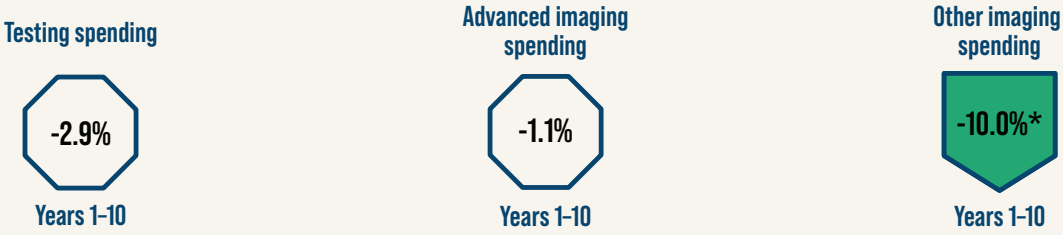
Three-year results for beneficiaries new to HBPC



For beneficiaries new to HBPC, **starting HBPC during the demonstration greatly increased primary care visits.** The estimated increase of 154.1% percent in the first year was equivalent to seven extra visits per beneficiary per year. As part of their approach to delivering HBPC, IAH practices provided frequent home visits to identify and address health problems before they worsened.

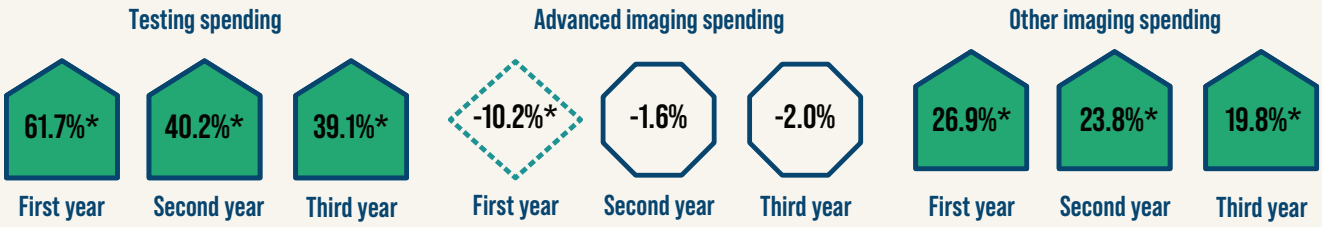
Did IAH improve efficiency of care?

Performance-year results for all beneficiaries



The demonstration did not reduce spending on testing or advanced imaging such as MRIs and CT scans but did reduce spending for other types of imaging such as ultrasounds and x-rays. Over time, IAH practices may have aimed to reduce some unnecessary imaging as a response to the incentive to lower spending during the demonstration.

Three-year results for beneficiaries new to HBPC



For beneficiaries new to HBPC, **starting HBPC during the demonstration greatly increased spending on testing and some types of imaging.** Several IAH practices arranged for beneficiaries to receive lab tests, ultrasounds, and x-rays at home as part of their approach to delivering HBPC. However, starting HBPC during the demonstration probably did not reduce advanced imaging spending. Although the estimated decrease of -10.2% was large, the evidence that starting HBPC during the demonstration caused this decrease was weak.

Were IAH beneficiaries and caregivers satisfied?

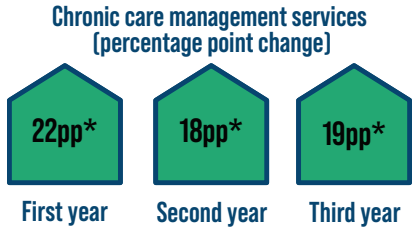
IAH beneficiaries were generally satisfied with the care they received from IAH practices during the demonstration. Almost all (93%) of beneficiaries reported being very satisfied or satisfied with care they received in the past six months. About 91% of caregivers reported having great confidence in the care team.

How did IAH practices perform on quality measures?

In most years, at least half of the practices that qualified for an IAH incentive payment could have earned a larger payment by meeting the performance threshold for more quality measures. One challenge with meeting the performance threshold for these measures was receiving timely notification about beneficiaries' emergency department (ED) visits and hospital admissions. Most IAH practices met the required thresholds for incentive payment purposes for the three claims-based quality measures of potentially avoidable ED and hospital use and readmissions across nearly all years. However, the evaluation's analysis of whether the demonstration resulted in a change in performance for similar measures showed that the demonstration did not reduce potentially avoidable ED use, though it may have reduced potentially avoidable hospital admissions and unplanned readmissions.

Did IAH improve coordination of care?

Three-year results for beneficiaries new to HBPC



Starting HBPC during the demonstration greatly increased use of chronic care management services, which is a measure of care coordination.

Collaboration with home health agencies about treating acute and chronic conditions was a key component of IAH practices' general approach to HBPC.

Did IAH reduce ED and hospital use?

Performance-year results for all beneficiaries

The demonstration probably did not lead to new reductions in ED and hospital use among new and existing users of HBPC. IAH practices focused on helping beneficiaries avoid the ED and the hospital long before the demonstration began. Practices made only minor changes to their long-established approach to delivering HBPC to try to reduce to try to reduce ED and hospital use after the demonstration began.

Three-year results for beneficiaries new to HBPC

For beneficiaries new to HBPC, **starting HBPC during the demonstration led to a growing reduction in ED use over time and reduced hospital use in the first two years.**

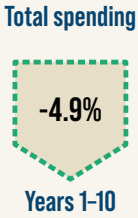
What were the best practices associated with better outcomes?

Several strategies IAH practices used to deliver HBPC were associated with larger reductions in potentially avoidable hospital admissions for beneficiaries starting HBPC during the demonstration. These strategies were:

- Lower daily clinician caseload, 3 to 7 patients per day rather than 8 to 15
- Smaller clinical panel sizes, 40 to 149 patients per clinician rather than 150 to 200
- Having nurse practitioners or physician assistants conduct at least half of the HBPC visits, with less than half provided by physicians
- Providing visits in the home by non-physician staff, such as nurses, social workers, and chaplains
- Providing patient visits when needed in settings outside the home, such as in a skilled nursing facility or hospital
- Using remote monitoring technology, such as to monitor beneficiaries' blood pressure or blood sugar levels

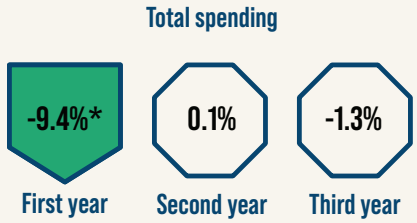
Did IAH reduce Medicare spending before accounting for incentive payments?

Performance-year results for all beneficiaries



The demonstration may have reduced total Medicare spending by a moderate amount before incentive payments. However, two-thirds of that reduction was tied to a large practice that stopped participating in IAH and stopped providing HBPC after Year 5. Still, the demonstration reduced spending among one group of beneficiaries: those who were both dually eligible for Medicaid and needed help with most or all daily activities, such as eating and dressing.

Three-year results for beneficiaries new to HBPC



For beneficiaries new to HBPC, **starting HBPC during the demonstration greatly reduced total Medicare spending in the first year, but this effect did not continue.** Starting HBPC during the demonstration reduced spending only among beneficiaries who needed help with most or all activities of daily living, regardless of whether they were dually eligible for Medicaid.

Did IAH reduce Medicare spending net of incentive payments?

Performance-year results for all beneficiaries

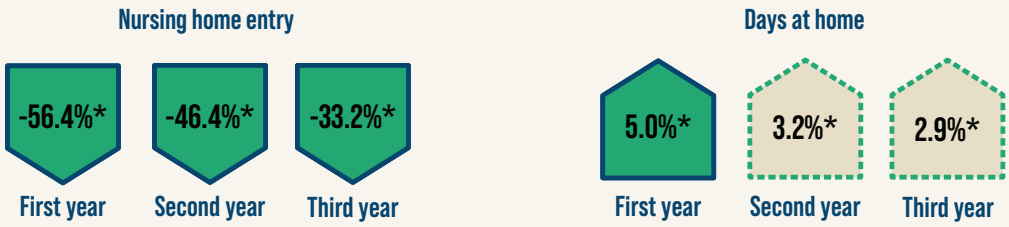
The demonstration did not reduce total Medicare spending net of incentive payments. IAH practices received incentive payments totaling $96.0 million over the course of the demonstration. Because of the inconclusive declines in gross total spending, the estimate of total Medicare spending after adding the total incentive payments ranged from a net savings of $162 million to a net loss of $104 million.

Did IAH reduce health outcomes?

Performance-year results for all beneficiaries

The demonstration did not reduce nursing home entry, nor did it affect beneficiary days at home. Evidence that the demonstration caused an increase of 9.3% in nursing home entry was weak.

Three-year results for beneficiaries new to HBPC



For beneficiaries new to HBPC, **starting HBPC during the demonstration greatly reduced nursing home entry in all years. It also increased days at home in the first year** by reducing hospital admissions and time in skilled nursing facilities.

To learn more about the IAH demonstration and download the final evaluation report, visit https://innovation.cms.gov/innovation-models/independence-at-home.