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# Innovative Home Visit Models Associated With Reductions In Costs, Hospitalizations, And Emergency Department Use

**ABSTRACT** While studies of home-based care delivered by teams led by primary care providers have shown cost savings, little is known about outcomes when practice-extender teams—that is, teams led by registered nurses or lay health workers—provide home visits with similar components (for example, care coordination and education). We evaluated findings from five models funded by Health Care Innovation Awards of the Centers for Medicare and Medicaid Services. Each model used a mix of different components to strengthen connections to primary care among fee-for-service Medicare beneficiaries with multiple chronic conditions; these connections included practice-extender home visits. Two models achieved significant reductions in Medicare expenditures, and three models reduced utilization in the form of emergency department visits, hospitalizations, or both for beneficiaries relative to comparators. These findings present a strong case for the potential value of home visits by practice-extender teams to reduce Medicare expenditures and service use in a particularly vulnerable and costly segment of the Medicare population.

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Many older adults have functional limitations that lead to delays in seeking primary care, which increases risks for potentially avoidable emergency department (ED) visits, hospitalizations, and nursing home admissions.<sup>1</sup> High-quality home visit models provide support for preventive health care and improved quality of care for older people who are managing multiple chronic conditions, as well as for their caregivers. Home visits offer an opportunity to reach high-risk, high-needs patients before a change in condition necessitates a higher level of care and can mitigate access barriers such as lack of transportation or limited mobility. Over time, home visits can also encourage trust, build a patient's or caregiver's capacity for self-care, and promote safety in home environments.<sup>2</sup>

Home visit programs are distinct from the Medicare home health benefit, which provides professional clinical care in the home following a hospitalization. To date, published studies of home visit programs have focused on physician-provided care. A 2008 review of twenty-one randomized controlled trials found that evidence is inconclusive about the impacts of preventive home visiting programs for older adults on measures of functional status, nursing home admission, or mortality.<sup>3</sup> However, there is significant variation in outcomes, with younger study populations having more positive results than older study populations.<sup>4,5</sup> A 2014 review by the Agency for Healthcare Research and Quality of home-based primary care interventions identified reductions in ED visits and hospitalizations, increased access to care, and improved patient satisfaction.<sup>6</sup> A 2015 review found that a large-scale

clinician-based home visit program offered in five states through a Medicare Advantage plan reduced hospitalizations and nursing home admissions.<sup>7</sup> Recent initiatives, including the Independence at Home Demonstration and Health Quality Partners, hold promise for high-risk patients.<sup>8,9</sup>

In this mixed-methods study, we explored the value of five home visit program models organized around care coordination and patient/consumer engagement instead of the delivery of care. As part of NORC at the University of Chicago's multiyear evaluation of the Health Care Innovation Awards of the Centers of Medicare and Medicaid Services (CMS), we assessed the effectiveness of five home visit models serving older adult Medicare beneficiaries that addressed aspects of service delivery not based in primary care. Instead of physicians or nurse practitioners, these models used patient-extendee teams comprising registered nurses or lay health workers (such as patient liaisons and educators) as lead staff on home visits.<sup>10</sup> Each model developed its own protocols to improve health and quality of care and to encourage smarter spending by providing innovative care to a targeted group of fee-for-service Medicare beneficiaries with multiple chronic conditions.

### The Home Visit Models

Each model delivered home visits with services complementary to clinical primary or palliative care, defined as “care that offers relief from pain and other symptoms, that supports quality of life, and that is focused on patients with serious illness and their families.”<sup>11</sup> The models approached the home as a place to strengthen connections or links with primary or palliative care, with the goal of improving the effectiveness or quality of services delivered by physicians, nurse practitioners, and other clinical providers in settings outside the context of a home visit. Some of the models used the home as a context for understanding beneficiary functioning, to inform person-directed care plans, and to address safety hazards by making modifications. Others used the home as a site for monitoring health and function, delivering supports such as education about chronic disease self-management, and providing referrals to home and community-based services and social services. We identified common populations and program components as relevant. However, given the diversity of home visit models and populations in this study, it is important to consider each model individually as well.

The models differed in scale, type, scope, and staffing. For example, they ranged in size from

a single site that enrolled fewer than 300 beneficiaries to multiple sites that enrolled over 9,000. Two models focused broadly on case management and improving health behaviors: Indiana University's Aging Brain Care (ABC), which enrolled patients with dementia, depression, or both; and Ochsner Health System's Stroke Mobile, which targeted patients recovering from stroke. Palliative Care Consultants of Santa Barbara's Doctors Assisting Seniors at Home (DASH) offered a subscription-based assessment and coordination service to help older adults avoid ED visits. The Johns Hopkins University School of Nursing's Community Aging in Place, Advancing Better Living for Elders (CAPABLE) focused on beneficiary-directed functional improvements tied to the home environment, with the aim of delaying entry to skilled nursing facilities.<sup>12</sup> Sutter Health's Advanced Illness Management (AIM) model served as a bridge between hospital and hospice care for patients with late-stage illness. Registered nurses were the lead staff for CAPABLE, DASH, and AIM, while lay health workers led the ABC and Stroke Mobile home visits (the models are described in detail below).

Enrollment strategies used existing institutional relationships and varied by target group to be served: ABC received referrals through Indiana University's brain care center; CAPABLE recruited participants as part of a National Institute on Aging trial; Stroke Mobile staff members saw all participants admitted to Ochsner Health System with a stroke diagnosis; DASH received referrals from senior housing managers and community partners in Santa Barbara, California; and AIM solicited referrals from providers of participants in the Sutter Health system who met criteria related to late-stage prognosis.

Collectively, the home visit program models addressed six categories of needs: care coordination, through the communication of beneficiary information across care settings and between providers and beneficiaries; beneficiary or caregiver education, through one-on-one or group education focused on chronic disease self-management; referrals to home and community-based services and supports, through the provision of information or assistance to connect the patient with transportation, food, housing assistance, and other services; disease management, through the regular monitoring of key biometrics (such as hemoglobin A1C levels) and a focus on improving health behavior (such as nutrition) through self-care; advance care planning, through early conversations about end-of-life preferences; and environmental assessment or redesign, through improving the home environment by reducing potential fall risks.

# Four of the five models we studied were associated with reduced total Medicare expenditures or utilization.

Though each model implemented a unique approach to home care for an older adult population, some similarities among the five models inform the potential impact of home visits. All five models included two components: care coordination and patient/consumer engagement, which created or strengthened links between model beneficiaries and clinicians who were not involved in the home visit. For example, home visit staff shared encounter notes, care plans, or electronic health records with clinicians serving the participants. In addition, home visit staff either identified a primary care provider for each beneficiary at the point of enrollment in the model or followed up with a beneficiary's already designated primary or palliative care provider.

Each model also offered an education component, with the type of education varying by disease and population focus. For example, Stroke Mobile addressed behavior change (such as smoking cessation) to prevent additional strokes among beneficiaries, while CAPABLE educated participants on dietary changes to improve diabetes self-management and weight-related mobility challenges.

Other components were offered by some but not all models. Four models (ABC, DASH, Stroke Mobile, and AIM) offered disease management and advance care planning. Disease management included tactics such as monitoring key biometrics (ABC) and medication reconciliation (DASH, AIM). Three models (CAPABLE, DASH, and AIM) offered referrals to home and community-based services. Two models (ABC and CAPABLE) offered environmental assessment and home modifications.

## Study Data And Methods

### CLAIMS-BASED ANALYSIS

► **DATA SOURCE AND ANALYTIC SAMPLE:** Our study population included participants in each

model who were enrolled for any part of the period July 2012–December 2015, as well as non-participant comparators matched to each participant. Each model provided a file containing a list of all participants and their date of enrollment. We linked each participant to fee-for-service (FFS) Medicare claims files from the CMS Chronic Conditions Data Warehouse, which contains detailed enrollment, cost, and utilization data.

Conceptual decisions about the creation of the comparison group and variables in propensity score models were developed in consultation with model research teams (for example, principal investigators and statisticians) and NORC's disease-specific subject matter experts (such as geriatricians and cardiologists). To identify comparators, we first identified geographic regions that were similar to those of the five home visit models and then used those regions to create a comparison pool. We narrowed the pool by identifying older adults and then using the model's clinical criteria for enrollment. We limited comparators to Medicare beneficiaries with at least three chronic conditions for CAPABLE, DASH, and AIM; those with dementia, depression, or both for ABC; and those who had had a recent stroke in a hospital with a Comprehensive Stroke Center Certification for Stroke Mobile. For the three models focused on multiple comorbidities, we did not match on specific combinations of chronic conditions. However, we did match on Hierarchical Condition Category (HCC) risk scores—a measure of multimorbidity and expected expenditures—at time of enrollment.<sup>13</sup>

Next, we identified a list of characteristics to use in selecting beneficiaries who were similar to treatment beneficiaries for each comparison pool. For CAPABLE, ABC, DASH, and AIM, we used one-to-one propensity score matching to match each model beneficiary to a comparator from a selected geographic region. For Stroke Mobile, we used propensity score weighting to match beneficiary episodes at selected comparison hospitals (for details on comparison group selection, propensity score weighting, and matching, see the online Appendix).<sup>14</sup> Matching models included demographic characteristics, comorbidities, and previous cost and utilization.

► **STUDY DESIGN:** We used a difference-in-differences approach to evaluate outcomes of ABC, CAPABLE, Stroke Mobile, and DASH, following each beneficiary and matched comparator for two years before the beneficiary's enrollment in the model and for up to three years after enrollment (that is, for up to five years overall). For AIM's retrospective analysis, we were not able to replicate a physician prognosis of death within twelve months in claims. Thus, we exam-

ined claims for the two years before death, using a retrospective time series (or differences) analysis.

Our analyses examined total Medicare expenditures, hospitalizations, and ED visits.<sup>15</sup> A negative number indicated a favorable finding relative to the comparison group. Cost outcomes were continuous, measured as the change in average total expenditures per beneficiary (or per beneficiary episode for Stroke Mobile) and presented as dollars per participant or episode. Utilization outcomes (hospitalizations and ED visits) are specified as binary (for example, did the participant have a hospitalization or not?) and were measured as the change in utilization rate and presented per 1,000 participants (or per 1,000 beneficiary episodes for Stroke Mobile).

► **STATISTICAL ANALYSIS:** We evaluated the impact of the models using a difference-in-differences analysis for CAPABLE, DASH, Stroke Mobile, and ABC and a time-series analysis for AIM. Difference-in-differences analysis compares average outcomes between beneficiaries in the treatment and comparison groups across the entire pre- and post-intervention periods and estimates the average treatment effect on the treated. For AIM, the analysis was anchored by date of death, and comparators were selected based on date of death and the same demographic, risk, and utilization factors as we used in the difference-in-differences models.

For total Medicare expenditures, we used generalized linear models. For utilization outcomes, we used logit models with robust standard errors. All models were adjusted for demographic characteristics (age, race, sex, and dual eligibility for Medicare and Medicaid), comorbidities (disability and HCC risk score), and cost and utilization in the previous year.

The conclusions drawn from these models were robust to alternative specifications (for example, using a count outcome). All statistical analyses were completed using Stata, version 13.1.

**QUALITATIVE ANALYSIS: DATA SOURCES** Qualitative data were collected for each of the five models in the period March 2014–December 2015. Sources of qualitative data were telephone interviews with model leadership; site visits that included focus groups or interviews with staff, participants, and caregivers; and direct observation of home visits. We also reviewed self-reported quarterly data that models submitted to CMS, related technical reports and peer-reviewed publications, and administrative and training documentation shared by the models.

Narrative data were analyzed using NVivo, version 10.0. A theme-based coding scheme was developed, based on the evaluation design

**It will be important for future research to consider which staffing approaches are appropriate to different groups of older adults.**

provided by CMS, to characterize elements of home visit models and impacts on quality of care, defined in terms of beneficiaries' reports of improvements in their health and self-care and strengthened links to primary care providers. We achieved interrater reliability of at least 90 percent on all analyses.

**LIMITATIONS** This analysis had several limitations. First, Medicare claims were the primary data source, so we were limited to covariates that were available and reliable in the claims data. For example, measures of disease severity and functional status were either unavailable or unreliable in claims data, and thus we were unable to include those measures in our models. We did include a measure of multimorbidity, using HCC risk scores in our analysis, and we used claims-based events to create similar trajectories for treatment and comparator beneficiaries (for example, we matched on a hospitalization before enrollment in a home visit model) where possible.<sup>16</sup>

Second, while we included many relevant demographic, clinical, and utilization characteristics in our matching strategy, there might still have been unobserved variance between treatment and comparison beneficiaries.

Third, our findings were limited to the experience of FFS Medicare beneficiaries; our analysis did not include the experience of beneficiaries with Medicaid or commercial insurance. As a consequence, the evaluations of two models, Stroke Mobile and CAPABLE, were underpowered, and we had only a 10 percent chance of detecting significant differences ( $p < 0.10$ ).<sup>17</sup> In these circumstances, the significant findings for both Stroke Mobile and CAPABLE suggest a strong relationship between the models and favorable outcomes.

Finally, each home visit model served a heterogeneous population that varied in diagnoses,



number of chronic conditions, and acuity of conditions, among other elements. For this reason, the analytic samples were unlikely to fully represent the experiences of all enrolled beneficiaries in the five models.

Despite these limitations, the data present a compelling view of the impact of a diverse set of home visit models.

## Study Results

Exhibit 1 summarizes the five models, including the frequency of visits and the staff involved. Exhibit 2 shows which of the six categories of need were addressed by each of the models.

**QUANTITATIVE ANALYSES** Our study sample included 5,861 beneficiaries and well-matched comparators. For a summary of participant characteristics, see the online Appendix.<sup>14</sup>

CAPABLE reduced total Medicare expendi-

tures for participants relative to comparators (Exhibit 3), driven by reductions in both inpatient and outpatient expenditures (data not shown). While we did not observe significant decreases in hospitalizations or ED visits (Exhibit 3), the model was associated with reduced readmissions and observation stays (data not shown). DASH showed significant reductions in ED visits and in hospitalizations, findings supported by the qualitative data (Exhibit 4). AIM estimates were based on end-of-life differences analysis. We noted significant reductions in hospitalizations and Medicare expenditures in the last thirty days of life for AIM (Exhibit 3). We observed significant reductions in readmissions for Stroke Mobile. There were no significant findings for ABC.

**QUALITATIVE ANALYSES** Analysis of qualitative data identified multiple themes related to improved quality of care, defined in terms of bene-

### EXHIBIT 1

#### Description of five home visit models for older adults

Model	Intervention	Frequency	General description	Home visit staff <sup>a</sup>
ABC (n = 1,244)	Provides individualized and integrated care management through interdisciplinary care teams across 2 sites	Monthly or quarterly home visits	Assesses patients' health status, monitors their medication and adherence, and delivers certain care protocols; offers environmental assessment; serves as a liaison between the patient and other members of the care team	21 lay health workers, 3 registered nurses, 2 social workers
CAPABLE (n = 171)	Delivers a tailored combination of services to older adults who are beneficiaries of both Medicare and Medicaid	10 home visits over a 5-month period	Assesses participants' functional difficulties, pain, depression, and home environment; provides referrals to home and community-based services; and home modifications that allow seniors to age in place	4 registered nurses, 6 occupational therapists, 3 handymen
Stroke Mobile (n = 412)	Provides home-based follow-up care for a year after discharge from hospital after stroke and targeted stroke education for participants and their families and caregivers	Monthly home visits over 1-year period	Offers educational modules to participants and their family members and caregivers to address post-stroke care, prevent additional strokes	3 lay health workers, 4 registered nurses
DASH (n = 1,112)	Offers two-part episodic coordination of care for beneficiaries of Medicare and of Medicare and Medicaid who want to remain at home	Uses home-based assessment by nurses and follow-up by nurse practitioners or physicians	Preempts the need for emergency services while participating in advance care planning, medication reconciliation, receiving referrals for home and community-based services, and confirming a connection to primary care providers	5 registered nurses, 3 nurse practitioners, 2 physicians
AIM (n = 2,922)	Provides care coordination among hospital, home health care, physician's office, and telephone support for patients with late-stage illness at 13 sites within the Sutter Health system by nurse-led teams	Weekly or biweekly home visits over 6–8 weeks	Enables patients to remain at home if they do not qualify for Medicare skilled home health care; during visits provides patient and caregiver engagement and education, advance care planning, medication reconciliation, assessment of patient's health status, navigation services, and referrals for durable medical equipment and home and community-based services	6 registered nurses, 13 licensed practical nurses, 10 social workers

**SOURCE** Authors' analysis of information gathered by NORC from site visits, interviews, and program materials, as of July 2015. **NOTES** The *ns* are numbers of beneficiaries receiving home visits for each model. ABC is Aging Brain Care. CAPABLE is Community Aging in Place, Advancing Better Living for Elders. DASH is Doctors Assisting Seniors at Home. AIM is Advanced Illness Management. <sup>a</sup>Numbers of individuals employed in each position as of July 2015, the end of the innovation period, as reported to NORC by each model.

EXHIBIT 2

Components of five home visit models for older adults

Home visit program	Category of need					
	Care coordination	Patient or caregiver education	Referrals to home and community-based services	Disease management	Advance care planning	Environmental assessment or redesign
ABC	■	■		■	■	■
CAPABLE	■	■	■			■
DASH	■	■	■	■	■	
Stroke Mobile	■	■		■	■	
AIM	■	■	■	■	■	

**SOURCE** Authors' analysis of information gathered by NORC from site visits, interviews, and program materials, as of December 2015. **NOTES** ABC is Aging Brain Care. CAPABLE is Community Aging in Place, Advancing Better Living for Elders. DASH is Doctors Assisting Seniors at Home. AIM is Advanced Illness Management. See the text for more details on these five models.

ficiaries' and caregivers' reports of improvements and strengthened links to primary or palliative care providers. Respondents from all five models reported increased confidence in self-management (Exhibit 4). One Stroke Mobile participant summarized the value of participation this way: "More than anything else, it's not so much the information that I got, but the reassurance that 'you're doing fine, it's looking good.'"

Four of the five models were associated with

beneficiary reports of positive change in health behavior related to managing their chronic condition. For example, one CAPABLE participant explained: "It didn't stop on that last visit, because I still carry out what I was taught. What I learned has allowed me to move around more."

Four models were associated with observations of improved communication. One caregiver of a participant enrolled in AIM noted that the AIM nurse shared relevant data with the participant's physicians: "There are no gaps where I have to call and ask what happened. I get fast replies." Reducing the physical, social, emotional, and financial burdens of caregiving, another important contribution, was documented for three of the five models.

Evidence from site-visit interviews and focus groups points to model characteristics that might support improved quality and outcomes (Exhibits 1 and 2). Certain components were associated with greater success in lowering costs and reducing ED visits and hospitalization. These included targeting interventions to individuals most likely to benefit from home visits, recruiting experienced staff, using assistive technology and durable medical equipment that enable people to continue living at home, and the organizational capacity to provide on-call access to providers after hours and on weekends.

We did not observe that any particular component, such as the use of assistive technology, was related to a specific outcome, such as reduced cost. Each model used a mix of different components that, together with each intervention's involvement in care coordination and patient/consumer engagement, improved outcomes. For example, in the case of AIM, the integration

EXHIBIT 3

Estimated effects of five home visit models on utilization and cost

Model	Hospitalizations		ED visits		Medicare expenditures	
	Per quarter, per 1,000 patients <sup>a</sup>	95% CI	Per quarter, per 1,000 patients <sup>a</sup>	95% CI	Per quarter, per patient <sup>a</sup>	95% CI
ABC (over a 3-year period)	−4	−14, 6	2	−12, 16	\$ 60	−311, 431
CAPABLE (over a 2-year period)	3	−36, 42	−26	−69, 17	−2,765**	−4,963, −567
Stroke Mobile (over a 2-year period)	−52**	−113, −8	35	−28, 98	2,088	−2,157, 6,333
DASH (over a 3-year period)	−17**	−25, −9	−24***	−36, −12	−316	−745, 113
AIM (in the last month of life, over a 3-year period)	−76***	−100, −51	30***	11, 49	−5,985***	−7,010, −4,959

**SOURCE** Authors' analysis of Medicare claims from five home visit models for the period 2010–15. **NOTES** The exhibit shows difference-in-differences estimates that compare the pre-post changes in a treatment to those in the comparison group. The estimates are from a generalized estimating equation model with log link and gamma distribution, using population-averaged logit models. A negative number indicates a favorable finding for model beneficiaries, relative to members of the comparison group. The Appendix presents baseline rates of utilization (see Note 14 in text). Significance refers to differences between patients in the model and those in comparison groups. ED is emergency department. CI is confidence interval. ABC is Aging Brain Care. CAPABLE is Community Aging in Place, Advancing Better Living for Elders. DASH is Doctors Assisting Seniors at Home. AIM is Advanced Illness Management. <sup>a</sup>For Stroke Mobile, "patient" is replaced by "beneficiary episode." <sup>b</sup>Thirty-day readmissions (the start of the intervention is a hospital admission for a stroke). \* $p < 0.10$  \*\* $p < 0.05$  \*\*\* $p < 0.01$

of data elements specific to home visits into the health system's Epic electronic health records supported data sharing across providers and settings. This increased beneficiary and caregiver confidence in the quality of the model's services and promoted provider fidelity to the AIM model.

## Discussion

Our findings build on the existing evidence for home visits by offering new evidence of the impact of practice-extender home visit models that strengthen links to primary or palliative care, instead of delivering such care as part of the model. Practice-extender home visit models for older adults can be effective in lowering hospital admissions when they include geriatric care assessments, care coordination, and communication with a beneficiary's regular care provider. In addition, we found that practice-extender staff models for home visits that included care coordination and patient/consumer engagement were associated with improved outcomes.

Quantitative analyses suggest that four of the five models we studied were associated with reduced total Medicare expenditures or utilization. We observed cost savings for CAPABLE and AIM, reductions in ED visits for DASH (a core goal of this model), and reductions in hospitalizations for Stroke Mobile, DASH, and AIM. All of the models had multiple positive qualitative findings regarding the quality of care for participants, including participants' increased confidence in self-management (five models), improved self-management of health behavior (four models), improved physician communication (four models), and reduced caregiver burdens (three models). Model components related to targeting patients most likely to benefit, staff recruitment and training, enabling access to assistive technology and durable medical equipment, and on-call access to providers after hours supported evidence of improved quality of care, but we did not observe a relationship between any one model component and favorable claims-based outcomes.

This identification of home visit components associated with effective models holds promise for improved quality of care when home visit models, tasks, and staffing approaches may be more frequently used, along with their corresponding payment arrangements. New payment models (for example, accountable care organizations) should consider the relevance of home visits for their enrollees and the potential cost-effectiveness of offering these services. Further research should consider whether certain target

## EXHIBIT 4

### Improved quality of care associated with home visits provided by five home visit models for older adults

Home visit program	Improvement in quality of care			
	Increased self-management confidence	Improved self-management of health behavior	Improved physician communication	Reduced caregiver burden
ABC	■		■	■
CAPABLE	■	■		
Stroke Mobile	■	■	■	
DASH	■	■	■	■
AIM	■	■	■	■

**SOURCE** Authors' analysis of information gathered by NORC from site visits, interviews, and program materials, as of December 2015. **NOTES** "Improved physician communication" is improved communication between the physician and the patient or another provider. ABC is Aging Brain Care. CAPABLE is Community Aging in Place, Advancing Better Living for Elders. DASH is Doctors Assisting Seniors at Home. AIM is Advanced Illness Management. See the text for more details on these five models.

subpopulations (such as those based on sex or socioeconomic status) might benefit differently from home visits provided by staff other than clinicians. It will also be important for future research to consider which staffing approaches are appropriate to different groups of older adults, and the contributions of specific home visit tasks in creating or reinforcing links between the individual and the health care system.

## Conclusion

Four of the five home visit models that received Health Care Innovation Awards were associated with significant reductions in measures of costs, hospitalizations, or ED use, relative to matched comparison groups. Care coordination and patient/consumer engagement appeared to contribute to improved quality and reduced total cost of care for a diverse set of patients with multiple chronic conditions. Though the models shared key components related to care coordination and patient/consumer engagement, given the models' diversity in target populations, staffing, and set of components, it is important to consider each home visit model on its own terms. The similarities among models that were correlated with positive findings present a strong case for considering the value of having practice extenders provide home visits. ■



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- 14 To access the Appendix, click on the Appendix link in the box to the right of the article online.
- 15 The stated outcome measures were selected by CMS for their uniformity. We used these measures because they are calculated in a similar way across all five programs.
- 16 The NORC team considered several measures of multimorbidity, such as the JEN frailty index, during the preliminary building of models and selection of comparators. While the NORC team did not find differences in selection of comparators, overall quality of comparison groups, or outcome variables using the frailty index, projects found that use of it and another index, such as the HCC risk score, improved the robustness of built models. Researchers should consider this strategy in future studies. To address differing trajectories in health care utilization experience before enrolling in a home visit model, in our propensity score models we used a month-specific match for hospitalization and controlled for year utilization and cost in the previous year. Details about these projects are available from the authors on request.
- 17 Power analyses were not specific to the intervention. Instead, we conducted a high-level analysis for Medicare high-risk patients, defined as those with three or more chronic conditions.