

## **Evaluation of the Older Adults Home Modification Grant Program OMB #2528-NEW**

### **B. Collections of Information Employing Statistical Methods**

#### **1. Respondent Universe and Sampling Plan**

*Describe (including a numerical estimate) the potential respondent universe and any sampling or other respondent selection methods to be used. Data on the number of entities (e.g. establishments, State and local government units, households, or persons) in the universe covered by the collection and in the corresponding sample are to be provided in tabular form for the universe as a whole and for each of the strata in the proposed sample. Indicate expected response rates for the collection as a whole. If the collection had been conducted previously, include the actual response rate achieved during the last collection.*

This Evaluation is not designed to produce national estimates of the conditions of low-income older adult owner-occupied housing or the health characteristics of their residents. OLHCHH grantees are selected on a competitive basis according to the requirements of the NOFO:

HUD's Office of Lead Hazard Control and Healthy Homes is making available grant funds and training resources to non-federal entities. Under this NOFA, experienced nonprofit organizations, state and local governments, and public housing authorities will deliver home modification services to qualified beneficiaries. As required by the appropriation laws that fund the grants... at least 50 percent of funding ... will be made available to grantees that serve communities with substantial rural populations...<sup>1</sup>

Although OLHCHH grant awards are intended to achieve a balance between rural and urban sites, they will not be awarded on a national or geographically representative basis. This Evaluation plans to include the 32 grantees who receive awards. Additionally, as OLHCHH OAHMP grantees are responsible for setting benchmarks for recruiting and enrolling owner-occupied households in their target service areas, clients included in the Evaluation may not be statistically representative of their communities. The Contractor will report on grantees' progress in attaining their benchmarks.

OAHMP grant requirements specify program eligibility is restricted to beneficiaries who are:

1. The elderly low-income homeowner of the primary residence where the home modifications will be installed;
2. At least 62 years of age;
3. Have a total family income less than or equal to 80% of the area median income (AMI);<sup>2</sup>
4. Where two or more individuals own the home, at least one of the owners must meet the age criterion listed above and live in the residence. A home owned by one member of a married couple, as recognized by the State, serving as the primary residence of either or both

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<sup>1</sup> U.S. Department of Housing and Urban Development. Office of Lead Hazard Control and Healthy Homes. Older Adults Home Modification Program, op. cit. Page 4.

<sup>2</sup> U.S. Department of Housing and Urban Development. Office of Policy Development and Research. [Income Limits](https://www.huduser.gov/portal/datasets/il/il21/IncomeLimitsMethodology-FY21.pdf). Retrieved from: <https://www.huduser.gov/portal/datasets/il/il21/IncomeLimitsMethodology-FY21.pdf>.

members of the couple is eligible if the individual(s) residing there meet the elderly and low-income beneficiary criteria above; and

5. Grantees may also choose to impose additional eligibility criteria, such as the physical condition of the primary residence (i.e., home must be structural sound) or previous home modification benefits received under the program.<sup>3</sup>

As context, Table 9 presents 2019 U.S. American Community Survey estimates on housing characteristics relevant to the population intended to receive services under the grant program.

<b>Table 9. Selected Characteristics of U.S. Populations Aged 65 and Older, National Extrapolation from Sampled Respondents Who Responded to the Question<sup>a</sup></b>			
<b>Category</b>	<b>Estimated Total number</b>	<b>Percentage</b>	<b>Source</b>
Population aged 65 and older in owner-occupied units	25,753,379	78.1%	<a href="#">Population 65 Years and Over In The United States American Community Survey Tableid: S0103</a>
Population aged 65 and over at or below 149% of the poverty level	9,448,037	17.9%	<a href="#">Population 65 Years and Over In The United States American Community Survey Tableid: S0103</a>
Population over age 65 who speak Spanish at home	4,045,609	1.3%	<a href="#">Language Spoken at Home American Community Survey S1601</a>
Population over age 65 who reported a disability and who had self-care difficulty	3,463,855	1.8%	<a href="#">Disability Characteristics American Community Survey Tableid: S1810</a>
Population over age 65 who report a disability and who had an independent living difficulty	14,690,563	5.9%	<a href="#">Disability Characteristics American Community Survey Tableid: S1810</a>

<sup>a</sup> U.S. Census, American Community Survey, 2019 ACS-1-Year Estimates Subject Tables

### **Evaluation Requirements for Inclusion and Exclusion of Client Respondents**

To be included in this Evaluation, OAHMP grantees’ clients must meet the following requirements:

1. Be 62 years of age or older;
2. Have annual household incomes equal to or less than 80% AMI;
3. Own and live in the home to be modified;
4. Sign the grantees’ paperwork agreeing to the delivery of the home modification services;
5. Sign Evaluation’s Informed Consent (appendix E); and
6. Are comfortable speaking English or Spanish.

Although federal policy permits LEP individuals to use family members as interpreters, HHS cautions this might not be appropriate in situations where there may be concerns about competency, privacy, or conflict of interest.<sup>4</sup> Consequently, while clients may continue to receive

<sup>3</sup> U.S. Department of Housing and Urban Development. Office of Lead Hazard Control and Healthy Homes. Older Adults Home Modification Program, op. cit. Pages 25-26.

<sup>4</sup> U.S. Department of Health and Human Services. Office for Civil Rights. [Guidance to Federal Financial Assistance](#)

services under the OAHMP grant, PD&R and the Contractor determined family members should not interpret for clients enrolled in the Evaluation, and clients participating in the Evaluation must be comfortable speaking either English or Spanish.

The Contractor has provided English and Spanish versions of documents grantees will be required to complete with their clients to facilitate administration of the Evaluation's DCIs. In addition, the Contractor's SCs will administer the Script to Schedule Client Process Evaluation Interview and the Client Process Evaluation Interview in English or Spanish based upon the client's preferred language.

As noted in the eligibility criteria, grantees' may require applicants' homes to be structurally sound to qualify for enrollment in the OAHMP modification services. If a home requires major rehabilitation and the grantee does not have the ability to supplement OAHMP grant funding to implement the rehabilitation, the applicant may not be enrolled in the grantees' program nor will they be included in the Evaluation (See appendix G, Lost-to-Project Form).

### **Client Respondent Selection Method**

As previously noted the Contractor will collect Evaluation data from 32 grantees. OAHMP grantees will enroll clients in the Evaluation who meet criteria outlined in B.1. Grantees will use selection methods approved by OLHCHH in their individual Management and Work Plans to recruit clients.

Grantees will be responsible for administering the forms in appendixes B through F, with the Client Impact Evaluation Interview form (appendix F) administered only to those clients who complete an Informed Consent (appendix E). It will be the grantee's responsibility to ensure they follow procedures taught during their training with the Contractor to administer the Evaluation DCIs. Grantees will be instructed to encourage participation in the Evaluation, but not exert pressure to complete the Informed Consent. All collected data will be submitted to the Contractor.

Six- to nine-months after home modifications are completed, the Contractor's SCs will administer the Client Process Evaluation Survey (appendix L) via one phone or video conversation with 10% of clients (approximately 500 in total). The Contractor will use a sequential stratified approach to create a randomization list for each of the 32 grantees to create a list of clients with whom to conduct the Evaluation survey and SCs will use it to contact clients. Separate lists will help ensure the geographic, racial/ethnic, gender, and socioeconomic diversity of the grantee's client subsets are equivalent to the grantees' enrolled population. Each grantee list will identify, on a random basis, one out of every ten sequentially enrolled clients for the SCs to contact. The SCs will make up to five attempts to reach clients on the list to schedule the Client Process Evaluation Survey. If a randomly selected client cannot be contacted or declines to participate in the process evaluation interview, the SC will choose the next client on the list to ensure meeting the 10% goal. Other methods to address nonresponse are discussed in B.2 and B.3.

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[Recipients Regarding Title VI and the Prohibition Against National Origin Discrimination Affecting Limited English Proficient Persons – Summary.](#)

## **Expected Response Rates**

Since the minimum number of units enrolled in the OAHMP will be based on grantees' approved Management and Work Plans, it is not possible to estimate the overall number of clients eligible to participate in the Evaluation or the number of clients grantees will actually serve. Based on an initial estimate created by OLHCHH, the Evaluation's sample of 32 grantees may produce 13,433 potential clients interested in applying for home modifications. An estimated 4,333 clients (33%) might be determined ineligible. Of the remaining 9,000 eligible clients, another 2,250 (25%) are anticipated to refuse to complete the Informed Consent, and therefore will not be enrolled in the Evaluation. Of the 6,750 clients expected to complete baseline data collection, 1,688 (25%) are expected to be lost to followup for the Evaluation in the six- to nine-months after homes have been modified, resulting in a total expected number of 5,063 clients included in all phases of the Evaluation.

The Contractor anticipates administering the Client Process Evaluation Survey to 10% of the grantees' clients whose homes received modifications, i.e., a target of approximately 500 for this DCI. The stratification procedure (i.e., each grantee list will randomly select one out of every ten sequentially enrolled clients for the SCs to contact) will ensure that the pace of administration of the Client Process Evaluation Survey is consistent with the actual number of units with completed home modifications. Based on the expected number of 5,063 clients for which the Evaluation has post-modification data, this would result in up to 506 clients completing this survey. Methods to address nonresponse are discussed in B.2 and B.3.

## **2. Procedures for Collection of Information**

*Describe the procedures for the collection of information including:*

- *Statistical methodology for stratification and sample selection,*
- *Estimation procedure,*
- *Degree of accuracy needed for the purpose described in the justification,*
- *Unusual problems requiring specialized sampling procedures,*
- *Any use of periodic (less frequent than annual) data collection cycles to reduce burden.*

### **Statistical Methodology for Stratification and Sample Selection**

As described in B.1, the Evaluation plans to include up to 32 grantees who receive awards. The Evaluation's client respondents will need to meet eligibility criteria discussed in B.1 as well as sign the Informed Consent. As noted in B.1, as OAHMP client selection is determined by grantees, Evaluation clients will not be selected randomly.

The Contractor will create a based on each grantees' list of clients which randomly selects one out of every ten sequentially enrolled clients for SCs to contact to participate in the Client Process Evaluation Survey. If a randomly selected client cannot be contacted or declines to participate in the process evaluation interview, the next client on the list will be chosen to ensure the 10% goal is met. Methods to address nonresponse are discussed in B.3.

### **Estimation Procedure**

This Evaluation focuses on implementation of a grant program. For all statistical analyses, the Contractor will define statistical significance as an observed significance level  $p < 0.05$  and marginal statistical significance as  $0.05 \leq p < 0.1$ . The general purposes of the Evaluation were translated into specific analytical objectives, as discussed below, to develop the statistical sampling design and data collection procedures.

### *Impact Evaluation Data Analysis*

The Contractor's Biostatistician will conduct all statistical analyses in SAS<sup>®</sup>;<sup>5</sup> statistical significance will be defined as an observed significance level of  $p < 0.05$  and marginal statistical significance as  $0.05 \leq p < 0.1$ . The final dataset will include clients who complete both the baseline and the six- to nine-month post-home modification visit.

A power calculation was based upon the hypothesis that there is at least a one-point reduction in the ADL score over this period, with ADL scores calculated as shown in Table 10. A one-point change in the ADL score will be considered clinically meaningful.<sup>6</sup> (See appendix C, Client Program Questionnaire, for a complete list of the eight ADL questions.)

To produce the power calculation, the Contractor utilized baseline- to seven-months post-intervention data from a recent study of the "Aging Gracefully" program which is designed to help older adults improve their physical function.<sup>7</sup> The Aging Gracefully interventions (OT, nurse, and home modifications) differ only slightly from those in the OAHMP Evaluation-specified Program Services Model (i.e., which includes OT assessments and home modifications). The data collection time frames are also similar (seven months post-intervention for Aging Gracefully versus six- to nine-months post-intervention for the OAHMP Evaluation). Using a one-sided paired t-test to detect an ADL score change of one point with the Aging Gracefully project's standard deviation of 2.9, sixty-nine study group participants of the Aging Gracefully project had a mean ADL score which dropped from 4.4 at baseline to 2.5 at seven months post-intervention. The one-point reduction assumed for the Evaluation is approximately 53% of the reduction observed in Aging Gracefully.

This power calculation indicates at least 54 clients must be included to test the hypothesis that the mean ADL scores will drop at least one point from baseline to follow-up with 80% power and 95% confidence. Assuming 32 grantees, each with an average of 500 clients, the power would be at least 99.9% across all grantees.

### *Client Health Outcome Data Analysis*

#### *Client Health Outcome Changes Between Baseline and Six- to Nine Months Post-Baseline*

<sup>5</sup> SAS<sup>®</sup> software version 9.4. Copyright (c) 2016 by SAS Institute Inc., Cary, NC, USA.

<sup>6</sup> Gill, Thomas M., Dorothy I. Baker, Margaret Gottschalk, Peter N. Peduzzi, Heather Allore, and Amy Byers, op cit.

<sup>7</sup> Breyse, Jill, Sherry Dixon, Jonathan Wilson, and Sarah Szanton. Aging gracefully in place, op cit.

The Contractor’s Biostatistician will test which of nine health outcomes—ADL difficulties, IADL difficulties, quality of life (Euro-QOL), falls efficacy, depression, life-space, healthcare utilization, the number of falls in the past year, and pain interference with daily activities—significantly change between baseline and six- to nine-months post-home modification. Six of these nine outcomes will require a score calculation (see Table 10). Scores for difficulties with ADLs and IADLs, quality of life, depression, and falls efficacy will be calculated using the methods Szanton et al.<sup>8</sup> described in their study rationale and design article. The life-space composite score (LSC) will be calculated according to methods described by Baker et al.<sup>9</sup> For these scores and other continuous or count variables (e.g., number of falls in the past year), the Contractor’s Biostatistician will use paired t-tests to determine if there are changes in the means from baseline to followup. The Wilcoxon **signed**-rank test will be used to determine whether the median change from baseline to followup differs from zero. Multiple comparison correction procedures will be utilized in analyzing health outcomes.

<b>Health Outcome</b>	<b>Number of Components</b>	<b>Score Methods</b>	<b>Score Range</b>
ADL difficulties <sup>a</sup>	8 activities	0=no difficulty and needs no help; 1=difficulty but needs no help; 2=needs help regardless of difficulty <sup>b</sup>	0=best 16=worst
IADL difficulties	8 activities	0=no difficulty and needs no help; 1=difficulty but needs no help; 2=needs help regardless of difficulty <sup>b</sup>	0=best 16=worst
Quality of Life	5 domains	1=no problem; 2=small problem; 3=large problem	5=best; 15=worst
Falls Efficacy	10 activities	0 to 10 confidence rating that person can do activity without falling	0=very confident 10=not confident at all
PHQ-9 (depression)	9 problems	In past 2 weeks, client has been bothered: 0=Not at all; 1=several days; 2=>half the days; 3=nearly every day	0=best 27=worst
Life-Space Composite Score (LSC)	5 locations	In past 4 weeks: <ul style="list-style-type: none"> <li>• did you go to the place (1=Yes, 0=No);</li> <li>• If so, how often (0=&lt;1/wk; 1=1 to 3 times/wk; 2=4 to 6 times/wk);</li> </ul> need help from another person=1; use equipment only=1.5 or neither=2	0=restricted to bed 120=totally unrestricted

<sup>a</sup> The Client Program Questionnaire uses ADL responses specified in this table while the Client Impact Evaluation Interview uses slightly different responses for six ADLs: No I do not have difficulty; Yes, I have difficulty; or I don’t do this activity. The latter categories reflect the question wording in the Medicare HOS.

<sup>b</sup> “No difficulty and needs no help” means that, at the time of the visit, the client reports they have no difficulty performing a task and do not need help to perform it; “difficulty but needs no help” means the client reports they have some difficulty performing a task but do not need help when performing it; and “needs help regardless of difficulty” means the client reports they need help regardless of how difficult they find the task.

<sup>8</sup> Szanton, Sarah L., J.W. Wolff, B. Leff, R.J. Thorpe, E. K. Tanner, C. Boyd, Q. Xue, J. Guralnik, D. Bishai, and L. N. Gitlin 2014, May. “CAPABLE trial: A randomized controlled trial of nurse, occupational therapist, and handyman to reduce disability among older adults: Rationale and design,” *Contemporary Clinical Trials* 38(2014):102-112. doi:10.1016/j.cct.2014.03.005.

<sup>9</sup> Baker, Patricia S., Eric V. Bodner, and Richard M. Allman. 2003, November. “Measuring Life-Space Mobility in Community-Dwelling Older Adults,” *Journal of the American Geriatrics Society* 51(11):1610-1614. doi: 10.1046/j.1532-5415.2003.51512.x.

The Contractor's Biostatistician will conduct multivariable linear modeling to identify factors that affect the ADL difficulties score changes from baseline to follow-up. A stepwise forward regression procedure with 0.15 significant level for variable entry into and with 0.10 significant level for removal will be conducted. The Contractor will identify variables considered potential predictors (e.g., type of home [single family versus unit in multifamily building]; baseline home hazard score; year home was built; baseline ADL difficulties score; age; race; gender; education; whether the client lives alone; income). The modeling may also include other variables such as common chronic conditions, which, although not expected to be impacted by the home modifications, could be confounders influencing changes in health outcomes over the OAHMP period of performance.

*Analysis of Individual ADL and IADL Difficulties for OAHMP Clients versus Medicare HOS Participants*

During the Client Impact Evaluation Interview (appendix F), the Contractor will collect additional ADL and IADL data at baseline and followup using client self-reported answers to verbatim questions from the Medicare HOS on difficulties with six specific ADLs and three IADLs. Sixteen ADL and IADL questions and answer choices listed on the Client Program Questionnaire differ slightly from the Medicare HOS ADL and IADL question and answer choices (see footnote to Table 10). While the Medicare HOS questions cannot be used to calculate ADL and IADL scores (see Table 10), the Evaluation "client group" responses to this limited set of nine questions can be compared with those of Medicare HOS participants drawn from a limited dataset of Medicare HOS data ("HOS comparison group"), matched demographically.

The Contractor will create a preliminary HOS comparison group dataset of Medicare HOS participants who have a household income less than \$30,000 and answered at least 90% of the ADL and IADL questions. For each OAHMP client, the Contractor will select HOS comparison group participants of the same age, gender, and race/ethnicity. The HOS participants will be sorted by the state in which the grantee conducts their work, then by client's household income, by race/ethnicity, and finally by highest percent of HOS ADL and IADL questions completed. The HOS individual best matched to the Contractor's OAHMP client's demographics will then be selected.

The Contractor will compare changes in ADL difficulties over the two time periods, both within each cohort and between the two cohorts. The Contractor will look at individual ADLs and IADLs from the HOS questions in the Client Impact Evaluation Interview (appendix F), not the total of scores for each measure for the analyses specified in Table 10, as only six of the eight ADLs that constitute the ADL score will be asked in the Client Impact Evaluation Interview and the answer choices are different from those used in the ADL and IADL scores. The HOS contains three answer choices for each ADL and IADL (No, I don't have difficulty; Yes, I have difficulty; and I am unable to do this activity [for ADLs] or I don't do this activity [for IADLs]). The distribution of client responses will be compared at the two times for each cohort using chi-squared tests. Generalized Estimating Equations (GEE) will be used to test between and within cohort differences for two binary versions of each ADL and IADL: (1) clients with difficulty versus those without difficulty, ignoring clients that do not do the activity; and (2) clients with difficulty versus those that either do not have difficulty or do not do the activity.

### *Home Hazard Checklist Data Analysis*

The Contractor will compile separate lists of home hazard checklist questions to evaluate baseline versus followup home safety: one that applies to single-family homes and one that applies to homes in multifamily buildings. The lists will be identical, except the single-family home list will include questions about the building's exterior. Responses to these questions will be used to calculate a "home hazard score" for each home at each visit, with possible scores ranging from 0 (no home safety hazards) to the maximum number of home hazards present. A paired t-test will be used to determine if there is a mean change in average home hazard scores between visits.

### *Cost Analysis of Healthcare Utilization*

The Contractor will use healthcare data from the baseline and post-modification Client Impact Evaluation Interviews to estimate changes in unplanned medical event expenditures potentially attributable to home modifications. Potential healthcare cost savings due to the home modifications will be demonstrated by comparing Client Impact Evaluation Interview data on client unplanned healthcare use for the one-year period prior to baseline to that reported for one year following the baseline interview. Assuming that modifications take up to three months, considering not only the time for completing the repairs, but also developing the scope of work, ordering materials, and accounting for scheduling delays, the year-long period includes both the times for modifications and the data collected six- to nine-months post modification.

The Contractor will use MEPS data converted to 2023 dollars (estimated midpoint for the OAHMP) to extract mean inpatient hospitalization discharge and ED expenditures<sup>10</sup> per visit by or on behalf of adults 65 and older in appropriate U.S. Census regions. Hospital inpatient costs for patients who were admitted but did not spend a night<sup>11</sup> and base cost inflators on CMS estimates of yearly national health expenditure increases for each program year will be subtracted.<sup>12</sup>

The Contractor's Economist will use the mean MEPS data to calculate mean total expenditures for three types of medical events: (1) ED visits, (2) ED visits leading to hospitalization, and (3) hospitalization only; and will calculate cost rates for each medical event type at baseline and followup. The relationship(s) between selected health outcomes and healthcare expenditures will be examined, including those associated with functional limitations.<sup>13</sup> No client's private Medicare/Medicaid or other healthcare insurance data will be accessed for the cost analysis.

### *Process Evaluation Data Analysis*

The Contractor will summarize and interpret the major process survey findings in an Interim and Final Report. Its Biostatistician will run comparisons of the grantees' programs to determine how implementation varied according to geography (e.g., among U.S. regions, particularly in rural

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<sup>10</sup> Expenditures equal the funds actually transferred as a result of the visit. Costs, or what was billed, can be two to four times higher than expenditures.

<sup>11</sup> Agency for Healthcare Research and Quality, op. cit.

<sup>12</sup> U.S. Centers for Medicare and Medicaid Services. Historical National Health Expenditure Data. Available at: <https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NationalHealthAccountsHistorical>. Accessed 1/21/2020.

<sup>13</sup> U.S. Department of Health and Human Services. Individuals living in the community with chronic conditions and functional limitations: A closer look. Prepared for the Office of the Assistant Secretary for Planning and Evaluation, USDHHS, January 2010. Available at: <http://aspe.hhs.gov/sites/default/files/pdf/75961/closerlook.pdf>. Accessed 12/3/15.



versus micropolitan versus urban locations), building characteristics, housing type, demographics, management and construction oversight capacity, or other site attributes. The Contractor will also examine how implementation varied among grantees and clients, e.g., running analyses to compare the intensity of home modifications (e.g., number of line items or associated cost per client) across grantees, particularly variability in home modification intensity by client characteristics (e.g., age, chronic conditions, function difficulties).

### **Weights**

No weights will be assigned to this data.

### **Degree of Accuracy Needed**

This Evaluation focuses on implementation of a grant program. For all statistical analyses, the Contractor will define statistical significance as an observed significance level  $p < 0.05$  and marginal statistical significance as  $0.05 \leq p < 0.1$ .

A power calculation was based upon the hypothesis that there is at least a one-point reduction in the total ADL score over this period. The power calculation indicates at least 54 clients must be included to test the hypothesis that the mean ADL scores will drop at least one point from baseline to follow-up with 80% power and 95% confidence. Assuming 32 grantees, each with an average of 500 clients, the power would be at least 99.9% across all grantees.

### **Unusual Problem Requiring Specialized Sampling Procedures**

The data collection plan does not require any specialized sampling.

### **Use of Periodic Data Collection Cycles**

The data collection plan requires only one OMB-approved collection cycle (i.e., a three-year period).

## **3. Methods for Maximizing Response Rates and Dealing with Nonresponse**

*Describe methods to maximize response rates and to deal with issues of non-response. The accuracy and reliability of information collected must be shown to be adequate for intended uses. For collections based on sampling, a special justification must be provided for any collection that will not yield “reliable” data that can be generalized to the universe studied.*

### **Methods to Maximize Response Rates**

This Evaluation focuses on the implementation of the OAHM grant program. Grantees selected to participate in this Evaluation are required to participate under the terms of their grant awards: grantees will collaborate with “...HUD’s Office of Policy Development and Research (PD&R) on that Office’s evaluation of the impact of the OAHMP, and any other HUD research on the program...”<sup>14</sup> As noted in B.1 and B.2, it is the grantee’s responsibility to ensure clients participating in the Evaluation meet its eligibility requirements prior to collecting information for the Evaluation’s DCIs.

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<sup>14</sup> U.S. Department of Housing and Urban Development. Office of Lead Hazard Control and Healthy Homes. Older Adults Home Modification Program, op. cit. Page 13.

The sampling procedure specific to the Evaluations' Client Process Evaluation Survey (appendix L) appears in B.2. This sampling procedure assures that if the selected client refuses to participate in this specific survey, the next client on the list will be asked to participate.

## **Dealing with Nonresponse**

### *Nonresponse Followup*

Grantees are responsible for enrolling clients to the Evaluation and administering its forms according to their training by the Contractor. It is in their interest to keep clients enrolled in their program, and by extension, in the Evaluation should the client agree to participate. The Contractor will train grantees and SCs in methods to encourage responses to survey questions, but it is ultimately the grantee's responsibility to ensure enrolled clients do not drop out of their programs. Although the Evaluation will record clients lost to the project, the Contractor will not provide training or forms for grantees to administer to clients who refuse to participate in the Evaluation. If grantees choose to administer their own surveys or take other means to ascertain why clients have dropped out of their program, the Contractor anticipates this information will be captured in their quarterly reports or other documents submitted to OLHCHH. OLHCHH, in turn, will share that information as appropriate with PD&R to provide to the Contractor.

The Contractor will train grantees and SCs to use the following strategies, as needed, to present the Evaluation to clients in a gently convincing, supportive manner:

1. Using active listening to acknowledge and reflect their understanding of client's concerns;
2. Asking if there is more information that the grantee or SC can provide;
3. Taking the time to answer questions about the use of the information and privacy of their responses. If needed, the grantees and SCs can review the privacy assurances in the Informed Consent;
4. If asked, explaining how their feedback can improve future projects like the OAHMP;
5. Recognizing reluctance to participate as a signal of the need to address "hidden concerns" such as the time involved to complete Evaluation forms, other demands on the client's time, suspicion about why the information is needed, or other issues; and
6. Offering the client the opportunity to speak to the SC's supervisor about their concerns.

OAHMP grantees will complete the Lost-to-Project Form (appendix G) for clients lost to the Evaluation for several reasons: 1) to document whether the client met or did not meet the grantees' eligibility requirements for enrollment in the OAHMP; 2) to document whether the client refused to sign the Informed Consent to participate in the Evaluation; and 3) to document whether the client was lost-to-follow up by the OAHMP. For the latter, these reasons include:

- Client no longer wishes to participate in the OAHMP (or by association, the Evaluation);
- Client is still in the OAHMP but no longer wishes to participate in the Evaluation;
- Unable to contact client after up to five repeated and varied attempts;
- Client became ill or was injured in a manner that prevented further participation;
- Client died;
- Client moved out of home for the following reasons:
  - o Relocated to assisted living or other facility offering medical services;
  - o Relocated to a relative's home;
  - o Relocated to a location other than those listed above;

- Other reason for de-enrollment not listed above.

The Contractor will also conduct statistical analyses to determine whether there are differences between certain baseline characteristics (i.e., those listed in the Client Eligibility Documentation form and those on the baseline Client Program Questionnaire) of enrolled clients who agreed to participate in the Evaluation from those who declined to participate.

As described in B.2, the Contractor will select clients to participate in the Client Process Evaluation Interview (appendix L) through a sequential stratified approach that will create a separate randomization list for each of up to 32 grantees. If a randomly selected client cannot be contacted after five attempts or declines to participate in the interview, the Contractor's SCs will choose the next client on the list to ensure the 10% goal is met. There will be no separate inquiry for clients who choose to not participate in the Client Process Evaluation Survey to ascertain their reasons for nonresponses.

### **Adequacy of Accuracy and Reliability of Information Collected for Intended Purposes**

In programming data collection forms in REDCap, the Contractor's Biostatistician will set logic and completion rules that alert data entry personnel to missing, inconsistent, out-of-range, or improbable data to ensure personnel can identify and correct these data entry issues in real time. The Contractor will create REDCap reports that will allow grantees, the Contractor's SCs, and other Contractor personnel to monitor grantee performance in collecting accurate data according to the Evaluation schedule.

REDCap has a Record Status Dashboard which allows users to monitor completed forms by individual grantees and for all grantees. SCs will monitor the dashboard at least weekly during the program period to ensure grantees are completing forms promptly.

On at least a monthly basis during the grantees active program implementation period, the Contractor's SCs will run REDCap reports documenting grantee progress on the number of:

- Clients screened;
- Clients for whom the first Evaluation home visit have been completed (i.e., the baseline Client Program Questionnaires, baseline Home Hazard Checklists, and baseline Client Impact Evaluation Interview forms are complete);
- Homes with documented home modifications (i.e., those with completed Documentation of Home Modification Work Completed forms);
- Clients for whom the follow-up Evaluation in-home visits have been completed (i.e., the followup Client Program Questionnaire, Home Hazard Checklist, and Client Impact Evaluation Interview forms are complete); and
- Clients and homes lost to follow-up (i.e., those with completed Lost-to-Project forms).

The Contractor's SCs will use these reports to monitor grantee progress and ensure forms are completed in a timely fashion. The Contractor can also use these reports to summarize grantee rates of progress on a per-month or per-quarter basis and compare expected to actual enrollment.

## **Justification for Collection that Will Not Yield “Reliable” Data that Can Be Generalized to the Universe Studied**

This Evaluation focuses on the implementation of a grant program. As such it is not intended to provide data generalizable to a study “universe.”

However, the Evaluation will provide context on older adults' self-reported data on difficulties with five specific ADLs and three IADLs in the OAHM Program Questionnaires by using verbatim questions from the Medicare HOS. The Contractor will compare baseline and post-modification questionnaire responses with those of Medicare HOS participants drawn the HOS comparison group, matched demographically.

The Evaluation will also put estimated changes in unplanned medical event frequencies and expenditures potentially attributable to home modifications into a national context. It will compare potential healthcare cost savings for OAHMP data on client unplanned healthcare use for the one-year period prior to intake versus the one-year period following intake. MEPS data will then be converted to 2023 dollars to extract mean inpatient hospitalization discharge expenditures per visit and ED expenditures per visit for adults 65 and older across the U.S. and in appropriate U.S. regions.

### **4. Tests of Procedures**

*Describe any tests of procedures or methods to be undertaken. Testing is encouraged as an effective means of refining collections of information to minimize burden and improved utility. Tests must be approved if they call for answers to identical questions from 10 or more respondents. A proposed test or set of tests may be submitted for approval separately or in combination with the main collection of information.*

As described in A.7, Table 5, many of the DCIs in this Evaluation incorporate standardized assessment tools with known reliability and validity.

The Contractor also conducted a pilot of the data collection forms to determine the time needed (i.e., grantee burden) to administer selected data collection forms to both clients and grantees and identify questions or administrative instructions that needed clarification. As it was not possible to conduct the pilot with OAHMP grantees as they had not yet been selected, the Contractor completed a pilot test of all client baseline DCIs from April 5 to April 12, 2021, with six individuals aged 62 years and older. During the same period, the Contractor piloted the Grantee Process Evaluation Survey (appendix I) with three senior staff members from different organizations experienced in managing home modification or other service delivery programs. It was not possible to pilot-test post-modification forms as these data will not be collected until six to nine months after home modifications have been completed and a pilot of these forms would have delayed submission of this ICR. Most of the post-modification questions are identical to those in the baseline, and many come from validated survey instruments.

## **5. Consultations and the Project Team**

*Provide the name and telephone number of individuals consulted on statistical aspects of the design, and the name of the agency unit, contractor(s), grantees(s), or other persons(s) who will actually collect and/or analyze the information for the agency.*

### **Individuals Consulted on Statistical Aspects of the Design**

Amanda Reddy, M.S.	Healthy Housing Solutions, Inc.	(443) 539-4152
Noreen Beatley, M.P.A.	Healthy Housing Solutions, Inc.	(443) 539-4153
Michael Eriksen Ph.D.	Healthy Housing Solutions, Inc.	(513) 556-5156
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Jonathan Wilson, M.P.P.	National Center for Healthy Housing	(443) 539-4162
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### **Contractors Responsible for Collecting Information for the Agency**

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### **Contractors Responsible for Analyzing Information for the Agency**

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The phone numbers above may also be reached by persons with hearing or speech difficulties by dialing 711 via teletype (TTY).