



HEALTHCARE AND HUMAN SERVICES POLICY, RESEARCH, AND CONSULTING—WITH REAL-WORLD PERSPECTIVE.

Demonstration Design Options for Coordinated Housing, Health and Long-term Services and Supports for Low Income Older Adults

Revised Draft Report

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Please note: The views expressed in this report are solely that of the authors. Members of the Technical Advisory Group (Appendix A) provided feedback that guided the development of options contained in this report.

Overview

The Department of Housing and Urban Development's (HUD) FY 2010-2015 Strategic Plan - HUD Priority Goal Performance 2010¹ and the Department of Health and Human Services' (HHS) Vision and Strategic Framework on Multiple Chronic Conditions² both embrace person-centered, holistic and cost-effective approaches to addressing the needs of vulnerable low- and modest-income older adults. The person-centered philosophy places the older adult (and family where available) squarely in the center of the local health and long-term services and supports (LTSS) delivery system and recognizes that the quality of the larger physical and social environment within which an individual lives (including shelter) significantly influence one's health and quality of life.

Building on over two decades of efforts to increase access to home and community-based services and supports, the Patient Protection and Affordable Care Act (ACA) further expands primarily Medicaid-funded options, providing unique opportunities for exploring how housing with services models may provide efficient ways of serving large numbers of low-income older adults. The Money Follows the Person demonstration that seeks to transition nursing home residents to the community has identified the lack of service-enriched affordable housing as one of the demonstration's major barriers (O'Malley-Watts, 2011). HUD also recognizes the important role of services in helping its older residents to remain safely in their apartments. HUD's proposed 2013 budget emphasizes aligning new Section 202 developments with health care reform efforts at the state and federal levels to better support older adults as they age in place in the community.³

Acknowledging the lack of service coordination and integration for Medicare and Medicaid beneficiaries – particularly those with multiple chronic conditions and functional limitations – the ACA established several new offices within the Centers for Medicare and Medicaid Services (CMS) to develop and oversee a range of payment and service reform demonstrations and programs (i.e. Accountable Care Organizations (ACO)/Shared Saving Program, Medicaid Health Home, Financial Alignment Demonstration, State Innovations Model) that test new approaches to reducing fragmentation and costs. These policy changes offer unique opportunities to explore the role of affordable housing with services in achieving the goals and objectives of these initiatives.

¹ Department of Housing and Urban Development, *FY 2010-2015 Strategic Plan - HUD Priority Goal Performance 2010* accessed February 10, 2013 at http://portal.hud.gov/hudportal/HUD?src=/program_offices/cfo/stratplan.

² Department of Health and Human Services, *Multiple Chronic Conditions Strategic Framework*, accessed 1/14/2013 at <http://www.hhs.gov/ash/initiatives/mcc/>.

³ Department of Housing and Urban Development, *FY 2013 Budget: Housing and Communities Built to Last* accessed February 28, 2013 at <http://portal.hud.gov/hudportal/documents/huddoc?id=CombBudget2013.pdf>.

Our proposed demonstration design options build on these trends and the federal and state policy initiatives currently underway to reform health care and housing for low-income older adults.

Purpose

The HHS Office of the Assistant Secretary for Planning and Evaluation's (ASPE) Office of Disability, Aging and Long-Term Care Policy (DALTCP), in partnership with HUD and the Administration for Community Living (ACL), engaged the Lewin Group (Lewin) and its' sub-contractors, Leading Age Center for Applied Research (LeadingAge), and The Moran Company to develop design options for a demonstration of targeted, coordinated housing, health and long-term services and supports for low-income older adults.

Policy and Practice Questions

The demonstration seeks to answer the following policy and practice questions:

- Can publicly subsidized housing properties with multiple units (generally unlicensed subsidized apartment buildings) serve as an effective platform for meeting the health and long-term services and support needs of low income older residents (62+) as well as some proportion of similar individuals who live in the surrounding community?
- Of the demonstrations that are found to be effective, which housing with services models result in the best outcomes?
- What services and supports need to be provided and to which specific groups of residents in order to maximize the best outcomes?

Design Parameters

In considering the design of a demonstration related to housing with services for older adults living in publicly subsidized housing, the sponsors agreed upon the following key premises:

- ASPE, HUD and ACL desire a proof-of-concept demonstration that can potentially provide evidence of the benefits of housing with services in terms of fewer adverse outcomes for residents (both health and housing related) and lower cost for the property, Medicare and Medicaid.
- The availability of administrative data from HUD, the participating properties, Medicaid and Medicare in order to measure the cost and the impact of the demonstration on the outcomes of interest.

- The demonstration will test two models: 1) The public health model that would target all low income older adults in participating properties and the surrounding community with the goal of improving the health and quality of life of all, and 2) the risk-based model that would target resources to a smaller subset of high risk seniors.
- The presence of a care coordination function to facilitate the organization and receipt of needed health and social services.
- The evaluation strategy could be based on a quasi- experimental or randomized design.

In considering potential demonstration designs, we reflected on the following key questions:

- What capacity, infrastructure and resources must be present with housing providers and their partners, and in the communities in which sites are located, to maximize the demonstrations' success?
- To what extent can HUD and HHS and its contractors depend on existing federal and state data sources to identify potential demonstration sites? To what extent, in turn, can sites depend upon these data sources to identify participants?
- What rule, requirements or allowances promulgated by HUD present major barriers or opportunities to implementing the proposed design? These might include restrictions of fair housing law; limitations on service coordinator roles and responsibilities; financing for service coordinators, financing and allowance for common space and apartment accessibility features, and allowances for live-in help.
- What CMS/state Medicaid policies are impediments to demonstration implementation and how can they be overcome (e.g., state licensing requirements for settings providing health services and or serving elderly residents; federal privacy rules; barriers to integrating services for those eligible for Medicare and Medicaid)?
- What other barriers to the demonstration must be addressed (e.g., insurance liability concerns/costs; local fire and safety ordinances), what types of properties do they impact, and how can they be overcome?

Outcomes of Interest

The outcomes we propose measuring include:

Core

- Hospital admissions related to ambulatory sensitive conditions (initial and readmissions)
- Emergency department (ED) visits
- Falls⁴
- Number of medications
- Depression
- Community tenure
- Quality of life

Additionally, bringing in dedicated staff and partnerships to address the physical and mental health needs of residents may also impact the housing properties themselves. We would also propose looking at outcomes that examine this effect, including:

- Unit turnover by reason
- Maintenance expenses and time related to unit turnover and apartment damage

Other Measures Requiring Significant Resources

Measures that happen less frequently and would require larger sample sizes, as well as those that would require a more intense qualitative data collection process were also recommended by the Technical Advisory Group:

- Mortality (during hospital or nursing facility stay)
- Nursing facility admissions (initial and readmissions)
- Nursing facility length of stay
- Nutrition
- Inappropriate combinations and duplicate medications

⁴ This measure will be more fully articulated in the design of an evaluation given the inconsistent definitions of “falls” across the literature. The most available measure might be injurious falls noted in a Medicare or Medicaid claim.

Demonstration Design Options

Determining the outcomes attributable to a program or service presents a central challenge for any impact study. A study must not only use the best and most-efficient design, but it also must address the needs and values of persons served by the program and prove useful to informing policy and practice. In developing the design options, we considered the policy and practice questions, design parameters and potential key outcomes as outlined above, as well as the type of evaluation, characteristics of the demonstration sites, the target population, assessment of participant service needs, the delivery model, financing, and quality improvement/performance measurement.

Potential Model Elements based on Case Study Findings

The Lewin/LeadingAge team conducted case studies of seven affordable senior housing with services programs as part of this initiative. The team is carrying out additional case studies as part of a follow-on project to this effort funded by the MacArthur Foundation. Additionally, LeadingAge, in partnership with RTI International, is conducting a focused evaluation of the Support and Services at Home Program (SASH), and has done previous case studies of additional housing with service strategies. Together, these studies have yielded several findings that inform the elements of the proposed potential demonstration models below. These elements were chosen as critical to the demonstration design because of the potential impact of these elements on outcomes of interest necessary to demonstrate the impact of targeted, coordinated housing, health and long-term care services and supports for low-income older adults.

Enhanced Coordination Role

Many affordable senior housing properties currently have a service coordinator. The role is conventionally defined as providing information and referrals and assisting residents to access the services that can help them remain self-reliant and age in place. Across properties, service coordinators operate along a spectrum in terms of level of engagement with residents and service providers; some provide basic information and referral (I&R), while others offer more hands-on coordination assistance.

Service coordinators with an enhanced role can take on one or more of the following: 1) assessing residents for health and social needs; 2) helping to identify, access and coordinate services (i.e. personal care), including communicating with service providers; 3) monitoring receipt and follow through of services, including encouraging and motivating residents to engage with providers and participate in their own management; 4) building partnerships and communicating with service providers and 5) serving as a member of an interdisciplinary team.

Providers in the housing with services programs studied indicated this enhanced role is crucial due to the nature of the population they assist. While some residents can manage their own needs, others face a range of challenges to getting their needs met. Even if individuals know the benefits, resources and services available, many face challenges to accessing them. Some residents do not speak English as their first language, have limited literacy (in English or their primary language), have difficulty understanding and following-through on the often multiple applications and steps required to qualify for and maintain benefits, and may not be skilled at advocating for themselves. While some residents have family members who can assist them, some have none or their families have equally limited capacity.

Residents also often need encouragement to begin and continue participation in a program, service or therapy. Through trusting relationships and frequent interaction, service coordinators can motivate residents to participate in activities they may be reluctant to join or carry out, but that may be beneficial to their health and well-being. For example, case study sites gave examples of service coordinators encouraging individuals to participate in chronic disease management programs or follow through with a course of rehabilitation therapy following a hospital stay.

This enhanced engagement also extends to interaction with service providers. In the programs studied, the housing properties generally had purposeful partnerships with providers delivering services in the property, as opposed to services being just between the resident and the service provider. Service coordinators and service providers often communicated about residents, with the resident's permission, sharing information that could enhance their mutual support of the resident (i.e. coordination of appointments and care needs). This exchange might happen formally and/or informally. In some cases, the service coordinators led regular meetings where the coordinators and service providers discussed residents and identified ways in which each partner could assist the resident.

Nursing Presence

Residents of affordable housing properties often have complex health situations, including having multiple chronic conditions, taking multiple medications, dealing with mental health issues and suffering from functional limitations. Many face challenges to accessing care, including limited transportation and/or physical difficulties to get to doctor appointments. They are also challenged by the short amount of time they have with their doctors and their ability to understand a doctor's often limited and/or complex explanation of their health situation and treatment regimen. Some residents also have not learned how best to use the health care system, often utilizing the emergency department for all their care.

For these reasons, the housing plus services programs examined the value of having a nursing presence onsite. The nurse can help address many health-related issues in an easily accessible, stress-free environment that allows the resident the time they need to understand their situation. Residents can access the nurse frequently and ask questions about issues they may not bother to follow-up on if they had to wait weeks for an appointment or had to arrange transportation. The nurse can explain to them what a diagnosis means, the results of their lab work, whether they should be concerned about their blood pressure or blood sugar level, and so on. Nurses can also review medications to help ensure there are no duplications or contraindications and that the resident understands how to take them properly. They can also help call physicians to get residents' questions answered or work out any potential concerns identified with their medications. In addition, nurses can monitor residents following their return from a hospital or rehabilitation stay to ensure they are having a successful transition home.

In addition to one-on-one education, nurses can also provide group education sessions and programs. Findings from our case studies point to several areas of special interest:

- exercise programs that improve balance and reduce falls;
- self-care management programs related to diabetes and congestive heart failure (CHF); and
- dealing with depression.

Housing staff and nurses working at housing properties believe the onsite presence allows them to become very familiar with residents and build trusting relationships. These relationships help nurses with motivating and encouraging residents to pursue treatment and improve their care management practices. Staff also believe that the familiarity and regular oversight of residents allows nurses to identify potential problems before they reach a crisis stage.

Also important is the interaction between the nurse and the service coordinator. Residents often have interrelated health and social service needs. Working as a team, the two positions can bring their complementary skills together to address residents' comprehensive needs. It is important to note that the nurse is a part of the team (not meant to replace the service coordinator) and enhances the concept of a person-centered, holistic and cost effective approach to housing with services and support.

One important lesson from the case studies is the need for the nurse position to have adequate time at the property. With too few hours, the nurse is not able to see the volume of residents who might benefit from his/her assistance, engage with them on an adequate level, or provide a full-range of one-on-one or group services. The position should be part-time at a minimum and full-time preferably. The need to address the health care needs (through the presence of a nurse) of vulnerable low- and modest-income older adults appears critical to this integrated model.

Home Care/Home Health Agency Provider Clustered Care Presence

Some of the strategies studied have developed programs to help support older residents facing functional challenges. These programs involved partnering with a home care or home health agency to dedicate onsite staff (aides and/or clinical nurses) to float around the building helping residents with their homemaker or personal care needs. Providers believed this onsite clustered care strategy offered several advantages:

- Service providers say that seeing their clients more frequently and regularly helps them build a relationship and trust with the client. This can often lead to clients being more willing to act on or follow their directives and suggestions.
- The home care providers believe that the more continuous presence with the client allows them to know their clients better and recognize potential problems more quickly, which they believe results in better outcomes for their clients.
- Clients often get more time than they are technically allotted. When a home care nurse or aide is onsite, they can float more flexibly between clients as opposed to when they are working under a traditional home care delivery system where their time is tightly structured because they must travel from client to client.
- Through the efficiencies and flexibility gained by being onsite, agencies can decrease the minimum number of required hours (e.g., two or four hour increments) and the hourly cost from the traditional home care model, making the service more affordable to residents who may need to pay for the services out-of-pocket.
- Although providers are technically onsite to serve their clients, they are often available to answer questions about non-clients.
- If there are multiple service providers' onsite who may share joint clients, they can communicate with each other more easily.
- Service providers can communicate with the service coordinator about issues or concerns they may have about their clients that may not be within their scope, but that the service coordinator can follow up on and/or assist with.
- Housing providers believed they could help monitor the service providers and ensure residents are getting high quality services, as compared to when multiple providers are coming to the property through unique relationships with individual residents.

Concerns may be raised about the availability of provider choice when creating a clustered care model with a dedicated home care/home health provider. In all of the case studies conducted, residents always had an option of selecting their own home care or personal care provider. In most cases, the residents utilizing these types of services elected to choose the onsite provider because of the convenience of and

witnessing services received by their neighbors and friends. The properties visited stated that they had never had a resident or family member raise a concern about the preferred relationship or lack of choice. As noted above, housing providers indicated that the clustered presence can allow them to offer services at a reduced rate and minimum time requirement. For individuals who may not be eligible for a publicly-funded program and must purchase home care with their own resources, this can provide an affordable option. At a market rate, these individuals may not have been able to purchase these services and would have gone without the assistance.

Engagement with Health Providers

Beyond the onsite nursing presence described in the prior section, some of the models studied engage more directly with health providers and/or systems to bring primary care or other health-related supports to the property. Three of the sites visited had elements that suggested greater engagement with health providers (one with co-located PACE (Program of All Inclusive Care for the Elderly) and a FQHC (Federally Qualified Health Center); one with an onsite geriatric clinic; and one with an onsite nurse where the service coordinator actively managed hospital discharges). However, at the time of the visits, these sites did not have data to draw conclusions from the site visits alone.

As a result, we sought data from additional programs examined outside of the case study sites that reveal the promise of this linkage. One housing property has partnered with a regional health system to bring a physician to the property once per week and assign a nurse navigator to follow residents transitioning home from the hospital or needing assistance in coordinating their clinical care across the system. In a comparison of the first six months of the pilot program to the six months prior the start of the program, the property saw a 20% reduction in emergency department visits and a 49% reduction in hospital admissions. In another property, a home health agency is operating an onsite clinic staffed by a nurse practitioner and a nurse and providing primary care, as well as wellness and health education services. In an analysis of residents utilizing the clinic, the clinic found a 3% use of the emergency department compared to the state average of 12% and a hospital readmission rate of 11% versus a state average of 18%. In addition, a large housing provider is attempting to develop its own medical home for its residents while another housing organization is partnering with an accountable care organization (ACO) to serve its dual eligible population.

An advantage of this purposeful partnership is the interaction between the health providers and the property service coordinator. A recent article discussed the role social supports, in conjunction with health care services, can play in lowering health care use and costs.⁵ The article notes, however, that fragmentation presents a barrier to

⁵ Gayle Shier, Michael Ginsburg, Julianne Howell, Patricia Volland, Robyn Golden, Strong Social Support Services, Such As Transportation And Help For Caregivers, Can Lead To Lower Health Care Use And Costs, *Health Affairs*, 32, no.3 (2013): 544-551.

integrating the health care delivery and social service systems. A 2011 survey conducted by the Robert Wood Johnson Foundation found that 85% of physicians say unmet social needs (i.e. access to nutritious food, reliable transportation and adequate housing) are directly leading to worse health for Americans.⁶ Yet, only 20% of doctors feel they have the ability to help address those needs. Through purposeful engagements, health care providers and housing providers can share information (with the resident's permission) and bring their insight and expertise to bear to address a resident's interrelated needs.

These models and their potential are especially timely because many initiatives under the ACA and other health reform activities enhance opportunities for partnership between health provider and affordable housing properties. Several of these initiatives focus on improving care delivery and health outcomes for the nation's high-risk and high-cost population, which represents many of the residents living in affordable senior housing properties.

These health providers could work with housing properties in a variety of ways. They might operate onsite clinics staffed with physicians or nurse practitioners to provide primary care, either as an individual's primary care provider (PCP) or as an enhancement to a PCP. They could also host wellness clinics, staffed by a nurse practitioner or nurse, which provides health monitoring, prevention and education type services. Or they might develop a nurse navigation role that helps ensure residents have successful transitions following a hospital stay or that care in general is coordinated across providers and entities within a system. Mental health providers – including psychiatrists and medical social workers – could also provide onsite counseling and therapy.

The nature of health-housing partnerships vary depending on a variety of circumstances, such as the capacity and resources of the health provider (i.e. a single hospital or clinic versus a health system versus an accountable care organization or managed care plan), where residents typically get their health care from (i.e. do they see a broad range of providers or do many see providers within a single system or do residents utilize a variety of hospitals), or the nature of health needs across a property.

Not surprisingly, one challenge that some housing and primary care practices partnerships have found is residents' unwillingness to give up their existing PCPs. Housing providers have seen that many in the current generation of residents have a sense of loyalty to their current doctors and are reluctant to make the change. Others find that some residents will make the switch, particularly those who are frailer and have a greater challenge getting to their physicians, but that it can take time for some residents to make this decision.

⁶ Robert Wood Johnson Foundation. Health Care's Blind Side: The Overlooked Connection between Social Needs and Good Health. December, 2011.

Common Health Issues and Needs of Target Population

There are some needs or issues that we frequently heard across case studies, including:

- **Medications** – Providers believe medications represent a significant problem for residents due to the large numbers of medications many take, potential duplications and contraindications and administration mistakes. Housing properties feel limited in their ability to aid residents in this area. Nurses may be able to perform medication reviews and help address problems. They are generally limited in their ability to assist with administration, however.
- **Transition from hospital back to the property** – Another challenge frequently raised is assisting residents with their return from a hospital stay. In most of the sites visited, service coordinators are mindful of following residents when they return from a hospital stay to ensure they have all the supports in place they need to have a successful transition back home. They face a couple challenges, however. First, because these properties are independent settings they do not track residents on a consistent basis and are not always aware when they have gone to the ED or hospital. The bigger challenge is finding out which hospital they have gone to (this is a bigger problem in urban areas than rural areas) and getting any information from the hospital discharge planning staff. Due to HIPAA regulations, hospital staff are often unwilling to talk with housing property staff.
- **Mental health** – Housing providers report a growing number of residents with mental health needs. The more common issues seem to be depression and anxiety; however, properties also report residents with serious mental illness, which appears to be more common in properties with a younger disabled population. Staff are often challenged in dealing with residents with behavioral health issues, both in their direct interaction with these individuals and identifying referral resources. Housing staff generally have limited, if any training, in dealing with persons with mental illness.
- **Falls** – One challenge, raised across several of the sites visited, is the high number of resident falls and the limitations of the housing property to respond. Most of the properties say it is their policy to not assist a resident in any way when they fall and to call 911. The concern is the potential liability if they hurt someone when trying to assist them or if someone should have gone to the hospital and later develops a problem. Some say this is a directive of their insurance company. Nonetheless, several housing providers recognize that many residents probably do not need to go to the ED and that there is a high cost connected to these unnecessary trips.

In addition to what we learned through case studies, one member of the Technical Advisory Group advocated for two elements to include in the demonstration: 1) full

integration of health care reform opportunities (i.e. implementation of medical homes, integration of services and supports for persons who have both Medicare and Medicaid) when feasible; and 2) development of formal affiliations between health care, housing, and community service providers.

Proposed Demonstration Model Options

Previous research, findings from our case studies, as discussed above, and knowledge of the characteristics and needs of the population in affordable senior housing properties, informed our identification of elements to include in a housing plus services strategy that would result in positive outcomes for residents, the housing and service providers, and public payers. These elements include: 1) strong care coordination that helps residents identify and address their health and social service needs; 2) onsite support with home and personal care needs; and 3) engagement with health care entities to help coordinate and manage health care needs.

Care coordination will assess residents' health and social needs, identify services and resources to meet those needs, and facilitate access to and receipt of needed services. This coordination can help ensure residents do not forgo resources that may improve their quality of life, maintain their safety in their home, support the maintenance of their health, and prevent the unnecessary use of costly health resources. Onsite, clustered provision of home and personal care services can provide more consistent and flexible services for residents, which may result in better support for the resident. It may also result in lower-costs, which can mean expanded access to individuals who must pay out of pocket and reduced costs to public payers. Engagement with health care providers and systems can help support resident's health care by bringing physicians additional knowledge of their patients and linkages to social and long-term care services, which can bear on their physical and behavioral health outcomes. It can also bring health and wellness resources to the property that can benefit the whole community.

Considering these elements, we propose the following-three model options detailed below:

Option 1: Enhanced Service and Support Coordination Model

Option 2: Added Onsite/Clustered Home Care Services Strategy

Option 3: Added Engagement with Health Care Entities Strategy

We envision Option 1, the enhanced service and support coordination model, as the core demonstration model. Any applicant participating in the demonstration would deploy this strategy. Depending on the needs of a housing property's residents and the possible health entity partnerships in the community, an applicant may also deploy

Option 2 and/or Option 3. All three options would pursue the same outcomes. Options 2 and 3 have additional supports that may target more specific needs or bring additional resources to the property but will still pursue the same outcomes; although it could be hypothesized they may result in greater improvement in the outcomes.

All options serve the whole resident population, but allow for targeted attention to specific resident populations, such as those with multiple chronic illnesses or functional limitations. We believe it is important to serve the whole resident population because all residents may benefit from some level of services and support. Low income and the high proportion of minorities among subsidized housing residents increase their risk of poor health outcomes. Residents on the healthier end of the spectrum will benefit from wellness activities, such as fitness classes and health education, which may encourage better management and prevent decline of their health conditions. Residents on the other end of the spectrum, who may have multiple chronic conditions and/or functional limitations, will benefit from monitoring and assistance coupled with accessing coordination of their range of services and resources.

All three models;

- recognize the value of an integrated approach to address all housing, health and long term services and supports needs that relies upon the inclusion of innovative person-centered, holistic and cost-effective interventions to coordinate care; and
- include a strong health promotion and disease prevention focus, with an emphasis on health education, physical and cognitive fitness, and self-care management.

As noted during the May 2010 National Summit on Affordable Senior Housing and Services⁷, there is a lack of evidence-based research on models that can lead to greater quality of life and a more efficient use of limited resources supporting residents in the community as they age and their needs change. Therefore, it is important this demonstration measure the outcomes associated with models that recognizes a holistic approach to both medical care and social support needs. This demonstration provides an opportunity to test new innovations to include enhanced service and support coordination through the inclusion of nurse education and monitoring, and also the addition of onsite home care and/or greater coordination with the health system. .

Option 1: Enhanced Service & Support Coordination Model

The first demonstration option pairs an enhanced service coordinator with a nurse, creating a services and supports coordination model that helps the resident population

⁷ www.leadingage.org/uploadedFiles/Content/About/Center_for_Applied_Research/Expanding_Affordable_Housing_Plus_Services/Affordable_Senior_Housing_Summit_Report.pdf

in addressing their social (i.e. nutrition, transportation, and personal care), wellness and clinical needs (education, exercise, blood pressure monitoring, nutrition, etc.). While each role focuses on supporting residents through their unique skill sets, the two positions function as an interdisciplinary team to jointly meet the resident's collective needs.

The team serves the entire resident population, addressing social resource and support needs, providing health education, health monitoring and acts as a liaison with primary care and other providers. They more intensively follow higher-risk residents who may require more frequent monitoring and ongoing engagement to help ensure needs are addressed. All resident participation is voluntary.

In this model, the service coordinator takes on an enhanced role beyond traditional information and referral functions. The service coordinator acts more proactively, assuming tasks, such as conducting assessments, developing and monitoring care plans, encouraging resident engagement in programs and activities, motivating resident engagement in their own health and supports management, collaborating with the onsite nurse to address resident issues, and networking with community partners. Given the expanded scope of the service coordinator role, it may be beneficial for service coordinators under the demonstration to receive leadership training by developing or enhancing skills in managing services, costs, time, quality and communications.

An onsite nurse conducts health, mental health and functional assessments, answers health-related questions, provides one-on-one and group health education, motivates resident engagement in self-care management, monitors vital signs, liaisons with health care providers, assists with medication reconciliation/management, monitors transitions home following an emergency department or hospital visit, collaborates with the service coordinator to address resident issues, and networks with community partners.

The wellness component of this option promotes a holistic approach that includes physical, emotional, social and environmental dimensions which places the individual at the center of care. Building upon this wellness component is a clinically-based component that may result in clinical measures of improved health. The nurse may perform nursing duties which may include clinical activities, such as giving injections (insulin, for example) and dressing wounds. Depending upon the state, these activities may conflict with residential or professional licensing requirements and waivers or exceptions may need to be obtained for the purposes of testing these activities within the demonstration.

This option builds upon the existing service coordinator model already present within many housing properties. However as mentioned previously, the demonstration

requires an enhanced level of skill and engagement than some existing service coordinators currently have or practice. Service coordinators will likely need additional training to meet the requirements of this model. Some properties may not currently have adequate funding to support a full-time coordinator or to support a coordinator with the skill set and capacity to fulfill the functions of the enhanced role.

Some housing properties also have an onsite nursing presence. Often, however, it is provided through a partnership (e.g. hospital or home health agency) and the nurse is only available for a limited time, a few hours per week or even per month. The proposed demonstration model requires a greater nursing presence with the additional need for the nurse to collaborate actively with the service coordinator. Although, the exact amount of nursing effort needed is unknown, the Vermont SASH model has 20% FTE per property which averages 70 residents, and they think the model could be even more robust with a higher percentage of FTE. Nonetheless, these two roles are generally available in a community and could be implemented in a way that could accommodate any licensing or regulatory restrictions (residential or professional).

Option 2: Added Onsite/Clustered Home Care Services Strategy

Option 2 takes the Option 1 enhanced services and support coordination model and adds the support of home care or personal care services through a clustered care strategy. In addition to onsite nursing presence, a clustered care strategy places aides onsite allowing them to care for multiple clients in the housing property at the same time. In the traditional home care delivery model, an aide visits a resident on the days and for the hours assigned to the resident, and each resident generally has their own aide. In a cluster care strategy, aides are staffed onsite at the housing property resulting in a more regular and flexible presence, and residents essentially share aides. This option addresses the range of social and health needs of the whole resident population through the service coordinator/nurse team, but also helps to meet the support needs of older residents through the onsite provision of home and/or personal care services.

Services are provided by home care, personal care aides either directly employed by the housing property or through a partnership with an outside entity; dependent upon the capacity or preference of the housing organization and/or the regulatory and licensing parameters of the state. Funding for the services may come from a variety of sources including Medicaid, dollars obtained through refinancing, endowments, private pay sliding scales, etc.

Option 3: Added Engagement with Health Care Entities Strategy

Option 3 takes the Option 1 enhanced services and support coordination model and adds linkage with primary and behavioral health providers. It is also possible to take Option 2 and add linkage to primary and behavioral health providers. In this model, a

housing property creates an intentional linkage with a health care entity or entities to bring primary and behavioral health care to the property.

This linkage could be implemented in a range of ways and therefore it is important for the demonstration to remain flexible. There are variations in the health resources and entities surrounding a housing property, what providers and residents utilize (e.g. is the housing property served by one hospital or five, do a volume of residents utilize any one particular practice or system, does insurance drive the use of a particular system, etc.). Additionally, states are involved in various health and long-term care initiatives, and what is occurring in one state may not be occurring in another. Additionally, the linkages proposed in this model are not meant to limit residents' choice of providers, but rather provide options to older adults in the housing property.

The mechanism may also vary depending on the nature of the property, the residents and the partnering health entity. For example, an entity might act as residents' PCP or as an enhancement to their existing PCP. ACOs, managed care organizations or FQHCs might enroll residents into their systems. Other variations of this primary care/housing model could involve close coordination between residents and fee-for-service medical homes in which residents may or may not be enrolled. The mechanism, however, requires a formal interaction between the health provider and the housing property where the entities share information and work together to assist and support the residents. For example, a health system could send a clinician (physician, nurse practitioner or physician assistant) to a property on a regular basis to see residents for primary care needs. This physician could serve as a resident's PCP and/or could liaison with resident's PCP to share information and help address health issues. In another example, a hospital and housing property could establish a partnership around transitions post hospital stay where a hospital would notify housing staff regarding a resident's impending discharge and the housing staff and discharge staff would communicate and collaborate around the resident's discharge plan.

Common Components Across All Three Demonstration Model Options

Staffing

Service Coordinator – The demonstration requires a full-time service coordinator. Demonstration sites should have an existing service coordinator in place due to the importance of established relationships. Relationship/trust is essential to resident willingness to approach the service coordinator for help, disclose issues and needs, accept and follow-through on advice, and accept assistance. If the service coordinator is not full-time, the demonstration should supplement funding to bring the position up to full time. As identified in one of the case study sites, properties that do not have a full-time coordinator find it challenging to develop and maintain relationships with both residents and community partners.

Onsite Nurse – The nurse should be a half-time position per 100 residents at a minimum. It is important to ensure the role has an adequate level of exposure to have an impact on the residents’ needs. The position could be employed directly or contracted through an outside organization, depending on the licensing/regulatory requirements of the state and the capacity or comfort level of the housing organization to supervise the nurse.

Training

The service coordinator and onsite nurse should have the necessary skills and knowledge to address the needs and issues of the resident population. The service coordinator should be trained in conducting assessments for health, social, and functional issues, as well as needs and preferences, motivational interviewing techniques, coaching, understanding aging processes and the health care needs of older adults. The nurse should be trained on social supports available. Both the service coordinator and nurse should be trained in dealing with persons with behavioral health issues. Doing so will enhance the service coordinator and nurse communication which may result in better outcomes for residents. There are challenges that will need to be overcome to conduct the training, including determining who pays for the training, who designs the curriculum, and who provides the training.

Assessment

Demonstration properties should complete formal assessments of health, social, and functional issues as well as the needs and preferences of residents on a periodic basis. These assessments should be voluntary (as these properties are independent housing), but the pilots should encourage resident participation to the greatest extent possible. Assessments are needed to understand the needs at both the individual and community level. For evaluation purposes, all demonstration sites should use an assessment tool with at least the same core elements and preferably the same tool.

Data Collection

Demonstration sites should track resident and program information. In order to ensure consistent and quality data collection, we recommend providing demonstration properties with a web-based tool to record required information about the residents as well as training to ensure adequate understanding of data collection and enhance inter-rater reliability. This would, at a minimum, include an assessment instrument and case management notes. We also recommend including resources to provide data extracts to either populate the standard elements of other software or to be imported from existing databases in use by the property.

Evidenced-Based Programming

Demonstration properties should incorporate evidenced-based programming that is responsive to needs identified in their resident assessment. This could include programs addressing areas such as chronic disease management, falls prevention, medication management, behavioral health, fitness or pain management. Programming could be offered directly by the housing property or through partnerships with community organizations. The demonstration could consider requiring the use of evidenced-based programming in key areas responsive to the needs discovered through assessments.

Service Delivery Space

Sites should be required to provide adequate space for services to be delivered. This includes providing offices or other adequate rooms where the service coordinator, nurse and other health or social services providers can meet privately with residents. In addition, there should be appropriate and adequate space for group health education and exercise programming.

Funding

The demonstration will rely on a mix of dedicated funding through the demonstration initiative and existing funding. Currently, services provided in senior housing sites are through programs that already have a funding stream and/or through services that are reimbursable through public programs like Medicaid. For example, a congregate meal program funded through the Older American's Act may be delivered at a housing property or a health care provider may visit a housing property and bill Medicare for reimbursable services delivered to eligible individuals. However, some of the key elements included in the proposed model options do not have an existing funding source. Most notably, the onsite nursing role is not a reimbursable Medicare/Medicaid service and an affordable housing property does not have an alternative mechanism to pay for this position. While some community partners will provide some nursing hours on an in-kind basis, it is rarely of an adequate level to provide the level of continuity and exposure needed to have an impact. Supplemental funding may also be necessary for the enhanced service coordinator position. HUD-supported properties with a service coordinator generally have a dedicated funding source for the position through mechanisms provided via HUD. These sources, however, may not always support a full-time position. They also may not provide a salary that is commensurate with the skills and knowledge that are necessary for this enhanced role. Properties funded through other financing mechanisms, such as low-income housing tax credits, less often have a dedicated funding source for a service coordinator and the position is often part-time. The demonstration may also need to provide support for data collection

software, as many housing providers currently do not engage in systematic assessment or tracking of residents.

Property Management

Property management should maintain a philosophy and culture in the building that promotes assisting residents with their various health and social service needs to maintain their quality of life and remain safely in their home. Creating this culture requires ensuring that all property management staff understand that this is the community's goal and the role they play in supporting this goal. Communication pathways should be identified between property management staff and the service coordinator, for property management staff to share relevant information they observe about residents that may reflect a resident need. Processes between property management and the service coordination staff should also be identified for addressing issues that may bear on a resident's tenancy. Additionally, property management should ensure residents are aware of the property's philosophy and goal of helping them to live safely in their apartments. This may allow residents to feel safer and more comfortable seeking advice and assistance from the service coordination staff.

Summary of Demonstration Design Options

In summary, the demonstration provides an opportunity to explore new ways of organizing and delivering services that are in line with several initiatives under the ACA (e.g., ACOs, medical or health homes, transitional care demonstrations, Independence at Home, State Innovation Models) and could identify opportunities for funding these services in a scalable and sustainable way going forward. The table below summarizes the three options proposed in this demonstration design report and connects the unique features of each to the outcome questions of interest specific to each model. It is important to note that all three models or variations of each model are expected to respond to the core policy and practice questions outlined earlier in this report:

- Can publicly subsidized housing properties with multiple units (generally unlicensed subsidized apartment buildings) serve as an effective platform for meeting the health and long-term services and support needs of low income older residents (62+) as well as some proportion of similar individuals who live in the surrounding community?
- Of the demonstrations that are found to be effective, which housing with services models result in the best outcomes?
- What services and supports need to be provided and to which specific groups of residents in order to maximize the best outcomes?

Model Option	Unique Features of Demonstration Model compared to Basic Housing with Services Model	Common Features across Basic and Demonstration Models	Outcome Questions of Interest Specific to the Model
<p>1</p> <p>Enhanced Services & Support Coordination Model</p>	<p>Enhanced service coordination and onsite nurse team.</p>	<p>Service Coordination – Enhanced role in terms of types of assistance provided, presence, and skills and knowledge.</p> <p>Addition of Nursing Assessment, Coordination and Support</p>	<p>What is the impact on resident outcomes (i.e. hospitalizations, emergency department use, and medication use) as a result of enhanced service coordination? As a result of strengthen medical-social coordination?</p>
<p>2</p> <p>Added Onsite/Clustered Home Care Services</p>	<p>Adds personal care and home health to the service and support coordination and nurse model.</p>		<p>What is the added impact of adding personal services for in-home assistance? Are residents afforded greater choice as a result of personal and home health coordination? Resident cost-savings?</p>
<p>3</p> <p>Added Engagement with Health Care Entities</p>	<p>Adds Primary and Behavioral Health Linkage to either the service and support coordination and nurse model or to the Coordination Plus Clustered Care Model</p>		<p>What is the added impact of creating intentional partnerships between health entities and housing providers?</p>

Purpose of Demonstration Funds

To respond to the key policy questions raised within this demonstration design report, the table below outlines potential uses for demonstration funds. The table is not meant to reflect all potential opportunities, but rather reflects examples of the various ways that demonstration funds could be used to meet program objectives.

- Expanded role of service coordinator (funds to make an existing service coordinator full time and/or funds to hire additional service coordination)
- Inclusion of nurse within team
- Testing new and/or innovative assessment processes
- Developing relationships and formal agreements with key partners
- Development of data collection systems
- Enhancing competencies for service coordinators and other staff through evidenced based practice training
- Program administrator to manage the data collection and evaluation components of the demonstration

Demonstration Site Selection

Not all properties currently fit within the models proposed in this report and therefore many existing sites may not qualify to participate in the demonstration. In order to test innovations leading to desired outcomes for low-income older adults, we propose several key considerations in the selection of demonstration sites that should be built into any solicitation:

Characteristics Required of All Participating Sites

- Sufficient numbers of participants
- Strong capacity of the property staff and management
- Demonstrated partnerships between the property and health/LTSS system
- Management Information System (MIS) infrastructure

Potential Selection Criteria Across Sites

- Mix of housing types
- Community/State characteristics

Sufficient Numbers of Participants

It will be critical to select sites that have sufficient numbers of participants for both the broader public health oriented interventions and the interventions targeting the narrower high risk population. Defining high risk as having limitations in at least one activity of daily living or instrumental activity of daily living, we estimate that in order to include at least 20 high risk individuals at a property, the demonstration should target properties with 100 or more residents.

According to our Technical Advisory Group, from a property perspective, a size of 100 or more residents also provides an adequate volume to make the design affordable and sustainable. One of the Technical Advisory Group's property managers indicated that adding a staff member would require funding for a minimum of 20 hours a week per staff person. This is also supported by Levine and Robinson Johns' 2008 study findings related to HUD's Service Coordinator Program, where developments without service coordinators indicated too few residents to merit an additional staff member.

Based on 2009 Medicare fee for service claims data, 26.8 percent of residents of publicly subsidized housing age 65 and older in the 12 geographic areas used for our feasibility

analysis had a hospital stay. Outpatient emergency department use rates are similar at 33.6 percent. In order to detect a 10 percent change with sufficient power would require treatment and control groups of 75 each at each property. This suggests that including properties with 100 or more residents age 65 and older should provide sufficient power to detect differences in key outcomes of interest.

Exhibit 1: Power Calculations for Any Hospital Stay (26.8 percent)

Detectable Change	Sample Size				
	50	75	100	125	150
5%	0.67	0.84	0.93	0.97	0.99
10%	0.71	0.87	0.95	0.98	0.99
20%	0.75	0.90	0.96	0.99	1.00

Capacity of the Property Staff

Success in implementing the demonstration will rely heavily upon the capacity of the property management and service coordination staff at the selected properties and the support they receive from their parent organization. Applications should require details about the organizational philosophy regarding independent living and the role of the property in supporting independent living, identification of the project champion(s) and their role within the organization, and relevant current or planned training of the property staff. Evidence of successful implementation of major changes to operations could indicate a capacity to make further necessary changes for success under the demonstration.

The HOPE IV final evaluation found that many grantee public housing authorities (PHAs) were initially unprepared to run the program (Ficke and Berkowitz, 1999). These PHAs were able to effectively enroll participants into HOPE IV only after making considerable changes to their infrastructure and attitudes to adapt to the needs of a frail elderly tenant population. This sometimes required organizational changes within the PHA or rearrangements in the relationship between the PHA and service agencies. Even with separate funding and a PHA commitment to the program, demonstration sites had to overcome substantial barriers to program development within their host agencies and among community partners. Focused technical assistance, potentially through a learning collaborative approach that encourages rapid cycle improvement and participation across partner organizations, could address some of these start-up issues.

Management Information Systems (MIS) Infrastructure

In order to ensure consistent and quality data collection, we recommend providing demonstration properties with a web-based tool to record required information about property residents and participants. This would, at a minimum, include an assessment instrument and case management notes. Properties would need access to a web-enabled computing device. We also recommend including resources to provide data extracts to either populate the standard elements of other software or to be imported from existing databases in use by the property.

Mix of Housing Types

In selecting potential properties to include in the demonstration, to the extent possible, it would be beneficial to include a mix of housing types, including public housing, Section 202, or other multi-family assisted senior designated properties, and low-income housing tax credit properties.

Community/State Characteristics

In selecting applicants, the characteristics of the community and state should be considered. State's Medicaid LTSS systems, state funded programs, licensing laws, and degree of managed care penetration each could influence the implementation of the demonstration. If less than 10 sites are targeted, we recommend considering only two or three states in order to: allow for some variation in policy at the state level while also having several sites (at least three) operating under the same state policies. Another consideration might be whether a state has been approved to participate in CMS' financial alignment initiative because a state's participation may offer additional avenues for service coordination among individuals enrolled in both Medicare and Medicaid.

Considerations for Evaluation

Outcomes

The primary research question to be answered by the evaluation is the following:

Do elderly residents of service-enriched housing have fewer adverse outcomes relative to their peers living in non-service-enriched housing properties?

All of the three model options proposed above would influence similar adverse outcomes. With the layering of additional and more intensive services that can assist more complex individuals, Options 2 and 3 may see a greater impact on the outcomes. We recommend tracking the following outcomes because they suggest both better health and quality of life for individuals as well as lowered costs to the health care system. These indicators can show whether linking affordable senior housing settings with services can be a valuable strategy for helping the federal and state governments achieve their health and long-term care reform goals. As the models are designed to serve the whole population in a housing property, these outcome areas are ones that could be experienced by residents along the need spectrum. Additionally, we have also seen in some preliminary data and heard through case studies that these are common areas of need among many affordable housing residents.

The outcomes we propose measuring include:

- Hospital admissions related to ambulatory sensitive conditions (initial and readmissions)
- Emergency department visits
- Falls
- Number of medications
- Depression
- Community tenure
- Quality of life

Additionally, bringing in dedicated staff and partnerships to address the physical and mental health needs of residents may also impact the housing properties themselves. We would also propose looking at outcomes that examine this effect, including:

- Unit turnover by reason
- Maintenance expenses and time related to unit turnover and apartment damage

Measures that happen less frequently and would require larger sample sizes as well as those that would require a more intense qualitative data collection process were also recommended by the Technical Advisory Group:

- Mortality (during hospital or nursing facility stay)
- Nursing facility admissions (initial and readmissions)
- Nursing facility length of stay
- Nutrition
- Inappropriate combinations and duplicate medications

Data Sources for Outcomes

A high-quality study design hinges on valid and reliable data. Regardless of how well a study is designed, the outcome is only as good as the data used. While available data sources provide a cost-effective and efficient way for collecting data, all sources reviewed were found to have limitations in terms of the variables collected, the quality of the data, the frequency of the collection, time lag for availability, or comparability of the variables over localities and states. Many studies have used supplemental surveys, questionnaires or interviews to collect additional data that complement the data collected through regular reporting systems to allow for more robust evaluation results. While supplemental data collection methods may be costly, they are likely the only way to ensure the inclusion of high quality data on certain key variables.

Exhibit 2: Data Sources for Outcomes

Variables of Interest	Secondary Data Sources	Requires Primary Data Collection	Considerations
Hospital Stays	CCW Medicare Part A claims		Lag of 2-3 years in availability
Emergency Department Visits	CCW Medicare claims		Lag of 2-3 years in availability
Home and Community-based Service Use (HCBS)	CCW Medicaid claims (MAX) OAA & state program administrative data	For those paying for their own services and if claims/admin data are not accessible	Lag of 3-4 years in availability Lack of consistency across funding sources Primary data collection likely impractical for non-experimental comparison group

Variables of Interest	Secondary Data Sources	Requires Primary Data Collection	Considerations
Number of medications and polypharmacology	CCW Medicare & Medicaid claims		Lag of 2-3 years in availability
Depression: prevalence, incidence, and costs associated with the condition	CCW Medicare & Medicaid claims		Lag of 2-3 years in availability
Falls	CCW Medicare & Medicaid claims	For more timely data & to capture incidents that do not involve health care system	Lag of 2-4 years in availability
Community Tenure	CCW Timeline based on MDS and claims		Lag of 2-3 years in availability
Resident Turnover & Evictions	HUD Property administrative data		Reported in the aggregate to HUD
Maintenance Expenses & Time Related to Unit Turnover and Apartment Damage		Survey of property managers or site visits	
Resident Quality of Life		Survey of resident perception	
Mortality	National Death Index		
Nursing Facility Use	CMS Minimum Data Set for nursing facilities		
Nutrition		Diary entries of food consumed or general survey questions	

Secondary Data Source Key:

CCW = Chronic Condition Warehouse – Provides researchers with Medicare and Medicaid beneficiary, claims, and assessment data linked by beneficiary across the continuum of care.

MDS = Minimum Data Set – A comprehensive assessment of each nursing facility resident's functional capabilities, regardless of source of payment, which helps nursing home staff identify health problems and develop a care plan. Conducted on admission and then periodically, within specific guidelines and time frames.

MAX = Medicaid Analytic Extract – Data files that contain Medicaid enrollment information and final action claims.

OAA = Older Americans Act -- Funds services that keep older adults healthy and independent, including meals, job training, senior centers, caregiver support, transportation, health promotion, benefits enrollment, and home and community-based services.

Evaluation Approach

With the intervention occurring at the property level, to pursue an experimental evaluation design would require randomizing properties with at least 100 residents, willing to pursue greater integration with the health system, and that already have a service coordinator. To the extent possible, it would also be important to have similar characteristics of the residents across properties in terms of age, health needs, and functional limitations. In addition, other environmental factors of the health care, behavioral health, and long term services and supports systems should be considered. In particular, it would be desirable to have properties located in communities with similarity on measures of access and service availability, such as the per capita number of hospital beds and primary care physicians, as well as the services provided and eligibility criteria for Medicaid home and community-based services. We think that if only Option 1: Enhanced Services and Supports Coordination Model were pursued it could be possible to conduct an experimental evaluation through recruitment of sites that meet the above and then randomly assigning them. By randomizing at the property level, randomization will not eliminate any bias related to individuals' choice of property in which to live.

For Options 2 and 3, in order to be considered for the demonstration, we would also want the property management to have forged partnerships with primary and acute health, behavioral health, and long term services and supports providers. For Option 2: Added Onsite/Clustered Home Care Services and/or Option 3: Added Engagement with Health Care Entities, we recommend a non-randomized comparison group approach due to the partnership development necessary to pursue.

Conclusion

Pursuing this demonstration can position ASPE, HUD, and AoA to answer critical questions about the use of publicly subsidized housing as a platform for reaching low income and vulnerable older adults with beneficial services in a cost-effective manner. Specifically, the sponsors will better understand the impact of enhancing coordination and availability of services in promoting positive outcomes for service recipients, including increased community tenure, housing stability, and decreased health care use. This demonstration can also examine the potential cost savings of such a model. Additionally, it will enhance capacity for ongoing research and provide information about the programs that the sponsors can use in future program planning.

Appendix A: Members of the Technical Advisory Group

Assistant Secretary for Planning and Evaluation (ASPE) The Design of a Demonstration of Housing with Services *Technical Advisory Group Members*

2011 TAG Meeting Attendees:

- Nancy Eldridge, Cathedral Square Corporation
- Jacquie Carson, Peter Sanborn Place and Peter Sanborn Home Care
- Kenneth Barbeau, Housing Authority, City of Milwaukee
- Peter Boling, Virginia Commonwealth University
- Carol Raphael, Visiting Nursing Service of New York⁸
- Fredda Vladeck, Aging in Place Initiative, United Hospital Fund
- Lydia Taghavi, Housing and Urban Development
- Ben Metcalf, Housing and Urban Development⁹
- Bill Clark, Centers for Medicare & Medicaid Services
- Lois Simon, Commonwealth Care Alliance¹⁰
- Sandra Newman, Johns Hopkins Institute for Policy Studies¹¹
- Terry Allton, National Church Residencies¹²

2013 TAG Meeting Attendees:

- Nancy Eldridge, Cathedral Square Corporation
- Jacquie Carson, Peter Sanborn Place and Peter Sanborn Home Care
- Kenneth Barbeau, Housing Authority, City of Milwaukee
- Peter Boling, Virginia Commonwealth University
- Carol Raphael, AARP Vice Chairman of the Board; Commission on Long-Term Care appointee
- Fredda Vladeck, Aging in Place Initiative, United Hospital Fund
- Lydia Taghavi, Housing and Urban Development
- Bill Clark, Centers for Medicare & Medicaid Services
- Doug Shoemaker, Mercy Housing¹³
- Michael Barber, National Church Residencies¹⁴

⁸ Carol Raphael was the President & CEO of the VNSNY in 2011. She was in a different position in 2013.

⁹ Ben Metcalf could not attend the 2013 meeting.

¹⁰ Lois Simon could not attend the 2013 meeting.

¹¹ Sandra Newman could not attend the 2013 meeting.

¹² Terry Allton could not attend the 2013 meeting – Michael Barber from NCR attended in his place.

¹³ Doug Shoemaker was a new TAG member in 2013, recommended by Ben Metcalf.

¹⁴ Michael Barber was a new TAG member in 2013, as a representative from NCR.

Appendix B: Definitions

ACO/shared saving program:

“The Centers for Medicare & Medicaid Services (CMS) has established a Medicare Shared Savings Program (Shared Savings Program) to facilitate coordination and cooperation among providers to improve the quality of care for Medicare Fee-For-Service (FFS) beneficiaries and reduce unnecessary costs. Eligible providers, hospitals, and suppliers may participate in the Shared Savings Program by creating or participating in an Accountable Care Organization (ACO).” Source:

<http://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/sharedsavingsprogram/index.html?redirect=/sharedsavingsprogram/>

Ambulatory care sensitive conditions (ACSCs):

The Agency for Health Research and Quality (AHRQ) defines ambulatory care sensitive conditions (ACSCs) as “conditions for which good outpatient care can potentially prevent the need for hospitalization, or for which early intervention can prevent complications or more severe disease”. Examples include admissions for uncontrolled asthma and complications from diabetes. Source:

<http://www.ahrq.gov/downloads/pub/ahrqqi/pqiguide.pdf>

Community Tenure:

AHRQ defines community tenure as “the days spent in the community between admissions or instead of a hospitalization or a nursing facility or rehabilitation facility stay.” Source: <http://www.ahrq.gov/professionals/quality-patient-safety/patient-safety-resources/resources/advances-in-patient-safety/vol1/Cotayo.pdf>

Financial alignment demonstration:

“In July 2011, the Centers for Medicare & Medicaid Services (CMS) released opportunity for states to engage in two financial alignment models to integrate care for beneficiaries who are Medicare and Medicaid.” Source:

<http://www.cms.gov/Medicare-Medicaid-Coordination/Medicare-and-Medicaid-Coordination/Medicare-Medicaid-Coordination-Office/FinancialModelstoSupportStatesEffortsinCareCoordination.html>.

Housing with services:

Housing with services is targeted, coordinated housing, health and term-term care services and supports for low-income older adults.

Independent affordable senior housing:

Senior housing may provide supportive services such as meals, housekeeping, social activities, and transportation. According to the U.S. Department of Housing and Urban

Development, the generally accepted definition of affordability is for a household to pay no more than 30 percent of its annual income on housing.

Interdisciplinary Team:

An interdisciplinary team is a group of professionals, family members, and caregivers who work together to support an individual.

Long term services and supports (LTSS):

Long term services and supports is used to refer to the range of services and supports used by individuals of all ages with functional limitations and chronic illnesses who need assistance to perform routine daily activities, such as bathing, dressing, preparing meals, and administering medications. These services and supports can include personal care, medication management, habilitation, and transportation and can be provided in an individual's home, group residence, or an institution, such as a nursing facility. Services and supports provided outside of an institution are referred to as home and community-based.

Medicaid health home:

"The Affordable Care Act of 2010, Section 2703, created an optional Medicaid State Plan benefit for states to establish Health Homes to coordinate care for people with Medicaid who have chronic conditions by adding Section 1945 of the Social Security Act." Source: <http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Long-Term-Services-and-Support/Integrating-Care/Health-Homes/Health-Homes.html>

Polypharmacology:

Polypharmacology is the use of multiple medications by a patient, generally older adults (those aged over 65 years). Source: <http://www.ncbi.nlm.nih.gov/pubmed/20964461>

Public health model:

A public health model is a model that focuses on preventing disease, prolonging life and promoting health through organized efforts by public and private organizations, communities, and individuals.

Service Coordinator:

Service coordinators assist older adults living in federally-assisted multifamily housing, to obtain needed supportive services from community agencies. Services are intended to prevent premature and inappropriate institutionalization. Source: http://portal.hud.gov/hudportal/HUD?src=/program_offices/housing/mfh/progdesc/servicecoord

Social Support Needs:

Social support needs include needs such as access to nutritious food, reliable transportation and adequate housing.

State innovations model:

“The Innovation Center created the State Innovation Models initiative for states that are prepared for or committed to planning, designing, testing, and supporting evaluation of new payment and service delivery models in the context of larger health system transformation. The Innovation Center is interested in testing innovative payment and service delivery models that have the potential to lower costs for Medicare, Medicaid, and the Children’s Health Insurance Program (CHIP), while maintaining or improving quality of care for program beneficiaries. The goal is to create multi-payer models with a broad mission to raise community health status and reduce long term health risks for beneficiaries of Medicare, Medicaid, and the Children’s Health Insurance Program (CHIP).” Source: <http://innovation.cms.gov/initiatives/state-innovations/>