U.S. Department of Health and Human Services
Assistant Secretary for Planning and Evaluation
Office of Disability, Aging and Long-Term Care Policy

An Evaluation of AoA's Program to Prevent Elder Abuse:

Final Report

August 2016

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AN EVALUATION OF AOA'S PROGRAM TO PREVENT ELDER ABUSE: Final Report

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ACRONYMS

The following acronyms are mentioned in this report and/or appendix.

ADL	Activity of Daily Living
AIM	Abuse Intervention Model
AK DSDS	Alaska Division of Senior and Disabilities Services
AoA	HHS Administration on Aging
APS	Adult Protective Services
ASL	American Sign Language
ASPE	HHS Office of the Assistant Secretary for Planning and Evaluation
CAGE	CAGE Substance Abuse Screening Tool
CTI	Critical time Intervention
DA	District Attorney
DADS	Texas Department of Aging and Disability Services
DSM-IV	Diagnostic and Statistical Manual of Mental Disorders, 4th Edition
DSSI	Duke Social Support Index
DUA	Data Use Agreement
E-MDT	Enhanced Multi-Disciplinary Team
EASI	Elder Abuse Suspicion Index©
ESCM	Elder Services Case Management
FOA	Funding Opportunity Announcement
GAD	General Anxiety Disorder 7-item scale
GDS	Geriatric Depression Scale
HHS	U.S. Department of Health and Human Services
IADL	Instrumental Activity of Daily Living
LSNS-6	Lubben Social Network Scale 6-item
LSNS-R	Lubben Social Network Scale
Mini-Cog	cognitive impairment instrument
MMSE	Mini Mental State Exam
NYCEAC	New York City Elder Abuse Center
NYSOFA	New York State Office for the Aging

PCC	Patient Care Coordination
PHQ	Patient Health Questionnaire
PHQ-9	Patient Health Questionnaire 9-item
PSS	Perceived Stress Scale
SF-36	Short Form 36 health survey
TX/WellMed	Texas Department of Family and Protective Services and the WellMed Charitable Foundation
TX DFPS	Texas Department of Family and Protective Services
USC	University of Southern California
UTHSC	University of Texas Health Science Center
VASS	Vulnerability to Abuse Screening Scale
WMMI	WellMed Medical Management Inc.

EXECUTIVE SUMMARY

A. Background

The *Elder Abuse Prevention Interventions* demonstration, authorized by the Elder Justice Act and funded by the Administration on Aging (AoA), U.S. Department of Health and Human Services (HHS) in FY 2013, provided funding to test interventions designed to prevent elder abuse, neglect, and exploitation. The *Elder Abuse Prevention Interventions* program provided $5.5 million to five states and three Tribes.

The HHS Office of the Assistant Secretary for Planning and Evaluation (ASPE) contracted with NORC at the University of Chicago to design and conduct an evaluation of the interventions being tested through this demonstration. The purpose of the evaluation was to study the development and implementation of the state grantees' elder abuse interventions and report findings on the characteristics of victims and perpetrators of elder abuse or those at-risk, the use of prevention services, and outcomes. Awards for the five states ranged from $625,000-$1,020,000 for a three-year period. The five grantees funded by AoA were:

- **Alaska Division of Senior and Disabilities Services** (AK DSDS)--*Using a Critical Time Intervention Approach for Elder Services Case Management*

- **New York State Office for the Aging** (NYSOFA)--*Using Enhanced Multi-Disciplinary Teams to Address Financial Exploitation*

- **Texas Department of Family and Protective Services and the WellMed Charitable Foundation** (TX/WellMed)--*Implementing Elder Abuse Screening and Embedding APS Specialists in Clinical Settings*

- **University of Southern California** (USC)--*Take AIM against Elder Abuse: The Abuse Intervention Model*

- **University of Texas Health Science Center** (UTHSC)--*The Self-management of Medication of Independent Living Elders who Self-Neglect (SMILES) Study*

All pilot projects shared common goals and requirements, including: (1) the design of a selective and/or indicated preventive intervention; (2) targeting of 1-3 categories of people at high risk of elder abuse; (3) the establishment of key stakeholder partnerships; (4) provision of local and state-level Adult Protective Services (APS) administrative data; and (5) agreement to collect a core set of data elements. Beyond these five objectives, grantees were afforded broad discretion in developing prevention interventions tailored to their specific communities and contexts.

Collectively, the interventions included the development and/or use of various screening and assessment tools, time-limited case management, tailored health promotion, enhanced multi-disciplinary teams (E-MDTs), improved coordination of referral and care, projects supported by multiple and diverse partnerships, and provision of education and training to a variety of target audiences (e.g., clients, clinicians, professionals, communities of interest). All projects were directly responsible for developing and customizing care plans. However, some projects directly administered those services to clients, whereas others either coordinated existing services or provided a combination of the two. Pilot projects were also characterized by their heterogeneity, including a focus on one type of abuse or potentially all forms, implementation in a variety of settings (primary care, APS, multi-disciplinary teams, etc.) and geographic areas (urban and rural), as well as assorted recruitment strategies or points of entry.

B. Objectives (Research Questions)

The evaluation of the five state cooperative agreements awarded by AoA's *Elder Abuse Prevention Interventions* program is an important element in building the evidence base on effective approaches to prevent elder abuse and enhancing existing data collection systems. The research questions of interest to ASPE and AoA were:

1. What is the infrastructure within which the interventions rest and the structure of elder abuse prevention interventions?

2. What are the facilitators of and barriers to implementation of the interventions and how are barriers addressed?

3. What are the characteristics of victims and perpetrators of elder abuse in the grantees' communities?

4. What are the characteristics of the interventions and how do victims and perpetrators of elder abuse participate in the grantees' intervention?

5. What data are available at the state, local, and national levels to measure the outcomes associated with those interventions?

To address these questions, the evaluation assessed the implementation and outcomes of individual grantee prevention interventions.

C. Evaluation Design

We used a mixed-methods approach to conduct the process evaluation of the elder abuse prevention interventions. To address the first two research questions that focus on examining the implementation and infrastructure of the prevention interventions, we conducted site visits with each of the five grantees and met with grantee staff, partners, and providers that implemented the elder abuse prevention interventions in late 2014 and early 2015. Topics addressed during the site visits included the theoretical or clinical basis of the prevention intervention; implementation of the core components of the intervention; partnerships; context; facilitators and barriers; service utilization; state and local data collection systems; and project replicability and lessons learned.

Following the visits, we prepared summaries that were shared with the grantees, ASPE, and AoA. We used this information as the basis for a series of *Research Briefs* for each grantee that were disseminated during the *White House Conference on the Aging* in 2015. We also periodically reviewed grantee progress reports provided by AoA.

To address research questions 3-5 that focus on describing the characteristics of participants, the interventions themselves and available data, we developed a *Cross-Grantee Data Analysis Plan* that called for the collection of core data elements on client characteristics, program activities and outcome measures across grantees. Given the heterogeneity in scope and program features of the grantee initiatives, this unified approach allowed for comparison of client and service utilization characteristics and outcomes from the diverse interventions. The systematic collection of core data elements enabled the preparation of risk factor profiles on victims/care recipients and perpetrators/caregivers that are served by each intervention.

The core set of data elements describe demographic, psychological/physical health and social well-being indicators that are risk factors for elder abuse. Other elements pertain to referral source, type(s) of abuse, service utilization and outcomes. Identification of the common data elements for inclusion in the cross-site framework was guided by a balance between any additional burden placed on the grantees and the increased scientific rigor achieved from collecting identical information that could be compared across sites. We note that given the heterogeneity and some gaps in the data we found that they could not be reliably harmonized and pooled across the grantees.

We executed Data Use Agreements with each grantee and their partners, as appropriate, and specified the variables needed for analysis. Data transfers between the grantees and NORC's Data Enclave, a secure, protected environment, were conducted through securely encrypted transfer of incoming confidential data via National Institute of Standards and Technology-certified secure file transfer protocol applications. The grantees provided data dictionaries and assisted the team by reviewing analyses.

D. Key Findings

Given the complex and multi-dimensional nature of elder abuse, as well as different underlying theories guiding elder abuse subtypes, each of the five grantees developed a variety of multi-component and/or multi-disciplinary prevention interventions that addressed victims and elders at-risk, as well as care recipients and caregivers. Key findings are presented below.

- **AK DSDS** through the APS Unit and in partnership with the Anchorage Police Department and other community partners implemented, tested and measured the performance of the *Critical Time Intervention* case management model to prevent elder abuse, neglect and exploitation.

- **NYSOFA**, in conjunction with multiple partners, implemented an E-MDT incorporating forensic accountants and geriatric psychiatrists to investigate and intervene in complex cases of elder financial exploitation and elder abuse.

- The **USC** Keck School of Medicine in partnership with the California Department of Aging, California Department of Social Services, Legal Aid Society of Orange County, and the Orange County Elder Abuse Forensic Center piloted a multi-dimensional intervention called *Abuse Intervention Model (AIM)* that designed and piloted a multi-component model for primary and secondary prevention of abuse of elders with dementia.

- The **UTHSC** at Houston, in partnership with APS, the Texas Department of Aging and Disability Services, and the Houston area justice system piloted an intervention to increase medication adherence in older adults who have chronic health conditions and who neglect themselves.

- **TX/WellMed** developed and tested clinical screening protocols within WellMed Clinics, including use of the Elder Abuse Suspicion Index© (EASI) screening tool to identify at-risk elders and prevent elder abuse. TX/WellMed also embedded two APS Specialists within WellMed Medical Management, a primary care physician group, to provide technical assistance, communication facilitation, and education supporting increased screening to prevent elder abuse.

Infrastructure

An essential component of the evaluation was to examine the infrastructure and structure of the prevention intervention. As required by the grant, each of the prevention interventions had the support and active involvement of APS, whether serving as the lead entity (AK DSDS), a key implementation partner (NYSOFA, UTHSC, TX/WellMed), or a referral source (USC). Across the grantees, there was broad representation of community partners in implementing the core components of the prevention intervention as well as providing services to address elders' needs, such as protection and safety, medical care, food security, housing or legal and financial assistance. As some

grantees served local communities, Area Agencies on Aging were enlisted to support the interventions. Partnerships with the justice system were rooted in long-standing organizational affiliations to address elder abuse in the grantees' communities, and included law enforcement and legal services, to varying degrees, depending on the intervention. Three grantees involved the justice system as part of the operating structure of the prevention intervention (NYSOFA, USC, AK DSDS). With two grantees, the justice system played a more peripheral role in the prevention intervention but was actively involved with elder abuse prevention and APS activities (UTHSC, TX/WellMed). Partnerships formed to implement the prevention intervention benefitted from active and sustained participation of its members.

Target Population

The target populations for four prevention interventions were elders at risk of abuse, neglect or exploitation (USC, AK DSDS, NYSOFA, TX/WellMed). One prevention intervention focused exclusively on substantiated victims of self-neglect (UTHSC). The minimum age for eligibility in the intervention was 60 years for two prevention interventions (UTHSC, NYSOFA) and 65 for the other three (AK DSDS, TX/WellMed, USC). Three prevention interventions targeted elders with cognitive impairment or dementia (AK DSDS, NYSOFA, USC) and four targeted elders with a physical impairment or health problem(s) (AK DSDS, NYSOFA, UTHSC, TX/WellMed). One prevention intervention targeted elders with detectable signs of possible financial exploitation present (NYSOFA).

Certain prevention interventions emphasized the connection between a vulnerable elder and a trusted person in his/her social network and the potential for abuse (i.e., the focal subject and responsible actor). This focus on relationships varied across the prevention interventions, as did the clinical or service delivery effort. USC explicitly focused on older adults with dementia at risk for abuse and their primary caregivers. In certain cases served by AK DSDS, there was a known abuser who was dependent on the victim. NYSOFA identified social isolation and inadequate social support as risk factors (and eligibility criteria), along with identification of perpetrators of financial exploitation, for cases served by the E-MDTs in the Finger Lakes region and Manhattan.

The prevention interventions varied in the number of elders served over the course of the three-year grant period. Original expectations were tempered by the ebb and flow of referrals from partners or the willingness of elders to participate. Three of the prevention interventions had rolling enrollment but with defined periods for participation and completion. AK DSDS received 170 referrals and had 87 elders participate in Elder Services Case Management. UTHSC recruited and enrolled 34 elders in the medication adherence prevention intervention. USC recruited a cohort of 76 dyads. Two prevention interventions had a more fluid referral stream. The NYSOFA E-MDTs served more than 220 elders, which included new cases and follow-up cases. TX/WellMed screened 11,426 elders using the EASI tool. Of these, 35 elders were referred to APS. Additionally, 588 WellMed patients were served through the APS Specialists and 474 were referred to APS.

Collectively, the prevention interventions targeted and addressed multiple forms of abuse, neglect, and exploitation and its co-occurrence. While the eligibility criteria for each prevention intervention focused on defined risks, co-morbid problems were addressed through the intervention. Those that emerged through assessments or over the course of the intervention were addressed through referrals to service partners.

Core Components

The core components of the five prevention interventions were implemented as intended, with some minor adjustments. They were conducted within the time period designated by the protocol. To varying degrees, each of the prevention interventions were standardized (or manualized) by creating manuals and protocols for staff implementation. As to be expected given the heterogeneity of the five prevention interventions, their delivery methods and service duration varied, and depended on the population targeted and the nature of abuse or risk. One common delivery element across all of the prevention interventions was the use of home visits as a primary method to reach at-risk elders, although the degree of contact varied. The intensity or dose of services varied with each prevention intervention, depending on the identified needs, the treatment protocol or case plan, the resource capacity of providers, and uptake by the elder. The duration of the prevention interventions varied, as well. Three were time-limited, with the duration ranging from three-months (USC), six-months (UTHSC), or nine-months (AK DSDS). Two were open-ended and depended on case resolution by the E-MDT (NYSOFA) or APS intervention as a result of screening or care coordination efforts (TX/WellMed).

The role and scope of service providers' involvement varied--from limited to extensive--across the prevention interventions. One had limited contact with external service providers in the community, but could turn to APS or a primary care physician in the event a problem or urgent need was identified (UTHSC). Prevention interventions that used a case management model or targeted elders' service needs coordinated referrals and service linkage with a range of community service providers (AK DSDS, NYSOFA, TX/WellMed, USC).

Three of the five prevention interventions identified areas that may be important to change in future expansion or replication efforts, based on their implementation experience. This included: Allowing for greater flexibility in the case management timeframe for an evidence-based intervention (AK DSDS); Providing scripts and language to clinics to better communicate with family members about the need for mandatory reporting and adapting elder abuse screening processes to better fit within an organization's existing protocols (TX/WellMed); and Using a less intensive staffing model or a more triaged assessment with a tiered intervention for a home-based intervention (UTHSC).

Facilitators and Barriers

The evaluation also addressed implementation facilitators and barriers. A number of common factors were identified across the five prevention interventions. To various degrees, all were grounded in strong partnerships with APS and community partners that assisted with intervention planning and/or implementation (AK DSDS, NYSOFA, TX/WellMed, UTHSC, USC). Although there was some turnover, continuity in staffing and leadership across the prevention interventions was critical in providing consistency in implementation and maintaining relationships developed between case managers and clients (AK DSDS), research staff and elders (UTHSC, USC), APS specialists and clinic staff (TX/WellMed), and E-MDT coordinators and community partners (NYSOFA).

Four of the prevention interventions had established referral partners that contributed resources in various capacities: to recruit and enroll elders in the intervention protocol (UTHSC, USC); take up a case with the E-MDT (NYSOFA); or provide community-based services once needs were assessed (AK DSDS, NYSOFA, UTHSC, USC). Use of a client-driven or patient-driven approach in the social service or clinical settings of the prevention interventions was extended by the involvement of partners, community agencies, advocacy organizations, and other entities in monthly standing meetings to address elder's needs stemming from abuse or risk of harm. Such forums helped expedite service delivery by specialists (NYSOFA, USC), provide complementary services and reduce fragmentation (TX/WellMed), and build awareness of available resources for referrals (AK DSDS, UTHSC).

Most challenges tended to be site-specific; a few were common to the prevention interventions, such as lower than expected recruitment, limited uptake of referrals, and retention of elders in the intervention. Limited services and lack of access to services affected two of the prevention interventions (AK DSDS, UTHSC).

Characteristics

A key task of this study is to describe the characteristics of victims, at-risk elders, care recipients, perpetrators and caregivers who participated in the five interventions. While we report broad patterns that emerge in selected characteristics of participants, these findings need to be understood within the context of each intervention's goals and eligibility criteria. An intervention's focus on a particular type of abuse (i.e., self-neglect or financial exploitation or all forms) and selection factors for inclusion (i.e., physical and cognitive impairment and social isolation as well as age minimums) not only shape the pool of elders for participation from the outset of the study but are in part determined by risk factors of abuse themselves. The differences--and similarities--then, that we observe across interventions are in part due to the intervention's focus and recruitment process. A risk factor for one type of abuse, furthermore, may not be a risk factor for another form.

With these caveats, we describe herein the characteristics of the five grantee interventions and their participants and where possible, draw on prior research on

specific forms of abuse and risk factors in order to place the findings in context. In terms of age, elders served by the prevention interventions ranged from 74 years to 81 years. The majority of victims and at-risk elders was female, spoke English as their primary language, had low income levels and lived alone and in a private home. Greater variation was observed across grantees with respect to the race and ethnicity of elders served, education levels, and marital status. The high number of female victims and at-risk elders in the interventions is consistent with elderly women's greater representation in APS caseloads (Wolf 1997). At the same time, Pillemer and Finkelhor (1988) have noted that this may be due to elderly women's greater numbers in the senior population. Their study found that the victimization rate was higher for men (5.1 percent) than women (2.5 percent). In terms of living arrangement, living alone was found to be a protective factor against elder mistreatment (Lachs et al. 1997). Shared residence increases opportunities for contact and has been linked to violence, particularly when Alzheimer's patients live with immediate family members (Paveza et al. 1992). It should be noted, however, that living arrangement is likely to play a differential role depending on the type of abuse being examined. For example, a shared living arrangement may not be as relevant in cases of self-neglect compared to other forms of mistreatment such as physical abuse or financial exploitation.

Turning to physical and psychosocial characteristics of victims, at-risk elders and care recipients, the physical functioning of elders served by the interventions tended to be fairly low-to-moderate. Levels of cognitive impairment, on the other hand, varied. Whereas self-neglecting elders were cognitively intact, most care recipients were cognitively impaired. There was also variation with respect to levels of anxiety and stress experienced by participants and limited evidence for depression among the elders served. Elders served by three prevention interventions reported low-to-moderate levels of social support but elders experiencing financial exploitation tended to be socially isolated. Past research has found that low levels of social support increases the risk of elder mistreatment (Lachs et al. 1994) and is associated with caregivers' verbal and physical abuse (Compton et al. 1997).

Limited information about perpetrators was available for two interventions (NYSOFA and TX/WellMed). Alleged perpetrators tended to be middle-aged or elderly, and included both males and females. Race and ethnicity was known for only a subset, but perpetrators were predominantly Caucasian. The educational background of the alleged perpetrators of financial exploitation ranged from those with limited education to the highly-educated. Most alleged perpetrators were family members or relatives. These findings are consistent with previous research indicating that victims' family members (adult children and spouses) tend to be perpetrators (Acierno et al. 2009). Alleged perpetrators also tended to have issues with substance abuse. Previous studies have also known that alcohol or drug abuse problems as well as a history of mental illness are relatively common among perpetrators (Greenberg et al. 1990; Wolf & Pillemer 1989).

Findings about caregivers are drawn exclusively from one intervention (USC). Caregivers were mostly female, Caucasian, married to the care recipient, college-

educated, and had fairly high incomes. Many caregivers were adult children. Although exhibiting low levels of anxiety and burden, and with moderate levels of support, caregivers showed signs of depression. A study by Paveza et al. (1992) found that depression among Alzheimer's caregivers predicted physical abuse.

In terms of types of abuse experienced, a finding across the prevention interventions was that self-neglect was the most common type of abuse experienced and co-occurred with all forms of abuse, reinforcing that elder self-neglect is a serious public health problem and a prevalent concern for APS (Naik et al. 2008). Financial exploitation co-occurred with other forms of abuse. Many elders served by the preventions interventions experienced more than one type of abuse. Thus, elders participating in the prevention intervention had multiple service needs.

With respect to outcomes, we examined whether cases had been referred to APS once the intervention had been completed (i.e., recidivism for those with prior APS histories) for a subset of elders served by AK DSDS and UTHSC. For NYSOFA, we examined outcomes achieved regarding financial exploitation. For TX/WellMed, we examined APS data collected on reasons for case closure. We found that most elders served by UTHSC did not have a re-referral to APS, but about one-third did. For the elders served by AK DSDS, 90 percent did not have a subsequent referral to APS. Intervention by NYSOFA's E-MDTs stopped financial exploitation of elder assets. TX/WellMed's use of the EASI screening tool identified few patients as at-risk for elder abuse. At the same time, at least 588 WellMed patients were brought to the attention of APS Specialists and served by WellMed's Complex Care services and/or APS whose needs may not have been addressed otherwise.

Changes measured in elders' state of vulnerability, characteristics or circumstances varied across the prevention interventions. As the type of change was intervention-specific, the measures and quantity of data available also varied.

In terms of social support and risk, findings varied across the prevention interventions. The moderate level of social support and physical functioning reported for elders served by UTHSC at baseline remained stable following the intervention. While elders served by AK DSDS reported less vulnerability following the intervention, they may have been susceptible to harm by others. High risk of financial exploitation decreased for a subset of elders served by one of NYSOFA's E-MDTs. Care recipients' sense of vulnerability and coercion fluctuated over the course of the dyadic intervention. Yet the perceived degree of social support remained constant for care recipients and caregivers served by USC.

In closing, this evaluation provides information about the development and implementation of the five Elder Abuse prevention interventions, focused on the characteristics of victims and at-risk elders, care recipients and caregivers, along with perpetrators of elder abuse; service utilization; and outcomes. Despite the limitations noted, collectively, the implementation and outcomes findings point to field-initiated approaches that merit further investigation and effectiveness testing using rigorous scientific designs, in an effort to build the knowledge base and prevent and reduce elder abuse, neglect, and exploitation.

I. INTRODUCTION

A. Elder Abuse Prevention Interventions Background

Elder Justice Act and AoA's Prevention Interventions Demonstration Program

The *Elder Abuse Prevention Interventions* demonstration, authorized by the Elder Justice Act and funded by the Administration on Aging (AoA), U.S. Department of Health and Human Services (HHS) in FY 2013, provided funding to test interventions designed to prevent elder abuse, neglect, and exploitation. The *Elder Abuse Prevention Interventions* program provided $5.5 million to five states and three Tribes.

The HHS Office of the Assistant Secretary for Planning and Evaluation (ASPE) contracted with NORC at the University of Chicago to design and conduct an evaluation of the interventions being tested through this demonstration. The purpose of the evaluation was to study the development and implementation of the state grantees' elder abuse interventions and report findings on the characteristics of victims and perpetrators of elder abuse or those at-risk, the use of prevention services, and outcomes. Awards for the five states ranged from $625,000 to $1,020,000 for a three-year period. The five grantees funded by AoA are:

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- **New York State Office for the Aging** (NYSOFA)--*Using Enhanced Multi-Disciplinary Teams to address Financial Exploitation*

- **Texas Department of Family and Protective Services and the WellMed Charitable Foundation** (TX/WellMed)--*Implementing Elder Abuse Screening and Embedding APS Specialists in Clinical Settings*

- **University of Southern California** (USC)--*Take AIM against Elder Abuse: The Abuse Intervention Model*

- **University of Texas Health Science Center** (UTHSC)--*The Self-management of Medication of Independent Living Elders who Self-Neglect (SMILES) Study*

Grantees were expected to finalize partnerships with Adult Protective Services (APS) and related institutions, develop and implement the proposed intervention, collect and deliver program data to AoA/ASPE and the evaluation (for a minimum of 18 months), and report semi-annually on achievements, barriers, and strategies to overcome those barriers.

All pilot projects shared common goals and requirements, including: (1) the design of a selective and/or indicated preventive intervention; (2) targeting of 1-3 categories of people at high risk of elder abuse; (3) the establishment of key stakeholder partnerships; (4) provision of local and state-level APS administrative data; and (5) agreement to collect a core set of data elements. Beyond these five objectives, grantees were afforded broad discretion in developing prevention interventions tailored to their specific communities and contexts.

Collectively, the interventions included the development and/or use of various screening and assessment tools, time-limited case management, tailored health promotion, enhanced multi-disciplinary teams (E-MDTs), improved coordination of referral and care, projects supported by multiple and diverse partnerships, and provision of education and training to a variety of target audiences (e.g., clients, clinicians, professionals, communities of interest). All projects were directly responsible for developing and customizing care plans. However, some projects directly administered those services to clients, whereas others either coordinated existing services or provided a combination of the two. Pilot projects were also characterized by their heterogeneity, including a focus on one type of abuse or potentially all forms, implementation in a variety of settings (primary care, APS, multi-disciplinary teams, etc.) and geographic areas (urban and rural), as well as assorted recruitment strategies or points of entry.

Given the complex and multi-dimensional nature of elder abuse, as well as different underlying theories guiding elder abuse subtypes, each of the five grantees developed a variety of multi-component and/or multi-disciplinary prevention interventions for elder abuse victims and/or perpetrators. Below is a brief description of each grantee's prevention intervention.

- **AK DSDS** through the APS Unit and in partnership with the Anchorage Police Department and other key partners implemented, tested and measured the performance of the *Critical Time Intervention* (CTI) case management model to prevent elder abuse, neglect and exploitation. CTI is an evidence-based model shown to be successful in preventing homelessness among individuals with mental illness following institutional discharge. Alaska's pilot represented the first time CTI was applied to vulnerable adults. The project targeted services to both victims and where possible, caregivers.[1]

- **NYSOFA**, in conjunction with multiple partners, implemented an E-MDT incorporating forensic accountants and geriatric psychiatrists to investigate and intervene in complex cases of elder financial exploitation and elder abuse. The intervention was aimed at improving protecting victim safety and assets through systems collaboration and awareness of signs of financial exploitation among both the public and private sectors (i.e., financial industry) and was implemented

[1] AK DSDS was unable to collect data on caregivers.

in Manhattan by the New York City Elder Abuse Center (NYCEAC) and the Finger Lakes region by Lifespan of Greater Rochester.

- The **USC** Keck School of Medicine in partnership with the California Department of Aging, California Department of Social Services, Legal Aid Society of Orange County, and the Orange County Elder Abuse Forensic Center piloted a multi-dimensional intervention called *Abuse Intervention Model (AIM)* that targeted elder abuse prevention among adults with dementia. The project designed and piloted a multi-component model for primary and secondary prevention of abuse of elders with dementia. This involved early assessment of vulnerability and targeted interventions for the person with dementia and/or the caregiver.

- The **UTHSC** at Houston, in partnership with APS, the Texas Department of Aging and Disability Services (DADS), and the Houston area justice system piloted an intervention to increase medication adherence in older adults who have chronic health conditions and who neglect themselves. The tailored health promotion intervention implemented by UTHSC was aimed at increasing the active participation of elder self-neglecters in managing their chronic disease medications, reducing their level of social isolation, and implementing environmental supports to increase medication adherence.

- **TX/WellMed** developed and tested clinical screening protocols within WellMed Clinics, including use of the Elder Abuse Suspicion Index© (EASI) screening tool to identify at-risk elders and prevent elder abuse. The screening protocols were implemented in WellMed clinics in five areas of Texas: San Antonio, Austin, Corpus Christi, the Lower Rio Grande Valley, and El Paso. TX/WellMed also embedded two APS Specialists within WellMed Medical Management Inc. (WMMI), a primary care physician group, to provide technical assistance, communication facilitation, and education supporting increased screening to prevent elder abuse.

Description of the grantees' prevention interventions are noted in **Table 1** below. They are arrayed based on whether they served victims, at-risk elders and victims, and care recipients and caregivers.

TABLE 1. Description of Grantee Prevention Interventions					
	UTHSC	**AK DSDS**	**NYSOFA**	**TX/WellMed**	**USC**
Intervention Characteristics					
Intervention Strategy	Tailored medication adherence intervention involving home visits and social calls	ESCM Prevention Intervention	E-MDT including forensic accountant and geriatric psychiatrist	Use of EASI screening tool and embedding of APS specialists within WellMed clinics	Multi-component intervention focusing on care recipient/ caregiver dyad
Intervention model	2 previous feasibility studies	CTI for homeless population	Brooklyn MDT	EASI tool tested previously in primary care setting	REACH* (caregiver component)
Type of prevention**	Indicated	Selective and Indicated	Indicated	Universal and Selective	Universal and Selective
Type of abuse addressed	Self-neglect	All forms	Financial neglect and co-occurring forms of abuse	All forms	All forms
Setting	Community	Community	Community	Primary care setting	Primary care setting
Location of intervention	Houston area	Municipality of Anchorage	Manhattan and Finger Lakes region	San Antonio Corpus Christi Austin Lower Rio Grande Valley El Paso	Orange County
Intervention duration	6 months	9 months	Open-ended	Open-ended	3 months
Implementation Staff	Registered Nurse, Research staff (2), Geriatrician	Case Managers (3)	E-MDT Coordinators (2); Multi-disciplinary teams (8)	APS Specialists (2)	Clinical Interviewer
Participant Characteristics					
Participants	Victims	At-risk elders/Victims	At-risk elders/Victims	At-risk elders/Victims	Care recipients Caregivers
Participant criteria for elders	Frailty	Physical and cognitive impairment	Physical and cognitive impairment, social isolation	Frailty	Dementia
Age minimum	65 years	60 years	60 years	65 years	65 years

* REACH refers to Resources for Enhancing Alzheimer's Caregiver Health project.
** Prevention interventions are generally designed to target those at risk for being involved in elder abuse, neglect or exploitation. A commonly used classification system was developed by the Institute of Medicine in 1994, and incorporates the concepts of universal, selective, and indicated preventive interventions. A description of each concept and their corresponding primary, secondary, and tertiary designations (which is not part of the IOM classification) are: (1) Universal Preventive Interventions (primary), targeted to the general public or communities of interest and not based on individual risk factors; (2) Selective Preventive Interventions (secondary), which are targeted to a subgroup of the population determined to be at higher risk for experiencing a phenomena; and (3) Indicated Preventive Interventions (tertiary), targeted to individuals displaying detectable signs of a phenomena.

B. Organization of the Report

Chapter II of the report presents an overview of the purpose of the evaluation and the key research questions, followed by the guiding framework for the presentation of findings. We then describe the data sources and data collection procedures, followed by the analytic approach and limitations of the study. Chapter III focuses on elements of grantees' planning for implementation of the prevention interventions, addressing the evidence base or theoretical/clinical basis of the interventions, setting characteristics, partnerships, and scale. It also describes the use of evaluability assessment by the research team to explore the feasibility of evaluating each prevention intervention.

Chapter IV describes key components of the prevention interventions. This includes: the target population; problems addressed; essential intervention components; delivery method; duration of the intervention; manual and training information; service provider roles; and intended outcomes. Adaptations to fit the local context are discussed, as are facilitators and challenges to implementation. Although an examination of the implementation costs and resources expended was not in scope of the evaluation, the value to address costs in future is noted. Chapter V presents the findings related to the risk factor of the elders served by the prevention interventions, service utilization patterns, and outcomes.

II. EVALUATION DESIGN AND METHODS

A. Overview

This evaluation of the five state cooperative agreements awarded by AoA's *Elder Abuse Prevention Interventions* program is an important element in building the evidence base on effective approaches to prevent elder abuse and enhancing existing data collection systems. Each grant covered at least a three-year period during which grantees finalized partnerships with APS and related institutions, developed and implemented the proposed intervention, collected and delivered program data to AoA and the national evaluator (for a minimum of 18 months), and reported semi-annually on achievements, barriers, and strategies to overcome those barriers. The research questions of interest to ASPE and AoA were:

1. What is the infrastructure within which the interventions rest and the structure of elder abuse prevention interventions?

2. What are the facilitators of and barriers to implementation of the interventions and how are barriers addressed?

3. What are the characteristics of victims and perpetrators of elder abuse in the grantees' communities?

4. What are the characteristics of the interventions and how do victims and perpetrators of elder abuse participate in the grantees' intervention?

5. What data are available at the state, local, and national levels to measure the outcomes associated with those interventions?

To address these questions, the evaluation assessed the implementation and outcomes of individual grantee prevention interventions.

B. Guiding Framework

As an orienting framework, and in an effort to place the findings of the process evaluation of the prevention interventions in the larger discourse of dissemination and implementation science, we used the *Framework for Enhancing the Value of Research for Dissemination and Implementation* (Neta et al. 2015) as a way to structure this report. The *Framework* emphasizes the importance of transparent reporting on key elements across various phases of the intervention and research process--planning, delivery, results and reporting, and long-term outcomes--in addition to addressing cross-cutting issues that interact with each phase, such as multi-level contexts (including

history, policy climate, and incentives), multiple stakeholder perspectives, and societal costs. It was developed in an effort to move research to practice and enhance the value of evaluation for researchers, practitioners, and policy-makers.

Originally, the *Developing and Conducting an Evaluation of AoA's Program to Prevent Elder Abuse* project called for two independent reports, one that synthesized the qualitative infrastructure and implementation findings and another that presented key findings related to service utilization and outcomes data. With approval from ASPE, we adopted the format suggested by the *Framework* to link the reports to present the findings of the prevention interventions in a holistic manner, and to do so in a way that would facilitate examination of factors that influence or inhibit change. We note, however, that the evaluation questions and constructs were limited and do not encompass all of the domains presented in the *Framework*.

- **Planning**: Clinical, health system of public health intervention (evidence base, program logic, mechanism of change); Context/Setting characteristics (resources, organizational climate and culture, capacity and readiness); Implementation strategy (evaluability, scalability); Partnership; Dissemination and implementation study design.

- **Delivery**: Reach; Adoption; Evolution of intervention and implementation strategy to fit conditions; Implementation; Implementation costs and resources expended.

- **Evaluation Results/Reporting**: Effectiveness; Primary outcomes; Broader consequences (e.g., other benefits and harms); External validity of findings including explicit description of setting and setting change; Robustness.

- **Long-Term Outcomes**: Sustainability; Evolvability; Transportability; Replication and uptake; Conditions under which findings hold; Economic evaluation (e.g., cost-benefit/effectiveness, budget impact, replication/implementation cost).

- **Goals**: Improvement in population health, health equity, social well-being, and health system efficiency).

C. Data Sources and Data Collection Procedures

We used a mixed-methods approach to conduct the evaluation of the elder abuse prevention interventions. To address the first two research questions that focus on examining the implementation and infrastructure of the prevention interventions, we conducted site visits with each of the five grantees and met with grantee staff, their partners, and providers that implemented the elder abuse prevention interventions. We developed a *Discussion Guide* to structure the visits, which addressed: (1) Theoretical/Clinical Basis of the Prevention Intervention; (2) Elements of the Intervention Model and Implementation; (3) Partnerships; (4) Implementation Context,

including facilitators and barriers; (5) Service Utilization; (6) State and Local Data Collection Systems; and (7) Project Replicability and Lessons Learned.

The *Discussion Guides* were informed by the description of the program model and operations provided in each grant application, initial and subsequent conference calls with the grantees, evaluability assessments, and program documents provided by the grantees and AoA. Given the diversity of the grantees, the *Guides* were tailored to each site and respondent type. NORC conducted site visits and interviews with the five grantees and their partners in late 2014 and early 2015. Following the site visits, we prepared summaries that were shared with the grantees, ASPE, and AoA. We used this information as the basis for a series of *Research Briefs* for each grantee that were disseminated during the *White House Conference on the Aging* in 2015. We also periodically reviewed grantee progress reports provided by AoA.

To address research questions 3-5 that focus on describing the characteristics of participants, the interventions themselves and available data, we developed a *Cross-Grantee Data Analysis Plan* that called for the collection of core data elements on client characteristics, program activities and outcome measures across grantees. Given the heterogeneity in scope and program features of the grantee initiatives, this unified approach allowed for comparison of client and service utilization characteristics and outcomes from the diverse interventions. The systematic collection of core data elements enabled the preparation of risk factor profiles on victims/care recipients and perpetrators/caregivers served by each intervention.

The core set of data elements describe demographic, psychological/physical health and social well-being indicators that are risk factors for elder abuse. Other elements pertain to referral source, type(s) of abuse, service utilization and outcomes. Identification of the common data elements for inclusion in the cross-site framework was guided by a balance between any additional burden placed on the grantees and the increased scientific rigor achieved from collecting identical information that could be compared across sites. We note that given the heterogeneity and some gaps in the data we found that they could not be reliably harmonized and pooled across the grantees.

Following the site visits in 2015, NORC communicated with the grantees to discuss the data sharing and data acquisition process. Working closely with NORC's Data Use Agreement (DUA) Committee and each grantee, we executed DUAs with each grantee and their partners, as appropriate, and specified the variables needed for analysis. Data transfers between the grantees and NORC's Data Enclave, a secure, protected environment, were conducted through securely encrypted transfer of incoming confidential data via National Institute of Standards and Technology-certified secure file transfer protocol applications. The grantees provided data dictionaries and assisted the team by reviewing analyses. All data were returned or destroyed per the terms of the DUAs at the conclusion of the study.

D. Available Data from Adult Protective Services and Prevention Interventions

All grantees provided project-level data specific to their prevention intervention for the evaluation. AK DSDS, TX/WellMed, and UTHSC provided APS data for their regions. The grantees provided the following data under the terms of the DUAs:

- AK DSDS provided nine data files, including: (1) Eligibility and Referral Form; (2) Action Goals; (3) Follow-up Survey; (4) Intake Assessment Form; (5) Vulnerability to Abuse Screening Scale (VASS) Form; (6) Eligibility and Referral Form; (7) Elder Services Case Management (ESCM) DS3 database cases through 12.15.2014; (8) ESCM Harmony database cases through 05.27.16; and (9) ESCM Paperwork Tracker.

- For NYSOFA, we extracted four Excel data files from the intervention's web-based tool: (1) Eligibility; (2) Intake; (3) Tracking; and (4) Outcomes. E-MDT coordinators from Lifespan and NYCEAC collected data from multiple sources, including APS, to populate the database.

- The Texas Department of Family and Protective Services (TX DFPS) provided two files: (1) APS data on WellMed patients and perpetrators; and (2) client logs that were prepared by the APS Specialists. The WellMed Charitable Foundation provided a data file of EASI screening tool results.

- USC provided four project related data files containing demographic variable and outcome measures. USC did not provide APS data.

- UTHSC provided six data files, including a demographic file, five data files pertaining to key measures, and services data from APS.

It should be noted that important variations in data sources *within* grantee interventions presented challenges to identifying participants across data sources, if unique identifiers were not readily available to enable data linkage. For example, the TX/WellMed intervention implemented two strategies to identify at-risk elders and three sources of data. The primary (universal) prevention component involved the administration of the EASI screening tool to WellMed patients. The data were first recorded by hand but ultimately folded into their electronic medical records system. Results of the ratings for 11,426 patients were shared by WellMed.

The second strategy involved embedding two APS Specialists at WellMed clinics to serve as ongoing resources for clinical staff. Their services included delivering training on the intervention to WellMed staff, participating in patient care coordination (PCC) meetings, and providing consultation to both WellMed and APS staff. During the period under study, 588 WellMed patients were brought to the attention of the two APS Specialists. Depending on the nature of the problem identified, the patient could either be served internally through WellMed's Complex Care program which provides an array

of social work services and referrals and/or be referred to APS. To the extent possible, the two APS Specialists tracked information and outcomes on the patients with whom they engaged, including information on referral sources, administration of the EASI tool, patient history with APS, and APS referral, among others.

TX DFPS's APS served as the third and main data source for the TX/WellMed intervention. These data are collected on all their clients (WellMed patients received standard APS) and are not specifically tailored to this study. TX DFPS shared data with the evaluation team that most closely corresponded to the requested core data elements. A total of 310 WellMed patients were served by APS during the study period. Data were not always available for all 310 patients or the 415 perpetrators for all of the data elements and we note the N used in each table. Other differences in the number reported were related to changes in APS' database. Toward the end of the study period in September 2014, APS began using Strategies that Help Intervention and Evaluation Leading to Decisions assessments tools in their casework, replacing their earlier protocol.

Given TX/WellMed's three distinct forms of data collection as well as their period of collection, we were not able to identify patients that overlapped across services. For this reason, we present the available data in the tables and indicate the data source.

E. Analytic Approach

The qualitative data from the site visits and document reviews were analyzed to identify commonalities and differences across the grantees' prevention interventions. Major themes regarding infrastructure, planning and implementation that emerged from the analysis are presented in the planning and intervention delivery sections of this report.

Quantitative data from the study are summarized using descriptive statistics. The "core data elements" that grantees collected were used to tabulate these statistics, including frequencies, means and percentages (as appropriate for continuous and categorical data). In the following tables, we present participant characteristics, the type of services and referrals they received, the characteristics of interventions, as well as participant outcomes.

Prior to carrying out these analyses, the core data elements collected by grantees were harmonized, where possible. Because common measurement methods were not a required element of this project, only a limited number of variables permitted harmonization. These included demographic information, household characteristics, type of abuse, and intervention characteristics. Categories were created for these variables based on the most granular level of data that could be captured across all five grantees. More detailed information on how data were harmonized for specific variables can be found in Appendix A.

In contrast to the demographic and household information, the varied measures that were used to assess participants' physical health, and psychosocial characteristics across grantees precluded harmonization. In addition to using different measures, in some instances, grantees employed the same question items but used different response options and scoring methods. The diversity of interventions involved different target populations (victims, at-risk elders, and care recipients), and this variability further added to the specificity of the data for many measures. The tables summarizing this information therefore present the original measures of physical health, psychological and social characteristics used by each grantee. For any instances where grantees applied a measure that was unique to its intervention (whether it pertained to the choice of question items, response options or scoring methods), data are presented on a separate line in the tables.

F. Limitations

Several limitations of the data analyses deserve mention. To varying degrees, missing data was a common issue across all grantees. While incomplete reporting was due in part to participant attrition (particularly in collecting data on elders over time), the extent to which data collection was feasible depended largely on the extent to which the interventions had direct contact with participants and the degree to which the grantee had control over the process, tracking, and documentation of service delivery. Interventions that delivered services directly to grantees, including UTHSC, AK DSDS and USC, were better positioned to identify and collect data from participants. Grantees that built on an existing service infrastructure and relied on existing APS data to inform the evaluation, including NYSOFA and TX/WellMed, were more limited in their ability to collect new data or to obtain relevant data from the myriad services to which participants were referred.

It should be noted that all interventions drew on each community's existing infrastructure of services to some degree. For that reason, a key challenge for all grantees was tracking and documenting the full range of services and referrals that were provided to participants throughout the duration of their interventions. Collecting more detailed information on the frequency and intensity or "dose" of each service that had been originally intended, was not feasible. Given grantees' limited control over the full range of service delivery as well as participant follow through on the referrals, the data are best suited to broadly describing the common types of services provided and referred by grantees; they are not well-suited to confirming all the services to which participants were referred or whether participants received those services.

Another important limitation of the study concerns our ability to describe risk factor profiles in the absence of data collection on a comparison group. At the outset of the study, a set of core data elements was identified for data collection across all grantees on intervention participants. The basis for inclusion was guided by prior research on risk factors for elder abuse, such as cognitive impairment and low levels of social support. While data were collected on these measures for intervention participants, we do not

have parallel data on elders who either are not at-risk/victims or elders who did not receive intervention services. As a result, while we are able to describe the profile of participants in the study, we are unable to understand the role that these risk factors play on abuse or intervention outcomes. It is important to emphasize that data collection on a comparison group was outside the scope of grantees' projects. However, this line of inquiry is important for future research, and can be informed by findings from the current project.

The profiles of participants speak to the enormous task presented to these interventions. Participants often had complex and evolving needs that cannot be easily addressed within a single intervention. Where data were available, we found that the population served is characterized by a number of vulnerabilities. For example, 85 percent of USC's care recipients were positively screened for dementia. A third of UTHSC's victims experienced mild to severe cognitive impairment. Eighty-eight percent of NYSOFA's participants reported being socially isolated. A quarter of TX/WellMed patients who were referred to APS were physically disabled or had impaired mobility. Over 40 percent of AK DSDS's participants had minimal to severe symptoms of depression. Of the intervention that collected information on all types of abuse, furthermore, approximately 40 percent of participants across interventions were identified for at least two forms of abuse. Treating one form of abuse is a considerable task yet co-occurring forms of abuse presents additional challenges.

While a great deal of information has been collected on participants themselves, the limited data that could be collected on service utilization and referral precludes our full understanding of the range of services to which participants were referred and completed. Within the confines of our study, we are unable to understand whether particular services or mix of services were especially helpful to participants across interventions or for whom particular interventions are best suited. Tracking information on service utilization and referral is not only challenging for services provided by the program itself, moreover, but particularly so for those that are referred out. Interventions must rely on participants' reports about services received or the myriad providers themselves which may be tremendously difficult to obtain.

At the same time, drawing on the community's existing service infrastructure is a necessity and reality of all interventions. Rarely can one intervention provide all the services that a vulnerable adult needs. Even when needs were identified, however, interventions could not guarantee that participants followed through on referrals. While lack of participation in the services may be in part due to choice, in other instances, resources may not have been available to secure those services. Based on information gleaned from our site visits, this may occur for example, when the participant lacks access to transportation to receive those services. Other times, the service was not available, had a waitlist or required additional funds from the participant.

This report only focuses on the core set of data elements that were requested from grantees and to a limited extent, outcomes that are specific to their intervention. Each grantee has collected additional data that are relevant to their particular intervention,

which are not represented here. A number of grantees, however, have already begun disseminating or intend to disseminate findings that are specific to their intervention. These studies offer a deeper investigation of the individual interventions and will provide an important complement to the cross-site analyses presented herein.

While these data have their limitations, little research to date has been carried out on elder abuse prevention interventions, alone or in combination. The data collected by grantees in this project represent a rich source of new information on the characteristics of victims, at-risk elders, care recipients, perpetrators and caregivers and the interventions that delivered services to them. They provide a springboard for additional research and could be used in numerous ways to inform future studies and interventions.

III. PLANNING FOR THE IMPLEMENTATION OF THE PREVENTION INTERVENTIONS AND THE CROSS-SITE EVALUATION

This section presents core theoretical components and infrastructure of the prevention interventions developed and implemented by the five grantees, using the *Framework* as an organizing structure.[2]

A. Evidence Base/Theoretical Base for the Elder Abuse Prevention Interventions

Among the most immediate needs of the field of elder abuse is a coherent and systematic body of research to inform and guide its efforts, including building an evidence base in effective prevention. While descriptive and observational studies on elder abuse research and practice exist, data on effective methods and practices to prevent or ameliorate mistreatment is significantly lacking and such intervention programs are rarely subject to rigorous evaluation (Daly et al. 2011, 2009; National Research Council 2003; Pillemer et al. 2007; Ploeg et al. 2009).

Crucial to the development of effective and appropriate prevention interventions is an understanding of the potential risk factors for involvement in elder abuse, neglect and exploitation, both as a victim and an abuser. While the following conditions are highly contingent upon the specific category of elder abuse under study, we know from the growing research literature that elder mistreatment in its various forms is associated with health issues and physical impairment, mental health problems, cognitive impairment and dementia, social isolation and inadequate social support, experience of previous traumatic events, shared living arrangements, psychological problems and substance abuse, and abuser dependency on the victim (Acierno et al. 2010; Anetzberger 1987; Beach et al. 2010; Burnett et al. 2006; Dong et al. 2010; Dyer et al. 2000; Fisher & Regan 2006; Lachs et al. 1997; Payne & Gainey 2005; Pillemer & Finkelhor 1988; Wiglesworth et al. 2010). Perpetrators, moreover, are often family members, including adult children and spouses (Acierno et al. 2009).

Elder abuse is a complex and multi-dimensional phenomenon. Given theories of mistreatment differ by category of abuse, moreover, it follows that interventions for particular types of abuse will also differ. While not an exhaustive inventory of programmatic elements, current prevention interventions include screening, mandatory reporting, APS intervention, caregiver support interventions, education of professionals,

[2] While the framework for dissemination and implementation was not a focus of the evaluation, AoA required that each grantee develop and implement plans for dissemination of prevention intervention activities and findings.

education of potential victims, home visitation by police/social workers, social support and self-help groups, safe houses and emergency shelters, daily money management programs, case management, multi-service programs, and partnerships with faith communities (Daly et al. 2011; Pillemer et al. 2007; Ploeg et al. 2009).

Reflecting this complexity, each of the elder abuse prevention interventions built upon, or was informed by, a theoretical or clinical foundation aimed at reducing risk or addressing the impact of substantiated abuse, neglect or exploitation for the target population embedded in distinct ecological contexts and relationships. The diversity of conditions and prevention interventions implemented speak to the challenge of defining a unifying conceptual framework in the field of elder abuse (National Research Council 2003). The interventions ranged along a continuum, from detection to prevention to direct intervention. TX/WellMed's project spanned all three, focused on screening for elder abuse using the EASI screening tool, applying preventive measures, and having APS intervene were necessary. USC's *Take AIM* tested a multi-component model for primary and secondary prevention of abuse of older people with dementia, as they are known to be at high risk for abuse. NYSOFA's E-MDTs intervened in cases of suspected or known financial exploitation. AK DSDS *CTI* focused on mobilizing supports for at-risk and victimized elders. UTHSC's tested an intervention to increase medication adherence among older adults with a substantiated report of self-neglect, as well decrease social isolation.

Detection

To detect elder abuse, neglect, and exploitation among elderly patients in a primary care setting, TX/WellMed administered the EASI in WellMed clinics. The EASI screening tool was developed to improve physicians' identification of elder abuse and to promote referrals of at-risk elders and potential victims for assessment and services (Yaffe, Wolfson, Litwick & Weiss 2008).

EASI Screening Tool

1. Have you relied on people for any of the following: bathing, dressing, shopping, banking, or meals?
2. Has anyone prevented you from getting food, clothes, medication, glasses, hearing aids or medical care, or from being with people you wanted to be with?
3. Have you been upset because someone talked to you in a way that made you feel shamed or threatened?
4. Has anyone tried to force you to sign papers or to use your money against your will?
5. Has anyone made you afraid, touched you in ways that you did not want, or hurt you physically?
6. Doctor: Elder abuse <u>may</u> be associated with findings such as: poor eye contact, withdrawn nature, malnourishment, hygiene issues, cuts, bruises, inappropriate clothing, or medication compliance issues. Did you notice any of these today or in the last 12 months?

The six-item EASI screening tool is administered to cognitively intact elders. Five detection questions are asked as well as one question that must be completed by the

physician, as shown at left (the first five may be administered by clinical staff). The impetus for implementing the EASI tool arose from feedback that WellMed Charitable Foundation received when conducting trainings with clinicians. Staff would invariably describe situations that related to elder abuse. There was a clear need to establish protocols on how to identify and report cases of suspected abuse to APS and social services. TX/WellMed's intention for the prevention intervention was to develop a clinical protocol that would screen at least 10,000 patients with the EASI tool and provide patient and caregivers materials and education. The goal was to develop a highly replicable model of screening for elder abuse risk in a primary care environment, along with multiple tools to successfully address elder abuse issues.

Assessment and Prevention

Research in child abuse (Scribano 2010) and domestic violence and intimate partner violence (Murray & Graybeal 2007) has demonstrated: (1) the importance of embedding prevention programs within the social context, targeting family members as well as victims; and (2) tailoring culturally-appropriate prevention strategies to the unique characteristics and needs of the individual situation. Applying this perspective to elder abuse, USC's *Take AIM* prevention intervention was situated in a social-ecological framework, which stressed the importance of embedding prevention programs within its social context (Doll et al. 2007). As adults with dementia are at higher risk for abuse than other groups of older adults (Anetzberger et al. 2000; Beach et al. 2005; Cooper et al. 2010) and the demands of caregiving may result in caregivers becoming abusers, the goal of *Take AIM* was to pilot test a multi-component model for early assessment of vulnerability to elder abuse and early preventive intervention, focusing on care recipient/caregiver dyads.

Intervention

Acting on the findings of the 2011 prevalence study which found that the financial exploitation of elders is a common, serious, and under-reported problem in New York, NYSOFA developed the E-MDTs to address this issue. Findings from the study, *Under the Radar: New York State Elder Abuse Prevalence Study Self-Reported Prevalence and Documented Case Surveys* (2011) found an elder abuse incidence rate in New York State that was nearly 24 times greater than the number of cases referred to social service, law enforcement or legal authorities. An estimated 260,000 older adults in the state had been victims of at least one form of elder abuse in 2008-2009. Financial exploitation was the most prevalent form of mistreatment reported by respondents, whereas psychological abuse was the most common form of mistreatment reported by agencies providing data on elder abuse victims.

In response, and building on the multi-disciplinary team model involving diverse professionals to address elder abuse (Malks et al. 2003; Teaster & Nerenberg n.d.), NYSOFA's prevention intervention was structured to provide a coordinated approach to investigate and intervene in cases of financial exploitation--where vulnerable elders were subject to undue influence, duress, fraud, or a lack of informed consent--as multi-

disciplinary teams have been shown to increase prosecution rates for financial exploitation (Navarro et al. 2012). The E-MDT pilots in Manhattan and the Finger Lakes region were adapted from the Multi-Disciplinary Team model that was successfully implemented in Brooklyn by NYCEAC in 2010 (Ramírez et al. 2012). Enhanced by NYSOFA, the E-MDTs focused on financial exploitation and involved a forensic accountant and geriatric psychiatrist.

AK DSDS's goal in implementing the prevention intervention was to increase community and social support to vulnerable elders and provide services not met by APS. AK DSDS provided case management services over a nine month period to older adults who were at high risk of or who had experienced abuse, neglect, or exploitation. The grantee implemented *CTI*, a time-limited evidence-based practice that mobilizes support systems and continuity of care during periods of transition.[3,4] The intervention begins with developing a trusting relationship, and then progresses to build and transition supports over three phases: (1) Providing support and connecting the client to services for primary support; (2) Monitoring and strengthening the support network and client's skills; and (3) Transferring services to the support network in place to ensure continuity of care. The model has been used with returning veterans and people with mental illness or those who have been homeless or in prison. AK DSDS's pilot marked the first time that *CTI* was used with a vulnerable older population.

Elder self-neglect is a serious public health problem and a prevalent concern for APS (Naik et al. 2008). A number of state statutes classify self-neglect as mistreatment that warrants APS involvement (National Research Council 2003). Yet there is considerable debate as to whether self-neglect is a distinct form of elder abuse, along with research underway to better understand its causes and relation to other forms of abuse, neglect, and exploitation. UTHSC's intervention addressed this population, and focused on older adults who had a substantiated report of self-neglect, chronic health conditions, and did not adhere to a medication regimen. The community-based intervention was modelled on an effective home-based treatment protocol using environmental cues and supports to improve medication adherence with a population of adults with severe mental illness (Velligan 2008). Adapted to self-neglecting elders with multiple chronic conditions, the goal of the intervention was to increase medication adherence and reduce adverse outcomes associated with elder self-neglect, including social isolation, dependence, health problems, and likelihood of re-referral to APS.

B. Context

The five prevention interventions took place in diverse geographic locations nationwide and reached elders in urban, suburban and rural areas, encompassing major metropolitan areas and counties statewide. AK DSDS's ESCM intervention was

[3] See https://www.criticaltime.org/about-us/.

[4] CTI is included in the HHS Substance Abuse and Mental Health Services Administration's National Registry of Evidence-based Programs and Practices: http://legacy.nreppadmin.net/ViewIntervention.aspx?id=367.

implemented in the municipality of Anchorage but had a 100-mile service area. USC's *Take AIM* prevention intervention focused on Orange County and capitalized on pre-existing resources and relationships with the academic and medical community, along with social and legal services.

NYSOFA led two E-MDTs in New York State. One was housed at the NYCEAC in Manhattan and the other at Lifespan of Greater Rochester, which served seven counties in the Finger Lakes region (Monroe, Cayuga, Livingston, Ontario, Seneca, Wayne and Yates counties). UTHSC's medication adherence prevention intervention was located in Houston and covered a 13 county area in southeastern Texas. TX/WellMed's intervention was conducted in WellMed primary care clinics located in four APS regions throughout the State of Texas: San Antonio (Region 8), Austin (Region 7), Rio Grande Valley and Corpus Christi (Region 11), and El Paso (Region 10).

Diverse contextual factors were taken into consideration when planning the prevention interventions. They included: (1) the organizational culture and climate of the primary care setting and clinical hierarchies and routines (TX/WellMed); (2) the social dynamics of small-knit communities (NYSOFA-Lifespan); (3) statewide rural to urban migration and social networks (AK DSDS); (4) the impact of population loss on social isolation of elders and lack of affordable housing (NYSOFA-Lifespan); (5) social diversity and cultural norms (NYSOFA-NYCEAC); and (6) first generation immigrant elders' lack of engagement with the health care system and reliance on traditional healers (UTHSC).

C. Partnerships

As a condition of the AoA cooperative agreement, each grantee was required to partner in a meaningful way with the state APS agency, a State Unit on Aging, and the justice system. Partnering with APS was essential in order to implement interventions at the local level and also to obtain administrative data to assess outcomes. Coordination with a State Unit on Aging could leverage the resources of aging network service providers and assist with intervention implementation. Connecting with the justice system was essential to ensure that vulnerable elders or their advocates had recourse to law enforcement and/or legal services organizations.

1. Relationship to Adult Protective Services

Grantee partnerships with APS depended on the focus of the prevention intervention and target population. Across the five prevention interventions, APS served as the lead entity, as key implementation partners, and as referral sources. The APS unit at AK DSDS led the *CTI* and staff served as case managers working directly with elders. APS specialists from Region VIII in Texas were embedded in WellMed's primary care clinics, where they served as liaisons between APS and WellMed, conducted educational trainings, and served as a resource to staff. Local APS units in the Finger

Lakes region and Manhattan served on NYSOFA's E-MDTs with the approval of the New York State Office of Children and Family Services. APS Region VI in Texas served as the referral source for self-neglecting elders participating in UTHSC's medication adherence intervention. APS in Orange County, California was one of a number of community-based referral sources for USC's *Take AIM* intervention. Three APS units--AK DSDS, TX/WellMed, and UTHSC--also provided administrative data to examine program outcomes.

2. Relationship to Aging Networks

The AoA grant program required that each grantee coordinate with a State Unit on Aging in order to leverage the resources of aging network service providers and assist with intervention implementation. The AK DSDS was already an organizational unit within the State Unit on Aging and in a leadership role in the community. Aging services representatives served on the Monthly ESCM Community Partners Meeting convened by AK DSDS that was convened to address challenging cases of elder abuse and coordinate services. For many of the grantees, however, the interventions served local communities and Area Agencies on Aging were enlisted to support the interventions. The California Department of Aging was a key partner with USC's *Take AIM* prevention intervention, and through its Area Agencies on Aging network in Orange County, facilitated access to community-based services. Area Agency on Aging representatives served as core members of the NYSOFA E-MDTs and on the project advisory committee, along with APS, for UTHSC's prevention intervention.

3. Relationship to the Justice System

The AoA grant program also stipulated that grantees' connect with the justice system to ensure that vulnerable elders or their advocates had access to law enforcement and/or legal services organizations. These alliances were rooted in long-standing organizational affiliations and relationships to address elder abuse in their communities. Three grantees involved the justice system as part of the operating structure of the prevention intervention. For two grantees, the justice system played a more peripheral role in the prevention intervention but was actively involved with elder abuse prevention and APS activities.

Representatives from the District Attorney (DA) offices in Manhattan and Monroe County were core members of the NYSOFA E-MDTs, as well as law enforcement specialists in financial crimes. (However, inclusion of the Manhattan DA on the E-MDT later changed due to constraints on reporting information that might compromise prosecution). Law enforcement in both jurisdictions provided referrals to the E-MDT Coordinators. Partnership with the Orange County Elder Abuse Forensic Center was a key component of USC's prevention intervention, and included representation from the DA's office, Sheriff's Department, and the Public Administrator/Public Guardian. Officers from the Anchorage Police Department served on the Monthly ESCM Community Partners Meeting convened by AK DSDS.

While not directly involved in the implementation of the prevention intervention, Houston area law enforcement is affiliated with the Texas Elder Abuse and Mistreatment Institute which housed UTHSC's medication adherence intervention. To guide the intervention, TX/WellMed initially intended to form an advisory council comprising the San Antonio sheriff's department, the San Antonio police department, and the DA's office. Given that the three agencies were already deeply involved in APS Region VIII daily activities, TX/WellMed ultimately decided to forgo this approach.

D. Evaluability Assessment

At the outset of the evaluation, the evaluation team conducted evaluability assessments. Although this was not a required component of the grantee initiative, we did so to determine whether the grantees were in need of any technical assistance to participate in the evaluation. To this end, we reviewed their logic models, research questions, intended activities, outputs and outcomes, data collection sources and analysis plans, intervention timelines, and resources that would be dedicated to the evaluation. Following this activity, we worked with the grantees to refine some elements of their plans. This activity was instrumental in establishing a degree of comparability across the prevention interventions with respect to intended measures and outcomes. This activity also identified the need to develop a database for one grantee for data collection and extraction. Overall, the evaluability assessments facilitated the development of the evaluation and analytic plan.

IV. INTERVENTION DELIVERY

A. Implementation Strategies

1. Prevention Intervention Characteristics

Target Population

The target populations for four prevention interventions were elders at risk of abuse, neglect or exploitation (USC, AK DSDS, NYSOFA, TX/WellMed). One prevention intervention focused exclusively on substantiated victims of self-neglect (UTHSC). The minimum age for eligibility in the intervention was 60 years for two prevention interventions (UTHSC, NYSOFA) and 65 for the other three (AK DSDS, TX/WellMed, USC). The majority of elders was community-dwelling and resided in private homes, although some resided in assisted living or group homes. The prevention interventions served elders living in diverse urban, suburban, and rural areas.

Frail elders and those with cognitive impairment or dementia were targeted by the prevention interventions. A few of the prevention interventions identified similar risk factors with respect to elders' mental and physical health, which then served as eligibility criteria. Three prevention interventions targeted elders with cognitive impairment or dementia (AK DSDS, NYSOFA, USC) and four targeted elders with a physical impairment or health problem(s) (AK DSDS, NYSOFA, UTHSC, TX/WellMed). One prevention intervention targeted elders with detectable signs of possible financial exploitation present (NYSOFA).

Certain prevention interventions emphasized the connection between a vulnerable elder and a trusted person in his/her social network and the potential for abuse (i.e., the focal subject and responsible actor). This focus on relationships varied across the prevention interventions, as did the clinical or service delivery effort. USC explicitly focused on older adults with dementia at risk for abuse and their primary caregivers. In cases served by AK DSDS, there was a known abuser who was dependent on the victim. NYSOFA identified social isolation and inadequate social support as risk factors (and eligibility criteria), along with identification of perpetrators of financial exploitation, for cases served by the E-MDTs in the Finger Lakes region and Manhattan.

Numbers Served

The prevention interventions varied in the number of elders served over the course of the three-year grant period. Original expectations were tempered by the ebb and flow of referrals from partners or the willingness of elders to participate. Changes in the

anticipated number of elders to be served were approved by AoA through the grant modification process.

Three of the prevention interventions had rolling enrollment but with defined periods for participation and completion, therefore the numbers reported herein are stable. AK DSDS received 170 referrals and had 87 elders participate in ESCM. UTHSC recruited and enrolled 34 elders in the medication adherence prevention intervention. USC recruited a cohort of 76 dyads. Two prevention interventions had a more fluid referral stream. The NYSOFA E-MDTs served more than 220 elders (over the 18 month period covered by the DUA). At any given time, this included new cases and follow-up cases. TX/WellMed screened 11,426 elders using the EASI tool. Of these, 35 elders were referred to APS. Additionally, 588 WellMed patients were served through the APS specialists and 474 were referred to APS. APS had 310 victims in their records. The difference in number is in part due to the longer period of data collection by the APS Specialists.

Problems Addressed

Collectively, the prevention interventions targeted and addressed multiple forms of abuse, neglect, and exploitation and its co-occurrence. While the eligibility criteria focused on defined risks, co-morbid problems were addressed through the intervention. Those that emerged through assessments or during the intervention were addressed through referrals to service partners. UTHSC's intervention focused on medication adherence for self-neglecting elders, yet also by design addressed social isolation, dependence, health problems, and the likelihood of re-referral to APS. Along with cognitive impairment, case managers implementing the *CTI* with AK DSDS found that their clients had health problems, mental health issues, depression, substance abuse issues, and were homeless or had no family or support system in place. While targeting financial exploitation, NYSOFA's E-MDTs addressed the presenting and immediate safety issues of a case but also elders' basic needs, such as legal guardianship, medical assistance, food security, and housing. TX/WellMed's intervention benefitted from the complementary services that APS and WellMed provided, which often expedited patient services. For example, whereas APS could not make specific recommendations on nursing homes to families, WMMI social workers had a network of nursing homes that they could recommend. Alternatively, if WellMed patients were out of their medication, APS had access to and could use purchase client funds to address client needs. APS could provide a diverse array of services to clients, including counseling, money management, pest removal, housecleaning, building ramps, and boarding pets, among others. Focused on dyadic relationships and elder abuse risk factors, USC addressed care recipients' aggressive behavior, resistance to care, and activities of daily living (ADLs) dependency due to dementia and caregivers' anxiety, depression, and burden.

Essential Intervention Components

Building upon a theory of change, the core components of a program or intervention are the essential functions or principles and activities that are necessary to achieve the intended outcomes (Blase & Fixsen 2013). Identification of these core components is necessary to determine if a program or intervention had been "successfully implemented, effectively evaluated, improved over time, and subsequently scaled up if results are promising" (Blase & Fixsen 2013:10). The core components of each grantee's prevention intervention are briefly described below.[5]

- **AK DSDS**: The ESCM prevention intervention was an adaptation of the *CTI* for homeless populations, which uses a client-centered approach. The ESCM included multiple components: referral and intake; informed consent; a nine-month case management intervention; and monthly community partner meetings. Support was provided over three phases. During the first three months (Transition Phase), case managers provided specialized intense support and set goals with the client to address critical needs (e.g., obtaining food, housing, transportation, or medical attention). Client contact was very high and involved frequent home visits and phone calls. Months 4-7 (Try-Out Phase) involved identifying informal and formal supports to meet client needs, with greater responsibility transferred to the client, identified caregiver, or service providers. Regular contact continued. During the last two months (Transfer Phase), case managers transferred care to the long-term support system created for the client. Contact with the client was reduced to monthly conference meetings. A case manager generated a report of harm report if the client was in need of APS.

- **NYSOFA**: E-MDT meetings convened by Lifespan and NYCEAC were typically held twice per month for 1.5-2 hours, and were facilitated by the E-MDT coordinator. Each E-MDT was composed of professionals from multiple agencies and organizations, including APS, aging services and resource centers, law enforcement, DA's office, legal services, community-based organizations, the banking industry, shelter services, geriatric medicine, and forensic accounting and financial investigations. Participation was required for core members. Case presentations were held which addressed the reason for referral, presenting issue(s), alleged perpetrator(s), the nature of abuse, and interventions provided to date. Comprehensive assessments were conducted to identify service needs (e.g., safety plan, order of protection, health care needs, mental health treatment referrals, guardianship, caregiver supports or respite, temporary housing or shelter, or APS home visits). Participants discussed each case of financial exploitation and identified barriers, resources, and action steps. The E-MDT Coordinator prepared an action plan for referrals and services. The E-MDTs used a coordinated, person-centered care approach. All E-MDT members were held accountable to follow through with assigned action items to ensure the cases

[5] Greater detail is provided in the *Evaluation of AoA's Elder Abuse Prevention Intervention Demonstrations Research Briefs* accessible at http://www.aoa.acl.gov/AoA_Programs/Elder_Rights/EA_Prevention/Demonstration/.

moved forward in a timely manner. Depending on the fact pattern of the case and forensic accountant review, criminal prosecution of the suspected perpetrator was pursued. Plans and supports were revisited at subsequent E-MDT meetings until case resolution.

- **TX/WellMed**: The prevention intervention had four components.[6] First, APS specialists were embedded at WellMed and served as a resource by providing educational training to clinicians on elder abuse, neglect and exploitation, instruction on how to use the EASI screening tool, and the clinical protocols for reporting flagged cases to APS and WellMed's Complex Care workers. They also provided consultation to clinical staff through individual inquiries or PCC meetings for high-risk patients (i.e., due to hospitalization, discharge, etc.). Second, clinicians were trained on screening and identification of elder abuse. Third, medical staff and physicians administered the EASI screening tool to cognitively intact patients without the presence of their caregiver at least once a year. The risk-level was assessed (high, elevated, or low) and the corresponding protocol followed: High-risk patients were reported to APS and referred to WellMed's Complex Care worker; Elevated risk patients were referred to complex care for follow-up; and Low-risk patients did not receive intervention. All patients, regardless of rating, were offered educational materials on elder abuse, neglect and exploitation; families received information on caregiver stress. The EASI tool was incorporated into the electronic medical record. Fourth, caregivers of WellMed patients with dementia or Alzheimer's disease were referred to their *Stress Busting* program.

- **USC**: Focusing on care recipient and caregiver dyads in which the care recipient had dementia, the multi-component *Take AIM* intervention included baseline and follow-up risk assessments, linkages to existing services in the community to address identified needs and risks, and home visits over the course of three months. During the first home visit and assessment, the care recipient and caregiver (the dyad) were interviewed separately. The USC interviewer assessed decision-making capacity, obtained informed consent, and administered the risk assessment. For the care recipient, the domains assessed were aggression, resistance to care, and ADLs dependency. Risk domains assessed for the caregiver were anxiety, depression, and perceived burden. Contextual factors, such as limited social support, financial strain, and relationship quality, were assessed. A risk assessment profile was developed and appropriate community-based resources for assistance were identified (i.e., treatment, training, or concrete service). USC developed a *Toolkit of Existing Interventions* to address each need identified. For care recipients with dementia this included: Geropsychiatry to address aggression; the *Savvy Caregiver Plus* course to address resistance to care; and in-home caregiver agency for ADL dependency. For the caregiver, options included: *Problem-Solving Therapy* to address anxiety;

[6] This evaluation did not address training clinicians on screening and identification of elder abuse or the *Stress Busting* program.

Individual counseling to deal with depression; and the *Friendly Visitor Program* to address burden. A caregiver support group was recommended for limited social support, Legal Aid to help with financial strain, and family counseling to address concerns with relationship quality. The profile was reviewed during the second home visit. During the third and final home visit, the USC interviewer assessed decision-making capacity, administered the follow-up risk assessment, and assessed service use, based on the interventions suggested in the *Toolkit*.

- **UTHSC**: The medication adherence prevention intervention for self-neglecting elders included multiple components: referral and intake; informed consent; a six-month medication adherence intervention; and a six-month follow-up phase. The three step enrollment process involved both APS and the UTHSC team. The APS caseworker conducted a home visit with a substantiated self-neglecting elder and asked if s/he was interested in the medication adherence intervention. If interested, the UTHSC research staff called the elder to verify eligibility, and then research staff led elders through the informed consent process. The six-month intervention focused on social support and medication management through monthly, one-hour home visits, premised on communication and engagement. In Months 1 and 2, activities focused on the baseline assessment, the medication safety assessment (conducted by a geriatrician), and education. The education component was tailored to each elder's knowledge and personal efficacy skills. During months 2-6, the registered nurse and research assistant made joint home visits to provide further education and troubleshoot medication management concerns. In the post-intervention phase, UTHSC conducted home visits to monitor adherence and provide educational reinforcement.

Delivery Method and Duration

As to be expected given the heterogeneity of the five prevention interventions, their delivery methods and service duration varied, and depended on the population targeted and the nature of abuse or risk.

One common delivery element across all of the prevention interventions was the use of home visits as a primary method to reach at-risk elders, although the degree of contact varied. AK DSDS case managers conducted multiple home visits and had telephone contact with elders while implementing the *CTI* model. UTHSC's research nurse and staff conducted monthly home visits and had weekly telephone contact with elders to monitor medication adherence. The program coordinator and interviewer for USC's *Take AIM* intervention focused on monthly home visits with care recipient and caregiver dyads over the three month intervention period. Although the NYSOFA's E-MDTs did not engage directly with elders, service professionals recommended increasing the number of home visits by APS to monitor and mitigate risk.

As noted above regarding the core components, the intensity or dose of services varied with each prevention intervention, depending on the identified needs, the treatment protocol or case plan, the resource capacity of providers, and uptake by the

elder. The duration of the prevention interventions varied, as well. Three were time-limited, with the duration ranging from three-months (USC), six-months (UTHSC), or nine-months (AK DSDS). Two were open-ended and depended on case resolution by the E-MDT (NYSOFA) or APS intervention as a result of screening or care coordination efforts (TX/WellMed).

Manual and Training Information

To varying degrees, each of the prevention interventions were standardized (or manualized) by creating manuals and protocols for staff implementation. As noted in the research literature, manualization provides structure to an intervention, improves implementation fidelity, and fosters well-designed research (Goldstein et al. 2012). While time-consuming, it yields multiple benefits, helping to identify key intervention components and processes; ensure quality service delivery and supervision; ensure consistency and fidelity of service delivery; and replicate practices (Fraser et al. 2009). In human service delivery environments were turnover is high, such as APS, manualization of an intervention helps to orient and train new staff, build and maintain organizational capacity, and transfer and share knowledge. Manualization also assists with documenting adaptations to a protocol and decision rules over time, as well as increasing team accountability to the protocol.

UTHSC's team used *Intervention Mapping* (Bartholomew et al. 2006) to develop theory-based protocols and to map core components to desired behavioral outcomes for the medication adherence prevention intervention. The team was actively involved in the development of the study instruments, procedures manual, and protocols. Training to implement the intervention included 1-2 observations with the geriatrician interacting with the participant, a review of the assessments, a clinical training session on the informed consent process, in-home observations of the protocol, and a review of safety procedures. Working closely with the Lifespan and NYCEAC teams, NYSOFA developed a *Decision Document* that guided the eligibility, intake, service utilization tracking, and financial exploitation outcomes for the elders served, taking into consideration policy and operational distinctions of the Finger Lakes' and Manhattan jurisdictions. USC's *Take AIM* prevention intervention developed and implemented an assessment tool that generated a risk profile and a *Toolkit of Existing Interventions* that specifically addressed the identified risk factors.

AK DSDS case managers received in-person training on *CTI* from the program developer (*Center for the Advancement of Critical Time Intervention*) to implement the prevention intervention. Case managers were also trained in Motivational Interviewing. TX/Well conducted a Training the Trainer for the APS Specialists to train WellMed clinical staff on APS reporting requirements and procedures, how to administer the EASI tool in the clinics with WellMed patients, and the protocols for how and when to report a case to APS for follow-up.

TABLE 2. Intended Outcomes of Prevention Interventions				
Target Populations	**Prevention Intervention**	**Intended Outcomes Over Time →**		
Care Recipient and Caregiver Dyads	USC	• Identification of high-risk of abuse at early stages • Enhanced caregiver coping skills and confidence • Reduced behavioral manifestations (agitation) • Increased knowledge of disease process • Increased access to social resources	• Decrease in the number of cases at or exceeding multi-domain risk threshold	• Reduce the risk of elder abuse and neglect among adults with dementia in a way that is reproducible and scalable
At-risk Elders and Victims	AK DSDS	• Increase elders' independence, social support and safety • Reduce risk for abuse • Reduced likelihood of re-referral to APS • *Increase awareness among community partners and to strengthen partnerships*		
	NYSOFA	• Ensure safety and well-being of victimized elders • Ensure protection of their assets	• Reduce risk of further exploitation	• Restitution of assets
	TX/WellMed	• Improve identification of abuse • Reduce risk for future abuse	• *Increase collaborations among community partners*	
Substantiated Victims	UTHSC	• Increase medication adherence • Reduce adverse outcomes associated with elder self-neglect (social isolation, dependence, health problems and likelihood of re-referral to APS)		

Service Provider Involvement

The role and scope of service providers' involvement varied--from limited to extensive--across the prevention interventions. UTHSC had limited contact with external service providers in the community, but could turn to APS or a primary care physician in the event a problem or urgent need was identified. AK DSDS's case management model required coordination for referrals and service linkage with a range of community service providers within a 100-mile radius of Anchorage. Operating on a smaller scale in Orange County, USC had pre-existing relationships with service providers in the community and they jointly established a protocol to fast-track access to services by the care recipient/caregiver dyads. Operating within the primary care settings, APS

Specialists engaged WellMed social workers to help identify and better coordinate services for clients. Through the APS Specialist, information was shared about available services provided by both agencies. By virtue of their purpose and structure, the Lifespan and NYCEAC E-MDTs had representation of diverse professionals drawn from multiple systems including: APS, social services, medical, law enforcement, legal, and financial. The E-MDT coordinator received referrals, consulted with referral sources, and obtained information. Following each E-MDT meeting, members were committed to fulfilling a key action item of the agreed-upon case plan for an elder.

Intended Outcomes

Intended outcomes were targeted to the population of interest and intervention-specific. As shown in **Table 2**, they are organized to present outcomes associated with three target populations: care recipients and caregiver dyads; at-risk elders and victims; and substantiated victims. Despite the heterogeneity of the prevention interventions, common outcomes exist: (1) Reduced risk for abuse; and (2) Reduced likelihood of referral to APS.

Other risk and protective factors were shared by some but not all prevention interventions. Examples of these included improved increased social support, improved sense of safety, increased awareness, and strengthened partnerships.

B. Adaptation to Fit Local Context

The core components of each prevention interventions (as identified above) were implemented as intended, as revealed through on-site interviews with key stakeholders and observations of the prevention intervention. Yet, a few adjustments to the intended models were made in response to local conditions and constraints. Key informants reported that the intervention benefitted from the change. In two cases, the changes strengthened APS involvement in the intervention and by extension with the wider community of services professionals. TX/WellMed's APS Specialists were included in the weekly PCC meetings where cases involving high-risk were discussed. USC's *Take AIM* team members modified their approach in response to participants' reception to and uptake with services referrals, taking a more patient-centered approach.[7] Realizing that the care recipient/caregiver dyads were overwhelmed by the choices of recommended services, the USC team found that they were not following up on the referrals. USC revised the protocol for delivering recommendations on referrals so that dyads could select one or two options that seemed most relevant. Additionally, this gave the care recipient and the caregiver the opportunity to voice why these referrals seemed most relevant and how they would obtain the services.

[7] As defined by the Institute of Medicine (2001:6), patient-centered care refers to "providing care that is respectful of and responsive to individual patient preferences, needs, and values and ensuring that patient values guide all clinical decisions."

NYSOFA made a change to the model in each jurisdiction where it was implemented. These changes involved structure and key partners. Rather than creating a hub E-MDT at the Lifespan office in Rochester and using technology for “satellite” locations in the adjoining jurisdictions, early on NYSOFA opted for having in-person meetings in each of the seven counties in the Finger Lakes region. While logistically challenging to organize, the in-person meetings fostered greater coordination and collaboration across the service professionals. A later modification to the E-MDT concerned the use of forensic accountants based in the New York DA's office. Constraints on their ability to report activities to the E-MDT, owing to their role in the DA’s office and pursuit of criminal cases, required that the Manhattan team use community services for forensic accountants.

Three of the five prevention interventions identified areas that may be important to change in future, based on their implementation experience and their interim findings. In attempting to replicate an evidence-based intervention developed for homeless adults with a population of vulnerable elders, AK DSDS found that greater flexibility was needed in the intervention’s case management timeframe. Short-term cases where client goal and needs could easily be met within the first three months could be closed out by APS, thus reducing the duration of the intervention from nine months to three. Having implemented the EASI screening tool in 73 primary care settings throughout its service region, TX/WellMed identified some modifications to their prevention intervention that would aid in future, statewide replication. These included providing scripts and language to clinics for dealing with family members about mandatory reporting of suspected elder abuse and adapting the screening intervention to better fit within an organization’s existing protocols. With cost-effectiveness and optimal service delivery in mind, UTHSC considered that, in the future, it may be beneficial to use a less intensive staffing model or a more triaged assessment and tiered intervention. Another consideration would be to align the home-based intervention with a primary care provider or coordinate information gathering with an electronic health record. Other elements of the intervention that may need to be modified were the number of assessments administered and home visits conducted. UTHSC also thought it would be preferable to use 1-2 measures that predict adherence to medications or the intended outcomes.

Staff that implemented the prevention interventions also focused on how they might, in the future, work in closer collaboration with project partners. Examples included forming an advisory board (TX/WellMed) or using monthly meetings with community partners to focus on vulnerable elders and not just those that were the focus of the intervention or known to APS (AK DSDS).

C. Facilitators and Challenges to Implementation

1. Facilitators

A number of common factors aided with the implementation of the five prevention interventions. To various degrees, all were grounded in strong partnerships with APS and community partners that assisted with intervention planning and/or implementation (AK DSDS, NYSOFA, TX/WellMed, UTHSC, USC). Some partnerships, such as UTHSC's partnership with APS Region VI in Texas, preceded the intervention, as did the partnering of Lifespan and NYCEAC for the NYSOFA E-MDTs and the community partners working with USC.

Although there was some turnover, continuity in staffing and leadership across the prevention interventions was critical in providing consistency in implementation and maintaining relationships developed between case managers and clients (AK DSDS), research staff and elders (UTHSC, USC), APS specialists and clinic staff (TX/WellMed), and E-MDT coordinators and community partners (NYSOFA).

Four of the prevention interventions had established referral partners that contributed resources in various capacities: to recruit and enroll elders in the intervention protocol (UTHSC, USC); take up a case with the E-MDT (NYSOFA); or provide community-based services once needs were assessed (AK DSDS, NYSOFA, UTHSC, USC). TX/WellMed's APS Specialists had to build relationships across all clinical staff in WellMed, including Complex Care provider services to facilitate referrals.

Use of a client-driven or patient-driven approach in social service or clinical settings was extended by involving partners, community agencies, advocacy organizations, and other entities in monthly standing meetings to address elder's needs stemming from abuse or risk of harm. Such forums helped expedite service delivery to specialists (NYSOFA, USC), provide complimentary services and reduce fragmentation (TX/WellMed), and build awareness of available resources for referrals (AK DSDS, UTHSC).

2. Challenges

Most challenges tended to be site-specific; a few were common across the prevention interventions, such as recruitment, referrals, retention, appointment cancellations, and service access. All experienced some early issues, and two had start-up delays and turnover with APS or project staff that affected early implementation (AK DSDS, NYSOFA).

The AK DSDS, USC, and UTHSC prevention interventions involved direct engagement of elders with interactions taking place in client homes. Few challenges were experienced in these settings and there were protocols in place to address concerns. In contrast, TX/WellMed's prevention intervention relied on the use of intermediaries in a clinical setting. Introducing an elder abuse screening protocol into an

existing workflow that was already time-constrained was initially challenging, resulting in some staff and physician reluctance to complete the EASI forms (some of which were integrated into the electronic medical record) or include APS Specialists in PCC meetings. These concerns were resolved by cross-training caseworkers and physicians, which helped dispel misperceptions about APS and elder abuse, improve working relationships, and garner support for the intervention. TX/WellMed also introduced a communications protocol where a lead medical doctor was designated to communicate and consult with other physicians using the EASI tool to facilitate implementation of the intervention.

Challenges with recruitment and referral varied across the prevention interventions. For AK DSDS, generating regular referrals to the intervention was an unexpected challenge. This was understood to be partially due to the newness of the program and the perception on the part of some APS investigators that clients may not need continued case management because they were no longer facing imminent risk. For UTHSC, referrals and enrollment in the intervention depended on coordination with APS caseworkers. Although UTHSC provided education and materials for them to solicit referrals, it was up to the caseworkers to make referrals. This required sending friendly reminders and reaching out to APS to increase the referral rate. Some elders were initially hesitant to participate which affected initial recruitment and enrollment.

As noted earlier, after finding that referral to and uptake of services were limited, USC adopted a different approach. They gave care recipient and caregiver dyads greater voice and choice in service selection (e.g., adult day care, caregiver support groups, family counseling, legal aid), with USC then facilitating the referral linkage. To protect client confidentiality, the service agencies did not provide USC with information on whether the dyad had contacted the agency or used their services, thus limiting the extent to which important outputs and outcomes could be tracked. TX/WellMed experienced a similar issue. Because there was no formal data tracking system in place to capture all of the WellMed referrals, it was difficult to systematically track referrals made to APS outside of the EASI screening. Lack of a feedback loop to communicate about patient activities also created data gaps and limited the ability to track intervention outcomes.

Limited services and access to services affected two of the prevention interventions. Even if client needs had been identified, AK DSDS's intervention relied on existing services which were sometimes difficult for elders to access. Transportation and affordable housing were identified as service gaps in the Anchorage area. For UTHSC, elders lived across a 13 county service area served by APS. Some counties were resource-rich while others were not. Harris County offered an array of health services for elders while some rural counties lacked basic health facilities and pharmacies, had wait lists for services, and had few geriatric specialists. Limited public transportation across the service area was a barrier to service access.

Evaluation-related challenges concerned efforts to obtain secondary data that resided in grantee or APS systems. In some cases this required the development of

new systems for data collection and tracking. Within APS, data may reside in different internal systems, thus requiring permission to access data from multiple sources. In cases where there was internal staff turnover at APS, some grant directors or project coordinators had to create new relationships and educate colleagues about the evaluation and data collection plans. In one circumstance, the prevention intervention staff provided support to APS to access data for the evaluation. This created an unanticipated burden and increased the amount of time needed to obtain relevant data. Development of a data collection system to track client information and service outcomes was needed for one prevention intervention that operated across service sectors. Prevention interventions' ability to track service utilization across their provider network was also restricted due to confidentiality concerns, thus limiting the availability of these data for outcome analysis.

V. FINDINGS

In this section, we present key findings related to three domains examined by the evaluation. We begin by presenting the characteristics of elders served by the prevention interventions, including: demographic information and household composition (where known); the type of abuse experienced; psychological and physical health indicators; and social well-being. Next, we present findings related to service referrals to address elders' identified needs and service utilization. Finally, as applicable, we address common and intervention-specific outcomes.

A. Risk Factor Profiles

1. What are the Demographic and Household Characteristics of Victims, At-risk Elders and Care Recipients?

The demographic and household characteristics of the elders served by the five prevention interventions are presented in **Table 3**. They are presented according to their status as substantiated victims (UTHSC), elders at-risk or known victims (AK DSDS, NYSOFA, and TX/WellMed), and care recipients (USC).

TABLE 3. Demographic and Household Characteristics of Participants

	Victims		At-risk Elders/Victims						Care Recipients	
	UTHSC (N=34)		AK DSDS (N=87)		NYSOFA (N=221)		TX/WellMed (N=310)		USC (N=76)	
	N	Mean	N	Mean	N	Mean	N	Mean	N	Mean
Age	34	74.4	55	70.3	151	80.9	310	76.3	76	80.8
	N	**%**	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**
Gender	34		87		206		310		76	
Male		38.2		39.1		33.9		36.1		55.3
Female		61.8		60.9		66.0		63.9		44.7
Race	34		79		157		294		67	
African American/ Black		61.8		13.9		15.9		7.8		1.5
American Indian/ Native Alaskan		0		24.1		0		0.3		0
Asian/Pacific Islander		0		2.5		0		1.0		7.5
Caucasian/White		20.6		55.7		84.1		90.1		91.0
Other*		17.6		3.8		0		0.7		0
Ethnicity	34		84		131		301		76	
Hispanic		17.6		3.6		5.3		53.5		13.2
Not Hispanic		82.3		96.4		94.7		46.5		86.8
Education	33		75		29		---		67	
Less than high school		42.4		14.7		3.4		---		7.5
High school		36.4		41.3		34.5		---		15.0
Some college		21.2		25.3		6.9		---		9.0
College graduate		0		14.7		27.6		---		34.3
Some graduate work		0		4.0		27.6		---		34.3

TABLE 3 (*continued*)										
	Victims		At-risk Elders/Victims						Care Recipients	
	UTHSC (N=34)		AK DSDS (N=87)		NYSOFA (N=221)		TX/WellMed (N=310)		USC (N=76)	
	N	%	N	%	N	%	N	%	N	%
Income	24		36		122		---		29	
Less than $15,000		70.8		47.2		22.1		---		10.3
$15,000-$25,000		20.8		41.6		31.1		---		17.2
$25,001-$35,000		4.2		5.6		23.0		---		3.4
$35,001-$50,000		4.2		5.6		10.7		---		27.6
$50,001-$75,000		0		0		9.8		---		20.7
$75,001-$100,000		0		0		0.8		---		13.8
Greater than $100,000		0		0		2.5		---		6.9
Marital Status	34		82		166		274		73	
Married		11.8		14.6		15.1		25.5		71.2
Single/Never married		2.9		20.7		14.5		14.2		4.1
Divorced/ Separated		32.4		41.4		10.8		6.9		1.4
Widowed		52.9		23.2		54.2		21.2		23.3
Other/Unknown		0		0		5.4		32.2		0
Primary Language	34		72		169		309		76	
English		82.4		97.2		95.3		86.1		88.2
Spanish		14.7		1.4		2.4		13.3		1.3
Other		2.9		1.4		2.4		0.6		10.5
Place of Residence	34		76		170		308		---	
Private home**		91.2		88.1		72.4		77.9		---
Multi-family home		---		0		7.1		0		---
Assisted living/ Nursing home		---		6.6		14.7		5.8		---
Group home/ Unlicensed personal care homes		---		1.3		2.4		1.3		---
Other		8.8		3.9		2.9		14.9		---
Unclear		---		0		0.6		---		---
Living Situation	34		64		170		---		---	
Alone		52.9		78.1		72.9		---		---
With spouse		2.9		21.9		7.1		---		---
With family		35.3		0		14.7		---		---
With provider		0		0		2.4		---		---
Other		8.8		0		2.9		---		---

* For UTHSC, "Other" refers to Hispanic/Latino.
** This includes apartments and rented rooms.

On average, elders served by the prevention interventions ranged from 75 years to 81 years of age. For those served through UTHSC's medication adherence intervention, the mean age was 74.4. For the at-risk elders served by AK DSDS's CTI, the mean age was 70.3. The mean age for the elders at-risk of financial exploitation served by NYSOFA was 80.9, and those served by TX/WellMed was 76.3 years. For the care recipients participating in USC's intervention, the mean age was 80.8.

The majority of victims participating in the interventions were female. For four of the five prevention intervention, about two-thirds of the elders were females and one-third were male (UTHSC, AK DSDS, NYSOFA, and TX/WellMed). By contrast, USC's prevention intervention did not focus on victims but on care recipients. More than one-half of USC's elders were males.

The race and ethnicity of the elders served by the prevention interventions varied by locale. Nearly 62 percent of the elders taking part in UTHSC medication adherence intervention were African American, 21 percent Caucasian, and 18 percent identified as Hispanic/Latino. AK DSDS served a diverse population: nearly 56 percent were Caucasian, 24 percent were American Indian or Alaska Native, and 14 percent were African American. Four-fifths of the elders served by NYSOFA's E-MDTs were Caucasian (84 percent) and less than one-fifth were African American (15.9 percent). This was similar to the racial and ethnic background of the elders served by TX/WellMed, as 90 percent of elders were Caucasian and only 8 percent were African American. More than one-half (53.5 percent) of the elders served by TX/WellMed identified as Hispanic/Latino. Of the care recipients served by USC, 91 percent were Caucasian, 7.5 percent were Asian/Pacific Islander, and 1.5 percent were African American.

Across the five prevention interventions, more than 80 percent of elders spoke English as their primary language. Spanish was the primary language for more than 10 percent of the elders served by UTHSC and TX/WellMed (14.7 percent and 13.3 percent, respectively).

The education levels of the elders served varied considerably across the prevention interventions.[8] Most elders served by UTHSC had less than a high school education (42.4 percent) or were high school graduates (36.4 percent); about 21 percent had some college education but were not college graduates. The diversity of the AK DSDS population was further demonstrated by their education levels. About 15 percent had less than a high school education, 40 percent were high school graduates, 25 percent had some college education, and about 15 percent were college graduates, with 4 percent having some graduate school education. Elders served through NYSOFA tended to be high school (34.5 percent) and college graduates (27.6 percent) or completed graduate work (27.6 percent); only a very small percentage had less than a high school education (3.4 percent). More than one-third of the elders served by USC were college graduates and another one-third had graduate school education. About 15 percent were high school graduates and 7.5 percent had less than a high school education.

Income levels of elders across three of the prevention interventions tended to be low.[9] Of all the data elements, information on elders' income levels was among the most challenging for grantees to obtain. Response rates for the four interventions that collected this information ranged from 38.2 percent to 70.6 percent. Of those participants who provided information on income, nearly 92 percent of the elders served by UTHSC had an annual income of less than $25,000, as did 89 percent of the elders served by AK DSDS. Similarly, about 53 percent of the elders served by NYSOFA had annual incomes less than $25,000. About 44 percent of the elders served by NYSOFA had incomes between $25,000 and $75,000, but very few had incomes exceeding

[8] Education data were not available for TX/WellMed.

[9] Data was not provided on the income source (i.e., earned, unearned). Income data were not available for TX/WellMed.

$75,000 (3 percent). In contrast, some of the elders served by USC appeared to be affluent, with 14 percent having incomes greater than $75,000. Most elders (52 percent) had incomes between $35,000 and $75,000 yet about 28 percent had incomes less than $25,000.

Marital status also varied across the elders served by the prevention interventions. More than half of the elders served by UTHSC and NYSOFA were widowed (52.9 percent and 54.2 percent, respectively). About 40 percent of the elders served by AK DSDS were divorced or separated. Most elders served by USC were married (71 percent). The marital status of the elders served by TX/WellMed varied across all categories.

Most elders lived in a private home, which included apartments and rented rooms, although a few resided in assisted living or nursing facilities. The place of residence for elders was consistent across four of the prevention interventions.[10] Most elders lived in a private home, which included apartments and rented rooms. About 15 percent of elders served by NYSOFA lived in assisted living or nursing home facilities; less than 2 percent lived in a group home or an unlicensed personal care homes.

Many elders lived alone. There was limited information available about the living situation of the elders. This information was available for three of the prevention interventions. Almost 80 percent of the elders served by AK DSDS lived alone, as did 73 percent of the elders served by NYSOFA, and 53 percent of the elders served by UTHSC. Twenty-one percent of the AK DSDS elders lived with a spouse. Fifteen percent of the NYSOFA elders and 35 percent of the UTHSC elders lived with family.

2. What are the Psychological, Physical Health and Social Conditions of Victims, At-risk Elders and Care Recipients?

The psychological, physical health and social conditions of victims, at-risk elders and care recipients were assessed using multiple measures. Together these measures present a sense of the vulnerability of elders served by the prevention interventions. Findings on physical health, psychological health, and social conditions are presented in **Table 4** and discussed below.

TABLE 4. Physical Health, Psychological and Social Characteristics of Participants

	Victims		At-risk Elders/Victims						Care Recipients	
	UTHSC (N=34)		AK DSDS (N=87)		NYSOFA (N=221)		TX/WellMed (N=296)		USC (N=76)	
	N	Mean	N	Mean	N	Mean	N	Mean	N	Mean
Physical Function										
ADL (0-35)	---	---	82	7.9	---	---	---	---	---	---
ADL (0-6)	---	---	---	---	---	---	---	---	75	3.5
ADL (0-6)	---	---	---	---	91	1.0	---	---	---	---
IADL (0-45)	---	---	84	16.6	---	---	---	---	---	---
IADL (0-16)	---	---	---	---	106	2.8	---	---	---	---
SF-36 (10-30)	30	17.1	---	---	---	---	---	---	---	---

[10] Data was not available from USC on this variable.

TABLE 4 (*continued*)										
	Victims		At-risk Elders/Victims						Care Recipients	
	UTHSC (N=34)		AK DSDS (N=87)		NYSOFA (N=221)		TX/WellMed (N=296)		USC (N=76)	
	N	%	N	%	N	%	N	%	N	%
IADL (8-31)									74	
Independent (8-10)										1.3
Moderate (11-16)										6.8
Dependent (17-31)										91.9
Mobility Impaired	---	---	---	---	---	---	---	24.0	---	---
Physically Disabled	---	---	---	---	---	---	---	26.0	---	---
Cognitive Function										
Cognitively Impaired	---	---	---	---	---	---	---	9.3	---	---
Dementia--Mini-Cog (0-5)	---	---	---	---	---	---	---	---	76	---
Positive screen (0-2)	---	---	---	---	---	---	---	---	---	85.1
Negative screen (3-4)	---	---	---	---	---	---	---	---	---	14.9
MMSE (0-30)	31		---		---		---		---	
Cognitively intact (25-30)		67.7		---		---		---		---
Mild cognitive impairment (21-24)		19.3		---		---		---		---
Moderate cognitive impairment (10-20)		12.9		---		---		---		---
Severe cognitive impairment (<10)		0	---	---	---	---	---	---	---	---
Depression										
PHQ-9 (0-27)	---		51		---		---		67	
No depression (0-4)		---		58.8		---		---		78.9
Minimal symptoms (5-9)		---		17.7		---		---		14.7
Minor symptoms (10-14)		---		13.7		---		---		4.9
Major depression, moderate (15-19)		---		5.9		---		---		1.6
Major depression, severe (>=20)		---		3.9		---		---		0
GDS (0-15)	27	---	---	---	---	---	---	---	---	---
Absent (1-4)		74.1								
Present (>4)		25.9								
Depression	---		---		32		---		---	
No		---		---		40.6		---		---
Mild		---		---		25.0		---		---
Moderate		---		---		21.9		---		---
Severe		---		---		12.5		---		---
	N	Mean	N	Mean	N	Mean	N	Mean	N	Mean
Anxiety										
GAD-7 (0-21)	---	---	53	4.3	---	---	---	---	63	1.5
	N	%	N	%	N	%	N	%	N	%
Anxiety	---		---		27		---		---	
No anxiety		---		---		29.6		---		---
Mild anxiety		---		---		25.9		---		---
Moderate anxiety		---		---		37.0		---		---
Severe anxiety		---		---		7.4		---		---

TABLE 4 (*continued*)										
	Victims		At-risk Elders/Victims						Care Recipients	
	UTHSC (N=34)		AK DSDS (N=87)		NYSOFA (N=221)		TX/WellMed (N=296)		USC (N=76)	
	N	Mean	N	Mean	N	Mean	N	Mean	N	Mean
Stress										
PSS (0-40)			72	18.8	---	---	---	---	---	---
	N	%	N	%	N	%	N	%	N	%
Stress	---		---		---		---		---	
No stress		---		---		11.1		---		---
Mild stress		---		---		18.5		---		---
Moderate stress		---		---		51.8		---		---
Severe stress		---		---		18.5		---		---
	N	Mean	N	Mean	N	Mean	N	Mean	N	Mean
Social Support										
LSNS-6 (0-30)	---	---	---	---	---	---	---	---	62	14.3
LSNS-R (0-60)	---	---	50	18.9	---	---	---	---	---	---
DSSI (11-33)	31	24.3	---	---	---	---	---	---	---	---
	N	%	N	%	N	%	N	%	N	%
Social Support (Yes=1)										
Socially isolated	---	---	---	---	88	0.59	---	---	---	---
Leave the house	---	---	---	---	70	0.34	---	---	---	---
Friends or family	---	---	---	---	68	0.54	---	---	---	---
Emotional support	---	---	---	---	78	0.70	---	---	---	---
Perpetrator part of social support	---	---	---	---	94	0.80	---	---	---	---

Physical Health

The physical functioning of elders served by four interventions was fairly low. For the elders served by UTHSC's medication adherence intervention, physical function was measured using the Short Form 36 (SF-36) Health Survey, ten item questions of which assess physical functioning. The mean score for elders served was 17.1, indicating a moderate level of physical functioning. AK DSDS, NYSOFA, and USC assessed physical functioning (i.e., the degree of an elder's dependency on others) by measuring participants' difficulty with performing ADLs and Instrumental Activities of Daily Living (IADLs). Using various ADL and IADL scales, elders served by AK DSDS's *CTI* were found to have low levels of difficulty (with a mean ADL score of 7.9 and a mean IADL score of 16.6) whereas elders served by NYSOFA's E-MDTs were assessed as having a high level of dependence (mean score was 1.0 on their ADL). On the IADL (0-8), the mean score for these elders was 2.8. For the care recipients assessed by USC, the mean score on the ADLs was 3.5 at baseline. On the IADL, the majority of care recipients were identified as dependent, with scores ranging 17-31. Among TX/WellMed participants, 24 percent were mobility impaired and 26 percent were physically disabled.

Cognitive Function

Levels of cognitive impairment varied. Self-neglecting elders were cognitively intact but most of the elder care recipients were cognitively impaired. UTHSC measured the cognitive function of self-neglecting elders using the Mini Mental State Exam (MMSE), which assesses orientation to time and place, tracking a sequence, attention in a mathematical context, short-term memory, several forms of language challenge, and ability to follow instructions involving visual-spatial manipulations. About 68 percent of

the elders were cognitively intact (67.7 percent), with about 20 percent demonstrating mild cognitive impairment (19.3 percent), and about 13 percent with moderate cognitive impairment (12.9 percent). No elders demonstrated severe cognitive impairment. Nine percent of elders served by TX/WellMed were identified as cognitively impaired (9.3 percent). Using the Mini-Cog test to screen for cognitive impairment, USC found that 85 percent of the care recipients were cognitively impaired and 15 percent were not (85.1 percent and 14.9 percent, respectively).

Depression

There was limited evidence of depression among the elders served by four of the preventions interventions. Using the Geriatric Depression Scale (GDS), depression was found to be absent for 74 percent (74.1 percent) of the elders served by UTHSC, but present for nearly 26 percent (25.9 percent). About 60 percent (58.8 percent) of elders served by AK DSDS did not exhibit signs of depression, as measured by the Patient Health Questionnaire-9 (PHQ-9), although 10 percent suffered from moderate to severe major depression. Using the PHQ-9, no depression was found for nearly 80 percent of the care recipients served by USC, however, about 20 percent had minimal to minor symptoms (14.7 percent and 4.9 percent respectively). Major depression was limited to less than 2 percent of the care recipients (1.6 percent).

In a similar vein, some elders demonstrated low levels of anxiety. Those assessed by AK DSDS using the General Anxiety Disorder (GAD) scale had a mean score of 4.3, indicating low anxiety. About 30 percent of the elders served by NYSOFA showed no anxiety while the remaining elders (70 percent) exhibited mild to moderate to severe anxiety (25.9 percent, 37 percent, and 7.4 percent, respectively). Having a geropsychiatrist as part of the prevention interventions (NYSOFA, USC) helps allow for appropriate mental health interventions to be put in place.

AK DSDS measured elders' stress using the Perceived Stress Scale (PSS), finding that at-risk elders had a mean score of 18.8 or a moderate level of stress. Conversely, elders served by NYSOFA exhibited higher levels of stress, with almost 20 percent with severe stress (18.5 percent) and more than 50 percent with moderate stress (51.8 percent). About one-fifth exhibited mild stress (18.5 percent) and about one-tenth had no stress (11.1 percent).

Social Support

Elders served by three prevention interventions had low-to-moderate levels of social support but elders experiencing financial exploitation tended to be socially isolated. Victims of self-neglect served by UTHSC had a mean score of 24.3 on the Duke Social Support Index (DSSI), which assesses the social network of the elderly and the support provided by that network. With a mean score of 24.3, these elders indicated a more than moderate level of support. As subset of elders served by AK DSDS had fairly low levels of social support (mean score of 18.9), as measured by the Lubben Social Network Scale (LSNS-R). Care recipients served by USC reported

moderate levels of social support (mean score of 14.3) using the Lubben Social Network Scale 6-item (LSNS-6). The NYSOFA teams assessed the level of social support for elders at-risk of financial exploitation to identify sources of support and whether elders felt socially isolated, left the house, had friends or family, had emotional support and if the perpetrator was part of the social support network. While NYSOFA was only able to obtain data on less than half of participants on this measure, of the elders who responded, more than half were socially isolated (59 percent) and the vast majority of perpetrators were part of their social network (80 percent).

3. What are Participants' Risk of Abuse?

Risk of abuse for at-risk elders, victims, and care recipients was measured by four of the prevention interventions using different screening tools or methods, as shown below in **Table 5**. AK DSDS and USC assessed risk using the VASS, TX/WellMed did so using the EASI screening tool, and NYSOFA assessed the level of risk for financial exploitation based on information provided by collateral contacts such as APS or law enforcement. Elders served by UTHSC had been substantiated for self-neglect by APS.

TABLE 5. Risk of Abuse

	At-risk Elders/Victims						Care Recipients	
	AK DSDS		NYSOFA		TX/WellMed		USC	
	N	%	N	%	N	%	N	%
VASS screening tool	80		---		---		76	
Vulnerability								
(1) Are you afraid of anyone in your family?		8.8		---		---		8.8
(2) Has anyone close to you tried to hurt you or harm you recently?		23.8		---		---		1.5
(3) Has anyone close to you called you names or put you down or made you feel bad recently?		28.8		---		---		11.8
Dependence								
(4) Do you have enough privacy at home?		76.3		---		---		94.3
(5) Do you trust most of the people in your family?		83.4		---		---		91.5
(6) Can you take your own medication and get around by yourself?		80.8		---		---		83.8
Dejection								
(7) Are you sad or lonely often?		31.7		---		---		9.9
(8) Do you feel that nobody wants you around?		15.0		---		---		2.9
(9) Do you feel uncomfortable with anyone in your family?		23.1		---		---		26.1
Coercion								
(10) Does someone in your family make you stay in bed or tell you you're sick when you know you're not?		1.3		---		---		4.5
(11) Has anyone forced you to do things you didn't want to do?		16.3		---		---		11.8
(12) Has anyone taken things that belong to you without your OK?		31.7		---		---		11.8

TABLE 5 (*continued*)								
	At-risk Elders/Victims						Care Recipients	
	AK DSDS		NYSOFA		TX/WellMed		USC	
	N	%	N	%	N	%	N	%
EASI screening tool	---		---		11,426		---	
(1) Have you relied on people for any of the following: bathing, dressing, shopping, banking or meals?		---				9.6		---
(2) Has anyone prevented you from getting food, clothes, medication, glasses, hearing aids or medical care, or from being with people you wanted to be with?		---				0.3		---
(3) Have you been upset because someone talked to you in a way that made you feel shamed or threatened?		---				1.1		---
(4) Has anyone tried to force you to sign papers or to use your money against your will?		---				0.2		---
(5) Has anyone made you afraid, touched you in ways that you did not want, or hurt you physically?		---				0.3		---
(6) Doctor: Elder abuse may be associated with findings such as: poor eye contact, withdrawn nature, malnourishment, hygiene issues, cuts, bruises, inappropriate clothing, or medication compliance issues. Did you notice any of these today or in the last 12 months?		---				0.3		---
Stoplight rating								
Green		---		---		98.6		---
Yellow		---		---		1.1		---
Red		---		---		0.3		---
APS history	---		---		573		---	
Yes		---		---		52.9		---
No		---		---		47.1		---
Risk of Financial Exploitation	---		117		---		---	
No risk		---		1.7		---		---
Low		---		1.7		---		---
Medium		---		16.2		---		---
High		---		80.3		---		---

Risk of Abuse for At-risk Elders and Victims

Elders served through by AK DSDS reported feeling vulnerable and subject to coercion. Using the VASS screening tool, AK DSDS assessed the vulnerability, dependence, sense of dejection, and degree of coercion for the elders participating in the *CTI*. About one-third (28.8 percent) of elders reported that someone close to them had not treated them well. Nearly one-quarter (23.8 percent) indicated that someone close to them had tried to hurt or harm them. Less than 10 percent (8.8 percent) reported being afraid of anyone in their family. These elders felt they had enough privacy in their home (76.3 percent), could trust most of the people in their family (83.4 percent), and could take their own medication and get around (80.8 percent). Yet, about one-third indicated that they often felt sad or lonely (31.7 percent), that nobody wanted them around (15 percent), and they were uncomfortable with a family member (23.1 percent). About one-third reported that someone had taken their belongings (31.7 percent). Sixteen percent indicated that they had been forced to do something they did not want to do.

The majority of patients screened using the EASI tool in TX/WellMed's intervention were at low risk of abuse. Over half of patients brought to the attention of the APS Specialists, however, had a prior APS case. As part of the primary prevention component of TX/WellMed, over 11,000 patients at 73 of WellMed primary care clinics were screened using the EASI tool to determine their risk of abuse. The vast majority of elders screened fell into the low-risk range (98.6 percent). Thirty-four elders were identified as high-risk (0.3 percent) and referred to APS. About 10 percent of these elders relied on others to help them bathe, dress, shop, bank or prepare meals. About 1 percent reported that someone had shamed or threatened them. In addition to the EASI screening, at-risk elders could be identified through services provided by the two APS Specialists who were embedded at WellMed clinics. The APS Specialists provided consultation to clinical staff through individual inquiries or PCC meetings where patients identified as high-risk (for being hospitalized, discharged home or some other issue, but not necessarily elder abuse) are discussed among a team of WellMed staff.

While the APS Specialists' participation in the PCC meetings was not originally a feature of the intervention, the number of referrals to APS that were generated through the PCC was higher than through the EASI screening tool. Based on data collected by the APS Specialists, 82 patients were identified through the PCC meetings (compared to 35 through the EASI screening tool). An additional 434 patients were referred to the APS Specialists by clinical staff outside of those meetings. WellMed staff included social workers, health coaches, nurses, doctors, and case managers among others. Among the 588 patients brought to the attention of the APS Specialists, 6.1 percent patients had been administered the EASI tool. Of the 36 who were administered the tool, 14.2 percent (or five patients) scored as high-risk. Importantly, of the 573 patients for whom information on APS history was available, a little over half (52.9 percent) had a prior history with APS.

The majority of elders served by the E-MDTs were at high-risk of abuse. NYSOFA assessed the risk of financial exploitation at case intake. Eighty percent were identified as at high-risk, whereas 16 percent demonstrated a medium level of risk. Less than 2 percent were determined to be low-risk.

Most care recipients served by the USC prevention intervention were not dependent, but some reported feeling uncomfortable with family members. The care recipients served by USC's *Take AIM* project were also assessed using the VASS screening tool. (Not all care recipients responded to each measure though.) At baseline, more than 10 percent (11.8 percent) of elders reported that someone close to them had not treated them well (i.e., put them down, called them names, made to feel bad). Less than 10 percent (8.8 percent) indicated that they were afraid of someone in their family and very few indicated that someone close to them had tried to hurt or harm them (1.5 percent). The majority of care recipients felt they had enough privacy in their home (94.3 percent), could trust their family members (91.5 percent), and were capable of taking their medications and getting around on their own (83.8 percent). However, about 26 percent reported being uncomfortable with a family member, and about

10 percent felt sad or lonely. Very few care recipients had the impression that nobody wanted them around (2.9 percent). In terms of coercion, about 12 percent (11.8 percent) indicated that they had been forced to do something they did not want to do and a similar proportion reported that someone had taken their belongings (11.8 percent). A few elders (4.5 percent) reported being made to stay in bed or told that they were sick (when they knew they were not).

4. What are the Demographic and Household Characteristics of Perpetrators and Caregivers?

The demographic and household characteristics of suspected perpetrators of elder abuse and caregivers are presented in **Table 6**. Two of the prevention interventions collected information on perpetrators: NYSOFA's E-MDTs and TX/WellMed.

TABLE 6. Demographic and Household Characteristics of Perpetrators and Caregivers

	Perpetrator				Care Recipients	
	NYSOFA		TX/WellMed		USC	
	N	Mean	N	Mean	N	Mean
Age	76	44.5	414	67.2	76	68.9
Gender	170		398		76	
Male		52.3		41.1		26.3
Female		47.6		58.9		73.7
Race	119		414		71	
African American/Black		12.6		8.0		1.4
American Indian/Native Alaskan		0		0.5		0
Asian/Pacific Islander		0.8		1.5		9.9
Caucasian/White		75.6		90.0		88.7
Other		10.9		0		0
Ethnicity	98		398		76	
Hispanic		4.1		55.0		6.6
Not Hispanic		95.9		45.0		93.4
Education	12		---		76	
Less than high school		16.7		---		1.3
High school		25.0		---		9.2
Some college		0		---		31.6
College graduate		25.0		---		23.7
Some graduate work		33.3		---		34.2
Income	---		---		76	
Less than $15,000		---		---		25.0
$15,000-$25,000		---		---		6.6
$25,001-$35,000		---		---		5.3
$35,001-$50,000		---		---		9.2
$50,001-$75,000		---		---		19.7
$75,001-$100,000		---		---		15.8
Greater than $100,000		---		---		18.4
Marital Status	114		---		76	
Married		32.4		---		81.6
Single		29.8		---		10.5
Divorced/Separated		11.4		---		6.6
Widowed		2.6		---		1.3
Other/Unknown		23.7		---		0
Primary Language	132		415		76	
English		96.2		90.1		92.1
Spanish		2.3		9.6		0
Other		1.5		0.2		7.9

TABLE 6 (*continued*)						
	Perpetrator				Caregiver	
	NYSOFA		TX/WellMed		USC	
	N	Mean	N	Mean	N	Mean
Place of Residence	---		394		---	
Private home*		---		76.1		---
Multi-family home		---		---		---
Assisted living/Nursing home		---		4.3		---
Group home/Unlicensed personal care home		---		1.3		---
Other		---		18.2		---
Unclear		---		---		---
Relationship to Victim/Care Recipient	150		415		76	
Self		---		66.7		---
Spouse		6.0		4.1		64.5
Parent		0		0.5		---
Child		37.3		14.9		26.3
Sibling		0.7		0.2		1.3
Other Relative		20.6		4.8		5.3
Other Nonrelative		34.0		8.0		2.6
Unknown		1.3		0.7		---
* This includes apartments and rented rooms.						

Perpetrators

Alleged perpetrators tended to be middle-aged or elderly, and included both males and females. The mean age of suspected perpetrators identified by the prevention interventions was 44.5 for NYSOFA and 67.2 for TX/WellMed. The mean age of caregivers was 68.9 for USC. The mean age for the elders at-risk of financial exploitation was 80.9, and those served by TX/WellMed was 76.3 years. For perpetrators identified by NYSOFA, 52 percent were male and 47 percent were female. This gender ratio was inverted for the TX/WellMed, as 41 percent of the perpetrators were male and 59 percent were female.

Race and ethnicity was known for only a subset of perpetrators, but they were predominantly Caucasian. For NYSOFA, 76 percent were Caucasian, 13 percent were African American, and 11 percent were noted as “Other.” Only 4 percent were identified as Hispanic. Among the perpetrators identified by TX/WellMed, 90 percent were Caucasian and 8 percent were African American. Fifty-five percent of perpetrators were identified as Hispanic. The primary language for perpetrators was English (96 percent for NYSOFA and 90 percent for TX/WellMed). Almost 10 percent of the perpetrators identified by TX/WellMed spoke Spanish; only 2 percent did with NYSOFA.

The educational background of the alleged perpetrators of financial exploitation ranged from those with limited education to the highly-educated. The education levels of suspected perpetrators were identified by NYSOFA’s E-MDTs. Seventeen percent had less than a high school education and 25 percent were high school graduates; 25 percent college graduates and 33 percent had some graduate education. Information about the perpetrators' income levels was unknown.

Most alleged perpetrators were family members or relatives. Information was provided about the relationship of the perpetrator to the victim. For suspected perpetrators identified by NYSOFA's E-MDTs, 37 percent were the child of the victim, 34 percent were a relative (such as a grandchild, niece or nephew, or in-law) and 6 percent were a spouse. Less than 1 percent were siblings of the victims. Thirty-four percent were classified as "other nonrelative" which included a girlfriend or boyfriend, friend, paid caregiver, roommate, tenant, or legal guardian. The majority of perpetrators identified by TX/WellMed were the victims themselves. These reflect cases of self-neglect. Nearly 15 percent of the perpetrators were the child of the victim (14.9 percent). Eight percent of perpetrators were nonrelatives, which included a paramour, friend, paid caregiver, service provider, and unrelated home member. Nearly 5 percent were relatives (4.8 percent).[11]

Caregivers

Caregivers were mostly female, Caucasian, married to the care recipient, college-educated, and had fairly high incomes. Many caregivers were adult children. As shown in **Table 6**, for the caregivers participating in USC's *Take AIM* intervention, the mean age was 68.9. About 74 percent of the caregivers were females and 26 percent were male. In terms of race and ethnicity, the majority of caregivers were Caucasian (89 percent) and nearly 10 percent were Asian/Pacific Islanders (9.9 percent). About 7 percent were identified as Hispanic. Caregivers tended to have a college education: 32 percent had some college, 24 percent were college graduates, and 34 percent had graduate school education. Less than 10 percent had only a high school education.

Twenty-five percent of the caregivers had incomes less than $25,000 and nearly 41 percent had incomes between $25,000 and $75,000. Many of the caregivers served by USC were middle income or affluent, with 34 percent having incomes greater than $75,000. Caregivers tended to be married (81.6 percent); some were single (10.5 percent) or divorced/separated (6.6 percent). More than 90 percent spoke English and nearly 8 percent spoke Spanish. There was no information available about the residence of the caregivers, although the relationship of the caregiver to the care recipient was known. Two-thirds of the caregivers were the spouse of the care recipient (64.5 percent) and over one-quarter were the adult child (26.3 percent). About 5 percent were other relatives, such as a grandson or granddaughter.

5. What are the Psychological, Physical Health and Social Conditions of Perpetrators and Caregivers?

The psychological, physical health and social conditions of perpetrators was identified by NYSOFA and TX/WellMed, as well as the caregivers participating in USC's intervention, and the results are shown in **Table 7**. Although sparse information is available it sheds light on elders' risk for abuse.

[11] Many of the elders served by TX/WellMed were self-neglecting, therefore 66 percent of the perpetrators were identified as "self."

TABLE 7. Physical Health, Psychological and Social Characteristics of Perpetrators and Caregivers						
	Perpetrator				Caregiver	
	NYSOFA (N=221)		TX/WellMed (N=134)		USC (N=76)	
	N	%	N	%	N	%
Mobility Impaired		---		3.0		---
Physical Disability		---		6.0		---
Depression						
PHQ-9	---		---		75	
No depression (04)		---		---		40.0
Minimal symptoms (5-9)		---		---		37.3
Minor symptoms (10-14)		---		---		16.0
Major depression, minor (15-19)		---		---		5.3
Major depression, severe (GE 20)		---		---		1.3
Depression	5		---		---	
No		20.0		---		---
Yes		80.0		---		---
Moderate		0		---		---
Severe		0		---		---
	N	**Mean**	**N**	**Mean**	**N**	**Mean**
Anxiety						
GAD	---	---	---	---	76	5.5
	N	**%**	**N**	**%**	**N**	**%**
Social Support						
LSNS-6	---	---	---	---	75	17.2
	N	**Mean**	**N**	**Mean**	**N**	**Mean**
Social Support						
Socially isolated	29	0.1	---	---	---	---
Leave the house	19	1.0	---	---	---	---
Friends or family	17	1.0	---	---	---	---
Emotional support	12	1.0	---	---	---	---
Caregiver Burden						
Zarit Burden Interview	---	---	---	---	76	8.2
Potential Substance Dependency--CAGE	---	---	---	---	11	1.0
	N	**%**	**N**	**%**	**N**	**%**
History of substance abuse	29	82		---		2.6
History of alcohol abuse	4	25		---		12.0
Alcohol abuse	---	---		1.0		---
History of violence	19	63		---		13.3
History of abuse	9	55		---		55.3
APS history	---	---		---		32.9

Alleged perpetrators tended to have issues with substance abuse, regardless of health status. In terms of physical health, perpetrators assessed by TX/WellMed were able-bodied, finding that only 3 percent were mobility impaired and only 6 percent were physically disabled. They also were prone to alcohol abuse. For the perpetrators identified by NYSOFA, 80 percent experienced depression, yet they were not socially isolated and appeared to have had social support. Perpetrators tended to have a history of substance abuse, coupled with a history of violence and abuse.

Although exhibiting low levels of anxiety and burden, and with moderate levels of support, caregivers showed signs of depression. USC assessed caregivers on multiple dimensions, using a battery of measures to gauge depression, anxiety, and burden.

Using the PHQ-9, no depression was found for 40 percent of the caregivers, however, about 53 percent had minimal to minor symptoms (37.37 percent and 16 percent respectively). Major depression was found for almost 7 percent of the caregivers (6.6 percent). Using the GAD scale, caregivers had a mean score of 5.5, indicating low anxiety. Caregivers served by USC reported moderate levels of social support (mean score of 17.2) using the LSNS-6. Based on the scores assessed using the Zarit Burden Interview, caregivers reported little burden with regard to the impact of the dementia patient's disabilities on the caregiver's life (mean score of 8.2). They also showed little propensity for developing a potential dependency on alcohol, given the mean CAGE substance abuse screening tool score of 1.0.

6. What is the Frequency of Abuse Types, by Site?[12]

Self-neglect was the most common type of abuse and co-occurred with all forms of abuse. The frequency of abuse types for each prevention intervention is presented in **Table 8**. Three of the four prevention interventions for which data were applicable reported high rates of elder self-neglect.[13] For the UTHSC prevention intervention, 86 percent (85.7 percent) of elders were substantiated by APS for self-neglect and about 4 percent were substantiated for medical self-neglect. Fifty-five percent of elders served by TX/WellMed were also identified for self-neglect. Forty-six percent of the cases served by AK DSDS involved self-neglecting elders. Across all four prevention interventions, a substantial proportion of cases involved co-occurring forms of abuse. Self-neglect co-occurred with all forms of abuse.

TABLE 8. Distribution of Abuse Types/Allegations, by Site

Type of Abuse	UTHSC (N=28)		AK DSDS (N=63)		NYSOFA (N=182)		TX/WellMed (N-310)	
	N	%	N	%	N	%	N	%
Physical	0	0	1	1.6	2	1.1	5	1.6
Psychological	0	0	2	3.2	1	0.5	5	1.6
Sexual	0	0	1	1.6	0	0	1	0.3
Financial exploitation	0	0	2	3.2	99	54.4	2	0.6
Neglect	0	0	2	3.2	0	0	5	1.6
Self-neglect	24	85.7	29	46.0	1	0.5	169	54.5
Medical self-neglect	1	3.6	0	0	0	0	0	0
Co-occurring	3	10.7	26	41.3	79	43.4	123	30.9

Financial exploitation co-occurred with other forms of abuse. More than half of the elders served through NYSOFA's E-MDTs had experienced financial exploitation; this was the specific focus of their intervention. However, financial exploitation was

[12] For data presented on type of abuse/allegation, we only included those individuals for whom information was available. For this reason, the sample size decreases for many of the interventions in Table 7 and Table 8. As discussed earlier, three of the interventions (AK DSDS, NYSOFA and TX/WellMed) focused on at-risk elders and victims. While elders may be identified as at-risk, we do not always know the particular type(s) of abuse for which they are identified, only that they are vulnerable. In the case of AK DSDS, we have included only those participants whose alleged abuse has been substantiated in our calculations. For NYSOFA, data on type of abuse were available for 182 cases. For TX/WellMed, data on allegations were provided by TX DFPS.

[13] USC focused on care recipients, not victims. For this reason, data on types of abuse do not apply to USC's intervention.

identified as a concern with other interventions and populations. A very small percentage of elders served for the AK DSDS and TX/WellMed prevention interventions experienced financial exploitation (3.2 percent and 0.6 percent, respectively).

7. What is the Frequency of Single, versus Multiple Types of Abuse, by Site?[14]

Many elders served by the preventions interventions experienced more than one type of abuse. As shown in Table 9, across the four prevention interventions that were serving elders who were substantiated victims or at-risk of elder abuse, more than half of them had experienced one form of abuse. This percentage ranged from 89 percent for UTHSC to 57 percent for NYSOFA. Yet many elders experienced more than one type of abuse. Twenty-five percent of the elders served by AK DSDS and TX/WellMed experienced two forms of abuse (25.4 percent and 25.8 percent, respectively), as did 15 percent of elders served by NYSOFA. More than 25 percent of the elders served by NYSOFA experienced 3-5 types of abuse, as did 15 percent of elders served by AK DSDS and almost 14 percent by TX/WellMed.

TABLE 9. Number of Abuse Types/Allegations, by Site

Number of Abuse Types	UTHSC (N=28)		AK DSDS (N=63)		NYSOFA (N=182)		TX/WellMed (N-310)	
	N	%	N	%	N	%	N	%
1	25	89.3	37	58.7	103	56.6	187	60.3
2	3	10.7	16	25.4	28	15.4	80	25.8
3	0	0	4	6.3	18	9.9	27	8.7
4	0	0	4	6.3	4	2.2	9	2.9
5	0	0	2	3.2	24	13.2	6	1.9
6	0	0	0	0	5	2.7	0	0
7	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	1	0.3

B. Service Referral and Utilization

In addition to data elements used to create the risk factor profiles, grantees collected information on the referral source and service utilization for elder victims and care recipients. The nature of risk for abuse, elder characteristics, and the types of services referred and received may play important roles in achieving outcomes for each of the respective interventions.

As part of their prevention interventions, grantees tracked and documented the service referrals and in some cases, services provided. Using data from the grantees, we describe the types of services for which elders were referred and their average duration. Based on this information, we present the type and mix of services and the length of the intervention in a series of tables below. We point out, however, that some

[14] Given the heterogeneity of the data and limited sample sizes, we were not able to conduct subgroup analyses that would have tested for differences in the type of abuse by demographic characteristics, psychological and physical health conditions, and degree of social support.

grantees played direct roles in service delivery (UTHSC, AK DSDS, USC) while others acted as coordinators for treatment or services (TX/WellMed, NYSOFA).

1. What are the Types and Frequencies of Services that are Referred to/Received by Participants?

Below we describe the types of service referrals made on behalf of elder served by the prevention interventions. They are presented according to their status as substantiated abuse victims (UTHSC), at-risk elders or know abuse (NYSOFA, TX/WellMed) and care recipient/caregiver dyads (USC).

Many self-neglecting elders served by UTHSC were in need of social work services. Through UTHSC's medication adherence intervention, all elders with APS substantiated self-neglect received social support, education and medication management during monthly, one-hour home visits. These check-ins also revealed areas where additional supports were needed and where UTHSC staff made referrals for services. As shown in **Table 10a** below, 60 percent of the elders were referred to social work services. About 25 percent were referred to provider services or skilled nursing and 14 percent were in need of medication. Referrals were made for utility payments, rental assistance, and home repairs.

TABLE 10a. Service Referral and Utilization, UTHSC

Type of Service Received	Victims (N=28)	
	N (times services were delivered)	%
Home visits	580	100
Phone calls	2,353	100
Pill counts	302	100
Education	139	100
Type of Service Referred	**N**	**%**
Social work services	17	60.7
Medication	4	14.3
Utilities	5	17.9
Rent	1	3.6
Provider services/Skilled nursing	7	25.0
Home repair	1	3.6

NOTE: Only individuals who completed the intervention were included here. Individuals can fit into more than one category.

Elders participating in the AK DSDS's prevention intervention had multiple service needs. All participating elders received frequent home visits and phone calls during the first three months of the intervention. **Table 10b** below presents common areas of assistance provided to participants. This included education and advocacy relating to housing, income and benefits, systems navigation, transportation and basic needs. Information on the specific number of individuals who received these services, however, is not available.

TABLE 10b. Service Referral and Utilization, AK DSDS		
Type of Service Received	**At-risk Elders/Victims (N=88)**	
	N	**%**
Home visits		100
Phone calls		100
Education/Assistance/Advocacy		NA
Housing		
Income and benefits advocacy and support		
Systems navigation and service access		
Transportation		
Basic needs (food, rent and utility assistance)		
NA refers to not available.		

Financial and legal interventions were the most common service needs of the elders served by NYSOFA's E-MDTs. For elders who were the victims of financial exploitation, the most common type of referral was financially-related (30 percent), such as requesting a bank hold or freezing accounts, cancelling credit or debit cards, contacting fraud alert departments, etc. As shown in **Table 10c**, this was followed by referrals for legal assistance or criminal justice intervention (22 percent), social or protective services (14 percent), and efforts to involve law enforcement (11 percent). Across the cases served, there were more than 200 referrals for professional services, of which 13 percent were for analysis by a forensic accountant and referrals for mental health evaluations (12 percent) or follow-up services with a mental health provider (4 percent).

TABLE 10c. Service Referral and Utilization, NYSOFA		
Type of Service Referred	**At-risk Elders/Victims (N=224)**	
	N	**%**
Financial	403	29.9
Home safety	17	1.2
Law enforcement	144	10.7
Legal/Criminal justice	291	21.6
Living arrangement/Housing	57	4.2
Medical/Physical	113	8.4
Mental health and cognitive issues	102	7.6
Social services/Protective services	187	13.9
Social support/Integration/Network	15	1.1
Perpetrator interventions	13	1.0
Victim-perpetrator relationship	0	0
Other	3	0.2
Type of Professional Referrals	**N**	**%**
Forensic accountant assistance		
Analysis	29	12.9
Obtaining documents	0	0
Other	1	0.4
Geropsychiatric assistance		
Refer for mental health evaluation	27	12.1
Follow-up with mental health professional	8	3.6

Most elders served by TX/WellMed were not at-risk of abuse, but some needed assistance from APS. As part of their prevention intervention, TX/WellMed incorporated use of the EASI screening tool into the electronic health record in primary care settings. Using a "stoplight" approach to identify risk, elders received services according to the level of perceived risk (low/green, medium/yellow, high/red). **Table 10d** indicates that the vast majority of elders screened fell into the low-risk range (98.6 percent) and received patient education materials only. However, a fraction of all elders screened--less than 1 percent--were identified as high-risk and referred to both the Complex Care worker and to APS. These referrals sparked a number of actions by APS, commonly for counseling and education, referrals to targeted services, and to a lesser extent, mediation or to purchase services on behalf of the client such as Meals on Wheels. In some cases, no action was taken.

TABLE 10d. Service Referral and Utilization, TX/WellMed		
Type of Service Received	**N**	**%**
WellMed patients		
Green rating on EASI tool	11,266	98.6
(1) Provision of patient education materials related to the prevention of elder abuse (green rating on EASI)		
Yellow rating on EASI tool		
(1) Provision of patient education materials related to the prevention of elder abuse (2) Referral to Complex Care (yellow rating on EASI)	125	1.1
Red rating on EASI tool		
(1) Provision of patient education materials related to the prevention of elder abuse (2) Referral to Complex Care (3) Referral to APS	35	0.3
APS Referred/Received	**N (times services referred/received)**	**%**
Counseling/Education	417	
Referral	182	
Purchase client services	45	
Mediation	69	
County services	1	
No action	58	
State: DADS	6	
Assistance/Documentation assistance	27	
Benefits	2	

The main service needs of care recipient/caregiver dyads were for in-home care as well as financial and legal assistance. USC's prevention intervention focused on 76 dyads in which one member had dementia. Risks assessments prompted linking one or both persons to community-based services to address identified needs. As shown in **Table 10e**, the need for an in-home caregiver was identified for 27 percent of the care recipients and 47 percent of the caregivers. Referrals for legal advice/assistance (24 percent and 25 percent) and financial planning or assistance were common (19 percent and 29 percent) across care recipients and caregivers, respectively. Additionally, 17 percent of care recipients and 41 percent of the care recipients were referred to a memory loss support group. Referrals for various forms of psychiatric intervention and care were made for both care recipients and caregivers

(between 10-12 percent of care recipients and 3-9 percent of caregivers). Twenty percent of caregivers were referred to respite care.

TABLE 10e. Service Referral and Utilization, USC						
Type of Service Referred to Dyad	**Care Recipient (N=76)**		**Caregiver (N=76)**			
	N	**%**	**N**	**%**	**N**	**%**
Memory loss support group	10	17.2	31	41.3		
Memory loss education program	8	13.6	20	26.7		
In-home caregiver	16	27.1	35	46.6		
Individual psychotherapy	7	12.1	5	6.7		
Conjoint psychotherapy	6	10.3	2	2.7		
Psychiatric care (for the caregiver)	6	10.2	7	9.3		
Legal advice/assistance (related to caregiving role)	14	24.1	19	25.3		
Financial planning/assistance (related to caregiving role)	11	19.3	22	29.3		
Respite Care	---	---	15	20.0		
Type of Service			**Service Provided**		**Service Completed**	
			N	**%**	**N**	**%**
Caregiver resource center			35	53.8	3	8.6
Savvy caregiver course			25	38.5	0	0
In-home caregiver agency			20	30.8	1	5.0
Support groups			23	35.4	0	0
Legal aid services			57	87.7	17	29.8
Geropsychiatry			14	21.5	1	7.1
Family counseling			23	35.4	1	4.3
Individual counseling			19	29.2	1	5.3
Friendly visitor program			58	89.2	8	13.8
Adult day care			24	36.9	2	8.3

For the caregiver, USC tracked they type of service referral, whether it was actually provided, and if the caregiver completed or followed through with the activity. Nearly 90 percent of caregivers were referred to the *Friendly Visitor* program and Legal Aid services. Of the caregivers referred to the *Friendly Visitor* program, about 14 percent availed themselves of this service. Of the caregivers referred to legal aid services, about 30 percent followed through with this activity. While more than 50 percent of care recipients were referred to the *Caregiver Resource Center*, only 9 percent of the caregivers followed through with the service. Additionally, at least one-third of the caregivers were referred to the *Savvy Caregiver* course, adult day care, support groups, and family counseling. Yet, there was little uptake for these services on the part of the caregivers (0 percent, 8.3 percent, 0 percent, and 4.3 percent, respectively).

2. What is the Duration of the Intervention? What Percentage of Participants Completed the Intervention Protocol? What Percentage of Participants Partially Completed all the Intervention Components (but did not drop out)? What is the Percentage of Participant Attrition?

The duration of the five prevention interventions depended on the type of victimization or risk addressed (e.g., substantiated, at-risk) and/or the nature of the treatment or intervention protocol.[15]

[15] Across the five grantees, information on the duration of the intervention was not available for all cases served, thus these findings represent a sub-sample of elders served.

Prevention interventions were conducted within the time period designated by the protocol. As presented in **Table 11**, three of the prevention interventions had a defined period of service delivery associated with an evidence-based (AK DSDS) or theory-informed intervention (UTHSC, USC). Across these prevention interventions, on average, services were completed within the time period designated by the protocol. Based on the case start and closure dates, the mean amount of time for full completion of AK DSDS's *CTI* was 9.6 months. Among the elders that only partially completed the intervention, the mean was 4.2 months. For the elders taking part in UTHSC's medication adherence intervention, the mean amount of time was 6.4 months to complete the treatment protocol. For all of the care recipients and caregivers that participated in USC's *Take AIM* intervention, the duration for each dyad was 3.0 months.

TABLE 11. Characteristics of Elder Abuse Prevention Intervention Protocols, by Site

Intervention Characteristics	Victims		At-risk Elders/Victims						Care Recipients		Caregivers	
	UTHSC		AK DSDS		NYSOFA		TX/WellMed		USC			
	N	Mean	N	Mean	N	Mean	N	Mean	N	Mean	N	Mean
Duration	23		88		103				76		76	
Duration of treatment (months) for full completion	20	6.4	54	9.6	77	9.1	---	---	56	3.0	58	3.0
Duration of treatment (months) for partial completion	3	4.0	33	4.2			---	---				
	N	%	N	%	N	%	N	%	N	%	N	%
Case Duration							296					
0-30 days							53	17.9				
31-60 days							64	21.6				
61-90 days							56	18.9				
91-120 days							45	15.2				
121-150 days							23	7.8				
151-180 days							28	9.5				
Over 180 days							27	9.1				
Protocol completion	34		87		222		---		76		76	
Full	20	58.7	54	62.1	103	46.4		---		73.7		73.7
Partial/Dropped	14	41.2	33	37.9	119	53.6		---		26.3		26.3

For prevention interventions where APS was a service partner, case duration ranged from three months to nine months. Two prevention interventions followed APS practices. The same period of service delivery was not predetermined for all participants. Investigations were handled on a case-by-case basis and were open-ended in duration, resulting in case closure once the desired outcome was achieved (NYSOFA, TX/WellMed). The mean amount of time for the NYSOFA E-MDTs to resolve an elder's case of financial exploitation was 9.1 months, from the point of intake to the date that the case was considered inactive *and* an outcome achieved. There was considerable variability in case duration for elders served by TX/WellMed. Of the 296 WellMed patients who were served by APS for whom data are available, the majority of cases (58.4 percent) were handled within 90 days. Almost 20 percent of cases took over 151 days to address.

Between 50-75 percent of elders completed the intervention protocol or had their case resolved for four of the prevention interventions. Nearly 60 percent of the elders participating in UTHSC's medication adherence intervention, completed the full protocol

and 40 percent partially completed it or dropped out. A similar percentage of elders (62 percent) completed the *CTI* protocol with AK DSDS. However, about 38 percent either partially completed or did not complete the protocol (due to inability to locate, death, moving out of the service area, or that it was unsafe for the case manager to continue the services). About 46 percent of the elders served by NYSOFA's E-MDTs are counted as having completed the protocol, given that their cases were closed. About 54 percent of the financial exploitation cases were still pending (at the time the dataset was obtained). For the care recipient/caregiver dyads served by USC, 74 percent full completed the protocol and 26 percent only partially completed.

C. Outcomes Achieved

We attempted to identify outcomes that were relevant across five grantees, taking into consideration the variety of prevention interventions implemented and the specific nature of elder abuse involved. To this end, we were able to examine intervention-specific outcomes and changes in key characteristics of elders. Findings are presented in **Table 12** below. We examined whether cases had been referred to APS once the intervention had been completed (i.e., recidivism for those with prior APS histories) for a subset of elders served by AK DSDS and UTHSC.[16] For NYSOFA, we examined outcomes achieved regarding financial exploitation. For TX/WellMed, APS data collected on reasons for case closure are presented. Changes measured in elders' state of vulnerability, characteristics or circumstances varied across the grantees. As the type of change was intervention-specific, the measures and quantity of data available also varied.

1. What were the Outcomes of the Elders' Participation in the Intervention?

About half of the elders served by UTHSC and AK DSDS prevention's intervention did not have a re-referral to APS. Almost one-half of the elders participating in UTHSC's medication adherence intervention did not have a subsequent referral to APS once the treatment protocol was completed, meaning that the elders were not reported for self-neglect or another form of abuse. However, about one-third of the elders did have a subsequent referral to APS and 14 percent had two referrals.[17] For the elders served by AK DSDS for whom data are available, 90 percent did not have a subsequent referral to APS. Only 6 percent were referred to APS within three months of the intervention and 3 percent were referred with six months.

[16] The timeframe captured by grantees on this measure varied. For AK DSDS, data on APS referral was collected at three months and six months following the termination of interventions for these projects. Collecting information at these two time points helps to understand whether the interventions' effects are sustainable beyond the end of the formal intervention period. For UTHSC, 32.4 percent of victims were referred subsequently to APS. Their re-referrals spanned anywhere between one month post-intervention to one year post-intervention. Additionally, 14.3 percent of victims were re-referred to APS after their first re-referral. The second subsequent referral spanned 1-14 months from the first subsequent referral.

[17] The reason for the re-referral was not provided.

TABLE 12. Description of Key Outcomes, by Site								
Outcome	UTHSC (N=28)		AK DSDS (N=63)		NYSOFA (N=103)		TX/WellMed (N=296)	
	N	%	N	%	N	%	N	%
APS Referral	28		63		---		---	
3 months post-intervention	---	---		6.3		---		---
6 months post-intervention	---	---		3.2		---		---
1 subsequent referral	9	32.1		---		---		---
2 subsequent referrals	4	14.3		---		---		---
Financial Exploitation	---		---		103*		---	
Reduction in exploitation of assets		---		---	65	81.5		---
End to exploitation of assets		---		---	58	68.9		---
Funds spent on appropriate care		---		---	49	83.7		---
Value of assets protected		---		---	48			---
Value protected		---		---		50.0		---
Value protected pending		---		---		50.0		---
Restitution of assets		---		---	7			---
Assets restored		---		---		71.4		---
Asset restitution pending		---		---		28.6		---
Recovery of assets		---		---	9			---
Assets recovered		---		---		44.4		---
Asset recovery pending		---		---		55.6		---
APS Investigation Closure Reason							296	
Valid, continue as APS	---	---	---	---	---	---	141	47.6
Resolved during investigation with service	---	---	---	---	---	---	19	6.4
Progress to ICS	---	---	---	---	---	---	20	6.8
Progress to maintenance	---	---	---	---	---	---	4	1.4
No services required	---	---	---	---	---	---	30	10.1
Services needed, but not available	---	---	---	---	---	---	1	0.3
Client refused services	---	---	---	---	---	---	2	0.7
Client died	---	---	---	---	---	---	11	3.7
Moved/Unable to locate	---	---	---	---	---	---	3	1.0
Unable to determine	---	---	---	---	---	---	9	3.0
Invalid	---	---	---	---	---	---	56	18.9
*N excludes data that were missing, unknown, cases that are not applicable or were classified as other.								

Intervention by NYSOFA's E-MDTs stopped financial exploitation of elder assets. Outcomes for a subset of elders served by NYSOFA Lifespan and NYCEAC included a reduction in the exploitation of assets (81.5 percent), an end to the exploitation of assets (68.9 percent), and having funds spent on appropriate care (83.7 percent). A subset of elders had their assets protected (50 percent) or their assets restored (71.4 percent). For others, protection or restitution of assets was pending.

Despite screening and identification of the majority of elders as at a low-risk of abuse, there were cases brought to the attention of APS by TX/WellMed. About 19 percent of cases of suspected elder abuse of WellMed patients that were referred to APS for service were closed for being invalid, meaning that there was no indication that the alleged victim was in a state of abuse, neglect, or financial exploitation following a thorough investigation. Six percent of cases were noted as resolved during an investigation with services provided. Yet almost 50 percent of the cases brought to the attention of APS were identified as valid and progressed to the stage of being an active case with services provided. Another 6 percent of cases were flagged as in need of intensive services, as elders were identified as being at moderate to high-risk of recidivism and in need of services to remedy the root cause of the abuse, neglect, or financial exploitation. Ten percent were closed as no services were required. However,

in these cases the alleged victim was experiencing some form of mistreatment, but APS intervention was not necessary to resolve the problem.

2. Did Participants' Level of Social Support Increase Over the Course of the Intervention? Did Participants become more Independent/less Dependent on Others over the Course of the Intervention? Did Participants' Sense of Safety Increase over the Course of the Intervention? Were there Changes in Caregiver Behaviors over the Course of the Intervention?

As shown in **Tables 13a-13d**, elders' were assessed on a variety of measures to determine changes in well-being, degree of risk and social support, etc. that may be attributed to the prevention intervention.

The moderate level of social support and physical functioning reported for elders served by UTHSC at baseline remained stable following the intervention. For elders served by the UTHSC, the mean baseline score on physical functioning (as measured by the SF-36 Health Survey) was 17.1, suggesting moderate functioning. The score increased slightly by the end of the intervention to 19.3, but regressed at three months and six months post-intervention. Social support was measured using the DSSI and assessed the social network of the elderly and the support provided by that network. Baseline scores indicate a moderate level of support with a mean score of 24.3 with a slight increase by the end of the intervention (25.7). This level of social support was sustained following the intervention (24.0 at three months and 24.5 at six months).

TABLE 13a. Change in Key Characteristics among Participants, UTHSC

	Baseline		End of Intervention		3 Months Post-Intervention		6 Months Post-Intervention	
	N	Mean	N	Mean	N	Mean	N	Mean
Physical Function (10-30)	30	17.1	19	19.3	13	18.8	10	16.8
Social Support--DSSI (11-33)	31	24.3	20	25.7	13	24.0	15	24.5

While elders served by AK DSDS reported less vulnerability following the intervention, they may have been susceptible to harm by others. Using the VASS screening tool, AK DSDS assessed the vulnerability, dependence, sense of dejection, and degree of coercion experienced by the elders participating in the *CTI* at multiple points in time. As shown in **Table 13b**, at baseline, over one-quarter (28.8 percent) of elders reported that someone close to them had not treated them well (i.e., put them down, called them names, made to feel bad). By the end of the intervention, this had decreased to about 3.5 percent. However, six months post-intervention, for elders contacted, the percentage increased to 9 percent, suggesting the need for follow-up assistance. A similar pattern was found with respect to risk of harm, with nearly one-quarter (23.8 percent) of elders at baseline indicating that someone close to them had tried to hurt or harm them. This decreased to about 7 percent at the end of the intervention, and then increased to about 18 percent post-intervention, indicating that elders may have been at imminent risk.

TABLE 13b. Change in Key Characteristics among Participants, AK DSDS								
	Baseline		End of Intervention		3 Months Post-Intervention		6 Months Post-Intervention	
	N	%	N	%	N	%	N	%
VASS	80		39		34		12	
Vulnerability								
(1) Are you afraid of anyone in your family?		8.8		3.5		6.1		9.1
(2) Has anyone close to you tried to hurt you or harm you recently?		23.8		6.9		6.1		18.2
(3) Has anyone close to you called you names or put you down or made you feel bad recently?		28.8		3.5		6.1		9.1
Dependence								
(4) Do you have enough privacy at home?		76.3		79.3		84.9		81.8
(5) Do you trust most of the people in your family?		83.4		100		93.9		54.6
(6) Can you take your own medication and get around by yourself?		80.8		75.9		81.8		45.5
Dejection								
(7) Are you sad or lonely often?		31.7		22.2		19.5		36.4
(8) Do you feel that nobody wants you around?		15.0		10.3		9.7		9.1
(9) Do you feel uncomfortable with anyone in your family?		23.1		11.1		6.9		10.0
Coercion								
(10) Does someone in your family make you stay in bed or tell you you're sick when you know you're not?		1.3		0		3.2		10.0
(11) Has anyone forced you to do things you didn't want to do?		16.3		10.3		3.1		18.2
(12) Has anyone taken things that belong to you without your OK?		31.7		10.3		12.5		27.3
Social support								
Professional network	---		37		31		13	
Yes		---		70.2		61.3		84.6
Somewhat		---		8.1		12.9		7.7
No		---		21.6		25.8		7.7
Family/Friend network	---		33		26		11	
Yes		---		72.7		69.2		90.9
Somewhat		---		12.1		7.7		0
No		---		15.1		23.1		9.1

On measures of dependence, elders reported that they had sufficient privacy at home both at baseline and at the end of the intervention. This remained fairly stable at three and six months post-intervention. Elders' sense of trust increased during the intervention from 83 percent to 100 percent, but diminished considerably six months later to 55 percent. They also were less able to take their medication and get around independently six months later. While elders were less likely to feel dejected over time, feelings of sadness of loneliness did not change. Concerning trends were evident regarding measures of coercion over time, as they either increased or stayed the same. Yet, the majority of elders reported having social support increase over time from both professional networks and among their family and friends.

High risk of financial exploitation decreased for a subset of elders served by one of NYSOFA's E-MDTs. The level of risk of financial exploitation at baseline was deemed "high" for a subset of elders (80.3 percent) served by NYSOFA's E-MDT operating in the Finger Lakes Region. As shown in **Table 13c**, by the end of the intervention, this perception had decreased to 11 percent, and about 72 percent of elder

were at low-risk.[18] It should be noted, however, that a response of "No Risk" was not an option at the end of the intervention, only during intake.

TABLE 13c. Change in Key Characteristics among Participants, NYSOFA (Lifespan)				
	Baseline		End of Intervention	
	N	%	N	%
Risk of Financial Exploitation	117		46	
No Risk		1.7		NA
Low		1.7		71.7
Medium		16.2		17.4
High		80.3		10.9

Care recipients' sense of vulnerability and coercion fluctuated over the course of the USC intervention. As shown in **Table 13d**, a subset of care recipients served by USC's *Take AIM* project were also assessed using the VASS screening tool. Over the course of the intervention, care recipients reported that someone close to them had not treated them well (i.e., put them down, called them names, made to feel bad), changing slightly from 12 percent to 18 percent. Levels of trust with family members remained stable over time (91.5 percent to 91.3 percent). Yet elders reported feelings of dejection increased from baseline to the end of the intervention. While there was little change in the degree of coercion experienced overall, elders reported being forced to do things they did not want to do (increasing from 11.8 percent to 15.6 percent).

Care recipients' level of dependency did not change appreciably, although more needed assistance with taking medication. Dependence remained essentially the same over three months. The physical functioning of the care recipients that participated in USC's *Take AIM* was assessed through the ADLs measure. ADL functions are essential for meeting basic needs (e.g., dressing and feeding oneself). The care recipient's ADL score was reported by the caregiver. The measure indicates whether the care recipient can perform an activity independent of the caregiver or whether s/he is dependent on the caregiver. At baseline the mean score was 3.5. Although it decreased slightly at the end of the intervention period to a mean of 3.2, the scores reflect a moderate level of functioning with some minimal loss of the ability to care for oneself.

Physical function of the care recipient was also measured by the IADL scale. This was reported by the caregiver. IADL functions are more concerned with independent living skills rather than basic ADLs. This includes the ability to use the telephone, shop, prepare food, do housekeeping, take medications, and handle finances. At baseline and at the end of the intervention, about 92 percent of care recipients were assessed as dependent.

[18] The E-MDT operating in Manhattan did not assess level of risk.

TABLE 13d. Change in Key Characteristics among Participants, USC								
	Care Recipients				Caregivers			
	Baseline		End of Intervention		Baseline		End of Intervention	
	N	%	N	%	N	%	N	%
VASS								
Vulnerability	76		46		---			
(1) Are you afraid of anyone in your family?	6	8.8	4	8.9	---	---	---	---
(2) Has anyone close to you tried to hurt you or harm you recently?	1	1.5	1	2.2	---	---	---	---
(3) Has anyone close to you called you names or put you down or made you feel bad recently?	8	11.8	8	18.2	---	---	---	---
Dependence								
(4) Do you have enough privacy at home?	66	94.3	45	95.7	---	---	---	---
(5) Do you trust most of the people in your family?	65	91.5	42	91.3	---	---	---	---
(6) Can you take your own medication and get around by yourself?	57	83.8	30	66.7	---	---	---	---
Dejection								
(7) Are you sad or lonely often?	7	9.9	7	15.2	---	---	---	---
(8) Do you feel that nobody wants you around?	2	2.9	5	11.4	---	---	---	---
(9) Do you feel uncomfortable with anyone in your family?	18	26.1	10	22.2	---	---	---	---
Coercion								
(10) Does someone in your family make you stay in bed or tell you you're sick when you know you're not?	3	4.5	2	4.4	---	---	---	---
(11) Has anyone forced you to do things you didn't want to do?	8	11.8	7	15.6	---	---	---	---
(12) Has anyone taken things that belong to you without your OK?	8	11.8	4	9.1	---	---	---	---
	N	Mean	N	Mean	N	Mean	N	Mean
IADLs	74		55		---		---	
Independent (8-10)		1.3		0				
Moderate (11-16)		6.8		7.3				
Dependent (17-31)		91.9		92.7				
ADLs	75	3.5	55	3.2	---	---	---	---
Social Support (LSNS-6)	62	14.3	40	14.5	75	17.2	55	17.7

The degree of social support remained constant for care recipients and caregivers served by USC. Social support, as measured by the LSNS-R, assesses the frequency of contact and quality of contact that one has with family and friends and the extent to which one could confide in or ask them for assistance. Care recipients served by USC reported a moderate level of social support at baseline, with a mean score of 14.3. By the end of the intervention, this had remained virtually the same, with a mean score of 14.5. A similar shift from baseline to the end of intervention was found for the caregivers, with a slight increase in the mean score from 17.2 to 17.5.

D. Replication and Lessons Learned

Potential for Replication

Overall, key stakeholders found that the prevention interventions they had implemented could be replicated in other locales under similar conditions. Lessons

learned also pointed to some modifications that would be helpful for future implementation.

For AK DSDS's implementation of the *CTI*, key informants indicated that the intervention could be easily replicated with similar populations or in other communities where there is easy access to community resources. No single feature was highlighted as being more amenable to replication than others. As the intervention relies on existing service infrastructure, implementing the program in geographically dispersed communities with few services would be difficult.

Stakeholders noted that with established knowledge of the community resources and their accessibility, USC's *Take AIM* program could be replicated and adapted to other communities. Most amenable to replication is the targeted, multi-disciplinary approach to identifying risk factors and appropriate resources for the care recipient/caregiver dyad. Team members come from a variety of backgrounds, both medical and social, and contribute to this multi-pronged approach.

UTHSC stakeholders reported that the medication adherence prevention intervention could be replicated with similar populations in other states. Features of the prevention intervention that are well-suited to replication are the educational component to increase health literacy, weekly personal contact and check-ins, and the use of environmental cues. The intervention requires a registered nurse and research staff with pharmacy and geriatrics background, and a geriatrician to conduct the medication reconciliation.

Stakeholders thought that it was very realistic to replicate the E-MDT in other jurisdictions and with similar population of vulnerable elders, although adjustments would be needed depending on the context of implementation. Based on the Lifespan and NYCEAC's experience, stakeholders identified some prerequisites or key ingredients for implementing an E-MDT. The convening organization must have a good relationship with the community in order to build and sustain the team. Key personnel that are necessary for implementation include a forensic accountant and geriatrician for consultation, plus an E-MDT coordinator with knowledge of financial exploitation and ability to work with professionals across systems (i.e., legal, social services, financial services and banking industry). From a legal perspective, there may be some restrictions on confidentiality and the use of power of attorney. The E-MDT might need adjustment to align with the legal framework in a different jurisdiction, as well as the service delivery system in the community.

TX/WellMed stakeholders indicated that the intervention could be replicated, either as a whole or each component separately although certain components may be replicated more easily than others. Many felt the EASI tool was the easiest to replicate given its ready availability. Replicating the role of an APS specialist embedded in other organizational entities, such as a clinical setting or hospital, to facilitate risk assessments, provide educational training, and coordinate care may be challenging, and would require establishing expectations and protocols. It was noted that the

intervention is well-suited to implementation in a state-administered APS system and perhaps less conducive to county-administered systems.

Across the prevention interventions, having an adequate array of aging and elder services and relationships with community-based providers to facilitate recruitment and referrals would be necessary contextual components. Having an outreach component with community organizations or service networks is necessary to establish referrals, both for enrollment and services. Resource- or program-rich communities have an array of services and supports to offer at-risk elders and victims, making it easier to make connections to address abuse, neglect and exploitation and to meet co-occurring needs. Jurisdictions that lack resources may need to seek partnerships with the public and private sector in order to bolster its service array.

E. Lessons Learned

1. Implications for the Elder Abuse Field

Lessons learned from the prevention interventions focused mainly on how one approaches working and conducting research with vulnerable elders while addressing risks of abuse, co-occurring needs, and co-morbid conditions. Additional lessons learned stemmed from forming partnerships across systems and working together to meet elders' needs.

Working with Vulnerable Elders

UTHSC noted that developing a helping relationship with vulnerable elders and becoming a needed, dependable presence in their lives was a "huge responsibility." Implementing the prevention intervention required compassion, patience, and professionalism, and constant mindfulness of ethical practice and research. Balancing elder autonomy and safety was an ever-present concern. Rapport building, empathy, commitment, and gentle persistence were essential. AK DSDS found that it is important to adjust to seniors' needs and timeline and support their decisions when they are ready, particularly as habits have been strongly formed over a lifetime.

AK DSDS found that the *CTI* appeared to benefit some types of elders and forms of abuse more so than others. More progress was seen with cases of self-neglect and those cases that had not risen to the level of needed protective services. The *CTI* appeared to be less successful for elders experiencing significant mental health issues, dementia, substance abuse issues, ongoing physical abuse, sexual abuse, and domestic violence. Cases with public guardians who had conflicting goals with their wards or where the abusing caregiver remained in the home also tended to be less successful.

TX/WellMed echoed these concerns, noting that the prevention intervention addressed not only elder abuse, neglect, and exploitation but other issues facing elders,

including poverty. As they learned, no one agency can address the issue of elder abuse alone: health and human services need to work together to meet the needs of vulnerable elders.

Working Across Organizations

As USC found, pre-existing and positive working relationships with community members provided a foundation to implement the prevention intervention and access available resources. Starting up a new prevention intervention requires understanding of roles and recognizing limits. NYSOFA found that designing and implementing the E-MDTs required a culture change in the way that professionals worked together across systems, requiring some education across these parties. In a similar fashion, TX/WellMed recognized the importance of having the support of all partners involved in the prevention intervention, regular communication, clear expectations and understanding of roles, and check points to ensure expectations are being met.

2. Implications for Research and Evaluation

Lessons learned from conducting the evaluation center on establishing the preconditions that would facilitate external evaluation and reduce burden on grantees. It would be helpful to include all data requirements in the Funding Opportunity Announcement (FOA), to the extent possible. While the FOA for this effort indicated that the collection of a set of core data elements would be required by all grantees, the evaluation team was tasked with identifying the specifics of those data elements during the first year of the grant. Understanding the data requirements prior to application may help ensure that grantees are aware of and can address any capacity issues that the requirements involve. Some grantees lacked the infrastructure to collect and track data, leading to delays in intervention start-up. Others began with a mix of paper-based data collection before transitioning into electronic records or databases. With the completion of this study, a refined set of data elements can be included in any future FOA to facilitate grantee planning. (See Appendix A for the data elements used.)

At the same time, an important task will be to reassess and reduce the number of core data elements for collection. Given the complexity of interventions and the multiple partners involved, data collection becomes a challenging task for not only grantees but participants themselves. Reducing the number of data elements to the most promising risk factors for further study would ease the burden of this component of the intervention. Identification of those essential measures can be facilitated by a close investigation of each individual intervention's outcomes (while each grantee collected data that are relevant to their intervention, only a subset of which is examined here). To determine the feasibility of conducting an external evaluation, future studies should require evaluability assessment as a standard procedure to assess the ability of grantees to provide needed data to address multiple domains of interest (e.g., APS involvement, health, well-being).

While certain aspects of data collection may warrant trimming, others are worth expanding. Data collection on a comparison or control group is critical to assess the associations between putative risk factors and elder abuse. In addition, requiring a common measure of risk of abuse for all grantees offers the opportunity to uniformly assess change in risk of abuse across interventions.

Cost-effectiveness studies would also be helpful to establish how addressing the risk of abuse, neglect, and exploitation for older adults proactively through prevention interventions may result in savings for social service and health care spending. A cost study was not conducted for this evaluation, although an original intent of the project was to set the stage for a future analysis of post-intervention health and well-being as well as health care utilization costs using administrative claims data from Medicaid and Medicare. While the FOA for the grantees' prevention intervention called for each project to be cost-effective and programmatically efficient, cost-effectiveness analyses were not required.[19] According to Neta et al. (2015), "Information on the costs and resources required to deliver an intervention are essential" in implementation research, both to determine cost-effectiveness and return on investment and to inform decisions by policy-makers and program adopters about promising strategies to adopt in the field.

[19] HHS Administration on Aging. PPHF--2012--*Elder Abuse Prevention Interventions Program*. Program Announcement and Grant Application Instructions, FY 2012.

CONCLUSIONS

This report presents the key findings of the process evaluation of the five state Elder Abuse Prevention Intervention demonstrations that tested interventions designed to prevent elder abuse, neglect, and exploitation, as authorized by the Elder Justice Act. The purpose of the evaluation was to study the development and implementation of the state grantees' elder abuse interventions and report findings on the characteristics of victims and perpetrators of elder abuse or those at-risk, the use of prevention services, and outcomes.

Given the complex and multi-dimensional nature of elder abuse, as well as different underlying theories guiding elder abuse subtypes, each of the five grantees developed a variety of multi-component and/or multi-disciplinary prevention interventions that addressed victims, elders at-risk, as well as care recipients and caregivers.

- **AK DSDS**, through the APS Unit and in partnership with the Anchorage Police Department and other community partners implemented, tested and measured the performance of the *CTI* case management model to prevent elder abuse, neglect and exploitation.

- **NYSOFA**, in conjunction with multiple partners, implemented an E-MDT incorporating forensic accountants and geriatric psychiatrists to investigate and intervene in complex cases of elder financial exploitation and elder abuse.

- The **USC** Keck School of Medicine in partnership with the California Department of Aging, California Department of Social Services, Legal Aid Society of Orange County, and the Orange County Elder Abuse Forensic Center piloted a multi-dimensional intervention called *AIM* that designed and piloted a multi-component model for primary and secondary prevention of abuse of elders with dementia.

- **UTHSC** at Houston, in partnership with APS, the Texas DADS, and the Houston area justice system piloted an intervention to increase medication adherence in older adults who have chronic health conditions and who neglect themselves.

- **TX/WellMed** developed and tested clinical screening protocols within WellMed Clinics, including use of the EASI screening tool to identify at-risk elders and prevent elder abuse. TX/WellMed also embedded two APS Specialists within WMMI, a primary care physician group, to provide technical assistance, communication facilitation, and education supporting increased screening to prevent elder abuse.

Infrastructure

An essential component of the evaluation was to examine the infrastructure and structure of the prevention intervention. As required by the grant, each of the prevention interventions had the support and active involvement of APS, whether serving as the lead entity (AK DSDS), a key implementation partner (NYSOFA, UTHSC, TX/WellMed), or a referral source (USC). Across the grantees, there was broad representation of community partners in implementing the core components of the prevention intervention as well as providing services to address elders' needs, such as protection and safety, medical care, food security, housing or legal and financial assistance. As some grantees served local communities, Area Agencies on Aging were enlisted to support the interventions. Partnerships with the justice system were rooted in long-standing organizational affiliations to address elder abuse in the grantees' communities, and included law enforcement and legal services, to varying degrees and depending on the intervention. Three grantees involved the justice system as part of the operating structure of the prevention intervention (NYSOFA, USC, AK DSDS). With two grantees, the justice system played a more peripheral role in the prevention intervention but was actively involved with elder abuse prevention and APS activities (UTHSC, TX/WellMed). Partnerships formed to implement the prevention intervention benefitted from active and sustained participation of its members.

Target Population

The target populations for four prevention interventions were elders at risk of abuse, neglect or exploitation (USC, AK DSDS, NYSOFA, TX/WellMed). One prevention intervention focused exclusively on substantiated victims of self-neglect (UTHSC). The minimum age for eligibility in the intervention was 60 years for two prevention interventions (UTHSC, NYSOFA) and 65 for the other three (AK DSDS, TX/WellMed, USC). Three prevention interventions targeted elders with cognitive impairment or dementia (AK DSDS, NYSOFA, USC) and four targeted elders with a physical impairment or health problem(s) (AK DSDS, NYSOFA, UTHSC, TX/WellMed). One prevention intervention targeted elders with detectable signs of possible financial exploitation present (NYSOFA).

Certain prevention interventions emphasized the connection between a vulnerable elder and a trusted person in his/her social network and the potential for abuse (i.e., the focal subject and responsible actor). This focus on relationships varied across the prevention interventions, as did the clinical or service delivery effort. USC explicitly focused on older adults with dementia at risk for abuse and their primary caregivers. In cases served by AK DSDS, there was a known abuser who was dependent on the victim. NYSOFA identified social isolation and inadequate social support as risk factors (and eligibility criteria), along with identification of perpetrators of financial exploitation, for cases served by the E-MDTs in the Finger Lakes region and Manhattan.

The prevention interventions varied in the number of elders served over the course of the three-year grant period. Original expectations were tempered by the ebb and flow

of referrals from partners or the willingness of elders to participate. Three of the prevention interventions had rolling enrollment but with definite periods for participation and completion. AK DSDS received 170 referrals and had 87 elders participate in the ESCM. UTHSC recruited and enrolled 34 elders in the medication adherence prevention intervention. USC recruited a cohort of 76 dyads. Two prevention interventions had a more fluid referral stream. The NYSOFA E-MDTs served more than 220 elders, which included new cases and follow-up cases. TX/WellMed screened 11,426 elders using the EASI tool. Of these, 35 elders were referred to APS. Additionally, 588 WellMed patients were served through the APS Specialists and 474 were referred to APS.

Collectively, the prevention interventions targeted and addressed multiple forms of abuse, neglect, and exploitation and its co-occurrence. While the eligibility criteria for each prevention intervention focused on defined risks, co-morbid problems were addressed through the intervention. Those that emerged through assessments or over the course of the intervention were addressed through referrals to service partners.

Core Components

The core components of the five prevention interventions were implemented as intended, with some minor adjustments. They were conducted within the time period designated by the protocol. To varying degrees, each of the prevention interventions were standardized (or manualized) by creating manuals and protocols for staff implementation. As to be expected given the heterogeneity of the five prevention interventions, their delivery methods and service duration varied, and depended on the population targeted and the nature of abuse or risk. One common delivery element across all of the prevention interventions was the use of home visits as a primary method to reach at-risk elders, although the degree of contact varied (AK DSDS, TX/WellMEd, UTHSC, USC). The intensity or dose of services varied with each prevention intervention, depending on the identified needs, the treatment protocol or case plan, the resource capacity of providers, and uptake by the elder. The duration of the prevention interventions varied, as well. Three were time-limited, with the duration ranging from three months (USC), six months (UTHSC), or nine months (AK DSDS). Two were open-ended and depended on case resolution by the E-MDT (NYSOFA) or APS intervention as a result of screening or care coordination efforts (TX/WellMed).

The role and scope of service providers' involvement varied--from limited to extensive--across the prevention interventions. One had limited contact with external service providers in the community, but could turn to APS or a primary care physician in the event a problem or urgent need was identified (UTHSC). Prevention interventions that used a case management model or targeted elders' service needs coordinated referrals and service linkage with a range of community service providers (AK DSDS, NYSOFA, TX/WellMed, USC).

Three of the five prevention interventions identified areas that may be important to change in future expansion or replication efforts, based on their implementation

experience. This included: Allowing for greater flexibility in the case management timeframe for an evidence-based intervention (AK DSDS); Providing scripts and language to clinics to better communicate with family members about the need for mandatory reporting and adapting elder abuse screening processes to better fit within an organization's existing protocols (TX/WellMed); and Using a less intensive staffing model or a more triaged assessment with a tiered intervention for a home-based intervention (UTHSC).

Facilitators and Barriers

The evaluation also addressed implementation facilitators and barriers. A number of common factors were identified across the five prevention interventions. To various degrees, all were grounded in strong partnerships with APS and community partners that assisted with intervention planning and/or implementation (AK DSDS, NYSOFA, TX/WellMed, UTHSC, USC). Although there was some turnover, continuity in staffing and leadership across the prevention interventions was critical in providing consistency in implementation and maintaining relationships developed between case managers and clients (AK DSDS), research staff and elders (UTHSC, USC), APS specialists and clinic staff (TX/WellMed), and E-MDT coordinators and community partners (NYSOFA).

Four of the prevention interventions had established referral partners that contributed resources in various capacities: to recruit and enroll elders in the intervention protocol (UTHSC, USC); take up a case with the E-MDT (NYSOFA); or provide community-based services once needs were assessed (AK DSDS, NYSOFA, UTHSC, USC). Use of a client-driven or patient-driven approach in the social service or clinical settings of the prevention interventions was extended by the involvement of partners, community agencies, advocacy organizations, and other entities in monthly standing meetings to address elder's needs stemming from abuse or risk of harm. Such forums helped expedite service delivery by specialists (NYSOFA, USC), provide complimentary services and reduce fragmentation (TX/WellMed), and build awareness of available resources for referrals (AK DSDS, UTHSC).

Most challenges tended to be site-specific; a few were common to the prevention interventions, such as lower than expected recruitment, limited uptake of referrals, and retention of elders in the intervention. Limited services and lack of access to services affected two of the prevention interventions (AK DSDS, UTHSC).

Characteristics

A key task of this study is to describe the characteristics of victims, at-risk elders, care recipients, perpetrators and caregivers who participated in the five interventions. While we report broad patterns that emerge in selected characteristics of participants, these findings need to be understood within the context of each intervention's goals and eligibility criteria. An intervention's focus on a particular type of abuse (i.e., self-neglect or financial exploitation or all forms) and selection factors for inclusion (i.e., physical and cognitive impairment and social isolation as well as age minimums) not only shape the

pool of elders for participation from the outset of the study but are in part determined by risk factors of abuse themselves. The differences--and similarities--then, that we observe across interventions are in part due to the intervention's focus and recruitment process. A risk factor for one type of abuse, furthermore, may not be a risk factor for another form.

With these caveats, we describe herein the characteristics of the five grantee interventions and their participants and where possible, draw on prior research on specific forms of abuse and risk factors in order to place the findings in context. In terms of age, elders served by the prevention interventions ranged from 74 years to 81 years. The majority of victims and at-risk elders was female, spoke English as their primary language, had low income levels and lived alone and in a private home. Greater variation was observed across grantees with respect to the race and ethnicity of elders served, education levels, and marital status. The high number of female victims and at-risk elders in the interventions is consistent with elderly women's greater representation in APS caseloads (Wolf 1997). At the same time, Pillemer and Finkelhor (1988) have noted that this may be due to elderly women's greater numbers in the senior population. Their study found that the victimization rate was higher for men (5.1 percent) than women (2.5 percent).

In terms of living arrangement, living alone was found to be a protective factor against elder mistreatment (Lachs et al. 1997). Alternatively, shared residence increases opportunities for contact and has been linked to violence, particularly when Alzheimer's patients live with immediate family members (Paveza et al. 1992). It should be noted, however, that living arrangement is likely to play a differential role depending on the type of abuse being examined. For example, a shared living arrangement may not be as relevant in cases of self-neglect compared to other forms of mistreatment such as physical abuse or financial exploitation.

Turning to physical and psychosocial characteristics of victims, at-risk elders and care recipients, the physical function of elders served by the interventions tended to be fairly low-to-moderate. Levels of cognitive impairment, on the other hand, varied. Whereas self-neglecting elders were cognitively intact, most care recipients were cognitively impaired. There was also variation with respect to levels of anxiety and stress experienced by participants and limited evidence for depression among the elders served. Elders served by three prevention interventions reported low-to-moderate levels of social support but elders experiencing financial exploitation tended to be social isolated. Past research has found that low levels of social support increases the risk of elder mistreatment (Lachs et al. 1994) and is associated with caregivers' verbal and physical abuse (Compton et al. 1997)

Some information about perpetrators was available for two interventions (NYSOFA, TX/WellMed). Alleged perpetrators tended to be middle-aged or elderly, and included both males and females. Race and ethnicity was known for only a subset, but perpetrators were predominantly Caucasian. The educational background of the alleged perpetrators of financial exploitation ranged from those with limited education to the

highly-educated. Most alleged perpetrators were family members or relatives. These findings are consistent with previous research indicating that victims' family members (adult children and spouses) tend to be perpetrators (Acierno 2009). Alleged perpetrators also tended to have issues with substance abuse. Previous studies have also known that alcohol or drug abuse problems as well as a history of mental illness are relatively common among perpetrators (Greenberg et al. 1990; Wolf & Pillemer 1989).

Findings about caregivers are drawn exclusively from USC's intervention. Caregivers were mostly female, Caucasian, married to the care recipient, college-educated, and had fairly high incomes. Many caregivers were adult children. Although exhibiting low levels of anxiety and burden, and with moderate levels of support, caregivers showed signs of depression. A study by Paveza et al. (1992) found that depression among Alzheimer's caregivers predicted physical abuse.

Type of Abuse Experienced

In terms of types of abuse experienced, a finding across the prevention interventions was that self-neglect was the most common type of abuse experienced and co-occurred with all forms of abuse, reinforcing that elder self-neglect is a serious public health problem and a prevalent concern for APS (Naik et al. 2008). Financial exploitation co-occurred with other forms of abuse. Many elders served by the preventions interventions experienced more than one type of abuse. Thus, elders participating in the prevention intervention had multiple service needs.

Outcomes

With respect to outcomes, we examined whether cases had been referred to APS once the intervention had been completed (i.e., recidivism for those with prior APS histories) for a subset of elders served by AK DSDS and UTHSC. For NYSOFA, we examined outcomes achieved regarding financial exploitation. For TX/WellMed, we examined APS data collected on reasons for case closure. We found that most elders served by UTHSC's did not have a re-referral to APS, but about one-third did. For the elders served by AK DSDS, 90 percent did not have a subsequent referral to APS. Intervention by NYSOFA's E-MDTs stopped financial exploitation of elder assets. TX/WellMed's use of the EASI screening tool identified few patients as at-risk for elder abuse. At the same time, at least 588 WellMed patients were brought to the attention of APS Specialists and served by WellMed's Complex Care services and/or APS whose needs may not have been addressed otherwise.

Changes measured in elders' state of vulnerability, characteristics or circumstances varied across the prevention interventions. As the type of change was intervention-specific, the measures and quantity of data available also varied.

In terms of social support and risk, findings varied across the prevention interventions. The moderate level of social support and physical functioning reported for

elders served by UTHSC at baseline remained stable following the intervention. While elders served by AK DSDS reported less vulnerability following the intervention, they may have been susceptible to harm by others. High risk of financial exploitation decreased for a subset of elders served by one of NYSOFA's E-MDTs. Care recipients' sense of vulnerability and coercion fluctuated over the course of the dyadic intervention. Yet the perceived degree of social support remained constant for those served by USC's prevention intervention.

In closing, this evaluation provides information about the development and implementation of the five elder abuse prevention interventions, focused on the characteristics of victims and at-risk elders, care recipients and caregivers, along with perpetrators of elder abuse; service utilization; and outcomes. Despite the limitations noted, collectively, the implementation and outcomes findings point to field-initiated approaches that merit further investigation and effectiveness testing using rigorous scientific designs, in an effort to build the knowledge base and prevent and reduce elder abuse, neglect, and exploitation.

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APPENDIX A:
DESCRIPTION OF GRANTEE VARIABLES

Age: Information on date of birth was used to calculate participant's age at time of enrollment in the intervention.

Gender: Response categories include: 'Male;' 'Female;' and 'Other.'

Ethnicity: Response categories include: 'Hispanic;' 'Not Hispanic;' and 'Unknown.'

Race: Response categories include: 'White/Caucasian;' 'Black/African American;' 'Native Hawaiian or Other Pacific Islander;' 'Asian;' 'American Indian/Native Alaskan;' 'Multiracial;' 'Other;' and 'Unknown.' To harmonize the data across grantees, 'Native Hawaiian or other Pacific Islander' was combined with 'Asian.' The categories for 'Multiracial' and 'Unknown' have been collapsed into 'Other.'

Education: Response categories include: 'Elementary School;' 'Junior High School;' 'High School or GED;' 'Some College;' 'Associate Degree;' 'Bachelor Degree;' and 'Graduate Degree.' To harmonize the data across grantees, 'Elementary School' and 'Junior High School' have been collapsed into 'Less than High School,' 'Associate Degree' is collapsed into 'Some College,' 'Bachelor Degree' is considered 'College Graduate,' and 'Graduate Degree' is considered 'Some Graduate Work.'

Marital Status: Response categories include: 'Never Married;' 'Married;' 'Civil Union;' 'Partner/Significant Other;' 'Widowed;' 'Separated;' and 'Divorced.' To harmonize the data across grantees, the category for 'Never Married' is collapsed into the 'Single' category. The categories for 'Separated' and 'Divorced' have been combined as 'Divorced/Separated.' 'Civil Union' and 'Partner/Significant Other' are collapsed into the 'Other/Unknown' category.

Primary Language: Response categories include: 'English;' 'Spanish;' 'American Sign Language (ASL);' and 'Other.' To harmonize the data across grantees, 'ASL' was included in the 'Other' category.

Place of Residence/Living Situation: Response categories include: 'Private Home/Apartment/Rented Room;' 'Multi-Family Home;' 'Assisted Living Home;' 'Group Home' (e.g., Psychiatric, Physical Disability, etc.); 'Hotel/Motel;' and 'Homeless.' To harmonize the data across grantees, 'Assisted Living Home' was collapsed into 'Assisted Living/Nursing Home,' and 'Hotel/Motel' and 'Homeless' were collapsed into 'Other.'

Living Situation: Response categories include: 'Lives Alone' and 'Lives with Husband/Wife or Partner.'

Income: Information was reported on the individual's monthly income. This value was then multiplied by 12 to obtain the yearly income. To harmonize the data across grantees, an ordinal variable was created with income intervals as follows: 'Less than $15,000;' '$15,000-$25,000;' '$25,001-$35,000;' '$35,001-$50,000;' '$50,001-$75,000;' '$75,001-$100,000;' and 'Greater than $100,000.'

Physical Function: Two scales were used to measure physical function. The first is a functional health scale measuring the number of difficulties with accomplishing eight ADLs with or without assistance. ADL functions are essential for an individual's self-care (e.g., dressing and feeding yourself). Response categories include: 'Independently' (0); 'Requires Verbal Cueing' (1); 'Requires Supervision' (2); 'Limited Assistance' (3); 'Extensive Assistance' (4); 'Total Dependence' (5); and 'No Answer' (6). The last response category is considered missing for analytic purposes. Responses to items are summed. The summary score ranges from 0-35. Higher scores indicate difficulty with a greater number of daily activities. The seven items included the following:

1. Indicates how well the adult positions/repositions himself/herself while in bed.
2. Indicates the level of assistance the adult needs to move between surfaces.
3. Indicates the level of assistance the adult needs to ambulate; if in a wheelchair, indicate level of self-sufficiency.
4. Indicates the level of assistance the adult needs to get dressed.
5. Indicates the level of assistance the adult needs to eat.
6. Indicates the level of assistance the adult needs to use the bathroom/toilet.
7. Indicates the level of assistance the adult needs with completing hygiene related tasks.

The second measure of physical function uses the IADL scale. IADL functions are more concerned with independent living skills rather than basic ADLs. Response categories include: 'Independently' (0); 'Requires Verbal Cueing' (1); 'Requires Supervision' (2); 'Limited Assistance' (3); 'Extensive Assistance' (4); 'Total Dependence' (5); and 'No Answer' (6). The last response category is considered missing for analytic purposes. Responses to items are summed. The summary score ranges from 0-45. Higher scores indicate difficulty with a greater number of daily instrumental activities. The nine items included the following:

1. Indicates the level of assistance the adult needs with completing meal preparation.
2. Indicates the level of assistance the adult needs in order to use the telephone.
3. Indicates the level of assistance the adult needs in order to complete daily household chores.
4. Indicates the level of assistance the adult needs in order to complete more difficult housework.
5. Indicates the level of assistance the adult needs in order to do his/her laundry.
6. Indicates the level of assistance the adult needs in order to manage his/her finances.
7. Indicates the level of assistance the adult needs in order to get groceries.

8. Indicates the level of assistance the adult needs when traveling outside his/her home or place of residence.
9. Indicates the level of assistance the adult needs in order to manage his/her medication regimen.

Depression: Depression is measured using the PHQ-9. The PHQ-9 is the depression module of the PHQ, which is an instrument for screening, diagnosing, monitoring and measuring the severity of depression. The PHQ-9 incorporates Diagnostic and Statistical Manual of Mental Disorders, 4th Edition (DSM-IV) depression diagnostic criteria with other leading depressive symptoms. Questions ask how often respondents have been bothered by specific problems (listed below) over the last two weeks. The tool rates the frequency of the symptoms. Responses include: 'Not at all' (0); 'Several Days' (1); 'More than Half the Days' (2); and 'Nearly Every Day' (3). Responses to each item are summed and are then categorized as follows: 'No Depression' (0-4); 'Minimal Symptoms' (5-9); 'Minor Symptoms' (10-14); 'Major Depression, Moderate' (15-19); and 'Major Depression, Severe' (20 or higher). The summary score ranges from 0-27. The nine items included on the tool are:

Over the past two weeks how often have you…

1. Little interest or pleasure in doing things.
2. Feeling down, depressed, or hopeless.
3. Trouble falling or staying asleep, or sleeping too much.
4. Feeling tired or having little energy.
5. Poor appetite or overeating.
6. Feeling bad about yourself--or that you are a failure or have let yourself or your family down.
7. Trouble concentrating on things, such as reading the newspaper or watching television.
8. Moving or speaking so slowly that other people could have noticed? Or the opposite--being so fidgety or restless that you have been moving around a lot more than usual.
9. Thoughts that you would be better off dead or of hurting yourself in some way.

Anxiety: Anxiety is measured using the GAD-7 scale. Response categories include: 'Not at all' (0); 'Several Days' (1); 'More than Half of the Days' (2); and 'Nearly Every Day' (3). Responses to each item are summed. The summary score ranges from 0-21, with higher scores indicating higher levels of anxiety. Items include:

Over the past two weeks how often have you…

1. Feeling nervous, anxious, or on edge.
2. Not being able to stop or control worrying.
3. Worrying too much about different things.
4. Trouble relaxing.
5. Being so restless that it's hard to sit still.

6. Becoming easily annoyed or irritable.
7. Feeling afraid as if something awful might happen.

Social Support: Three measures of social support are used. At baseline, social support is measured by the LSNS-R. The LSNS-R is correlated with mortality, all-cause hospitalization, health behaviors, depressive symptoms, and overall physical health. Questions 1, 3, 4, 7, 9 and 10 have the following response categories: 0=none, 1=one, 2=two, 3=three or four, 4=five thru eight, 5=nine or more. Questions 2 and 8 have the following response categories: 0=less than monthly, 1=monthly, 2=few times a month, 3=weekly, 4=few times a week, 5=daily. Questions 5, 6, 11 and 12 have the following response categories: 0=never, 1=seldom, 2=sometimes, 3=often, 4=very often, 5=always. Responses to the following questions are summed and the summary score ranges from 0-60:

1. How many relatives do you see or hear from at least once a month?
2. How often do you see or hear from the relative with whom you have the most contact?
3. How many relatives do you feel at ease with that you can talk about private matters?
4. How many relatives do you feel close to such that you call on them for help?
5. When one of your relatives has an important decision to make, how often do they talk to you about it?
6. How often is one of your relatives available for you to talk when you have an important decision to make?
7. How many of your friends do you see or hear from at least once a month?
8. How often do you see or hear from the friend with whom you have the most contact?
9. How many friends do you feel at ease with that you can talk about private matters?
10. How many friends do you feel close to such that you call on them for help?
11. When one of your friends has an important decision to make, how often do they talk to you about it?
12. How often is one of your friends available for you to talk when you have an important decision to make?

At the end of the intervention and three months and six months post-intervention, information on the participants' Social Support Network Professional was collected. The item asks if the individual has, and uses a social support network of professionals. The possible categories that the individual can fall under are 'Yes,' 'No' and 'Somewhat.' Similarly, for the measure on Social Support Network Family and Friend, the question asks if the participant has, and uses a social support network of family or friends. The possible categories that the individual can fall under are 'Yes,' 'No' and 'Somewhat.'

Risk of Abuse: Risk of abuse is measured by 12 questions on the VASS. Each item has two possible responses: 'Yes' (1) and 'No' (0). VASS is composed of four factors, with three items each, representing the following domains: vulnerability (items 1-3),

dependence (items 4-6), dejection (items 7-9), and coercion (items 10-12). The questions are as follows:

1. Are you afraid of anyone in your family?
2. Has anyone close to you tried to hurt you or harm you recently?
3. Has anyone close to you called you names or put you down or made you feel bad recently?
4. Do you have enough privacy at home?
5. Do you trust most of the people in your family?
6. Can you take your own medication and get around by yourself?
7. Are you sad or lonely often?
8. Do you feel that nobody wants you around?
9. Do you feel uncomfortable with anyone in your family?
10. Does someone in your family make you stay in bed or tell you you're sick when you know you're not?
11. Has anyone forced you to do things you didn't want to do?
12. Has anyone taken things that belong to you without your OK?

Stress: Two measures of stress are used. At baseline, stress is measured by the PSS at baseline. For each of the ten questions, response options include: 'Never' (0); 'Almost Never' (1); 'Sometimes' (2); 'Fairly Often' (3); and 'Very Often' (4). PSS scores are obtained by reversing responses (e.g., 0=4, 1=3, 2=2, 3=1, 4=0) to the four positively stated items (items 4, 5, 7, and 8) and then summing across all scale items. Higher PSS scores are associated with higher levels of stress and indicate a greater likelihood for stress interfering with things like lifestyle changes (a person's efforts to quit smoking) and their ability to improve their shape. Responses are summed for the following questions and the summary score ranges from 0-40:

1. In the last month, how often have you been upset because of something that happened unexpectedly?
2. In the last month, how often have you felt that you were unable to control the important things in your life?
3. In the last month, how often have you felt nervous and "stressed"?
4. In the last month, how often have you felt confident about your ability to handle your personal problems?
5. In the last month, how often have you felt that things were going your way?
6. In the last month, how often have you found that you could not cope with all the things that you had to do?
7. In the last month, how often have you been able to control irritations in your life?
8. In the last month, how often have you felt that you were on top of things?
9. In the last month, how often have you been angered because of things that were outside of your control?
10. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?

At the end of the intervention and three months and six months post-intervention, stress is measured using the following response categories include: ‘Lots of Stress;’ ‘Some Stress;’ and ‘Minimal Stress.’

Type of Abuse: Response categories for type of abuse include: ‘Abandonment;’ ‘Physical Abuse;’ ‘Sexual Abuse;’ ‘Mental Abuse;’ ‘Exploitation--Person;’ ‘Exploitation-Financial;’ ‘Neglect;’ ‘Self-Neglect;’ and ‘Undue Influence.’ To harmonize the data across the grantees, ‘Abandonment,’ ‘Exploitation-Person,’ ‘Undue Influence’ and ‘Falls’ were combined into the ‘Other’ category. An additional category is available to identify individuals with co-occurring abuse types.

Age: Age refers to the age of participant.

Gender: Response categories include: 'Male' and 'Female.'

Ethnicity: Response categories include: 'Hispanic' and 'Not Hispanic.'

Race: Response categories include: 'Caucasian/White' and 'African American/Black.'

Education: Response categories include: 'Less than High School;' 'High School;' 'Some College;' 'College Graduate;' or 'Some Graduate Work.'

Marital Status: Response categories include: 'Married;' 'Single;' 'Divorced/Separated;' 'Widowed;' or 'Other/Unknown.'

Primary Language: Response categories include: 'English;' 'Spanish;' and 'Other.'

Type of Residence/Living Situation: Type of residence describes the setting in which the participant lives. Response categories include: 'Private Home' (including apartments and rented rooms); 'Multi-Family Home;' 'Assisted Living/Nursing Home;' 'Group Home;' 'Other;' and 'Unclear.'

Income: Response categories include: 'Less than $15,000;' '$15,000-$25,000;' '$25,001-$35,000;' '$35,001-$50,000;' '$50,001-$75,000;' '$75,001-$100,000;' and 'Greater than $100,000.'

Physical Function: Two scales were used to measure physical function. The first is a functional health scale measuring the number of difficulties with accomplishing six ADLs. Function levels measured include bathing/showering, dressing, toileting, transferring in/out of bed/chair, urine/bowel continence, and feeding. Response options include: 'Yes' (1) and 'No' (0). Responses to items are summed. The summary score ranges from 0-6, with a higher score indicating a higher level of physical function.

The second measure of physical function uses the IADL scale. IADL functions are more concerned with independent living skills rather than basic ADLs. Function levels measured include ability to use the telephone, shopping, food preparation, housekeeping, laundry, mode of transportation, responsibility for own medications and ability to handle finances. Response options include: 'Yes' (1) and 'No' (0). Responses to items are summed. The summary score ranges from 0-8, with a higher score indicating a higher level of physical function.

Depression: Response categories include 'Yes' and 'No,' with an additional value to specify 'Severe' depression amongst those who indicated they experienced depression.

Anxiety: Response categories include: 'No Anxiety;' 'Mild Anxiety;' 'Moderate Anxiety;' and 'Severe Anxiety.'

Social Support (Victim): The following questions regarding victims' social support are asked (see below). Responses include: 'Yes;' 'No;' and 'Unknown.' 'Unknown' is treated as missing.

1. Is the victim socially isolated?
2. Does the victim leave the house for social activity?
3. Does the victim see friends or family members regularly?
4. Does the victim have friend or family emotional supports available?
5. Is the suspected perpetrator a part of the social support system?

Social Support (Perpetrator): The following questions regarding alleged perpetrators' social support are asked. Responses include: 'Yes;' 'No;' and 'Unknown.' 'Unknown' is treated as missing.

1. Is the suspected perpetrator socially isolated?
2. Does the suspected perpetrator leave the house for social activity?
3. Does the suspected perpetrator see friends or family members regularly?
4. Does the suspected perpetrator have friend or family emotional supports available?

Stress: Response categories include: 'No Stress;' 'Mild Stress;' Moderate Stress;' and 'Severe Stress.'

History of Substance Abuse: This is a self-reported measure by perpetrators. Responses include: 'Yes;' 'No;' and 'Unknown.' 'Unknown' is treated as missing.

Alcohol Abuse: This is a self-reported measure by perpetrators. Responses include: 'Yes;' 'No;' and 'Unknown.' 'Unknown' is treated as missing.

History of Abuse: This is a self-reported measure by perpetrators. Responses include: 'Yes;' 'No;' and 'Unknown.' 'Unknown' is treated as missing.

Type of Abuse: Responses include: 'Financial;' 'Neglect;' 'Emotional;' 'Physical;' 'Sexual;' and 'Other.'

Self-Neglect: Responses include: 'Yes;' 'No;' and 'Unknown.' 'Unknown' is treated as missing.

Reduction of Exploitation of Assets: This item asks if the E-MDT intervention reduced the exploitation of assets. Responses include: 'Yes;' 'No;' 'Unknown;' 'N/A;' and 'Other.' 'Unknown,' 'N/A,' and 'Other' are removed from the analyses.

Stop Exploitation of Assets: This item asks if the E-MDT intervention stopped the exploitation of assets. Responses include: 'Yes;' 'No;' 'Unknown;' 'N/A;' and 'Other.' 'Unknown,' 'N/A,' and 'Other' are removed from the analyses.

Facilitate Spending of Funds: This item asks if the E-MDT intervention facilitated the spending of funds on appropriate care or other needs. Responses include: 'Yes;' 'No;' 'Unknown;' 'N/A;' and 'Other.' 'Unknown,' 'N/A,' and 'Other' were removed from the analyses.

Reduction in Mistreatment: This item evaluates the risk of abuse during the intake assessment. Data are only available for participants in the Finger Lakes region intervention. Response categories at intake include: "No Risk' (The possibility of continued victimization is null); 'Low Risk' (The possibility of victimization is very unlikely to continue); 'Medium Risk' (The possibility of victimization is somewhat likely to continue); 'High Risk' (The possibility of victimization is very likely to continue); 'Unknown;' and 'N/A.' 'Unknown' and 'N/A' responses were removed from the analyses. At the end of the intervention, response categories included: 'Low Risk,' 'Medium Risk,' and High Risk.' The option of "No Risk' was not provided.

Age: Information on date of birth was used to calculate participant's age at time of enrollment in the intervention.

Gender: Response categories include: 'Male' and 'Female.'

Ethnicity: Response categories include: 'Non-Hispanic' or 'Hispanic.'

Race: Response categories include: 'Anglo;' 'African American;' 'Asian;' 'Hawaiian;' and 'Native American.' To harmonize the data across grantees, 'Anglo' is included as 'Caucasian/White,' 'Hawaiian' was collapsed into 'Asian/Pacific Islander,' and 'Native American' was included as 'American Indian/Native Alaskan.'

Marital Status: Response categories include: 'Married;' 'Divorced;' 'Single/Never Married;' 'Widowed;' and 'Unknown.'

Primary Language: Response categories include: 'English;' 'Spanish;' 'Other;' and 'Sign' (American). To harmonize the data across grantees, 'Sign' (American) was combined with the 'Other' category.

Relationship to the Victim: This variable describes the relationship of the perpetrator to the victim. Response categories include: 'Son;' 'Self;' 'Service Provider;' 'Unrelated Home Member;' 'Spouse;' 'Daughter;' 'Paid Caregiver' (APS only); 'Niece/Nephew;' 'Parent;' 'Grandchild;' 'Other Family Member;' 'Unknown;' 'Client's Paramour' (APS); 'Friend;' 'Step-Child;' 'Sibling;' and 'Other.' To harmonize the data across grantees, categories for 'Service Provider;' 'Paid Caregiver' (APS only); 'Other;' 'Unknown;' 'Client's Paramour' (APS); 'Friend;' and 'Step-Child' were combined as 'Unrelated Non-Relative.' The categories for 'Niece/Nephew;' 'Grandchild;' and 'Other Family Member' were combined as 'Other Relative.'

Place of Residence: Response categories include: 'Friend/Relative;' 'Own Home/Apt;' 'Nursing Home;' 'Homeless;' 'Group Home;' 'Unlicensed Personal Care Home;' 'DHS Assisted Living;' 'General Hospital;' and 'Other.' To harmonize the data across grantees, 'Nursing Home' and 'DHS Assisted Living' were combined as 'Nursing Home/Assisted living.' 'Unlicensed Personal Care Home,' is included under 'Group Home/Unlicensed Personal Care Homes.' 'Homeless,' 'General Hospital,' and 'Friend/Relative' were collapsed into the 'Other' category.

Cognitively Impaired: Victim's cognitive impairment is based on the APS worker's observation.

Physical Function: Victim's physical function is based on the victim's report of physical impairment ('Mobility Impaired') or disability ('Physically Disabled').

Drug Abuse: This variable indicates whether the alleged perpetrator had any issues with drug abuse. If no response was provided, the response is assumed to be 'Not Applicable.'

Type of Abuse: Response categories include: 'Physical;' 'Psychological;' 'Sexual;' 'Financial Exploitation;' 'Neglect;' 'Self-Neglect;' and 'Other.' An additional category of 'Co-occurring' was added for individuals reporting more than one type of abuse.

Type of Service Referred/Received: Services received or referred by APS include:

1. Counseling/Education.
2. Referral.
3. Purchase client services.
4. Mediation.
5. County--client referred to a county agency.
6. No action--client's situation has been resolved, but not through APS.
7. State: DADS--client referred to Texas Department of Aging and Disability Services.
8. Assistance/Documentation assistance--active assistance, rather than counseling or referral.
9. Benefits--reflects services related to the benefits being received by the client.
10. Blank--"service type" left blank by worker.

APS Investigation Closure Reason: This item identifies actions and outcomes or resolution of cases opened with APS. The response categories include:

1. Valid, continue as APS--represents all valid cases that progressed to the service stage.
2. Resolved during investigation with service.
3. Progress to ICS--client is determined to be at moderate to high risk of recidivism and is in need on intensive case services to remedy the root cause of the abuse, neglect, or financial exploitation.
4. Progress to maintenance--alleged victim is experiencing abuse, neglect, or financial exploitation, and intensive case services are not necessary, but the case must remain open until the pending referral or service is completed.
5. No services required--alleged victim is experiencing abuse, neglect, or financial exploitation, but APS intervention was not necessary to resolve the problem.
6. Services needed, but not available.
7. Client refused services.

8. Client died.
9. Moved/Unable to locate.
10. Unable to determine--based on the available evidence, preponderance does not support a finding of Valid or Invalid for the allegations.
11. Invalid--there is no indication the alleged victim is in a state of abuse, neglect, or financial exploitation following a thorough investigation.

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Age: Information on date of birth was used to calculate participant's age at time of enrollment in the intervention.

Gender: Response categories include: 'Male' or 'Female.'

Ethnicity: Response categories include: 'Hispanic/Latino Origin;' 'Not of Hispanic/Latino Origin;' or 'Unknown.'

Race: Response categories include: 'White;' 'African American;' 'American Indian or Alaska Native;' 'Asian Indian;' 'Chinese;' 'Filipino;' 'Japanese;' 'Korean;' 'Vietnamese;' 'Other Asian;' 'Native Hawaiian;' 'Guamanian or Chamorro;' 'Samoan;' and 'Other Pacific Islander.' To harmonize the data across grantees, 'Asian Indian,' 'Chinese,' 'Filipino,' 'Japanese,' 'Korean,' 'Vietnamese,' 'Other Asian,' 'Native Hawaiian' 'Guamanian or Chamorro,' 'Samoan,' and 'Other Pacific Islander' were combined into a single 'Asian/Pacific Islander' category.

Education: Education is measured as the number of years of school attended. To harmonize the data across grantees, years of education were grouped into the following categories: 'Less than High School' (0-11); 'High School' (12); 'Some College' (13-15); 'College Graduate' (16); and 'Some Graduate Work' (17 or more).

Marital Status: Response categories include: 'Single/Never Married;' 'Married;' 'Married but not Living Together;' 'Divorced;' 'Separated;' 'Widowed;' and 'Unknown.' To harmonize data across the grantees, 'Separated' and 'Divorced' were combined to create 'Divorced/Separated,' and 'Married but not Living Together' was collapsed into 'Married.'

Primary Language: The question asks whether English is the primary language of the participant. Responses include: 'Yes' or 'No.' To harmonize the data across grantees, respondents who indicated that Spanish was their primary language was included in the 'Spanish' category.

Relationship Status: This variable describes the relationship between the caregiver and care recipient. Response categories include: 'Husband;' 'Wife;' 'Mother;' 'Father;' 'Son;' 'Daughter;' 'Sibling;' 'Grandson;' 'Granddaughter;' 'Brother;' 'Sister;' 'Legal Guardian;' 'Other Relative;' and 'Other Non-Relative.' To harmonize the data across grantees, 'Grandson' and 'Granddaughter' were collapsed into the 'Other Relative' category, 'Brother' and 'Sister' were collapsed into 'Sibling,' and 'Legal Guardian' was collapsed into 'Other Non-Relative.'

Income: Response categories representing yearly income include: 'Less than $15,000;' '$15,000-$25,000;' '$25,001-$35,000;' '$35,001-$50,000;' '$50,001-$75,000;' '$75,001-$100,000;' or 'Greater than $100,000.'

Physical Function: Two scales were used to measure physical function. The first is a functional health scale measuring the number of difficulties with accomplishing six ADLs. The care recipient's ability is reported by the caregiver. Caregivers identify whether the care recipient can perform an activity 'Independent' (1) of the caregiver, or 'Dependent' (0) on the caregiver. These activities include: bathing, dressing, toileting, transfer, continence and feeding. Each item is scored and summed. The summary score ranges from 0-6, with a higher score indicating a higher level of physical function.

The second measure of physical function assesses an individual's ability to perform eight IADLs. IADL functions are more concerned with independent living skills rather than basic ADLs. Assessments of the care recipient are reported by the caregiver. Function levels measured include ability to use the telephone, shopping, food preparation, housekeeping, laundry, mode of transportation, responsibility for own medications and ability to handle finances. Response categories include multiple levels of independence or dependence for each activity, with all options scoring either 0 (for some level of dependence) or 1 (for some level of independence). Responses to each item is scored and summed. The summary score ranges from 8-31, with a higher score indicating a higher level of physical function.

Cognitively Impaired: Cognitive impairment is measured by the Mini-Cog test. The Mini-Cog test is an instrument to screen for cognitive impairment in older adults. The test uses a three-item recall test for memory and a scored clock-drawing test. Each test is scored and summed. The summary score ranges from 0-5. A score of 0-2 indicates a positive screen for dementia, while a score of 3-5 indicates a negative screen for dementia.

Depression: Depression is measured using the PHQ-9. The PHQ-9 is the depression module of the PHQ which is an instrument for screening, diagnosing, monitoring and measuring the severity of depression. The PHQ-9 incorporates DSM-IV depression diagnostic criteria with other leading depressive symptoms. Questions ask how often respondents have been bothered by specific problems (listed below) over the last two weeks. The tool rates the frequency of the symptoms. Responses include: 'Not at all' (0); 'Several Days' (1); 'More than Half the Days' (2); and 'Nearly Every Day' (3). Responses to each item are summed and the summary score ranges from 0-27. The summed scores are then categorized as follows: 'No Depression' (0-4); 'Minimal Symptoms' (5-9); 'Minor Symptoms' (10-14); 'Major Depression, Moderate' (15-19); and 'Major Depression, Severe' (20 or higher). Items include:

1. Little interest or pleasure in doing things.
2. Feeling down, depressed, or hopeless.
3. Trouble falling or staying asleep, or sleeping too much.
4. Feeling tired or having little energy.

5. Poor appetite or overeating.
6. Feeling bad about yourself--or that you are a failure or have let yourself or your family down.
7. Trouble concentrating on things, such as reading the newspaper or watching television.
8. Moving or speaking so slowly that other people could have noticed? Or the opposite--being so fidgety or restless that you have been moving around a lot more than usual.
9. Thoughts that you would be better off dead or of hurting yourself in some way.

Anxiety: Anxiety is measured using the GAD-7 scale. Response categories include: 'Not at all' (0); 'Several Days' (1); 'More than Half of the Days' (2); and 'Nearly Every Day' (3). Responses to each item are summed. The summary score ranges from 0-21, with higher scores indicating higher levels of anxiety. Items include:

Over the past two weeks how often have you…

1. Feeling nervous, anxious, or on edge.
2. Not being able to stop or control worrying.
3. Worrying too much about different things.
4. Trouble relaxing.
5. Being so restless that it's hard to sit still.
6. Becoming easily annoyed or irritable.
7. Feeling afraid as if something awful might happen.

Social Support: Social support is measured using the LSNS-6. The LSNS-6 is correlated with mortality, all-cause hospitalization, health behaviors, depressive symptoms, and overall physical health. Response categories include: 0=none; 1=1; 2=2; 3=3 or 4; 4=5-8; and 5=9 or more. Responses to the following questions are summed and the summary scores range from 0-30, with higher scores indicating higher social support:

1. How many relatives do you see or hear from at least once a month?
2. How many relatives do you feel at ease with that you can talk about private matters?
3. How many relatives do you feel close to such that you could call on them for help?
4. How many of your friends do you see or hear from at least once a month?
5. How many friends do you feel at ease with that you can talk about private matters?
6. How many friends do you feel close to such that you could call on them for help?

Risk of Abuse: Risk of abuse is measured using 12 questions on the VASS. Each item has two possible responses: 'Yes' (1) and 'No' (0). VASS is composed of four factors, with three items each, representing the following domains: vulnerability (items 1-3),

dependence (items 4-6), dejection (items 7-9), and coercion (items 10-12). The questions are as follows:

1. Are you afraid of anyone in your family?
2. Has anyone close to you tried to hurt you or harm you recently?
3. Has anyone close to you called you names or put you down or made you feel bad recently?
4. Do you have enough privacy at home?
5. Do you trust most of the people in your family?
6. Can you take your own medication and get around by yourself?
7. Are you sad or lonely often?
8. Do you feel that nobody wants you around?
9. Do you feel uncomfortable with anyone in your family?
10. Does someone in your family make you stay in bed or tell you you're sick when you know you're not?
11. Has anyone forced you to do things you didn't want to do?
12. Has anyone taken things that belong to you without your OK?

Caregiver Burden: Caregiver burden is measured using the 22-item Zarit Burden Interview. Questions ask about the impact of the dementia patient's disabilities on the caregiver's life (listed below). For each item, response options include: 'Never' (0); 'Rarely' (1); 'Sometimes' (2); 'Quite Frequently' (3); and 'Nearly Always' (4). The Burden Interview is scored by summing the numbered responses of the individual items. Summary scores range from 0-88, with higher scores indicating greater caregiver distress. Common categories used for interpretation of scores include, 'Little or No Burden' (0-20); 'Mild to Moderate Burden' (21-40); 'Moderate to Severe Burden' (41-60); and 'Severe Burden' (61-88). The following questions are included in the interview:

1. Do you feel that your relative asks for more help than he or she needs?
2. Do you feel that, because of the time you spend with your relative, you don't have enough time for yourself?
3. Do you feel stressed between caring for your relative and trying to meet other responsibilities for your family or work?
4. Do you feel embarrassed about your relative's behavior?
5. Do you feel angry when you are around your relative?
6. Do you feel that your relative currently affects your relationship with other family members?
7. Are you afraid about what the future holds for your relative?
8. Do you feel that your relative is dependent upon you?
9. Do you feel strained when you are around your relative?
10. Do you feel that your health has suffered because of your involvement with your relative?
11. Do you feel that you don't have as much privacy as you would like, because of your relative?
12. Do you feel that your social life has suffered because you are caring for your relative?

13. Do you feel uncomfortable having your friends over because of your relative?
14. Do you feel that your relative seems to expect you to take care of him or her, as if you were the only one he or she could depend on?
15. Do you feel that you don't have enough money to care for your relative, in addition to the rest of your expenses?
16. Do you feel that you will be unable to take care of your relative much longer?
17. Do you feel that you have lost control of your life since your relative's death?
18. Do you wish that you could just leave the care of your relative to someone else?
19. Do you feel uncertain about what to do about your relative?
20. Do you feel that you should be doing more for your relative?
21. Do you feel that you could do a better job in caring for your relative?
22. Overall, how burdened do you feel in caring for your relative?

Potential Substance Dependency: Potential substance dependency is measured by the CAGE substance abuse screening tool. Response categories include: 'Yes' (1) or 'No' (0). CAGE is scored by summing the numbered response to the individual items. Summary scores range from 0-4, with a higher total score indicating a potential alcohol problem. A total score of two or greater is considered clinically significant.

1. Have you ever felt you should **C**ut down on your drinking?
2. Have people **A**nnoyed you by criticizing your drinking?
3. Have you ever felt bad or **G**uilty about your drinking?
4. Have you ever had a drink first thing in the morning to steady your nerves or to get rid of a hangover (**E**ye opener)?

History of Abuse: Response categories include: 'Yes' and 'No.'

History of Violence: Response categories include: 'Yes' and 'No.'

History of Substance Abuse: Response categories include: 'Yes' and 'No.'

History of Alcohol Abuse: Response categories include: 'Yes' and 'No.'

Age: Age refers to the age of the participant at time of enrollment in the intervention.

Gender: Response categories include: 'Male' and 'Female.'

Ethnicity: Response categories include: 'White;' 'Black;' 'Hispanic;' 'Asian;' and 'Native Hawaiian and Other Pacific Islander;' 'American Indian and Alaskan Native;' and 'Other.' To harmonize the data across grantees, 'Native Hawaiian and Other Pacific Islander' have been combined with 'Asian' as 'Asian/Pacific Islander,' and 'Hispanic' was grouped into 'Other.'

Education: Education refers to the number of years of school attended by the participant. To harmonize the data across grantees, years of education were grouped into the following categories: 'Less than High School' (0-11), 'High School' (12), 'Some College' (13-15), 'College Graduate' (16), and 'Some Graduate Work' (17 or more).

Marital Status: Response categories include: 'Married;' 'Divorced;' 'Widowed;' 'Separated;' and 'Never Married.' To harmonize the data across grantees, the categories for 'Separated' and 'Divorced' were combined into one category called 'Divorced/Separated.'

Primary Language: Response categories include: 'English;' 'Spanish;' and 'Other.'

Living Situation: Living situation indicates whether the participant lives with another person. Response categories include: 'Alone;' 'With Spouse;' 'With Family;' 'With a Provider;' and 'Other.'

Income: Monthly income of the individual was reported. This value was then multiplied by 12 to obtain the yearly income. To harmonize the data across grantees, amounts were grouped into the following categories: 'Less than $15,000;' '$15,000-$25,000;' '$25,001-$35,000;' '$35,001-$50,000;' '$50,001-$75,000;' '$75,001-$100,000;' and 'Greater than $100,000.'

Physical Function: Physical function is measured using ten questions (listed below) related to functional health on the SF-36 Health Survey. Respondents are asked to assess their ability to perform typical activities. Response categories include: 1=Yes, limited a lot; 2=Yes, limited a little; 3=No, not limited at all. The summary score ranges from 10-30, with higher score indicating better physical functioning.

1. Vigorous activities, such as running, lifting heavy objects, and participating in strenuous sports.

2. Moderate activities include moving a table, pushing a vacuum cleaner, bowling, playing golf.
3. Lifting or carrying groceries.
4. Climbing several flights of stairs.
5. Climbing one flight of stairs.
6. Bending, kneeling, or stooping.
7. Walking more than a mile.
8. Walking several hundred yards.
9. Walking 100 yards.
10. Bathing or dressing yourself.

Depression: Depression is measured using the GDS. The GDS (short form) is a 15-item questionnaire that asks older adults to respond 'Yes' or 'No' in reference to how they felt over the past week. For items 2, 3, 4, 6, 8, 9, 10, 12, 14, and 15 below, 'Yes' indicates depression (recorded as 1). For items 1, 5, 7, 11, and 13, 'No' indicates depression (recorded as 1). Responses to items are summed and the summary score ranges from 0 to 15. A score greater than 5 on the 15-item scale indicates depression. The scale includes the following questions:

1. Are you basically satisfied with your life?
2. Have you dropped many of your activities and interests?
3. Do you feel that your life is empty?
4. Do you often get bored?
5. Are you in good spirits most of the time?
6. Are you afraid that something bad is going to happen to you?
7. Do you feel happy most of the time?
8. Do you often feel helpless?
9. Do you prefer to stay at home, rather than going out and doing new things?
10. Do you feel you have more problems with memory than most people?
11. Do you think it is wonderful to be alive?
12. Do you feel pretty worthless the way you are now?
13. Do you feel full of energy?
14. Do you feel that your situation is hopeless?
15. Do you think that most people are better off than you are?

Social Support: Social support is measured using the DSSI. The abbreviated DSSI is an 11-item battery that assesses the social network of the participant and the support provided by that network. Included in the DSSI are two dimensions of social support: subjective support subscale and social interaction subscale. Response categories for question 1 are: 1=none; 2=1-2 people; 3=more than 2 people. Response categories for question 2 are: 1=none; 2=1 or 2 times; 3=3 or more times. Response categories for questions 3 and 4 are: 1=none or once; 2=2-5 times; 3=5 or more times. Response categories for questions 5-10 are: 1=hardly ever; 2=some of the time; 3=most of the time. Response categories for question 11 are: 1=very dissatisfied; 2=somewhat dissatisfied; 3=satisfied. The total score is the sum of all the responses. Summary scores range from 11-33, with higher scores indicate greater social support.

1. Other than members of your family, how many persons in your local area do you feel you can depend on or feel very close to?
2. How many times during the past week did you spend time with someone who does not live with you, that is, you went to see them or they came to visit you or you went out together?
3. How many times did you talk to someone (friends, relatives or others) on telephone in the past week (either they called you, or you called them)?
4. About how often did you go to meetings of clubs, religious meetings, or other groups that you belong to in the past week?
5. Does it seem that your family and friends (people who are important to you) understand you?
6. Do you feel useful to your family and friends (people important to you)?
7. Do you know what is going on with your family and friends?
8. When you are talking with your family and friends, do you feel you are being listened to?
9. Do you feel you have a definite role (place) in your family and among your friends?
10. Can you talk about your deepest problems with at least some of your family and friends?
11. How satisfied are you with the kinds of relationships you have with your family and friends?

Cognitively Function: Cognitive function is measured using the MMSE. The 11-item measure tests five areas of cognitive function: orientation to time and place, tracking a sequence, attention in a mathematical context, short-term memory, several forms of language challenge, and ability to follow instructions involving visual-spatial manipulations. The summary score ranges from 0-30, and can be interpreted using the categories below:

1. 25-30=cognitively intact.
2. 21-24=mild cognitive impairment.
3. 10-20=moderate cognitive impairment.
4. <10=severe cognitive impairment.

Type of Abuse: Response categories include: ‘Physical Neglect’ and ‘Medical Neglect.’

Service Type: Response categories include: ‘Social Work Services;’ ‘Medication;’ ‘Utilities;’ ‘Rent;’ ‘Provider Services;’ and ‘Home Repair.’

To obtain a printed copy of this report, send the full report title and your mailing information to:

U.S. Department of Health and Human Services
Office of Disability, Aging and Long-Term Care Policy
Room 424E, H.H. Humphrey Building
200 Independence Avenue, S.W.
Washington, D.C. 20201
FAX: 202-401-7733

NOTE: All requests must be in writing.

RETURN TO:

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