United States Government Accountability Office

Report to Congressional Committees

July 2022

OLDER ADULTS AND ADULTS WITH DISABILITIES

Federal Programs Provide Support for Preventing Falls, but Program Reach Is Limited

Accessible Version

GAO-22-105276

GAO Highlights

Highlights of GAO-22-105276, a report to congressional committees

July 2022

OLDER ADULTS AND ADULTS WITH DISABILITIES

Federal Programs Provide Support for Preventing Falls, but Program Reach Is Limited

Why GAO Did This Study

Studies report that each year, about one in four older adults—many of whom may also have a disability—suffers a fall. According to CDC, falls were the leading cause of death from unintentional injury among older adults in 2020. They cost billions of dollars in medical expenses. However, studies also show that assessing and modifying the home environment or using other interventions can help prevent falls.

This report examines (1) what federal programs are designed to provide evidence-based falls prevention, home assessments, or home modifications for older adults and adults with disabilities and what do national data indicate about those at greatest risk of falls, (2) what do federal agencies know about how these programs affect participants' health, and (3) to what extent do federal agencies coordinate their efforts and provide consumer information to those at risk of falls. GAO analyzed CDC falls data from 2020, the most recent data available, and surveyed relevant federal programs. GAO interviewed officials from national aging and disability organizations; and reviewed studies of federal programs, falls prevention resources, and relevant federal laws and regulations.

What GAO Recommends

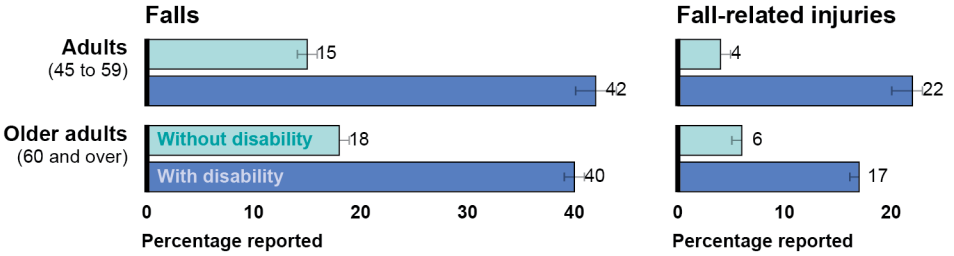
GAO is making three recommendations, including that CDC examine falls data for adults of various ages and that ACL facilitate additional information sharing across federal programs and among its disability network. The agencies concurred with the recommendations.

View GAO-22-105276. For more information, contact Kathryn Larin at (202) 512-7215 or larink@gao.gov.

What GAO Found

Nine federal programs are designed to help prevent falls or improve accessibility for older adults or adults with disabilities by providing evidence-based falls prevention (e.g., exercise classes), home assessments (e.g., home safety checklists), or home modifications (e.g., railings or ramps). Four agencies oversee these programs: Administration on Community Living (ACL), Centers for Disease Control and Prevention (CDC), the Department of Housing and Urban Development, and the Department of Veterans Affairs. These programs serve limited numbers of individuals, based on agency survey responses. Officials from national stakeholder organizations GAO spoke with said that not all populations at risk of falls may be served, including adults with disabilities under age 60. GAO's analysis of national data on self-reported falls from 2020 found that adults with disabilities aged 45 to 59 reported rates of falls and fall-related injuries that were higher than those reported by individuals 60 and over. However, because CDC's analysis of these data has focused solely on older adults, federal agencies may be limited in their understanding of the range of groups at risk.

Estimated Percentage of Reported Falls and Fall-Related Injuries by Age and Disability Status, 2020



Source: GAO analysis of Behavioral Risk Factor Surveillance System data. | GAO-22-105276

Accessible Data for Estimated Percentage of Reported Falls and Fall-Related Injuries by Age and Disability Status, 2020

Falls (Percentage reported)

	Lower	Estimate	Upper
Adults (45 to 59) without disability	14	15	16
Adults (45 to 59) with disability	40	42	44
Older adults (60 and over) without disability	18	18	19
Older adults (60 and over) with disability	39	40	41

Fall-related injuries (Percentage reported)

	Lower	Estimate	Upper
Adults (45 to 59) without disability	4	4	5
Adults (45 to 59) with disability	20	22	23
Older adults (60 and over) without disability	5	6	6
Older adults (60 and over) with disability	16	17	17

Source: GAO analysis of Behavioral Risk Factor Surveillance System data. | GAO-22-105276

Federal agencies have conducted various health-related studies of three of the nine federal programs. These studies suggest positive health outcomes for older participants. For example, a study of older adults participating in one of ACL's programs, which included exercise and other evidence-based falls prevention interventions, found some experienced fewer falls and fall-related injuries.

Federal agencies administering the nine programs have coordinated to some degree and disseminated falls prevention resources to consumers. But they lack a way to sustain information sharing and reach all groups at risk of falls with relevant resources. ACL was created, in part, to help manage fragmentation among federal programs that help people who are aging or have disabilities live independently. However, it has not identified a mechanism to sustain efforts to share falls prevention and home modification information among agencies. Further, most federally sponsored consumer resources on these topics target older adults. ACL has not used its existing network of disability organizations and providers to share information on the risk of falls or falls prevention for adults with disabilities under age 60. Yet GAO's analysis found they are also at high risk of falls. By facilitating information sharing across federal programs and among its own disability network, ACL could better help all groups at risk of falls to safely age and live in their homes and communities.

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Abbreviations

AAA	area agencies on aging
ACL	Administration for Community Living
ADL	activities of daily living
BRFSS	Behavioral Risk Factor Surveillance System
CAPABLE	Community Aging in Place—Advancing Better Living for Elders
CDC	Centers for Disease Control and Prevention
CMS	Centers for Medicare & Medicaid Services
EBFP	evidence-based falls prevention
HHS	Department of Health and Human Services
HISA	Home Improvement and Structural Alterations
HUD	Department of Housing and Urban Development
IADL	instrumental activities of daily living
LIFT	Living Independently and Falls-free Together
OAA	Older Americans Act
OAHMP	Older Adults Home Modification Program
PPHF	Prevention and Public Health Fund
SAH	Specially Adapted Housing
SHA	Special Housing Adaptation
STEADI	Stopping Elderly Accidents, Deaths, and Injuries
USC	University of Southern California
VA	Department of Veterans Affairs
VR&E	Veteran Readiness and Employment

U.S. GOVERNMENT ACCOUNTABILITY OFFICE
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July 27, 2022

The Honorable Patty Murray
Chair
The Honorable Richard Burr
Ranking Member
Committee on Health, Education, Labor, and Pensions
United States Senate

The Honorable Robert C. "Bobby" Scott
Chair
The Honorable Virginia Foxx
Republican Leader
Committee on Education and Labor
House of Representatives

Studies report that, each year, about one in four older adults suffers a fall. According to the Centers for Disease Control and Prevention (CDC), in 2020 falls were the leading cause of death from unintentional injury among older adults—many of whom may also have a disability—and the problem is growing worse. Nonlethal falls can still cause injury and reduce older adults' ability to stay in their homes and communities. Additionally, falls have financial implications for the health care system. According to one study, in 2015, medical costs for fall-related injuries were an estimated $50 billion, with the federal government paying for a substantial portion of these costs.[1] As the population ages, these costs are likely to increase.

The CDC reports that most unintentional falls occur at home and are preventable, such as by assessing and modifying the home environment or using other interventions. For those with disabilities, home modifications, such as structural changes and adaptive equipment, may be especially important in supporting independent and barrier-free living. Other interventions, such as exercise programs that help improve balance, can also be used to address fall risk. Further, with reports that home care workers are increasingly scarce, finding other ways to help

[1]Medicare and Medicaid paid an estimated $28.9 billion and $8.7 billion, respectively, for fall-related medical costs in 2015. Florence C.S., et al., "Medical Costs of Fatal and Nonfatal Falls in Older Adults," *Journal of the American Geriatrics Society*, vol. 66, no. 4 (2018).

adults age or live safely in their homes may become even more important. Federal programs may provide referrals, information, or funding to help support home modification and falls-prevention efforts. However, little is known about how these programs work together to prevent falls.

The Supporting Older Americans Act of 2020 includes a provision for GAO to, among other things, compile an inventory of federal programs that support evidence-based falls prevention, home assessments, and home modifications for older individuals and individuals with disabilities.

This report examines (1) what federal programs are aimed at supporting evidence-based falls prevention (EBFP), home assessments, and home modifications for older adults and adults with disabilities, and what do national data indicate about those at greatest risk of falls; (2) what do federal agencies know about how these programs affect participants' health; and (3) to what extent do federal agencies coordinate their efforts and provide consumer information to those at risk of falls.

To address our first objective, we identified federal programs aimed at supporting EBFP, home assessments, and home modifications for older adults and adults with disabilities by searching the Sam.gov Assistance Listings and requesting information from federal agencies and others on relevant programs.[2] We included programs for which at least one of our key terms (falls prevention, home assessment, or home modification) was explicitly mentioned in the program's purpose, generally obtained from Sam.gov and verified by program officials, among other criteria.[3] To identify program characteristics, such as activities, obligations, and

[2]For the purpose of this report, we define "program" broadly to include a set of activities directed toward a common purpose or goal that an agency undertakes or proposes to carry out its mission. This can include contracts, direct services, grants, research and development, informational tools, and tax expenditures. Additionally, evidence-based falls prevention programs are those that have been proven effective through outcome or effectiveness evaluations, as we explain later in the report.

[3]Through our research, we also compiled a non-exhaustive list of related programs targeting older adults or adults with disabilities for which falls prevention, home assessments, and home modifications are an allowable use of funds, but not the primary purpose. We collected limited information on these programs because federal agencies generally did not have information on the extent to which programs were used for these services, such as in terms of funding amounts or people served. We did not independently verify the information provided by the agencies or conduct a legal analysis to confirm the various descriptions of the programs, such as information on their primary purpose, service areas, eligibility requirements, and budgetary obligations.

populations served, we obtained information from federal officials for each program using a survey, as well as follow-up data requests and interviews. We also interviewed a nongeneralizable selection of national aging and disability organizations to obtain their views on the nature of these programs as a whole, including the extent to which there may be duplication of services or unmet needs.[4]

To determine what national data indicate about those at greatest risk of falls, we analyzed CDC data on falls and obtained information and interviewed officials from CDC. Specifically, we analyzed 2020 data from CDC's Behavioral Risk Factor Surveillance System survey on the prevalence of falls and fall-related injuries among different demographic groups to identify populations who are potentially at-risk of falls or in need of services.[5] We assessed the reliability of these data by obtaining information from CDC officials, reviewing related documentation, and conducting data testing. We determined these data were sufficiently reliable for the purpose of identifying the demographic characteristics of older adults and adults with disabilities with the highest prevalence of falls and fall-related injuries in 2020. We also interviewed CDC officials about their analysis of these data.

To address our second objective on what federal agencies know about how these programs affect participants' health, we used the survey and interviews with federal agencies and national organizations to identify relevant federally funded impact and outcome studies. In particular, we selected studies published within the last 10 years which examined how programs affect participants' health. We reviewed studies of programs in our inventory, as well as studies of relevant EBFP interventions which have informed programs in our inventory. Throughout this report, we use "interventions" to refer to initiatives implemented at the community level.

[4]We selected these organizations based on the frequency with which federal agency officials recommended them and to provide a mix of perspectives based on the populations they represent (i.e., older adults and adults of varying ages with disabilities). These organizations were Advancing States, the American Association on Health and Disability, the University of Southern California's (USC) Leonard Davis School of Gerontology Fall Prevention Center of Excellence, the National Council on Aging, the National Council on Independent Living, and USAging.

[5]The Behavioral Risk Factor Surveillance System survey is an annual, health-related telephone survey of noninstitutionalized U.S. civilians 18 years or older designed to collect data on health-related risk behaviors, chronic health conditions, and use of preventive services. For additional information on our data analysis and other methods, see appendix I.

These are distinct from the federal programs in our inventory, which are implemented on a national scale.

To address our third objective, we obtained information about programs' coordination activities via the survey and through federal agency interviews. We also interviewed the selected national aging and disability organizations to ask how, if at all, federal agencies could improve coordination and communication efforts. We also obtained information from selected area agencies on aging (AAA) on their awareness of programs in our inventory and use of consumer resources.[6] Additionally, we reviewed key federal consumer resources regarding falls prevention and home modification efforts, which we identified through interviews with federal agencies and national aging and disability organizations. We assessed coordination and communication efforts based on agency specific goals, as well as Standards for Internal Control in the Federal Government.[7] We also used selected leading practices on interagency collaboration and our prior work on duplication, overlap, and fragmentation.[8]

We conducted this performance audit from June 2021 to July 2022 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

[6]We contacted six area agencies on aging in three states (Georgia, New Mexico, and New York) that were selected for their higher percentages of adults 60 and older below the poverty level and to reflect demographic and geographic diversity, among other factors.

[7]GAO, *Standards for Internal Control in the Federal Government*, GAO-14-704G (Washington, D.C.: Sept. 10, 2014).

[8]We chose selected collaboration practices based on their relevance to the interagency relationships we examined. GAO, *Managing for Results: Key Considerations for Implementing Interagency Collaborative Mechanisms*, GAO-12-1022 (Washington, D.C.: Sept. 27, 2012); *Fragmentation, Overlap, and Duplication: An Evaluation and Management Guide,* GAO-15-49SP (Washington, D.C.: Apr. 14, 2015).

Background

Older Adults and Adults with Disabilities

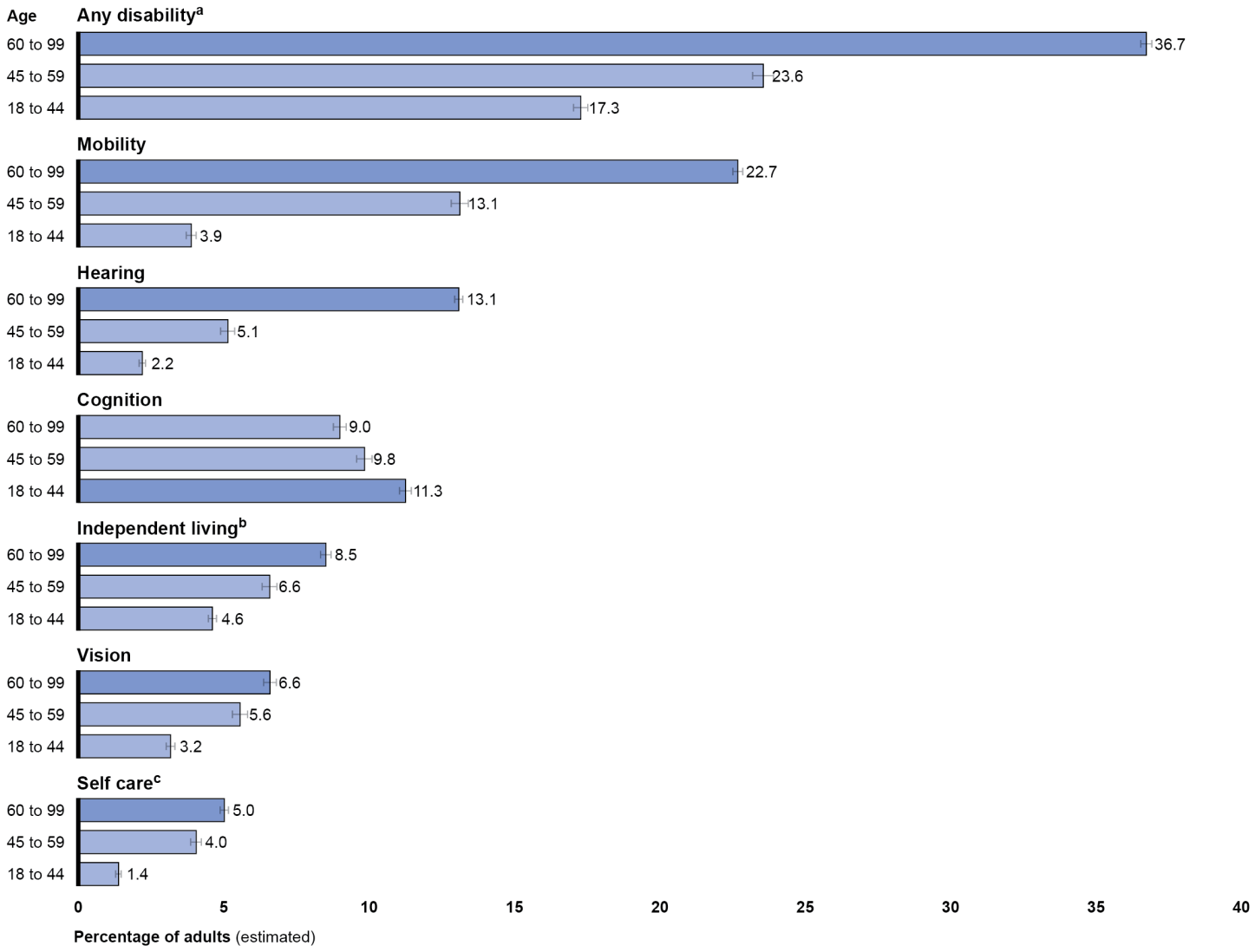
According to the Department of Health and Human Services' (HHS) Administration for Community Living (ACL), both the population of older adults and adults with disabilities are growing, and older adults are one of the fastest-growing demographics in the country.[9] In 2019, there were 54.1 million adults aged 65 and older, representing 16 percent of the U.S. population. By 2040, adults aged 65 and older are projected to represent 22 percent of the population. In addition to the overall growth in this population, the number of adults 85 or older—who may have greater service needs—is expected to nearly double, from 6.6 million in 2019 to 14.4 million in 2040.[10]

In 2020, an estimated 62 million adults 18 and older, or 25 percent of the U.S. population, reported some type of disability, defined as difficulty with at least one of six functioning domains—mobility, hearing, cognition, independent living, vision, or self-care, according to our analysis of CDC data. The prevalence of disability was higher among older adults, for all types of disability except cognition. (See fig. 1).

[9]Some programs and data define "older adults" and "disability" in different ways. According to the Older Americans Act (OAA) of 1965, the term "older individual" means an individual who is 60 years of age, or older, and the term "disability" generally means a disability attributable to mental or physical impairment, or a combination of mental and physical impairments, that results in substantial functional limitations in one or more of certain major life activities. 42 U.S.C. §§ 3002(13) & (40).

[10]U.S. Department of Health and Human Services, Administration for Community Living, *2020 Profile of Older Americans*, (May 2021).

Figure 1: Estimated Percentage of Adults with Disabilities, by Disability Type and Age Group, 2020



Source: GAO analysis of Behavioral Risk Factor Surveillance System data. | GAO-22-105276

Accessible Data for Figure 1: Estimated Percentage of Adults with Disabilities, by Disability Type and Age Group, 2020

Percentage of adults (estimated)

	Lower	Estimate	Upper
Any disability[a] (60 to 99)	36.5	36.7	36.9
Any disability[a] (45 to 59)	23.2	23.6	23.9
Any disability[a] (18 to 44)	17.0	17.3	17.5

	Lower	Estimate	Upper
Mobility (60 to 99)	22.5	22.7	22.9
Mobility (45 to 59)	12.8	13.1	13.4
Mobility (18 to 44)	3.7	3.9	4.1
Hearing (60 to 99)	12.9	13.1	13.2
Hearing (45 to 59)	4.9	5.1	5.4
Hearing (18 to 44)	2.1	2.2	2.3
Cognition (60 to 99)	8.8	9.0	9.2
Cognition (45 to 59)	9.6	9.8	10.1
Cognition (18 to 44)	11.0	11.3	11.5
Independent living[b] (60 to 99)	8.3	8.5	8.7
Independent living[b] (45 to 59)	6.3	6.6	6.9
Independent living[b] (18 to 44)	4.5	4.6	4.8
Vision (60 to 99)	6.4	6.6	6.8
Vision (45 to 59)	5.3	5.6	5.8
Vision (18 to 44)	3.0	3.2	3.3
Self care[c] (60 to 99)	4.9	5.0	5.2
Self care[c] (45 to 59)	3.8	4.1	4.3
Self care[c] (18 to 44)	1.3	1.4	1.5

Source: GAO analysis of Behavioral Risk Factor Surveillance System data. | GAO-22-105276

[a]This includes adults who reported a disability in at least one of the six functioning domains—mobility, hearing, cognition, independent living, vision, or self-care.

[b]This includes difficulty doing errands alone such as visiting a doctor´s office or shopping due to a physical, mental, or emotional condition.

[c]This includes difficulty dressing or bathing.

ACL, which oversees programs to serve older adults and people with disabilities in the community, is structured to serve each population separately, while also providing general policy coordination across both.[11] For example, ACL's Administration on Aging oversees an aging network that includes state units on aging, AAAs, and others to address the needs of older adults at the state and local level through services and supports to promote independent living. ACL's Administration on Disabilities provides funding to state entities, community-based organizations, universities, and other organizations in a disability network to equip individuals with disabilities of all ages with opportunities, tools, and supports to lead lives of their choice in their community.

[11]Various other federal agencies also have programs that serve older adults and people with disabilities, among other populations, but ACL's mission is focused on these two populations specifically.

Falls and Fall Prevention

Falls can have serious health effects. In addition to being the leading cause of death from unintentional injury among older adults, falls were the leading cause for emergency department visits for unintentional injuries across all age groups in 2020, according to CDC data.[12] Falls were also the third leading cause of unintentional injury-related deaths across all age groups for 2010-2020. Falls may cause broken bones, such as hip fractures, as well as serious head injuries. Even when not injured, adults who have fallen may become afraid to fall again and may reduce their everyday activities—thereby becoming weaker, and increasing the likelihood of a future fall.

However, research suggests that many falls can be prevented through various interventions. Since 2004, CDC has maintained a compendium of falls prevention interventions that have been shown in randomized control trials to reduce falls among older adults living in the community.[13] Some interventions address multiple fall risk factors, such as by removing or reducing potential fall hazards in the home environment and managing medications to reduce side effects like low blood pressure. Others address a specific fall risk factor, such as an exercise regime to help with gait and balance issues. In a 2015 report to Congress, HHS's Centers for Medicare & Medicaid Services (CMS) identified similar types of interventions that could be used to prevent falls among Medicare beneficiaries, such as exercise and educational programs and modifications to the home.[14] In a subsequent CMS report, participants in such interventions reported improved physical and mental health,

[12]CDC, National Center for Injury Prevention and Control, Web–based Injury Statistics Query and Reporting System (WISQARS) [online], accessed May 17, 2022.

[13]Judy A. Stevens and Elizabeth Burns. *A CDC Compendium of Effective Fall Interventions: What Works for Community-Dwelling Older Adults*. 3rd ed. (Atlanta, GA: Centers for Disease Control and Prevention, National Center for Injury Prevention and Control, 2015).

[14]The Patient Protection and Affordable Care Act directed the Secretary of Health and Human Services to conduct an evaluation of community-based prevention and wellness programs and to develop a plan for promoting healthy lifestyles and chronic disease self-management for Medicare beneficiaries. The act specifically required the Secretary's evaluation to include a review of available evidence, literature, best practices, and resources that are relevant to programs that promote healthy lifestyles and reduce risk factors for the Medicare population, specifically including falls among the issues to be considered. Pub. L. No. 111-148, § 4202(b), 124 Stat. 119, 569 (2010) (codified at 42 U.S.C. § 300u-14(b)).

physical activity, body strength, and confidence in balance.[15] Additionally, since 2014, ACL has supported the National Falls Prevention Resource Center, run by the National Council on Aging, which provides information and resources to help prevent falls among older adults.

For the purposes of this report, we define key falls prevention-related terms—EBFP, home assessments, and home modifications—as shown in figure 2.

Figure 2: Definitions of Key Falls Prevention-Related Terms

Source: GAO analysis of information from falls prevention-related research, federal agencies, and national aging and disability organizations; Adobe Stock (images). | GAO-22-105276

[15]Acumen, LLC and Westat, Inc., *Wellness Prospective Evaluation: Final Report,* (Burlingame, CA: Centers for Medicare & Medicaid Services, Jan. 2019).

Accessible Data for Figure 2: Definitions of Key Falls Prevention-Related Terms

Evidence-based falls prevention

Interventions that have been demonstrated to be effective through outcome/effectiveness evaluation in improving the health and well-being or reducing disability and/or injury among older adults or adults with disabilities; for which research results have been published in a peer-reviewed journal; and that were carried out at the community level with fidelity to the published research at least once before.

Interventions may include...

- Attending exercise classes to enhance mobility and strength
- Receiving advice on safe, non-slip footwear

Home assessment

A home safety evaluation that assesses potential hazards or risks in the home, how the individual functions in their home environment, and factors that may hinder or prevent independent living.

Interventions may include...

- Recommend changes or modifications that assist the individual in living safely and independently at home
- Identify safety hazards, such as poor lighting and loose rugs, and recommend changes

Home modification

Changes to make a home environment safer to avoid potential hazards and support the individual in operating effectively and independently in the home.

Interventions may include...

- Structural modifications, e.g., widening doorways, installing ramps, and adding grab bars
- Non-structural modifications, e.g., improving lighting and clearing walkways
- Adaptive equipment, e.g., shower chairs and motion-sensor lights

Source: GAO analysis of information from falls prevention-related research, federal agencies, and national aging and disability organizations; Adobe Stock (images). | GAO-22-105276

Nine Federal Programs Are Designed to Provide Falls Prevention, Home Assessments, or Home Modifications but Have Limited Reach

Programs Are Intended to Target Specific Populations and Offer Distinct Services

Nine programs across four agencies are designed to provide EBFP, home assessments, or home modifications and target older adults or adults with disabilities, according to our analysis of agency survey responses. These agencies are ACL, CDC, the Department of Housing and Urban Development (HUD), and the Department of Veterans Affairs (VA). (See figure 3.)

Figure 3: Target Populations and Services Provided by Federal Programs Designed to Support Evidence-Based Falls Prevention, Home Assessments, or Home Modifications

Federal agency		Federal program	Evidence-Based Falls Prevention	Home assessment	Home modification	
Dept. of Health and Human Services	ACL programs	Prevention and Public Health Fund (PPHF) Evidence-Based Falls Prevention	✓	✓	✓	Older adults
		Older Americans Act Title III-D Preventive Health Services	✓	a	a	
	CDC programs	MyMobility Plan	✓	✓ b		
		Stopping Elderly Accidents, Deaths, and Injuries (STEADI)	✓	✓ b		
Dept. of Housing and Urban Development		Older Adults Home Modification Program	✓	✓	✓	
		Veterans Housing Rehabilitation and Modification Pilot Program		✓	✓	
Dept. of Veterans Affairs		Home Improvement and Structural Alterations (HISA)	c	✓	✓	Veterans with disabilities[d]
		Specially Adapted Housing Program	c	✓	✓	
		Veteran Readiness and Employment (VR&E) Housing Adaptation Grant		✓	✓	

Source: GAO analysis of survey responses from the Administration for Community Living (ACL) and Centers for Disease Control and Prevention (CDC) within the Department of Health and Human Services, the Department of Housing and Urban Development, and the Department of Veterans Affairs. | GAO-22-105276

Accessible Data for Figure 3: Target Populations and Services Provided by Federal Programs Designed to Support Evidence-Based Falls Prevention, Home Assessments, or Home Modifications

Federal agency	Federal program	Evidence-Based Falls Prevention	Home assessment	Home modification	Target population
Dept. of Health and Human Services (ACL)	Prevention and Public Health Fund (PPHF) Evidence-Based Falls Prevention	yes	yes	yes	Older adults
Dept. of Health and Human Services (ACL)	Older Americans Act Title III-D Preventive Health Services	yes	a	a	Older adults
Dept. of Health and Human Services (CDC)	MyMobility Plan	yes	yes[b]	no	Older adults
Dept. of Health and Human Services (CDC)	Stopping Elderly Accidents, Deaths, and Injuries (STEADI)	yes	yes[b]	no	Older adults
Dept. of Housing and Urban Development	Older Adults Home Modification Program	yes	yes	yes	Older adults
Dept. of Housing and Urban Development	Veterans Housing Rehabilitation and Modification Pilot Program	no	yes	yes	Veterans with disabilities[d]
Dept. of Veterans Affairs	Home Improvement and Structural Alterations (HISA)	c	yes	yes	Veterans with disabilities[d]
Dept. of Veterans Affairs	Specially Adapted Housing Program	c	yes	yes	Veterans with disabilities[d]
Dept. of Veterans Affairs	Veteran Readiness and Employment (VR&E) Housing Adaptation Grant	no	yes	yes	Veterans with disabilities[d]

Source: GAO analysis of survey responses from the Administration for Community Living (ACL) and Centers for Disease Control and Prevention (CDC) within the Department of Health and Human Services, the Department of Housing and Urban Development, and the Department of Veterans Affairs. | GAO-22-105276

[a]According to program officials, home assessment and modification services can be provided if they meet program guidelines for evidence-based falls prevention, but generally these services are not provided.

[b]Provides a checklist for individuals to conduct home assessments, does not provide professional home assessments.

[c]Program officials noted they incorporate certain evidence-based falls prevention practices, such as evidence-based educational activities. Additionally, clinical interventions and programs serving patients cared for by the Veterans Health Administration were not within our scope.

[d]HISA, the Specially Adapted Housing Program, and VR&E Housing Adaptation Grant also serve active duty servicemembers who have been determined to meet program eligibility requirements.

The types of services provided—EBFP, home modification, or home assessment—generally vary depending on whether the program targets older adults or veterans with disabilities:

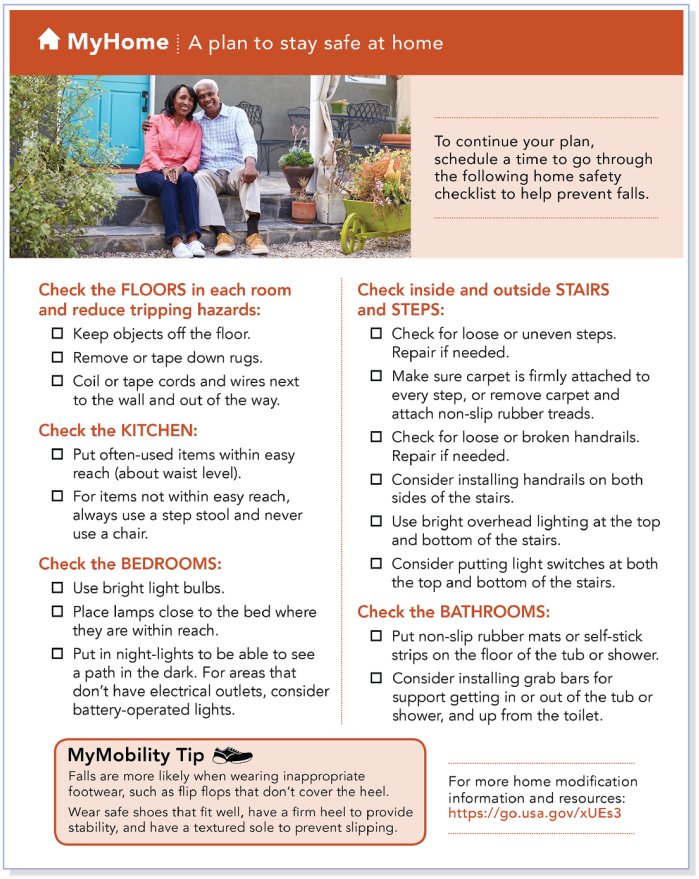
- **EBFP.** Five of the programs that provide or allow funding for EBFP target older adults, including those with disabilities. These programs are—ACL's OAA Title III-D Preventive Health Services program and ACL's Prevention and Public Health Fund (PPHF) Evidence-Based Falls Prevention program; CDC's MyMobility Plan and CDC's Stopping Elderly Accidents, Deaths, and Injuries (STEADI); and HUD's Older Adults Home Modification Program (OAHMP).[16] The five programs vary in how they provide EBFP based on their program purpose. For example, CDC's MyMobility Plan is a self-help planning tool that older adults can access online and use to plan for aging-related mobility changes that might increase their risk of falls. (See fig. 4.) In contrast, HUD's OAHMP grantees provide individualized EBFP interventions to participants, which can include clinical interventions with an occupational therapist and a nurse, as well as a home assessment and home maintenance and/or repair services.[17] (See appendix II for additional information on the purposes of the nine programs in our inventory.)

[16]CDC officials said that they consider STEADI and MyMobility Plan to be informational tools rather than programs. However, given our broad definition of a program, we included both in our inventory.

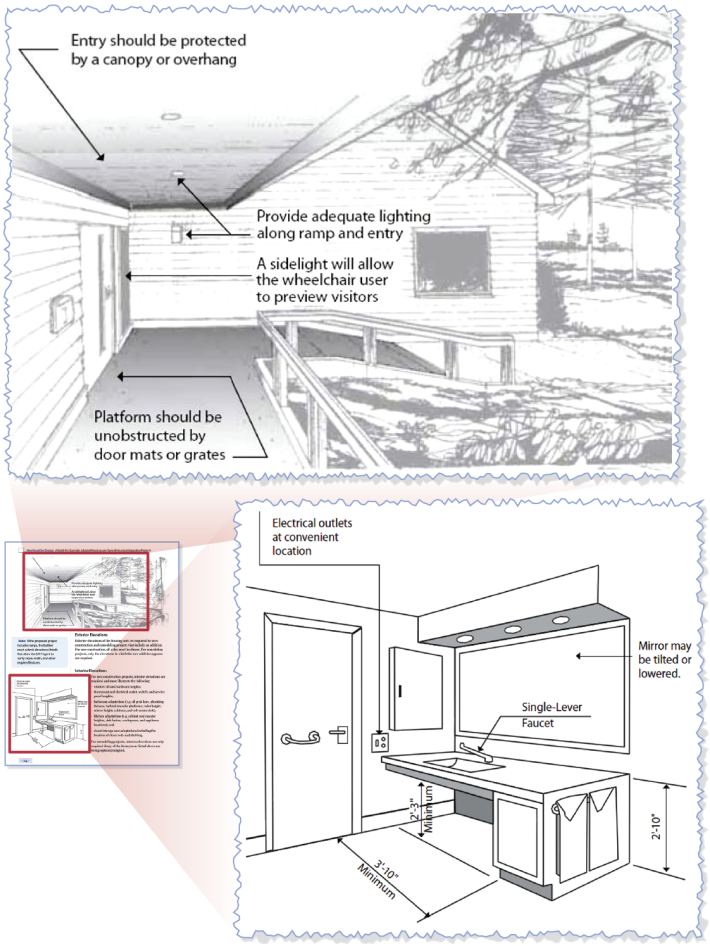
[17]Program officials informed us that HUD's Older Adults Home Modification Program currently gives grantees the option to provide an individualized EBFP intervention by adopting the Johns Hopkins University's CAPABLE program model and may expand its list of EBFP interventions in the future.

Figure 4: Examples from Federal Evidence-Based Falls Prevention and Home Modification Programs

MyMobility planning tool



Illustrations of home modifications allowed through the Specially Adapted Housing Program



Source: "MyMobility Plan," published by the Centers for Disease Control and Prevention, National Center for Injury Prevention and Control and Excerpt from the Handbook for Design: A Guide for Specially Adapted Housing and Special Housing Adaptation Projects, U.S. Department of Veterans Affairs, Veterans Benefits Administration. | GAO-22-105276

Accessible Data for Figure 4: Examples from Federal Evidence-Based Falls Prevention and Home Modification Programs

Figure shows excerpt from MyMobility planning tool

Check the FLOORS in each room and reduce tripping hazards: Keep objects off the floor. Remove or tape down rugs. Coil or tape cords and wires next to the wall and out of the way. Check the KITCHEN: Put often-used items within easy reach (about waist level). For items not within easy reach, always use a step stool and never use a chair. Check the BEDROOMS: Use bright light bulbs. Place lamps close to the bed where they are within reach. Put in night-lights to be able to see a path in the dark. For areas that don't have electrical outlets, consider battery-operated lights.

Check inside and outside STAIRS and STEPS: Check for loose or uneven steps. Repair if needed. Make sure carpet is firmly attached to every step, or remove carpet and attach non-slip rubber treads. Check for loose or broken handrails. Repair if needed. Consider installing handrails on both sides of the stairs. Use bright overhead lighting at the top and bottom of the stairs. Consider putting light switches at both the top and bottom of the stairs. Check the BATHROOMS: Put non-slip rubber mats or self-stick strips on the floor of the tub or shower. Consider installing grab bars for support getting in or out of the tub or shower, and up from the toilet.

MyMobility Tip Falls are more likely when wearing inappropriate footwear, such as flip flops that don't cover the heel. Wear safe shoes that fit well, have a fir m heel to provide stability, and have a textured sole to prevent slipping.

For more home modification information and resources: https://go.usa.gov/xUEs3

Figure also shows Illustrations of home modifications allowed through the Specially Adapted Housing Program

- Outdoors
  - Entry should be protected by canopy or overhang
  - Provide adequate lighting along ramp and entry
  - A sidelight will allow the wheelchair user to preview visitors
  - Platform should be unobstructed by door mats or grates
- Inside the bathroom
  - Electrical outlets at convenient location
  - Mirror may be tilted or lowered
  - Single-level faucet

Source: "MyMobility Plan," published by the Centers for Disease Control and Prevention, National Center for Injury Prevention and Control and Excerpt from the Handbook for Design: A Guide for Specially Adapted Housing and Special Housing Adaptation Projects, U.S. Department of Veterans Affairs, Veterans Benefits Administration. | GAO-22-105276

- **Home modifications.** All four programs that target veterans with disabilities focus on home modifications and do not offer EBFP, including HUD's Veterans Housing Rehabilitation and Modification Pilot Program, VA's Home Improvement and Structural Alterations program, Specially Adapted Housing Program, and Veteran Readiness and Employment (VR&E) Housing Adaptation Grant

program.[18] All of the veterans programs provide structural modifications to the home environment ranging from major modifications such as widening doorways and installing ramps, to minor modifications, such as adding grab bars or railings. (See fig 4.) These programs also offer adaptive equipment (e.g., shower chairs and stick-on motion sensor lights) to enable individuals to perform daily living activities and reduce the risk of falling. But the programs vary in whether they provide support for non-structural modifications (e.g., installing higher watt light bulbs and clearing potential walkway hazards). Additionally, two older adult programs—ACL's PPHF Evidence-Based Falls Prevention program and HUD's OAHMP—include home modifications and can provide structural modifications, nonstructural modifications, and adaptive equipment.

- **Home assessments.** Eight of the nine programs provide home assessment services, ranging from checklists for older adults and their caregivers to conduct their own home assessment to home assessment services conducted by professionals. According to survey responses, professional assessments may also consider the individual's other supportive service or health care needs in addition to an assessment of potential challenges and risks in the home.

Despite Overlapping Services, Program Reach Is Limited, and Stakeholders We Interviewed Identified Gaps in Populations Served

Across the nine programs we surveyed, agency survey responses indicated there was some overlap in program services and target populations. In addition, these programs, which are involved in the same broad area of national need, were fragmented across several federal agencies. However, we did not find the programs to be duplicative since they had distinct purposes, which differentiated the services that were provided and how they were executed. Programs also targeted distinct groups of beneficiaries within broader target populations. For example, in

[18]The Veteran Readiness and Employment program has five different support-and-services tracks: Reemployment, Rapid Access to Employment, Employment Through Long Term Services, Self-Employment, and Independent Living. The VR&E Housing Adaptation Grant program is one service within the Independent Living or Employment Through Long Term Services support-and-services track. The Independent Living track is intended to assist servicemembers and veterans who cannot return to work right away, but may qualify for services that can help them live as independently as possible. The Employment Through Long Term Services track is focused on offering education or training to assist veterans in finding work in a different field that better suits their current abilities and interests.

regard to older adults, HUD's OAMHP specifically targets older adult homeowners who are low-income; and in regard to veterans with disabilities, VA's VR&E Housing Adaptation Grant is aimed at serving veterans or servicemembers with disabilities who require adaptations to achieve a vocational goal.

Fragmentation, Overlap, and Duplication

Fragmentation refers to those circumstances in which more than one federal agency (or more than one organization within an agency) is involved in the same broad area of national need and opportunities exist to improve service delivery.

Overlap occurs when multiple agencies or programs have similar goals, engage in similar activities or strategies to achieve them, or target similar beneficiaries.

Duplication occurs when two or more agencies or programs are engaged in the same activities or provide the same services to the same beneficiaries.

Source: GAO, *Fragmentation, Overlap, and Duplication: An Evaluation and Management Guide*, GAO-15-49SP (Washington, D.C.: Apr 14, 2015). | GAO-22-105276

Further, several of the programs are capable of serving only a limited number of participants, and, in prior work, we found that overlap may be beneficial when programs have limited reach.[19] Eight of the nine programs had fiscal year 2021 obligations of $52 million or less.[20] In fiscal year 2020, programs with available participation data ranged from serving 94 adults (VA's VR&E Housing Adaptation Grant) to approximately 540,000 adults (ACL's OAA Title III-D Preventive Health Services). However, for the latter, participants included those receiving other evidence-based health promotion services, not only EBFP. (See appendix II for additional information on obligations and numbers served for each program.)

Although we identified other federal programs that allow funds to be used for EBFP, home assessment, or home modification services, the extent to which programs offer these services is unknown. Medicare Advantage,

[19]For example, overlap may increase the likelihood that eligible individuals seeking benefits from one program will be referred to other appropriate programs, and help households fill service gaps and address their specific, individual needs. However, we have also noted in prior work that program overlap can also create the potential for unnecessary duplication of efforts and confuse those seeking services. GAO-15-49SP.

[20]VA's Specially Adapted Housing Program had $125 million in fiscal year 2021 obligations and served 2,300 people.

for example, may offer home modifications as supplemental benefits for chronically ill enrollees who meet certain criteria, and may offer home assessment services as part of evaluating an enrollee's falls-risk. Similarly, for those eligible for Medicaid home- and community-based services, program funds may be used to support home assessment and modifications. In addition to these CMS programs, we identified other federal programs that allow funds to be used for EBFP, home assessment, or home modification services.[21] However, the extent to which such programs provide such services is uncertain. According to our analysis of agency information, federal agencies that administer these programs generally do not collect information on participants receiving and the amount spent on these types of services.[22]

In terms of both programs in our inventory and other federal programs that may support these services, officials from three national aging and disability organizations we interviewed indicated that local agencies and grantees often face difficult decisions on how to distribute funds due to limited resources. Such decisions can broaden gaps in services provided. In the case of home modifications, for example, organizations may have to decide whether to distribute funds more broadly by focusing on low-cost services, such as installing grab bars, or to serve fewer adults by focusing on adults with the greatest needs and higher costs, such as structural changes to a home. Officials from several organizations noted that local organizations frequently opt to focus on low-cost services, which may disadvantage those in greater need. According to the 2020 National Survey of Area Agencies on Aging Report, 61 percent of AAAs provide home repair or modification. Of these, 94 percent reported providing minor nonstructural home modifications, and 52 percent reported providing structural modifications.[23]

Officials from several national organizations we interviewed also said the fragmented nature of the various programs that directly provide or support

[21]See appendix III for additional information on these federal programs.

[22]For example, CMS officials informed us they collect some relevant data from states providing Medicaid home- and community-based services under 1915(c) authority, but cannot report specifically on the number of participants receiving or amount spent on home modifications. Specifically, CMS requires these states to submit information on the number of people receiving and amount spent on environmental modifications, which may include vehicle or home modifications, but states do not specify the type of modification provided in these data.

[23]USAging, *2020 National Survey of Area Agencies on Aging Report: Meeting the Needs of Today's Older Adults* (Washington, D.C.: 2022).

EBFP, home assessment, or home modification services made it more challenging for individuals to receive needed services. As a result of program fragmentation, officials from multiple national organizations indicated people in need of services, as well as their caregivers and local organizations, often have to identify and navigate multiple federal programs in order to find falls prevention, home assessment, or home modification services. Officials from one organization described it as a patchwork system, noting that often each program only addresses one issue and each program has different eligibility requirements regarding income, disability status, as well as other factors.

Additionally, some populations may be particularly underserved, according to our analysis of program information from agency officials and officials from several national organizations. For instance, of the nine programs in our inventory, none are designed to target adults with disabilities who are under age 60 and not veterans. The PPHF Evidence-Based Falls Prevention program allows program grantees to serve some adults with disabilities under age 60, although the program's target population is adults 60 years and older, according to ACL. Information from ACL indicates that since 2014, only 3 percent of those served in the PPHF Evidence-Based Falls Prevention program were adults with disabilities under age 60. Officials from several organizations we interviewed recognized adults under 60 with disabilities as an underserved population, along with other populations mentioned later in the report. For example, officials from the National Council on Independent Living explained that although AAAs can use OAA funding to provide these services for older adults, community-based centers for independent living and other organizations have to piece together funding or other resources to provide home modifications to people with disabilities younger than 60.

Overall, programs' data on demographic characteristics of people served was limited.[24] However, officials from several national organizations we spoke with identified multiple demographic groups, such as Native Americans, adults in rural areas, and renters who may face additional challenges in obtaining falls prevention, home assessment, and home modification services. For example, one survey of program grantees administering the OAA program serving tribal elders illustrated that home modifications, as well as other housing needs, were among the top unmet needs.[25]

When people in need of services do not receive them, their ability to live at home independently and safely is affected, according to officials from several national organizations we interviewed. Three of these organizations noted such gaps may accelerate the need for institutional or additional medical care. Officials from one aging organization noted that due to a shortage of home care workers, it is especially important to ensure adults have the home modifications they need to age in their homes.

National Data Suggests Need for Falls Prevention or Home Modification Services Beyond Targeted Populations

Our analysis of CDC's Behavioral Risk Factor Surveillance System (BRFSS) 2020 data on noninstitutionalized adults identified multiple subgroups of older adults and adults with disabilities with a high

[24]Four of the nine programs were able to provide data on the number of older adults and/or adults with disabilities served. (See appendix II.) The other five programs were unable to provide data on the number of adults served and information on their demographic characteristics. As a result, we were unable to assess the demographic composition of individuals served by the nine programs. In prior studies, ACL's PPHF Evidence-Based Falls Prevention and VA's Home Improvement and Structural Alterations (HISA) programs were able to analyze detailed demographic data. We describe the results later in the report. The study of ACL's PPHF Evidence-Based Falls Prevention program examined 44 grantees in 31 states from 2014–2019 and found the average age of program participants was 75.5, and the sample was primarily female (80 percent) and white (83 percent). The study of VA's HISA program used data matching to collect further participant data and found that the average age of the HISA participants included in their sample was 72.5, and the sample was primarily male (96 percent) and white (71 percent).

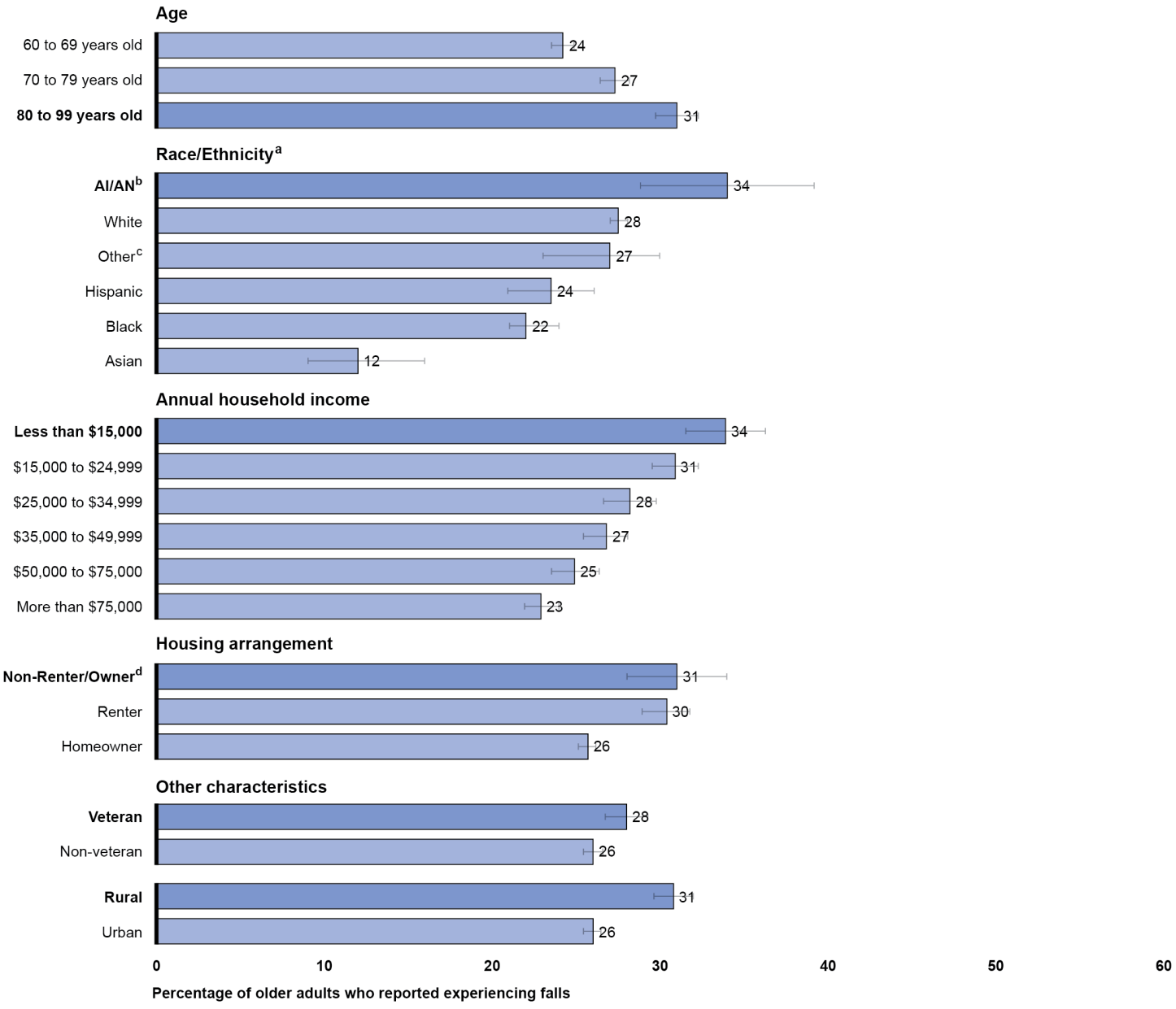
[25]USAging, *National Survey of Title VI Programs 2020 Report: Serving Tribal Elders Across the United States* (Washington, D.C.: 2020).

prevalence of falls and fall-related injuries compared to others.[26] For example, for older adults (60 years and older) we found that the percentage of falls and fall-related injuries were higher among those who were American Indian/Alaska Native (34 percent and 15 percent) than those who were White (28 percent and 10 percent) or Black (22 percent and 8 percent). (See fig. 5.) Our findings are consistent with trends identified in CDC's prior research using BRFSS to examine falls among older adults by characteristics, such as race/ethnicity, age, and geography.[27]

[26]BRFSS defines fall-related injuries as injuries from falls that limited regular activities for at least a day or caused an individual to go see a doctor.

[27]See: Gwen Bergen, et al., "Understanding Modifiable and Unmodifiable Older Adult Fall Risk Factors to Create Effective Prevention Strategies," *American Journal of Lifestyle Medicine*, vol. 15, no. 6 (2021) and Briana Moreland, Ramakrishna Kakara, and Ankita Henry, "Trends in Nonfatal Falls and Fall-Related Injuries Among Adults Aged ≥65 Years - United States, 2012-2018," *Morbidity and Mortality Weekly Report*, vol. 69, no. 27 (July 10, 2020).

Figure 5: Estimated Percentage of Reported Falls Among Older Adults (60 years and older), by Selected Characteristics, 2020



Source: GAO analysis of Behavioral Risk Factor Surveillance System data. | GAO-22-105276

Accessible Data for Figure 5: Estimated Percentage of Reported Falls Among Older Adults (60 years and older), by Selected Characteristics, 2020

Characteristic	Characteristic category	Lower	Estimate	Upper
Age	60 to 69 years old	23.5	24.2	24.9
Age	70 to 79 years old	26.4	27.3	28.2
Age	80 to 99 years old	29.7	31.0	32.3
Race/Ethnicity[a]	AI/AN[b]	28.8	34.0	39.2
Race/Ethnicity[a]	White	27.0	27.5	28.1
Race/Ethnicity[a]	Other[c]	23.0	27.0	30.0
Race/Ethnicity[a]	Hispanic	20.9	23.5	26.1
Race/Ethnicity[a]	Black	21.0	22.0	24.0
Race/Ethnicity[a]	Asian	9.0	12.0	16.0
Annual household income	Less than $15,000	31.5	33.9	36.3
Annual household income	$15,000 to $24,999	29.5	30.9	32.3
Annual household income	$25,000 to $34,999	26.6	28.2	29.8
Annual household income	$35,000 to $49,999	25.4	26.8	28.1
Annual household income	$50,000 to $75,000	23.5	24.9	26.4
Annual household income	More than $75,000	21.9	22.9	24.0
Housing arrangement	Non-Renter/Owner[d]	28.0	31.0	34.0
Housing arrangement	Renter	28.9	30.4	31.8
Housing arrangement	Homeowner	25.1	25.7	26.2
Veteran status	Veteran	26.7	28.0	29.3
Veteran status	Non-veteran	25.4	26.0	26.6
Rural/urban	Rural	29.6	30.8	32.0
Rural/urban	Urban	25.4	26.0	26.5

Source: GAO analysis of Behavioral Risk Factor Surveillance System data. | GAO-22-105276

Notes: The percentage of falls represents the share of older adults (60 years and older), including those with disabilities, who report falling at least once in 2020.

[a]Individuals who identified as having Hispanic ethnicity are not included in the percentages shown for race categories.

[b]AI/AN is the abbreviation for American Indian/Alaska Native (non-Hispanic).

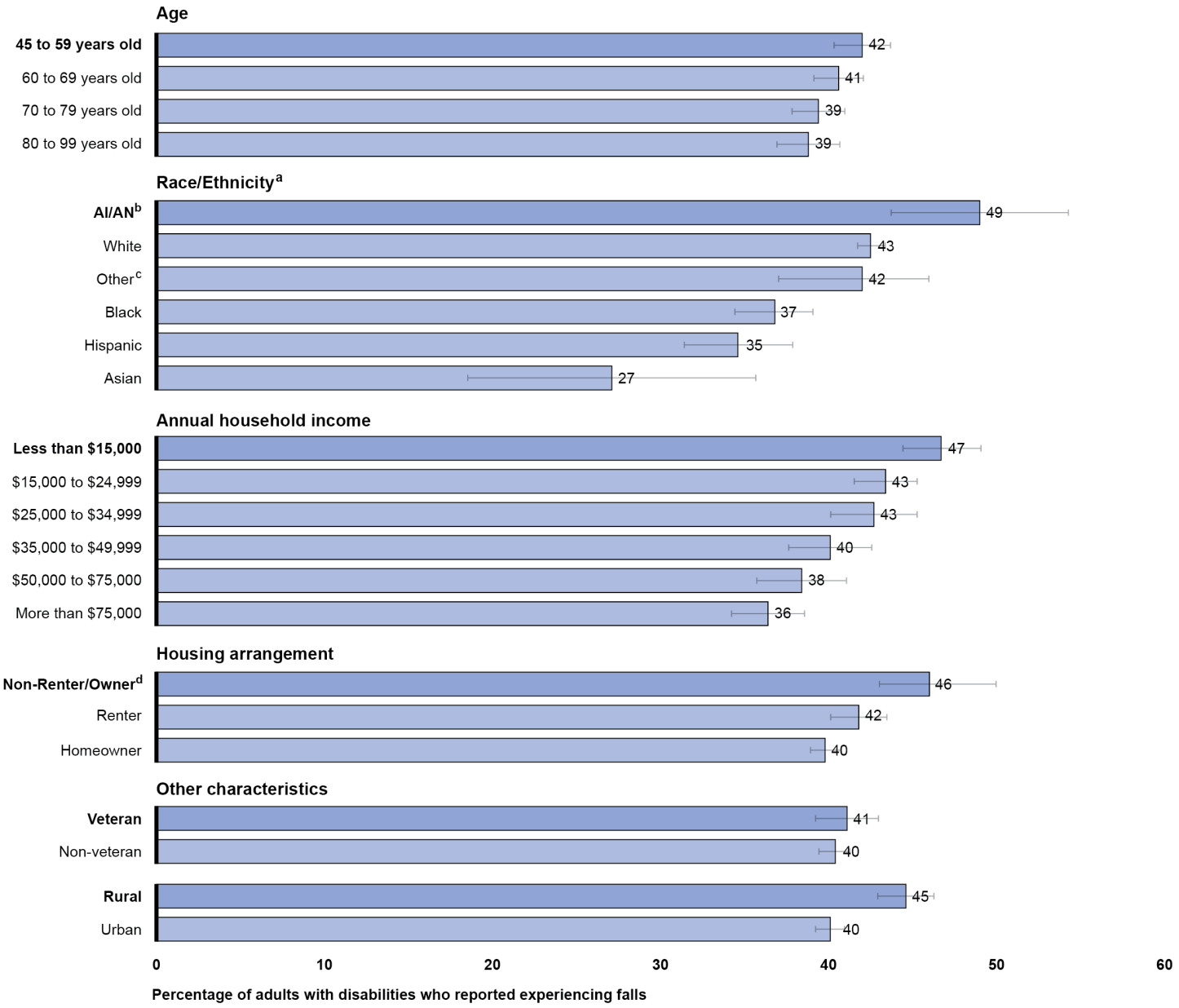
[c]Other includes individuals who identified as non-Hispanic and as multi-racial, Native Hawaiian or other Pacific Islander. Other also includes individuals who responded don't know or not sure, refused to respond, or where data on race/ethnicity was missing.

[d]Non-renter/non-homeowner describes a person living in a different arrangement, such as a group home or staying with friends or family without paying rent.

In the case of adults with disabilities (45 years and older), the prevalence of falls and fall-related injuries was higher than it was for older adults overall, but followed similar patterns when examining the data by race/ethnicity, income level, as well as other characteristics, according to our analysis of BRFSS data (see fig. 6).[28] (See appendix IV for additional information on the prevalence of falls and fall-related injuries for older adults and adults with disabilities by selected characteristics.)

[28]Adults 60 years and older with disabilities are captured in both sets of analyses and in figures 5 and 6. For adults with disabilities (45 years and older) we found that the estimated percentage of falls and fall-related injuries were 41 percent and 18 percent, compared with 26 percent and 10 percent for older adults (60 years and older).

Figure 6: Estimated Percentage of Falls among Adults with Disabilities (45 years and older), by Selected Characteristics, 2020



Source: GAO analysis of Behavioral Risk Factor Surveillance System data. | GAO-22-105276

Accessible Data for Figure 6: Estimated Percentage of Falls among Adults with Disabilities (45 years and older), by Selected Characteristics, 2020

Characteristic	Characteristic category	Lower	Estimate	Upper
Age	45 to 59 years old	40.3	42.0	43.7
Age	60 to 69 years old	39.1	40.6	42.1
Age	70 to 79 years old	37.8	39.4	41.0
Age	80 to 99 years old	36.9	38.8	40.7
Race/Ethnicity[a]	AI/AN[b]	43.7	49.0	54.3
Race/Ethnicity[a]	White	41.7	42.5	43.4
Race/Ethnicity[a]	Other[c]	37.0	42.0	46.0
Race/Ethnicity[a]	Hispanic	34.4	36.8	39.1
Race/Ethnicity[a]	Black	31.4	34.6	37.9
Race/Ethnicity[a]	Asian	18.5	27.1	35.7
Annual household income	Less than $15,000	44.4	46.7	49.1
Annual household income	$15,000 to $24,999	41.5	43.4	45.3
Annual household income	$25,000 to $34,999	40.1	42.7	45.3
Annual household income	$35,000 to $49,999	37.6	40.1	42.6
Annual household income	$50,000 to $75,000	35.7	38.4	41.1
Annual household income	More than $75,000	34.2	36.4	38.6
Housing arrangement	Non-Renter/Owner[d]	43.0	46.0	50.0
Housing arrangement	Renter	40.1	41.8	43.5
Housing arrangement	Homeowner	38.9	39.8	40.8
Veteran status	Veteran	39.2	41.1	43.0
Veteran status	Non-veteran	39.4	40.4	41.3
Rural/urban	Rural	42.9	44.6	46.3
Rural/urban	Urban	39.2	40.1	41.0

Source: GAO analysis of Behavioral Risk Factor Surveillance System data. | GAO-22-105276

Notes: The percentage of falls represents the share of adults (45 years and older) with disabilities who report falling at least once in 2020.

[a]Individuals who identified as having Hispanic ethnicity are not included in the percentages shown for race categories.

[b]AI/AN is the abbreviation for American Indian/Alaska Native (non-Hispanic).

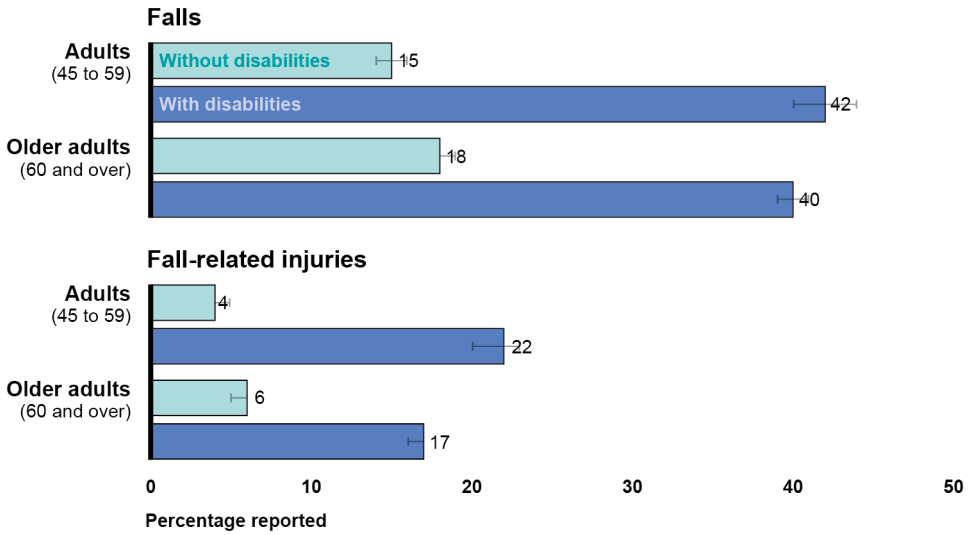
[c]Other includes individuals who identified as non-Hispanic and as multi-racial, Native Hawaiian or other Pacific Islander. Other also includes individuals who responded don't know or not sure, refused to respond, or where data on race/ethnicity was missing.

[d]Non-renter/non-homeowner describes a person living in a different arrangement, such as a group home or staying with friends or family without paying rent.

CDC's BRFSS analysis of falls and fall-related injuries among adults in the community, and its related published articles, have been limited to

adults aged 65 and older. However, our analysis of available data shows that adults with disabilities aged 45 to 59 were at high risk of falls. Specifically, this group of adults had the highest rates of falls and fall-related injuries when compared with older adults generally and even older adults with disabilities.[29] (See figure 7.) According to our analysis, we estimated that adults with disabilities 45 and older who reported falls number about 16.2 million in the U.S. population. Of these, adults with disabilities aged 45 to 59 made up a third—or an estimated 5.4 million adults—who reported falls.

Figure 7: Estimated Percentage of Falls and Fall-Related Injuries by Age and Disability Status, 2020



Source: GAO analysis of Behavioral Risk Factor Surveillance System data. | GAO-22-105276

[29]We found that the percentage of falls and fall-related injuries were 26 percent and 10 percent for older adults generally. Although the confidence interval for adults with disabilities overlaps with that of older adults with disabilities, a further statistical test indicated estimates are different.

Accessible Data for Figure 7: Estimated Percentage of Falls and Fall-Related Injuries by Age and Disability Status, 2020

Falls (Percentage reported)

	Lower	Estimate	Upper
Adults (45 to 59) without disability	14	15	16
Adults (45 to 59) with disability	40	42	44
Older adults (60 and over) without disability	18	18	19
Older adults (60 and over) with disability	39	40	41

Fall-related injuries (Percentage reported)

	Lower	Estimate	Upper
Adults (45 to 59) without disability	4	4	5
Adults (45 to 59) with disability	20	22	23
Older adults (60 and over) without disability	5	6	6
Older adults (60 and over) with disability	16	17	17

Source: GAO analysis of Behavioral Risk Factor Surveillance System data. | GAO-22-105276

Note: The percentage of falls represents the share of adults (45 to 59 years) or older adults (60 years and older), with or without disabilities, who report falling at least once in 2020, and the percentage of fall-related injuries represents the share of adults (45 to 59 years) or older adults (60 years and older), with or without disabilities, who report falling and experiencing an injury in 2020. Data on falls and fall-related injuries are not collected for individuals aged 18 to 44 years.

CDC officials told us that although CDC collects data on falls and fall-related injuries on adults aged 45 to 64 through BRFSS, it has never analyzed these data. Additionally, CDC does not ask the two fall-related questions on the BRFSS survey to adults aged 18 to 44, as it does for other health risk factors on adults starting at age 18.[30] CDC officials informed us that due to resource constraints, they have focused on analyzing fall-related data for adults aged 65 and older, because they consider them to be at higher risk of falls and there are evidence-based interventions for this population.

BRFSS is intended to, among other things, enable CDC to work closely with state and territorial partners to provide valuable data both for public health research and practice, and for state and local health policy

[30]The 2020 BRFSS survey includes two fall-related questions for adults 45 and older. The interviewer first asks, “In the past 12 months, how many times have you fallen?” If person responds that they have experienced at least one fall, the interviewer asks, “How many of these falls caused an injury that limited your regular activities for at least a day or caused you to go to see a doctor?”

decisions. The survey is recognized by CDC as the primary source of national data in surveilling risk among adults 18 and older and a key resource in promoting cross-agency collaboration and information sharing for state and federal government. As an agency, CDC has also established Healthy People 2030 objectives, which include reducing unintentional injuries, such as falls, across all age cohorts both in regard to reducing emergency department visits for nonfatal injuries, as well as fatal injuries.[31]

Given BRFSS's stated purpose and relevant agency and federal goals, CDC may be missing opportunities to use existing data to better understand at-risk populations among adults aged 45 to 64 for falls and fall-related injuries by focusing solely on adults aged 65 years and older. It may also be missing opportunities to better understand falls risks in populations aged 18 to 44 because it does not ask fall-related questions to BRFSS survey participants of those ages. Accordingly, CDC may be unable to provide valuable information that could inform BRFSS and agency-wide surveillance goals on risk behaviors and at-risk populations, as well as related Healthy People objectives aimed at reducing unintentional injuries across all age groups.

Available Agency Studies Suggest Falls Prevention Practices Lead to Positive Health Outcomes for Older Adults

Agency-Sponsored Research of Selected Federal Programs Indicates Positive Health Outcomes, Including Reduced Falls and Fall-Related Injuries

Federal agencies have conducted various health-related impact and outcome studies of three of the nine federal EBFP, home assessment, and home modification programs in our inventory. These studies suggest

[31]Other CDC data have shown that for all ages unintentional injuries over the last 20 years (2001-2020), falls are the leading cause of emergency room visits for all adults and among the top 10 causes of deaths resulting from an unintentional injury.

positive health outcomes for older adult participants.[32] Agency studies of two EBFP programs—CDC's STEADI and ACL's PPHF Evidence-Based Falls Prevention—suggest that these programs may improve older adults' health outcomes by reducing falls, fall-related injuries, and fall-related hospitalizations.[33] These studies generally focus on the effectiveness of falls prevention interventions, such as falls education, strength and balance exercises, or medication management in addition to the use of home assessments and modifications. In addition, one study examined a federal home modification program for veterans—VA's Home Improvements and Structural Alterations Benefits Program—and found veterans with disabilities experienced a reduced number of hospital visits

[32]Impact studies estimate what would have happened in the absence of the program or aspect of the program to assess its impact. Outcome studies assess the extent to which a program has achieved certain objectives, and how the program achieved these objectives. For programs in our inventory, we asked agency officials to identify any federally conducted or federally sponsored impact evaluations and/or outcome evaluations related to health status and health outcomes in populations supported by the program published 2011 or later. All findings cited from these studies are statistically significant, unless otherwise noted.

[33]Yvonne A. Johnston, et al., "Implementation of the Stopping Elderly Accidents, Deaths, and Injuries Initiative in Primary Care: An Outcome Evaluation," *The Gerontologist*, vol. 59, no. 6 (2019) and J. Brach, et al., "Dissemination and Implementation of Evidence-Based Falls Prevention Programs: Reach and Effectiveness." *Journals of Gerontology: Medical Sciences*, vol. 77, no. 1 (2022).

Source: Stock.adobe.com. | GAO-22-105276

Stopping Elderly Accidents, Deaths, and Injuries (STEADI)

STEADI gives health care providers a suite of materials (e.g., standardized screening questions, fact sheets, and training videos) to help them discuss fall risks with older adults and incorporate effective fall prevention into their practices.

STEADI includes three core elements:

1. Screening: Identify older adults with an increased falls risk.
2. Assessment: Identify risk factors that can be modified (e.g., review medications, administer a functional ability test, check vision, refer older adult to a podiatrist, or evaluate home fall hazards).
3. Intervention: Reduce fall risk using evidence-based strategies (e.g., strength and balance program, medication management, occupational therapy, or corrective eyewear).

Source: Yvonne A. Johnston, et al., "Implementation of the Stopping Elderly Accidents, Deaths, and Injuries Initiative in Primary Care: An Outcome Evaluation," *The Gerontologist*, vol. 59, no. 6 (2019). | GAO-22-105276

after receiving home modifications recommended by a health care provider.[34] (See appendix V for more information on these studies.)

- **STEADI.** One of two CDC-sponsored studies of STEADI suggests this EBFP program holds promise for older adults' health outcomes (see sidebar for key components of STEADI). A 2018 outcome study of STEADI found that those at risk for a fall who received a Fall Plan of Care—fall risk prevention strategies identified by a primary care provider in response to a medical assessment—were 40 percent less

[34]Luz Mairena Semeah, et al., "Home Modification and Health Services Utilization by Rural and Urban Veterans With Disabilities," *Housing Policy Debate*, vol. 31, no. 6 (2021).

likely to have a fall-related hospitalization when compared to those at risk for a fall who did not receive a Fall Plan of Care.[35]

- **ACL's PPHF Evidence-Based Falls Prevention.** One 2021 federally sponsored outcome study of ACL's PPHF Evidence-Based Falls Prevention program examined 53,000 older adults in 31 states and found a substantial number reported positive health outcomes after participating in various interventions.[36] Through its PPHF Evidence-Based Falls Prevention program, ACL funds grantees' use of EBFP interventions, which have been previously implemented at the community level and have undergone prior rigorous study. Some interventions include educational and exercise components.[37] The study found that after participating in these interventions, older adults reported taking different actions to reduce falls, including exercise and making home safety modifications. In addition, 32 percent of older adults in the study reported less fear of falling, 22 percent reported fewer falls, and 10 percent reported fewer fall-related injuries.
- **Home Improvements and Structural Alterations Benefits Program (HISA).** A 2021 VA-sponsored outcome study found veterans with disabilities who received home modifications based on health care providers' recommendations through HISA experienced a significant reduction in hospitalization after 1 year.[38] Although veterans of any age may participate in HISA, those included in the study had an average age of 73. Researchers concluded that by making veterans' homes more accessible with home modifications, veterans with disabilities are more likely to be able to remain in their homes, receive community-based health care services focused on health maintenance and preventative care, and avoid costly hospital stays.

[35]Johnston, et al., "Implementation of the Stopping Elderly Accidents, Deaths, and Injuries Initiative in Primary Care."

[36]Brach, J., et al., "Dissemination and Implementation of Evidence-Based Falls Prevention Programs."

[37]For example, Matter of Balance is an intervention that employs educational and exercise components and emphasizes strategies to reduce fear of falling and increase activity levels, and the Stay Active and Independent for Life program is an intervention with strength, balance, and fitness components.

[38]Luz Mairena Semeah, et al., "Home Modification and Health Services Utilization by Rural and Urban Veterans With Disabilities."

Although agencies had not completed impact or outcome studies for other programs in our inventory, ACL and HUD have other health-related research efforts underway.

- **OAA Title III-D Preventive Health Services.** ACL is currently evaluating the degree to which the evidence-based interventions funded under OAA Title III-D Preventive Health Services are implemented with fidelity.[39] According to ACL officials, the fidelity study will determine if ACL grantees are implementing these interventions—which have been proven to achieve identified outcomes—as intended and what supports ACL might provide to improve implementation.[40] ACL officials said that this evaluation is expected to end in September 2022.
- **Older Adults Home Modification Program.** HUD is conducting an evaluation of this program, as directed by Congress, and will examine the program's impact on participants' number of emergency room visits and ability to age in their own homes. HUD officials anticipate completing this study by 2026.

Officials overseeing other programs in our inventory have conducted other types of research that focus on program use rather than health outcomes. For example, CDC officials surveyed older adults on their use of a draft version of the MyMobility Plan tool and found that a higher percentage of those who used the MyHome section of the tool have checked their home for safety hazards and have made safety changes in their homes, compared with a control group.[41] VA officials said that for the Specially Adapted Housing Program—which provides funds to veterans and active duty servicemembers for the purpose of adapting their homes—they have historically measured program impact based on such metrics as the number of applications received, projects approved and completed, and veterans receiving services.

[39]In addition, officials said that ACL provided funding for the National Council on Aging to conduct another fidelity study to evaluate the implementation of evidence-based falls prevention programs in a remote format due to COVID-19.

[40]In our prior work, we have found process evaluations, such as fidelity studies, can help answer evaluation questions during the early stages of a program or initiative, while outcome or impact studies may be more appropriate for mature, stable programs with well-defined program models. GAO, *Designing Evaluations: 2012 Revision (Supersedes PEMD-10.1.4)*, GAO-12-208G (Washington, D.C.: Jan. 31, 2012).

[41]According to CDC officials, these findings have not been published.

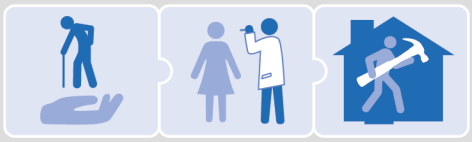
Other Federally Funded Research on Falls Prevention Interventions Also Suggests Promising Health Outcomes, Such as Improved Functioning in Daily Activities

Federal agency officials also identified two multifaceted falls prevention interventions—implemented at the community level—as contributing to the evidence base for federal programs and which were evaluated through federally sponsored impact and outcome studies.[42] Like the federal programs in our inventory which have been studied, these interventions suggest a positive effect on health outcomes for participants.

- **Community Aging in Place—Advancing Better Living for Elders (CAPABLE).** Various federally sponsored studies of CAPABLE—developed by the Johns Hopkins School of Nursing—have examined the intervention in different settings and locations and suggest that it can improve functioning in daily activities among older adults (see sidebar for components of CAPABLE). Two impact and two outcome studies sponsored by HHS agencies suggest that CAPABLE decreased participants' disability scores.[43] For example, one small impact study from 2011 found low-income older adults with disabilities experienced improvements in their ability to perform daily activities,

[42]Studies of falls prevention programs that were not federally conducted or sponsored or that do not pertain to health outcomes for older adults or adults with disabilities were beyond this scope of this review, yet may be informative. For example, CDC's compendium of falls prevention interventions cites research that was not federally sponsored, and we considered this research beyond the scope of our review.

[43]Disability scores are determined by scoring patients' difficulty related to the eight activities of daily living (ADL): walking across a small room, bathing, dressing the upper body, dressing the lower body, eating, using the toilet, transferring in and out of bed, and grooming, and the instrumental activities of daily living (IADL): using the phone, shopping, preparing food, light housekeeping, washing laundry, traveling independently, taking medications, and managing finances independently.



Source: GAO. | GAO-22-105276

Community Aging in Place—Advancing Better Living for Elders (CAPABLE)

CAPABLE addresses personal and environmental factors that contribute to disability and includes several components:

1. A multidisciplinary assessment performed by an occupational therapist and a registered nurse.
2. Development of an integrated plan that is based on individual assessments and participant-identified goals and that includes tailored strategies that address those goals.
3. Implementation of these strategies through regular check-ins.
4. Home repair, environmental modifications, and medical equipment that support the achievement of participant-identified functional goals. For 5 months, CAPABLE participants receive up to 6 one-hour home sessions with the occupational therapist; up to 4 one-hour home sessions with the registered nurse; and up to $1,300 worth of home repairs, modifications, and assistive devices.

Source: Sarah L. Szanton, et al, "Effect of a Biobehavioral Environmental Approach on Disability Among Low-Income Older Adults: A Randomized Clinical Trial," *JAMA Internal Medicine*, vol. 179, no. 2 (2019). | GAO-22-105276

such as dressing and preparing food.[44] Participants also gained confidence that they could conduct certain activities without falling and reported an increase in quality of life, as compared with the control group. A larger 2019 impact study of low-income older adults with disabilities found CAPABLE participation resulted in a 30 percent reduction in activities of daily living disability scores. Compared with the control group, participants in the CAPABLE group were more likely to report that the program made their life easier, helped them

[44]Participants were selected who had difficulty in one or more activity of daily living or two or more instrumental activities of daily living. Sarah L. Szanton, et al., "Community Aging in Place, Advancing Better Living for Elders: A Bio-Behavioral-Environmental Intervention to Improve Function and Health-Related Quality of Life in Disabled Older Adults," *Journal of the American Geriatrics Society*, vol. 59, no. 12 (2011).

take care of themselves, helped them gain confidence in managing daily challenges, and kept them living at home.[45]

Federal agencies are sponsoring additional studies of CAPABLE to inform their programmatic efforts. HUD sponsored a meta-analysis of CAPABLE studies and is currently sponsoring another study of the intervention, which informed the design of HUD's Older Adults Home Modification Program. VA is also sponsoring a study of CAPABLE for veterans 65 years and older.

- **Living Independently and Falls-free Together (LIFT) Wellness Program.** A 2015 federally-sponsored impact study of LIFT Wellness Program suggests the intervention may have contributed to a reduced risk of falls and fall-related injuries among older adults.[46] HHS's Office of the Assistant Secretary for Planning and Evaluation sponsored the development and evaluation of LIFT Wellness Program because there were few studies examining the impact of falls prevention interventions on the use and cost of long-term services and supports.[47] Researchers found that community-dwelling adults 75 years and older who participated in LIFT Wellness Program experienced reduced risk of falls and fall-related injuries, compared with a control group, in the first year following the intervention. The study also found that in the 3 years after the intervention, participants in the intervention group had a significantly (33 percent) lower incidence of claims for long-term services and supports than those in the control group, resulting in cost savings for insurers.

[45]Sarah L. Szanton, et al., "Effect of a Biobehavioral Environmental Approach on Disability Among Low-Income Older Adults: A Randomized Clinical Trial," *JAMA Internal Medicine*, vol. 179, no. 2 (2019).

[46]LIFT Wellness Program was developed for community-dwelling older adults and included a clinical assessment performed in-home by a nurse, customized recommendations and education (created by nurses), a coaching call between the nurse and the participant, and a quarterly newsletter, which provided additional coaching and education about falls prevention, along with suggestions and tips for implementing fall-mitigating behaviors. Marc A. Cohen, et al., "Prevention Program Lowered The Risk Of Falls And Decreased Claims For Long-Term Services Among Elder Participants," *Health Affairs*, vol. 34, no. 6 (June 2015).

[47]LIFT Wellness Program was developed in conjunction with LifePlans Inc.

Federal Agencies Coordinate on Some Falls Intervention Efforts, but Consumer Information Does Not Reach All At-Risk Populations

Agencies Have Coordinated on Falls Prevention and Home Modifications, but ACL Has Not Identified a Way to Sustain Efforts and Include All At-Risk Populations

Agency officials reported coordinating to support EBFP, home assessments, or home modifications through efforts such as sharing information for administering programs or developing grants. In general, the efforts agencies cited were within their respective departments, or were focused on specific populations.

- **Coordination within departments.** Of the nine federal programs included in our inventory that focus on EBFP, home assessment, or home modification, eight reported coordination activities, with most activities occurring within their departments—HHS, HUD, and VA.[48] For example, in their responses to our survey, officials from VA's VR&E program reported coordinating with VA medical centers to conduct home assessments for eligible veterans and to determine their need for structural modifications. In another case, officials from ACL's PPHF Evidence Based Falls Prevention program said they share information with CDC about implementation of evidence-based programs at the community level and receive updates from CDC about training for health care professionals.
- **Coordination focused on a specific program or population.** In other cases, officials described interdepartmental coordination efforts related to a specific program or target population. For instance, officials from HUD's Older Adults Home Modification Program described staff training and public outreach efforts that were supported by ACL funding. In another example, agency officials described an HHS, HUD, and USDA joint bulletin intended to support housing accessibility and safety for rural adults who are older or have disabilities. This August 2020 bulletin included information about the

[48]We surveyed nine programs, which were administered by ACL and CDC (within HHS) and by HUD and VA. VA's Home Improvement and Structural Alterations (HISA) program did not report any coordination activities via the survey.

relevant federal agencies and their respective programs and resources, some of which can help reduce incidents of falls.[49]

ACL sponsored one broader and multifaceted project focused on helping older adults learn about and access home modifications. To lead this project, ACL and University of Southern California's (USC) Leonard Davis School of Gerontology Fall Prevention Center of Excellence entered into a cooperative agreement, Promoting Aging in Place by Enhancing Access to Home Modifications. It ran from October 2018 to June 2022. USC led several efforts during the course of the agreement, in collaboration with various federal departments and national organizations, which included the following:

- **Developing an inventory of state and local home modification programs.** USC developed a searchable database of state and local level home modifications programs and potential funding sources to support home modifications. According to officials, this effort included conducting an environmental scan to catalog the federally funded home modification programs and services available through the aging network and related health and housing agencies to better support coordination and knowledge sharing.
- **Developing online resources for providers and consumers.** USC developed webinars on topics such as the role of home modification in promoting aging in place and community, among other training materials. It also developed resources for older adults and their caregivers such as fact sheets and videos about home modifications.
- **Establishing an interagency leadership committee.** This committee included representatives from USDA, HUD, VA, HHS, and a number of national organizations. In consultation with ACL, the committee was intended to provide insight on the direction of the project; facilitate coordination among federal agencies, programs, and national organizations; and distribute information to older adults, their caregivers, and underserved populations. ACL officials said the committee met six times, in addition to informal discussions, and officials who participated in these meetings reported they provided a

[49]U.S. Departments of Health and Human Services, Housing and Urban Development, and Agriculture, *Living at Home in Rural America: Improving Accessibility for Older Adults and People with a Disability,* Joint Informational Bulletin (Washington, D.C.: Aug. 19, 2020).

platform for sharing information on efforts related to EBFP and home assessments and modifications.[50]

Since the recent end of the ACL-USC project, it is unclear how federal agencies and relevant organizations will continue to engage in coordination and information sharing on these issues, although various officials described these efforts as helpful. Officials from a national aging organization that had participated in the leadership committee indicated that, given the degree to which the relevant programs are fragmented across multiple agencies, funding sources, and program expertise, building a better understanding of these issues across programs and agencies can be helpful. Officials from one federal agency noted that coordination efforts can be difficult because their falls prevention programs operate independently and noted that additional federal coordination—both within and among departments—would be beneficial. Similarly, federal efforts to promote information sharing have helped some officials from AAAs and national disability and aging organizations become aware of federal EBFP, or home assessment and modification programs and related resources, and most noted that ongoing efforts would be beneficial.

A new ACL resource center and its related stakeholder group could help sustain interagency coordination and information sharing on EBFP and home assessments and modifications. However, at the time of our review it was unclear the extent to which the resource center would serve this purpose. Specifically, in December 2021, ACL coordinated with HUD to launch the Housing and Services Resource Center aimed at improving access to affordable, accessible housing and related services.[51] This resource center provides a mechanism for participating federal agencies, and other stakeholders, to communicate on housing-related issues and for users to find information across programs in a central place. For instance, core topics of the resource center's work include accessible and affordable housing, homelessness, and tribal housing.

At the time of our review, the Housing and Services Resource Center had limited information related to home modifications or falls prevention,

[50]Another outcome of the leadership committee was a publicly available July 2021 webinar at which representatives of the committee discussed federal, state, and local-level home modification efforts to support aging in place.

[51]Additional agencies involved in this collaboration include CMS and the Substance Abuse and Mental Health Services Administration, which are both part of HHS. We describe this resource in more detail later in the report.

which was not prominently featured. However, ACL officials agreed that home modifications and falls prevention are critical components of housing services and had plans to add information regarding home modifications to the resource center. Specifically, ACL had entered into another contract with USC in spring 2022 to provide new deliverables related to home modifications, including a webinar and a modified training course. ACL officials said the agency had plans to make this information available on the Housing and Services Resource Center website and via email to stakeholder groups. However, they also indicated that it was too soon to specify exactly how the new information would be featured and the extent to which the resource center would play a role in promoting sustained awareness and information sharing on home modifications. Relatedly, ACL officials said the resource center's stakeholder group, whose representation has some overlap with the ACL-USC leadership committee, could potentially share information on home assessments and modification efforts.[52] However, this stakeholder group does not include representation from all the federal agencies involved in such efforts, such as VA, or from all groups that represent populations at risk of falls or in need of services, such as people living in rural communities.[53]

ACL was created, in part, to help manage the fragmentation that exists among federal programs that help people stay in their homes and their communities and to support the needs of both the aging and disability populations.[54] In keeping with this purpose, ACL's vision statement calls for it to provide leadership and support for its networks, be a source of collaboration and solutions for its partners, be a source of information for the public, and promote strategies that enable older adults and people with disabilities to live in their communities. Moreover, in our prior work, we found that sustained leadership is an essential element to developing collaborative working relationships and that collaborative mechanisms

[52]Although home assessments and modification efforts can be a component of falls prevention activities, the officials also confirmed that falls prevention will not be the focus of the ACL-USC contract. The Housing and Services Resource Center does include a link to the National Falls Prevention Resource Center, which contains information for older adults about falls.

[53]The current stakeholder group includes representation from several HHS agencies and HUD, as well as national organizations representing older adults, people with disabilities, Native Americans, and low-income housing populations, among others.

[54]See 80 Fed. Reg. 31,389, 31,389 (June 2, 2015). As previously noted, fragmentation refers to those circumstances in which more than one federal agency (or more than one organization within an agency) is involved in the same broad area. See GAO-15-49SP.

should include all relevant participants, with the appropriate knowledge and skills to contribute.[55] Without additional efforts to sustain ongoing information sharing across the fragmented programs that help address falls prevention and home modification for all older adults and adults with disabilities, ACL may miss opportunities to fulfill its purpose and better serve these populations.

Information on Falls Prevention and Related Issues Is Available, but Does Not Reach All At-Risk Populations

We identified various federally funded resource centers or websites that provide information on falls prevention, home assessments, and home modifications.[56] These resources include information for consumers or providers about how to find local supports, guides for caregivers to facilitate discussions about the risk of falls, and checklists to use when assessing a home for fall hazards. Although one informational resource was aimed at the broader population of adults with disabilities, the others were generally targeted at serving older adults. (See table 1.)

Table 1: Selected Federally Funded or Federally Administered Resources or Websites That Provide Information on Falls Prevention, Home Assessment, or Home Modifications

Federal agency administering or providing funding for website	Resource center or website	Examples of information pertaining to falls prevention, home modifications, or home assessments	Information aimed at serving older adults and/or adults with disabilities
ACL	**Eldercare Locator** uses both a website and a national toll-free number to connect older adults and their families to local services. Eldercare.acl.gov/Public/Index.aspx	• Referrals to support services including help with home repairs. • Brochures on home modification and falls prevention • Links to home modification resources including STEADI and homemods.org	Older adults

[55]GAO-12-1022.

[56]We identified these resource centers and websites through interviews with officials from federal agencies and national aging and disability organizations.

Federal agency administering or providing funding for website	Resource center or website	Examples of information pertaining to falls prevention, home modifications, or home assessments	Information aimed at serving older adults and/or adults with disabilities
ACL	**Homemods.org** promotes home modifications to support aging through a variety of webpages and consumer materials for older adults and their caregivers.	• National directory of home modification and repair resources for each state—aimed at both consumers and providers • Videos for consumers (e.g., "Home Modifications for Rural Older Adults" and "Home Modifications for Older Veterans") • Online training program for professionals	Older adults
ACL	**Home Usability Program** helps those with disabilities and others learn about home usability and the role it can play in independent living.	• Home Usability Plan for consumers, including home assessment worksheets for different parts of the house • Examples of home usability problems and solutions • Links to various disability resources • Information on assistance programs that may support home modifications	Adults with disabilities
ACL	**National Falls Prevention Resource Center** supports the implementation and dissemination of evidence-based falls prevention programs to increase awareness among consumers and their providers about the risk of falls, among other goals.	• Falls Free Check-up for professionals or consumers • Home modification strategies (with links to homemods.org) • Fact sheets and short articles for consumers • Conversation guide for caregivers	Older adults
ACL and HUD[a]	**Housing and Services Resource Center** contains information for people who provide housing resources, health, and supportive services with the goal of making community living possible for more people. https://acl.gov/HousingAndServices	• Links to other resources including some in this table, such as the homemods.org website and National Falls Prevention Resource Center	Both
CDC	**CDC Older Adult Fall Prevention** provides information, tools, and other resources to help older adults and caregivers prevent falls. https://www.cdc.gov/falls/index.html	• Links to data, publications, and resources on falls in older adults • Information targeted at consumers, such as MyMobility Plan and articles on medication • Links to resources for professionals, such as the compendium of evidence-based falls programs • Links to CDC's Still Going Strong awareness campaign that offers information on how to prevent injuries, like falls, as people age	Older adults

Federal agency administering or providing funding for website	Resource center or website	Examples of information pertaining to falls prevention, home modifications, or home assessments	Information aimed at serving older adults and/or adults with disabilities
CDC	**CDC Stopping Elderly Accidents, Deaths, and Injuries (STEADI)** provides information, tools, and other resources to help health care providers assess falls risks among older adults. https://www.cdc.gov/steadi/index.html	Training and tools for health care providers, pharmacists, and others Guides and brochures for older adults and caregivers	Older adults

Source: GAO analysis of key federally-funded falls prevention, home assessment, and home modification websites. | GAO-22-105276

Note: Abbreviations used above include: Administration for Community Living (ACL), Centers for Disease Control and Prevention (CDC), Department of Health and Human Services (HHS), and Department of Housing and Urban Development (HUD).

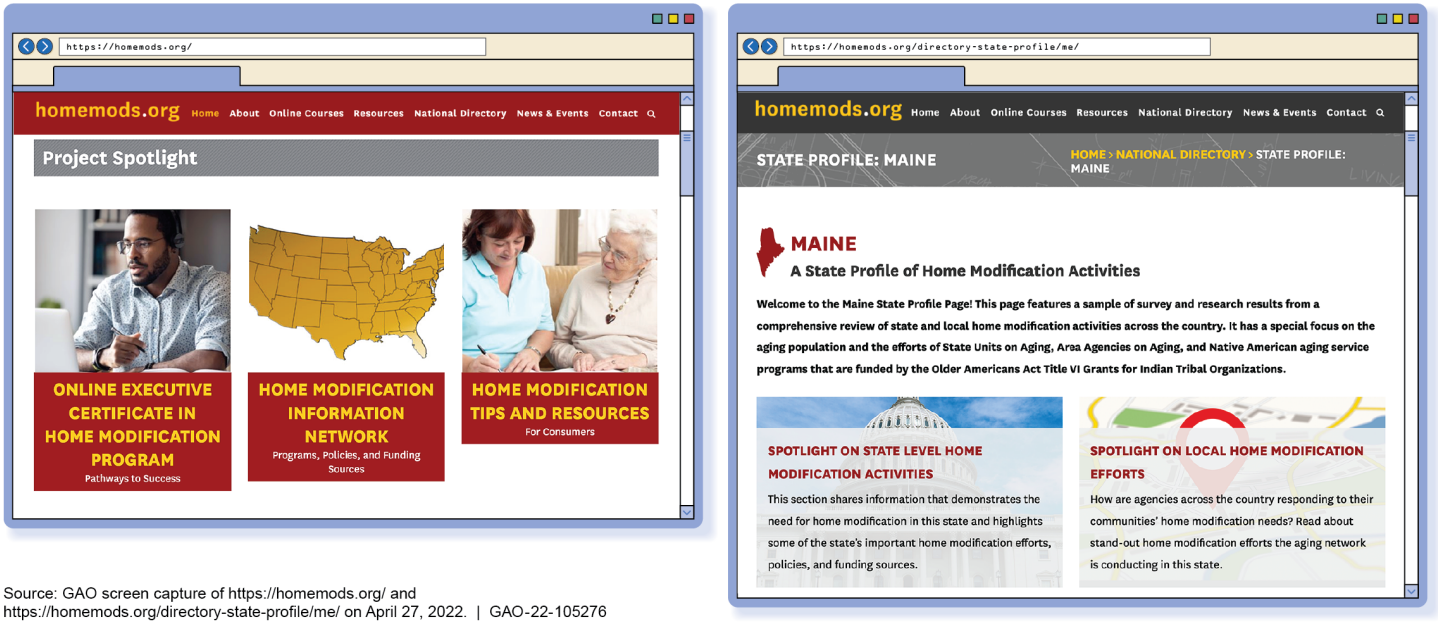
[a]HHS and HUD jointly administer the Housing and Services Resource Center, with ACL as the lead agency within HHS.

The resources we identified provided various types and levels of information. For example, homemods.org includes a searchable database to help consumers find home modification supports at the state and local level. Officials from two of the national aging and disability organizations we interviewed said that the homemods.org website is the most comprehensive source of such information available. The website also includes information specific to certain populations of older adults, such as those who are low-income, veterans, or live in rural communities. (See fig. 8 for examples of homemods.org resources.) In contrast, a few of the brochures on ACL's Eldercare Locator website address falls prevention and home modification, aimed at older adults or their caregivers, but the majority do not.[57] Instead, the Eldercare Locator's main purpose, according to ACL officials, is to connect consumers with local providers, such as AAAs, who can assist them further.[58] Officials from aging and disability organizations noted that this local assistance can be a necessary component of helping consumers who may find it challenging to learn about and navigate EBFP, home assessment, and home modification programs on their own.

[57]One Eldercare Locator brochure, *Modifying Your Home for Healthy Aging,* provides examples of home modifications and information on how to assess the need for and pay for modifications. Another, *Preventing Falls at Home,* includes a checklist with measures, such as securing all rugs, older adults can take to help avoid falls.

[58]To facilitate these connections, the locator includes both a website, which is searchable by zip code or city and state, and a national toll-free telephone number.

Figure 8: Selected Examples of Homemods.org Home Modification Resources



Source: GAO screen capture of https://homemods.org/ and https://homemods.org/directory-state-profile/me/ on April 27, 2022. | GAO-22-105276

Accessible Text for Figure 8: Selected Examples of Homemods.org Home Modification Resources

Graphic shows a screen capture of https://homemods.org/ and https://homemods.org/directory-state-profile/me/ on April 27, 2022

Source: GAO screen capture of https://homemods.org/ and https://homemods.org/directory-state-profile/me/ on April 27, 2022. | GAO-22-105276

We found, however, that officials from several AAAs were not always aware of relevant resources or available programs related to EBFP, home assessment, and home modification efforts. For instance, among the six selected AAAs that we contacted, some of which also serve as aging and disability resource centers, none cited homemods.org as a key resource they would consult on these issues. Similarly, officials from a national organization said that local providers, such as AAAs, can be helpful sources of information but, given challenges with staying abreast of the various resources and programs, as well as frequent changes in state and local workforces, providers could benefit from additional outreach. This could include information about available falls prevention programs and funding.

Officials from all of the national aging and disability organizations we interviewed further noted that informational resources available to consumers may not be reaching or targeted to all populations in need of EBFP, home assessment, and home modification supports. Most noted

that this is particularly challenging for adults with disabilities, and some said it is a challenge for providers. For example, an official from a national association representing disability providers, who worked at the local level, was unfamiliar with some available federal informational resources, including some of the CDC initiatives (STEADI and MyMobility Plan) and websites such as homemods.org. After reviewing these resources, the official noted that they could be helpful in supporting adults with disabilities seeking EBFP, housing assessment, or home modification services, especially because there is some degree of overlap in the challenges affecting this population and older adults.

As noted above, we found that most of the resources on falls and home assessments and modifications we reviewed were not specifically aimed at serving adults with disabilities of varying ages. ACL officials said that services and resources on falls prevention and home modifications are generally tied to dedicated funding, such as funding provided under the Older Americans Act of 1965, which is generally meant to help adults 60 years and older. However, in some instances ACL officials said they have been able to leverage funds for broader use. For instance, the new ACL-USC contract will expand the focus of home modification training to include providers who serve people with disabilities in addition to those who serve older adults.

Although ACL is making efforts to expand information available on home modifications to serve people with disabilities of varying ages, the agency generally has not taken steps to share and highlight relevant information regarding falls risk for this population.[59] ACL officials told us that they have not done this because neither adults with disabilities nor the organizations that serve them have raised falls as a concern.[60] However, as previously discussed, our analysis of CDC's 2020 data found that this population is at risk of falls. Specifically, we found that adults with disabilities aged 45 to 59 had among the highest rates of falls and fall-related injuries compared with other groups. Additionally, ACL sponsored

[59]One exception to this was related to people with traumatic brain injury, who may be at higher risk of falls. ACL officials told us they have shared information across the aging and disability portfolios to create awareness of this issue, and ACL has produced consumer resources on this topic.

[60]ACL officials also noted that many types of falls prevention efforts are perceived as medical or health care related for people with disabilities and generally are not considered as high a priority as other services and supports that people with disabilities depend upon for independence and full integration into their communities.

a 2016 study from the Association of University Centers on Disabilities that found that adults with intellectual disabilities could be at elevated risk of falls because of factors including arthritis, use of multiple medications, and reduced strength—which can be similar to those that affect older adults.[61] Given these data, ACL officials indicated that—although its ability to support falls prevention services aimed at individuals with disabilities younger than 60 is limited by funding constraints—sharing additional information on falls risk to inform state and local planning efforts for adults with disabilities could be useful.

Additionally, while ACL's aging specialists work closely with CDC experts to highlight information about falls prevention, ACL's disability specialists do not. Specifically, ACL officials said that they invite CDC experts to conferences for the aging network to present data on falls risk and information on falls prevention for older adults. Officials noted that the two agencies work together to ensure ACL's grantees who work with older adults are aware of CDC falls prevention programs such as STEADI. In contrast, ACL has not engaged with CDC on falls risk or prevention regarding people with disabilities of all ages, but ACL officials acknowledged that more collaboration with CDC in this area could be beneficial.

ACL's vision statement calls for it to provide support for its disability network and to serve as a source of information to the public. In addition, federal internal control standards state that an agency should communicate quality information throughout its organization and externally to help the agency achieve its objectives and inform decision making.[62] By sharing information related to falls prevention and home modifications with its disability network, ACL can better fulfill its vision and promote strategies that may facilitate independent living for adults with disabilities.

Conclusions

Falls can be deadly or cause serious injuries and lead to expensive emergency department visits or hospital stays for adults across all age

[61]Kelly Hsieh et al., *Policy to Practice: Falls in Adults with Intellectual Disabilities* (Silver Spring, Maryland: Association of University Centers on Disabilities, 2016). ACL's National Institute on Disability, Independent Living, and Rehabilitation Research funded this study.

[62]GAO-14-704G.

groups. Research suggests that interventions aimed at preventing falls may help improve health outcomes for older adults, but less is known about adults of varying ages, including those with disabilities who may be at higher risk of falling. This may be due, in part, to national falls data analyses focusing solely on older adults. Without expanding the scope of its analysis of falls data, CDC will continue to miss opportunities to better understand populations at risk of falls and to inform future programmatic efforts for these populations. Such efforts may also help to ensure these groups receive needed services and to reduce unintentional injuries across all age groups, which could be especially relevant for meeting CDC's Healthy People objectives.

Federal programs designed to provide EBFP, home assessment, and home modification services face resource constraints, and the fragmented nature of these programs across multiple agencies make them difficult for consumers to navigate and understand. Sharing information and resources across agencies, which could include building upon existing collaborative mechanisms, could offer low cost opportunities to help expand the reach of falls prevention, home assessment, and home modification efforts. For example, programs serving limited numbers of people could broaden their reach by taking advantage of existing educational tools and resources, like home assessment checklists, developed by other federal programs. In addition, better information sharing across programs and a more coordinated approach could help to ensure consumers find the information they need, no matter their entry point in searching for resources.

Without a collaborative mechanism for sustained interagency information sharing on all populations at risk of falls and in need of home modifications, ACL will not be able to ensure that all agencies with useful knowledge and skills contribute to efforts to help people stay in their homes and their communities. Further, unless ACL takes steps to highlight existing information on falls risk and related resources among its disability network, the agency will continue to miss opportunities to inform state and local planning efforts for adults with disabilities who are younger than 60. In the absence of such actions, ACL may miss ways to help prevent fall-related injuries, reduce related medical expenses, and enable people to independently age or live safely in their homes and communities.

Recommendations for Executive Action

We are making the following three recommendations, including one to the Director of the CDC and two to the Administrator of ACL:

The Director of the CDC should expand the scope of its analysis of Behavioral Risk Factor Surveillance System (BRFSS) data to include the prevalence of falls and fall-related injuries among adults under age 65 who may be at higher risk of falls, including adults with disabilities, and, as appropriate, share findings with ACL and other agencies overseeing relevant programmatic efforts. For example:

- CDC could analyze existing BRFSS data on adults aged 45 to 64 and share findings, as appropriate.
- CDC could propose asking adults aged 18 to 44 the two BRFSS fall-related questions, as part of the survey update process. (Recommendation 1)

The Administrator of ACL should identify a collaborative mechanism to facilitate sustained information sharing on all populations at risk of falls and in need of evidence-based falls prevention, home modifications, or home assessments. For example, this could be accomplished by establishing an interagency working group or by building upon the existing efforts to expand the reach of the Housing and Services Resource Center. (Recommendation 2)

The Administrator of ACL should share and highlight information on falls risk and related resources for adults with disabilities who are younger than 60 more prominently among its disability network to inform state and local planning efforts. For example, to the extent possible and appropriate, ACL could work with CDC to highlight relevant falls data and leverage existing resources on falls prevention. (Recommendation 3)

Agency Comments

We provided a draft of this report to HHS, HUD, and VA for review and comment. In its comments reproduced in appendix VI, HHS concurred with all three of our recommendations and described steps CDC and ACL plan to take to implement them. For example, CDC plans to include a fall-related question in the 2023 BRFSS, which will allow additional analysis on adults aged 45 to 64. ACL will build upon the Housing Services and

Resource Center to reach out to other federal agencies, such as VA, to further increase collaboration. Additionally, ACL plans to share information among its disability programs to raise awareness of falls risk for adults with disabilities. In doing so, it plans to coordinate with federal partners on the most current and relevant information to be shared.

HHS, HUD, and VA also provided technical comments, which we incorporated, as appropriate.

We are sending copies of this report to the appropriate congressional committees, the Secretary of Health and Human Services, Secretary of Housing and Urban Development, Secretary of Veterans Affairs, and other interested parties. The report is also available at no charge on the GAO website at http://www.gao.gov.

If you or your staff have any questions about this report, please contact me at (202) 512-7215 or larink@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made key contributions to this report are listed in appendix VII.

Kathryn A. Larin
Director, Education, Workforce, and Income Security Issues

Appendix I: Additional Methodological Details

This appendix provides additional information on our program inventory, analysis of falls data, and review of program studies, among other methodologies.

Selection of Inventory Programs and Corresponding Survey

To develop criteria for the programs to be included in our inventory, we first developed definitions for evidence-based falls prevention (EBFP), home assessment, and home modification by reviewing relevant reports and studies. We then refined and validated these definitions based on interviews with federal officials and experts from multiple national aging and disability organizations. We further validated these definitions through pre-tests with federal program officials and our survey of federal programs, as described below. Based on the information we collected, we developed the following definitions for the purposes of this report:

- **EBFP.** Interventions that have been demonstrated to be effective through outcome/effectiveness evaluation in improving the health and well-being or reducing disability and/or injury among older adults or adults with disabilities; for which research results have been published in a peer-reviewed journal; and that have been carried out at the community level with fidelity to the published research at least once before.
- **Home assessment.** A home safety evaluation that assesses potential hazards or risks in the home, how the individual functions in their home environment, and factors that may hinder or prevent independent living. The assessment may recommend potential changes or modifications that would assist the individual in living safely and independently in their home.
- **Home modification.** Changes to make a home environment safer to avoid potential hazards and support the individual in operating effectively and independently in the home. Examples include structural modifications, such as widening doorways, installing ramps and walkways, and adding grab bars, as well as non-structural

changes, such as improving lighting and clearing walkways. Home modification may also include providing adaptive equipment.

We used these definitions, as well as other considerations, to inform our program selection.[1] To be included in the inventory, the program must have

(1) been in effect in fiscal year 2020;

(2) provided either direct or indirect assistance to individuals, businesses, or communities for the primary purpose of providing EBFP, home assessment, and /or home modification; and

(3) been designed to target older adults (over age 60 or 65) and/or adults with disabilities, and who live in their homes rather than in institutional care.

We excluded programs that might have allowed funding to be used for EBFP, home assessment, and home modification for adults or adults with disabilities, but did not have any of these three service areas as a primary purpose. (See appendix III for a list of selected programs for which falls prevention, home modifications, or home assessment services are an allowable use of funds.)

After selecting nine programs for inclusion in the inventory, we sent one survey for each program to four federal agencies responsible for administering it. The survey included questions on topics such as program purpose, the types of benefits or services, impact or outcome studies, and coordination efforts. To ensure that questions were understandable and that we collected the desired information, we pretested the survey with two federal agencies. We revised it based on the agencies' feedback. We sent the survey to programs in October 2021,

[1]We defined "program" broadly to include a set of activities directed toward a common purpose or goal that an agency undertakes or proposes to carry out its mission. This can include contracts, direct services, grants, research and development, informational tools, and tax expenditures.

received responses from all programs, and closed the survey in November 2021.[2]

We did not independently verify the information provided by the agencies or conduct a legal analysis to confirm the various descriptions of the programs, such as information on their primary purpose, service areas, eligibility requirements, and budgetary obligations. Further, in developing this report, we also did not independently review or analyze financial data or materials prepared by the agencies in connection with the annual budget and appropriations process. In some cases, we contacted agencies to clarify their survey responses or obtain additional information. In other instances, we obtained information from agency websites and agency documents to explain or elaborate on survey findings.

Analysis of Federal Data on Falls and Fall-Related Injuries

To further inform our understanding of the prevalence of falls and fall injuries among different demographic groups, we analyzed 2020 data, the most recent data available, from Centers for Disease Control and Prevention's (CDC) nationally-representative Behavioral Risk Factor Surveillance System (BRFSS) survey.[3] The BRFSS survey is an annual, health-related telephone survey of non-institutionalized U.S. civilians 18 years or older designed to collect data on health-related risk behaviors, chronic health conditions, and use of preventive services. Data on falls are collected for adults 45 years and older. According to CDC, falls data were collected every two years from 2012 through 2020, but will be

[2]Through our research, we compiled a non-exhaustive list of related programs targeting older adults or adults with disabilities for which falls prevention, home assessments, and home modifications are an allowable use of funds, but not the primary purpose. We gathered information on these programs through interviews with and information requests to agency officials. In addition, in November 2021, we sent a shortened version of our survey to the four agencies responsible for administering these eight programs. We collected limited information on these programs because federal agencies generally did not have information on the extent to which programs were used for these services, such as in terms of funding amounts or people served. After reviewing our draft report, Centers for Medicare and Medicaid Services officials also identified Programs of All-Inclusive Care for the Elderly as a program for which falls prevention, home assessments, and home modifications are an allowable use of funds, but not the primary purpose. Officials reported that this program, which targets older adults, conducts home assessments on each enrollee and provides fall prevention plans and home modifications, as needed.

[3]BRFSS collects data from all 50 states, Washington, D.C., and some U.S. territories. For our purposes, we excluded the territories from our analysis.

collected every three years moving forward, with the next collection in 2023.

Using BRFSS data, we examined the prevalence of people who reported one or more falls in the past 12 months (i.e., falls) and injuries from falls that limited regular activities for at least a day or caused them to go see a doctor (i.e., fall-related injuries). We examined variations in falls and fall-related injuries among: (1) older adults who were 60 years and older, (2) adults with disabilities who were 45 years and older, and (3) adults with and without disabilities by age cohorts (i.e., 45 to 59 years and 60 years and older).[4] For the first two groups we also examined the prevalence of falls and fall-related injuries by various characteristics, including age, race/ethnicity, annual household income, housing arrangement, veteran status, and whether they lived in an urban or rural location. For contextual information, we also used BRFSS data to analyze the number of people with disabilities, by age and disability type (i.e., hearing, vision, cognition, mobility, self-care, and independent living).

We assessed the reliability of these data by obtaining information from CDC officials, reviewing related documentation, and conducting data testing, and we noted some data limitations. The falls data pertain to adults age 45 and older and do not include persons in long-term care facilities who are at higher risk for falls. Since BRFSS data are self-reported, they also do not capture fatal falls. However, CDC officials reported that of the falls experienced by older adults in 2018, a nominal percentage were fatal falls.[5] In addition, BRFSS data may also be subject to recall bias. Further, according to CDC officials, the broad definition of fall injury used in BRFSS might result in a higher estimate of older adults suffering injurious falls compared with other reports. Finally, a low response rate could have resulted in nonresponse bias; however, weighting procedures based on the survey methodology were used to adjust the estimates to make the sample data more representative of the state-level and national populations and reduce the effect of nonresponse bias. We determined these data were sufficiently reliable for the purpose

[4]BRFSS defines a disability as having one of the following characteristics: (1) deaf or serious difficulty hearing; (2) blind or serious difficulty seeing, even when wearing glasses; (3) a physical, mental, or emotional condition that causes serious difficulty concentrating, remembering, or making decisions; (4) serious difficulty walking or climbing stairs; (5) difficulty dressing or bathing; (6) a physical, mental, or emotional condition that causes difficulty doing errands alone such as visiting a doctor´s office or shopping.

[5]Other CDC data, such as the National Center for Health Statistics' National Vital Statistics System capture information on fatal falls.

of identifying demographic characteristics of older adults and adults with disabilities who reported falls and fall-related injuries in 2020.

Interviews with Selected National Aging and Disability Organizations

We also interviewed officials from six selected national aging and disability organizations to obtain their views on the extent to which these programs serve at-risk populations and provide information to consumers.[6] For example, we asked about the types of supports various populations may need, efforts to coordinate support, and the degree to which consumer information is available. We selected the organizations based on the frequency with which federal agency officials recommended them and to provide a mix of perspectives based on the populations they represent (i.e., older adults and adults of varying ages with disabilities). In some cases, officials from the national organizations also represented or had experience at the local level and provided that perspective. The views of these organizations are not generalizable to all national aging and disability organizations.

Information from Selected Area Agencies on Aging

To obtain additional insights about consumer information and support available at the regional and local levels, we selected six area agencies on aging (AAAs) based on factors such as demographic and geographic diversity.[7] An AAA is a public or private nonprofit agency designated by a state to address the needs and concerns of all older adults at the regional and local levels. These six AAAs provided written responses to questions we submitted on topics such as the degree to which they provide EBFP, home assessment, or home modification services; their familiarity with federal programs supporting these services; and key resources AAAs consider when advising consumers seeking support. The views of these AAAs are not generalizable to all AAAs.

[6]These organizations were Advancing States, the American Association on Health and Disability, the University of Southern California's Leonard Davis School of Gerontology Fall Prevention Center of Excellence, the National Council on Aging, the National Council on Independent Living, and USAging.

[7]We contacted AAAs representing urban and non-urban areas in Georgia, New Mexico, and New York.

Review of Impact and Outcome Studies

To examine what federal agencies know about how federal programs aimed at supporting EBFP, home assessments, and home modifications for older adults and adults with disabilities programs affect participants' health, we asked agency officials to identify relevant studies through our survey. In addition to identifying relevant studies of federal programs in our inventory, agency officials identified studies of falls prevention interventions—implemented at the community level—that contributed to the evidence base for federal programs. Further, officials from a national aging organization also identified one study we reviewed.

In total, we considered 20 studies for inclusion in our review, and identified nine which met our criteria (see tables 2 and 3). Studies met our criteria if they (1) were federally conducted or federally sponsored; (2) were impact or outcome studies;[8] (3) examined EBFP, home assessment, or home modification programs for older adults or adults with disabilities; (4) pertained to the health status or health outcomes of populations supported by these programs; and (5) were published in 2011 or later. We included both studies of programs in our inventory, as well as falls prevention interventions not in our inventory. (See tables 2 and 3.)

Table 2: Selected Health-Related Impact and Outcome Studies of Federal Falls Prevention and Home Modification Programs

Title	Authors	Year of publication	Federal program and agency
Impact of STEADI-Rx: A Community Pharmacy-Based Fall Prevention Intervention	Blalock, Susan J., Stefanie P. Ferreri, Chelsea P. Renfro, Jessica M. Robinson, Joel F. Farley, Neepa Ray, and Jan Busby-Whitehead	2020	Stopping Elderly Accidents, Deaths, and Injuries (STEADI) (Centers for Disease Control and Prevention (CDC))
Dissemination and Implementation of Evidence-Based Falls Prevention Programs: Reach and Effectiveness	Brach, Jennifer S., Gardenia Juarez, Subashan Perera, Kathleen Cameron, Jennifer L. Vincenzo, and Jennifer Tripken	2021	Prevention and Public Health Fund (PPHF) Evidence-Based Falls Prevention Program (Administration for Community Living)
Implementation of the Stopping Elderly Accidents, Deaths, and Injuries Initiative in Primary Care: An Outcome Evaluation	Johnston, Yvonne A., Gwen Bergen, Michael Bauer, Erin M. Parker, Leah Wentworth, Mary McFadden, Chelsea Reome, and Matthew Garnett	2019	STEADI (CDC)

[8]Impact studies focus on assessing the impact of a program or aspect of a program on outcomes by estimating what would have happened in the absence of the program or aspect of the program. Outcome studies assess the extent to which a program has achieved certain objectives, and how the program achieved these objectives.

Title	Authors	Year of publication	Federal program and agency
Home Modification and Health Services Utilization by Rural and Urban Veterans With Disabilities	Semeah, Luz Mairena, Shanti P. Ganesh, Xinping Wang, Diane C. Cowper Ripley, Zaccheus James Ahonle, Mi Jung Lee, Tatiana Orozco, Jennifer Hale-Gallardo, and Huanguang Jia	2021	Home Improvements and Structural Alterations (HISA) program (Department of Veterans Affairs)

Source: Studies GAO reviewed of federally sponsored impact and outcome studies of federal falls prevention and home modification programs. | GAO-22-105276

Table 3: Selected Health-Related Impact and Outcome Studies of Federally Sponsored Impact and Outcome Studies of Falls Prevention Interventions

Title	Authors	Year of publication	Intervention
Prevention Program Lowered The Risk Of Falls And Decreased Claims For Long-Term Services Among Elder Participants	Cohen, Marc A., Jessica Miller, Xiaomei Shi, Jasbir Sandhu, Lewis A. Lipsitz	2015	Living Independently and Falls-free Together (LIFT) Wellness Program
Dissemination of the CAPABLE Model of Care in a Medicaid Waiver Program to Improve Physical Function	Spoelstra, Sandra L., Alla Sikorskii, Laura N. Gitlin, Monica Schueller, Margaret Kline, and Sarah L. Szanton	2019	Community Aging in Place—Advancing Better Living for Elders (CAPABLE)
Home-Based Care Program Reduces Disability and Promotes Aging In Place	Szanton, Sarah L., Bruce Leff, Jennifer L. Wolff, Laken Roberts, and Laura N. Gitlin	2016	CAPABLE
Community Aging in Place, Advancing Better Living for Elders: A Bio-Behavioral-Environmental Intervention to Improve Function and Health-Related Quality of Life in Disabled Older Adults	Szanton, Sarah L., Roland J. Thorpe, Cynthia Boyd, Elizabeth K. Tanner, Bruce Leff, Emily Agree, Qian-Li Xue, Jerilyn K. Allen, Christopher L. Seplaki, Carlos O. Weiss, Jack M. Guralnik, and Laura N. Gitlin	2011	CAPABLE
Effect of a Biobehavioral Environmental Approach on Disability Among Low-Income Older Adults: A Randomized Clinical Trial	Szanton, Sarah L., Qian-Li Xue, Bruce Leff, Jack Guralnik, Jennifer L.Wolff, Elizabeth K. Tanner, Cynthia Boyd, Roland J. Thorpe Jr, David Bishai, Laura N. Gitlin	2019	CAPABLE

Source: GAO analysis of federally sponsored impact and outcome studies of falls prevention interventions. | GAO-22-105276

Review of Federally Funded Consumer Resources

To determine the extent to which federally funded resources on EBFP, home assessments, and home modifications are available to consumers and others, we selected web-based resources, identified through our interviews with officials from federal agencies and national organizations, and assessed their content by reviewing publicly available information such as webpages, fact sheets, and brochures. We determined whether these resources addressed at least one of the service areas (i.e., EBFP, home assessments, and home modifications) as well as the target

audience for each resource. We focused on resources related to falls prevention measures inside the home and did not assess resources addressing other settings, such as hospitals.

Appendix II: Federal Programs Designed to Support Evidence-Based Falls Prevention, Home Assessment, and Home Modification

The following tables contain additional information obtained on the nine programs we identified that are designed to provide evidence-based falls prevention (EBFP), home assessments, or home modifications and target older adults or adults with disabilities. The information was obtained through our analysis of agency survey responses.[1]

Table 4: Federal Programs Designed to Support Evidence-Based Falls Prevention, Home Assessments, or Home Modifications

Department	HHS agency	Program	Program purpose[a]
Department of Health and Human Services (HHS)	**HHS – Administration for Community Living (ACL)**	Prevention and Public Health Fund (PPHF) Evidence-Based Falls Prevention	To develop or expand capacity—through the use of cooperative agreements—to significantly increase participation in evidence-based falls prevention (EBFP) programs among older adults and older adults with disabilities, particularly those in underserved area/populations. The program aims to empower participants to reduce their risk of falls, while concurrently enhancing the sustainability of proven programs. This funding also supports a cooperative agreement for a National Falls Prevention Resource Center.
Department of Health and Human Services (HHS)	**HHS – Administration for Community Living (ACL)**	Older Americans Act Title III-D Preventive Health Services	To develop or strengthen preventive health service and health promotion systems through designated state agencies on aging and area agencies on aging. Funds are provided for evidence-based disease prevention and health promotion services including programs related to physical fitness, medication management, chronic disease self-management education, psychosocial behavioral health intervention, human immunodeficiency virus, arthritis, brain health, diabetes, falls prevention, depression, and chronic pain.
Department of Health and Human Services (HHS)	**HHS – Centers for Disease Control and Prevention (CDC)**	MyMobility Plan	To provide a planning tool, developed with available scientific evidence, to help older adults plan for future mobility changes that might increase their risk for motor vehicle crashes and falls.

[1]We did not independently verify the information provided by the agencies or conduct a legal analysis to confirm the various descriptions of the programs included in these tables.

Department	HHS agency	Program	Program purpose[a]
Department of Health and Human Services (HHS)	**HHS – Centers for Disease Control and Prevention (CDC)**	Stopping Elderly Accidents, Deaths, and Injuries (STEADI)	To provide evidence-based tools, resources, and guidance for health care providers who treat older adults who are at risk of falling or who may have fallen in the past.
Department of Housing and Urban Development (HUD)		Older Adults Home Modification Program	To enhance local capacity to sustainably operate low-barrier, participant-led programs that address the home modification needs of older, low-income homeowners.
Department of Housing and Urban Development (HUD)		Veterans Housing Rehabilitation and Modification Pilot Program	To explore the potential benefits of awarding grants to nonprofit organizations to rehabilitate and modify the primary residence of veterans who are low-income and living with disabilities.
Department of Veterans Affairs (VA)		Home Improvement and Structural Alterations (HISA)	To provide monetary assistance for a home improvement, modification, or structural alteration necessary for continued treatment or ingress/egress throughout the beneficiary's primary residence.
Department of Veterans Affairs (VA)		Specially Adapted Housing Program	To offer grants to servicemembers and veterans with certain severe service-connected disabilities to assist with building, remodeling or purchasing an adapted home. The program includes Specially Adapted Housing (SAH) grants and Special Housing Adaptation (SHA) grants. The SAH grant helps veterans and servicemembers with disabilities enjoy barrier-free living. The SHA grant can be used to increase mobility throughout a veteran or servicemember's residence.
Department of Veterans Affairs (VA)		Veteran Readiness and Employment (VR&E) Housing Adaptation Grant	To provide home adaptations to individuals who are not currently able to work because of the effects of their service-connected disabilities, or who require adaptations to achieve a vocational goal. The benefits are limited to those required to improve independence at home and/or in the community.

Source: GAO analysis of agency survey responses. | GAO-22-105276

Note: These programs were selected because they had falls prevention, home modification, or home assessment as a primary program purpose and were generally targeted at older adults or adults with disabilities.

[a]In some cases, the program purpose provided by agencies was shortened for brevity and more standard reporting across programs.

Table 5: Number of Adults Served by Programs that Collect Individual-Level Data for Federal Programs Designed to Support Evidence-Based Falls Prevention, Home Assessments, or Home Modifications

na	Adults with disabilities	Adults with disabilities	Adults with disabilities	Older adults	Older adults	Older adults
Program	**Fiscal year 2019**	**Fiscal year 2020**	**Fiscal year 2021**	**Fiscal year 2019**	**Fiscal year 2020**	**Fiscal year 2021**
Prevention and Public Health Fund (PPHF) Evidence-Based Falls Prevention	7,180[a]	2,995[a]	1,650[a]	25,662	11,243	6,929

na	Adults with disabilities	Adults with disabilities	Adults with disabilities	Older adults	Older adults	Older adults
Program	**Fiscal year 2019**	**Fiscal year 2020**	**Fiscal year 2021**	**Fiscal year 2019**	**Fiscal year 2020**	**Fiscal year 2021**
Older Americans Act Title III-D Preventive Health Services	Data not collected	Data not collected	Data not collected	605,404	539,960	Not yet available
Specially Adapted Housing Program	2,270	2,086	2,324	Data not collected	Data not collected	Data not collected
Veteran Readiness and Employment (VR&E) Housing Adaptation Grant	60	94	78	Data not collected	Data not collected	Data not collected

Legend: — Program does not target this population group and does not collect data on this group.

Source: GAO analysis of agency survey responses. | GAO-22-105276

Notes: Other programs that are designed to support evidence-based falls prevention, home assessments, and home modifications do not collect data on the number of adults served.

[a]According to federal agency officials, most of these adults with disabilities are older than 60. Since 2014, PPHF Evidence-Based Falls Prevention grantees and their partners report that 3 percent of those served were adults with disabilities under age 60.

Table 6: Federal Fiscal Obligations for Federal Programs Designed to Support Evidence-Based Falls Prevention Home Assessments, or Home Modifications, Fiscal Years 2019-2021

Program	Fiscal year 2019	Fiscal year 2020	Fiscal year 2021
Prevention and Public Health Fund (PPHF) Evidence-Based Falls Prevention[a]	$ 4,996,741	$ 4,999,002	$ 4,999,002
Older Americans Act Title III-D Preventive Health Services[b]	$ 24,696,386	$ 24,722,881	$ 24,712,378
MyMobility Plan	Program not funded	Program not funded	$ 186,547
Stopping Elderly Accidents, Deaths, and Injuries (STEADI)	$ 2,481,500	$ 1,619,516	$ 1,535,598
Older Adults Home Modification Program[c]	Program not funded	Program not funded	$ 30,000,000
Veterans Housing Rehabilitation and Modification Pilot Program	$ 4,800,000	$ 4,000,000	$ 3,000,000
Home Improvement and Structural Alterations (HISA)	$ 50,098,904	$ 49,406,376	$ 52,337,303
Specially Adapted Housing Program[d]	$ 120,900,000	$ 116,800,000	$ 125,100,000
Veteran Readiness and Employment (VR&E) Housing Adaptation Grant[e]	$ 85,645	$ 90,364	$ 92,569

Legend: - Program not funded in this fiscal year.

Source: GAO analysis of agency survey responses. | GAO-22-105276

[a]The numbers for fiscal year 2021 only reflect obligations against the $5,000,000 appropriated for PPHF Evidence-Based Falls Prevention in fiscal year 2021. They exclude an additional $74,428 obligated for PPHF Evidence-Based Falls Prevention program activities from carryover balances from prior years. This includes $467 from fiscal year 2015. $53,135 from fiscal year 2016, $17,036 from fiscal year 2017, $3,259 from fiscal year 2019, and $998 from fiscal year 2020.

[b]Funds are provided for evidence-based disease prevention and health promotion services including programs related to physical fitness, medication management, chronic disease self-management

education, psychosocial behavioral health intervention, human immunodeficiency virus, arthritis, brain health, diabetes, falls prevention, depression, and chronic pain. The numbers do not include obligations related to set-asides provided under statute from the program to be used for evaluation and disaster assistance. Total appropriations were $24,848,000 for each fiscal year.

[c]The program's first grant year was in fiscal year 2021 and therefore did not have obligations for fiscal years 2019 and 2020.

[d]The agency provided the total amount of grant funds awarded for each fiscal year's approved grants.

[e]The dollar amounts provided are grant limits for each fiscal year.

Appendix III: Programs for Which Falls Prevention, Home Assessment, or Home Modification Are an Allowable Use of Funds

The following table contains additional information obtained on selected programs we identified that allow funds to be used for falls prevention, home assessment, or home modification, but are not designed to provide them.

Table 7: Selected Programs for Which Falls Prevention, Home Modifications, or Home Assessment Services Are an Allowable Use of Funds

Department	HHS agency	Program	Program purpose[a]	Target population served by program[b]	How funds can be used
Department of Agriculture		Very Low-income Housing Repair[c]	Provides loans to very low-income homeowners to repair, improve or modernize their homes or grants to elderly very-low-income homeowners to remove health and safety hazards.	Very low-income homeowners in rural areas, including older adults.	Structural home modifications to remove health or safety hazards or to make accessibility modifications.
Department of Health and Human Services (HHS)		Special Programs for the Aging, Title III, Part B, Grants for Supportive Services and Senior Centers[d]	Provides transportation services, in-home services, and other support service to maximize the informal support provided to older Americans to enable them to remain in their homes and communities.	Older adults, targeting those with the greatest economic and social needs.	State agencies and area agencies on aging can determine use of program funds for a range of activities, including evidence-based falls prevention, home modification, and home assessment services.[e]
Department of Health and Human Services (HHS)	**HHS's Administration for Community Living**	Special Programs for the Aging, Title VI, Part A, Grants to Indian Tribes, Part B, Grants to Native Hawaiians[f]	Promotes the delivery of supportive services, including nutrition services, to American Indians, Alaskan Natives, and Native Hawaiians that are comparable to services provided under Title III of the Older Americans Act.	Older adults from tribal communities.	Tribal grantees can determine use of program funds for falls prevention, home modification, and home assessment services.

Department	HHS agency	Program	Program purpose[a]	Target population served by program[b]	How funds can be used
Department of Health and Human Services (HHS)	**HHS's Centers for Medicare & Medicaid Services**	Medicaid home- and community-based services[g]	Provides opportunities for Medicaid beneficiaries to receive services in their own home or community rather than institutions or other isolated settings.	Various eligible low-income or medically needy populations, including older adults and individuals with disabilities, as determined by each state's Medicaid plan or authority.	Home modifications necessary to ensure health, welfare, and safety and enable greater independence (e.g., installation of ramps or grab bars) are permitted and would include assessments to determine the types of modifications needed. Other potentially covered services, such as occupational therapy, may also aid in falls prevention.
Department of Health and Human Services (HHS)	**HHS's Centers for Medicare & Medicaid Services**	Medicare Advantage	Provides an "all in one" alternative to Medicare beneficiaries through Medicare-approved private companies, encompassing Medicare Part A (hospital insurance), Part B (Medical insurance) and, usually, Part D (Medicare drug plan).	Medicare beneficiaries are adults 65 or older, have certain types of disabilities, or end-stage renal disease.	Falls-prevention or home assessment services may be offered to meet certain requirements related to evaluating individuals' falls-risk. Such services as well as safety devices for the home to prevent injury may be offered as part of supplemental benefits. Structural home modifications may be offered as supplemental benefits for chronically ill enrollees who meet certain criteria.[h]
Department of Health and Human Services (HHS)	**HHS's Centers for Medicare & Medicaid Services**	Money Follows the Person Rebalancing Demonstration	Increases the use of home- and community-based, rather than institutional, long-term care services and eliminates barriers that hinder the flexible use of Medicaid funds for long-term services in the chosen settings of beneficiaries, among other purposes.	Medicaid beneficiaries (including eligible low-income older adults and people with disabilities) residing in an institution for 60 days or more who are moving to a qualified residence in the community.	Home modification, home assessment, or falls prevention services provided under Medicaid home- and community-based services could be covered.

Department	HHS agency	Program	Program purpose[a]	Target population served by program[b]	How funds can be used
Department of Housing and Urban Development		Section 202 Supportive Housing for the Elderly Program	Provides capital advance funding and project rental subsidies to develop and subsidize rental housing, as well as voluntary support services such as nutrition, transportation, continuing education, or health-related services to enable older adults to live independently. Funding is awarded on a year-to-year basis.	Low-income older adults who are rental tenants.	Section 202 housing must comply with federal physical accessibility requirements, and home assessments may be done as part of the grantee's physical inspection process. Supportive services may be provided to evaluate tenants' daily living skills and the need for assistance.
Department of Housing and Urban Development		Section 811 Supportive Housing for Persons with Disabilities	Provides capital advance funding and project rental subsidies to develop and subsidize rental housing with the available supportive services to help people with disabilities live as independently as possible in the community. Funding is awarded on a year-to-year basis.	Low-income adults with disabilities who are rental tenants.	Section 811 housing must comply with federal physical accessibility requirements. Additionally, project applicants are encouraged to address falls prevention, and enhanced accessibility among other issues, in line with or in addition to federal accessibility requirements.

Source: GAO analysis of information from Departments of Agriculture, Health and Human Services, and Housing and Urban Development. | GAO 22 105276

Note: We did not independently verify the information provided by the agencies or conduct a legal analysis to confirm the descriptions of the programs included in the table. Programs in this list generally target older adults or adults with disabilities. This list is not exhaustive.

[a]In some cases, the program purpose provided by agencies was shortened for brevity and more standard reporting across programs.

[b]Programs may define older adult, individuals with disability, or other population characteristics differently. For example, the age threshold for older adults can vary by program.

[c]This program is also known as Single Family Housing Repair Loans and Grants or Section 504 Home Repair.

[d]This program is also known as Home and Community-Based Supportive Services.

[e]Falls prevention and adaptation of homes to meet the needs of older adults with physical disabilities are identified as potential uses for this program in the Older Americans Act of 1965, among various other uses.

[f]This program is also known as Native American Nutrition and Supportive Services.

[g]Under Medicaid, home- and community-based services can be delivered under different authorities, such as 1905(a) and 1915 authorities among others.

[h]Additionally, Medicare Advantage Special Needs Plans are required to identify various health needs through a health risk assessment for each enrollee, and address falls as needed in an individualized care plan.

Appendix IV: Falls and Fall-Related Injuries, Reported by Older Adults and Adults with Disabilities, by Selected Characteristics, 2020

Table 8: Estimated Percentage of Reported Falls and Fall-Related Injuries among Older Adults (60 Years and Older), by Selected Characteristics, 2020

		Falls	Falls	Falls	Fall-related injuries	Fall-related injuries	Fall-related injuries
Characteristic	**Characteristic category**	**Estimate**	**Lower 95%[a]**	**Upper 95%[a]**	**Estimate**	**Lower 95%[a]**	**Upper 95%[a]**
Age	60 to 69 years old	24%	24%	25%	9%	9%	10%
Age	70 to 79 years old	27%	26%	28%	10%	9%	10%
Age	80 to 99 years old	31%	30%	32%	12%	11%	12%
Gender	Female	28%	27%	29%	11%	11%	12%
Gender	Male	24%	24%	25%	8%	7%	8%
Race/ethnicity	American Indian/Alaska Native (non-Hispanic)	34%	29%	39%	15%	11%	19%
Race/ethnicity	White (non-Hispanic)	28%	27%	28%	10%	10%	10%
Race/ethnicity	Other[b]	27%	23%	30%	10%	8%	12%
Race/ethnicity	Hispanic	24%	21%	26%	10%	8%	12%
Race/ethnicity	Black (non-Hispanic)	22%	21%	24%	8%	7%	9%
Race/ethnicity	Asian (non-Hispanic)	12%	9%	16%	6%	3%	9%
Annual household income	Less than $15,000	34%	32%	36%	16%	14%	17%
Annual household income	$15,000 to $24,999	31%	30%	32%	12%	11%	13%
Annual household income	$25,000 to $34,999	28%	27%	30%	11%	10%	12%
Annual household income	$35,000 to $49,999	27%	25%	28%	9%	8%	10%

		Falls	Falls	Falls	Fall-related injuries	Fall-related injuries	Fall-related injuries
Characteristic	**Characteristic category**	**Estimate**	**Lower 95%[a]**	**Upper 95%[a]**	**Estimate**	**Lower 95%[a]**	**Upper 95%[a]**
Annual household income	$50,000 to $74,999	25%	24%	26%	9%	8%	10%
Annual household income	$75,000 or higher	23%	22%	24%	7%	7%	8%
Housing arrangement	Non-renter/non-homeowner[c]	31%	28%	34%	13%	11%	15%
Housing arrangement	Renter	30%	29%	32%	13%	12%	14%
Housing arrangement	Homeowner	26%	25%	26%	9%	9%	10%
Veteran status	Veteran	28%	27%	29%	10%	9%	11%
Veteran status	Non-veteran	26%	25%	27%	10%	9%	10%
Urban vs rural	Rural	31%	30%	32%	10%	9%	11%
Urban vs rural	Urban	26%	25%	27%	10%	9%	10%

Source: GAO analysis of Behavioral Risk Factor Surveillance System data. | GAO-22-105276

Notes: The percentage of falls represents the share of older adults (60 years and older), including those with disabilities, who report falling at least once in 2020. The percentage of fall-injuries represents the share of older adults (60 years and older), including those with disabilities, who report at least one injury from falls that limited regular activities for at least a day or caused an individual to go see a doctor.

[a]The lower 95% and upper 95% is the confidence interval that would contain the actual population value for 95 percent of the samples that could have been drawn.

[b]Other includes individuals who identified as non-Hispanic and as multi-racial, Native Hawaiian, or other Pacific Islander. Other also includes individuals who responded don't know or not sure, refused to respond, or where data on race/ethnicity was missing.

[c]Non-renter/non-homeowner describes a person living in a different arrangement, such as a group home or staying with friends or family without paying rent.

Table 9: Estimated Percentage of Reported Falls and Fall-Related Injuries among Adults with Disabilities (45 Years and Older), by Selected Characteristics, 2020

		Falls	Falls	Falls	Fall-related injuries	Fall-related injuries	Fall-related injuries
Characteristic	**Characteristic category**	**Estimate**	**Lower 95%[a]**	**Upper 95%[a]**	**Estimate**	**Lower 95%[a]**	**Upper 95%[a]**
Age	45 to 59 years old	42%	40%	44%	22%	20%	23%
Age	60 to 69 years old	41%	39%	42%	18%	17%	20%
Age	70 to 79 years old	39%	38%	41%	16%	14%	17%
Age	80 to 99 years old	39%	37%	41%	16%	14%	17%
Gender	Female	42%	41%	44%	21%	20%	22%
Gender	Male	38%	37%	39%	15%	14%	16%

		Falls	Falls	Falls	Fall-related injuries	Fall-related injuries	Fall-related injuries
Characteristic	**Characteristic category**	**Estimate**	**Lower 95%[a]**	**Upper 95%[a]**	**Estimate**	**Lower 95%[a]**	**Upper 95%[a]**
Race/ethnicity	American Indian/Alaska Native (non-Hispanic)	49%	44%	54%	26%	21%	31%
Race/ethnicity	White (non-Hispanic)	43%	42%	43%	19%	18%	20%
Race/ethnicity	Other[b]	42%	37%	46%	21%	18%	24%
Race/ethnicity	Black (non-Hispanic)	37%	34%	39%	18%	16%	20%
Race/ethnicity	Hispanic	35%	31%	38%	16%	14%	18%
Race/ethnicity	Asian (non-Hispanic)	27%	19%	36%	12%	6%	18%
Annual household income	Less than $15,000	47%	44%	49%	25%	24%	27%
Annual household income	$15,000 to $24,999	43%	42%	45%	20%	19%	22%
Annual household income	$25,000 to $34,999	43%	40%	45%	19%	17%	21%
Annual household income	$35,000 to $49,999	40%	38%	43%	17%	15%	19%
Annual household income	$50,000 to $74,999	38%	36%	41%	17%	15%	19%
Annual household income	$75,000 or higher	36%	34%	39%	16%	14%	17%
Housing arrangement	Non-renter/non-homeowner[c]	46%	43%	50%	21%	18%	24%
Housing arrangement	Renter	42%	40%	44%	22%	20%	23%
Housing arrangement	Homeowner	40%	39%	41%	17%	17%	18%
Veteran status	Veteran	41%	39%	43%	18%	16%	19%
Veteran status	Non-veteran	40%	39%	41%	18%	18%	19%
Urban vs rural	Rural	45%	43%	46%	19%	18%	21%
Urban vs rural	Urban	40%	39%	41%	18%	18%	19%

Source: GAO analysis of Behavioral Risk Factor Surveillance System data. | GAO-22-105276

Notes: The percentage of falls represents the share of adults (45 years and older) with disabilities who report falling at least once in 2020. The percentage of fall injuries represents the share of adults (45 years and older) with disabilities who report at least one injury from falls that limited regular activities for at least a day or caused an individual to go see a doctor.

[a]The lower 95% and upper 95% is the confidence interval that would contain the actual population value for 95 percent of the samples that could have been drawn.

[b]Other includes individuals who identified as non-Hispanic and as multi-racial, Native Hawaiian, or other Pacific Islander. Other also includes individuals who responded don't know or not sure, refused to respond, or where data on race/ethnicity was missing.

[c]Non-renter/non-homeowner describes a person living in a different arrangement, such as a group home or staying with friends or family without paying rent.

Appendix V: Key Health-Related Findings from Federally Sponsored Falls Prevention and Home Modification Studies

Table 10: Key Health-Related Findings from Federally Sponsored Impact and Outcome Studies of Federal Falls Prevention and Home Modification Programs

Federal program and agency	Study authors and year of publication	Key findings	Population and timeframe for data
Stopping Elderly Accidents, Deaths, and Injuries (STEADI) (Centers for Disease Control and Prevention (CDC))	Johnston et al., 2019	This outcome study found those at risk for a fall who received a Fall Plan of Care were 0.6 times as likely to have a fall-related hospitalization when compared to those at risk for a fall who did not receive a Fall Plan of Care.	12,346 older adults[a] who had a primary care visit at one of 14 outpatient clinics within one county in New York (2012-2015)
STEADI (CDC)	Blalock et al., 2020	This impact study did not find statistically significant differences between the control group and participants in STEADI-Rx[b] in their Drug Burden Index scores—scores calculated to assess the degree of exposure to drugs that affect mobility and/or cognitive performance in older adults.	10,565 older adults[a] who filled at least 80 percent of their prescriptions at a participating pharmacy and who used either four or more chronic medications or one or more medications associated with an increased risk of falling in North Carolina (2017-2018)
Prevention and Public Health Fund (PPHF) Evidence-Based Falls Prevention Program (Administration for Community Living)	Brach et al., 2021	This outcome study found the majority of participants reported the same number of falls and fall-related injuries pre- and post-intervention, but the number of people who reported a fall and the number of falls reported decreased after the intervention.	53,489 older adults[a] who participated in evidence-based falls prevention programs and completed baseline and follow-up assessments in 31 states (2014-2019)
Home Improvements and Structural Alterations (HISA) program (Department of Veterans Affairs)	Semeah et al., 2021	This outcome study found HISA users experienced a reduction in hospitalizations and an increase in outpatient care during the 12 months following receipt of a home modification, compared with the 12 months prior to the home modification.	29,910 veterans with disabilities[c] who used the HISA program (fiscal years 2011-2016)

Source: GAO analysis of federally sponsored impact and outcome studies of federal falls prevention and home modification programs. | GAO-22-105276

Note: All findings cited are statistically significant, unless otherwise noted.

[a]Older adults are defined as adults aged 60 or older.

[b]STEADI-Rx adapts STEADI for the community pharmacy setting; pharmacy staff screened patients for fall risk and pharmacists conducted medication reviews for those at risk.

[c]Veterans with disabilities included those with a diagnosed disability which could be service-connected or not service-connected.

Table 11: Key Health-Related Findings from Federally Sponsored Impact and Outcome Studies of Falls Prevention Interventions

Intervention	Study authors and year of publication	Key findings	Population and timeframe for data
Living Independently and Falls-free Together (LIFT) Wellness Program	Cohen et al., 2015	This impact study found that participation in the LIFT program is associated with an 11 percent reduction in risk of falling and an 18 percent reduction of risk of injurious falling between the intervention group and the active control group in the first year following the intervention.	5,757 community-dwelling older adults[a] had private long-term care insurance with one major insurer but who were not receiving claims payments for long-term services and supports (2008-2012)
Community Aging in Place—Advancing Better Living for Elders (CAPABLE)	Szanton et al., 2019	This impact study found CAPABLE participation resulted in a reduction in activities of daily living (ADL) disability scores. Participants in the CAPABLE group were also more likely to report that the program made their life easier, helped them take care of themselves, helped them gain confidence in managing daily challenges, and kept them living at home than were participants in the control group.	300 low-income, community-dwelling older adults[b] with a disability[c] in Baltimore, Maryland (2012-2016)
CAPABLE	Spoelstra et al. 2019	This outcome study found improvements in ADL and instrumental activities of daily living (IADL) in those who received CAPABLE versus their own pre-CAPABLE scores.	270 Medicaid older[d] beneficiaries in four Medicaid home- and community-based waiver sites in Michigan (2015-2017)
CAPABLE	Szanton et al., 2011	This impact study found that the intervention group experienced reductions in difficulties with ADLs and IADLs, and improved falls efficacy (i.e., participants' confidence that they could conduct certain activities without falling), in addition to an increase in quality of life, as compared to the control group.	35 low-income older adults[b] with a disability[c] in Baltimore, Maryland (timeframe for data not specified)
CAPABLE	Szanton et al., 2016	This outcome study found that difficulty performing the eight ADLs was reduced among 75 percent of participants, difficulties with IADLs decreased in 65 percent of participants, and depressive symptoms improved in 53 percent of the participants when researchers conducted the 5-month follow up, as compared to the baseline.	234 older adults[b] with a disability[e] in Baltimore, Maryland who were dually eligible for Medicare and Medicaid; participants had to be living in a house and could not be cognitively impaired, be receiving skilled home health care services, or have been hospitalized four or more times in the previous year (2012-2015)

Source: GAO analysis of federally-sponsored impact and outcome studies of falls prevention interventions. | GAO-22-105276

Note: All findings cited are statistically significant.

[a]Older adults are defined as adults aged 75 or older.

[b]Older adults are defined as adults aged 65 or older.

[c]Adults with disabilities reported difficulty with 1 or more activities of daily living (ADL) or 2 or more instrumental ADLs (IADL).

[d]Older adults are defined as adults aged 50 or older.

[e]Adults with disabilities reported having at least some difficulty in performing an average of four of eight ADLs.

Appendix VI: Comments from the U.S. Department of Health and Human Services

DEPARTMENT OF HEALTH & HUMAN SERVICES OFFICE OF THE SECRETARY

Assistant Secretary for Legislation
Washington, DC 20201

July 7, 2022

Kathryn A. Larin
Director
Education, Workforce,
and Income Security Issues
U.S. Government Accountability Office
441 G Street NW
Washington, DC 20548

Dear Ms. Larin:

Attached are comments on the U.S. Government Accountability Office's (GAO) report entitled, **"Older Adults and Adults with Disabilities: Federal Programs Provide Support for Preventing Falls, But Program Reach Is Limited"** (GAO-22-105276).

The Department appreciates the opportunity to review this report prior to publication.

Sincerely,

Melanie Anne Egorin

Melanie Anne Egorin, PhD
Assistant Secretary for Legislation

Attachment

GENERAL COMMENTS FROM THE DEPARTMENT OF HEALTH & HUMAN SERVICES ON THE GOVERNMENT ACCOUNTABILITY OFFICE'S DRAFT REPORT ENTITLED — Older Adults and Adults with Disabilities: Federal Programs Provide Support for Preventing Falls, But Program Reach Is Limited (22-105276)

The U.S. Department of Health & Human Services (HHS) appreciates the opportunity from the Government Accountability Office (GAO) to review and comment on this draft report.

General Comments

Recommendation 1

The Director of the CDC should expand the scope of its analysis of Behavioral Risk Factor Surveillance System (BRFSS) data to include the prevalence of falls and fall-related injuries among adults under age 65 who may be at higher risk of falls, including adults with disabilities, and, as appropriate, share findings with ACL and other agencies overseeing relevant programmatic efforts. For example:
• CDC could analyze existing BRFSS data on adults aged 45 to 64 and share findings, as appropriate.
• CDC could propose asking adults aged 18 to 44 the two BRFSS falls-related questions, as part of the survey update process.

HHS Response

HHS Concurs with GAO's recommendation.

CDC is on schedule to include a question on falls to the 2023 Behavioral Risk Factor Surveillance System (BRFSS) for respondents aged 45 and older. The addition of this question will allow additional analysis of 45–64-year-old respondents to be added as a calculated variable once guidance is provided on the definition.

Recommendation 2

The Administrator of ACL should identify a collaborative mechanism to facilitate sustained information sharing on all populations at risk of falls and in need of evidence-based falls prevention, home modifications, or home assessments. For example, this could be accomplished by establishing an interagency working group or by building upon the existing efforts to expand the reach of the Housing and Services Resource Center.

HHS Response

HHS Concurs with GAO's recommendation.

HHS concurs with GAO’s recommendation. ACL works collaboratively on multiple fronts to encourage information sharing around fall risk prevention and home modifications. As stated in the report, officials from ACL’s PPHF Evidence Based Falls Prevention share information with CDC about implementation of

evidence-based programs at the community level and receive updates from CDC about training for health care professionals. Exploring the expansion of this existing partnership into a broader interagency work group, by evaluating additional potential partners, would build upon existing collaborative mechanisms and offer low-cost opportunities to share information across programs, and help expand the reach of falls by widening dissemination avenues to the at-risk population.

The report also references efforts underway through the Housing and Services Resource Center (HSRC). The U.S. Department of Housing and Urban Development (HUD) and HHS are meeting regularly to coordinate technical assistance resources, goals, and strategies. Issues around home modifications have been included in the HSRC training and technical assistance activities. A home modification webinar was held on June 9, 2022 that featured USC Leonard Davis School of Gerontology and a collaborative partnership from Iowa. Over 760 people attended the zoom webinar. ACL will build upon the HSRC and reach out to other federal agencies, such as the U.S. Department of Veterans Affairs (VA), to further increase collaboration.

Recommendation 3

The Administrator of ACL should share and highlight information on falls risk and related resources for adults with disabilities who are younger than 60 more prominently among its disability network to inform state and local planning efforts. For example, to the extent possible and appropriate, ACL could work with CDC to highlight relevant falls data and leverage existing resources on falls prevention.

HHS Response

HHS Concurs with GAO's recommendation.

HHS concurs with GAO’s recommendation. Given the falls risk for people with disabilities under the age of 60, ACL will share and highlight information on falls risk and related resources for adults with disabilities who are younger than 60 more prominently with their disability network to inform state and local planning efforts. ACL will conduct annual information sharing to raise awareness amongst its disability programs, including the Centers for Independent Living, Independent Living Services Program, State Councils on Developmental Disabilities, Protection and Advocacy Systems, University Centers for Excellence in Developmental Disabilities, Traumatic Brain Injury State Partnerships, the National Paralysis Resource Center and the Amputee Coalition. ACL will coordinate with federal partners, including the Administration on Aging and the Centers for Disease Control on the most current and relevant information to be shared and will determine the most appropriate strategies for sharing information.

Accessible Text for Appendix VI: Comments from the U.S. Department of Health and Human Services

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Appendix VII: GAO Contact and Staff Acknowledgments

GAO Contact

Kathryn A. Larin, (202) 512-7215 or larink@gao.gov

Staff Acknowledgments

In addition to the contact named above, Theresa Lo (Assistant Director), Kristen Jones (Analyst in Charge), Justine Augeri, MacKenzie Cooper, and Miranda Richard made significant contributions to this report. Also contributing to this report were Marianne Anderson, Andrew Bellis, James Bennett, John Karikari, Kelsey Kreider, Terell Lasane, Cory Marzullo, Charles McPhee, Jean McSween, Lorin Obler, Daniel Setlow, Joy Solmonson, Sarah Veale, Russell Voth, and Adam Wendel.

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