

**U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES**

Optimal Aging for Older Adults: Promoting Health and Addressing Dementias, Including  
Alzheimer's Disease

Thursday, June 19, 2014

## Opening Remarks

**DR. WRIGHT:** Hello, and thank you for joining us for another Healthy People 20/20 Progress Review. During these progress reviews, we focus on issues of public health importance that is supported by two Healthy People 20/20 topic areas. Over the next 60 minutes, we'll explore the older adults and dementia, including Alzheimer topic areas. We will review where we are as a nation in meeting the Healthy People 20/20 goals, and more importantly, discuss how we are working together to achieve them.

We have a number of colleagues and subject matter experts joining us today. First, Dr. Irma Arispe, Associate Director of the National Center for Health Statistics, will provide an update on critical Healthy People 20/20 objectives.

Next, Dr. Marie Bernard, Deputy Director at the National Institute on Aging at the National Institutes of Health, will present, followed by Edwin Walker, Deputy Assistant Secretary for Aging, at the Administration on Aging, at the Administration for Community Living. He will be followed by Dr. Wayne Giles, Director, Division of Population Health at the National Center for Chronic Disease Prevention and Health Promotion at the Centers for Disease Control and Prevention.

They will share with us what is being done on the federal level to achieve the Healthy People 20/20 goals. In addition, we have Dr. Shari Ling, Deputy Chief Medical Officer for CMS, who will be available for the Q&A portion of today's program.

Let me say my favorite portion of the progress reviews is the community highlight when a non-federal organization tells us about how they've achieved outcomes locally. Today we'll hear from Susan Snyder, Director of Project Enhance, Senior Services in Seattle, Washington and Nichole Shepard, a health education specialist at Salt Lake County Aging and Adult Services.

Healthy People 20/20 is produced by the Office of Disease Prevention and Health Promotion within the U.S. Department of Health and Human Services. Now in its fourth decade, it's grown tremendously over the years to include more than 1200 objectives. It remains one of the most enduring health promotion and disease prevention initiatives in the nation and continues to track national data for federal, state, local, non-government, non-profit, and academic stakeholders.

As I said earlier, today's progress review will focus on older adults and dementia, including Alzheimer's. This chart shows the changing trend for the older population, age 65 and older, and the subgroup, age 85 and over. It's evident that the number of older adults is quickly growing. The population of adults age 65 and older is projected to double from 35 million in 2010 to 72 million in 2030, and to 88.5 million by the year 2050.

Now looking at healthcare expenditures for Medicare beneficiaries by age group over time, we can see that the expenditures are rising over time for all age groups, that is 65 to 75, 75 to 84, and over 85. These expenditures include both out-of-pocket costs and costs covered by insurance.

At this time, I'd like to turn the presentation over to Dr. Arispe for an in-depth discussion of the data. Dr. Arispe?

## **Presentation - Irma Arispe**

**DR. ARISPE:** Thank you, Dr. Wright.

Good afternoon. First, we'll begin with an overview of today's presentation. Here's an outline for today's presentation. We'll start with an overview of progress from the Healthy People 20/20 objectives in our two affinity areas.

Next, we'll discuss the public health impact of older adults and dementias, focusing on prevalence, leading causes of death, chronic conditions, and associated costs. Then we'll focus on specific data for the Healthy People older adults and dementias objective, including diagnosis, awareness, and preventable hospitalizations.

In the older adults' topic area, there are 15 measurable objectives. Six are meeting their targets as of now and eight are getting worse. For Healthy People 20/20, dementias, including Alzheimer's, is a new topic area. And so, there are two measurable objectives, and only baseline data are available at this time.

As Dr. Wright mentioned in the introduction, there are changing population trends for the entire population age 65 and over, the top line, as well as for the subgroup 85 and older, the bottom line, also known as the oldest old. As Dr. Wright noted, the population of adults age 65 and older were more than doubled, from 35 million in 2010 to 72 million in 2030. Overall, the population 65 and over is projected to grow to 88.5 million by the year 2050. We'll look at some of the implications of this growth in the following slides.

This bar graph shows the extent to which Medicare beneficiaries age 65 and older were living with multiple chronic conditions in 2012. To summarize, about a third had zero to 1 chronic conditions; about one-third had 2 to 3 chronic conditions; about 22 percent had 4 to 5 chronic conditions; and about 16 percent had 6 or more chronic conditions.

In this next slide, we see the relationship between Medicare spending, the bar on the right, and the number of chronic conditions that beneficiaries are diagnosed with, the bar on the left. On the left in purple, the nearly 14 percent of beneficiaries with 6 or more chronic conditions account for nearly half of all Medicare spending. The purple and green combined on the left shows the approximately one-third of beneficiaries with 4 or more conditions. Together they account for 75 percent of all Medicare spending.

Next, we'll look at the 10 leading causes of death among Americans age 65 and over. The top five leading causes of death are heart disease, cancer, lower respiratory disease, stroke, and Alzheimer's. Note here that Alzheimer's is ranked number 5 above diabetes. Its ranking has increased over the last 10 years, as you'll see in the next slide.

Between 2000 and 2010, the age adjusted death rates for cancer, heart disease, and stroke dropped by more than 30 percent for the population as a whole. In contrast, the age-adjusted death rates for Alzheimer's disease rose nearly 40 percent in this time period, as you see at the top blue bars.

This next graph looks at the projected number of persons living with Alzheimer's in the U.S. population. These are estimates for the period from 2010 to 2050, and they are based on data from the Chicago Health and Aging Project, CHAP. These are prevalence estimates for the nation. In 2010, up to 5 million people were living with Alzheimer's disease. By 2050, this number is projected to rise to 14 million, a nearly threefold increase.

Now we'll review the monetary cost of dementia. Beginning with 2010 on the left, we see that annual direct costs of dementia were \$109 billion. Direct costs include actual medical spending for dementia care. When the costs for informal care are included, projections rose between 159 and \$215 billion.

These projections are based on the estimated replacement cost and lost wages among caregivers for people living with dementia. By 2040, direct and indirect costs are projected to jump between 259 and over \$500 billion annually.

Turning back to our presentation outline, next we'll move to an overview of the data for the Healthy People objectives in the older adults' topic area. It's important to remember that for all data displayed in this progress review, older adults are defined as those 65 and older.

We'll begin with the first objective, which tracks the proportion of newly enrolled Medicare beneficiaries who use the Welcome to Medicare benefit. This is a one-time, no-cost benefit to new enrollees that provides a basic medical screening that focuses on assessing individual needs for preventive care, such as screenings for high blood pressure, obesity, vision, and depression.

The percent using the Welcome to Medicare benefit more than doubled from 6.4 percent in 2008 to 13.1 percent in 2011, exceeding the Healthy People target, but the percent of new enrollees using this benefit still remains low.

Data on these next two slides look at core preventive service use, which is a composite measure that reflects receipt of a core set of preventive services, including flu vaccination, pneumococcal vaccination, and colorectal cancer screening. This chart focuses on males age 65 and over who received all of these services within a specified time frame stipulated in the clinical guideline.

In 2012, overall, approximately 40 percent of men received these services, the bar shown in purple. Receipt of these services was highest among whites, and this rate was significantly higher than for non-Hispanic/black, Asian, American Indian, and Hispanic populations. Men with some college or a four-year college degree or more had significantly higher rates of receipt of these core preventive services than those with less than a high school education.

In this next slide, we look at receipt of core preventive services among women age 65 and over. Core services includes those I mentioned before, plus the receipt of a mammogram within the past two years for women in the age group 65 to 74. We see that similar utilization patterns are observed with approximately 40 percent of women receiving these services in 2012.

As with men, there are significant race/ethnicity differences with the white population significantly more likely to receive services than non-Hispanic/black and Hispanic populations. Also, as with men, women with higher education were significantly more likely to receive services than those with less than a high school education.

This next objective illustrates the proportion of Medicare beneficiaries with a diagnosis of diabetes, who received the diabetes self-management benefit between 2008 and 2012. The diabetes self-management benefit provides for 10 hours of initial training for a beneficiary who has been diagnosed with diabetes and is designed to educate beneficiaries in the successful management, self-management, of diabetes. The percent remained relatively constant at approximately 2 percent from 2008 to 2012. This percentage remains very low for receipt of the benefit.

This slide shows the prevalence of moderate to severe functional limitations in adults 65 and over from 2007 to 2011. The definition here includes people who have difficulty performing at least one activity of daily living, such as bathing, dressing, eating, and using the toilet or who are living in a long-term care facility such as a nursing home. Nearly one-third of older adults had moderate to severe functional limitations in 2011 and race arising over time for the total population, as well as by sex and race/ethnicity.

We'll now look at physical activity among older adults with reduced physical or cognitive function. These are data from the NCHS National Health Interview Survey. For this objective, physical activity for those with reduced physical or cognitive function is defined as at least 10 minutes per week of any light, moderate, or vigorous exercise. Reduced physical or cognitive function includes difficulties in mobility, vision or hearing, and/or cognition.

In 2012, less than 40 percent of this group of older adults engaged in physical activity. There were significant differences by sex, with females engaging in significantly lower rates compared to males. Among this population, whites were more likely than non-Hispanic/black to engage in physical activity on a weekly basis.

Next, we'll review the data on emergency department visits for falls among older adults. In 2011, the overall ED visit rate for falls was about 6800 per 100,000 persons age 65 and over. This ED visit rate rose significantly between 2007 and 2011, so it is moving away from the target. Higher rates are found among women, and there was a significant age gradient. Rates are twice as high for the 74 to 84 group and over four times as high for those in the 85-plus age group compared with those age 65 to 74.

Finally, we'll review the two Healthy People objectives in the dementias, including the Alzheimer's topic area. These focus on awareness of diagnosis and preventable hospitalizations. This topic area is new for Healthy People 20/20, and the data for the two objectives just recently became available. Given the growing population of older adults, additional objectives may be added in the next few years.

This first objective in this topic area shows the proportion of older adults with a dementia diagnosis who are aware of their diagnosis. These data come from the Medicare Current Beneficiary Survey, which is sponsored by the Centers for Medicare and Medicaid Services. Diagnosis of dementia is key to receiving effective treatment and care.

As their dementia worsens, people need more health services and oftentimes long-term care. Overall, only one-third of persons with diagnosed dementia were aware of this diagnosis in the period 2007 to 2009, which is a three-year aggregated sample estimate. There are no significant differences by sex, race, ethnicity, age, or family income level.

Our second objective in this topic area tracks preventable hospitalizations. Approximately 25 percent of persons 65 and older with diagnosed dementia experienced preventable hospitalization in the period 2000 through 2008.

Preventable hospitalizations include, for example, complications from diabetes, hypertension, dehydration, and urinary tract infection, conditions for which hospitalizations could be potentially avoided given good primary care. While there were no significant disparities among sex and age groups, there were significant disparities by race/ethnicity.

Hispanic and non-Hispanic/black populations have higher rates compared to the non-Hispanic/white populations. In addition, those with incomes less than 200 percent of the poverty threshold had a 50 percent higher rate of preventable hospitalizations compared to those with income over 400 percent of the poverty threshold.

So let's move to our key takeaways. First, for older adults. Both the number and proportion of the population age 65 and older are increasing. Average annual health costs are increasing, and Medicare spending is highest for those with four or more chronic conditions. Almost 38 percent of adults had four or more chronic conditions in 2012. Nearly one-third of older adults have moderate to severe functional limitations.

Continuing on to the next slide, emergency department visits for falls in older adults are increasing over time. Less than half, or 40 percent, of older adults received core preventive services in 2012, and certain Medicare benefits are under-used, such as diabetes self-management and the Welcome to Medicare benefit.

So here are our key takeaways for dementias, including Alzheimer's disease. Alzheimer's disease is the fifth leading cause of death among adults age 65 and over. Approximately 1 in 3 older adults

are aware of their dementia diagnosis, and approximately 1 in 4 persons with dementia experience potentially preventable hospitalizations.

Thank you.

**DR. WRIGHT:** Thank you, Irma, for that very comprehensive look at the latest data as it relates to dementia and older adults.

At this time, I'm going to turn the podium over to Dr. Marie Bernard, Deputy Director of the National Institute on Aging. Dr. Bernard?

### **Presentation - Marie Bernard**

**DR. BERNARD:** Thank you. It's a pleasure to represent the National Institutes of Health. I'm from the National Institute on Aging, one of the 27 institutes and centers at the National Institutes of Health, and we are all about developing evidence. And much of the objectives that we're currently focusing on, the underlying evidence was developed by the National Institutes of Health. Thus, I will provide you a research update to help think about these objectives.

I'll start with a study that was called Move to Opportunity. It was reported in the New England Journal of Medicine in 2011. It looked at a natural experiment that took place actually at the beginning of 1990, when the Department of Health, Education, and Welfare, which it was known as at that time, gave low-income women an opportunity to move from areas of poverty to other areas. So they randomly assigned women to one of three groups. They had the opportunity to move to any area with a voucher. Another group had an opportunity with a voucher to move, but they had to move to an area of low poverty. And then the last group was a control group.

Our scientists looked at these women some 20 years later to assess the quality of their health. And they found that moving to an area of low poverty was beneficial in terms of an effect on glucose control as compared to treatment with Metformin in other groups, better subjective well-being, and an increase in annual income for the women who moved to the areas of low poverty. And we think this relates to the Healthy People older adult objectives numbers 3 and 8. And you'll see in the bottom right-hand corner how the questions relate.

Another example of a natural experiment that our scientists have taken advantage of is an experiment that occurred in the state of Oregon at the beginning of this century. And very specifically, in 2004, the state of Oregon found that they did not have sufficient funds to cover everyone who was eligible for Medicaid, so they got a waiver from the Center for Medicare and Medicaid Services to conduct a lottery.

They opened it up with the idea of supporting some 10,000 individuals. Some 90,000 applied. So by random selection, 10,000 people received Medicaid benefits. And our scientists looked at health outcomes for those individuals a couple of years after the experiment was initiated, and they found that those people who received the insurance had increased use with primary and preventive care,

lower out-of-pocket medical expenditures and debt, better self-reported physical and mental health, and increased diagnoses and management of diabetes. And as you can see in the bottom right-hand corner, that relates to several of the Healthy People older adult objectives as well.

We were very pleased at the end of May to have the report of a study that we supported for many years now, Lifestyle Interventions for the Elderly or LIFE study. This is a study that was initiated to test the hypothesis that physical activity, structured physical activity, can have an impact in preventing disability for older adults.

It took subjects who were 70 to 89 years of age into this study. They at baseline had some functional problems, but they weren't truly disabled. And they put them into a structured, exercise intervention that included walking, some balancing and strengthening exercises, getting these sedentary individuals up to 150 minutes per week of exercise.

At the reporting at the end of May, with an average of about 2 and a half to 3 years of follow-up, this intervention did lead to a reduced risk of major mobility disability by a significant percentage, and it additionally decreased the likelihood of persistent mobility disability.

What do I mean by that? If a person had a stroke, they were more likely to have less disability as a result of that and less persistent disability as a result of that. And I can certainly say as a geriatrician that now being able to say very specifically to patients, if you do this, you can decrease your likelihood of disability, that can be a great motivator.

We also have a report this year from George Rebok and colleagues of a follow-up of a study called ACTIVE, Advanced Cognitive Training for Independent and Vital Elderly. This is a study that was conducted 10 years ago, where older individuals are trained in various cognitive domains. One was in reasoning. Another was in speed of processing of information. Another was in memory. The intervention was only about an hour or so, two or three times a week, for a set period of time, about 12 weeks or so.

Of course, at the end of the study 10 years ago, people had improvement in each of those domains. The thing that is extraordinary about this report is that looking at these subjects 10 years later, there were persistent benefits for the people who were trained in reasoning and speed of processing that was associated with better maintenance of instrumental activities of daily living, being able to bank, sort through mail, those sorts of things. So some cognitive training in those domains seemed to have a persistent benefit.

Finally, in terms of recent research, we were very pleased to be able to announce, just June 4th, that we have made a selection in a collaboration with the Patient Centered Outcomes Research Institute or PCORI. As you know, PCORI is a private entity that has been enabled through the Affordable Care Act -- that focuses on looking at -- comparing various forms of clinical interventions. And starting last summer, PCORI and NIH -- very specifically NIH taking the lead -- have collaborated to look at the issue of falls.

Falls are common and a serious problem among the elderly. The best prevention strategy is not known, and the goal of this collaboration is to fund a single, large clinical trial on prevention of fall-related injuries in non-institutionalized older adults; and that's, in other words, community-dwelling individuals. The goal was to have meaningful involvement of patients and stakeholders as partners with researchers throughout the research process.

Over the course of this past year, that has been done. And we were happy to announce that the \$30 million award has been given to a group of researchers led by folks at Brigham and Women's, Yale, and UCLA, that will be -- it's titled, Randomized Trial of a Multifactorial Fall Injury Prevention. And it's going to take all of the best of the evidence that's available and see whether it could be applied in a real-world situation to decrease the prevalence of falls in older individuals.

Not to leave you feeling that we just do theoretical things and we don't translate our research, I would like to bring to your attention our Go4Life program. This is a program that's an exercise and physical activity campaign that's been led by the National Institute on Aging in collaboration with multiple other agencies, many which are represented on this program, to help older individuals to get active, whether one has been sedentary or whether one has been active all along; whether one has some degree of disability.

This is a great resource to refer to, and it's certainly related to the objective, older adults objectives 5 and 6, as well as several of the physical activity objectives in Healthy People 20/20.

So transitioning to the dementia as including Alzheimer's disease objective, I should mention that the National Institute on Aging is also the federally designated lead research institute on Alzheimer's disease. And I was asked to very specifically provide a definition of Alzheimer's disease. So if you went to our Alzheimer's disease education and referral website, what you would see is what's presented here.

Alzheimer's disease is an irreversible progressive brain disease that slowly destroys memory and thinking skills, leading to the eventual loss of the ability to carry out the simplest tasks of daily living. Symptoms first appear generally after the age of 60, although there are some unfortunate individuals who do develop this at a younger age. And it is the most common cause of dementia among older adults.

Now there's an asterisk there for dementia because the Diagnostic Statistical Manual, which clinicians use for making diagnoses, Version V has replaced the term "dementia" with major, neurocognitive disorder.

So getting a little bit into those leads, a major neurocognitive disorder is one where there's evidence of significant cognitive decline from a previously documented level, where there are cognitive deficits that interfere with independence, where there are cognitive deficits that are exclusive of delirium. So delirium is the change in cognition with an acute illness. So you can't make a diagnosis of a major neurocognitive disorder or delirium when a person's in the hospital because

you don't know how much of it is because of that acute illness and how much of it is baseline. And the cognitive deficits are not better explained by another mental disorder, things like major depression or schizophrenia.

Going to the DSM-V, the diagnosis of Alzheimer's disease is made by meeting the criteria for major cognitive disorder -- aka, dementia -- and having an insidious and gradual progression, plus either having an Alzheimer's disease genetic mutation from a family history or through testing. And I'll be talking a little bit about that in the next slide -- or all three of the things that are listed there: clear decline in memory and learning, plus one other domain, and a steadily progressive gradual decline in cognition, plus no evidence of mixed etiology such as, again, things like cerebrovascular disease, mental problems, and systemic disease that might affect cognition.

I will note that the National Institute on Aging, working with the Alzheimer's Association, has the competing set of diagnostic criteria, and they like to point out that cognitive decline does not necessarily have to be the first feature in a person that's developing Alzheimer's disease. But that's really at the level of the specialists, clinicians. For the purposes of thinking about the dementias, including Alzheimer's disease, criteria, I think that the DSM-V very well serves our purposes.

Some of our research that one should be aware of, we have been really focused on this issue for more than 20 years. We've been able to determine that prior to the development of cognitive and functional impairment that are the stigmata of Alzheimer's disease, there are changes in brain volume and metabolism that occur. And even before that, there are changes in the brain in the build up of a substance called beta-amyloid as well as a substance called tau.

We are now able to image those things so that we can potentially see changes in the brain, years or even decades before a person really develops symptoms. And that allows us to potentially look at means of preventing or delaying this illness.

An example of this is shown in this slide. Eric Reiman and colleagues from the Banner Health Institute in Arizona are one of many who are looking at means of trying to delay Alzheimer's disease. And we were able to give a generous grant to Eric and colleagues a couple of years ago under an initiative fostered by President Obama to focus more on Alzheimer's disease.

What you see in the bottom left-hand side there is a PET scan of an individual in their late 20's. So on the bottom left-hand side, it's all blue. The top right-hand slide, you see a slide of an individual in their mid 30's, who does not have a genetic change that predisposes them to the development of Alzheimer's disease.

Very specifically, they're looking at people with something called the presenilin-1 mutation, which predisposes to Alzheimer's at a very young age. And then the bottom right-hand side, you see a scan of a person in their mid 30's who does have a presenilin-1 mutation, and what you see lit up there is Alzheimer's deposition within the brain.

What's hopefully going to be accomplished with this study is the amyloid within the brain will be removed or its accumulation will be retarded by the administration of anti-amyloid drugs, and we will get the opportunity to see whether this makes a difference in outcomes for these individuals. And there are a number of other similar studies looking at it in lots of different ways that we're supporting.

Not to leave you feeling that we're not doing things for people who presently are suffering, this is a report that just came up out this year of the CitAd trial. It's using citalopram for treating individuals with Alzheimer's disease and clinically significant agitation. Citalopram is a selective serotonin reuptake inhibitor, an antidepressant that's been used in lots of other situations. And what was found in this trial is that citalopram offered significant improvement in agitation symptoms compared to the placebo that was given to the control subjects.

It does have its problems. There was some evidence of cognitive decline and changes in heart function, but fewer of these sorts of side effects that you might find with other antipsychotics that are commonly prescribed to people with Alzheimer's disease like haloperidol and other sorts of things; so something more for the armamentarium in dealing with this very challenging illness.

I'll close by pointing out that President Obama in January of 2011 signed into law something called the National Alzheimer's Project Act. That called for a plan to address Alzheimer's disease, which was released in May of 2012, led by the Secretary of Health and Human Services. You see listed here the five goals for this national plan. Some of the research that I presented has been facilitated by having something of that sort. And hopefully, when we get to Healthy People 20/30, we will have other sorts of things to offer.

**DR. WRIGHT:** Thank you, Dr. Bernard, for sharing NIH's research portfolio, both in the past, current, and future, in these two very challenging areas.

At this time, we're going to turn the podium over to Edwin Walker, who is the Deputy Assistant Secretary for Aging in the Administration on Aging and Administration for Community Living. Mr. Walker?

### **Presentation - Edwin Walker**

**MR. WALKER:** Thank you, Don. And it's really our pleasure to be here today and to join this great discussion.

First, I thought I would talk about the Administration for Community Living, given that it's the newest operating division within the Department of Health and Human Services. It was created in 2012, and it was designed to reduce the fragmentation in federal programs, addressing service and support needs of both the aging and disability populations. It was designed to enhance access to quality health care and long-term services and supports for all individuals; and thirdly, to promote consistency in community living policy across all areas of the federal government.

It combined the Administration on Aging, the Office on Disability, which was a policy office within the Office of the Secretary, and the Administration for Intellectual and Developmental Disabilities. Today I'll focus primarily on the Administration on Aging, the component in which I work because the Administration on Aging, or AOA, leads the National Aging Network, which consists of 56 state and territorial units on aging, more than 400 federally recognized tribes and tribal organizations, about 620 area agencies on aging, which are regional planning agencies throughout the country, and 20,000 local service providers, and probably, very significantly, more than half a million volunteers.

This group is what comprises what we call the Aging Network, and this aging network provides an array of services, services that are available and address the objectives related to older adults and dementias, including Alzheimer's disease. You see an array of services on the slide. They represent those services that most directly achieve the objectives that we're discussing today.

Older adult objectives number 3 speaks to increasing self confidence in managing chronic conditions. And here we use an evidence-based approach that helps older adults learn how to manage their health conditions more effectively. Our aging and public health networks and their partners are delivering these programs throughout the United States, and the outcomes from this chronic disease self-management effort shows that we really are achieving better health, better care, and less use of services, such as fewer emergency room visits and hospitalizations.

When we speak of evidence-based programs, we're talking about those that have been tested in randomized controlled trials, published in peer-reviewed journals, and found to have a positive impact on the population that they're designed to serve.

One in particular is chronic disease self management, where we have programs focused on chronic disease self management for older adults and adults with disabilities and focused on education and tools that help them better manage their chronic conditions, such as diabetes, health disease, arthritis, HIV-AIDS, and depression.

From this, we have a number of workshops where older people come together. They are taught and led by their peers. They have peer support. And they cover such topics as techniques to deal with problems such as frustration, fatigue, pain and isolation; appropriate exercise for maintaining and improving strength, flexibility, and endurance; the appropriate use of medications; communicating effectively with family, friends, and health professionals; nutrition and decision-making; and how to evaluate new programs and new treatments.

Our role in chronic disease self-management education really began in 2003 and has continued through a variety of demonstration grants funded from various sources focused on translating evidence-based interventions into community settings.

Older adult objective number 4 focuses on increasing diabetes self-management benefits, and here we focused on implementing our Diabetes Self-Management Program with 39 states throughout the

country. We are providing technical assistance resources to them and teaching them how to obtain American Diabetes Association and the American Association of Diabetes Educators accreditation. Some of our aging network sites have supplemented their diabetes self-management program and have become service providers that qualify for Medicare reimbursement for delivering these services.

Older adult objective number 11 speaks to reducing emergency department visits due to falls. In 2003, we funded grants to 24 states to develop infrastructure and partnerships to work toward embedding evidence-based health and prevention programs within communities. Among these programs, there were three that focused on falls management and falls prevention, and we supported falls management programs such as A Matter of Balance, Stepping On, and Tai Chi: Moving for Better Balance. Currently, there is a new funding opportunity for FY14 to help the Aging Network provide falls management and prevention programs to older adults, and that's on the screen.

Older adult objective number 8 speaks to reducing unmet need for long-term services and supports, and we do this through our home- and community-based supportive services provided through the Older Americans Act infrastructure with services such as supportive and nutrition protective services provided through states and tribes to 1 in 5 seniors throughout the country, and targeted to those most at risk.

These are designed to fill in the gaps for older adults living in the community so that they can stay at home, where we know they wish to do so. And we know that unmet needs are a key risk for unnecessary institutional invasion.

Older adult objective number 9 focuses on reducing unmet need for caregiver support services. And here, we have the National Family Care Giver Support Program, which was the first federal grant program designed specifically for meeting the needs of the unpaid family caregivers in our country, the real heroes actually in our country.

It authorizes five services, which are on the screen, but they are information about how to access services, assistance in actually accessing services, the provision of caregiver counseling, the development of support groups and training, respite care, and supplemental services, and it's been quite successful. Seventy-eight percent of the caregivers say that the program has enabled them to continue to provide care longer, and 93 percent of the caregivers have rated the services good and excellent. We serve about a million caregivers each year through this program.

The dementia including Alzheimer's, objective number 2, speaks to reducing preventable hospitalizations in those with dementias. And here we have the Alzheimer's Disease Supportive Services Program started first in 1992 as the first federal demonstration program to target services to people with Alzheimer's disease.

In 2008, we transitioned the program to an evidence-based one focused on translating interventions and have decreased caregiver depression and burden as well as increased caregiver knowledge,

confidence, and coping. We are so pleased that this is now supplemented by a new Alzheimer's program, where we will adapt evidence-based interventions to address three challenges: people living alone with dementia, people aging with disabilities such as Downs syndrome, and behavioral symptoms, which can lead to unnecessary institutionalization.

The takeaways for us are that our programs really relate to many of the older adult and dementia, including Alzheimer's disease, objectives, and they offer older adults direct benefits from evidence-based programs. Additional information and resources are listed on the slide, and we would ask you to feel free to click on any of the links and to contact us if you have any additional questions.

Thanks so much for today, and, Don, back to you.

**DR. WRIGHT:** Thank you, Mr. Walker, for sharing the good work that is coming out of the Administration on Aging for this population group.

At this time, I'm going to turn the podium over to Dr. Wayne Giles, Director of the Division of Population Health, National Center for Chronic Disease and Health Promotion within the Centers for Disease Control and Prevention. Dr. Giles?

### **Presentation - Wayne Giles**

**DR. GILES:** Hello, everyone, and it's a pleasure to be here and on the panel today. I'm going to talk with you all today about the work that we are doing across the agency at CDC to help provide states and communities with concrete tools and resources to help us see improvements in the older adult objectives that you've heard about today. This is really truly about translating the research into practice.

At CDC, we have three primary strategic directions for the agency. Number one, to improve health security at home and around the world; number two, to better prevent the leading causes of illness, injury, disability, and death; and number three, to strengthen the linkages between public health and health care.

What I'll talk about today focuses on those latter two objectives, and specifically how we achieve those objectives is through focusing on population-based approaches, monitoring indicators of health and health-related conditions such as the Healthy People 20/20 objectives, conducting research, and, importantly, providing support to states and local communities.

If you'd go to the next slide, I want to focus now on the work that we do within our Health Aging program, which capitalizes on opportunities to promote health among Americans age 50 years of age and older. And we do this work in collaboration with over 200 organizations at the national, state, and local level, who have helped us in our effort, but also with several federal agencies, including the Administration for Community Living, the Health Resources Services Administration, the National Institute on Aging, among others as well.

Our Healthy Aging Brain Initiative, which is shown here on this slide, is driven by the need to develop a public health focus on cognitive health much in the same way that we have a public health focus that addresses physical health and increasingly mental health as part of that work. Within this roadmap, we have four main domains: to monitor and evaluate what's going on; to educate and empower the nation; to develop policies and to mobilize partnerships; and to assure a competent workforce.

We go to the next slide, and I want to give you examples of what some of our states have done in terms of moving forward with the Healthy Brain Initiative. In Arizona, they were particularly concerned about how do we assure a competent workforce. So they've been working to provide training to community health workers around Alzheimer's disease.

In Hawaii, they were interested in educating and empowering their population, so they've developed public awareness materials to reduce stigma associated with cognitive decline. In Wisconsin, they were interested in developing policies and partnerships, so they've developed toolkits and models to promote dementia friendly communities as part of that work. And in Puerto Rico, they've developed an Alzheimer's disease plan, which they are currently in the process of implementing.

The next slide, I'd like to transition and talk about the work that we are doing in terms of increasing the delivery of clinical preventive services, objective number 2. This is a framework that we have developed in collaboration with the National Association of Chronic Disease directors and the Michigan Public Health Institute. This framework was published in the American Journal of Preventive Medicine last year, and Alex Krist is the first author on this publication.

I'd like to focus on the big box in the middle. And as we think about increasing the delivery of clinical preventive services, we need to think about how do we engage and educate the community so that they know what community preventive services are available and they should make use of. Number two, what can we do within the healthcare system to increase the delivery of clinical preventive services?

The third area that's vitally important is feedback, so providing feedback to providers and feedback to residents in the states and local communities about how well we're doing in terms of the delivery of clinical preventive services. But this framework really drives a lot of the work that we do.

On the next slide, you will see examples of some of the documents that we have been able to develop around clinical preventive services. And again, we work with a number of partners, including the Administration for Community Living, the agency for healthcare research and quality, and the Centers for Medicare and Medicaid Services, as we have developed these reports.

Part of these reports provide data on how we're doing in terms of delivery of clinical preventive services both at the national level but also at the state level as well. And as we report back how well the states and the nation are doing in terms of delivery of clinical preventive services, in each of these documents, you will find concrete examples of how local practitioners and communities have

mobilized to increase the delivery of clinical preventive services, so these are great resources. I should also say that these documents focus on two important segments of the population, the Medicaid population, those age 65 and older, but also the pre-Medicare population, individuals age 50 to 64 years of age.

I also want to give you an example of a very nice program that has been instrumental in terms of increasing the delivery of clinical preventive services. It's a program called Vote & Vax. With every election, there are over 126 million Americans who pass through 186,000 polling places in this country. Seventy percent of those individuals are over the age of 50. And one of the things that the Sickness Prevention Achieved Through Regional Collaboration, or SPARC program, has done with support from CDC, AARP, and the Robert Wood Johnson is they've developed this program called Vote & Vax.

So as people are in line waiting for the polls, people are offered an opportunity to receive their flu vaccination. In the last presidential election in 2012, there were over 1600 Vote & Vax sites that occurred, and over 10,000 people were vaccinated in one day, a great example of a program that could be scaled up broadly.

On the next slide, you'll see an example of what we've been able to do in terms of colorectal cancer screening. And here I'm going to give examples from two states. The first is Pennsylvania, where they focus on the provider community and use data from electronic health records to provide feedback to healthcare providers in terms of how well they are doing in terms of colorectal cancer screening. And through this program, they saw the rates of colorectal cancer screening increase from 60 percent to 75 percent.

Another example is New Hampshire, where they focus on the patient, community and use community health workers, or patient navigators, to help patients prepare for a colorectal cancer screening as part of the process. And through this program, the rate of no-shows for screening decreased substantially. They saw an increase in screening rates from 70 percent to 76 percent.

The next slide, I want to talk a little bit about what we're doing around chronic disease self-management education, particularly around diabetes self management, and really wanted to focus -- we're doing a lot of work with worksites and employers across the country. We've got a nice website, [diabetesatwork.org](http://diabetesatwork.org), which is a great resource. We've able to work with over 200 partners through this effort, including some large employers such as General Electric and General Motors as part of this work.

On the next slide, I want to highlight work related to our promotion of physical activity among older adults. At CDC, we call physical activity the "wonder drug" because it really can have a huge impact in terms of health and well-being of older adults. We're working with the U.S. Forest Service to promote parks and trails for older adults and those with disabilities.

We're working with the National Rec and Park Association, with the YMCA, and Arthritis Foundation to implement physical activity programs for people with arthritis. We also have an arthritis funded state program, which funds 12 states. They are promoting two programs, EnhanceFitness and Walk with Ease. Through those programs, they have reached over 75,000 individuals.

I want to talk a little bit about EnhanceFitness because this is a program that was created out of the Prevention Research center at the University of Washington and is now being scaled up widely. It has shown to improve health and well-being of older adults and also decrease healthcare costs. You're going to hear in just a minute from Susan Snyder and Nichole Shepard, but they both are going to give some great information in just a minute about how this program has scaled up and the impact that it's had on older adults, a great example of how we at CDC have been able to take research and translate it to the community.

On the next slide, I want to talk a little bit about falls prevention. And one of the key strategies for us is providing the community with resources so that they can act on what's going on. And so this compendium of effective falls intervention includes 22 scientific tested and proven interventions and provides relevant details to public health professionals and others in terms of what they can do in terms of falls prevention.

On this slide, you will also see a toolkit specifically for healthcare providers. This is the STEADI Toolkit, which stands for Stopping Elderly Accidents, Death, and Injuries. It's a great resource that provides facts sheets, case studies, and guidelines for healthcare providers in terms of how to assess gait among older adults. And it also includes forms so that healthcare providers can easily refer patients to community falls prevention programs, but a great resource for our healthcare providers.

On the next slide, you will see a list of resources where you can find information about all of the activities that I talked about during the presentation today. Thank you very much for the opportunity to present to you today.

**DR. WRIGHT:** Thank you, Dr. Giles.

Now we had a clear overview of what is occurring in the federal family to improve health objectives as related to older adults and dementia. At this time, we're going to transition to the local community and hear what a local community has done to address this special population. Our first speaker will be Susan Snyder, Director of Project Enhance from Seattle, Washington, and she'll be followed by Nichole Shepard, a health educator from the Salt Lake County Aging and Adult Services.

Susan?

## **Presentation - Susan Snyder**

**MS. SNYDER:** Thank you. I'll be talking about my organization, Senior Services, an evidence-based program that we have disseminated for nearly 20 years now. These programs address the older adult, Healthy People 20/20 objectives on chronic disease management, physical activity, falls, and cognitive health functioning. One quarter of Americans have multiple chronic conditions with most of those Americans being older adults. People, especially those with chronic conditions, spend 99 percent of their time outside of the healthcare system. The programs I'll be discussing are in communities to provide options for those with chronic conditions.

Senior Services is a community-based nonprofit serving King County, Washington in promoting positive aging through our core programs, including caregiver, information and assistance, Meals on Wheels, community dining, transportation, and a package of evidence-based programs that I'll be talking about in a few minutes, and seven affiliated senior centers. We serve over 60,000 each year, and our paid staff are complemented by 4,000 volunteers. Funding comes from Aging Network and public health, private donors, sales, fundraising events, foundations, donations, and state and federal grants.

Project Enhance provides a menu of evidence-based programs, the Chronic Disease Self-Management Program, Matter of Balance, and PEARLS, as well as those owned and managed by Senior Services, EnhanceFitness and EnhanceWellness.

This photo is a class at one of our ethnically diverse sites in southwest Seattle. It's an EnhanceFitness class, and I will show in the next few slides a brief overview of each of the evidence-based programs we have offered since the late '90s.

The Stanford Self-Management Program that was discussed earlier is for those with multiple chronic conditions who meet in peer-led groups, either in person or online, to build confidence in managing their condition. These groups are community based. Senior Services was one of the original pilot sites of the Chronic Disease Self-Management Program. As one person from that program stated, "The class sessions were great and gave me and my husband a path to wellness. We manage our chronic conditions with confidence."

PEARLS is a brief depression-care management program designed to reach underserved older adults and is participant-driven, empowering adults to actively manage depression and improve their quality of life. As a participant stated, "I always would leave our meetings with a feeling of hope." And you'll see on each of these sites where you can get more information about each of the programs.

A Matter of Balance is designed to reduce the fear of falling and increase the activity levels of older adults who have concerns about falls. One anecdote from a participant, "I'm picking up my feet more when I walk, turning on more lights in the house, and using a cane when I walk in the yard."

A Senior Services program, EnhanceWellness is a participant-centered health behavior change program using motivational interviewing and behavior-change theory. Our current five-year research project at the University of Washington is using EnhanceWellness as an intervention for older adults with long-term disabilities. In addition, United Way of King County funds a wellness project in low-income, public housing buildings.

A partner in this project is Sea Mar Community Health Center, a federally qualified health center providing EnhanceWellness to Latinos in a local senior center. As an EnhanceWellness participant stated, "Focusing on changing my eating habits and exercising more has enabled me to make a lifestyle change, lose weight, feel better, and lower my cholesterol and my blood pressure."

EnhanceFitness, mentioned earlier, is a structured, ongoing physical activity class led by certified fitness instructors held three times per week in hourly sessions. Please visit our Facebook page to hear more from instructors and participants' stories.

Ongoing research is critical. Pilots are currently looking at adaptation for those with mild cognitive impairment, which we're EnhanceMobility and for those with chronic pain. A five-year study between the Y of USA and the University of Washington Health Promotion Research Center will begin this year. The Centers for Medicare and Medicaid recently completed a retrospective study of evidence-based programs, which included EnhanceFitness. Results showed enrollment in EnhanceFitness was associated with a cost savings of \$945 a year for every Medicare beneficiary. A prospective study will be conducted beginning in the next few months.

Partnerships between public health and aging help to implement and maintain programs, promoting physical and mental well-being. The University of Washington Health Promotion Research Center has been a partner since the original program study with Senior Services. The CDC has supported evidence-based programs for more than a decade as well as the Administration for Community Living and Administration on Aging, specifically. National nonprofits have also provided support and partnerships, including the National Council on Aging and the Y of the USA.

The Y partnership resulted in the Y of USA having as a goal to serve at least 10,000 older adults by 2016 in order to have a positive impact on their health and be a resource for healthcare providers. Area agencies on aging and health departments are key in reaching their goal.

Another strong partnership is the Evidence-Based Leadership Council, which is a consortium of programs and community representatives working together to develop and deliver evidence-based programs through one infrastructure nationally, a one-stop shop. This council is comprised of evidence-based programs with wide dissemination and is receiving support from the Archstone Foundation as well as the CDC.

I would like to now introduce Nichole Shepard, Salt Lake County Aging and Adult Services, who started EnhanceFitness classes several years ago with support from public health and the Aging Network.

## **Presentation - Nichole Shepard**

**MS. SHEPARD:** Hi there. Thank you, Susan, and thank you for the opportunity to share our EnhanceFitness success with all of you today.

As the largest area agency on aging in Utah, Salt Lake County Aging and Adult Services is the community focal point for older adults, their families, and caregivers. In 2010, Salt Lake County's population was just over a million, which represents just a little over 37 percent of Utah's population, with 125,000 older adults residing in Salt Lake County.

By 2020, it is anticipated that individuals over the age of 60 in the county alone will reach just over 409,000. But with an increase in population, there is a need for quality programming, and I'm proud to say that Salt Lake County does offer a wide variety of services and a menu of evidence-based programs for our participants to choose from. Among all that we do offer, EnhanceFitness is our most popular class at our centers. Our participants absolutely love it.

So we are a donation-based agency, meaning our programs delivered in the centers are at no charge, including EnhanceFitness. We do receive funding from our community partner, the Utah Arthritis Program, who in return reports to the CDC, then the remaining budget is funded by Salt Lake County and Salt Lake County Aging and Adult Services.

So we began implementation of EnhanceFitness towards the end of 2008, and with strong support from our administration team, fantastic instructors, and the increase in advanced, for-quality programming, the popularity of this class continues to increase. With a reach of 920 participants to date, we're still growing.

So we now offer the class in every corner of the county, with 16 classes to choose from. Towards the bottom of your slide, you'll see some of our results. These are based on program protocols, and we're comparing individuals to their gender and age group for pre- and post-scores, and we're showing an improvement with 76 percent improving or maintaining their lower body strength at average or above average; 80 percent are improving or maintaining upper body strength at average or above average; and 60 percent improving or maintaining balance at average or above average.

So I've placed some quotes here on the slide that you can kind of scan through on your own, but I want to focus on Theresa, who's pictured to the left of your slide today. Theresa has been attending the EnhanceFitness program about two times a week since August 2013. She joined EnhanceFitness after receiving permission from her regular doctor because she thought her balance was off for a healthy 62 year old. Because of the instructor's explanations and the wonderful exercises offered, Theresa confirmed she did indeed have a balance problem.

She went on to see a specialist. She had tests and was prescribed physical therapy in December. The doctor at the Draper Hearing and Balance Center was very familiar with EnhanceFitness and said he had huge success with patients who attended the class. He gave her permission to

participate in the program with no restrictions. Her physical therapist also said that the exercises provided were excellent. So instead of three times a week of physical therapy, Theresa was assigned to go to EnhanceFitness two times a week and physical therapy once a week. And in three months, she completed a physical therapy program that ordinarily takes five to six months.

So I just want to wrap up here with a quote from Theresa. She says, "EnhanceFitness saved my healthcare plan hundreds of dollars, saved me many expensive co-pays, accelerated my return to normal balance, and produced normal test results and balance for my age and health. I did have a minor problem that responded to physical therapy and EnhanceFitness. I have also seen three other people in that class who came in with walkers and now use canes or walk by themselves. This class is valuable beyond words. It is worth every penny of the money spent by the county."

So I end with those great words, and I'll turn the time back over to Susan. Thank you.

### **Presentation - Susan Snyder (resumed)**

**MS. SNYDER:** Thank you, Nichole.

Our last slide is talking about lessons learned. Ongoing partnerships are critical to complement the skills of each partner, to sustain our programs, and to continually evaluate their effectiveness.

Make your programs accessible in communities where those with the greatest need reside and in facilities where they gather.

Select data from day one and include these and program management costs in your budget. And most especially, show how it works for everyone, from each participant to your funders.

Program instructors and leaders are key to keeping participants in the program and engaged as they become better managers of their health.

Finally, a menu of proven programs provides options to those wishing to improve their health and stay in their community.

Thank you for your time, and please feel free to contact us at any time about any of the information that we have covered. Thank you.

**DR. WRIGHT:** Susan and Nichole, thank you for sharing the success at the local level and addressing needs of this specific population.

I think you all will agree these presentations have been just excellent. I want to thank everyone for the work that you're doing in this particular area. And before we begin our roundtable discussion, I have one reminder for our viewing audience. You will be asked to complete a survey about this webinar during the discussion period. Your opinions are very important to us, as it helps us improve the quality of future webinars.

At this point of time, I want to move into the question and answer time for this webinar. I'm going to turn things over to Carter Blakey, who serves as the Deputy Director of the Office of Disease Prevention and Health Promotion.

Carter?

## Questions and Answers

**MS. BLAKEY:** Thank you, Don, and many thanks to all of our speakers this afternoon. You have been fabulous. And I'd like to remind the audience that we have joining us now for this roundtable discussion Shari Ling from the Centers for Medicare and Medicaid Services. This topic has clearly been one that our participants on line have related to. We have several listeners who have emailed in that they have been touched personally by Alzheimer's and the related conditions associated with that.

With that, we have a couple of questions to throw out. And the first one I will send to Dr. Marie Bernard from NIH. We have listeners who say that they have been personally affected by Alzheimer's, in fact have lost many family members to the disease. And they're I suppose looking for an answer in a crystal ball.

Can you predict or hold out any sort of a time line when we might find a cure for Alzheimer's?

**DR. BERNARD:** Well, as you will recall, I showed a slide about the goals for the national plan to approach Alzheimer's disease, and number one is to find a prevention or a cure by 2025. That is a goal. You can never predict how the science is going to evolve. But I can certainly say that lots of effort is being put towards trying to meet that goal.

After President Obama signed into law the National Alzheimer's Project Act, some \$50 million were redirected towards additional research in Alzheimer's disease in fiscal year '12, which led to the Reiman study that I presented. In fiscal year '13, NIH director put an additional \$40 million, and NIA put in another \$5 million towards the already sizeable sum of money that's being put towards Alzheimer's research. And we are very grateful that Congress in the fiscal year '14 budget increased the budget for NIH as a whole, and then very specifically for NIA got another \$100 million with the suggestion that much of that money be put towards meritorious research related to Alzheimer's disease.

So it will not be as a result of lack of effort, and there are lots of scientists across the United States and really globally. There's a global alliance of scientists who are trying to come up with a treatment or a cure for this devastating illness. So there's no better time but unfortunately no guarantees about us being able to meet that goal.

**MS. BLAKEY:** Thank you very much.

Dr. Ling, the same listener is wondering what are some changes that perhaps there will be coverage for some of the caregiver services so that family members aren't burdened quite as much.

**DR. LING:** Thank you for the question. We recognize the critical role that caregivers play in providing and meeting the needs of persons with dementia, which as you know, as Marie and others have mentioned, is an increasing percentage of the population. I think it's important to also build on something that Marie said in terms of a cure. And if you look at the national plan, a cure is an important goal, but we can achieve effective management even short of a goal.

So we'd like to reframe this in terms of what can we do in the processes of enabling early detection, arriving at a diagnosis appropriately that includes exclusion of potentially reversible causes of cognitive impairment, and then effective management. That can include therapy, that is pharmacologic therapy, but at the same time, management interventions that go beyond just pharmaceutical agents. That is where we believe caregivers play a critical role, an important role.

Some of the work that we're collaborating on -- and Marie I'm glad mentioned -- is new therapies to manage difficult behaviors, looking at the effects of caregiving and the stress there that is inflicted upon caregivers. And we're very interested in the emerging evidence of what those physiologic as well as psychologic effects are in that that could also significantly impact on the outcomes of the persons or the first victims of dementia and Alzheimer's disease.

There are services that are available that go beyond, which Medicare currently covers. And that's where the tools and services mentioned by our colleagues, by the sister agencies, really come into play. And we view the role of care providers, physicians, and clinicians as knowing what those services are, where they are, and where they can guide patients and families to receive that help.

So we are eager to hear more about the emerging evidence that would support improving outcomes for persons with dementia and also for caregivers.

**MS. BLAKEY:** Thank you.

Mr. Walker, I think I'll throw a similar question to you having to do with caregiver services and support. Do you see increased funding as the population of baby boomers age? Do you see increased funding coming from your agency for caregiving services?

**MR. WALKER:** Well, thank you, Carter, for the question and for whoever asked the question. We certainly know the value of caregivers in this country. We try to support them. There was a time when we used to refer to those individuals as the informal support network. But they provide the bulk of all long-term care services in this country. And so they really are the more formal network.

We are aware of studies that show that the value of caregiving exceeds \$450 billion a year and that the types of issues that caregivers are addressing include complex medical care at home with very little training. So we know that there needs to be a greater investment with regard to caregiving. The demographics show that the issues will only increase. So we were very pleased that the vice president's Middle-Class Task Force a couple of years ago recognized the need to invest in caregiving.

The president's budget for two years in a row asked the Congress for an increased amount of federal funding to support caregivers, but we have yet to see that from this Congress. And so we just need to continue to make the case and make each person aware of the need to address and support caregivers in this country. We are pleased to hear, however, that the Senate Appropriations Subcommittee may have added a few dollars in their mark for our caregiver program. We are waiting to see the final results of their actions, but we are encouraged by what we are hearing at the moment.

**MS. BLAKEY:** Great. Thank you.

And now I have a question for our community organization. Susan Snyder, can you tell our listeners how they can find an aging and public health network and their partners in their own communities?

**MS. SNYDER:** Yes. I would suggest first finding out where your area agency on aging is located, if it is in your community or if it is in another community, but it's a regional office. Area agencies on aging can cover anywhere from one to multiple counties, and they're a wonderful partner and support. They could also go to their public health department to see if there is a specific person that is working with the older adult population and healthy aging. That's what I would suggest or their local Y, who may be providing specifically EnhanceFitness.

**MS. BLAKEY:** Great. Thank you very much. And a related question that, Susan, you may want to answer, too, as well as Wayne Giles. A listener asked how can we move programs like Project Enhance to a national implementation level.

Wayne, would you like to go first?

**DR. GILES:** Sure. I think there are a couple of things that I think are important, and I think there are some key lessons we've learned from our experience with EnhanceFitness. And I want to applaud Susan and colleagues at Senior Services along with researchers at the University of Washington for moving the work forward.

One is I think being able to document the impact that the program has, so in other words, being able to show the improvements in health outcomes and well-being that have occurred, but also the important cost data that they have been able to collect I think is really, particularly nowadays, important and being able to document that cost savings. I think it was a very nice portfolio of data

that they were able to present to folks, like at Group Health, that led to reimbursement. We're seeing an increasing number of states. Also, as they're thinking about Medicaid reimbursement and state employee benefit reimbursement -- thinking about program such enhancements, so I think that will help in terms of scaling it up.

The other thing that I think we need to think about is how do we deliver these programs into communities. And so working with groups such as Rec and Park, Y of the USA, et cetera, that have affiliates in other local entities in communities across the country and using that national network to deliver these programs is going to be vitally important.

The last thing I would say on this is we also need to make sure that as these programs are being implemented, there's good fidelity in terms of the intervention, and that as these programs are being implemented at the local level, we continue to see the strong outcomes, and that's got to be part of this as well.

Susan, I didn't know if you had anything you wanted to add to that.

**MS. SNYDER:** Just a couple of things. Thank you. First is that, yes, the data is critically important, and we do collect outcomes data online that has really helped us in providing additional costs in evaluation of the program for those interested, and specifically for working with healthcare providers.

In addition, in answer to your question about how do you make these nationally available, well, the studies that we're doing with Center for Medicare and Medicaid Services will help us in looking at cost and effectiveness compared to those that are not participating in the program, which will provide even more knowledge to our knowledge base.

The Evidence-Based Leadership Council has been formed in order to look at a national infrastructure for delivering these programs, so that there is one place for people to go that are interested in providing multiple, evidence-based programs and looking at our technical assistance and training so that we can provide organizations in a cost effective and efficient manner.

**MS. BLAKEY:** Great. Thank you very much.

Dr. Arispe, we have several questions that have come in about the data. Let me give you two that relate to Alzheimer's disease. One listener is asking if you can repeat again the target for increasing the percentage of people with Alzheimer's or other dementias to know their diagnosis. And then there's also someone who says that they've heard that CDC underestimates Alzheimer's deaths or recent research shows that the CDC underestimates Alzheimer's deaths.

Can you answer that or is that true? And maybe explain the concern there.

**DR. ARISPE:** I can answer the statistical aspect of it. I don't know if some of the clinicians may also want to talk about the diagnostic challenges involved. I think this is a case where we have to

have a catch-up between science and measurement. The first straightforward question about awareness of dementia diagnosis, the target is 38.3 percent, and that's on my slide 21, for those of you who have access to the slides. The target-setting approach for that objective is a 10 percent improvement, which when that is achieved, may or may not be statistically significant.

I think there are a number of challenges in measuring dementia and Alzheimer's prevalence. The study that we use today is a very in-depth comprehensive approach that is used in a small geographic area and then estimated to the nation as a whole, and that's not something that we have within our statistical capability to collect at this time. It's simply a data availability from the volume of data.

It's also a question of being able to have providers able to effectively distinguish one condition from another. And that challenge is both with respect to prevalence and with respect to death data. So for example, we collect in the National Vital Statistics system Alzheimer's disease, for example, as an underlying cause of death. But what we are able to collect is probably an underestimate because Alzheimer's is sometimes reported as an underlying cause of death or a contributing cause of death. There are also a number of deaths that are labeled as dementia, so it becomes unable to distinguish between dementias in a larger context than Alzheimer's.

So that's kind of the statistical issues. I don't know if there are clinicians here who want to address the diagnostic issue.

**DR. LING:** Sure. This is Shari Ling. I'm a geriatrician, and part of my active clinical duties as a volunteer in the Veterans Administration, or Veterans Affairs Dementia Clinic, is to address exactly this, which is how do you actually provide patients and families with an accurate diagnosis and convey that message appropriately?

For many reasons, a diagnosis is challenging to arrive at and often late in the game to address because of delayed detection that there are cognitive concerns on the part of the patient or even families. And there's even a misinterpretation that memory difficulties or the dementia warning signs are attributed to normal aging, which that's an important distinction as well.

So it is helpful to frame things in terms of focus on early detection and then diagnosis. And this also plays into the data source. So administrative data sources have limitations in that a diagnosis of Alzheimer's disease or dementia may not make it to the top three reasons for a hospitalization as an example. The hospitalization may detect or may be coded rather than dementia and may be psychosis because the patient or person has delirium.

So we are working collectively and collaboratively in trying to refine the diagnoses that are applied, and also working with care providers so that an accurate diagnosis can be appropriately assigned, and also that message delivered in a way that the patient and family can understand for purposes of prognosis and also planning and management.

**MS. BLAKEY:** Thank you very much. We have another question NIH. Dr. Bernard, you had talked about beta-amyloid buildup in the brain. We have a listener who is asking what lifestyle changes or nutritional changes can be made to prevent the buildup of beta-amyloid plaque.

**DR. BERNARD:** Thank you for the question. That is the subject of a lot of our research. We're very interested in what sorts of things beyond medications can modify the development of Alzheimer's disease. We certainly know that among the risk factors for Alzheimer's disease are things such as diabetes, high blood pressure, obesity. And thus, the lifestyle changes that can help to modify those sorts of illnesses may make a difference in the development of cognitive decline and maybe perhaps will make a difference in the development of Alzheimer's disease.

We do not yet have the definitive evidence along those lines, but there's no question that employing the good lifestyle measures that are recommended by the Department of Health and Human Services for a healthy heart and general health may make a difference for those risk factors.

**MS. BLAKEY:** Thank you. We have a question for the Administration on Aging and Mr. Walker. How do you locate contacts for local aging network services to partner in enhancing and supporting delivery of programs?

**MR. WALKER:** Thank you again for the question. It's quite easy to locate the local services, the local area agency in any part of the country. You can go right on our website, which is [www.acl](http://www.acl.gov) -- for Administration for Community Living -- [acl.gov](http://acl.gov). And you would go to the elder care locator. And you put in your zip code, and you will find the area agency directly responsible for your area, your geographic area throughout the country. You could also go to [eldercare.gov](http://eldercare.gov). That's the direct link to the elder care website.

**MS. BLAKEY:** Thank you. That sounds pretty straightforward.

Susan Snyder, we have another question for you. Can you compare how vigorous the EnhanceFitness program is, compare it with A Matter of Balance with respect to exercise?

**MS. SNYDER:** Sure. Well, A Matter of Balance provides how to do certain exercises to help you in your balance. That's provided during the workshop, which is time limited. And EnhanceFitness is an ongoing fitness program, and all we do are physical activities based around strength, flexibility, balance. So our program is a group program, and it's a great actually next step for A Matter of Balance participants who want to go to an ongoing class and continue doing those and more of the physical activities in the class, the exercises.

**MS. BLAKEY:** Thank you very much.

Wayne Giles, you listed a lot of resources that are available to folks. Someone is asking if there are any tips or resources for support with chronic conditions in Alzheimer's or other dementias.

**DR. GILES:** Sure. A couple of things that I highlight. Earlier we talked about multiple chronic conditions. And there's a lot of comorbidity with Alzheimer's and other chronic conditions, whether it be diabetes, high blood pressure, hypertension, heart disease, et cetera, et cetera. So one of the important resources we see is work on chronic disease self-management education, and that's a great resource for folks.

We've got a number of programs that we support at CDC that help in terms of spread of chronic disease self-management education in addition to the work that the Administration for Community Living is doing around chronic disease self-management education. So I think that's one really important resource. You can go to our arthritis program website if you want a list of those states that are funded, [www.cdc.gov/arthritis](http://www.cdc.gov/arthritis). And you can get a list of those 12 states, and you might be able to partner with them.

The other thing I think is important to think about is I'm going to go back to an issue of a lifestyle, and again, the importance of physical activity as an important strategy in terms of work that we do in terms of promoting healthy aging as part of that work as well. And so there I want to highlight a couple of things. One is that our Division on Nutrition and Physical Activity and Obesity through a new cooperative agreement funds all 50 states to do work around physical activity. And that includes having communities think about what they can do and implement policy strategy to promote physical activity. That's a really important strategy.

In addition to that, our arthritis program also is working on disseminating programs, including programs around working, EnhanceFitness that I talked about. So those are two important resources that you may want to think about and linking with your state.

**MS. BLAKEY:** That's great. I know we're over time, but we have so many questions. I think we'll take time to answer a few more.

Susan out in Washington, you had given a lot of information on your exercise programs, and Dr. Arispe had given data on the population of older adults who received 10 minutes or less of exercise, whether it's vigorous or moderate, in a week. Do you have any programs or do your programs work with this population of people?

**MS. SNYDER:** With those that are receiving? Yes. I believe I know what they're asking, but, yes, we do serve that population. Our class is an hour a week, and the population includes primarily people over 70, but it also includes those that aren't as functionally fit that are anywhere from 50 to 70. The classes are quite open. They're often in community centers or senior centers that are acceptable to everyone.

Does that answer the question?

**MS. BLAKEY:** I think it does.

**MS. SNYDER:** Okay.

**MS. BLAKEY:** I think that will have been our last question, but we do have some good news. During this webinar, we just received confirmation from the American Association of Public Health that we will be giving CEUs and CMEs for this webinar today. You will have to complete a form on the website in order to receive the CEUs to document that you have indeed participated in the webinar. So please email us today if you're viewing this webinar in a group and you would like to receive the CMEs or CEUs. You can email us at [healthypeople@norc.org](mailto:healthypeople@norc.org). So we're very thankful to APHA for giving us the opportunity toward these credits.

So at this point, I'd like to turn the show back over to Dr. Wright to close us out.

**DR. WRIGHT:** Thank you, Carter. Unfortunately, we've come to the end of our time, although we certainly haven't come to the end of the questions that have been submitted. I think this just highlights the interest in this particular topic to the listening audience.

Well, first of all, thank you all to the presenters, who took time out of your very busy schedules to share your efforts and your expertise in this special population. To our viewers, I hope you will join us for our next project review, which will occur in September and will feature new data in the topic areas of diabetes and chronic kidney disease. Thank you very much.

(Whereupon, the session was concluded.)