

STATEMENT OF

Dr. Mehrdad Ayati, MD, is an Adjunct Assistant Professor of Medicine at Stanford University School of Medicine where he teaches and trains medical students, residents, fellows, and nurses in Geriatrics. Dr. Ayati is board certified in family and geriatric medicine. He joined the Stanford University School of Medicine in 2011 as a member of its faculty, where he taught and practiced Internal Medicine and Geriatrics prior to starting a private geriatric practice in 2016. Doctor Ayati is a member of the Ethnogeriatrics Committee of the American Geriatrics Society and serves as a Faculty Advisor for the Center On Longevity at Stanford University. He is a member of the Health Care Advisory Committee of Northern California and Nevada Chapter of the Alzheimer's Association and is the Geriatric Consultant on Aging Research Projects at SRI (Stanford Research Institute) International. He founded the Bay Area Senior Care Society. He has served as the Medical Director and Medical Advisor of multiple skilled nursing facilities in the San Francisco Bay Area in California. Dr. Ayati is the Founder of the Geriatric Concierge Center in Menlo Park, California, where he currently practices, and is co-author of the book *Paths to Healthy Aging*.

**Before the
U.S. Senate Special Committee on Aging
Concerning:
Aging, challenges faced by the aging population in the US, and Paths to Healthy Aging**

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EXECUTIVE SUMMARY

Dear Madam Chair, Ranking Member, and distinguished members of the US Senate Special Committee on Aging,

Thank you for inviting and giving me the opportunity to discuss critical challenges regarding the aging population in the US. My name is Dr. Mehrdad Ayati. I am a board-certified Geriatrician and an educator. I am also board certified in Family Medicine. I am presenting myself as a physician who has treated and managed, and continues to treat and manage, thousands of senior Americans.

I would like to start with some statistics. Today, the number of Americans ages 65 and older is approximately 49 million. This number is estimated to grow to 98 million by 2060. Currently, there are about 7,000 geriatricians in practice in the United States, yet according to the Alliance for Aging Research, we should instead have 20,000 geriatricians—nearly three times our current number—just to accommodate the needs we have right now. By 2030, this group estimates that our country will need about 37,000 of these specialists.

Since 2011, approximately 10,000 Americans have been enrolling in Medicare every day. This aging population is faced with multiple challenges on the path to healthy aging. I would like to outline eight of these challenges briefly and suggest some directions for overcoming them.

- 1. There is a lack of experts in the field of Geriatric Medicine and Gerontology.** Unfortunately, our health care and education systems have not been designed to train enough senior care providers such as doctors, nurses, physician assistants, pharmacists, social workers, dementia experts, and physical and occupational therapist who can specifically manage seniors. As we age, our physiology changes. For example, absorption of drugs through our digestive system can be altered. Our liver function decreases, and it becomes harder for our body to metabolize and eliminate drugs. Changes in our circulatory and nervous systems affect our reactions to drugs. Therefore, we might need lower or higher doses of medications compared to other age groups. Additionally, there are medications that while working perfectly well for younger adults, should not be prescribed for the geriatric population. Therefore, it is crucial for the elderly to be managed by healthcare providers who have been educated and trained in this field. In the US, 80% of those 65 and older have at least one chronic condition (more than 3 out of 4) and 50% have two chronic conditions. Forty percent of the seniors take at least 5 medications, not taking into account over-the-counter supplements and herbal remedies. They see many different specialists and are prescribed a number of different medications through each. This situation can result in polypharmacy or over-medication, and even Drug Cascade Syndrome, where an undesirable side effect is misinterpreted as a medical

condition and results in a new prescription. That is the reason why 4.5 million Americans visit the emergency rooms and physician offices each year. Adverse drug events account for a large number of hospital stays and deaths among the elderly. Therefore, there is a critical need for training more senior care providers.

- 2. There is a dearth of scientific and research-backed medical information regarding healthy aging.** Despite the fact that we live in an era of advanced technology, with massive amounts of information on the subject of aging at our fingertips, the validity of much of such information is highly questionable. Our seniors are bombarded with contradictory claims, literature that is overly technical and hard to understand, recommendations that are impossible to follow, and often marketing-oriented myths about how to take care of themselves. They lack simple, straight forward, easy to follow information about aging on topics such as nutrition, mental and physical health, frailty, medications, finding the right physician, and end of life decisions. For example, misleading marketing campaigns at every corner are enticing our seniors to take drastic measures such as taking unregulated vitamins and supplements or undergo harmful diets to live longer and healthier. This is regardless of the fact that scientific data collected over many years indicate that such over-the-counter supplements and drastic diets are not contributing to better health and could even be detrimental to our health. Consequently, there is a critical need for reliable information, valid guidelines, and effective strategies so that senior can avoid or more effectively manage chronic diseases and have a better quality of life.

Very few clinical research and trials are designed for or even include older people, which consume majority of the pharmaceuticals currently available in the market. As such, the safety of most medications in the elder population is not well researched.

There is also a lack of academic and scientific research on the subject of aging. There is also an urgent need for the development of innovative tools to help the elderly stay in the comfort of their homes as long as possible and avoid spending time in nursing homes.

- 3. The elderly are becoming more racially and ethnically diverse.** In 2010, more than one in eight US adults 65 and older were foreign born, a share that is expected to continue to grow. The U.S. elderly immigrant population rose from 2.7 million in 1990 to 4.6 million in 2010, a 70 percent increase in 20 years. It is estimated that the number of US immigrants 65 and older will quadruple to more than 16 million by 2050. This increase is due to the aging of the long-term foreign-born population and the recent migration of older adults as part of family reunification and refugee admissions. In 2014, about 15% of people age 65 and older lived in a home where a language other than English was spoken. Currently, we lack the resources to address the challenges of this growing ethnic and racial groups. These challenges include language barriers, cultural differences, religious and belief differences, physiological factors such as genetic backgrounds, and financial inequalities.

4. **We live in an Anti-Aging Society.** We are a youth-oriented society that is not properly focused on aging and the older generation. As people grow older, they need more attention, care, support, companionship, and love. We need to raise awareness about the needs of the elderly as well as the hardships they face and to promote the respect, gratitude and appreciation they deserve. All too often, older adults are forced out of the workforce and replaced by cheaper and unskilled labor. They may then retire to the solitude of their homes, where they can become isolated and lonely, and as a consequence, develop depression and cognitive impairment. Later, they may be institutionalized and set aside by the society they built and the children they raised. They can even be mistreated, cheated and taken advantage of.
5. **We need more infrastructure and resources.** Our seniors face a lack of appropriate resources in the areas of transportation, affordable housing, senior centers, organized and affordable social activities, and qualified healthcare centers. These problems are magnified for those suffering from dementia. Currently 5 million Americans suffer from this condition, and in the next 15 years this number is expected to triple. However, we lack the dementia units as well as the professionally trained staff to provide care for this population.
6. **Seniors are experiencing financial difficulties.** A large number of seniors are living in poverty. The recent global economic crisis of 2008, the collapse of the housing market and the astronomically high cost of healthcare in the US are among the many factors contributing to the growth of debt among the elderly. Some of them are forced to forgo retirement and seek very low paying jobs, which they may still have a very hard time finding due to age discrimination. Often, they are faced with a hard choice between paying their mortgage, buying the many medications they can't survive without, or purchasing food. Too often, they become not only financially but also physical dependent on their children, which are known as the "sandwich generation" when they care for parents while at the same time raising their own children.
7. **We expect quick fixes.** We live in a modern society where more is considered better. This kind of mentality tells us that for every single problem, there should exist a quick fix—even if there is no logic behind it. "Modern medicine" dictates that health issues should be resolved with either medications or interventions. But in reality, the statistics do not support this. The Congressional Budget Office in 2015 estimated that 5% of the nation's gross domestic product, \$700 billion per year, goes to tests and procedures that do not improve health outcomes. Therefore, modern medicine, with its emphasis on attempted solutions rather than prevention, does not necessarily make happier and healthier citizens.
8. **Medicare expenditures are not aligned with needs.** As the Medicare system is set up today, it does not pay for the medically necessary services, which can have tremendous impact toward a better physical and mental quality of life for adults. For instance, if an

older adult needs more physical therapy to help with mobility or needs a necessary piece of equipment to have a better quality of life, it will be denied by Medicare. However, if the same person wants to undergo an expensive diagnostic test, the test will be quickly authorized. Unfortunately, as we discussed, many of these diagnostic tests do not change the quality of life for the elderly. Sometimes they do not even improve the management of the disease. I see on a daily basis that Medicare would fully pay for diagnosing and treating my patient's cancer, even if it would extend their life for just a few weeks. However, Medicare would not pay a penny if the same patient needed help at home, nor would it pay if he/she required counselling to overcome anxiety and depression. I had a patient a few years back with advanced dementia in a nursing home. He also had advanced colon cancer. He could not eat, was in severe distress and could not recognize anyone. His life expectancy was less than two months. On one of his visits to the ER, his family members were instructed to consult with a cardiologist. The cardiologist advised them to get a pacemaker for him. They put a patient with advanced dementia and cancer under general anesthesia to give him a pacemaker. And Medicare paid for it. He died less than a month later.

SOLUTIONS

- 1. Expansion of Geriatric Education.** A large number of the teaching physicians in the U.S. medical schools don't have the appropriate expertise or background in the field of Geriatrics. As a result, medical students, residents, fellows, and practicing physicians who currently treat the elderly lack the basic knowledge in the field of geriatrics. Therefore, too often the elderly are misdiagnosed and mismanaged. In contrast, in Great Britain, every medical school has a department of geriatrics, as do one-half of Japanese medical schools. Of the 145 US medical schools, only 11 have geriatric departments (7.6%!). Plus, the geriatric curriculum at over three-quarters of the US medical schools is an elective, not a required field of study. As a consequence, many older Americans will not get the most knowledgeable care they need when they most desperately need it. In fact, it's already too late for a solution that involves training enough certified geriatricians. The experts admit this and offer an alternative solution. This solution hinges on creating enough geriatric educators to ensure that every new physician, of which there are over 16,000 per year, will have been sufficiently trained in geriatrics in medical school to know the differences between medical care for non-geriatric patients and medicine for the oldest of us. Another recommendation is that all primary care physicians and specialists should have mandatory training in the field of geriatric as part of their CME (Continuing Medical Education). This rule should also be mandatory for nursing, advanced nursing and physician assistant practice education.

Earlier this year, the American Geriatric Society endorsed the Geriatrics Workforce and Caregiver Enhancement Act (H.R. 3713), a bipartisan proposal for programs addressing the shortage of health professionals equipped to care for the elderly. Introduced by Reps. Jan Schakowsky (D-IL), Doris Matsui (D-CA), and David McKinley (R-WV), the bill draws on considerable insights from the Eldercare Workforce Alliance (EWA), a collaborative comprised of more than 30 member organizations co-convened by the AGS and now reflecting the diverse expertise of millions of professionals who support health in aging for older Americans. The proposed legislation would codify into law and authorize funding for the Geriatrics Workforce Enhancement Program (GWEP). The GWEP is the only federal program designed to increase the number of health professionals with the skills and training to care for older adults.

Launched in 2015 by the Health Resources and Services Administration (HRSA) with 44 three-year grants provided to awardees in 29 states, the GWEP is helping geriatrics experts develop innovative local solutions. When approved, H.R. 3713 will authorize GWEP funding of more than \$45 million annually through 2023, allowing current and future GWEP awardees to educate and engage with family caregivers, promote interdisciplinary team-based care, and improve the quality of care delivered to older adults. I hope this bill will be finalized soon, as this can be a big victory for our vulnerable older adults, allowing them to receive better care for their future. But this is only a beginning and we need more funding in the future.

- 2. Medicare Reimbursement Model.** With the passage of the Affordable Care Act, the reimbursement basis is slowly shifting from a Fee for Service (FFS) structure to one which puts emphasis on improving performance and outcomes. However, the level of reimbursement is still not adequate. Geriatric counseling and geriatric assessments require time. Keep in mind that there is a shortage of geriatricians and there is a large population of geriatric patients with multiple chronic conditions on many medications. As such, the amount of time spent per patient needs to be long enough to be effective. However, at the current low reimbursement levels, geriatric professionals need to see many patients in a short timeframe to survive financially. Geriatrics is one of the lowest-paying specialties, and experts say this low pay and factors such as the high cost of living and office overheads as well as the long work hours are driving new physicians away from the field. Increasing reimbursement fees for geriatric consultations would undoubtedly create more attraction for medical centers and doctors' offices to expand their geriatric care and hire more geriatric care providers. It would also allow the care providers to spend an effective amount of time with each patient to provide all the necessary assessments, management and education.
- 3. Expand Geriatric Consultation.** One efficient way of properly taking advantage of the currently low number of geriatricians in the field is to use geriatricians as consultants rather than primary care providers for the elderly. To accomplish this, all healthcare providers could send their elderly patients for a geriatric consult at least once or twice a year. This would allow geriatric professionals to evaluate patients and their list of medications and make the proper recommendations to their primary care physicians and other specialists. It should also be made mandatory for primary care physicians to consult with a board certified geriatrician or a gero-psychiatrist for their patients suffering from dementia. Of course, a proper reimbursement method is necessary for this model to survive.
- 4. Medicare Annual Wellness Visits.** Medicare has a comprehensive and well detailed annual wellness visit structure. Unfortunately, many physicians do not follow the well-established CMS annual wellness instructions. The majority of discussion time between patients and the physicians is spent on management of high blood pressure, high cholesterol, refill of medications, and/or vaccinations. Although these are relevant topics which need to be well addressed, this annual wellness visit should in addition include a thorough geriatric assessment and evaluation. This includes screening for depression, discussing nutrition, and screening for memory loss. It should also include discussing goals of care and life preferences. Primary care physicians should consult geriatricians during these CMS annual wellness visits to properly assess their older patients.
- 5. Coordination of care.** Bringing together a team of health care providers, with a geriatrician at the center, and working closely with the senior patients, family caregivers, primary care physicians, specialists, case managers, and other care professionals is of

essence to ensure healthy aging. This team can coordinate individual needs, synchronize the variety of short-term and long-term medical services, improve health care access and outcomes, support and improve communication resulting in improved individual well-being and health outcomes.

- 6. Physical Health of our Older Adults.** Frailty is defined as a progressive deterioration of multiple body systems resulting in physical and functional decline. It is characterized as a drop in the body's energy production and utilization as well as a deterioration of its repair systems. It can occur at any age but is much more prevalent in the elderly. As we grow older, we eventually lose about 40 percent of our muscle tissue. Unfortunately, as we discussed, our seniors lack the basic infrastructure to stay healthy and fit. For example, there is a lack of senior-friendly exercise centers in this country. Such centers should have suitable equipment designed for seniors and have certified trainers who can help them stay physically strong, and to prevent, slow, or reverse the development of frailty. Seniors also need transportation systems to reach such physical and social centers.

We also need more effective, continuous adult education in medical centers, physician offices, media, and public programs about the importance of exercise for older adults. It is essential that providers be honest with their patients and explain to them that medications and procedures alone are insufficient: they must be accompanied by regular physical activity in order to maintain their mental and physical well-being.

- 7. Mental Health of our Older Adults.** Mental health is the most important aspect of healthy aging. As we discussed, people in this group are highly susceptible to becoming lonely and isolated and to suffer from depression and/or anxiety. Unfortunately, this will lead them toward increased cognitive impairment and disability over time. Data is showing that loneliness in the elderly is associated with the use of psychotropic drugs. Further, seniors who feel lonely and isolated are more likely to report having poor physical and mental health, as indicated in a 2009 study using data from the National Social Life, Health, and Aging Project. It is therefore essential to expand senior day center programs providing intellectual stimulation, extend adult educational programs, and increase community support for the seniors. There is also a strong need for social engagement and interaction centers for the elderly. We should also develop mechanisms to help our older adults to engage in voluntary programs in their community.

Another important factor is the lack of professional geriatric counselors or therapists who can treat depression and anxiety in this population. Medicare does not currently provide funding to support geriatric counselling or psychotherapy. Consequently, depressed seniors are only to receive pharmacologic treatment options. Furthermore, with the increase of ethnic and racial groups in the US, there is a crucial need for therapists with different cultural and language backgrounds.

- 8. Nutrition.** Proper diet and nutrition are essential factors for health. Unfortunately, many of our seniors are looking for the best supplement that could act as a magic solution for better health. Sadly, this unfounded belief in the power of supplements has become a practice model in our society and is gradually replacing the healthy diet for this population.

As we age, we lose bone mass, muscle, and water content while increasing fat content. Other physiological factors such as losing taste buds and sense of smell, dental issues, lack of companionship, medical and psychological illness, and stress also result in weight loss. Many medications also cause loss of appetite and weight loss. Medical and social education for this group should put emphasis on proper hydration, maintaining a balanced diet, practicing mindful eating, avoiding fad diets, and not relying on over-the-counter supplements and herbal remedies. Social support programs providing meals for older adults are crucial. Eating meals in senior centers can help not only nutrition but also help to avoid loneliness in this group.

- 9. Polypharmacy and Drug Cascade Syndrome.** As discussed before, prescribing for older patients offers unique challenges. A periodic evaluation of the drug regimen that a patient is taking is an essential component of the medical care of an older person. Such a review may indicate the need for changes to prescribed drug therapy. These changes may include discontinuation of a treatment prescribed for an indication that no longer exists, substitution of a required treatment with a potentially safer agent, reduction in the dosage of a drug that the patient still needs to take, or an increase in dose or even addition of a new medication. An Interdisciplinary geriatric team will be the best group to help our older adults avoid the negative impacts of polypharmacy. It is essential that all medical centers follow Beers criteria. These are guidelines for healthcare professionals to help improve the safety of prescribing medications for older adults.

Physicians who have not been trained enough in the geriatric field should avoid prescribing psychotropic medications for dementia-related behavioral disturbances. These medications have very serious side effects such as confusion, disorientation, hallucinations, seizures and delirium, and memory loss. In the elderly, they can result in falls and death.

Through medical and social media, it is essential to educate the seniors and their care givers to have a current list of their illnesses and their medications, including the dosage, and to share that list with all their physicians and pharmacists. Patients and their caregivers are often unaware of the reasons why some of their medications have been prescribed. Patients should question their physicians thoroughly about each of the medications prescribed for them. They should ask what side effects to look out for. They should also ask their physicians to ensure that any new medications do not interact with or inactivate their existing medications. The public should also be aware that over-the-counter medications, vitamins, antioxidants, supplements and herbal remedies are not necessarily safe to use and can interact with their existing

medications.

CONCLUSION

A joint effort involving better public education, widespread training of caregivers in the field of geriatrics, and changing Medicare and government regulations is required to ensure that the growing wave of seniors live healthier and happier lives.

I would like to thank the Senate Special Committee on Aging for giving me the opportunity to discuss healthy aging and the challenges currently faced by the aging population in the US as well as offering solutions.

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