Research on hoarding behavior began in the early 1990s and has led to widespread public awareness on the topic. Consensus is that approximately two to five percent of the general population in the United States has a hoarding condition. A recent study found that the onset of hoarding behavior is most common in adolescence, but that the severity increases with each decade of life (Ayers et al., 2010). Results from a Johns Hopkins study show that hoarding behavior is more prevalent among older adults (Samuels et al., 2008), and a study of hoarding complaints to a Massachusetts Health Department found that 40% of individuals referred were elderly (Steketee, Frost, & Kim, 2001). As our aging population rapidly increases, so will the number of older adults for whom hoarding is a problem.

Medical and Mental Health Factors of Hoarding

Too often persons who hoard are thought to be lazy, choosing to live in squalor. They are often blamed for the behavior, as if they have complete control over it. However, hoarding behavior is neither a lifestyle choice nor the result of unwillingness to keep a tidy environment. Instead, it appears to be the result of complex medical and mental health factors. Hoarding was previously thought to be a behavior related to Obsessive Compulsive Disorder (OCD) and Obsessive Compulsive Personality Disorder (OCPD). Experts now believe it to be unique and separate from other neurological and psychiatric disorders, yet often co-existing with another mental illness. Genetic and neurobiological studies have found that hoarding behavior may be a result of genetic differences or brain injury (Saxena, 2007). Approximately 80% of persons who hoard grew up with a family member who hoards, and gene research has shown a positive correlation between hoarding behavior and a unique pattern on chromosome 14 (Samuels et al., 2008). One study of nine patients who experienced brain damage found a correlation between the location of the damage and hoarding behavior (Anderson, Damasio & Damasio, 2005). Mental illnesses that often co-exist with hoarding behavior include psychotic disorders such as schizophrenia, degenerative brain...
disorders such as dementia, obsessive compulsive disorder, traumatic brain injury, bipolar disorder, intellectual disabilities, Asperger’s syndrome, and attention deficit disorder. A common characteristic of hoarding is impaired executive function. Executive function is the brain’s ability to process information, which includes the ability to organize thoughts and activities, prioritize and concentrate on tasks, use time efficiently, categorize items, and make decisions. In addition to seeing executive function impairment in people who hoard, it is also often seen in the neurobiological conditions listed above. The connections among these various neurobiological conditions, hoarding behavior, and executive function impairment are as yet unclear.

**Special Aspects of Hoarding in Older Adults**

As the severity of hoarding increases with each decade of life, a particular concern is the increased vulnerability of older persons who hoard. Years of hoarding can result in overwhelming amounts of “stuff” that increase risk of falls. Fearing discovery by authorities who might condemn their homes, older hoarders may not allow workers into their house to make repairs. Consequently, there are often broken toilets, stopped up sinks, and structural damages that produce conditions that are hazardous and unsanitary. When downsizing after retirement, some may be unable to part with belongings or to envision the more limited space they are moving into, thereby overfilling their new environment. Some older persons develop hoarding behavior as a secondary symptom to dementia and can no longer keep up with the organization necessary to maintain order. The Alzheimer's Association (2012) estimates that 13% of people over the age of 65 develop dementia; of these, approximately 20% exhibit hoarding behavior (Hwang et al., 1998). The death of a spouse who helped attenuate a hoarding problem can cause the problem to surface and place the hoarder at risk for the first time. There is a higher prevalence of hoarding behavior among those who are single and socially isolated. Families often have made numerous attempts over the years to offer assistance only to have their clean-up efforts return to previous conditions, and so, they give up.

**Treatment and Intervention**

There is no cure for hoarding behavior, but a number of treatment and intervention strategies have demonstrated some success. The first factor is the great variability of characteristics among those who hoard. If placed on a continuum, those who exhibit good interpersonal skills, cognitive ability, absence of psychosis, awareness of their hoarding, and motivation to change their situation would be at one end, while those who exhibit psychosis, dementia, physical frailty, social isolation, denial about their hoarding, and an unwillingness to accept help would be placed at the other. Similarly, some environments are livable and mildly cluttered, while others are hazardous and uninhabitable. To tailor services to clients who have such varied characteristics, a variety of strategies and resources must be available. What is helpful with one client may be completely ineffective with another.

The challenge for the service provider is to determine which strategies will be most helpful in any given case.

Treatment research has focused on Cognitive Behavior Therapy (CBT) techniques and medication. Some positive results have been noted with these treatments, but clients must be willing participants and be able to be motivated to work on their problem. CBT is an evidence-based psychotherapy developed by Aaron T. Beck, M.D. in the 1960s for the treatment of depression. Since then, its use has expanded to treat a myriad of other psychiatric conditions. Rather than focus on the influence of early life experiences, as is the case with psychoanalytic therapies, CBT focuses on the present with the goal of alleviating symptoms, including changing behaviors. CBT takes the approach that behaviors, thoughts, and emotions affect one another, and that a change in one can positively influence another. In an effort to help people who hoard, researchers Frost & Steketee adapted CBT for hoarding clients. In 2007, they published a guide and workbook for therapists and clients titled “Compulsive Hoarding and Acquiring” (Steketee & Frost, 2007). Unique to CBT adapted for hoarding is the aspect of home visiting. Because many hoarding clients minimize or deny the extent of their hoarding behavior, this adapted treatment emphasizes education about hoarding and includes motivational interviewing strategies to help engage the client and motivate him/her toward change. Sometimes the educational aspect is handled in groups, which has the added benefit of clients’ feelings being supported by others.
with similar problems. The therapist and client approach the task of sorting and de-cluttering together, so that the client can experience exposure to personal items and receive helpful strategies to make decisions about them. Items that are less meaningful to clients and, therefore, easier to discard are the first to be sorted, as this helps the client become sensitized to the process, making it easier to approach more challenging items later on. Thoughts and perceptions about items are challenged, so that clients can let items go that they formerly could not. Reducing acquiring behavior is another important focus of treatment. Exposure to venues and items where clients routinely acquire and helping clients experience and “survive” not acquiring those items is another useful CBT strategy.

To participate in CBT, a person must have the cognitive ability to learn new information and the stamina to follow through with homework assignments. Homework might include writing down goals, making lists of the importance of items, sorting items in the home and bringing items to sessions. Treatment may take months and by itself may not be sufficient to tackle very severe hoarding environments and behavior in a timely way. Cognitive Behavior Therapy strategies, however, can be effective and should be considered for clients at different points during the intervention process. There is some indication that medication can be helpful, and a careful mental health evaluation is always needed in order to assess for treatable mental health conditions that occur along with the hoarding behavior. Other interventions that have been effective in some cases are those offered by professional organizers and private care managers. These service providers frequently work in collaboration with mental health professionals to assure that the client’s mental health needs are not overlooked while there is such intensive focus on cleaning up their environment. Additionally, “Hoarding Task Forces” involving a multitude of agencies have formed in many jurisdictions and have been helpful. These are particularly prevalent in public agencies when a property may have code and fire violations or a client’s level of self-neglect meets criteria for involvement from a county’s Adult Protective Services program. With multiple agencies engaged in these task forces, the focus can be on having property clean-up for the safety of the individual and community, as well as planning and caring for the needs of the individual. Whatever the combination of services that is put together, in all cases it is imperative that there be a constant and supportive person who can develop a trusting relationship with the client, gauge the client’s readiness for an intervention, and anticipate the client’s response to it. Too often an intervention may involve a major clean-up, but, this completed, services discontinue. The focus in those cases is on the property rather than both the person and the property. These clients need a long term relationship with a trained professional who can help them through the cleanup phase and help develop a maintenance plan, which may include motivating, monitoring, organizing, and regular housekeeping services.

It should not be forgotten that persons who hoard have the legal right to refuse intervention and treatment. Based on existing property violations, fire and code enforcement authorities may take action against a client’s wishes by condemning the property or ordering clean up. When property conditions do not warrant such action and the client refuses services, no further intervention is possible. The only exception is when a client is incapacitated and a court appointed guardian or conservator can make decisions on a client’s behalf, including decisions regarding clean-up. Most often a guardian and conservator are appointed only in those cases where there is another condition present beyond hoarding, such as dementia, intellectual disability or a psychotic disorder and impairment. These are often the clients who are referred to Adult Protective Services for self-neglect. Respecting the individual’s right and desire to be independent and self-sufficient, while protecting him or her from self-neglect and harm, together create an ethical challenge for those called upon to intervene.

Case Study #1

Mr. R. first came to the attention of his local Fire Department when a neighbor complained about the mounds of trash she had glimpsed through his doorway as Mr. R. entered his home. Besides the neighbor’s concern, no-one suspected that Mr. R. had a problem. He was a bright, articulate 69 year old gentleman who had retired from his federal government job four years earlier and was volunteering in the community for a local charity that provided meals to shut-ins. A staff
person from the Fire Department visited him but was unable to investigate the complaint due to Mr. R. not allowing him entry into his home. The Fire official was able to persuade Mr. R. to meet with a social worker from Adult Protective Services who evaluated Mr. R. and found him to be competent and able to refuse services. Over the next 10 years a complaint about Mr. R.’s hoarding behavior was made approximately once every two years. Complaints included references to a car that was so stuffed full of things that it was unsafe to drive, and rodents on the property. With each complaint services were offered to him, and each time he refused. CBT was not an approach used with Mr. R. for a number of reasons. He saw attempts to help him as unwelcome interventions which he did not want. He exhibited no motivation to change his behavior, a necessary component of CBT treatment. He continued to present as cognitively intact and competent to refuse services. When Mr. R. was not seen at his volunteer job for several days, a request was made of police to check on his welfare. Police found him unconscious in a corner of his bedroom where he had landed after sliding down a pile of papers. Mr. R. was hospitalized, received treatment for an infection of both legs, and had his home condemned by the fire marshal. While in the hospital, he was diagnosed with bi-polar disorder and placed on medication. Social workers helped Mr. R. find temporary housing and engage the services of a professional organizer to help him clean out and organize his belongings. After some house repairs, the Fire Marshall allowed him to move back in. Once the crisis passed, Mr. R. refused ongoing mental health or case management services, as he felt they were too expensive and he stopped taking his medication. Some years later a repeat intervention took place. This time, in addition to his hoarding behavior, there was evidence that Mr. R. had early stage dementia. At that point he was evaluated by a psychiatrist who found him lacking the capacity to manage and safeguard his finances. It was discovered that Mr. R. had lost approximately $25,000 after falling for a scam. The court appointed a conservator. There was now a mechanism in place to pay for private care management which Mr. R. accepted. With this ongoing help, his situation stabilized. Mr. R.’s environment, though still cluttered, remained safe and functional.

Case Study #2

Mrs. S. was 73 years of age when her husband brought her to a mental health therapist who suggested CBT treatment. Mr. S. had been unable to persuade his wife to dispose of her large collection of craft supplies so that they could sell their home. The couple had made a mutual decision to move into a home in a retirement community that was one fifth the size of the home they were leaving. Mrs. S. had made no progress during the six month period set aside to get the house ready for sale. Deadlines for the sale of their current home and move to their new home were fast approaching. Mrs. S. had made no progress during the six month period set aside to get the house ready for sale. Deadlines for the sale of their current home and move to their new home were fast approaching. Mrs. S. acknowledged that she had a problem with excessive buying and difficulty getting rid of things; however, she could not make a plan to reduce her belongings. She agreed to engage the services of a professional organizer and to continue work with the therapist on a twice a week basis. With Mrs. S. present, the professional organizer and Mr. S. removed all but 50 boxes of her craft supplies. A storage unit was filled with some, but many needed to be given to charity or otherwise disposed of. The process caused Mrs. S. to become severely depressed and angry; she talked about having thoughts of suicide. The completion of the process and her therapist’s help caused her depressive symptoms to lift and she began expressing feelings of excitement about the upcoming move. To help prevent a recurrent hoarding situation, Mrs. S. continued treatment after her move. Emptying the temporary storage facility was her first goal. Her task was to bring a box of items to her session during which all items in the box were sorted into categories. With her therapist’s help, she established four categories in which to sort items: trash, recycling, donating, and items to keep. Although the items were forgotten when packed up, she experienced anxiety when seeing them again and had difficulty placing items in any of the categories that were not “items to keep.” Using a CBT strategy to change her thinking about items, however, she managed to dispose of more and more things as treatment progressed. One item that was particularly difficult for her was a bottle of bubble bath that she had purchased when her daughter was a toddler 30 years earlier. When the therapist asked how keeping the bottle would help her reach her goal of emptying the storage container (it would not) or if she would use it during the next five years (she would not) or if she could imagine a child in a shel-
ter enjoying it (she would like that), she was able to let go of it. Repeating this process with items over and over again sensitized her to the process and allowed her to make decisions much more quickly as time went on. Mrs. S. also agreed to take medications prescribed for depression and Attention Deficit Disorder, which had the effect of making her more focused during treatment sessions. She was able to allow a housekeeper to come once a week to help with keeping things organized and uncluttered. She agreed to these services on a long term basis to prevent a recurrence of the prior over-filled and disorganized state of her home.

**Conclusion**

Hoarding behavior can have significant impacts on the health and safety of older hoarders. To address hoarding behaviors, individuals, families, mental health professionals, elder service agencies, and residences for older adults will need the knowledge, skills, and support of a variety of resources. Long term involvement by a dedicated professional, such as a care manager, is necessary to maintain stability, monitor needs, assist with obtaining appropriate services, and coordinate care among service providers. Many older hoarders will need ongoing and regular mental health services, as well as in-home organizing and housekeeping to compensate for lack of executive functioning skills. Maintaining the elder's stability will require collaboration and partnerships between providers and agencies, ideally under the coordination of a care manager. Providing these services is time consuming, expensive, and requires availability of professionals who are trained in dealing with hoarding behavior. Creative ways to help those without sufficient funds need to be found.

**Study Questions**

1. What medical and mental health factors contribute to hoarding behavior?
2. If executive functioning is impaired, why might that cause hoarding behavior?
3. What challenges are more likely for older persons who hoard, as compared to a younger population?
4. What principles of Cognitive Behavior Therapy (CBT) help to address hoarding behavior?

**References**


**About the Author**

Henriette Kellum, LCSW, is a mental health service provider with an adult psychotherapy practice in Northern Virginia. She has over 30 years of experience working in public and private sector settings with people who are challenged with hoarding behavior. Henriette has conducted numerous trainings, helped organize conferences on the topic, and provided leadership in establishing one of the first hoarding task forces in the country. See [www.hkellum.com](http://www.hkellum.com) for more information about her and her practice.
Walkability

There has been, for some years recently, a search to identify and define communities that encourage us in our later years. The World Health Organization (WHO) launched a global initiative on this topic in 2007. The mayor of Seoul, Korea, the largest city in the country that apparently is aging the fastest in the world, announced in 2008 that Seoul would be an "Age Friendly City," with a 3-10 plan: 10 new day care centers within each city district, no more than 10 minutes from any resident, open until 10 pm. With many around the world weighing in on the question, there have been numerous opinions about what constitutes an "age friendly" or "livable" community. Suggested criteria include such diverse encouragements as opportunities for lifelong learning, tax breaks for older residents, curb cuts for wheelchair users, and extra police scrutiny to prevent victimization of older residents. People-friendly communities benefit residents of all ages, but the critical net effect here is that older residents are not disadvantaged in these communities. Put another way, it's the opposite of Lily Tomlin's classic observation, "We're all in this....alone."

Not surprisingly, no single criterion or set of criteria readily have emerged to define age-friendly and livable. Older adults themselves do not agree; for, after all, we older adults are not experts on aging, only on our own personal aging. And even then.....

There are a number of useful resources to aid our consideration of the matter. The AARP Network of Age-Friendly Communities, launched this spring, is affiliated with WHO's initiative called the WHO Global Network of Age-friendly Cities and Communities. WHO's Network began with 33 cities around the world, from Amman, Jordan to Nairobi, Kenya, to Udine, Italy, that are actively engaged in conducting research on its "active ageing" model. (You can find WHO's readable 82-page guidebook at: www.who.int/ageing/age_friendly_cities_guide/en/index.html.) In AARP's initiative, there currently are pilot projects on developing age-friendly communities in Georgia, Iowa, Kansas, Michigan, New York, Oregon, and Pennsylvania, plus the District of Columbia. AARP will be posting research results on its website. The U.S. Environmental Protection Agency (EPA) has its own model and has defined Aging Initiative Principles for this model, among them: social connectivity, eating healthy, and accessible housing. Alan Glicksman of the Philadelphia Corporation for Aging says that his city is trying to put these principles into action by encouraging city residents, respectively, to use public parks, plant community gardens, and adapt their homes so they can remain there. To different degrees, one of the key features of all of these efforts is their focus on community rather than just on aging individuals. This is, of course, realpolitik, acknowledging that appropriating bodies seem to be less willing to target just one constituency when there are fewer resources to expend overall. But, more importantly, these initiatives attempt to reverse the age-segmentation that, ironically, may have contributed to the problems in the first place.

My colleague Dana Bradley at Bowling Green University is partnering with community activists and elected officials in the small city of Bowling Green, Kentucky, the first Southern city in the U.S. to be accepted into the WHO Global Network, which offers a platform to exchange ideas and learned experiences with others in the Network around the world. Dana and her partners are seeking over the next several years to implement and study WHO's core aging-related features that WHO maintains are "intended to provide a universal standard for an age-friendly city."

The eight core features address aspects of daily life: Outdoor Spaces and Buildings; Transportation; Housing; Social Participation; Respect and Social Inclusion; Civic Participation and Employment; Communication and Information; and Community Support and Health Services.

The WHO guidebook offers the findings from focus groups around
the world that collectively give substance to what each of these features really means in everyday living. For instance, under Outdoor Spaces and Buildings the checklist, with many detailed examples, includes there being a pleasant and clean environment; the importance of green spaces (that are safe to visit); somewhere to rest; age-friendly pavements; safe pedestrian crossings; accessibility; a secure environment; age-friendly buildings (railings, ramps, wide doorways); and more.

Transportation is the feature that elicited from the focus groups around the world the greatest number of examples to emulate, 16 in all. Certainly, many of us are aware that getting in and out of our communities safely and affordably is both necessary and desirable for many reasons, from economic to physical health to mental well being. The absence of this feature connotes the worst extreme of aging in place. The WHO guidebook cites these examples of transportation in age-friendly cities: availability; affordability; reliability and frequency (transport that is there on weekends and doesn't take forever to reach a destination); travel destinations (going where people want to go); age-friendly vehicles (accessible); priority seating for people with special needs; transport stops and stations kept in good condition; information (ready access to timetables, routes); courtesy to older drivers; priority parking; and more.

One can clearly see that the criteria that WHO and AARP offer for an age-friendly community really speak to what would constitute a desirable place for all members of the community, young and old, working and not working. A starting point, in my mind, for assessing how friendly or livable a community is, is to consider its walkability. Many of the features listed above convert or relate to walkability. By walkability I do not mean the requirement that one be able to stand and place one foot in front of the other. Rather, I mean that, among other things, there be features in the community that would motivate a person to want to visit or take advantage of them.

Walkability seems to be a common denominator across several sets of criteria established by AARP, EPA, and WHO. AARP's Livable Communities: An Evaluation Guide (2005) even has a section on it. Walkability has different dimensions, for it implies not only that there be amenities in the community to which one would want to go, but also that one can move about safely; that the person motivated would have the health status or needed support to move about; that there would be means of transportation within and outside of the community, such as public transportation and taxis; and so on.

Walkability is not the single simplistic answer, but it appears to me to be a fairly understandable yardstick to begin measuring what we in the aging network need to do in partnership across the generations to identify and create livable communities that are all-people-friendly.

From the Commissioner, Virginia Department for Aging and Rehabilitative Services

Jim Rothrock

Planning, Planning, Planning …

Sometimes I don’t fancy myself a real planner and delude myself into false comfort rationalizing that I’m a doer not a planner. But as time goes on, I realize the error of my ways and understand each and every day that if we are to fully address the challenges and opportunities of the Age Wave, planning is the key.

Over the last month or so, I have had the good fortune to attend several events signaling the culmination of the first planning efforts to position certain communities to respond to this Wave. I am certain that many other communities are realizing the same planning processes, but I would like to feature at least two here.

About a year ago in Age in Action, I noted the completion of the Blueprint for Livable Communities initiative that Dr. Bill Hazel, Secretary of HHR, launched in May 2010. This effort put the Departments for Aging, Health, and Rehabilitative Services in a collaborative to generate local activities in planning. At that time, it was agreed that the state had no business foisting a Blueprint template on communities as diverse as Fieldale and Fairfax, and this report focused on the role the state could play as a catalyst for local planning.
Since the completion of that first report, Marcia DuBois, Blueprint staff, and I have conducted a number of conferences and she has done a great job keeping the website current and full of useful information; check it out: www.vadrs.org/vblc. But recently I was able to play a small part in two efforts to move this most important topic along and underscore the value of another resource, the Older Dominion Partnership (ODP). The ODP completed the first meaningful survey in decades to better understand the needs and concerns of boomers and older adults in Virginia, key elements in the Wave. The ODP website can be accessed at: www.olderdominion.org.

The survey sponsored by ODP offers findings from more than 5,000 respondents and breaks down results based on the geographic areas served by our 25 Area Agencies on Aging. On the ODP site you can readily access data in your area and/or read the overall report. Their data was a factor in the reports announced by two areas I wish to discuss in more detail.

First, the ODP data set offered a solid research component for the Greater Richmond and Petersburg area planning process. Senior Connections (the local Area Agency on Aging), under the stellar leadership of Thelma Bland Watson, matched perfectly with the visionary staff at the United Way. They brought in the other partners, as many entities must be included within the effort to catch the Wave. Their process took three years, with numerous meetings, community updates, and partner subgroups to garner their product. You can read up on their effort at: www.yourunitedway.org/news/historic-milestone-reached-age-wave-planning.

Second, the United Way took a lead role as the Northern Shenandoah Valley launched its plan recently. The United Way partnered with the Shenandoah Area Agency on Aging (SAAA) and completed over 250 surveys of seniors in the Meals on Wheels and Senior Center programs. This effort clearly noted the sparse resources currently available and cited that the needs would only grow with time as the target population is growing quickly. Their report can be accessed at this site: www.unitedwaynsv.org/Pages/SeniorNeedsStudy.aspx.

Both of these reports are exceptional. However, they are not the end result but the beginning of an ongoing process. That’s what makes these two reports important. They embrace the ongoing nature of the conversation among critical partners that will help our Commonwealth truly be one of opportunity for our citizenry, one which values community based services and encourages us to age in place.

I invite you to share with me any similar reports that you are aware of where planning is now going on. You can send them to me at: Jim.Rothrock@dars.virginia.gov. I will then post them on our Blueprint website to be an aid to others engaged in similar critical discussions.

As the newly created Department for Aging and Rehabilitative Services becomes an entity, we will focus on supporting communities in their planning efforts which are critical to our Commonwealth’s ability to respond to the Age Wave. Thank you for your help in making sure that we are able to catch this Age Wave.

DARS has three advisory boards. Upcoming meetings in 2012, which are open to the public, include:

The Commonwealth Alzheimer’s Disease and Related Disorders Commission
August 21st, December 11th

The Commonwealth Council on Aging
September 19th

The Virginia Public Guardian & Conservator Board
September 6th, December 6th

For more information, visit http://vda.virginia.gov/boards.asp.

Editorials

Can your organization link individuals with disabilities to jobs serving people with disabilities?

The Virginia Board for People with Disabilities is releasing a revised 2013 Request for Proposals (RFP), seeking to expand the number of direct support professionals and increase employment for individuals with disabilities. Proposals are due by July 24, 2012. To download the RFP booklet, forms, and other information regarding these 100% federally-funded grant awards, visit www.vaboard.org/grants.htm.
Types of Memory

Memory is not a simple, one-dimensional function. Rather, memory refers to several types and focuses of recall and the processes of aging seem to affect them differently. Episodic autobiographical memories (AMs) are recollections of past events, specified in time and place, and together build one’s life story, facilitate decision making, and foster and maintain social ties. AMs permit vivid first-person-perspective reliving of past episodes, and may persist throughout a lifetime. AMs also have a high degree of interpretation and reconstruction; that is, two actors in the same event will likely have divergent memories that are likely to change with time and ensuing life experiences. Compared to other forms of memory, e.g., semantic (memory for facts) or procedural (memory for skills), AM is particularly altered during aging. Despite the critical value of AMs in everyday life, and their observed age-related changes, characterization of the numbers and rates of episodic details that comprise a recollection (such as people involved, specific actions, or the location and time) and its rate of occurrence (or frequency) is limited.

A common technique to measure the detail contained in an AM elicits memories in the laboratory by presenting a participant with a memory cue, such as the word “river,” or phrase “seeing someone famous in person.” The participant is asked to think of the first AM that comes to his or her mind in response to that cue, and later provides the recalled details such as ‘dating’ when the event occurred. Using this technique, older (about 70 years old) participants reported fewer episodic details than younger (about 20 years old) participants. Interestingly, the same older participants reported more factual information or general knowledge related to or surrounding the event. Similarly, from pre-arranged events experienced within the laboratory, such as packing a picnic basket, older adults less frequently reported perceptual and contextual information pertaining to the event upon recall. These measures, however, have yet to be collected from an extensive number of ages and life-periods under naturalistic conditions reflecting everyday conversations, readings, or one’s internal dialogue, or sampling AM. Such a characterization will enable more meaningful comparisons on how AM changes with age and quantify normal and pathological decline.

Age-related changes in AM frequency, to date, have been rarely studied as it occurs in daily life. One such investigation into how often younger and older adults reminisce about specific events using self-reported ratings showed equivalent perceived retrieval for both recent and remote episodes. Other studies observed that older adults produced fewer AMs in response to word cues. However, direct measures of the number of typical AMs per unit of time have not been collected. Experience sampling uses an ecological design to sample, e.g., by phone prompts, time points throughout daily-life to identify and measure mental states and activities. These designs increase measurement accuracy and validity by minimizing delay between experience and self-report, and measuring experiences in natural conditions. In AM research, experience sampling has great potential to measure AM frequency. Moreover, these designs can be applied to various categories of mnemonic recall, including AM and prospective memory (PM). PM, or remembering an intention to perform an action at a future time, like AM utilizes context-rich recollection. When external reminders are absent, PM is diminished in older adults. Experience sampling used to assess the frequency of both AM and PM in the same subject from various age groups can determine if frequency of recollection changes with age; and compare the proportion of time spent recollecting past events and future intentions.

Seeking Research Participants

The Center for Neural Informatics, Structures, and Plasticity, at the Krasnow Institute for Advanced Study of George Mason University (http://krasnow1.gmu.edu/cn3) studies the brain regions and processes underlying AMs. In parallel, we investigate age-related changes in AM and PM to fully understand recollection throughout the life span and its potential decline.

We are actively recruiting participants of all ages to comprehensively characterize AM detail and AM

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The Alzheimer's and Related Diseases Research Award Fund (ARDRAF) was established by the Virginia General Assembly in 1982 to stimulate innovative investigations into Alzheimer's disease (AD) and related disorders along a variety of avenues, such as the causes, epidemiology, diagnosis, and treatment of the disorder; public policy and the financing of care; and the social and psychological impacts of the disease upon the individual, family, and community. The ARDRAF competition is administered by the Virginia Center on Aging at Virginia Commonwealth University. The grant awards for 2012-2013 are as follows:

**UVA**

Carol Manning, PhD, ABPP-CN, Ishan C. Williams, PhD, and Steven DeKosky, MD

*Vascular Risk Factors and Cognition in African Americans*

Vascular risk factors are associated with vascular dementia and more recently have been associated with increased risk for Alzheimer's disease (AD). African-Americans have high rates of vascular risk factors and recently have been found to have higher overall rates of dementia than Caucasians. However, dementia and Mild Cognitive Impairment, often a precursor to frank dementia, may be under-recognized in African-Americans coming in for general medical appointments. In this study, two groups of African-Americans who are coming to see their primary care physicians will be given cognitive testing: 1) people without vascular risk factors and 2) people with high blood pressure, diabetes, high cholesterol, history of stroke, or those who smoke cigarettes. Participants will not be coming to see their providers because of cognitive complaints. It is hypothesized that cognitive impairments will be greater in the participants with vascular risk factors and that in both groups cognitive deficits are under-recognized secondary to a number of factors including limited appointment time, and lack of knowledge about expected cognitive change and risks for cognitive change. *(The investigators may be contacted: Dr. Manning 434/982-1012; cm4r@virginia.edu; Dr. Williams 434/924-0480; icw8t@virginia.edu; Dr. DeKosky 434/924-5118; sd3zc@virginia.edu)*

**Marymount**

Julie D. Ries, PhD, PT

*University Balance Training Program Designed for Individuals with Alzheimer’s Disease: The Effect on Balance and Falls*

This is an expansion of two pilot studies in which small-group balance interventions were successful in improving balance in individuals with AD. The program uniquely integrates motor learning strategies and communication tactics demonstrated to be successful with this population. Balance activities are functional and concrete. Thirty participants will be recruited from three adult day center programs. Subjects will have a probable AD diagnosis, be medically stable, and ambulatory with or without an assistive device. Background data includes medical, personal, and fall history, as well as scores on the Mini Mental Status Exam and the Functional Assessment Staging Tool. Twice a week for 12 weeks, subjects will be supervised by physical therapists as they participate in a 45-minute, functionally-based balance training program at their day care center. Outcome measures include the Berg Balance Scale, Timed Up and Go test, and Gait Speed. Fall data will be gathered three months following the program. Pilot studies showed that, although individuals did not recall participating in exercise programs, balance performance significantly improved, demonstrating “motor memory” of the training. An intervention that improves balance and decreases falls could positively impact quality of life and decrease healthcare costs for individuals with AD. *(Dr. Ries may be contacted at 703/284-5983; jries@marymount.edu)*
VCU  Vladimir Sidorov, PhD

Identification and Characterization of nAChRs Clustered in Cell Membrane Lipid Rafts Using Novel Patching Technique with Chemically Modified Electrodes

Recently, it has been shown that the function of alpha4beta2 and alpha7 subtypes of nicotinic acetylcholine receptors (nAChRs) is regulated by association of the receptors with rigid areas of neuronal membranes, known as lipid rafts. The only currently available experimental tool to study receptor channel regulation by the cell membrane lipid rafts entails modifying the interaction with methyl-beta-cyclodextrin. The overall goal of this project is to develop a novel technique that allows identification and characterization of the functional properties of nAChRs based on selective patching of the raft and fluid areas of cell membranes with a chemically modified borosilicate electrode. This approach will serve as a valuable tool to monitor the activity of nAChRs in the specific membrane areas, including their regulation by beta amyloid, one of the major players in the development of AD. The initial stage of this investigation is aimed at the development of a procedure for surface modification of the borosilicate electrodes used in the patch-clamp recordings with the chelator for pyranine dye, and labeling of the cell membrane domains with pyranine conjugates. The mass-spectral analysis of the contents of patches will allow the investigator to establish feasibility of selective patch-clamp recordings for the raft and fluid membrane areas. As additional funding becomes available, the next step will compare the properties and sensitivity to beta amyloid of alpha4beta2 and alpha7 nAChRs expressed in the lipid rafts and free cell membrane regions. The completion of this project will directly lead to understanding of the effects of beta amyloid on the nicotinic receptors at the subcellular level, and may lead to new therapeutic strategies for the management of AD. (Dr. Sidorov may be contacted at 804/828-7507; vsidorov@vcu.edu)

Ferrum Megan M. St. Peters, PhD

College Who Forgot the Hippocampus? Potential Involvement in the Neural Circuitry of Attentional Control

The ability to focus on important stimuli and ignore irrelevant stimuli in our environment is essential to the “top down” control of attention. It is suggested that the memory of what is important in an environment is essential to this top-down control, and recent research suggests that attentional impairments may precede or largely contribute to the memory problems associated with AD. Yet studies examining the brain pathways involved in attention have failed to examine the role of the hippocampus, a brain region commonly associated with memory loss and AD. This project uses a rodent model to examine the influence of the hippocampus on performance in cognitive tasks when irrelevant distractors are introduced. The goal is to provide insight into the behavioral and neural interplay between memory and the top down control of attention. (Dr. St. Peters may be contacted at 540/365-6947; mstpeters@ferrum.edu)

VCU Dong Sun, MD, PhD

Excessive Inflammation in Aging Population Following Brain Injury Impairs Hippocampal Neurogenesis and Cognitive Function: Implication for AD

Studies have found that in the mammalian brain, new neurons are generated constantly in the hippocampus, a region responsible for learning and memory function. However, this neurogenic capacity is significantly decreased with aging. In addition, it appears that impaired neurogenesis in the hippocampus is a critical event in the development of AD. Both aging and traumatic brain injury (TBI) are leading risk factors for AD. The investigators recently found that TBI in an aging population induces heightened levels of neuroinflammatory responses, as well as decreased hippocampal neurogenesis and cognitive function. In this project they will explore how inflammation, the common pathological event found in AD and TBI, affects hippocampal neurogenesis and cognitive function. They will first assess the temporal profiles of inflammatory mediators in the hippocampus, cerebrospinal fluid, and serum in aged animals following TBI, and then examine the effect of combinational therapy by targeting neuroinflammation and promoting survival of new neurons on recovery of cognitive function. (Dr. Sun may be contacted at 804/828-1318; dsun@vcu.edu)
2012 ARDRAF Reviewers

ARDRAF 2012 Awards Committee reviewing grant applications (clockwise from left): Shijun Zhang, PhD; Jenni Mathews (VCoA recorder); Beverly Rzigalinski, PhD; Manoj Patel, PhD; Linda Phillips, PhD; Patricia Trimmer, PhD; Paul Aravich, PhD; Abby Whittington, PhD; Kathleen Fuchs, PhD; Ayn Welleford, PhD; Myra Owens, PhD; and John Hackett, PhD.

New Resource on Disability Etiquette

Easter Seals Project ACTION has just released a resource entitled *Including People with Disabilities: Communication & Meeting Etiquette*. This pocket guide is designed to raise awareness of the needs that individuals with disabilities may have in a meeting setting or one-on-one conversation. The guide provides tips on hosting meetings that are accessible for people who have physical disabilities, providing audio-visual accommodations, and communicating with individuals who are blind, have visual impairments, are deaf, or are hard of hearing.

To get a copy of this free resource, visit [www.projectaction.org](http://www.projectaction.org).

Person-Centered Care: Changing the Way We Care for Each Other as We Age

by Sonya Barsness, MSG
Sonya Barsness Consulting LLC

Person-centered care has become an increasingly popular term, so much that it has varied explanations. Fundamentally, person-centered care places a person at the center of his or her own care, honoring each person as a unique individual. Core person-centered values are choice, dignity, respect, self-determination, and purposeful living. We want this, yet we continue to struggle with operationalization. While there are many reasons for these challenges, perhaps we need first to acknowledge that this is a paradigm shift, from a traditional culture of aging and care that can be institutional, ageist, and paternalistic.

I once saw a sign in a nursing home that really resonated with me. It said: “Residents do not live in our facility. We work in their home.” I realized the power of the meaning behind this statement, which acknowledges that we have all thought this way. We think of residents living in OUR facility or clients utilizing OUR services, and this paradigm needs to change. In this way of thinking, which has come from good intentions and caring people, we perpetuate the idea that elders are “those people” and not one of us. We are then at risk of creating a power differential so that care is driven by the needs of the institution/system/organization rather than by the person.

Person-centered care aims to create a new paradigm, one in which we are interdependent and empowered to support each other as care partners. Leah Curtin, a leader in nursing ethics, observed, “We are human beings, our patients or clients are human beings; and it is shared humanity that should be the basis of the relationship between us.” Person-centered care helps us in gerontology to recognize this shared humanity, that we are all aging and “in this together.”

Support for person-centered care is seen throughout the aging and long-term care networks. Kathy Greenlee, Assistant Secretary at the Administration on Aging, has expressed her commitment to “increasing momentum for person-centered services in all settings.” With nursing homes, support for person-centered care is inherent in the Nursing Home Reform Act of 1987 and has been formally supported through the QIO 8th Scope of Work, interpretative guidelines, the Artifacts of Culture Change tool, and more.

We have limited data on how we are doing in person-centered care. The Commonwealth Fund 2007 National Survey of Nursing Homes reported that approximately 31% of nursing homes are engaged in some sort of culture change efforts, with only 5% indicating they are completely engaged. Note that we do not have this type of data for other care settings such as assisted living, home care, and home- and community-based services. On the state level, including Virginia, it is even more difficult to determine the reach of person-centered care. Such data will become increasingly
important as we move further in this paradigm shift and want to learn from each other.

The case for adoption of person-centered care builds, with practicing long-term care communities reporting positive impact in clinical outcomes, occupancy, staff retention, and resident satisfaction, to name a few. Although the body of research on person-centered care is continuing to grow, there are still significant gaps. Future research needs to include resident perspectives with outcomes that are important to them.

Person-centered care will continue to evolve as we challenge ourselves to operationalize this paradigm shift. Certainly, it may seem overwhelming to think about changing the way we care for each other. But each of us plays a role in creating a person-centered culture of aging. To start in your own world, consider looking at the messages your organization sends in its internal and external communications. Are they consistent with person-centered values? If elders were reading them, how would they feel? Would they feel respected? Do you see institutional language or language that focuses on disability rather than ability (e.g., Alzheimer’s patient rather than person with Alzheimer’s disease). To provoke your thoughts, see Karen Schoeneman’s article on the language of culture change.

www.pioneernetwork.net/CultureChange/Language. Consider how you involve the voices of elders in your services. Do your services focus on the individual and his or her preferences?

All of these changes are important as part of the person-centered journey in which we are continually challenging ourselves to place elders truly at the center and acknowledge our shared humanity. Each person can and does make a difference. And in the words of Michelle Walker, “If you think you're too small to make a difference, you've obviously never been in bed with a mosquito.”

To ensure that person-centered care becomes THE way we support elders (and all individuals with support needs), learn more about person-centered care and culture change. Here are some sites to get you started:

www.pioneernetwork.net
www.residentcenteredcare.org
www.ccal.org

In Virginia, contact the Virginia Culture Change Coalition (VCCC). Visit www.facebook.com/pages/Virginia-Culture-Change-Coalition/239072799460685 to learn more and get connected.

Twelve Complete
VGEC’s Faculty Development Program

Twelve health care practitioners have just completed a 160-hour interprofessional Faculty Development Program (FDP) in geriatrics conducted by the Virginia Geriatric Education Center (VGEC). The 12 FDP Scholars began monthly training meetings at the Virginia Center on Aging in September 2011, meeting five hours each time plus having two-day weekend retreats in October, January, and April.

Pictured are: (back row) Jean Ellen Zavertnik, MSN; Natasha Harrigan, PharmD; Emmy Wheeler, DPT; Pam Gwathmey, MD; Arthur Meyers, BSN; Madeline Dunstan, MS, Bruce Britton, MD; Lana Sargent, NP; (front row) Mary Rubino, MD; Martha Sawyer, DSW; Ron Gregory, PharmD; and Cameron Sgroi, MSW.

Invitation to Switch to E-Mail Delivery of Age in Action

We currently publish the Age in Action in identical print and PDF versions. Age in Action will be transitioning over time to an electronic version only. If you now receive hard copies by postal mail, please consider switching to e-mail distribution. Send an e-mail listing your present postal address and best e-mail address for future deliveries, to Ed Ansello at eansello@vcu.edu.
Program Success: Aging and Transit Partnership

Partnering with a local transportation provider can prove to be an efficient and effective method to expand senior transportation options, as the Prince William Area Agency on Aging has demonstrated. This Area Agency on Aging (AAA), which serves the tri-jurisdictional area of Prince William County, the City of Manassas, and the City of Manassas Park in Northern Virginia, recognized the need to increase transportation services for older adults in the area. The organization, however, does not fashion itself as a transportation expert, since all of its resources are devoted to information and referral, caregiver support, in-home services, adult day care, tours/other special events, and the management of two senior centers located on opposite ends of the territory it covers.

Courtney Tierney, the AAA Director, looked for partners in the community who could help assess what additional transportation options for older adults were needed. Among others, she reached out to Potomac and Rappahannock Transportation Commission’s executive director, Alfred Harf. The Potomac and Rappahannock Transportation Commission (PTC) is a multi-jurisdictional agency representing Prince William, Stafford, and Spotsylvania Counties and the Cities of Manassas, Manassas Park, and Fredericksburg. Located in Virginia about 25 miles southwest of Washington, D.C., PRTC provides commuter bus service (OmniRide & Metro Direct) and local bus services in Prince William County and the cities of Manassas and Manassas Park (OmniLink & Cross County Connector). PRTC also offers Omni-Match, a free ridesharing service and rail commuter service to DC.

The relationship between the AAA and the transit provider builds on the two organizations’ respective areas of expertise. With Harf’s transportation program knowledge and Tierney’s proposal writing and lobbying skills and contacts, they were able to get several programs funded and in development, including:

1. The preparation of a mobility management plan (the plan), funded by a New Freedom grant from the Metropolitan Washington Council of Governments to measure needs and identify actions best suited to address those needs, including:
   • The design of a transportation voucher program to enable targeted residents to use subsidized taxi and accessible transportation services for trip-making beyond the reach of the public transportation system and/or for those who cannot use the public transportation system.
   • The development of a travel training program to acquaint human service agency staff and targeted residents who can use the public transportation system but have no history using it with the intricacies of doing so.
   • An affirmation of PRTC’s own plans for expanded public transportation services, with a particular emphasis on the expansion of local services.

The plan was developed with the assistance of the “Transportation Options Group,” a coalition of private non-profit and public human service agencies, transportation providers, and government officials. The group continued meeting regularly after the plan was completed, as implementation-related efforts on elements of the plan as described below ensued.

2. The implementation of a pilot transportation voucher program for seniors and people with disabilities to use subsidized taxi and accessible transportation services. Funded through a second New Freedom grant from the Metropolitan Washington Council of Governments, the pilot provided important insights for the design of what the AAA and PRTC hope will become a sustainable transportation voucher program. PRTC subsequently submitted a separate grant application to a local foundation seeking funding for the start-up of the program as designed.

3. The launch of travel training services, beginning with a program focused on the two AAA senior centers (staffed by a graduate student and funded by a grant from the Virginia Department of Rail and Public Transit [VDRPT]), and thereafter a second grant from VDRPT for a two-year travel orientation program with a broader geographic reach that PRTC and its contractor now has in progress.

This article was featured on the National Center for Senior Transportation’s website. http://seniortransportation.easterseals.com/site/PageServer?pageName=NCST2_success_story_P学习ash_William
VCU Department of Gerontology’s Class of 2011/2012

Congratulations to the Virginia Commonwealth University Department of Gerontology’s Master of Science graduates for Winter 2011 and Spring 2012!

Jamela Davis plans to continue working full time in aging services, as well as continuing her volunteer activities. Charlotte Arbogast will continue with her efforts in aging policy and advocacy. Sadashiv Aggarwal will continue his work as a physical therapist, as well as pursuing a Ph.D. in Health Related Sciences. Eniye Iyebote has begun a full time position as the Assistant Geriatric Education Coordinator for MCV Health Systems. Megan Felton has returned to her home state of New York and will take the aging services industry by storm with her coordination and grant writing skills. Ginger Ragan has been awarded a position with Covenant Woods, a continuing care retirement community in Hanover County. Jay White will continue his role as Director of Professional and Community Development for the VCU Department of Gerontology.

The faculty and staff of the Department of Gerontology are extremely proud of this crop of graduates, for they continue to serve the mission of Improving Eldercare through Education. For more information on the Master of Science in Gerontology program, please visit www.sahp.vcu.edu/gerontology or call (804) 828-1565.

Virginia Health Navigator Solution Center

SeniorNavigator is pleased to announce the launch of its Virginia Health Navigator Solution Center, made possible through a generous grant from the Richmond Memorial Health Foundation. This virtual informational resource clarifies provisions of the Affordable Care Act and addresses the issues faced by seniors, caregivers, and baby boomers, while focusing on increasing access to affordable health care for Virginians.

To help build a comprehensive and useful resource for consumers and professionals alike, SeniorNavigator hosted four ‘Community Conversations’ in Central Virginia, and convened an Advisory Council of partners, including AARP; Senior Connections, The Capital Area Agency on Aging; the Virginia Health Care Foundation; and the Virginia Poverty Law Center.


Memory and Aging, continued

and PM frequency in two separate-experiments. To measure AM detail from various life periods, we use naturalistic word-cues to elicit AMs and subsequently collect the time period from when the event occurred and counts of specified details remembered. This assessment can be accessed anonymously on the internet at (http://cramtest.info). At the end of the ‘full’ version, which takes about 45 minutes, participants can choose to compare their recollection to an aged-matched population. To obtain measures of AM and PM frequency, we use experience sampling to identify the probability and duration of recall in natural conditions. This experiment requires a few minutes of participation every day and typically lasts about two to three weeks. Participation in one study does not preclude participation in the other. Both studies are approved by the George Mason University Human Subjects Review Board, do not collect sensitive personal information, and are safe both mentally and physically. We would value your participation.

If you are interested in participating in our studies of memory or would like more details, please contact Robert (Bob) Gardner at rgardne1@masonlive.gmu.edu.

Further Readings


Social Security, Income, and Age

The Social Security Administration (SSA) issued a report in March 2012 summarizing the economic status of older Americans, as drawn from a huge sample in 2010. The report, *Income of the Aged, Chartbook 2010*, notes that increasing age, marital status, and race contribute substantially to discrepancies in economic well-being. Households of older unmarried women tend to be the poorest, a condition long recognized by many of us. In a look back over 50 years, the SSA also finds greater reliance now on Social Security in the later years of Americans, and lessened income from earnings and assets. Public assistance to elders has declined. The continuing recession is only intensifying diminished opportunities for earnings by elders and further drains on whatever assets elders may have accumulated over a lifetime. Social Security has become the reliable source of income stability for most older Americans.

The following are verbatim excerpts from this report:

Preface

Since 1941, the Social Security Administration (SSA) has periodically surveyed the aged to determine their economic status. The first national survey was conducted in 1963. In 1976, SSA’s Office of Research and Statistics began compiling a biennial series of reports on the income of the aged based on data collected by the U.S. Census Bureau in its Current Population Survey. These SSA reports are published under the title *Income of the Population 55 or Older*. The most recent edition of that publication is based on 2010 data, which, along with special tabulations, form the basis of this chartbook.

This publication covers the population aged 65 or older. The unit of analysis here, with the exception of measures of poverty and family income of persons, is the aged unit, which is a married couple living together or a person who does not live with a spouse. A married couple’s age is defined as the age of the husband - unless he is under age 55 and the wife is 55 or older, in which case it is the age of the wife. The race and Hispanic origin of a married couple are determined by the husband. The unit of analysis for poverty is persons aged 65 or older.

The 2010 sample represented 12,162,000 couples and 17,478,000 single units. The single unit may be a widow(er), a divorced or separated person, a legally married person who does not live with a spouse, or a person who never married. This unit of analysis allows one to measure the economic status of the entire noninstitutionalized aged population separately from that of the family or household in which the unit may live.

Brad Trenkamp prepared this chartbook. Staff of the Division of Information Resources edited the report and prepared it for publication. This chartbook and its companion publication, *Income of the Population 55 or Older*, are available at [www.socialsecurity.gov/policy](http://www.socialsecurity.gov/policy).

Income Sources

Asset income includes interest, dividends, income from estates or trusts, and net rental income or royalties.

Cash public assistance includes Supplemental Security Income and other cash public assistance payments low-income people receive, such as Aid to Families with Dependent Children (AFDC, ADC), temporary assistance to needy families (TANF), general assistance, and emergency assistance.

Earnings is the sum of income from wages and salaries and income from self-employment.

Noncash benefits include Food Stamps, energy assistance, and housing assistance. Noncash benefits are not included as money income for public assistance or total income.

Retirement benefits include Social Security, other public sources such as Railroad Retirement and government employee pensions (military, federal, state, and local), and private pensions and annuities.

Social Security includes retired-worker benefits, dependent or survivor benefits, disability benefits, transitionally insured benefits, and special age-72 benefits.

Pensions include regular payments from private pensions and annuities; government employee pensions; Railroad Retirement; and individual retirement accounts (IRAs), Keoghs, and 401(k) plans. Irregular withdrawals (lump-sum payments) from IRAs, Keoghs, and...
401(k) plans are not included in the data because they do not fit the Census Bureau’s definition of money income.

(Some of SSA’s findings include the following:

The aged are an economically diverse group. The median income for units aged 65 or older is $25,757, but there are wide differences within the total group. Approximately 13% have an income of under $10,000, and roughly 25% have an income of $50,000 or more.

Income differences by age are associated with differences in marital status. Median income is generally lower in older age groups. The striking differences by age are due in part to the disproportionate number of nonmarried women in older age groups.

Family total income varies by age and sex. Median family total income is highest for the youngest cohorts. In all age groups, women have lower median family total income than men, from $44,086 for women aged 65 to 69 to $23,484 for women aged 80 or older.

High proportions of nonmarried and minority persons aged 65 or older are poor or near poor. The variations in family income by sex, marital status, and race are reflected in the poverty rates for those subgroups of the aged. Nonmarried persons, blacks, and Hispanics have the highest poverty rates, ranging from 15% to 18%. An additional 8.9% to 10.5% of nonmarried persons, blacks, and Hispanics have incomes between the poverty line and 125% of the poverty line (the near poor).

Social Security is the most common source of income for units aged 65 or older. Nearly nine out of 10 aged units receive Social Security benefits. Asset income is the next most common source of income, received by more than half of the aged. Two-fifths receive retirement benefits other than Social Security, and more than one-quarter have earnings. Public assistance and veterans’ benefits are each received by less than 4%. Noncash benefits (food stamps and housing and energy assistance), are received by almost 12%.

Social Security provides at least half of total income for a majority of beneficiary aged units. In 2010, 87.8% of married couples and 85.3% of nonmarried persons aged 65 or older received Social Security benefits. It was the major source of income (providing at least 50% of total income) for 53.1% of aged beneficiary couples and 74.1% of aged nonmarried beneficiaries. It was 90% or more of income for 22.5% of aged beneficiary couples and 46.1% of aged nonmarried beneficiaries. Total income excludes withdrawals from savings and lump-sum payments from IRAs or 401(k)s; it also excludes in-kind support, such as food stamps and housing and energy assistance.

Receipt of Social Security has become nearly universal. In 1962, 69% of units aged 65 or older received Social Security benefits; in 2010, 86% of them did. Most of that increase occurred in the 1960s. Receipt of other pension income, which more than doubled from 1962 to 1992, has decreased slightly since then. The proportion of aged units with asset income, which had been about two-thirds since 1980, has dropped since 1990 and leveled off since 2000. The proportion with earnings has declined since 1971 and has been between 20% and 25% since 1980. The proportion receiving public assistance has also declined and is now about a third of its 1962 level.

Over time, Social Security has provided the largest share of aggregate income for units aged 65 or older. In 1962, it provided the largest share, followed closely by earnings. In 2010, it continued to provide the largest share, but by a wider margin compared with other major sources of income. The share from asset income increased for over 20 years, but has generally declined since the mid-1980s. The share from earnings has had the opposite pattern - declining until the mid-1980s and generally increasing since. The share from pensions doubled by the early 1990s, but has since leveled off.

Receipt of asset income is associated with relatively high median income. The median income of units aged 65 or older with asset income is more than twice that of those with no asset income ($38,059 compared with $16,800). Aged units with no asset income are concentrated in the lowest income categories: one-fourth have a total income below $10,000, and one-fifth have an income of $30,000 or more. Among aged units with asset income, 4% have a total income of less than $10,000, and over half have an income of $30,000 or more.
Calendar of Events

July 20, 2012
New to Medicare. Information and assistance event. Presented by Senior Services of Southeastern Virginia Education Center. 9:00 a.m. - 11:00 a.m. SSSEVA Office, Norfolk. For information, visit www.SSSEVA.org.

July 26, 2012
2012 Virginia Guardianship Association/Virginia Elder Rights Coalition Conference on Adult Guardianship, Elder Rights, and Disability Services. Wyndham Richmond Airport. For information, visit www.vgavirginia.org or call (804) 261-4046.

July 31, 2012
Art and Dementia. Presented by the Alzheimer’s Association Greater Richmond Chapter. Workshop will train care providers to facilitate an art program for people with dementia. $30 per person; includes lunch. 8:30 a.m. - 4:30 p.m. Chapter Offices, Glen Allen. For information, call (804) 967-2580 or e-mail fran.foster@alz.org.

August 5-8, 2012
Building a Bridge to a New Culture of Aging. 12th Annual Conference of the Pioneer Network. Hyatt Regency, Jacksonville, FL. For information, visit www.pioneernetwork.net. For student scholarship information, contact sonya.barnness@pioneernetwork.net.

August 31, 2012
Lifelong Learning Institute of Chesterfield Open House. An orientation for anyone interested in the program will be held at 10:00. Open House from 10:00 a.m. - 1:00 p.m. RSVP to (804) 378-2527 or info@lllichesterfield.org.

September 10, 2012

October 4, 2012
Fun at the Fairgrounds. Free health and wellness festival for adults age 50+. Health screenings, karaoke, crafts, games, entertainment, competitions, door prizes, vendors and more. Lunch available for purchase. 9:00 a.m. – 12:00 p.m. Chesterfield Fairgrounds, Chesterfield. For information, call (804) 768-7878 or email Leidheiserd@chesterfield.gov.

October 8-9, 2012
Virginia Public Health Association/Virginia Rural Health Association Joint Conference. Charlottesville Omni. For information, visit www.va-srhp.org.

October 10, 2012
9th Annual Empty Plate Luncheon. Supports Senior Connections, The Capital Area Agency on Aging. 11:30 a.m. - 1:00 p.m. Science Museum of Virginia. For information, contact Mary Creasy at (804) 343-3023 or creasy@youraaa.org.

October 13, 2012
Modern Aging Event. Presented by Lift Caregiving and HCA Virginia Health System. Free event. Programming includes: Bathing Basics, Courageous Conversations, Delicious & Nutritious Meals, and Energizing Exercise. 11:00 a.m. - 2:00 p.m. LLLI of Chesterfield, Midlothian. For information, call (804) 378-2527.

October 20, 2012
Prince William Area Agency on Aging Annual Fall Caregiver Conference. 8:30 a.m. - 4:00 p.m. Manassas Park Recreation Center, Manassas Park. For information, call (703) 792-4031.

November 5-6, 2012
29th Annual Conference and Trade Show of the Virginia Association for Home Care and Hospice. The Homestead, Hot Springs. For more information, visit www.vahc.org.

November 5-6, 2012
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2012 Walk to End Alzheimer's

Walk to End Alzheimer's is the Alzheimer's Association's signature nationwide fundraising event. Each Fall, tens of thousands of people walk together to help make a difference in the lives of people affected by Alzheimer's and to increase awareness of the disease. Become part of the group of individuals, corporations, and organizations that are proud to lead the fight against Alzheimer's disease!

| Greater Richmond Chapter | Middle Peninsula/Northern Neck, September 15  
| Register for walks in this area at [www.alz.org/grva](http://www.alz.org/grva). | Fredericksburg, September 29  
| Richmond, October 6 |  
| Central and Western Virginia Chapter | Culpeper, September 8  
| Register for walks in this area at [www.alz.org/cwva](http://www.alz.org/cwva). | Blacksburg, September 15  
| Roanoke, September 15  
| Charlottesville, September 22  
| Lynchburg, October 13  
| Harrisonburg, October 20  
| Danville, October 27 |  
| National Capital Area Chapter | Southern MD - Solomons Island, September 15  
| Register for this walk at [www.alz.org/nca](http://www.alz.org/nca). | Southern MD - Waldorf, September 15  
| Northern VA, September 30  
| Prince William County, October 13  
| Washington, DC, October 27 |  
| Southeastern Virginia Chapter | Constant's Wharf, Suffolk, September 22  
| Register for walks in this area at [www.alz.org/seva](http://www.alz.org/seva). | Eastern Shore, September 29  
| Farmville, October 4  
| Neptune Park, Virginia Beach, October 14  
| Port Warwick, Newport News, October 20  
| Williamsburg, October 27 |  

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