The ABCDs of End-Of-Life Care for People With Dementia

By John T. Chibnall Ph.D., Nina Tumosa Ph.D., and Abhilash K. Desai M.D.

Death and dying are common issues in caring for persons with advanced dementia. Yet, end-of-life care is not a concept that immediately comes to mind as a priority with respect to dementia. There are a number of reasons for this observation. For example, the National Center for Health Statistics currently lists Alzheimer’s disease as the fifth leading cause of death in the U.S. in people older than 65, and seventh overall. As compelling as these statistics may appear, new research data suggest that they may actually be underestimated. This underestimation may be tied to the fact that health care professionals, as well as people in the community, often do not recognize

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Center for Healthy Brain Aging Opens at Saint Louis University

In a multidisciplinary effort to help patients improve their brain function and reduce their risk of future dementia, a new Center for Healthy Brain Aging is now open. The Center is directed by Abhilash K. Desai M.D., a board-certified geriatric psychiatrist, and a leader in the national healthy brain aging movement. Part of the Department of Neurology & Psychiatry, Division of Geriatric Psychiatry, at Saint Louis University’s School of Medicine, the goal of the Center for Healthy Brain Aging is to improve brain function, specifically, the capacity to think clearly and improve memory in all age groups. The uniqueness of the Center is that it utilizes a multidisciplinary, holistic approach. The multidisciplinary team of highly trained healthcare professionals (e.g., neurologists, neuropsychologists, and psychologists) led by geriatric psychiatrists provides a comprehensive assessment of suspected cognitive impairment and a holistic treatment plan that is tailored to the individual’s needs. Individualized brain healthy lifestyle strategies (e.g., nutrition, exercise and physical activity, brain exercises and stimulation, stress management, and emotional well-being strategies) are also identified and promoted to enhance brain function. Aggressive control of cardiovascular risk factors (e.g., obesity, sleep disorders, hypertension, diabetes, hyperlipidemia, and smoking) in collaboration with each patient’s primary care physician is also emphasized.

For more information, please visit our website http://neuroandpsych.slu.edu/healthybrain or email at healthybrain@slu.edu or call at 314-977-4884.

Abhilash K. Desai, M.D., is an Associate Professor and Director of Center for Healthy Brain Aging in the Division of Geriatric Psychiatry at the Saint Louis University School of Medicine. After he completed the Saint Louis University School of Medicine Geriatric Psychiatry Fellowship in 1999, he served as the Medical Director for the Alzheimer’s Center of Excellence in Appleton, Wisconsin. Prior to that, he was the medical director of the behavioral health unit at Grand View Hospital in Sellersville, Pennsylvania, as well as the medical director of the senior lifestyles unit at Missouri Delta Medical Center in Sikeston, Missouri. Under his direction, the Alzheimer’s Center of Excellence received the Outstanding Organization Award from the Wisconsin Alzheimer’s Association in 2007. He also received an award for Outstanding Excellence in Geriatric Psychiatry from the Missouri Department of Health and Senior Services in 2003.
Twenty Years of Geriatrics

Twenty years ago, Saint Louis University, in conjunction with the St. Louis Veterans Administration, embarked on a major project to increase the visibility of geriatrics in the Midwest. Over these last 20 years, the program has had more than a modicum of success.

Over this period in conjunction with the Bureau of Health Professionals and multiple collaborators, the program has had a major role in increasing the awareness of gerontology and geriatrics. Not only has the program sponsored numerous medical education programs for 23 disciplines, but it also produced numerous enduring materials. The most popular of these is *Aging Successfully,* but SLU GEMS (a booklet of geriatric mnemonics), Geropady (a teaching game), and our sets of slide presentation have all played a role. The program has been responsible for the production of numerous books such as “Geriatric Nutrition” and “Pathy’s Principles and Practice of Geriatric Medicine” that have provided a resource for multiple health care providers. Recently a book for the lay public called “Staying Young” was produced by the program. Over the years, members of the program have edited or been associate editors of the *Journal of the American Medical Directors Association,* the *Journals of Gerontology: Medical Science,* the *Journal of the American Geriatrics Society,* *The Aging Male,* and *Current Pharmaceutical Design.* We have played a major role in organizing international meetings such as the International Association of Nutrition and Aging and the International Cachexia meetings on the Aging Male. In addition, numerous lectures for the public have been given, and we organized a local chapter of the University of the Third Age.

Our medical students are given exposure to geriatrics in all four years of their curriculum. Medical residents receive between four and six months of geriatric training. We have trained 101 geriatric subspecialty residents, and training in geriatric research has been provided for 56 medical students.

Our clinical programs stretch through the University Hospital, a community hospital (Des Peres), the Veterans Administration, three outpatient facilities, an assisted living facility, and seven nursing homes and a home care service. This allows our fellows, residents, and students maximum exposure to geriatrics.

Our research program has had some major successes. We have developed and validated a number of widely used screening tools, e.g., the VA/Saint Louis University Mental Status Exam (SLUMS Exam), the St. Louis University Androgenic Deficiency in Aging Males (ADAM) screener, and the Simplified Nutrition Assessment Questionnaire (SNAQ). The program has played a major role in investigating the role of testosterone in older males and in characterizing the changes in the aging blood brain barrier. Our studies into the anorexia of aging are considered to be pioneering. We have a major epidemiological program studying aging in African Americans. Recently, Dr. Flaherty has been instrumental in developing an epidemiological program studying healthy Chinese over the age of 90 years. Our program has discovered a number of potential antisenses for clinical uses. Of these, a leading candidate is our antisense to amyloid precursor protein developed by Dr. Kumar.

It is my pleasure to thank all of our faculty and friends who have worked so hard to make Saint Louis University and the St. Louis VA GRECC one of the leading geriatric programs in the world. I look forward to the next 20 years where our young emerging faculty will clearly take the program to even greater heights.
advanced Alzheimer’s disease and other dementias as terminal illnesses. There is also the issue of stigma. Dementing illness is a powerful factor with respect to negative attitudes and fear about aging in our society, as are assumptions about what is and is not relevant to a person with advanced dementia who has “lost” his or her “mind.” Further, as with most health care practices in modern society, end-of-life care for older adults with dementia is carried out—to the extent that it is carried out at all—within the medico-legal context. Thus, cost, decision-making, and/or planning for end-of-life care has to some extent shifted away from the family and the individual with dementia toward health care professionals (HCPs), nursing home personnel, attorneys, the judicial system, and government. As a result, end-of-life with dementia may in some cases become less of a palliative care approach and more of a medico-legal problem that involves multiple stakeholders who function outside the patient-family context.

It is human nature to put off thinking and talking about death, even when a loved one is terminally ill. There seems to be a universal belief, including among many HCPs, that preparing for death implies giving up on life. But, in reality, talking and listening about death at this difficult time are essential, both for the people who are dying and for their families and friends. Open and honest communication is the first step toward meeting a dying loved one’s spiritual, emotional, and physical needs. The concept of “relief of suffering” is key to a more considered, centered, individualized, and open approach to end-of-life care. Modern medical approaches to the “relief of suffering” at end-of-life are more narrowly defined, and tend to concentrate on pain control, management of physical symptoms, and avoidance of unnecessary life-prolonging interventions for the patient.

Our approach rests on a much broader understanding of the nature of suffering at end-of-life for persons with dementia, and includes family and caregivers in that experience of suffering. It also acknowledges the unique situation with dementia wherein the most important player, the person with dementia, is unable to voice his or her wishes, needs, and sufferings during the last stages of life (and sometimes for many years prior to death). To that end, we propose four key aspects of end-of-life care to be applied towards people with dementia: acknowledgement of “Authenticity”; appreciation of “Blessings”; development of “Connectedness”; and promotion of “Dignity.” These “ABCDs” of end-of-life care in dementia are not meant to be exhaustive, but are meant to open up the end-of-life process toward a broader understanding of relief of suffering for both people with dementia and their families and friends.

A is for Authenticity. With respect to end-of-life care, families, friends, and HCPs who care for people with dementia should accept the primary role of acknowledging the authenticity of the person with dementia. In this context, “authenticity” refers to the real, legitimate, and meaningful life experiences and “ways of being” that shaped and define the person with dementia. Recognizing authenticity means viewing that individual’s life-long stories, experiences, memories, character, and values
as key components of the end-of-life process, including decision-making. The opposite of “authenticity” may be best defined as “dehumanization” or “medicalization” of the person with dementia. In the context of advanced dementia and end-of-life, dehumanization may be reflected in a tendency to treat the person as an infant or as a nonentity; in other words, to interpret the person solely through his or her dementia. The family plays an important role in promoting and protecting “authenticity.” By sharing the patient’s life story and values and pictures of the individual in earlier life, as well as roles and/or routines with the HCPs, the humanity of the patient becomes apparent and unavoidable. That allows empathy and compassion to increase through discussions about patient preferences. In this way, the patient’s lifetime of experiences is acknowledged, consulted, and respected. Creating a foundation of respect for “authenticity” can be enormously liberating and therapeutic for all involved in the care of the person with dementia, particularly as the time until death grows shorter.

**B is for Blessings.** HCPs can provide care that promotes awareness of opportunities, for all involved, to experience blessings and receive gifts. Depression— as manifested in feelings of hopelessness, self-hate, guilt, despair, and futility—may be considered the antithesis of Blessings. The HCP in particular has responsibility for monitoring the states of mind of the person with dementia and his or her loved ones, and depression is a condition that HCPs are well trained to recognize and treat. Depression is a sign that something has gone fundamentally wrong with the end-of-life process, and it is neither “natural” nor “expected” in either the person with dementia or the family. Monitoring for and responding to depression, therefore, is an important step that opens up the possibility of experiencing blessings. End-of-life time may be perceived and promoted as the best (and sometimes last) opportunity for healing, forgiveness, remembering, expressing appreciation, contemplating the life lived, reflecting on the meaning of the experience of caring for a person with dementia, growing internally, confronting disappointments and difficult emotions, saying “I love you,” saying “Thank you,” and saying “Goodbye.” Blessings are apparent in caregivers who report experiencing a deepening sense of responsibility, gratitude, and love at the end of an often long and difficult process. Other potential blessings include a sense of purpose that comes from caregiving, a feeling of commitment to a loved one, and the forming of bonds with other caregivers, physicians, nurses, therapists, and other staff. Caregivers may find that care giving has helped them develop a sense of solidarity with other caregivers that lasts long after the death of their loved one. The mutual experience of an uncontrollable, lengthy, and demanding process is a potentially powerful blessing that should be encouraged by HCPs. Perhaps the most important concept underlying the notion of Blessings is finding or creating something that resembles meaning and purpose in the experience of dementia at end-of-life. The nature of advanced dementia makes the pursuit of meaning and purpose challenging with respect to the person with dementia, but even simple acts and attitudes can create an environment of blessings, regardless of the degree to which we believe the person with dementia can actually participate. Moreover, the ability to recognize the onset of mild cognitive (continued on page 6)
impairment (which may or may not progress to dementia) allows for the blessing of time, including time to face unresolved issues, before it is too late to find closure. It is in the early stages of life with dementia that a person can grasp remarkable possibilities for personal and spiritual growth, for strengthening bonds with people they love, for repairing broken ties and making amends, and for seeking meanings that can be carried forward toward the time when advanced dementia takes its awful toll. The final blessing for the caregiver may be grief: the expression of one’s deepest love for another through the anguish of loss. Grief offers opportunities to establish or re-establish values and goals, and to recognize that the time we have to accomplish those goals may not be as long as we thought. By acknowledging those who have lost their values and goals, we are granted, through grief, the blessing of appreciation.

**C is for Connectedness.** When HCPs provide care that promotes connection to all things living and to the divine, they are promoting Connectedness. Relationships—with ourselves, with those around us, with our environment, and with the transcendent—are the fundamental experiences of life as a human being. Healthy attachments bring love, meaning, companionship, satisfaction, and purpose to our lives. Therefore, a primary fear among those with disease is the loss of attachments through isolation, inhibition of self, separation from self and others, and loss of affiliative opportunities and capacities. First and foremost, connections to others must be maintained during the closing phases of the dementia experience. All too often, the person with advanced dementia is marginalized with respect to conversation, touch, listening, interaction, and emotional expressions. People with dementia may be talked about, rather than talked to. Yet, connectedness—regardless of the cognitive capacity of the person with dementia—may be considered the most vital component of a meaningful end-of-life experience. Spirituality is another form of connectedness, to the divine or the transcendent, and is often a primary source of meaning and coping at the end-of-life. Spiritually-based rituals and prayer may be vital sources of empowerment during the end stages of dementia. Religion and family/cultural values are sources of strength and comfort. Connectedness to one’s past, to one’s interests, to beauty, to art and music, and to nature should also be promoted, particularly in light of the person’s “life before dementia” (see Authenticity above). Connectedness is a two way process. Activities that are mutually satisfying can promote psychosocial wellbeing for all. For example, the capacity to appreciate and enjoy art and music may be retained in persons with advanced dementia. Creating connectedness between people may therefore be facilitated through mutual connectedness to “third sources” like music and art.

**D is for Dignity.** HCPs should provide care that conserves the dignity of the person with dementia. Guarding the self-respect and self-worth of the person with dementia is a key component in decision-making at the end-of-life, including avoidance of demeaning and unnecessary medical care, adherence to Living Wills and end-of-life wishes, and sensitivity to the effects of medications, interventions, and environment on the well-being of the person. Kindness, humanity, and respect—which have been
called the core values of the medical profession—are paramount until the end, no matter what state the person with dementia is in. Telling the truth must be honored at all times. Truth-telling preserves dignity because it acknowledges that the person with dementia and his or her loved ones are unique human beings who deserve the truth in order to make their own decisions and plans. Dignity is also preserved by truth-telling that is sensitive to the emotional states of those being addressed, both before and after news is delivered, and by not personalizing (but effectively responding to) the sometimes negative reactions to painful truths. Dementia, especially in its advanced stages, obscures individuality like a mask, and the mask makes it easier to forget about the essential dignity of the dying person. It is up to HCPs and family members to realize this and to make every effort to preserve the dignity and honor of the person behind the mask.

The ABCDs of end-of-life care in dementia incorporate the four critical concepts of Authenticity, Blessings, Connectedness, and Dignity. Too often, these concepts are not honored in the care of any dying person, let alone people with dementia who are dying. In particular, even the best-intentioned HCPs and family members may be overwhelmed at end-of-life by the power of advanced dementia, a power derived from the slow process toward death that it engenders and by its ability to cause “psychosocial” death (i.e., the destruction of who the person with dementia “used to be” and his or her abilities to understand, relate, decide, and express) long before physical death occurs. As a result, the values inherent in the ABCDs are even more easily overlooked in the end-of-life experience with dementia. Yet, there can be no more powerful moments than what we experience with a dying loved one or dying patient. Caregivers, family, the spiritual community, and health care professionals need to come together with a burst of collective will to conserve dignity and promote wellness and peace in the lives of persons with dementia, and to provide much needed support to their families and professional caregivers, particularly at end-of-life. The ABCDs are offered as an impetus toward creating that collective will.

References and Suggested Readings:


Lustbader W. Thoughts on the mean-

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Services of the Division of Geriatric Medicine at Saint Louis University Medical Center include clinics in the following areas:

- Aging and Developmental Disabilities
- Bone Metabolism
- Falls: Assessment and Prevention
- General Geriatric Assessment
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- Medication Reduction
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- Podiatry
- Rheumatology
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**Recent Publications of Interest**

The Science of Staying Young, written by John E. Morley, MD, & Sheri R. Colberg, PhD, is available for purchase by visiting www.amazon.com or selected Barnes & Noble stores.

Clinics in Geriatric Medicine, Vol. 24, edited by Julie K. Gammack, MD, of Saint Louis University, is available for purchase by visiting www.elsevier.com.
Detecting Common Eye Diseases in the Elderly

Jennifer Weier, OD, Elizabeth Wolff, OD, and Steven Grondalski, OD

It’s hard to imagine a day without sight. How would we get dressed, cook a meal, drive to work, shop for groceries, or pay our bills without the ability to see? Yet, many people have visual impairments and are forced to adapt their lives to rely on other senses to survive. As we age, our risk of sight threatening conditions increases. Most of these conditions are preventable and treatable if identified early. In this article, we’ll be discussing four of the major sight threatening conditions that affect the aging eye and how they can be prevented and managed to minimize the risk of vision loss.

The most common sight-threatening condition that occurs as we age is cataracts, which are an inevitable part of life. Quite simply, if you live long enough, you will eventually develop cataracts.

The significance of the cataract depends the type of cataract. The most common cataract occurs when the lens in the eye gradually progresses from the crystal clear color we are born with to a yellow, opaque color. As the lens becomes increasing yellow, less light reaches the retina and images appear dimmer. Colors become less vibrant and it becomes difficult to distinguish hues. People who suffer from cataracts often complain of increased glare from light and are especially sensitive to oncoming headlights at night, which makes night-time driving difficult.

When cataracts significantly affect vision, they can be removed with a short surgical procedure. The whole process may take no longer than 15 minutes and does not require an overnight hospital stay. During the procedure, an incision is made that is so small it doesn’t require a

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Detecting Eye Diseases
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The cataract is dissolved with a sound wave in a process called phacoemulsification. A new lens implant is inserted in place of the old, dissolved lens. Only one eye is operated on at a time. If the first surgery is successful, a second surgery is often scheduled for the other eye. Many people only need reading glasses after having cataract surgery because the new lens implants are designed to correct distance vision. There are many different kinds of lens implants. Some implants, called Accomodating IOLs, are designed to minimize the need for reading glasses and others, called Toric IOLs, correct for astigmatism. Because there are so many lens designs, it’s always important to discuss your options with your surgeon to decide which option is right for you.

The progression of cataracts can be delayed with a few simple lifestyle modifications. Because ultraviolet (UV) light speeds the progression of cataracts, wearing sunglasses or lenses with UV-protection when outdoors is very important. Diets rich in Lutein and Zeaxanthin, nutrients found in green leafy vegetables, have been shown to reduce the risk of some forms of cataracts.1,3 Also, people who take a multivitamin containing vitamins C and E over a period of 10 years had a lower rate of cataract development.2,3

Another eye disease than can cause vision loss is macular degeneration. There are two forms of macular degeneration, wet and dry. The wet form is less common and progresses at a much faster rate. If left untreated, it can cause devastating central vision loss, making it difficult to read or recognize faces. The dry form of macular degeneration progresses at a slower rate and is usually not as devastating, but still can result in a significant loss of central vision over time. Common signs of both forms of macular degeneration are distorted vision and complaints that straight lines appear to be wavy.

The simplest way to check for this condition is with an Amsler Grid. The progression of cataracts can be delayed with a few simple lifestyle modifications. Because ultraviolet (UV) light speeds the progression of cataracts, wearing sunglasses or lenses with UV-protection when outdoors is very important. Diets rich in Lutein and Zeaxanthin, nutrients found in green leafy vegetables, have been shown to reduce the risk of some forms of cataracts.1,3 Also, people who take a multivitamin containing vitamins C and E over a period of 10 years had a lower rate of cataract development.2,3

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The simplest way to check for this condition is with an Amsler Grid. This grid is composed of evenly spaced horizontal and vertical lines with a dot at the center. To perform the test, you should put on your reading glasses and hold the grid approximately 40 cm from your eyes. Cover one eye at a time and focus on the dot in the center of the chart. The lines should appear straight. If some of the lines look wavy, distorted, or missing you may be at risk for macular degeneration and should visit an eye care specialist.

Wet Macular Degeneration occurs when tiny blood vessels grow beneath the macula and disturb central vision. It is often treated with a laser that stops the progression of blood vessels. Monthly injections of a drug called Avastin or Lucentis are also very effective in decreasing the growth of these blood vessels.

There is no treatment for dry macular degeneration, but its progression can be greatly reduced by adding certain nutrients to your diet. Foods rich in Omega-3 fatty acids, such as fish, nuts and flax seed, may decrease the likelihood of developing macular degeneration.4 Lutein and Zeaxanthin, have also been proven to

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reduce the risk of developing macular degeneration.\(^5\) If you do not consume these foods and are at risk for macular degeneration, you should consider taking a dietary supplement. Several vitamins designed for ocular health are available in most pharmacies. It’s important to check with a physician before taking any supplements to make sure there are no contraindications.

Glaucoma is a term for a disease that causes damage to the optic nerve leading to peripheral vision loss and sometimes total blindness. It usually progresses very slowly and is often related to high eye pressure. There are several forms of glaucoma, but most do not have any symptoms. The only way to detect glaucoma is by visiting an eye care specialist on a routine basis. People who are at a higher risk for glaucoma such as those who have experienced eye trauma, have immediate family members with glaucoma, are African Americans,\(^6\) or are elderly should be especially diligent in getting an annual eye exam.

Diabetes is another disease that can lead to vision loss. People with uncontrolled blood sugar are at risk of developing diabetic retinopathy. This is a condition that occurs when tiny blood vessels called capillaries begin to leak. If this happens in the line of sight, it can cause significant vision loss. Diabetes can also cause the growth of new blood vessels onto the optic nerve and retina. If diabetic retinopathy is severe enough, it can cause retinal detachments and glaucoma. Diabetic complications often require prompt treatment with steroid injections and lasers. Because there are often no symptoms associated with diabetic retinopathy, it’s crucial that diabetic persons receive an annual dilated eye exam to monitor for diabetic changes.

It’s hard to imagine life without seeing the faces of our loved ones, watching the seasons change, and enjoying the sunsets. Simple steps such as routine visits to an eye care specialist, a diet including Lutein, Zeaxanthin, and Omega-3 fatty acids, and regular monitoring with an Amsler Grid can go a long way in preventing vision loss, so good vision can last a lifetime.

**References**

1. Moeller, S. PhD, Voland, R. PhD, *et al.* Association Between Age-Related Nuclear Cataract and Lutein and Zeaxanthin in the Diet and Serum in the Carotenoids in the Age-Related Eye Disease Study (CAREDS), and Ancillary Study of the Women’s Health Initiative. *Arch Ophthalmol* 2008;126(3):354-364.


### Decompensated Heart Failure (Disease of the Elderly)

**Prevalence:** 3% (65-74 years); 7% (75-84 years); 15% (>85 years)

**Death Rates:** 11.6% in 30 days; 33% in 1 year; 59% in 2 years; 76% in 3 years

50% have diastolic dysfunction

#### Precipitating Factors

1. Non-compliance
2. Cardiac failure
3. Pressure overload (HTN)
4. Volume overload
5. High output state

#### Diagnosis

**HISTORY**
- Dyspnea
- PND
- Orthopnea
- Fatigue
- Anorexia/Weight loss
- Swelling
- Delirium

**EXAMINATION**
- Tachypnea
- Cyanosis
- Edema (Sacral/Pedal)
- Ascites
- JVD/hepatosplenic reflex
- S3 (ventricular filling)
- S4 (atrial gallop)
- Bibasilar rates (common in normal old)
- Wheezing (cardiac asthma)
- Pleural effusion

**Laboratory**
- CXR: Hilar haziness
- Kerley A
- Kerley B
- Peribronchial cuffing
- BNP or N-BNP
- EKG Arrhythmias
- QRST
- OTC
- Echocardiogram
- Sodium
- Potassium
- Creatinine
- Uric Acid
- Hemoglobin
- Troponin

#### Treatment

- Loop diuretic (furosemide)
- Ultrafiltration
- Venodilation + arterial dilation
- Venodilation (preload reduction)
- Arterial dilation (afterload reduction)
- Intropes
- Vasoconstrictors
- Vasopressors
- Positive Pressure Ventilation (preload reduction)
- Fish Oil

#### Devices

- AICD
- Asynchronous pacemaker

#### Future

- Vasopressin
- Antagonists (Tolvaptan, Conivaptan)
- Calcium sensitizers (Levosimendan)
- Endothelin antagonists (Darusentan)

#### Survival Predictor Index

**Age > 75 years**
**Na < 135 mEqv/L**
**CAD**
**Dementia**
**PVOD**
**SBP <120 mmHg**
**SUN > 30 mg/dl**

### JCAHO Discharge Criteria

- Activity level
- Diet
- Medications
- Appointment
- Weight monitoring
- Smoking cessation advice/counseling/medications

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An in-hospital interdisciplinary education program and nurse follow-up at home decrease hospital admissions but NOT mortality.

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**Notes:**

- 3 Types: Wet and warm (Pulmonary edema or high output)
- Wet and cold (Cardiogenic)
- Dry and cold (Hypovolemic)
Incontinence

Acute Incontinence
- Diarrhea
- Retention
- Infection
- Prostatitis

Urge Incontinence
(Detrusor Hypercontractility)
1. Physical therapy
2. Biofeedback
3. Anticholinergic
   - Oxybutinin (IR, ER, Patch)
   - Tolterodine (IR, ER)
   - Trospium (quaternaryamine)
   - Solifenacin (M₂, M₃)
   - Darifenacin (M₃)
4. Sacral nerve stimulation
5. Intravesical therapy
6. Botulinum A
7. Augmentation cystoplasty

Lower Urinary Tract Symptomatology (LUTS)
- Alpha blockers
  - Terazosin
  - Doxazosin
  - Tamsulosin
  - Alfuzosin
5-Alpha Reductase Inhibitor (T DHT)
- Dutasteride (I + II)
- Finasteride (II)
Phytotherapy
- Saw palmetto (serenoa repens)
Prostate Surgery
- Minimally invasive (microwave/radio frequency)
- TURP
- Artificial urinary sphincter

Mixed
DHIC (Detrusor Hypercontractility Impaired Contraction)
Stress/Urges

FUNCTIONAL
- Frequent toileting

Neuropathic
1. Bethanechol
2. Intermittent catheterization

Reflex
1. Intermittent catheterization
2. Artificial urinary sphincter

Stress incontinence
1. Kegel exercises
2. Cone exercises
3. Alpha agonists
   - Pseudoephedrine
4. Serotonin - NE uptake inhibitor
   - Duloxetine
5. Pessaries
6. Injection of bulking agents (collagen)
7. Surgery
   - Culposuspension
   - Slings: bladder neck/mid-urethral
   - Artificial urinary sphincter
8. Estrogen

Questions? FAX: 314-771-8575
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Life Lessons from an Aging Panda

In China, Giant Pandas are believed to represent strength and bravery. On a visit to Chengdu, China, I was asked why two older Giant Pandas, ages 22 and 25, were losing weight. While in their geriatric years, these pandas were eating just about the same amount as other panda bears, yet they were dropping pounds. My answer: They were sick, not dieting.

As we age, we are more vulnerable to stressors. The pandas were not absorbing nutrients because the stress placed on the gastrointestinal tract caused the gut to malfunction and the pandas to lose weight.

Why is this story significant for people? During much of our life, we worry about gaining weight. Those over 70 should be more concerned about losing weight. Older people who lose weight face an increased chance of dying.

Frequently, unexplained weight loss indicates an underlying medical problem that can be treated. So if an older person starts to lose weight for no apparent reason, he or she needs to visit a physician so that the cause can be found and treated.

The most common reason for weight loss in older persons is depression. Sadness is associated with anorexia. Numerous drugs for depression can cure the misery associated with the disease. Shock (electroconvulsive) therapy is another alternative to treat severe depression, and is associated with an excellent outcome.

Older adults might lose weight for a variety of other reasons. Medications can alter taste, decrease appetite or cause nausea. Chronic infections can lead to weight loss. Gallstones can cause appetite loss. Some older persons try to lose weight because they believe that restricting calories will enhance their health. And, like the Giant Pandas, some humans become unable to adequately absorb calories, which can take a toll on health.

The bottom line: For the elderly, weight loss can be deadly and should be treated as a medical problem. If you are losing weight for no apparent reason, see your doctor to find out why.

This article appeared in John Morley’s new column in the St. Louis Post-Dispatch entitled “Aging Successfully” at http://www.stltoday.com/stltoday/lifestyle/stories.nsf/healthfitness/story/. The column appears every second week.
Alexian Brothers PACE Program Offers Unique Alternative to Nursing Home

Rebecca Boerner and Richard O. Scharp, M.D.

Rheumatoid arthritis has kept Mrs. Q from getting around like she used to. Since her knee surgery she could no longer go to the coin laundry. She could barely get out for groceries. Cooped up and lonely, she felt like a burden to her family and friends. She worried that if she couldn’t care for herself at home, she would have to move to the nursing home.

Then she heard about the Alexian Brothers PACE Program and called. A PACE Intake Worker came to her home and introduced her to PACE, an innovative program that delivers medical, personal and social services to seniors which enable them to continue to live at home or with family.

Three mornings each week, a PACE van picks up Mrs. Q and takes her to the PACE adult day center. Now Mrs. Q enjoys bingo, plays cards and attends non-denominational church services. She socializes with peers, eats a hot lunch and can see her doctor on site at the PACE day center as needed. She participates in a physical therapy program to help her mobility.

Before the van comes in the afternoon to take her home, she can pick up her prescription from the on-site pharmacy. PACE also sends someone to her home to do her laundry and shopping and to help with household chores.

What is PACE?

PACE is the Program of All-inclusive Care for the Elderly. It is a government-supported program operated by Alexian Brothers Community Services. The Alexian Brothers PACE is located at 3900 South Grand. The goal of the program is to help frail, elderly citizens remain safe and independent in their homes and community, avoiding nursing home placement. The Alexian Brothers PACE Program coordinates and provides all needed preventive, primary, acute and long term care services for nearly 190 older people in the area. The Alexian Brothers PACE is the only PACE Program in Missouri.

PACE programs utilize interdisciplinary teams — including physicians, nurse practitioners, nurses, social workers, therapists, van drivers and aides to exchange information and solve problems as participants’ healthcare needs change with time. These teams are made up of professionals who specialize in caring for older people. They partner with the caregiver to enable their loved one to continue to live at home. The very first PACE Program was started in San Francisco because families did not want to have their loved ones move to a nursing home. They wanted to care for them at home.

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home. At the Alexian Brothers PACE Program about 60% of the participants live with a caregiver. The rest live independently.

**Who’s Eligible for PACE?**

To be eligible for PACE services you must be 55 years or older, live in St. Louis City or County and meet the State’s Level of Care criteria for nursing home eligibility. The State’s Level of Care is a point system whereby the individual scores points for deficiencies in daily living activities. To be eligible for PACE, the individual must need help in areas like bathing, feeding, mobility, medication management and doctors’ visits. The prospective participant is also assessed by Alexian Brothers PACE Interdisciplinary Team to determine if the individual can be maintained safely in the community with PACE support and services.

PACE is jointly funded by Missouri (MO) HealthNet (formerly Medicaid) and Federal Medicare (CMS). Participants, like Mrs. Q, who have both MO HealthNet (Medicaid) and Medicare benefits may receive PACE services at no out-of-pocket cost to them based on their income. (All services must be approved by the Interdisciplinary Team in order to be covered at no cost to the participant.) Eligible Medicare-only participants pay a fee for services. Eligible people with neither Medicare nor MO HealthNet can pay privately.

Individuals who are not currently eligible for MO HealthNet benefits, may be eligible for these benefits if they are enrolling in PACE. The PACE Marketing & Intake Department helps individuals or couples apply for MO HealthNet if needed. Those interested in learning more about PACE eligibility and payment options can contact the Marketing and Intake Department at (314) 771-5800.

**PACE Services**

PACE provides all the support and services seniors need to remain safe and independent in their homes.

**Adult Day Care:** The PACE Center, the hub of all activity, is open Monday through Friday from 8:00 a.m. to 5:00 p.m. Certified Nurse Assistants provide help during the day with eating, toileting and personal care. Incontinence supplies are included in our daily care at the center and at home; the center is completely handicap-accessible; daily lunch and snacks are provided for individual dietary needs.

**Van Transportation:** Lift-equipped vans provide door-to-door service in St. Louis City and County for transportation to the PACE Center and medical appointments.

**Non-denominational Church Services:** Daily services for all faiths; Eucharist available for Roman Catholics, Bible discussions and trivia.

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The PACE Program
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Medical Care: Full-time M.D.s and an adult Nurse Practitioner are available daily for primary medical care and supervision. Emergency care, hospital services, surgical procedures, diagnostic and rehab services are also available through PACE.

Dental Care: Routine and special procedures including dentures

Eye Care: Routine exams, glasses and surgery when needed

Audiology Services: Exams and hearing aides

Diabetic Care: All supplies and shoes as needed

Part D-covered Drugs: Prescriptions and over-the-counter medications, vitamins, supplements with NO COPAYMENTS

Physical Therapy: Skilled services and restorative services with unlimited visits

Occupational Therapy: Including in-home assessments and family education and training

Speech Therapy: To address communication and swallowing problems

Social Services: Individual case management and family conferences, Powers of Attorney and Advance Directives assistance, Lifeline and Circuit Breaker

In-Home Services: Certified Nursing help with errands, personal care, cleaning, laundry, cooking as needed

Medical Equipment: Medically-necessary hospital beds, wheelchairs, walkers and more, plus batteries and repairs

Caregiver Education and Respite

Recreational Therapy and Activities: There are a myriad of activities, games, entertainment and socialization opportunities. Tai Chi, Yoga, spa pedicures and manicures, bingo, movies, arts and crafts, and gardening are just a few of the activities available.

For more information about the Alexian Brothers PACE Program, go to www.alexianbrothers.net. To find out more about PACE programs around the country, visit the National PACE Association website www.NPAOnline.org for more information.

If you are interested in learning more about the Alexian Brothers PACE Program, please contact the PACE Marketing & Intake Department at (314) 771-5800, or send an email to rboerner@alexianbrothers.net.
Aging adults are increasingly susceptible to falls and injuries, due to intrinsic, extrinsic, and participation factors. The roles, routines, habits and activities in which individuals participate and that bring meaning and quality to their lives may also put them at risk for falls and other injuries. To older persons, the falls problem is extremely threatening, since fall related injuries are some of the most common causes of restricted activity, disability, and death in older populations (Gill, Allore, Holford & Guo, 2004; Kannus, Niemi, Palvanen, Parkkari, & Jarvinen, 2005).

Occupational therapists use a multifactorial, interdisciplinary approach to working with aging adults and preventing falls and injury risks. **Intrinsic risk factors** that span biopsychosocial dimensions are typically first identified collaboratively with input from other disciplines. These may include impairments in muscle strength, balance, gait, cognition, vision, postural hypotension, symptoms of depression, fear of falling, arthritis, and medication and over-the-counter supplements use.

**Extrinsic factors** represent any aspects of the individual’s external environment that may potentiate injury risk. Typically occupational therapists evaluate home environments in order to identify and remediate or eliminate potential hazards. Slippery surfaces, obstacles in pathways, and poor illumination have been identified as the top three falls hazards in homes (Clemson, et al. 1997). If the older client also frequents other environments regularly, the occupational therapist must also evaluate those settings. The existence of the intrinsic and extrinsic factors alone may not be enough to cause falls; rather, it is often the interaction of the older person’s physical capabilities and the environment demands that have been found to be relevant to fall risks (Lord, Menz, & Sherrington, 2006).

**Participation factors** relate to the activities (occupations) in which the older adult participates. These include the full 24 hour/7 day per week pattern, from rising in the morning and conducting hygiene activities, to routine chores, working or volunteering, shopping, engaging with friends, and finally retiring to bed and rising during the night to use the bathroom. Older adults who demonstrate multiple intrinsic and extrinsic fall risk factors therefore may benefit from occupational therapy intervention to assist them in determining whether certain activities should be adapted, limited or eliminated from their routines. This review takes place through interview, and/or observation. The focus of the intervention is upon supporting the older adult’s engagement in activities that are meaningful and that add quality to their life and that of others.

**The Person-Environ**
The Environment-Occupation (PEO) model is used as a framework in the fall risk assessment (Stewart, et al, 2003). This framework exemplifies the continuous interaction and “goodness of fit” of the individual, their environments, and their occupations (activities). The greater the fit, then the greater the resulting congruence of the interacting factors.

Included in the assessment of the person are behavioral fall risk factors. Risk-taking behaviors include the following dimensions: cognitive adaptations, protective mobility, avoidance, awareness and being observant, pace, and practical strategies (Clemson, Cumming & Heard, 2003).

The instruments highlighted in the table (above right) are utilized by occupational therapists to evaluate fall and injury risk within the P-E-O model of reasoning.

Thus occupational therapy interventions are concerned with the Person, Environment, Occupational Participation fit. Home and community safety recommendations are made, and it is then up to the individual and his/her support system to implement as deemed necessary.
FALLS in the Elderly

Vision Problems Contributing to Falls in the Older Person
Elizabeth Wolff O.D., Jennifer Weier O.D., Steven Grondalski O.D.

Vision problems are a major risk factor for falls in older persons. The relationship is simple; if people are unable to see properly, they cannot safely maneuver through their environment. As we age, we are more prone to develop certain conditions that can decrease our visual function. There are four major types of eye diseases that commonly develop with age: cataracts, macular degeneration, glaucoma, and vascular conditions (e.g., retinal vein occlusions, ischemic optic neuropathies, diabetic retinopathy). Cerebrovascular accidents, although not a disease of the eye, also commonly cause vision problems in the elderly. These diseases can lead to decreased visual acuity, contrast sensitivity, and peripheral vision. All of these vision problems can contribute to falls in the elderly. Recognizing and managing these problems can lead to a decreased risk of falls.

Decreased visual acuity is the easiest problem to recognize and usually the easiest to manage. Although any number of eye conditions can cause this, uncorrected refractive error is a very common cause in the older persons. Uncorrected refractive error can be easily corrected with glasses or contacts. However, bifocal lenses can themselves cause falls in the elderly. When patients are first given bifocal lenses, they often have difficulty walking and negotiating stairs. This occurs because they are looking through the near portion of the lens when they look down. Glasses can also cause a problem with peripheral vision if patients are not accustomed to wearing them. If properly educated by their eye doctor of these potential problems, the risk of falls can be greatly reduced.

Contrast sensitivity decreases with age. This decrease causes patients to require more light to be able to see clearly and maneuver safely. Patients will often complain of glare and report needing more light to see. Cataracts are the most appropriate.

References

Dr. Karen F. Barney is the Chairperson of the Department of Occupational Science & Occupational Therapy at Saint Louis University.
common cause of these problems in the elderly. When cataracts start to affect quality of life, cataract extraction surgery is performed. After surgery, most patients experience an increase in brightness and clarity of their vision. If cataract surgery is not an option, properly illuminating their environment can help increase contrast sensitivity. Also, an optometrist or ophthalmologist specializing in low vision could prescribe colored eyeglass filters to help increase contrast indoors and outdoors.

A decrease in a patient’s peripheral vision can be caused by a number of different conditions. Glaucoma and strokes are the most common causes of visual field loss in the geriatric population. The damage from these conditions is permanent but can be managed. In the case of glaucoma, the condition itself must first be treated to prevent further vision loss. To manage a decrease in peripheral vision, low vision specialists can assist patients through the use of special optical aides. For example, prism can be put on eyeglasses to bring the neglected area of vision into the patient’s intact field of vision, similar to how a rear view mirror works in a car.

Elderly patients will often not have specific complaints about their vision. Comprehensive eye examinations by an eye doctor are often necessary to uncover these problems. In people age 65 and over, routine eye examinations are recommended every 1-2 years. Routine examinations are the best way to help keep elderly patients seeing well and therefore lower their risk of falls.

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Beauvais Manor Patients Now Served by SLU Doctors, Residents, Students

On Thursday, January 29, Beauvais Manor on the Park celebrated their enhanced Saint Louis University Geriatrics affiliation with a reception and ribbon cutting. This facility which has served the St. Louis community for 120 years now has two Saint Louis University Geriatric Medicine fellows on site each day to provide the excellence in care it is known for. This new SLUCare facility shares the outstanding reputation of the Saint Louis University medical group, and the Division of Geriatric Medicine at SLU utilizes this fine skilled and long term care facility to expand the skills of SLU medical and allied health students, residents, and fellows.

To see more about this facility, visit [http://www.beauvaismanor.com/](http://www.beauvaismanor.com/)

![Dr. John E. Morley and Dr. Miguel Paniagua prepare for the ribbon cutting at Beauvais Manor](image-url)
Upcoming Continuing Education Programs

Multi-Disciplinary Certificate Program in Geriatrics for Non-Physicians

In Quincy, Illinois - Wednesdays
Sept. 9, 23, Oct. 7, 21, Nov. 4, 18, 2009
In Chicago, Illinois - Thursdays
Sept. 10, 24, Oct. 8, 22, Nov. 5, 19, 2009
In Crystal Lake, Illinois - Fridays
Sept. 11, 25, Oct. 9, 23, Nov. 6, 20, 2009

Multi-Dimensional Functional Screening and Assessment of Older Adults

In Danville, Illinois - Fridays
Sept. 25, Oct. 30, 2009
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For more information on these conferences, call 773-930-3200.

3rd Annual CAM and 24th Annual GRECC Conference Integrative Pain Management
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This newsletter is a publication of:
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