



The Aging Institute of  
UPMC Senior Services and the  
University of Pittsburgh

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## A Year of Great Change

2010 was a year of great change for the University of Pittsburgh Institute on Aging. First and foremost, we have undergone a name change and are now formally called the **Aging Institute of UPMC Senior Services and the University of Pittsburgh**. We also have undergone a leadership change. In July, Shikha Iyengar retired as administrative director, and Neil Resnick, MD, passed the position of director to Charles Reynolds III, MD. The leadership and contributions of Dr. Resnick and Ms. Iyengar will be deeply missed.

Dr. Reynolds is professor of geriatric psychiatry, professor of neurology and neuroscience, and senior associate dean of the University of Pittsburgh School of Medicine, and professor of behavioral and community health sciences at the University of Pittsburgh Graduate School of Public Health. Dr. Reynolds is the recipient of a National Institute of Mental Health (NIMH) Research Scientist Award and a MERIT award for studies of "Maintenance Therapies in Late Life Depression." Dr. Reynolds has twice been named one of the Best Doctors in America, and has received the Exemplary Psychiatrist Award from the National Alliance for the Mentally Ill.

The administrative director position has been filled by Kristin Lauria Gurley, MS, MPH, CPM. Ms. Gurley received her master's degree in clinical exercise physiology from the University of Florida, and her Master's of Public Health from San Jose State University. She has spent most of her career leading interprofessional collaborative partnerships serving marginalized communities. The outcomes of these partnerships have received three national awards.

In addition to these changes, an executive committee and administrative board have been developed as part of the Aging Institute's leadership structure. One of the first tasks undertaken by the new leadership team was to revise the mission statement of the Aging Institute. The restated mission of the Aging Institute pledges that, "The Aging Institute will create productive and innovative programs for older adults by partnering a world-class integrated health care delivery and financing system with a leading center for academic scholarship."

While continuing many of its past activities, the Aging Institute has initiated three new projects:

- increasing access to palliative care for older adults
- reducing hospital readmissions from skilled nursing facilities
- promoting healthy aging for older adults

Needless to say, 2010 was full of exciting changes, and we look forward to sharing our progress with our colleagues in gerontology. This first edition of *Aging Connections* includes articles from three of our executive committee members that highlight their perspectives and contributions to the field on projects currently being addressed by the Aging Institute. We hope to develop a continuing dialogue with you on the key issues facing the field of aging, and welcome your feedback and comments through our website, [www.aging.upmc.com](http://www.aging.upmc.com).

# Acute Care and Transitions Launches at Magee-Womens Hospital of UPMC

by Neil Resnick, MD and Robert Palmer, MD

The Division of Geriatric Medicine has launched a new inpatient model of care, Acute Care and Transitions (ACT), at Magee-Womens Hospital of UPMC.

The ACT program is designed to prevent functional decline of hospitalized older adults and to reduce their risk of early unplanned readmission to hospital. ACT integrates principles of three models of evidence-based care to provide optimal, safe, and cost-efficient care for hospitalized older patients.

The first model is **Acute Care for the Elderly (ACE)**, which was originally implemented on an acute care nursing unit. The ACE Unit creates a physical environment that promotes patient independence and safe care. An interprofessional team of physicians, nurses, social workers, physical and occupational therapists, dietitians, and care managers collaborates in the care of complex patients in the hospital. The team reviews the patient's functional status (activities of daily living, mood, cognition, nutrition, and mobility) and plans for the patient's transition back to home. The ACE Unit promotes patient mobility, self-care abilities, and preservation of patient mood and cognition. Nurses are trained in bedside care of older patients through didactic lectures (e.g., Ageless Wisdom, journal clubs) and teaching rounds with the geriatrician. The ACE interprofessional team rounds on challenging patients using a systematic approach to acute care and care transitions.

The second model is the **Hospital Elder Life Program (HELP)**, which is an evidence-based



model of care designed to prevent incident delirium in older hospitalized patients at risk for delirium. HELP includes a series of simple interventions that target evidence-based risk factors of immobility, cognitive impairment, vision and hearing loss, dehydration, and sleep deprivation.



The Division of Geriatrics directs the highly successful HELP program at UPMC Shadyside. Unlike the original HELP program, which relies heavily on the work of volunteers, the interventions in the ACT program are integrated into the routine nursing and team care of patients.

The third model, currently in development, is based on the **Care Transitions Intervention (CTI)**. The CTI prepares the hospitalized patient for the transition back to home. A "transitions coach" works with the patient and their family to ensure a seamless transition from the hospital, including a summary of the patient's diagnoses, medications, and "red flags" that indicate a worsening of the medical

condition; follow-up with the patient's primary care provider; and a list of questions for the patient to ask his or her physician in the outpatient setting.

Quality of care and outcome metrics are reviewed by a strategic planning oversight committee composed of clinical members of the interprofessional team and administrative leaders at Magee. Relevant metrics include length of hospital stay, readmission rates, and patient satisfaction. Built on evidence-based models of care, the ACT program is a novel model that addresses the clinical, safety, and financial challenges of acute hospital care faced by patients, their families, payers, and health systems.

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# Informal Caregiving Research at the University of Pittsburgh

by Richard Schulz, PhD

Rosalynn Carter is often quoted for her observation, “There are only four types of people in the world: those who have been caregivers, those who currently are caregivers, those who will be caregivers, and those who will need caregivers.” Family caregivers are a critical national health care resource. Families often are the primary source of home care and support for older relatives, contributing services that would cost hundreds of billions of dollars annually if they had to be purchased. In any given year, as many as 65 million Americans provide unpaid care to a relative, with most of this care being delivered to people age 50 and older.

Caregiving has all the features of a chronic stress experience: It creates physical and psychological strain over extended periods of time, is accompanied by high levels of unpredictability and uncontrollability, has the capacity to create secondary stress in other life domains such as work and family relationships, and frequently requires high levels of vigilance. Caregiving fits the formula for chronic stress so well that it is often used as a model for studying the health effects of chronic stress exposure.

Faculty at the University of Pittsburgh and UPMC have been at the forefront of research documenting the physical and mental health effects of caregiving, as well as developing intervention strategies designed to ease the burden of caregiving. Faculty in the Department of Psychiatry, and the schools of Nursing, Social Work, Public Health, and Health and Rehabilitation Sciences, have shown that caregivers may experience effects such as depression, impaired health habits, adverse physiological responses, physical illness, and even death in response to the stresses of caregiving. A landmark study carried out by University of Pittsburgh researchers published in *JAMA*<sup>1</sup> was the first to show that stressed caregivers were at risk for increased mortality, after controlling for other risk factors known to be associated with death. Related studies examined the effects of exiting the caregiving role either through placement or the death of the care recipient.<sup>2,3,4</sup>

Researchers here also played a critical role in identifying key features of the caregiving experience that contributed to heightened stress responses, including the level of functional disability and cognitive impairment of the patient, behavior problems of the patient, the duration and amount of care provided, and the type and quality of relationship between caregiver and patient, among others. These

findings provided a basis for developing intervention programs for caregivers that were tested in a national study carried out over 10 years in six different cities in the United States. Interventions were developed to improve the emotional well-being of caregivers, ease the burden of care, improve their health, and enhance their knowledge and skills for meeting the challenges of caregiving.<sup>5</sup> These interventions have now been widely implemented by the Veterans Administration and state units on aging.

What is the future of caregiving? Although there are some encouraging signs that age-related disability is declining in the United States, this will be offset by the rapid growth of the senior population, to an estimated 70 million in 2035. It is projected that the number of older adults with functional deficits will grow from 22 million in 2005 to 38 million by 2030. The challenges posed by this demographic shift will be exacerbated by the decreasing ability of existing formal care systems to care for older adults because of a shortage of nurses and other health care workers, and increasing costs of hospitalization and long-term care. Changes in family size and composition and the increased labor force participation of women will make informal caregivers less available. Thus, the convergence of these factors in the decades ahead — increased need for care, decreased availability of formal care, and decreased number of adult children to provide care — has the makings of a perfect storm. While we have accomplished a great deal in understanding and improving the experience of caregiving, even greater challenges lie ahead.



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## Research Programs at the Aging Institute

by **Stephanie A. Studenski, MD**

Aging-related programs at the University of Pittsburgh and UPMC are among the most active and innovative in the nation. The mission of the Research division of the Aging Institute is to provide additional leverage and integration to these highly successful programs in order to break new ground, increase knowledge about aging, and ultimately improve care and the quality of life for older adults, their families, and communities in western Pennsylvania and beyond. The Aging Institute currently has three major initiatives that support our research mission: a program of pilot grant funds, a speakers series, and an annual Celebrate Aging Day.

The pilot grant-funding program provides \$100,000 a year for up to four high-impact, innovative research projects that involve collaborations across disciplines and components of UPMC and the University of Pittsburgh. The grant program begins annually with a call for proposals, followed by proposal submissions, independent review, and awards. All grants are for one year and are monitored for progress and eventual products, such as manuscripts, reports, and independent funding. The types of research that are funded span the spectrum of inquiry from basic science to clinical, behavioral, community, and health systems approaches. We are especially interested in promoting new cross disciplinary collaborations. In addition, we seek to leverage our resources by partnering with the many funded aging-related centers at the University of Pittsburgh.

The speakers series is designed to provide a single forum for the academic and clinical communities to learn about current research and programs related to aging. The series includes experts from the UPMC and the schools of health sciences, as well as visiting speakers hosted by participating centers and programs. A full listing of speakers and topics can be found on the website at [www.aging.upmc.com](http://www.aging.upmc.com). Segments from this series, including Dr. Reynolds' presentation entitled, "Linking Late-Life Depression to Mild Cognitive Impairment and Future Dementia: Outcomes of the MTLN-III Trial," are available for free online continuing medical education credits at [www.UPMCPhysicianResources.com/Geriatrics](http://www.UPMCPhysicianResources.com/Geriatrics).

The third element of the Aging Institute's research activity is the Annual Celebrate Aging Day. The primary goal is to highlight ongoing aging research and activities at UPMC and the University of Pittsburgh in an interactive, informal environment. The day includes a poster session summarizing work led by investigators at every level, including students, advanced trainees, faculty, staff, and clinicians from multiple disciplines. Awards for outstanding work are made to each level of investigators. In addition, there is a plenary session highlighting recently funded investigators and novel programs.

The Aging Institute is proud to offer numerous opportunities for faculty, trainees, and clinicians to participate in our vibrant environment, to grow personally, and to engage in new partnerships with other committed individuals.



For further information, visit [www.aging.upmc.com](http://www.aging.upmc.com).

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