

Geriatric UPDATE

In This Issue

The Gold Standard
for the Golden Years

Recent Publications

Department Briefs:
Welcoming New Faculty

WINTER 2015



From the Division of Geriatric Medicine



Message from the Chief

The mission of the Division of Geriatric Medicine is to enhance the health of older adults by providing superb clinical care, training others to do the same, and conducting research to ensure that tomorrow's care is better than today's. As a division, we are focusing on innovation as our primary strategy for achieving these goals.

This issue of *Geriatric Update* highlights the division's integrated clinical care initiatives, where our faculty provide care for more than 15,000 ambulatory visits, 1,000 admissions, and approximately 6,500 long-term care visits annually. Our multidisciplinary education and training programs for trainees of all levels, and our nationally funded research projects, also are discussed.

The division is committed to enhancing and integrating our clinical, training, and research missions. The strategic collaborations we have built across the University of Pittsburgh, UPMC, long-term care facilities, and our Geriatric Research and Clinical Center that is part of the United States Department of Veterans Affairs have allowed us to address critical geriatric problems and continue to respond in innovative ways.

As physicians, we're being challenged to make increasingly complex, evidence-based medical decisions. In the future, new care models, training, and research will be required, and our division's expertise, coupled with our close ties to other key departments, agencies, and organizations, makes us well-positioned to respond.

A handwritten signature in black ink that reads "Neil M. Resnick".

Neil M. Resnick, MD

Division Chief and Thomas Detre Professor of Medicine

Associate Director, Aging Institute

Director, Hartford Center of Excellence in Geriatrics

The Gold Standard for the Golden Years

Like you, every day we face the challenge of providing optimal care to our older patients. Thankfully, UPMC is supporting our effort to create innovative new care models that are more effective, more efficient, and even cost-saving. We hope that these models will be helpful for you and your patients as well.

Changing the Way We Care for Seniors — For Good

Our guiding principles are that: (1) much of what drives morbidity can be identified in advance; (2) preemptive, team-led, and systems-based care — aided by information technology — can prevent many of these problems; and (3) when problems do develop, such an approach can detect them earlier when they are most responsive to treatment and recovery is most likely. We are applying these principles to improve geriatric care in every relevant setting.

Ambulatory Care: In addition to developing a Patient-Centered Medical Home (PCMH) at each of our sites, we have adapted the PCMH model in two ways: (1) by ensuring that its metrics are more relevant to older adults, and (2) by tailoring interventions to each patient's comorbidity, functional status, life expectancy, and goals. We were honored to be recognized for this effort by the National Committee for Quality Assurance (NCQA), which awarded us its highest level of recognition.

Consultative Care: As we know, when subspecialty consultation is required, it can be difficult to find a subspecialist who understands the need to adapt the approach to our patients' goals. To address this, many of our faculty are dually trained in both geriatrics and another specialty, including neurology, behavioral neurology, dementia, psychiatry, osteoporosis, incontinence, rheumatology, cardiology, oncology, chronic pain, and end-of-life care. Together, we are devising approaches that will be more appropriate for our patients and also feasible for more widespread application.

Acute Care: Designed with the conviction that optimal geriatric care is good for patients of all ages, our Acute Care and Transitions (ACT) Program operates hospital-wide and integrates every hospital discipline, from physicians and nurses to those who deliver patient meals. Through use of a systems-based model, proactive care is now incorporated into providers' daily routines; they are not asked to work harder but to work differently. The results have been gratifying, with improved metrics in safety, quality, and efficiency across the entire medical service.

Home Care: By complementing the traditional approach with a systematic search for reversible factors, our Staying-At-Home

Program is preventing institutionalization, improving clinical outcomes and quality of life, and achieving cost savings.

Nursing Home Care: Given the very different challenges and resources in this setting, we have adapted our proactive approach to care in a novel way. With \$19 million in funding from Medicare's Innovation Center, we are testing, refining, and disseminating this new model, which is decreasing adverse drug events and hospital admissions.

Research to Fuel the Improvement

Fortunately, these successes are generating additional federal, state, and foundation support. In addition to traditional funding of our basic and translational research, examples include NIH support of our National Center of Excellence in Chronic Pain Education, our Center of Excellence in Geriatric Pharmacotherapy, and our Older American's Independence ("Pepper") Center; Patient-Centered Outcomes Research Institute (PCORI) funding to reduce injurious falls; Hartford Foundation funding to advance a geriatric emergency department; state funding of CMS' mandate to reduce antipsychotic use in all its nursing homes; Agency for Healthcare Research and Quality (AHRQ) funding to reduce adverse drug events and to develop antibiotic stewardship; and funding from the Department of Veterans Affairs for innovative new approaches to telemedicine including distance ePrescribing, teledementia, and telemedicine for nursing homes.

Training to Disseminate the Benefits

Our training programs benefit not only from our efforts to develop novel care models, deliver state-of-the-art care, and advance understanding of the aging process and syndromes, but also from the same commitment to innovation in education that we devote to care and research. Designed for trainees at all levels, from high school students to the practicing physician, each of our training programs strives to convey new and existing information in as creative and challenging a way as possible. Three examples include our statewide program in aging for the brightest high school students, our geriatrics "major" for medical students, and our geriatrics "track" for internal medicine residents. We also are committed to meeting the challenge of interprofessional training, and with funding from the National Center for Interprofessional Practice and Education, we are developing several new approaches to achieve this.

Hopefully, these efforts will help us all to provide still better care tomorrow — which couldn't come at a better time for the 40 million Americans who are already over age 65, and the nearly 80 million who will be by 2030.

RECENT PUBLICATIONS

- **Exercise:** Pahor M, Guralnik JM, Ambrosius WT, Blair S, Bonds D, Church T, Espeland M, Fielding R, Gill T, Groessl E, King A, Kritchevsky S, Manini T, McDermott M, Miller M, **Newman AB**, Rejeski WJ, Sink KM, Williamson JD, and LIFE study investigators. Effect of Structured Physical Activity on Prevention of Major Mobility Disability in Older Adults: The LIFE Study Randomized Clinical Trial. *JAMA*. 2014; 311:2387-96.

This landmark trial, conducted at eight national centers, including the Pittsburgh site led by **Anne Newman, MD**, proved that mobility disability can be prevented in older, high-risk adults through a program of walking and strength and balance training, and can be sustained for more than 2.6 years.
- **Sarcopenia:** The decline in muscle mass and function that occurs with age contributes to functional decline and dependence. Unfortunately, sarcopenia's causes are largely unknown, and the lack of normative data, as well as a consensus on its definition, has hampered research and also precluded FDA approval of any medication to treat it. **Stephanie Studenski, MD**, led an international effort to pool data from multiple longitudinal studies to develop evidence-based criteria for the condition. Their analyses of data from 26,000 older adults identified criteria that discriminate a population at high risk of functional limitations, both cross-sectionally and longitudinally. This seminal study was published as a series of five articles in *The Journals of Gerontology Biological Sciences & Medical Sciences Series A*. 2014; 69:547-58, 559-66, 567-75, 576-83, 584-90.
- **Causes of Geriatric Urge Incontinence:** **Resnick NM**, et al. What Predicts and What Mediates Response of Urge Urinary Incontinence to Biofeedback? *NeuroUrol Urodynam*. 2013; 32:408-15.

Although urge incontinence is common, morbid, and costly, its treatment has improved little in 50 years, largely owing to lack of understanding of its causes and perhaps because the focus of research has been on the lower urinary tract alone. Using biofeedback as a physiological probe to elucidate the causes of urge incontinence, the division's continence lab found that therapeutic response failed to correlate with any of the primary physiological domains or parameters at the level of the bladder or urethra. These results point to the brain as the primary etiology of urge incontinence and provide the rationale for renewed R01.
- **Medicare Part D and Lipid Control:** **Hanlon JT**, Boudreau RM, **Perera S**, Strotmeyer ES, **Newman AB**, et al. Racial Differences in Anti-Lipemic Use and Lipid Control in High-Risk Older Adults: Post-Medicare Part D. *Am Heart J*. 2013; 166:792-7.

To determine the impact of Medicare Part D on racial differences in the management of hypercholesterolemia, **Joseph Hanlon, PharmD**, and colleagues examined the use of anti-lipemic agents in patients with heart disease or diabetes. They found that use of such agents increased after Medicare Part D, but the racial disparity in either treatment or lipid control did not decrease.

- **Urinary Tract Infections:** **Nace DA**, Drinka PJ, Crnich CJ. Clinical Uncertainties in the Approach to Long-Term Care Residents With Possible Urinary Tract Infection. *J Am Med Dir Assoc*. 2014; 15:133-9.

The high prevalence, morbidity, and mortality associated with UTI, especially in the long-term care setting, mandates accurate diagnosis and therapy. Yet strategies to assure this are frustrated by logistical impediments and the atypical presentation of UTI in the long-term care setting. The result is overtreatment, with considerable adverse consequences to patients and society. To address this problem, **David Nace, MD**, and his colleagues published this thoughtful review, which is a key component of the American Medical Directors Association's national effort to improve care, reduce antimicrobial resistance, and enhance antimicrobial stewardship.

ADDITIONAL PUBLICATIONS

- Castle N, **Resnick NM**. Service-Enriched Housing: The Staying-At-Home Program. *J Appl Gerontol*. 2014 Jul 9.
- Deyo RA, Dworkin SF, Amtmann D, Andersson G, Borenstein D, Carragee E, Carrino J, Chou R, Cook K, DeLitto A, Goertz C, Khalsa P, Loeser J, Mackey S, Panagis J, Rainville J, Tosteson T, Turk D, Korff MV, **Weiner DK**. Report of the NIH Task Force on Research Standards for Chronic Low Back Pain. *Pain Med*. 2014 Aug; 15(8):1249-67.
- Greenspan SL**, **Perera S**, Ferchak M, **Nace DA**, **Resnick NM**. Efficacy and Safety of Single Dose Zoledronic Acid for Osteoporosis in Frail Seniors: A Randomized Clinical Trial. *JAMA Internal Med*, in press.
- Marcum ZA**, Sevick MA, **Handler SM**. Medication Nonadherence: A Diagnosable and Treatable Medical Condition. *JAMA*. 2013; 309:2105-6.
- Menezes AR, Lavie CJ, **Forman DE**, Arena R, Milani RV, Franklin BA. Cardiac Rehabilitation in the Elderly. *Prog Cardiovasc Dis*. 2014 Sep-Oct; 57(2):152-9.
- Nadkarni NK**, Nunley K, Aizenstein H, Harris TB, Yaffe K, Satterfield S, **Newman AB**, Rosano C. Association Between Cerebellar Grey Matter Volumes, Gait Speed, and Information Processing Ability in Older Adults Enrolled in the Health ABC Study. *J Gerontol A Biol Sci Med Sci*. 2014 Aug; 69(8):996-1003.
- Adult Immunization Committee of the National Quality Forum (including **Nace DA**). Priority Setting for Healthcare Performance Measurement: Addressing Performance Measure Gaps for Adult Immunizations. Final Report. Washington, DC: National Quality Forum, August 15, 2014.
- Tyagi S**, **Resnick NM**, **Perera S**, Monk T, Hall M, Buysse D. Behavioral Treatment of Insomnia: Also Effective for Nocturia. *J Amer Geriatr Soc*. 2014; 62:54-60.

DEPARTMENT BRIEFS

Welcoming New Faculty



Daniel Forman, MD

Trained as both a cardiologist and a geriatrician, Dr. Forman contributes to the division's expanding expertise in geriatric subspecialty care. Dr. Forman founded the American College of Cardiology's geriatric cardiology section, which has 2,500 members. He joins the division as professor of medicine. The focus of his work is on novel approaches to cardiac problems in older adults.



Shachi Tyagi, MD, MS

Prior to her clinical training, Dr. Tyagi, assistant professor of medicine, worked as a researcher with the University of Pittsburgh Department of Urology, focusing on lower urinary tract disorders and bladder pain syndromes. She completed a geriatric medicine fellowship in the Division of Geriatric Medicine, where she focused on voiding dysfunction and nocturia. She currently is collaborating with the Sleep and Chronobiology Institute at Western Psychiatric Institute and Clinic of UPMC to enhance knowledge about the interface of nocturia and insomnia.

ADDRESS CORRESPONDENCE TO:

Division of Geriatric Medicine

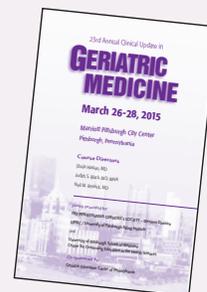
3471 Fifth Ave. • Kaufmann Medical Building, Suite 500
Pittsburgh, PA 15213 • Phone: 412-692-2360

Save the Date: March 26–28, 2015

23rd Annual Clinical Update in Geriatric Medicine

Pittsburgh, Pennsylvania

This award-winning CME conference is designed to help clinicians provide exceptional care for their older patients. Its structure, speakers, and content have been specifically chosen to provide state-of-the-art yet pragmatic approaches to the most common and confounding conditions clinicians face. Owing to its unique aspects, the conference regularly attracts more than 500 attendees.



CME presentations from the *2014 Clinical Update in Geriatric Medicine* are now available online, including:

- *Assessment of Decision-Making Capacity in the Older Patient*, presented by James Tew, MD
- *Anxiety Disorders in Older Adults*, presented by Jordan Karp, MD

To view these courses and others with a geriatric medicine focus, please visit UPMCPhysicianResources.com/Geriatrics.

A world-renowned health care provider and insurer, Pittsburgh-based UPMC is inventing new models of accountable, cost-effective, patient-centered care. It provides more than \$887 million a year in benefits to its communities, including more care to the region's most vulnerable citizens than any other health care institution. The largest nongovernmental employer in Pennsylvania, UPMC integrates more than 60,000 employees, more than 20 hospitals, more than 500 doctors' offices and outpatient sites, a more than 2.5-million-member health insurance division, and international and commercial operations. Affiliated with the University of Pittsburgh Schools of the Health Sciences, UPMC ranks No. 12 in the prestigious *U.S. News & World Report* annual Honor Roll of America's Best Hospitals — and No. 1 in Pennsylvania. For more information, go to UPMC.com.