

Center for Gerontology & Healthcare Research

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OVERVIEW AND HISTORY

The Center for Gerontology & Healthcare Research (CGHCR) is an internationally renowned healthcare research center grounded in interdisciplinary collaboration, located at the Brown University School of Public Health. Its foundation in 1987 followed the National Hospice Study led by David Greer, MD, former dean of the Warren Alpert Medical School, and Vincent Mor, PhD, a professor in the Department of Community Health. Through rigorous research linking national datasets, they established the multiple benefits of hospice delivery—patient and family quality of life and reduced healthcare costs—leading to a new Medicare benefit. Sidney Katz, MD, a major contributor to gerontology and creator of standardized measures such as the activities of daily living index, served as the inaugural director. The CGHCR's research and faculty expanded over the years, producing notable advances in gerontology, such as documenting the futility of feeding-tube insertion for nursing home residents with advanced dementia, culminating in a major reduction in their use nationwide; demonstrating that palliative care consultation for nursing home residents reduced invasive treatments and improved quality of life; and conceptualizing burdensome transitions at end of life, a metric in evaluating care quality.

In 2013, CGHCR became one of the core centers in the newly established School of Public Health. To this day, we remain steadfast in our mission to enhance the quality of life for vulnerable populations, especially older adults and people with chronic conditions, through rigorous, advanced methodological research and the translation of research into effective policies and practices. Given that nearly 20% of the U.S. population (61 million people) are over 65 years of age, there is an ever-expanding need to identify, test, and disseminate proven interventions and policies to meet public health expectations and maximize health-related quality of life.

FACULTY AND SCHOLARSHIP

To accomplish our mission, the CGHCR provides vital research infrastructure for faculty investigators and their research teams. Currently, we have over 30 faculty who lead project teams. Faculty come from a variety of backgrounds, including gerontology, epidemiology, health economics,

health policy, internal medicine, geriatrics, pharmacoepidemiology, and biostatistics. Their interdisciplinarity allows for an extraordinary richness in theoretical framing, study design, and methods to solve challenges for older adults. Focal areas of expertise include chronic disease management (prevention and treatment); end-of-life and palliative care; long-term care supports and services; assisted living and nursing home care; prescription medication use (pharmacoepidemiology and pharmaceutical health services research); and innovative technology adoption for direct care. More recent emerging focal areas include transgender healthcare access and quality, and the impact of climate change on older adults' health. Over the last 5 years, our faculty, staff, and students have produced over 1,000 peer-reviewed publications, accepted across high-profile aging, medicine, policy and health services research journals.

CGHCR faculty and their teams are extremely successful in securing research funding, which now exceeds \$30 million annually, mostly earned through awards from the National Institutes on Aging. Our national leadership in Alzheimer's and related-dementia research is vast and deep, as evidenced by the following projects:

In 2019, Dr. Mor, in collaboration with Susan Mitchell, MD, a colleague at Boston-based Hebrew Senior Life, secured the largest federal grant (U54AG063546) in Brown University's history, a 5-year, \$53 million award to lead national efforts to improve healthcare and quality of life for people living with dementias and their caregivers. Established in September 2019, the National Institute on Aging (NIA) IMbedded Pragmatic Alzheimer's disease (AD) and AD-Related Dementias (AD/ADRD) Clinical Trials (IMPACT) Collaboratory mission is to build the nation's capacity to conduct embedded, pragmatic clinical trials of interventions within healthcare systems, helping them provide high quality, coordinated, and equitable care to people living with dementia and their care partners. Scalable and adoptable interventions that are effective in improving the care delivered to this vulnerable population are desperately needed. Since its inception, IMPACT has advanced the conduct of embedded pragmatic clinical trials, developed and disseminated knowledge, built investigator capacity, and catalyzed stakeholder collaboration. IMPACT was recently renewed for an additional 5 years at \$84 million.

- In Fall 2024, Amal Trivedi, MD, and CGHCR colleagues secured a renewal for the 16th year of a program project grant (P01 AG027296: Alzheimer's Disease and Related Disorders Treatment and Outcomes in America: Changing Policies and Systems). Although the population living with ADRD is expected to triple by 2050, many recent policy changes aim to maximize the value of care for the "average" patient, without specific consideration of their consequences for high-cost, high-need populations, such as those with ADRD. The P01 project will undertake four synergistic projects testing the effect of recent national policies and payment changes on people living with ADRD in different states of disease progression, in different care settings, and exposed to different policies.
- Sarah Ackley, PhD, is leading a K99R00 grant modeling ADRD, entitled Mathematical Models of Tau-PET Measures and Cognitive Decline in Alzheimer's Disease Across the Lifespan.

Another vital resource offered through the CGHCR is LTCFocUS, a publicly available data resource for national and international gerontology scholars. LTCFocUS provides data on nursing home care in the U.S. Our goal is to allow researchers to trace relationships between state policies, local market forces, and the quality of long-term care, and enable policymakers to craft state and local guidelines that promote high-quality, cost-effective, equitable care for older Americans. The data contained in LTCFocUS.org provides users with the opportunity to develop reports, presentations, and publications. Researchers can use this website to examine care processes and resident outcomes within the context of their local markets and regulatory practices. Policymakers can use the information to shape state and local guidelines, policies, and regulations that promote high-quality, cost-effective, equitable care to older Americans. We have logged 322 publications acknowledging the use of LTCFocUS resources.

CGHCR faculty lead research projects and collaborate with colleagues from other centers and universities. Some of our active projects are listed below.

HEALTH POLICY AND PRACTICE

- Dr. Barnett: Physician Sub-specialization and the Health and Health Care of Older Americans
- Drs. Rahman and Kosar: Impact of Medicare and Medicaid Financial Policies on Post-acute and Long-term Care for Persons Living with Dementia
- Dr. Rahman: Assessing the Effects of Institutional Special Need Plan (I-SNP) Enrollment on Quality of Long-Term and End-of-Life care for Elderly Individuals with Dementia
- Dr. Trivedi: Effects of Expanding Medicare Advantage Enrollment to Persons with End-stage Renal Disease
- Dr. Trivedi: Impact of Randomized Payment Incentives on Disparities in Home Dialysis and Kidney Transplantation

PRESCRIPTION MEDICATION USE

- Drs. Dow and Hughto: Impact of Medicaid Prescription Cap Policies on Treatment Outcomes for Opioid Use Disorder: A National Mixed Methods Study
- Drs. Galarraga and Shireman: Impact of Prescription Caps on Health Outcomes in People Infected with HIV
- Drs. Hayes and Zullo: Prescribing Cascades among Nursing Home Residents with ADRD
- Dr. Joyce: The risks and consequences of a motor vehicle crash in older adults with Alzheimer's Disease and Related Dementias
- Dr. Zullo: Post-Acute Care Medication Use and Functional Recovery in Heart Failure
- Dr. Zullo: Clinically Significant Drug Interactions among Nursing Home Residents with ADRD

HEALTHCARE DISPARITIES

- Drs. Meyers and Hughto: Examining Health Comorbidities and Healthcare Utilization Disparities among Older Transgender and Cisgender Adults in the U.S.
- Dr. Rivera-Hernandez: Migration and outcomes among older adults with and without ADRD from Puerto Rico

CLIMATE CHANGE AND AGING

- Dr. Rivera-Hernandez: Long-Term Effects of Hurricane Maria on Healthcare Delivery, Migration and Mortality Among People with Kidney Failure in Puerto Rico
- Drs. Just and Shireman: CHAIRS-C: Climate, Health, and Aging Innovation and Research Solutions for Communities

TRAINING

Since our inception, CGHCR has actively trained future generations in contemporary health services research using a real-world learning environment. Faculty regularly include pre- and post-doctoral trainees in their funded research programs. Pre-doctoral and post-doctoral fellowship programs also embed post-doctoral trainees in the research teams of funded faculty mentors to practice and advance their research and scientific writing skills as they build toward their independence. Pre-doctoral trainees are typically graduate students in the Health Services, Policy & Practice Department or the Department of Epidemiology. These graduate students are actively involved in all stages of project development, from the development of researchable ideas to the execution of analyses and the preparation and submission of manuscripts. Faculty support post-doctoral research fellows through grant funding. In addition, the CGHCR has hosted several grants, under Linda Resnik's, PhD, leadership, to advance health services research and learning health system skills for rehabilitation faculty.

INITIATIVES WITHIN CGHCR

CGHCR provides educational and research funding and acknowledges aging-focused scholarship through generous donations, including:

- **Diamond Fund:** The Diamond Fund provides resources to the CGHCR to support several types of public health aging activities for faculty and students, including pilot awards for faculty doing implementation science projects; MPH scholarships for translational science or aging-related projects with local public health or community-based organizations; research engagement with an equity lens; and aging course development.
- **SURDNA Award:** The SURDNA fellowship is designed to provide pilot funds or tuition support to faculty in clinical departments to gain formal research training and develop an independent line of aging research.
- **Ginsberg Award:** The Irwin E. Ginsberg Award provides a modest summer stipend for Brown University medical or public health student projects related to aging, and mentored by faculty affiliated with CGHCR.
- **Gerontology Prize:** CGHCR recognizes undergraduate or Master's public health students who complete a research project in gerontology, leading to a public presentation, publication or publication-quality manuscript.

SUMMARY

The Center for Gerontology & Healthcare Research stands as a national leader in aging and healthcare research, uniquely positioned to address the complex challenges facing our rapidly aging society. With over \$30 million in annual research funding and more than 30 interdisciplinary faculty members, CGHCR combines rigorous scientific methodology with real-world impact to improve care quality and outcomes for older adults and people with chronic conditions. Our comprehensive research portfolio spans medication safety and pharmacoepidemiology, pragmatic clinical trials, federal policy evaluation, long-term care innovation, and emerging areas such as climate change impacts and transgender healthcare access. Through our nationally recognized training programs, innovative data resources like LTCFocUS.org, and strategic partnerships with healthcare systems and community organizations, CGHCR translates cutting-edge research into evidence-based practices and policies that enhance quality of life for vulnerable populations. As stewards of landmark initiatives, we remain committed to fostering the next generation of aging researchers while advancing scalable, equitable solutions for an aging America.

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