



BY PAUL ENGLEMAN

Home Care Specialist

A leading expert in the field of aging, Associate Professor **Naoko Muramatsu** is investigating new ways to improve care to homebound seniors

Four days a week, for four hours a day, Tanya Moses visits Steve Bey at his modest apartment in a senior citizens' housing complex a few blocks from the UIC campus. Moses helps Bey, whose medical condition limits his physical abilities to accomplish routine daily tasks that most of us take for granted. Moses cooks, she cleans, she helps him wash and fold his laundry; some days she drives him to the bank or the grocery store. While assisting with his chores, she keeps Bey company and helps keep his spirits up. And, most important, she helps him keep his dignity by keeping him out of a nursing home.

Bey has resided at two different nursing homes on two occasions after surgery. "At nursing homes, they treat you like children. I am not a child," he says emphatically.

Moses is a paid home care aide, a job that is projected to be the

single largest growing occupation in the nation over the next 10 years. Bey is one of four clients for whom she provides care. Moses is paid only \$10.50 an hour, but because she is represented by the Service Employees International Union (SEIU), she has benefits such as sick pay and vacation pay and her hourly wage will increase by five cents next year.

Moses sees her role as "trying to keep the normalcy in people's lives. Here at home, Steve can still be Steve," she says. "And we are saving the taxpayers money by keeping seniors in their homes."

Unbeknownst to Moses and Bey, at the UIC Institute for Health Research, just one **Curtis Granderson, CBA '03**, home run to the west, UIC Associate Professor Naoko Muramatsu, along with a diverse team of researchers and partners, has been looking out for the long-term interests of these people. And with the population of the U. S.

rapidly aging, the team's interests correlate closely with those needed to sustain the economy of the future and our way of life.

Aging and home care

In 1988, when Muramatsu came to the U.S. from Japan on a Fulbright scholarship to pursue a doctorate in health services administration at the University of Michigan, she didn't plan on becoming a researcher on aging. Instead, she envisioned a career with the United Nations.

But that changed when Muramatsu completed her Ph.D. and accepted a position in the field of gerontology at the UIC School of Public Health in 1995.

Now an acclaimed researcher specializing in care for the aged, Muramatsu recalls that in accordance with Japanese custom, her mother (as the wife of the eldest son) was responsible for caring for her aging in-laws. "Watching

"Long-term care in the U.S. is fragmented, both in terms of financing and delivery," says Naoko Muramatsu, associate professor, UIC School of Public Health.

"Aging is a global phenomenon... We have not experienced this situation before. Countries are experimenting with differing [approaches], and it's important for us to learn from each other."

my mom ... was inspiring," she says. So although the direction of her professional career came about by circumstance, "I saw her taking care of everybody, so I was aware of the care-giving burden and how important it is to have support."

Last September, Muramatsu received a five-year research grant from the National Institute on Aging for an innovative program on home care for the aged. It brings together a range of research partners, including home care aides, homebound seniors, private and public social service agencies, and the SEIU, along with UIC students and medical staff that includes a kinesiologist and a geriatrician.

The program, "Promoting Seniors' Health with Home Care Aides," grew out of an earlier NIA-funded pilot study of Muramatsu's that paired 54 home care aides with homebound seniors. Typically, home care aides provide housekeeping and routine personal care services to homebound people who can no longer perform those tasks. But for Muramatsu's pilot program, they also served as personal trainers of a sort.

Relying on an exercise program for seniors called Healthy Moves for Aging Well, which was developed by the California-based Partners in Care Foundation, the home care aides were trained to instruct their clients on how to perform basic exercises during their visits, with the understanding that the clients would continue to do them on their own. The exercises consist of simple movements that are performed while seated.

The pilot program's primary goal was to maintain and enhance the function and well-being of frail, homebound seniors, while empowering the home

care aides to administer that process. The program received a satisfaction rating of 95 percent from clients and 97 percent from aides. Clients reported a decrease in their fear of falling and their use of pain medications, an increase in balance and satisfaction with home care aides. Among aides, nine in 10 agreed that the program improved their ability to motivate and communicate with clients, and four in five said it motivated them to become more physically active themselves.

For the new study, Muramatsu hopes to have 300 pairs of home care aides and clients, with 20 percent of them being Spanish-speaking. One thing that pleases her about the project's design is the component of co-learning, something she believes is valuable. Because the program involves interventions in people's homes, it provides opportunities for all project partners—the aides, their clients, researchers and home care agency personnel—to learn from each other.

"This study could have really important health implications for a population segment that tends to be underserved," says **David Marquez**, MS '00 UI, PHD '04 UI, a co-investigator on the project and UIC associate professor of kinesiology. It accesses these people and "then uses an innovative way to deliver the physical activity to them."

Although the exercise requirement is low, practicing even minimal physical movements may help very frail people perform personal functions such as bathing or using the bathroom independently, says Marquez, who has been at UIC's Institute for Health Research and Policy since 2007. Small contributions to health could forestall hospital



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and nursing home admissions. The program, if successful, could become a sustainable model, replicated by social service agencies in other communities.

Aging: A global phenomenon

The home care study is not Muramatsu's only avenue of research on aging. She also conducts more traditional, data-intensive research that compares approaches to senior care in the U.S. and Asia.

"Countries are experimenting with differing [approaches], and it's important for us to learn from each other," Muramatsu says. She points out that Japan, for example, has developed a system of mandatory long-term-care social insurance modeled on Germany's system. In Japan, long-term care is uni-



versal, with every person beginning to pay premiums at age 40.

In October 2015, Muramatsu joined an eight-member delegation to Shanghai as part of the Chicago Sister Cities International program. “That was a once-in-a-lifetime experience for all of us,” she says. While the delegation was there, the Chinese government announced an end to the one-child birth policy that had been in effect since 1980. Although that policy was put in place to mitigate the problems caused by overpopulation, China now finds itself with a shortage of caregivers for its aging population.

“The Chinese are open to learning from other societies—I was impressed with that. I also was impressed by similarities in Chicago and Shanghai,” Muramatsu

says, noting that caregivers in both cities are poorly paid, making it difficult to maintain a reliable workforce.

After their return from China, Muramatsu and the other delegates published a letter in the *Journal of the American Geriatrics Society*, which stated the need for the U.S. to “innovate and engage in global learning to develop an effective long-term care system . . . to address population aging before it is too late.”

Although the U.S. population is not aging as rapidly as those of Asian countries, Muramatsu agrees with other researchers who say that the combination of an aging population and a failure to plan for it has led to a situation that deserves to be called a crisis.

The U.S. Census Bureau projects that

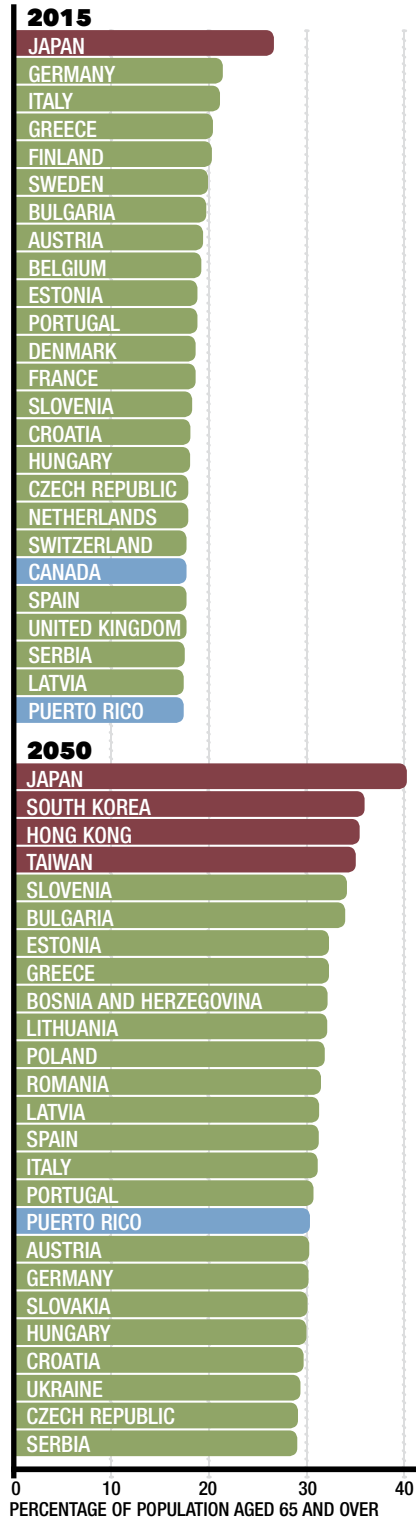
the 65-and-over population will nearly double over the next three decades, from 48 million to 88 million by the year 2050. And the population of people 85 and over is projected to more than triple, to 19.4 million. That will no doubt lead to a significant increase in the need for care for the aged, with expenditures for long-term care estimated to reach nearly \$346 billion by 2040.

A report released by the General Accounting Office describes the aging population outlook in stark terms: “As we look ahead, we face an unprecedented demographic challenge with the aging of the baby boom generation. As the share

Muramatsu has developed a program, “Promoting Seniors’ Health with Home Care Aides,” which trains home care aides to instruct seniors on how to perform basic exercises.

World's 25 Oldest Countries/Areas

● ASIA ● EUROPE ● NORTH AMERICA



NOTE: THE LIST INCLUDES COUNTRIES AND AREAS WITH A TOTAL POPULATION OF AT LEAST 1 MILLION IN 2015. SOURCE: U.S. CENSUS BUREAU, 2013; INTERNATIONAL DATA BASE. AN AGING WORLD: 2015.

of the population 65 and over climbs, federal spending on the elderly will absorb a larger and ultimately unsustainable share of the federal budget and economic resources ...”

Although the home care workforce has doubled in size over the past 10 years to 2.2 million workers, the Paraprofessional Healthcare Institute reports that the U.S. will need an additional 633,000 home care workers by 2024—more new jobs than any occupation in the economy.

“Long-term care in the U.S. is fragmented, both in terms of financing and delivery,” Muramatsu says. She references a research project she conducted that examined large datasets to identify state-to-state variations in approaches to long-term care, and how those policies impact the lives of older people and those who care for them. “There can be a huge variation in the delivery systems from one state to another because long-term care is funded mainly by Medicaid [which is a state-administered program],” Muramatsu says. “We found [the level of state support] to be a very important factor, especially for people who don’t have enough family support. That can have an important impact on nursing home admissions, the probability of dying at home and so forth.

“The majority of people in this country do not have access to publicly funded non-medical home care,” she continues. “Working conditions for home care workers need to be improved. Most home care is provided by families, but they lack support to help with their needs and maintain a work-life balance. We need the political will to develop a system to promote the health and well-being of aging individuals and their family members.”

Poverty and home care workers

As concerned as she is about caring for frail, homebound seniors, Muramatsu may be even more passionate about looking after the needs of the home care workers who assist them with their daily living activities. She is a co-principal investigator on a five-year study funded

by the Centers for Disease Control and Prevention, along with Lisa Brosseau, UIC professor of environmental and occupational health sciences. Conducted in partnership with five other universities, the Workplace Health Research Network project is conducting research on improving health conditions of the working poor. This group includes home care aides, who typically are middle-aged or older ethnic minorities with limited education. Currently, one in four home care workers lives in poverty, and one in two relies on some form of public assistance. Nine in 10 are women.

“Home care aides are really remarkable people,” says Muramatsu. “They do an amazingly difficult job, even though it is considered to be entry-level. And they do it independently, without any supervision. They have to face family members of the clients. They are underappreciated and underpaid.”

Although there is a high turnover rate, about a third of home care aides do the same work for 20 years or more. “I did focus groups with many home care aides,” Muramatsu says. “That was an eye-opening experience for me. I heard stories of home care aides whose clients die in their arms. For people who don’t have any relatives, they may be the family.”

And Tanya Moses understands the important role she plays in her clients’ lives. She knows that she could make a higher hourly wage at a different and easier job. “But I can’t leave this fight,” Moses says. “I’m an advocate. I’m a fighter.”

Right now, her biggest fight is over the stalled State of Illinois budget process and its effects on funding for social service agencies. Moses and Steve Bey have traveled to Springfield with advocacy groups to lobby for seniors’ rights and raising the minimum wage.

“I love Tanya,” says Bey. “She acts like I’m her husband. She’s like my family.”

While Bey moves to get his cane before going outside for a walk, Moses points to her heart. “If you don’t have it here,” she says, “you can’t do this job.” 