

New Hampshire State Commission on Aging  
Monday, May 20, 2024, 10 am to noon  
NH Hospital Association, 125 Airport Road, Concord, NH

Present in person: **Members:** Susan Ruka-Chair, Roxie Severance – Clerk, Wendi Aultman, (DHHS), Susan Buxton (OLTCO), Rich Lavers, (DES), Brandy Casada (Dept. of Safety), Polly Campion (Grafton), Sunny Mulligan Shea (NH Attorney General), Daniel Marcek (Hillsborough), Rep. Lucy McVitty Weber (Cheshire), Jack Ruderman (NHHFA), Laurie Duff (Strafford), Doug McNutt (Merrimack), Joanne Ward (Rockingham), Shelly Winters (DOT), Doug McNutt (Merrimack), Suzanne Demers (Belknap/Merrimack) . **Guests:** Heather Smith (DMVA), Mike Young (UNH), Dan Wise (AARP)

Staff: Rebecca Sky, Executive Director, Karen Knowles, Project Director

Online: **Members:** Beverly Bjorkland, (Sullivan)- Schedule Conflict, Beth Quarm Todgham (Hillsborough)- Schedule Conflict, Carissa Elphick (Belknap) Schedule Conflict, Margaret Franckhauser (Belknap)- Schedule Conflict, Tracy McGraw (Dept. of Labor) Schedule Conflict **Guests:** April Steffensmeier (ServiceLink BM Cap), Anne Marie Olsen-Hayward, Carole Boutin, Jennifer Rabalais (NH AHA), Kristen Barnum, Laura Davie, Theresa Tanous, Jessica Eskeland (Alzheimer Association) , Martin Bischoff, Cheryl Steinburg, Martha Mcleod (New Futures) , Thomas O'Connor (DHHS)

Absent: Rep. James MacKay, Senator Bill Gannon, Rep Charles McMahan, David Ross, (Hillsborough)

Welcome: Sue Ruka welcomed all to the meeting at 10:10 with a quorum present.

Approval of Minutes: Doug McNutt made a motion to approve the minutes, Lucy Weber, seconded. In a roll call vote, the motion passed with Shelley Winters abstaining.

Commission Members participating online were asked to put the reason they were remote in the chat.

Research and Innovation in Aging in NH:

Chair Sue Ruka provided an overview of the topic for the meeting- Research Innovation in Aging in NH. NH is a great place to test new technology and innovations that could help us to age well - living productive and engaging lives. Rebecca Sky reported that this agenda item is a result of discussions at the Age Friendly Task force led by co-chairs Sunny Mulligan Shea and Dan Marcek. Sunny and Dan gave an overview of the Task Force's work and how the Commission could have a role encouraging innovation and age-related research in New Hampshire, bringing that technology to all NH residents. The Task Force is curious about the transmission of research into everyday life.

Rebecca restated the purpose of this part of our agenda - to learn about current aging related research at the Geriatric Center of Excellence at Dartmouth Health, and the University of New Hampshire College of Health & Human Services, how research agendas are shaped, & discuss possibilities for future research. Initial conversations with the researchers in preparation for this meeting revealed that each institution works hard to prioritize collaboration with the community and care providers in their research, the implementation science side of research.

## Speakers:

### **Ellen Flaherty, Ph.D., APRN, AGSF, Vice President, Geriatric Center of Excellence at Dartmouth Health**

Dr. Flaherty introduced herself as a geriatric nurse practitioner, whose research focuses on improving the lives and care of older adults in the near term. Theoretical research can take up to 17 years before it becomes part of common practice. The Geriatric Center of Excellence strives to shorten that time frame by focusing on implementation or translational science research.

The idea for the Geriatric Center of Excellence at Dartmouth Health is only 2 years old. Dartmouth Health is inclusive of the Medical Center in Lebanon, 5 other critical access hospitals and medical clinics in other parts of the state. The Geriatric Center of Excellence at Dartmouth Health creates a structure that supports, aligns, coordinates, and provides visibility for geriatric initiatives across the entire system including clinical care, research, education, and policy. Towards meeting the quadruple aim within the healthcare system, they seek to improve quality of care via focusing staff energy on the 4M's of age-friendly health care (1. What matters most to patients (shared decision making is critical!), 2. mobility, 3. Medications, 4. Mentation), addressing cost by reducing unwarranted and unwanted medical interventions to older adults, using their experience towards keeping older adults in their homes, and addressing workforce by ensuring a robust and joyful geriatric team.

She shared the following research they are currently doing:

- [\*Colonoscopy vs Stool-Based testing for older adults with a history of Colon Polyps.\*](#) Can we detect the cancer without a colonoscopy? Is there an age to stop doing Colonoscopies? This is funded from Patient Centered Outcome Research Institute (PCORI) and \$37 Million in funding.
- *Inequities for Adults with Alzheimer's disease and Related Dementias*, \$16.2 Million 5-year, to study the inequity in health and social care for older adults with Alzheimer's disease and related dementias.
- *The CHRONICLE Trial* - Comparing office visits using clinical notes alone or notes plus visit audio recording. Recording notes and sharing notes with family. How can you enhance care that happens at the point of care in a visit with a provider? <https://www.openrecordings.org/projects-chronicle> and <https://www.pcori.org/research-results/2022/comparing-healthcare-visit-recording-and-open-notes-improve-chronic-illness-care-experience-older-adults-chronicle-trial>
- *RELIEF Study*, PCORI, \$6.6 million, studying low doses of Botox to treat urinary urgency incontinence in older women. <https://www.reliefstudy.org/> and <https://www.pcori.org/research-results/2022/tailoring-incontinence-care-onabotulinumtoxin-a-urgency-urinary-incontinence-among-older-women>
- *Geriatrics Workforce Enhancement Program*, Health Resources and Services Administration (HRSA) has funded this for the past 20 years. \$5 million with \$75 million pending. Majority of work has focused on improving care in primary care and other clinical practices to improve health outcomes for older adults. To make changes to care sustainable, they have aligned targeted changes to new reimbursement opportunities for the practices. Some of the changes have focused on maximizing the annual wellness visit for older adults (nurse run), transitional care, and increasing the number of patients with advance care plans. They created implementation guides for the entire team in the practice, not just the physician so that everyone is performing to the highest level of their license and in the interest of the older patient. During the next phase they hope to talk these models to Federally Qualified Health Centers. And, if funded, the next phase will work to re-energizing the teaching in Nursing Homes concept. Hoping to elevate the work environment in nursing homes. Looking to provide stipends and

tuition to people currently working in nursing homes and who want to become LPNs and RNs and stay working in nursing homes.

- *VOICES Trial*, NIA, \$3.9, using voice recording during healthcare visits for patients and families living with dementia. Patient and family can listen to recording later, looking to seek if this enhances shared decision making. <https://www.openrecordings.org/projects-voices>
- *REPLAY Study*, \$3.4M over 5 years. To conduct a multisite trial evaluating the impact of adding an audio recording of clinic visits (AUDIO) to usual care in older adults with multimorbidity, including diabetes, compared to After Visit paper Summary alone.
- *Annual Wellness visits versus GRACE augmented Annual Wellness Visits for Older Adults with High Needs*, PCORI- \$1.2 million over 5 years. A comparative analysis of office based annual wellness visits to a model of home-based geriatric care management. This will initially start in one accountable care organization (ACO) out of Vanderbilt in Nashville and will expand to 6 additional ACOs in 5 years.

There was discussion about the free tuition and other external funding for the nurse and LNA program, and other educational programs. The goal is to create a nursing home that would be a learning and teaching model for training both physicians and nursing staff. Improving the work environment, creating a place people wish to work is a critical part of this effort. One of the biggest challenges for staff in nursing homes is managing residents with behavior issues without meds. One aspect of this grant, if funded, will be to develop what will be called, “Behavior Rounds”, maybe 15 minutes 3 times a week. These teaching rounds will include different types of students and teachers from psychiatric and palliative care fellows to nurses and nursing assistants with the result being behavior care plans. It’s about creating teams that can support each other to address challenging workplace issues.

Sue Buxton, NH Long Term Care Ombudsman lauded the effort to improve work environments in nursing homes. Sue shared that work environments in nursing homes right now are very demoralizing. Staff struggle to provide good care but are limited because of the lack of coworkers on a shift. Sue is hopeful that the federal mandatory staffing will hold nursing home administration accountable which should also help the work environment.

The teaching nursing home is not an official designation its more of a collaboration with local colleges. The Heart Foundation in Pennsylvania is also looking into the redevelopment of the “academic nursing home”, an idea that has been around since the 1970s.

**Kirsten Corazinni, Ph.D., FGSA, Dean and Professor, College of Health & Human Services, UNH, and Dain LaRoche, Ph. D, FACSM, Associate Dean for Research, College of Health & Human Services, UNH.**

Dr. Corazinni expressed appreciation for this session today – several opportunities for synergistic work have become apparent at both the virtual meeting in preparation for today and being together in for this meeting. Between both Dartmouth and UNH so much work in happening across the breadth of geriatric caring professions.

UNH College of Health and Human Services educates and conducts research across the full spectrum of health professions outside if medicine. The College also has three Research Institutes (Institute on Disability, Institute for Health Policy & Practice and the Institute for Excellence in Health & Social Systems ) and a variety of centers that create opportunities for study and the intersection of research and implementation. As a public research institution, the University has a “social contract” with the state to work with New Hampshire based entities to

conduct research and evaluation, provide training and technical assistance, facilitate key public policy dialogue, and develop leaders. The University is taking efforts to earn the designation as an age-friendly university.

Jennifer Rabalais, Co-Director of the Center on Aging and Community Living with Laura Davie shared that the center focuses on creating a bridge between the University and NH communities.

Dr. Corazinni introduced herself as a social gerontologist. Her own research has focused largely to advance residential long-term care, particularly supporting people with dementia and the front-line staff who provide their care. She introduced Dr. LaRoche, who as the Associated Dean for Research shared information on robotics, digital and telehealth researched at UNH focused on the needs of older adults.

Dr. Corazinni shared information on four current research projects that can be categorized as focused on Person-Centered Dementia and Long-Term Care:

- *The Nursing Home Person-Centered Options Counseling Certification Program in NH.* Addressing the gap in implementing person-centered in low resource communities through the development of a mentoring program. UNH Lead: Laura Davie, MPH
- *Fostering Ethical Adoption of Artificial Intelligence-Enabled Assistive Robots (AIAR) grounded in person-centered dementia care.* To promote the ethical adoption of AI-enabled assistive robots in dementia care, ensuring that their use aligns with person-centered care principles and enhances the quality of life for individuals with dementia. Principle Investigator: Jing Wang, PhD, RN, FAAN
- *Advancing Person Centered Dementia Care in Low-Resource Contexts.* Partnering with residents and their families as well as staff in low-resourced residential settings in NH & MD (assisted living and nursing homes) to learn what matters most and design together ways to collect and share information about person-centered dementia care. UNH Lead: Kirsten Corazzini, PhD, FGSA
- *Adaptation of the NYU Caregiver Intervention-Enhanced Support (NYUCI-ES) Program.* Adaptation of the NYUCI-ES to support Chinese and Korean American caregivers of older adults with dementia. UNH Lead: Jing Wang, PhD, RN, FAAN

Dr. Corazinni spoke about three projects investigating the impact of social environments upon Wellbeing:

- Social Isolation and Mental Health: *Psychosocial Factors Linking Social Isolation to Mental Health Outcomes Among U.S. Older Adults.* Using the Health and Retirement Study (HRS), this project aims to examine the longitudinal effects of social isolation on mental health outcomes through the underlying pathways of psychosocial factors.
- Older Immigrants: *The impacts of Social Environments on Older Immigrants' Health and Quality of Life.* 1) Using data from low income subsidized senior housing in NH, IL, and MO, investigate if ethnically homogeneous environment matters for self-rated health among low-income immigrants; 2) Using the Population Study of Chinese Elderly (PINE), examine individual and contextual factors that predict the heterogeneity in the change trajectory of social isolation among older Chinese immigrants; 3) Explore various patterns of social network and their impacts on healthcare access and use among older immigrant Koreans in New England.
- Global Aging: *Cross-national Comparisons: Intergenerational Relationships and Well-being among Older Adults.* To conduct cross-national comparisons on the patterns of intergenerational relationships and their implications for mental health and psychological well-being among older adults from China, India, Japan, South Korea, and the U.S. This project uses nationally representative and harmonized datasets, which makes cross-national comparisons possible.

Dain LaRoche spoke on the research of Telehealth and Telerehabilitation. Pre-COVID, UNH had a center on Telehealth, which has been recently reorganized as the Center for Digital Innovation run by Margaret Coravini which focuses on broader view of health technologies. It fosters increased collaboration between the College of Health & Human Services and the College of Engineering at UNH.

One study is looking at distance learning and the delivery of occupational health services working on such things as hand mobility. This is happening by getting virtual reality headsets, tablets, computers into community member hands at the Tamworth, Conway, and Littleton Libraries, and the Sullivan County Nursing Home. In this way 2-way portals are established between providers and patient. With provider shortages and people living in rural communities having less access to healthcare, finding the best ways to deliver care remotely is important.

Another project of the center has a robotics team working with AI that now studies physiology and biomechanics. It has started with a robot learning from human demonstration. The goal is for robots soon to help with the laundry. They may provide physical therapy. AI software can measure and test the quality of the motion the patient is doing. Currently this research is still in the lab, but the quality of the motion as it emulates human motion has been validated with about 100 physical therapists.

Dr. LaRoche spoke about socially assistive robots for people living with dementia and their caregivers research project mentioned earlier. The goal is to reduce caregiver burden, improve quality of life, and keep people at home longer. The end users are an important part of the design process. At the start of the project, a focus group of caregivers was convened to identify and prioritize what functions the robot should be able to do. The project is using existing hardware, and existing smart home technology and integrating them. The project is considering three different designs currently, the most popular visually resembles a dog and can climb stairs. Another model has an arm that can grasp objects making it useful for bringing a tablet interface to a person. UNH is designing the robots to work in the home to keep a person on task - i.e. medication reminders, reminders to eat, a verbal message alerting someone who rises out of bed in the middle of the night that its nighttime and they should go back to bed. Caregivers will be able to develop AI daily planner so that reminders to go to the bathroom or eat breakfast are personalized. Mapping the home using an Apple iPhone 14 mapping tool will enable this. And the map combined with a camera on the robot will allow the robot to self-navigate in the home. If a caregiver leaves the house, they will be able to ask the robot to find their person in the house and put the camera on them. The robots can be linked with smart home technology – door open/close sensors, oven on/off sensors, camera motion sensors, etc. They can be equipped with facial recognition technology. With all this technology combined, there are significant ethical questions. If the camera is in-house, caregivers and the older adult lose their privacy. With that in mind, at this point the camera video images never leave the house even as a person's position in the house is mapped on an app.

The first year of the project was spent in development and prototyping. Shortly the robot will be taken to a long term care facility to be pilot tested with its first participant. Over the next three years the goal is a clinical trial with 60 dyads (care recipient and care partner). Key questions to be answered in the trial is does the intervention alleviate care partner burnout and does it allow a person living with dementia to stay living in their home longer? And there is a question about dual burden of care – caring for the person with dementia and attending to the robot. It is expected that this type of robot will improve safety and autonomy and reduce care partner burden.

## Discussion

A question was asked if people living with dementia might be confused or intimidated by having a robot in their home and a “dis-embodied voice” speaking to them. Dr. LaRoche noted the focus group recommended that the technology be implemented in the early stages of the disease. The face of the robot can be customized. And with AI voice generators, the voice can be made to sound like a familiar person.

A question was asked about the impact of this type of robot on workforce shortages. Could a homebased robot eventually help with healthcare provider checks on vitals, could it reduce the number of home health visits needed? And thinking about the state’s economy, what would the business model be to have these commonly in use in the community? Dr. LaRoche said that right now, this is expensive technology, approximately \$25,000 per robot. So maybe the business model involves 6 month leases rather than ownership. Dr. Corazinni suggested that when we consider cost, we need to think about cost avoidance too. Alleviating care partner burnout can help avoid the health toll on the caregiver and costs associated. And if the robot helps a care partner to maintain some kind of employment, there is a gain there as well.

Dr. Corazinni spoke about the dangers of focusing research questions on delaying institutionalization. It’s a misleading question because so many people who are clinically ‘nursing home eligible’, are still living in the community, and they are not doing so with any quality of life. They don’t see affording a more supported environment or have some other social, emotional, or systemic barrier to making a change. There is so much unmet need. Yes, it’s true there are people who wish to avoid living in a facility who with the right supports could meaningfully live in their long-time home. But the reverse is true too.

Adoption and utilization of technology of older adults was raised. Chair Ruka noted that in implementing a recent grant funded project in her area, many older adults adapted well to using tablets and other tech. It’s about putting it into people’s hand and providing the training and support. A related question was asked about adoption of robots that cause humans pain, like a physical therapy robot might cause?

Another question was asked about storage of data by the robots or connected technology. The question arose as it was noted that many cases of abuse and exploitation are committed by caregivers. Dr. LaRoche’s response is that data storage in the “cloud” is currently minimal. But consideration of the question in the context raised is something his team should think more about.

A question was raised was how non-academic partners could facilitate academic research. Dr. Flaherty started her response speaking to the importance of letters of support from community partners. Maintaining bi-lateral relationships between researchers and community partners to co-create the research is critical. A future grant that is in progress will involve working with town clerks. Wendi Aultman, NH DHHS, BEAS, commented for the past 20 years, DHHS has been part of the HRSA grant. The relationship has been beneficial to all parties with researchers gaining needed insight and DHHS learning from the outcomes ways they need to flex their policies to better support people to age well. Dr. Corazinni added to this conversation that as relational as NH is, it’s virtually a living lab that makes new learning to come at a rapid pace. By growing our relationships, we grow opportunities. Mike Sullivan, from UNH Cooperative Extension attending as a member of the public spoke to Cooperative Extensions ability to help get research findings utilized by community members, their unique ability to be that bridge. Cooperative extension is moving more and more into the health and well being space.

A final question was raised about academic institution partnership with industry to bring innovation to the real world. Dr. LaRoche responded that part of starting this work was running it by UNH Innovation which is the

intellectual property division of the University. Nothing they are developing is patentable other than copywriting the software. He went on to say that the final robot chosen to take the work to the next place in development was chosen in part because the robot manufacturer was the one most willing to partner with UNH to develop the robot for this purpose. UNH does not have the expertise to commercialize a product like the robot. A challenge is that the robotics industry is more focused on industrial use rather than the potential for providing in home care.

A member of the public asked if any research was happening focusing on solo-agers out in community or in subsidized housing. NH has a large and growing number of solo agers, people living alone in older age. Dr. Flaherty spoke to research that was happening pre-COVID that looked at the impact of added community health workers to a community nurse program. A few communities in NH have community nurses. But this project fell by the wayside. Dr. Flaherty appreciated the question and agreed new efforts need to be made to look at this issue.

**COA State House Team Update:** Polly Campion shared that of the initial 50+ bills the Commission tracked, only about 20 are still in consideration by the legislature. A few highlights:

System of Care for Healthy Aging:

- HB1568, relative to Medicaid reimbursement for non-transport emergency medical services calls is moving forward. Helpful for keeping older adults out of hospitals and aging at home.
- SB499 includes NH DHHS participating in the SNAP elderly simplified application project, a non-germane amendment was added.

Workforce Development:

- SB 403 very little of the original bill is still in the bill. One component still in is the certification of CHW. Another is shortening the work experience an LNA must have from 2 years to 1 year before becoming a medication nurse assistant.
- HB1585 – creation certified assisted living medication assistants. Addresses workforces issues but concerns for medication errors remain. Non-germane nurse loan repayment provision added to bill.
- HB 1190 – interstate social work compact adopted by both chambers.

Civic & Social Engagement:

- There are 2 bills of concern regarding voting rights of older adults: HB 1098 is regarding ballots delivered to facilities. HB1569 Removes any exceptions for proving voter identification. Also removes the voter affidavits as proof of identification and repeals the procedures.
- HB 1264 will increase rights to privacy by increasing accessibility options during local elections.
- HB 1191 that exempts OAA restaurant voucher program meals from NH rooms and meals tax.

Guardianship:

- HB1245 will help people who are under guardianship to get access to their own records – support autonomy.

Housing: Of the 16 bills we initially tracked, only 5 are still alive.

## **Older Adult Volunteer Awards**

Rebecca reminded everyone that at 2pm at the state house, COA will be recognizing older adult volunteers. The Governor scheduled to be there.

Parking will be an issue.

**Public Input:** There was no public input.

**Adjournment:** The meeting adjourned at 12:12pm.



## Aging Related Research at Dartmouth Health

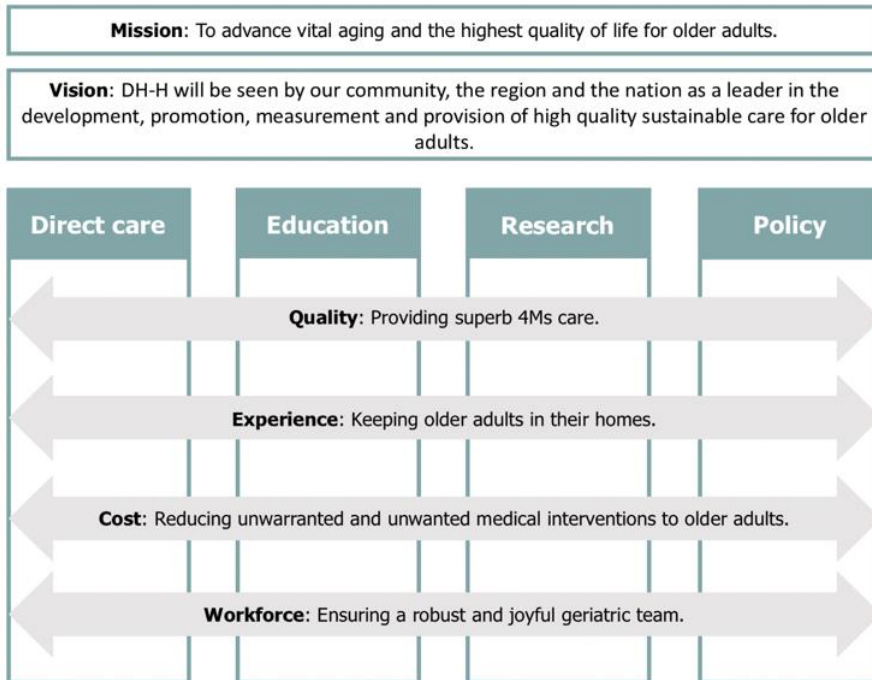
Ellen Flaherty, Ph.D, APRN, AGSF  
VP Geriatric Center of Excellence

May 20, 2024

Dartmouth Health



The GCOE creates a structure that supports, aligns, coordinates, and provides visibility for all geriatric initiatives across the system including clinical care, research, education and policy.



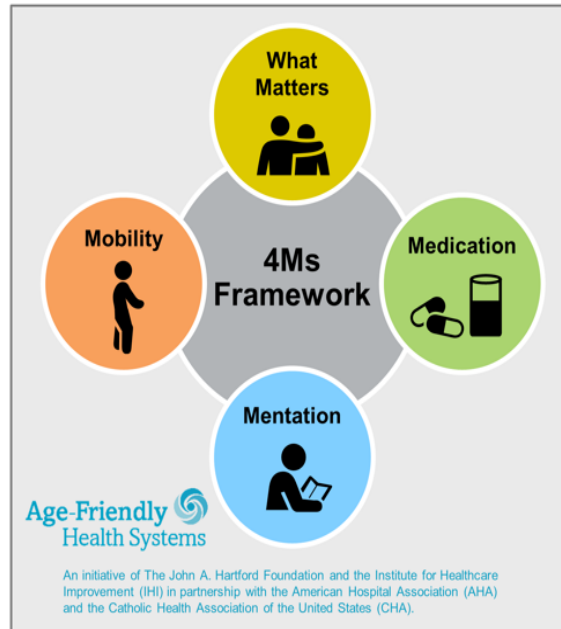


## The 4Ms

As an Age Friendly Health System, Dartmouth Health focuses on “4M Care”.

This includes:

1. What Matters Most to our patients
2. Mobility
3. Medications
4. Mentation



<https://www.ihf.org/initiatives/age-friendly-health-systems>

### What Matters

Know and align care with each older adult's specific health outcome goals and care preferences including, but not limited to, end-of-life care, and across settings of care.

### Medication

If medication is necessary, use Age-Friendly medication that does not interfere with What Matters to the older adult, Mobility, or Mentation across settings of care.

### Mentation

Prevent, identify, treat, and manage dementia, depression, and delirium across settings of care.

### Mobility

Ensure that older adults move safely every day in order to maintain function and do What Matters.

## Colonoscopy vs. Stool-Based Testing for Older Adults With a History of Colon Polyps

- Patient Centered Outcome Research Institute (PCORI)
- \$37.5 million (11 year follow-up)
- Objective: To compare colonoscopy and stool-based testing for the prevention of colorectal cancer in adults 70 and older with prior small colon polyps.
- PI: Audrey Calderwood
- <https://www.pcori.org/research-results/2021/comparing-two-screening-tests-colon-cancer-older-adults-history-colon-polyps-coop-study>

## Inequities for Adults with Alzheimer's Disease and Related Dementias (ADRD).

- National Institute on Aging (NIA)
- \$16.2 million 5-year renewal grant
- Objective: To study inequity in health and social care for adults with Alzheimer's disease and related dementias (ADRD).
- PI: Amber Bernato

## The CHRONICLE Trial

- The CHRONICLE (Comparing Healthcare visit Recording and Open Notes) trial focused on improving chronic illness experience for older adults.
- Patient Centered Outcome Research Institute (PCORI)
- \$7 million awarded over 5 years
- Objective: This study compares using clinical notes alone or notes plus visit audio recordings.
- PI: Paul Barr
- <https://www.openrecordings.org/projects-chronicle>
- <https://www.pcori.org/research-results/2022/comparing-healthcare-visit-recording-and-open-notes-improve-chronic-illness-care-experience-older-adults-chronicle-trial>

## RELIEF Study

- Patient Centered Outcome Research Institute (PCORI)
- \$6.6 million
- Objective: Study the use of low dose Botox to treat urinary urgency incontinence in older women.
- PI: Anne Cooper & Ann Gormley both urogynecologists at Dartmouth Hitchcock.
- <https://www.reliefstudy.org/>
- <https://www.pcori.org/research-results/2022/tailoring-incontinence-care-onabotulinumtoxin-a-urgency-urinary-incontinence-among-older-women>

## Geriatrics Workforce Enhancement Program

- Health Resources and Services Administration (HRSA)
- \$5 million (2019-2024)
- Additional \$4.75 million proposal pending (2024-2029).
- Objective: To design to improve health outcomes for older adults by educating a healthcare workforce that maximizes older adult and family engagement; and by developing primary care clinics and their communities into evidence-based Age-Friendly Health Communities.
- PI: Ellen Flaherty

## VOICES Trial

- National Institute on Aging (NIA)
- \$3.9 million (5-year award)
- Objective: To design an intervention that enhances interpersonal communication in triadic visits using visit recordings for patients and caregivers living with dementia.
- PI: Paul Barr
- <https://www.openrecordings.org/projects-voices>

- National Institute on Aging (NIA).
- \$3.4 million awarded over 5 years
- Objective: To conduct a multisite trial evaluating the impact of adding an audio recording of clinic visits (AUDIO) to usual care in older adults with multimorbidity, including diabetes, compared to AVS alone.
- PI: Paul Barr
- <https://www.openrecordings.org/projects-replay>

## Annual Wellness Visits versus GRACE-augmented Annual Wellness Visits for Older Adults with High Needs

- Patient Centered Outcome Research Institute (PCORI)
- \$1.2 million over 5 years
- Participants: Harvard/Massachusetts General & Brigham.
- Objective: Comparative effectiveness analysis of Dartmouth Medicare Annual Wellness Visits vs. Geriatric Resources for Assessment and Care of Elders (GRACE) Model. GRACE is a model of care that works in collaboration with primary care providers (PCPs) and patient-centered medical homes to provide home-based geriatric care management focusing on geriatric syndromes and psychosocial problems commonly found in older adults, improved care quality and reduced acute care use for high-risk, low-income older adults.
- PI: Ellen Flaherty
- <https://www.pcori.org/research-results/2023/annual-wellness-visits-versus-grace-augmented-annual-wellness-visits-older-adults-high-needs>

# Thank You

[Ellen.Flaherty@hitchcock.org](mailto:Ellen.Flaherty@hitchcock.org)

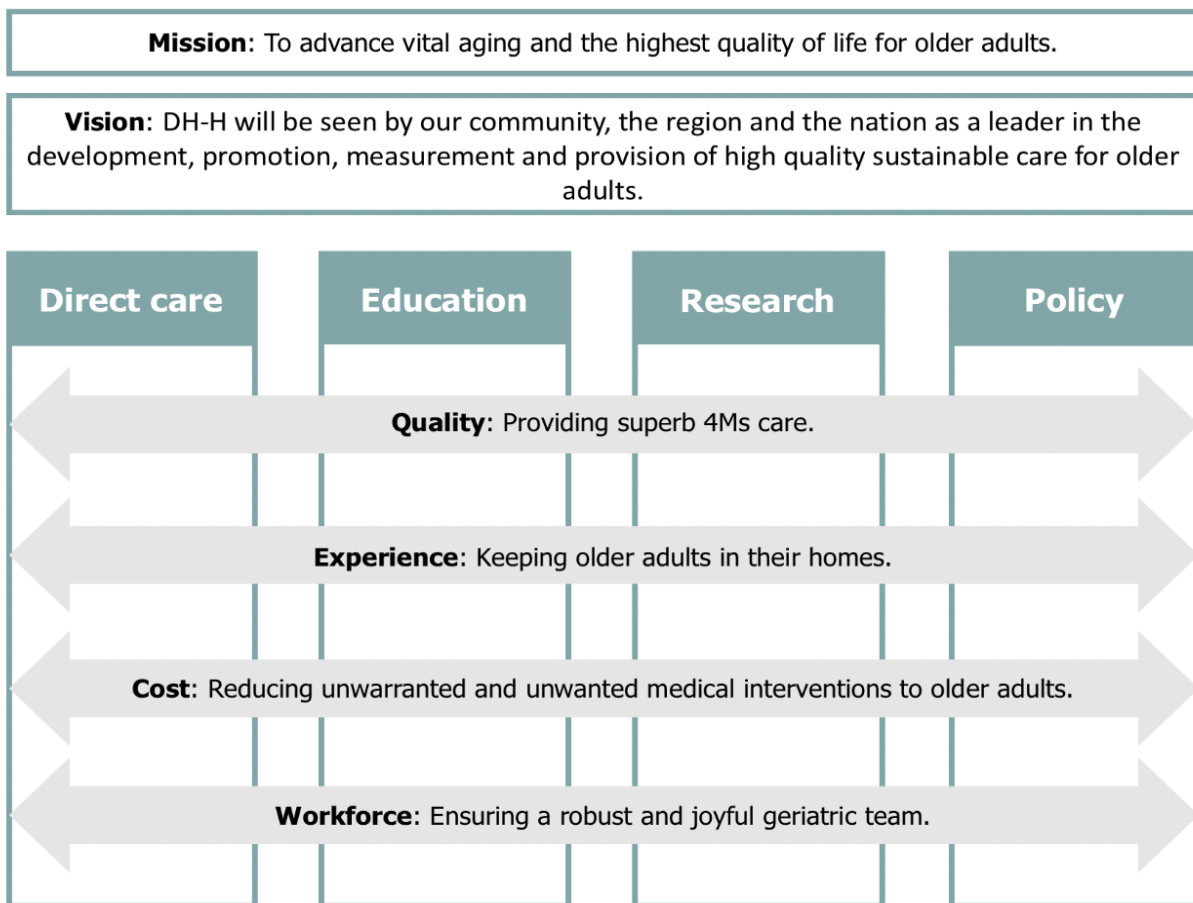
References available on request

Dartmouth Health Geriatric Center of Excellence  
Aging Related Research at Dartmouth Health Brief

May 16, 2024  
Dartmouth Health

- Alice Peck Day Memorial Hospital – Lebanon, NH
- Cheshire Medical Center – Keene, NH
- Dartmouth Hitchcock Clinics – Lebanon, Lyme, Concord, Manchester, Nashua
- Dartmouth Hitchcock Medical Center – Lebanon, NH
- Mt. Ascutney Hospital and Health Center – Windsor, VT
- New London Hospital – New London, NH
- Southwestern Vermont Medical Center – Bennington, VT
- Visiting Nurse and Hospice for Vermont and New Hampshire – White River Junction, VT

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### Aging Research at Dartmouth Health

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**College of Health and Human Services**  
*Aging Research*

**Kirsten Corazzini, PhD, FGSA**  
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**DEPARTMENTS**

- Communication Sciences & Disorders
- Health Management & Policy
- Human Development & Family Studies
- Kinesiology
- Nursing
- Occupational Therapy
- Recreation Management & Policy
- Social Work

**INSTITUTES & CENTERS**

- Institute on Disability
- Institute for Health Policy & Practice
- Institute for Excellence in Health & Social Systems
- Center on Aging & Community Living
- Telehealth Practice Center
- Child Study & Development Center
- Health Sciences Simulation Center
- Marriage & Family Therapy Center
- Speech Language Hearing Center
- Northeast Passage
- Browne Center



**Our Vision**

All New Hampshire residents have access to person-centered options which allow them to live and age in the communities of their choice.



**CENTER ON AGING AND  
COMMUNITY LIVING**

A COLLABORATION BETWEEN THE  
INSTITUTE ON DISABILITY (IOD) AND  
THE INSTITUTE FOR HEALTH POLICY  
AND PRACTICE (IHPP)

**FOCUS AREAS**

- Research and Evaluation
- Training and Technical Assistance
- Public Policy
- Leadership Development
- University Engagement





# Person-Centered Dementia and Long-term Care

## The Nursing Home Person-Centered Options Counseling Certification Program in New Hampshire

UNH Lead: Laura Davie, MPH

**Purpose:** To address the gap in implementing person-centered care in low-resource communities through the Person-Centered Options Counseling Certification program, through developing a mentoring program and competency framework.

Funding: NH DHHS

## Fostering Ethical Adoption of Artificial Intelligence-Enabled Assistive Robots (AIAR) Grounded in Person-Centered Dementia Care.

Principal Investigator: Jing Wang, PhD, RN, FAAN

**Purpose:** To promote the ethical adoption of AI-enabled assistive robots in dementia care, ensuring that their use aligns with person-centered care principles and enhances the quality of life for individuals with dementia.

Funding: NH-INBRE

## Advancing Person-Centered Dementia Care in Low-Resource Contexts

UNH Lead: Kirsten Corazzini, PhD, FGSA

**Purpose:** Partner with long-term care residents living with dementia, their family members and staff in underserved residential settings to learn their perspectives and design together ways to collect and share information about person-centered dementia care.

Funding: The Alzheimer's Association

## Adaptation of the NYU Caregiver Intervention-Enhanced Support (NYUCI-ES) Program

UNH Lead: Jing Wang, PhD, RN, FAAN

**Purpose:** Adaptation of the NYUCI-ES to support Chinese and Korean American caregivers of older adults with dementia.

Funding: National Institute on Minority Health and Health Disparities (NIMHD)



# Social Environment and Wellbeing

## Areas of Focus: Global Aging

### Cross-national Comparisons: Intergenerational Relationships and Well-being among Older Adults

UNH Lead: BoRin Kim, PhD and Ke Li, PhD

**Purpose:** To conduct cross-national comparisons on the patterns of intergenerational relationships and their implications for mental health and psychological well-being among older adults from China, India, Japan, South Korea, and the U.S. This project uses nationally representative and harmonized datasets, which makes cross-national comparisons possible.

Funding: UNH CHHS Research Support Initiative

## Areas of Focus: Social Isolation and Mental Health

### Psychosocial Factors Linking Social Isolation to Mental Health Outcomes Among U.S. Older Adults

UNH Lead: Ke Li, PhD and BoRin Kim, PhD

**Purpose:** Using the Health and Retirement Study (HRS), this project aims to examine the longitudinal effects of social isolation on mental health outcomes through the underlying pathways of psychosocial factors.

Funding: N/A

## Areas of Focus: Older Immigrants

### The impacts of Social Environments on Older Immigrants' Health and Quality of Life

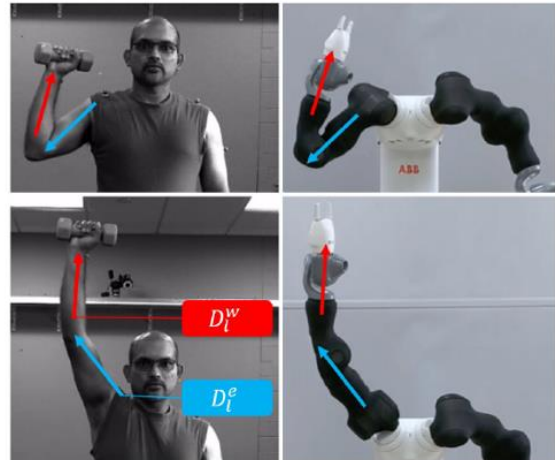
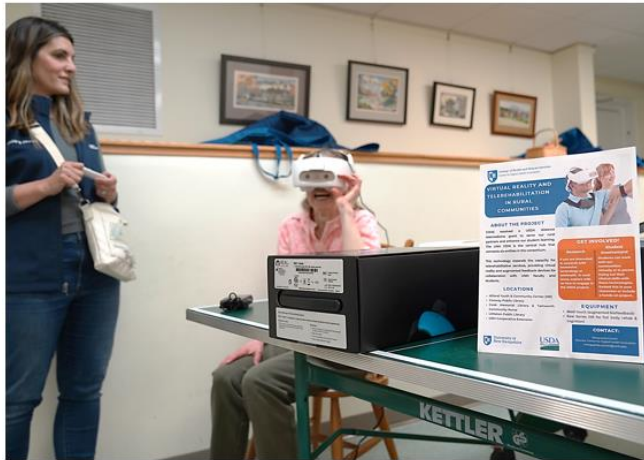
UNH Lead: BoRin Kim, PhD, Ke Li, PhD, and Chung Hyeon Jeong, PhD

**Purpose:** Older immigrants often encounter unique challenges that can complicate their integration and quality of life. 1) Using data from low income subsidized senior housing in NH, IL, and MO, investigate if ethnically homogeneous environment matters for self-rated health among low-income immigrants; 2) Using the Population Study of Chinese Elderly (PINE), examine individual and contextual factors that predict the heterogeneity in the change trajectory of social isolation among older Chinese immigrants; 3) Explore various patterns of social network and their impacts on healthcare access and use among older immigrant Koreans in New England.

Funding: National Institute on Aging (PINE Study)



# Telehealth and Telerehabilitation



*Distance Learning and Telemedicine:*  
Marguerite Corvini, John Wilcox, Keri Miloro, Michele Kroll, Sajay Arthanat, Casey Rabideau



*National Robotics Initiative:*  
Momotaz Begum, Dain LaRoche, Sajay Arthanat

# Socially Assistive Robot for Alzheimer's Disease Related Dementia Care



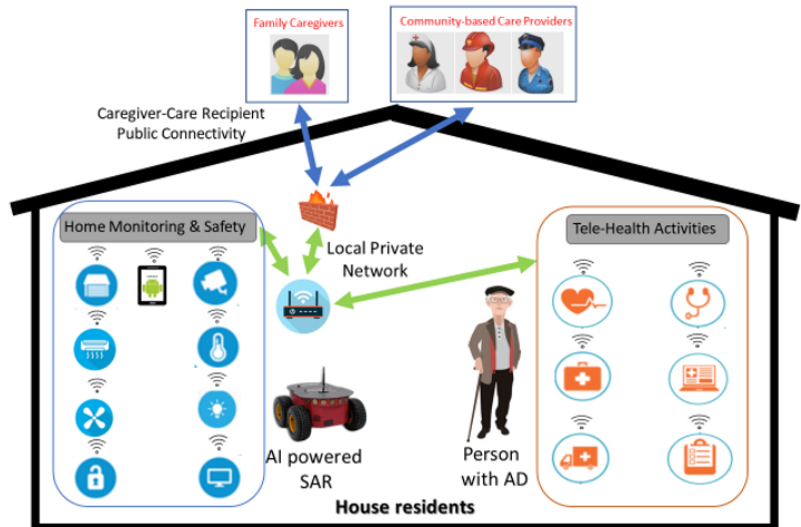
Sajay Arthanat, Momotaz Begum, Dain LaRoche, John Wilcox, Dongpeng Xu, Gene Harkless, Esmail Bahalkeh, Lou Ann Griswold, Jennifer Rabalais





# Smart Home-Linked Socially Assistive Robot

- Desire to age-in-place
- Increase Autonomy
- Improve Safety
- Preserve Health
- Better Social Connections
- Entertainment
- Scalable with Disease Progression
- Reduce Caregiver Burden



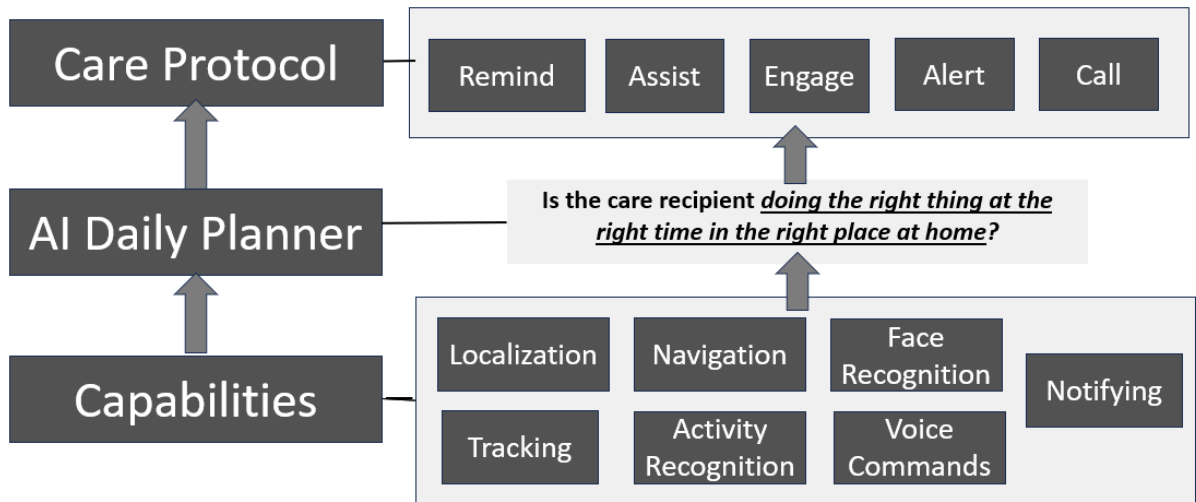
## Top SAR Functions and Caregiving Needs

Five speech bubbles containing user feedback on SAR functions:

- "If you could get a medication dispenser to program with the robot"
- "Sound a siren or alarm first if the person tries to leave the house"
- "Wish the robot can sense and alert if there is an abnormal heart rate or drop in blood pressure"
- "I think that would be useful if there were some sort of an exercise program that he could take part in"
- "They get very bored, they get lonely. Something interactive." "like an interactive game with the person, or ... a short conversation"



# How Does the Socially Assistive Robot Work?



## Thank You!



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Areas of Focus: Community-based long-term care, Person-centered care

**The Nursing Home Person-Centered Options Counseling Certification Program in New Hampshire**

UNH Lead: Laura Davie, MPH

Purpose: To address the gap in implementing person-centered care in low-resource communities through the Person-Centered Options Counseling Certification program, through developing a mentoring program and competency framework.

Funding: NH DHHS

Areas of Focus: Long-term Care, Dementia Care, Person-Centered Care

**Advancing Person-Centered Dementia Care in Low-Resource Contexts**

UNH Lead: Kirsten Corazzini, PhD, FGSA

Purpose: Partner with long-term care residents living with dementia, their family members and staff in underserved residential settings to learn their perspectives and design together ways to collect and share information about person-centered dementia care.

Funding: The Alzheimer's Association

Areas of Focus: Person-Centered Dementia Care, Caregiver support, Technology, Cross-cultural

This research program encompasses several key areas aimed at enhancing the well-being of older adults and their caregivers through a person-centered care lens. This includes investigating cultural influences on dementia care, understanding the significance of person-centered care, and exploring the ethical implications of technology adoption in dementia care.

**Adaptation of the NYU Caregiver Intervention-Enhanced Support (NYUCI-ES) Program**

UNH Lead: Jing Wang, PhD, RN, FAAN

Purpose: Adaptation of the NYUCI-ES to support Chinese and Korean American caregivers of older adults with dementia.

Funding: National Institute on Minority Health and Health Disparities (NIMHD)

**Development of a Family-Centered Supportive Intervention for Chinese Adolescents and Parents with Young-onset Dementia (YOD)**

Principal Investigator: Jing Wang, PhD, RN, FAAN

Purpose: To develop a family-centered supportive intervention aimed at improving the well-being and coping strategies of Chinese adolescents and their parents who are living with young-onset dementia.

Funding: Rockefeller Foundation-China Medical Board of United States

**Fostering Ethical Adoption of Artificial Intelligence-Enabled Assistive Robots (AIAR) Grounded in Person-Centered Dementia Care.**

Principal Investigator: Jing Wang, PhD, RN, FAAN

Purpose: To promote the ethical adoption of AI-enabled assistive robots in dementia care, ensuring that their use aligns with person-centered care principles and enhances the quality of life for individuals with dementia.

Funding: NH-INBRE

Areas of Focus: Global Aging

**Cross-national Comparisons: Intergenerational Relationships and Well-being among Older Adults**

UNH Lead: BoRin Kim, PhD and Ke Li, PhD

Purpose: This project aims to conduct cross-national comparisons on the patterns of intergenerational relationships and their implications for mental health and psychological well-being among older adults in diverse cultural and social contexts. This project includes multiple subprojects focusing on individual countries such as China, India, Japan, South Korea, and the U.S. This project uses nationally representative and harmonized datasets, which makes cross-national comparisons available.

Funding: UNH CHHS Research Support Initiative

Areas of Focus: Aging and Digital Disparities in Healthcare

**Multilevel factors influencing eHealth use among Older Adults**

UNH Lead: BoRin Kim, PhD and Chung Hyeon Jeong, PhD

Purpose: Digital disparities have a profound impact on older adults' access to healthcare use, particularly during the pandemic. Based on the quantitative and qualitative data collected from Seacoast NH, multilevel factors influencing eHealth use in general as well as patient portal are investigated.

Funding: UNH CHHS Research Support Initiative

Areas of Focus: The COVID-19 Pandemic and Older Adults

**Various Impacts of the Pandemic on Older Adults: Vaccine Hesitancy, Racial/Ethnic Disparities, Social Relationships, ICT use, and eHealth use**

UNH Lead: BoRin Kim, PhD, Ke Li, PhD, and Chung Hyeon Jeong, PhD

Purpose: The COVID-19 pandemic has profoundly affected older adults in numerous ways. Based on two nationally representative panel datasets including the Health and Retirement Study (HRS) and the National Health and Aging Trends Study (NHATS), multiple research projects explore diverse impacts of the pandemic on older Americans.

Funding: N/A

Areas of Focus: Social Isolation and Mental Health

**Psychosocial Factors Linking Social Isolation to Mental Health Outcomes Among U.S. Older Adults**

UNH Lead: Ke Li, PhD and BoRin Kim, PhD

Purpose: Using the Health and Retirement Study (HRS), this project aims to examine the longitudinal effects of social isolation on mental health outcomes through the underlying pathways of psychosocial factors.

Funding: N/A

**Using Video Conferencing to Address Social Isolation Among Older Adults**

UNH Lead: Jennifer Rabalais, MA and Therese Willkomm, PhD

Purpose: Pilot study to examine the use of IPADS and Amazon Show to create connections between older adults at risk of social isolation and their caregivers through video conferencing.

Funding: NH Partnership for Public Health

Areas of Focus: Older Immigrants

**The impacts of Social Environments on Older Immigrants' Health and Quality of Life**

UNH Lead: BoRin Kim, PhD, Ke Li, PhD, and Chung Hyeon Jeong, PhD

Purpose: Older immigrants often encounter unique challenges that can complicate their integration and quality of life. Under this theme, three research projects are ongoing: 1) Based on the data collected from low income subsidized senior housing in NH, IL, and MO, Dr. Kim and colleagues investigate if ethnically homogeneous environment matters for self-rated health among low-income immigrants living in senior housing; 2) Using the Population Study of Chinese Elderly (PINE), Dr. Li and colleagues examine a comprehensive list of individual and contextual factors that predict the heterogeneity in the change trajectory of social isolation among older Chinese immigrants; 3) Dr. Jeong and colleagues explore various patterns of social network and their impacts on healthcare access and use among older immigrant Koreans in New England.

Funding: National Institute on Aging (PINE Study)

Areas of Focus: Assistive Technologies

**Socially Assistive Robots for Dementia Care**

UNH Lead: Sajay Arthanat, Dain LaRoche, John Wilcox, Ferdinand Delgado, Gene Harkless, Esmaeil Bahalkeh, Lou Ann Griswold, Jennifer Rabalais.

Purpose: Socially assistive robots are being developed that utilize AI to: 1) reduce caregiver burden and improve autonomy of older adults living with Alzheimer's Disease and Related Dementia; 2) demonstrate and correct therapeutic exercises in remote settings.

Funding: National Institute on Aging, National Science Foundation

### **Telehealth & Telerehabilitation**

UNH Lead: Marguerite Corvini, Sajay Arthanat, John Wilcox, Keri Miloro Ferdinand Delgado

Purpose: To develop, adopt, refine and implement remote technological solutions that preserve physical and cognitive function, support aging-in-place, increase access to care, preserve independence, and contribute to older adults' quality of life. Extended reality, including augmented, virtual and mixed reality, are used for cognitive and physical training of older adults in the community to broaden access to care.

Funding: U.S. Department of Agriculture

Area of Focus: Older Workers

### **Productive Aging Study**

UNH Lead: Karla Armenti

Purpose: Study to learn more about employer policies and practices targeting the promotion of healthy, safe, and more age-friendly workplaces across New Hampshire.

Funding: National Institute for Occupational Safety and Health