technologies (ICTs). Further, interactions and relationships with people in their immediate social networks might have implications for whether or not older adults adopt ICTs. In two studies of individuals (N=595 participants; Mage=67.09; 56% Female; 69.2% White) and couples (N=542 couples; Mage=63.65; 50% Female; 83.9% White), I examined individual and dyadic predictors of technology adoption among older adults. Among a wide array of individual difference constructs, the most reliable predictor of technology adoption in both individuals and their spouses was need for cognition (.08 ≤ r ≤ .23). The results will be discussed in the context of how individual differences modulate adoption and the benefits accrued from ICTs across the lifespan.

THE IMPLICATIONS OF DIGITAL SOCIAL INTERACTIONS FOR OLDER ADULTS' EXPERIENCES OF WELL-BEING IN DAILY LIFE

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Digital communication technologies expand opportunities for social interactions and as a result have the potential to either amplify or dampen the coupling of social interactions with well-being in daily life. We use data from the 100-day Personal Understanding of Life and Social Experiences project (n = 99, age = 50 – 88) to examine variation in the sensitivity of older adults' daily reports of well-being to the quality of social interactions with their five closest social partners across digital (email/social media) and analogue (in person/by phone) interactions. Digital interactions were more common among less-close social partners. Multilevel random coefficient models showed days with more digital interactions than normal to be characterized by a) lower well-being and b) less sensitivity in well-being to the quality of social interactions with close social partners on that day. The implications of our findings are discussed within a lifespan perspective of social relationships and well-being.

SOCIAL ENGAGEMENT THROUGH VIDEO CHAT FOR OLDER INDIVIDUALS WITH AND WITHOUT COGNITIVE IMPAIRMENT

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Social engagement is a fundamental component of health and quality-of-life outcomes. However, there is a prevailing view that older adults primarily want to engage socially with current family and friends – that they are not interested in developing new relationships. That is an overgeneralization. We have found that older adults are interested in the opportunity to engage in social interactions with people who have shared interests. Technology can facilitate these interactions. We will describe our research with OneClick.chat, a web-based video chat system. We explored potential benefits of use by adults aged 70-85, including those with mild cognitive impairment (MCI), as well as barriers and facilitators

to adoption. Participants saw value of this online social engagement platform and were able to use it with some initial training. They envisioned using OneClick not only for conversations but also for learning and doing activities with like-minded individuals.

SESSION 555 (SYMPOSIUM)

ONDRI: A PROVINCIAL INITIATIVE TO UNDERSTAND THE HEALTH SYSTEM IMPACT OF AGING AND NEURODEGENERATIVE DISEASES

Chair: Susan E. Bronskill, *Institute for Clinical Evaluative Sciences (ICES), Toronto, Ontario, Canada*
Co-Chair: Colleen J. Maxwell, *University of Waterloo, Waterloo, Ontario, Canada*
Discussant: Nathalie Jette, *Department of Population Health Science and Policy, Icahn School of Medicine at Mount Sinai, New York, New York, United States*

As populations worldwide are living longer, the impact of neurodegenerative diseases on health resource utilization is expected to increase. Providing care to older adults with neurodegenerative diseases is challenging, and requires adequate supports across multiple health sectors including community, acute care and nursing home settings to allow individuals to maximize their quality of life. The Ontario Neurodegenerative Disease Research Initiative (ONDRI) is a collaborative research program that aims to improve diagnosis, treatment and management of neurodegenerative diseases including Alzheimer's disease and related dementias, Parkinson's disease, Amyotrophic Lateral Sclerosis (ALS), and Vascular Cognitive Impairment. Using population-based linked health administrative and clinical databases--covering over 14 million individuals residing in the province of Ontario, Canada-- the ONDRI health services research platform will address knowledge gaps regarding the health service utilization and outcomes of older adults with neurodegenerative diseases and impacts on family and care partners. Access to over two decades of historical health administrative data on a large population of older individuals uniquely positions our collaborative to examine trajectories of health system use as well as rare neurodegenerative diseases which have been previously understudied. The health services research platform is embedded within a larger ONDRI network of biomedical researchers, provincial decision-makers and health system stakeholders. Our research findings will inform health system planning and interventions to support older adults to live independently in the community. This session will explore how health administrative databases may be used to address knowledge gaps regarding health service utilization and outcomes in older persons with neurodegenerative diseases.

TRAJECTORIES OF HEALTH SYSTEM USE AND TRANSITIONS IN OLDER ADULTS WITH DEMENTIA

Susan E. Bronskill,[1] Laura C. Maclagan,[2] Jennifer Walker,[3] Jun Guan,[2] Xuesong Wang,[2] Ryan Ng,[2] Marian J. Vermeulen,[2] and Colleen J. Maxwell[4], *1. Institute for Clinical Evaluative Sciences (ICES), Toronto, Ontario, Canada, 2. ICES, Toronto, Ontario, Canada, 3. Laurentian University, Sudbury, Ontario, Canada, 4. University of Waterloo, Waterloo, Ontario, Canada*

Health systems strive to enable persons with Alzheimer's and related dementias to remain at home to maximize their quality of life. There is limited evidence describing long-term trajectories of health system use by persons with dementia as they remain in the community over time. A cohort of 62,622 community-dwelling older adults was followed for seven years and matched to persons without dementia (controls) based on age, sex and comorbidities. Overall, persons with dementia were more likely than controls to use health services, particularly home care and hospitalizations with discharge delay; and were more likely to be admitted to a nursing home. As they remained in the community over time, persons with dementia used home care at an increasingly intensive rate. Our approach to examine trajectories of health system use among persons with dementia is of particular value to capacity planning initiatives to anticipate future health service needs of this population.

COMORBIDITY IN NEURODEGENERATIVE DISEASES AND MENTAL HEALTH CONDITIONS: IMPLICATIONS FOR HEALTH SYSTEM BURDEN

Colleen J. Maxwell,[1] Laura C. Maclagan,[2] Ruth Ann Marrie,[3] Luke Mondor,[2] Walter Wodchis,[4] David B. Hogan,[5] and Susan E. Bronskill[2], *1. University of Waterloo, Waterloo, Ontario, Canada, 2. ICES, Toronto, Ontario, Canada, 3. University of Manitoba, Winnipeg, Manitoba, Canada, 4. Institute of Health Policy, Management & Evaluation, University Of Toronto, Toronto, Ontario, Canada, 5. University of Calgary, Calgary, Alberta, Canada*

Research suggests that older adults with neurodegenerative diseases are at increased risk of developing a subsequent neurodegenerative or comorbid psychiatric disorder or both. Depression and other psychiatric conditions, though prevalent, are often under-diagnosed and under-treated among those with neurodegenerative conditions potentially leading to more rapid disease progression, poorer health outcomes and increased health care use. Few population-based studies have comprehensively examined the risk and temporal ordering of common neurodegenerative and psychiatric conditions, including whether these associations differ by age or sex. Initial findings regarding the incidence of ordered pairs of neurological conditions (including dementia, Parkinson's disease and stroke) and psychiatric disorders (including mood and anxiety disorders, and schizophrenia) will be summarized. This population-based retrospective cohort study will provide essential data to allow policymakers, planners and providers to better anticipate the prognosis and care needs of older adults with comorbid neurodegenerative and psychiatric conditions.

CHALLENGES IN IDENTIFYING PERSONS WITH NEURODEGENERATIVE DISEASES USING HEALTH ADMINISTRATIVE DATABASES

Laura C. Maclagan,[1] Serena Soleimani,[2] Agessandro Abrahao,[3] Lorne Zinman,[3] Michael A. Campitelli,[4] Liisa Jaakkimainen,[4] Colleen J. Maxwell,[5] and Susan E. Bronskill[4], *1. Institute for Clinical Evaluative Sciences (ICES), Toronto, Ontario, Canada, 2. Institute of Medical Science, University of Toronto, Toronto, Ontario, Canada, 3. Sunnybrook Health Sciences Centre, Toronto, Ontario, Canada, 4. ICES, Toronto, Ontario, Canada, 5. University of Waterloo, Waterloo, Ontario, Canada*

Health administrative databases can be used to quantify prevalence and incidence of neurodegenerative diseases and their impact on health service utilization outcomes at the population level. Algorithms based on diagnosis codes and health service patterns can be used to identify persons suspected to have a neurodegenerative disease. Previous studies have developed and validated algorithms to identify persons with Alzheimer's and related dementias using primary care medical records as the reference standard, however, little previous work has focused on developing algorithms for rare neurodegenerative diseases including amyotrophic lateral sclerosis (ALS). This session will discuss challenges in developing algorithms to identify persons with neurodegenerative diseases accurately and opportunities to improve existing definitions using novel data sources including electronic medical record databases. Preliminary findings regarding the development of an ALS algorithm will be presented.

UNDERSTANDING SEX DIFFERENCES IN OLDER PERSONS WITH NEURODEGENERATIVE DISEASES

Michael A. Campitelli,[1] Laura C. Maclagan,[2] Christina Diong,[2] Longdi Fu[2] Amy Y. Yu,[3] Lorne Zinman,[3] Rick Swartz[3] and Susan E. Bronskill[2], *1. Institute for Clinical Evaluative Sciences (ICES), Toronto, Ontario, Canada, 2. ICES, Toronto, Ontario, Canada, 3. Sunnybrook Health Sciences Centre, Toronto, Ontario, Canada*

Sex differences in the incidence, prevalence, and clinical presentation of neurodegenerative diseases have been previously documented, however, sex differences in how individuals with neurodegenerative diseases access the health system remain understudied. Clinical trials and observational studies often do not report data stratified by sex, which limits the understanding of sex-related differences in persons with neurodegenerative diseases. This session will highlight both opportunities and methodological challenges researchers face when undertaking sex and gender research in persons with neurodegenerative diseases using two case studies: 1) sex differences in health service utilization prior to a diagnosis of Amyotrophic Lateral Sclerosis (ALS); and 2) sex differences in care needs and survival among persons who are admitted to a nursing home after a stroke. The findings of these studies may support the development of guidelines and care plans to meet the needs of men and women with neurodegenerative disorders in varied care settings.

WHAT'S OLD IS NEW: USING ARTIFICIAL INTELLIGENCE TO ACCELERATE DISCOVERY OF NEW TREATMENTS

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Given the high cost of drug development and low success rates, repurposing drugs already proven safe provides a promising avenue for identifying effective therapies with