

## GERIATRIC INTERPROFESSIONAL SIMULATION EDUCATION RESULTS AND RAPID CYCLE QUALITY IMPROVEMENT

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Following a geriatric interprofessional education event, we measured learner progression in interprofessional collaborative competencies using the Interprofessional Socialization and Valuing Scale (ISVS). We also measured student satisfaction with an investigator generated assessment tool. Through Rapid Cycle Quality Improvement (RCQI) processes, we implemented a number of variations of both the in-person and the virtual events. Variations included differences in case studies, pre work requirements, geriatric didactic topics, poster topics and presentation format, facilitator training, standardized patient or patient presence, huddle format, and demonstration of how to effectively perform teamwork. Results showed gains in interprofessional collaborative competencies between pre- and post-education using this geriatric simulation model. Learner satisfaction was high for all simulation variations. Results of education variations and comparisons of the delivery methods will be presented.

### Session 1005 (Paper)

#### ADRD and Caregiving

##### A 10-YEAR BEHAVIORAL AND SOCIAL SCIENCES RESEARCH AGENDA FOR ADRD: REFLECTION ON A NEW NATIONAL ACADEMIES REPORT

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The National Academies of Sciences, Engineering, and Medicine (NASEM) was charged with developing a ten-year agenda for research in the behavioral and social sciences that would substantially contribute to reducing the impact of Alzheimer's disease and related dementias (AD/ADRD). The report, expected to be publicly released in June 2021, has been developed by a committee of individuals with expertise across a range of disciplines and fields, including dementia research. The committee was charged with assessing the role of the social and behavioral sciences in reducing the impact of dementia. The committee held several evidence-gathering sessions, reviewed published literature, commissioned several papers, and engaged individuals living with dementia and caregivers as a part of an Advisory Panel to the committee. This presentation will engage attendees in a discussion about the ten-year behavioral and social science research agenda related to dementia produced by this NASEM committee.

##### CREATING A PERSON- AND FAMILY-CENTERED PROGRAM OF RESEARCH: LESSONS LEARNED FROM OVER 30 YEARS OF APPLIED RESEARCH

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Approximately 6 million Americans are living with Alzheimer's Disease or related dementia. Due to these alarming statistics, there is an increased need for families to seek out services and supports to not only cope with these devastating diagnoses, but to plan effectively for their future care needs. A plethora of research has shown that both the family care partner and person living with dementia are at-risk for negative outcomes such as depression, anxiety, social isolation, and worsening physical and mental health. Moreover, further and encouraging research supports the development and implementation of empowerment-based, person- and family-centered interventions. When utilized effectively these interventions improve quality of care and well-being in persons living with dementia and their care partners. The purpose of this paper is to provide guidance for researchers interested in making their work more person- and family-centered. Strategies discussed are based on over 30 years of applied research and include: 1) placing individuals at the center of their own care, 2) including persons with dementia as co-investigators, 3) convening diverse professionals and individuals in advisory councils from the start, and 4) conducting focus groups to obtain participant and stakeholder feedback. Demonstrations of select person-and-family-centered, evidence-programs will be included and supplemented with case examples to illustrate person-centered principles in practice.

##### FAMILY CAREGIVER NEEDS AND PREFERENCES FOR VIRTUAL TRAINING TO MANAGE BEHAVIORAL SYMPTOMS OF DEMENTIA

Maggie Ramirez,<sup>1</sup> Miriana Duran,<sup>1</sup> Chester Pabiniak,<sup>2</sup> Kelly Hansen,<sup>2</sup> James Ralston,<sup>2</sup> Susan McCurry,<sup>3</sup> Linda Teri,<sup>4</sup> and Robert Penfold,<sup>2</sup> 1. *University of Washington School of Public Health, Seattle, Washington, United States*, 2. *Kaiser Permanente Washington Health Research Institute, Seattle, Washington, United States*, 3. *University of Washington School of Nursing, Seattle, Washington, United States*, 4. *University of Washington, Seattle, Washington, United States*

STAR-Caregivers Virtual Training and Follow-up (STAR-VTF) is adapted from an evidence-based, in-person program that teaches family caregivers to manage behavioral and psychological symptoms of dementia (BPSD). The study objective was to understand the needs of family caregivers for improving BPSD management and the extent to which caregivers perceived that STAR-VTF could address those needs. We conducted 15 semi-structured interviews with family caregivers of people with dementia. We showed caregivers prototypes of STAR-VTF online self-directed materials. We obtained caregiver feedback, focusing on needs and preferences and perceived barriers to using STAR-VTF. We used a hybrid approach of inductive and deductive coding and aggregated codes to develop themes. The idea of a virtual training program for learning to manage BPSD appealed to caregivers. They said healthcare providers did not provide adequate education in the early disease stages about the personality and behavior symptoms that can affect people with dementia. Caregivers found it unexpected and frustrating when the person with dementia began experiencing BPSD, symptoms they felt unprepared to manage. Accordingly, caregivers expressed a strong desire for the healthcare organization to

offer programs such as STAR-VTF much sooner. Many were interested in the virtual aspect of the training due to the convenience of receiving help from home and the perception that help from a virtual program would be timelier than traditional service modalities. Given caregivers' limited time, they suggested dividing the STAR-VTF content into chunks to review as time permitted. Caregivers reported a preference for having the same coach for the program duration.

#### LONGITUDINAL EFFECTS OF CULTURAL AND PSYCHOSOCIAL FACTORS ON BIOMARKERS OF CARDIOVASCULAR RISK IN CAREGIVERS

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Dysfunctional thoughts about caregiving (DTAC) and familism (i.e. familistic obligation) were associated with worse caregiver emotional and cardiovascular health in cross-sectional studies. The aim of this study was to longitudinally examine the effects of familism and DTAC on cardiovascular health, considering caregiver kinship adjusting for well-established predictors of cardiovascular health. Study participants were 80 family dementia caregivers. Individual interviews and collection of blood samples were conducted in three yearly assessments. Linear mixed (random effects) regression analysis was performed to examine longitudinal associations of familism, DTAC, and circulating levels of cytokine interleukin (IL)-6, a cytokine and biomarker of cardiovascular disease risk (CVD). Caregiver age, gender, alcohol consumption, body mass index (BMI), hours caring, frequency and reaction of behavioral problems and caregivers' transitions were used as covariates. Results showed that increases in DTAC, in familism and higher caregiver age were independently and significantly associated with higher levels of IL-6 over time in the group of spousal caregivers. No significant effects were found for any of the other covariates in spousal caregivers. In contrast, increases in BMI and in frequency of behavioral problems were significantly associated with increases in IL-6 over time in adult child caregivers. No significant effects were found for any of the rest of predictors in adult child caregivers. Findings suggest that high level of obligation familism and DTAC may a profile of increased vulnerability for CVD in spousal caregivers. In contrast, problem behaviors of the care recipient may characterize adult child caregivers in terms of an increased CVD risk.

#### THE EFFECTS OF REMOTE ACTIVITY MONITORING ON FAMILY CAREGIVERS OF PEOPLE LIVING WITH DEMENTIA OVER AN 18-MONTH PERIOD

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Technology interventions for older persons and long-term care are generally utilized as real-time data capture tools to complement clinical or family care for older persons or as interventions themselves designed to improve important dementia care outcomes. Although research on novel technological interventions for people with Alzheimer's disease and related dementias (ADRD) and their family caregivers has grown considerably in the past two decades, much of this work continues to focus on design, feasibility, and acceptability (with a need for conceptual refinement in these areas) and less on controlled outcome studies. The objective of this experimental mixed methods demonstration was to determine the 18-month effectiveness of remote activity monitoring (RAM) technology in improving outcomes among family caregivers of community-dwelling persons with dementia. We used an embedded experimental mixed methods design, collecting qualitative data within the structure of a traditional randomized controlled trial ([QUAN+qual]→QUAN) over an 18-month period for 171 dementia caregivers. Change in caregiver self-efficacy, sense of competence, and caregiver distress served as the main quantitative outcomes of interest. Individual growth curve models indicated that the RAM technology did not have direct effects on caregiving outcomes, and although the qualitative findings indicated several potential moderators of RAM effectiveness on caregiving outcomes, the inclusion of these qualitatively-identified moderators did not result in statistically significant ( $p < .05$ ) effects. Ensuring effective human care management alongside RAM technology may help to overcome the barriers reported by dementia caregivers in this demonstration study.

#### Session 1010 (Symposium)

##### ADVANCING DEMENTIA CARE INTERVENTIONS WITH TECHNOLOGY SOLUTIONS

Chair: Jinmyoung Cho

Discussant: Elena Fazio

Over the past two decades, a number of interventions have been developed and tested to help meet the complex care needs of persons living with dementia (PLWD) and the family care support system. Despite the large foundation of empirical evidence, they are often not readily available as part of dementia care support services. Interventions leveraging technology-based solutions have the potential to bolster their desirability, efficacy, and feasibility. While progress has been made, there is still a need to design and test new innovative solutions in real-world settings. This symposium will highlight three such innovative technology solutions for dementia care and explore lessons learned in their development and testing. Smith et al. demonstrate the feasibility of using a novel in-situ sensor system to assess daily functions for PLWD in home or assisted care settings. Results of detecting and classifying diverse forms of functional assessment and environmental conditions will be discussed in the presentation. Czaja et al. describe a randomized controlled trial evaluating the feasibility and efficacy of an innovative dyadic intervention (DT) delivered through an interactive technology. Recruitment challenges and lessons learned from the feasibility of implementing a dyadic intervention will be presented. Stevens et al. introduce an online approach to delivering REACH II, GamePlan4Care (GP4C). Qualitative thematic analyses from GP4C user test