

### A QUALITATIVE UNDERSTANDING OF MOTIVATIONS, PREFERENCES, AND ATTITUDES TOWARD ADHERENCE-BASED TECHNOLOGY

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The future of cognitive assessments and brain-training programs is very likely to involve mobile applications for phones and tablets. However, adherence to these programs over the long haul is notoriously low. In an effort to countervail this trend, we ran online focus groups with both older and younger adults to understand from a user-centered perspective how to better design apps to increase adherence. Using thematic content analysis (Braun & Clarke, 2006) with an inductive bottom-up approach (Frith & Gleeson, 2004), we found a surprising number of common themes across older and younger adults that superseded many of their superficial differences. For instance, both younger and older adults were reluctant to engage in the program unless it had some obvious perceived benefit; both wanted the program personalized to their individual preferences; both wanted the ability to customize features and reminders; and both generally agreed that the tasks had to be fun.

### THE EFFECT OF REMINDER MESSAGE TAILORING ON COGNITIVE INTERVENTION ADHERENCE

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To examine the potential impact of tailored messaging on adherence and attitudes toward text message reminders, a pilot study conducted in advance of the APPT randomized controlled trial systematically manipulated the match between text message content and participants' self-reported motivations to participate in a cognitive intervention study. Older adults (n=40) were asked to engage in cognitive training, in the form of gamified neuropsychological tests, 30 minutes a day for 10 consecutive days, and adherence was tracked remotely over time. Critically, each day text message reminders alternated between messages consistent or inconsistent with participants' previously reported motivations for entering the study. This talk presents results, derived from multilevel modeling, that explore the effectiveness of this simple and cost-effective message tailoring approach for facilitating adherence and engendering positive attitudes toward the reminder system, and implications for programs requiring long-term adherence.

## Session 4475 (Symposium)

### THE IMPORTANCE OF REDEFINING GERIATRIC EXPERTISE IN NURSING HOMES TO REDUCE UNNECESSARY HOSPITALIZATIONS

Chair: Franziska Zúñiga

Co-Chair: Lori Popejoy

Discussant: Amy Vogelsmeier

Unplanned transfers from nursing homes (NHs) are burdensome, associated with adverse outcomes for residents

and costly for health care systems. Internationally, NHs are facing similar issues whereby a lack of geriatric expertise combined with a shortage of NH general practitioners require innovative and adaptable models of care tailored to the organizational context. In this symposium, we will present studies from the MOQI project from the United States, which successfully reduced unnecessary hospitalizations by embedding advanced practice registered nurses (APRN) in 16 US NHs over a 6-year period. We will discuss the influence of race on multiple hospital transfers and present possible interventions to reduce transfers. Next, we will present finding from a study with MOQI APRNs that highlighted their contributions to the COVID-19 pandemic response in NHs and discuss the broader implication or infection control practices. In addition, we will present the INTERCARE project which successfully reduced unplanned hospitalizations in 11 Swiss NHs, by implementing a registered nurse with an expanded role, to compensate for the very limited access to APRNs; which is the case for many European countries. Both MOQI and INTERCARE pinpoint the importance of strategies to support the introduction of a new role in NHs. Both projects will give examples of different models of care which can be feasibly implemented to sustainably decrease unnecessary hospitalizations, in different contexts and with different resources. Finally, data from the INTERCARE study will address the issue of potentially avoidable fall-related transfers and which resources are deemed appropriate to mitigate these.

### MULTIPLE HOSPITAL TRANSFERS AMONG MOQI NURSING HOME RESIDENTS: THE INFLUENCE OF RACE

Kelli Canada,<sup>1</sup> Elizabeth Fritz,<sup>2</sup> Amy Vogelsmeier,<sup>3</sup> Marilyn Rantz,<sup>3</sup> and Lori Popejoy,<sup>3</sup> 1. *University of Missouri, Columbia, Missouri, United States*, 2. *Sinclair School of Nursing, Columbia, Missouri, United States*, 3. *University of Missouri - Columbia, Columbia, Missouri, United States*

Missouri Quality Initiative (MOQI) was a CMS-funded enhanced care and coordination provider demonstration project (2012-2020) that successfully reduced avoidable hospitalizations and improved nursing home (NH) care quality. Little is known about the influence of race in multiple hospital transfers from NHs. Using a mixed-methods approach we analyzed hospitalization root cause analysis data from 2017-2019 for 1410 residents in 16 MOQI NHs. There were 113 residents who were transferred 609 times. Those with multiple transfers (four or more transfers/year) were compared by race and key characteristics (e.g., code status, diagnosis). A subset of residents with multiple transfers were examined qualitatively to identify and describe key cases. Findings suggest that Black residents have a higher probability for multiple transfers. Findings highlight the need for transfer prevention efforts for Black residents including early assessment and intervention, early/frequent discussion about goals of care, advance directives, resuscitation status, and family/resident understanding of treatment effectiveness.

### THE INFLUENCE OF MOQI APRNS ON THE COVID-19 RESPONSE IN NURSING HOMES

Lori Popejoy, Megan Hiltz, Marilyn Rantz, and Amy Vogelsmeier, *University of Missouri - Columbia, Columbia, Missouri, United States*

During the COVID-19 pandemic Missouri Quality Initiative APRNs worked in 16 nursing homes (NHs) providing clinical expertise and support. To understand their influence on the NH COVID-19 response, we conducted four group interviews with APRNs from 13 of the 16 NHs. Using thematic analysis, we identified similarities and differences between NH groups and then compared groups by COVID-19 infection rates. Leaders from NHs with high COVID-19 rates were unwilling to report infections and were resistant to resident/staff testing. In contrast, leaders from NHs with low COVID-19 rates were strategic about acquiring supplies, held daily huddles, and initiated CDC recommendations almost immediately. All reported residents lost weight, and experienced mood and physical decline resulting from quarantine/isolation. APRNs worked with providers to identify potentially ill residents/staff, improve isolation/quarantine procedures, manage ill residents, and supported efforts to mitigate viral spread. We will discuss implications for broader infection prevention in NHs.

#### **POSITIVE EFFECT OF A SUCCESSFULLY IMPLEMENTED MODEL OF CARE ON UNPLANNED TRANSFERS TO HOSPITAL**

Franziska Zuniga,<sup>1</sup> Raphaëlle Guerbaai,<sup>2</sup> and Michael Simon,<sup>3</sup> 1. *Basel University, Ostermündingen, Basel-Stadt, Switzerland* 2. *Institute of Nursing Science, Department of Public Health, University of Basel, Institute of Nursing Science, Department of Public Health, University of Basel, Basel-Stadt, Switzerland,* 3. *University of Basel, Basel, Basel-Stadt, Switzerland,*

Models of care have shown effectiveness in reducing unplanned transfers in nursing homes (NHs) from 11.7% to 6.1%. These include coordination of care and access to skilled medical providers such as geriatricians, specialist nurses or registered nurses with additional training. A hybrid type-2 effectiveness-implementation project (INTERCARE) was developed to improve intervention uptake and to understand the mechanisms behind results. INTERCARE consisted of six core elements and was rolled-out to 11 Swiss NHs with a stepped-wedge design allowing all NHs to receive the intervention. 942 residents were recruited (June 2018 -January 2020). INTERCARE showed a significant reduction of unplanned transfers during the intervention period compared with baseline. The successful implementation of INTERCARE relied on the use of implementation science, building on stakeholder input and careful theory-driven contextual adaptations. INTERCARE's success was driven by registered nurses with expanded roles, on-site coaching, and the use of tools for clinical decision making.

#### **DEFINING APPROPRIATE RESOURCES FOR NURSING HOMES TO REDUCE POTENTIALLY AVOIDABLE TRANSFERS AFTER A FALL**

Raphaëlle Guerbaai,<sup>1</sup> Michael Simon,<sup>2</sup> and Franziska Zúñiga,<sup>2</sup> 1. *Institute of Nursing Science, Department of Public Health, University of Basel, Institute of Nursing Science, Department of Public Health, University of Basel, Basel-Stadt, Switzerland,* 2. *University of Basel, Basel, Basel-Stadt, Switzerland*

Falls are common in nursing home (NH) residents and are the predominant reason for an emergency department (ED) transfer. Falls are responsible for 25% - 87% of ED transfers, a proportion of which are potentially avoidable. INTERCARE – an implementation science study reducing unplanned hospitalizations (2018 – 2020) – involved experts to identify potentially avoidable fall-related transfers. Focus group and stakeholder survey enabled identification of resources to safely manage some falls in NHs. 25.9% of fall-related transfers were potentially avoidable based on using root-cause analysis and discharge reports. Avoidability was associated to ED visit, compared to hospitalizations. Appropriate resources identified by stakeholders included timely access to outpatient services for diagnostic imaging (e.g., X-Ray) and clinical skills' training in suturing and wound care for registered or specialist nurses. Although NHs are striving for a home-like environment, better access to basic diagnostic and treatment services within NHs should be possible.

#### **Session 4480 (Symposium)**

##### **THE M. POWELL LAWTON AWARD LECTURE: THE PERSON-ENVIRONMENT FIT FRAMEWORK, OLDER ADULTS, AND TECHNOLOGY INTERACTIONS**

Chair: Debra Dobbs

The lecture will be given by the 2020 recipient, Sara Czaja, PhD, FGSA of Weill Cornell Medicine. The 2021 M. Powell Lawton Award recipient is David Roth, Phd, FGSA, of Johns Hopkins University. The M. Powell Lawton Award is presented annually to an individual who has made outstanding contributions from applied research that has benefited older people and their care. The Lawton Award is generously funded by the Polisher Research Institute of Abramson Senior Care.

##### **THE M. POWELL LAWTON AWARD LECTURE: THE PERSON-ENVIRONMENT FIT FRAMEWORK, OLDER ADULTS AND TECHNOLOGY INTERACTIONS**

Sara Czaja, *Weill Cornell Medicine/Center on Aging and Behavioral Research, New York, New York, United States*

M. Powell Lawton made significant contributions throughout his illustrious career to improve the quality of life of older adults. His landmark theory of person-environment fit (P-E Fit) recognized the importance of understanding the dynamic interactions between older adults and their physical and social environments and the subsequent impact of these interactions on independent living. In today's living environments, technology is ubiquitous and can serve as both a barrier and facilitator to the ability of older people to live independently. This presentation will discuss how the P-E Fit Model can be used to clarify potential mismatches between technology systems and the characteristics, abilities, and preferences of older adult and how it can be used to guide design and training interventions to maximize the ability of aging adults to interact successfully with technology systems. Examples will be drawn from the Center for Research and Education on Aging and Technology Enhancement (CREATE) in the domains of social engagement, work, and health from technology design and intervention perspectives. The CREATE conceptual framework, consistent with the P-E