from 134 Chinese dementia caregivers in New York City. Logistic regression models were conducted to test the associations between predisposing, enabling and need factors and the likelihoods of using tangible (home health aide, adult daycare, respite care), educational (lectures and workshops), and psychological (peer support groups and psychological counseling) services. Results: Consistent with prior literature, caregiver's knowledge about services, caring tasks, length of care and burden and care recipient's physical and cognitive deteriorations, were significantly associated with higher possibilities of using multiple types of services among these Chinese American dementia caregivers. Three sociocultural factors, including residing in Chinatowns, availability of alternative family caregivers and diagnosis of cognitive deterioration, were also associated with higher likelihoods of using educational or psychological services. Discussion and Implications: The findings extended the existing literature on service utilization of caregivers by highlighting the importance of distinguishing types of services and the necessity of considering sociocultural factors in future research and practice.

Session 2365 (Symposium)

AN INTERDISCIPLINARY COLLABORATION TO IMPROVE HYPERTENSION MEDICATION ADHERENCE FOR OLDER ADULTS

Chair: Jeannie Lee

Co-Chair: Wendy Rogers

Hypertension is highly prevalent in older adults (74.5% in ≥60 years) with dire consequences, and adherence to hypertension medications is low (approximately 50%). With increased smartphone use among older adults (81% for 60-69 years, 62% for ≥70 years), technology innovations can improve medication adherence. This symposium highlights the efforts of an innovative interdisciplinary team of experts (clinical, cognitive aging, human factors, health technology) to develop and implement the Medication Education, Decision Support, Reminding, and Monitoring (MEDSReM) system to improve hypertension medication adherence for older adults. MEDSReM is a theory-based, integrated mobile application (app) and companion web portal that educates, supports missed dose decisions, reminds, monitors adherence, and incorporates blood pressure feedback. In this symposium, we describe the interdisciplinary development efforts. Insel et al. will present the theory-based intervention, technology translation, and advancement of the MEDSReM system. Lee et al. will describe the interdisciplinary team and describe the work by the decision support subteam that created the medication formulary and generated an algorithm to guide missed-dose decisions based on pharmacology of aging. Rogers et al. will discuss the education subteam's development of educational information about hypertension, medications, and adherence for the MEDSReM system. Mitzner et al. will illustrate the instructional support subteam's efforts to ensure older adults can interact with both the smartphone app and online portal. Lastly, Hale et al. will describe the user testing subteam's usability processes including the integration of blood pressure self-monitoring. These efforts will provide insights for other interdisciplinary teams developing technology interventions for older adults.

FOUNDATIONAL BASIS FOR THE DEVELOPMENT OF MEDSREM

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Discovering a composite of measures of executive function/working memory predicted everyday medication adherence among older adults, led to the development of a behavioral intervention, the Multifaceted Prospective Memory Intervention (MPMI) to improve hypertension medication adherence. The intervention resulted in a 35% improvement in adherence compared to an active education and attention control condition. However, adherence slowly declined over an additional five months of adherence monitoring without the presence of interventionists in the home. We proposed that the use of technology might help individuals maintain the prospective memory strategies, resulting in sustained adherence. An interdisciplinary team was formed to translate the behavioral intervention to technology, resulting in the first version of the MEDSReM system. In this presentation we describe the evolution of the project, from the components of the successful MPMI to the design and initial testing of MEDSReM. These efforts provide general insights about translating interventions into technology tools.

INTERDISCIPLINARY TEAM FOR MEDSREM-2 AND DECISION SUPPORT THROUGH PHARMACOLOGY OF AGING PRINCIPLES

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The interdisciplinary team members with distinct and complementary expertise working collaboratively to advance MEDSReM to MEDSReM-2 will be introduced. The decision support functionality in MEDSReM-2 application (app) is to guide older users on making decisions about missed doses. MEDSReM-2 medication formulary was created to include safe hypertension medications for older adults. Pharmacology of aging, including Pharmacokinetic and Pharmacodynamic principles, along with published studies and expert peer reviews, were used to create an algorithm for safe window of time to take the missed medications. We will present the processes for developing the decision support algorithm for the MEDSReM-2 App and how this guide will be communicated to the users to inform their decision making about missed doses. Interdisciplinary collaboration including pharmacy, nursing, cognitive aging, and technology development that was crucial for designing and implementing decision support within the MEDSReM-2 app for older users will be shared.

DEVELOPING EDUCATIONAL MATERIALS TO SUPPORT OLDER ADULTS WITH HYPERTENSION MANAGEMENT

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