

C.S. JACELON, J.V.E. RIDGWAY, J. CHOI, M. ALKHAWALDEH. **Participatory development of ASSISTwell: A self-management application.** *Gerontechnology* 2016;15(suppl):128s; doi:10.4017/ gt.2016.15.s.660.00 **Purpose** New mobile systems developed with input on perceived usefulness<sup>1</sup> enhance function and improve older adults' ability to manage their chronic conditions. These systems use physiological, psychological, and sociological data to maximize older adults' abilities to manage their chronic conditions, activities, independent living, function, safety, and quality of life at home<sup>2</sup>. The systems store health management information, provide accurate and timely information to the user, and share reliable information with their healthcare providers. The purpose of this study was to develop an innovative mini-tablet-based application to enhance older adults' self-management of multiple chronic conditions. The application uses a functional approach based upon the World Health Organization's International Classification of Functioning, Disability, and Health (ICF)<sup>3</sup> that describes function as "...a dynamic interaction between health conditions and contextual factors, both personal and environmental"<sup>3p4</sup>. The ASSISTwell application includes monitoring and supporting health, activity, attitude, and autonomy of the individual and their relationships with others<sup>4</sup>. This goes beyond systems that monitor only physiological data. Our system focusses on daily function, not the underlying pathology. It fits in the individual's daily life, and will improve communication between the individual and his or her healthcare provider about daily self-management practices. Our long-term goal is to improve self-management in order to reduce the burden of managing chronic illnesses by helping older adults to effectively manage their chronic conditions, thereby avoiding hospitalization and institutionalization. This goal is consistent with the Healthy People 2020 goals for older adults<sup>5</sup>. **Method** Two focus groups<sup>6</sup> (12 women in their 70's and 80's) were conducted to provide input on the design of the system. During these focus groups, computer tablets with a prototype of ASSISTwell were given to the participants. The moderator guided the discussion to glean feedback on features of the design such as text size and font, user interface controls (e.g., buttons and menu items), and input and output modalities (i.e., text and audio/speech). Participants were asked to test the devices and engage in 'think aloud'<sup>7,8</sup> as they used the application. **Results & Discussion** Including older adults' during the design phase helped create an ASSISTwell that is an easy to use, tablet-based interactive program supporting an older adult's overall health. It prompts the user to engage in healthful behaviors<sup>4</sup>; responds to the user's interactions by recording, integrating, processing, analysing, and displaying information in a way that is useful to the user<sup>1</sup>; and stores and displays longitudinal data on health behaviors and goal attainment to the older adult and to their healthcare providers. ASSISTwell preserves the privacy, dignity, and autonomy of older adults and provides control over their health information to allow or deny access.

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**Keywords:** health, self-management, technology

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