THE DEPARTMENT OF ELECTRICAL & COMPUTER ENGINEERING SPEAKER SERIES

Using Smart Technology to Manage Chronic Disease



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Monday, 10/19, 9:55amZoom Meeting RoomMeeting ID: 950 7037 0614Passcode: 611172https://uofh.zoom.us/j/95070370614?pwd=ck5VU2t5UTRCL3pxbGZhUGxyM2d6UT09

LECTURE ABSTRACT

Approximately 60% of adults have one chronic disease and 40% have multiple chronic diseases. Chronic diseases such as heart disease, cancer, and diabetes are the leading causes of death and disability in the United States. These diseases increase with age where 80% of individuals over the age of 65 have one or more chronic diseases. Additionally, individuals are living longer with chronic disease due to improvements in management and treatment. In the U.S. in 2010, there were 40 million people over the age of 65 and by 2060, it is projected that there will be 95 million over the age of 65. With people living longer with chronic disease, we need smart information and communication technologies to relay the right information at the right time to the right person to prevent and detect health incidents, lower costs, enhance quality of care, and improve health outcomes. This talk will discuss the need for the use of technology used to self-manage chronic disease; and outline major issues and challenges with the use of technology in self-managing chronic disease.

SPEAKER BIOSKETCH

Dr. Constance Johnson is the Lee and J.D. Jamail Distinguished Professor, Maria C. and Christopher J. Pappas Family Distinguished Chair in Nursing, Associate Dean for Research and Chair of the Department of Research at the University of Texas Health Science Center at Houston, Cizik School of Nursing. She has joint appointment at the UTHealth School of Biomedical Informatics. Dr. Johnson earned her Bachelor's of Science in Nursing from the University of Connecticut and her Masters and PhD from the University of Texas Health Science Center at Houston, School of Biomedical Informatics. She is a health informaticist with interdisciplinary training in nursing and health informatics and specific training in human-computer interaction. Her research interests include: human-computer interaction and how presentation of information impacts health-related decisions in the area of chronic disease. Her career has been devoted to changing the way information is presented to clinicians and patients to improve the decision-making that impacts health. Her work in human-computer interaction has significantly contributed to a new vision using novel technological tools that assist patients to engage in the self-management of chronic illnesses. Her program of research is a result of years of experience in informatics, disease prevention and health promotion. As a Primary Investigator, she has received funding from the National Library of Medicine, the National Cancer Institute, the Agency for Health Care Research and Quality and the National Heart, Lung and Blood Institute. Dr. Johnson has numerous publications and presentations at national and international conferences and has mentored many doctoral students.

Please contact Dr. Rose Faghih (<u>rtfaghih@uh.edu</u>) to request further information.

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