Using a Human Factors Approach to Improve Health Equity: A Study in Understanding and Improving Communication with Patients with Language Barriers

Presented by:

Natalie (Nat) Benda
Department of Industrial and Systems Engineering; University of Buffalo

Nearly 9% of the United States population is not proficient in the English language. Patients with limited English proficiency face significant healthcare disparities related to the quality, safety, and satisfaction with the healthcare they receive. While these disparities have been well-documented over the past 30 years, little progress has been made to improve these inequities. A key gap is the lack of knowledge surrounding strategies different care providers and interpreters use to communicate with patients, and their relative effectiveness. This study addresses the gap by observing Spanish and English patients throughout their stay in the emergency room to understand how communication occurs. The results of these observations will then be validated by interviews and focus groups with key stakeholders. Methods from the field of human factors (specifically cognitive work analysis) are utilized to identify strategies used to communicate with the two groups of patients. Key themes from the observations include: complexity of interpreter service use throughout the entire patient stay, the ability of professional interpreters to anticipate and mitigate communication issues, professional interpreters serving as a navigator for the patient, and issues associated with using phone-based interpreter services. These findings and how they can be utilized to develop solutions that can improve communication with patients with language barriers will be further discussed.

About the Speaker:
Nat Benda is a PhD candidate in the department of Industrial and Systems Engineering at the University of Buffalo (Advisor: Dr. Ann Bisantz). She is also a Senior Research Fellow with MedStar’s National Center for Human Factors in Healthcare. Her work focuses on using a human factors approach to improve health equity. Nat has expertise in cognitive systems engineering in addition to extensive experience improving the safety and usability of health information technology design. She received a bachelor’s degree in industrial engineering from Purdue University and a master’s in industrial engineering from the University of Buffalo. She has received the National Science Foundation’s Graduate Research Fellowship program award, UB’s School of Engineering and Applied Sciences Dean’s Fellowship, and a grant from the Charles and Mary Latham Foundation to support her graduate work. She has also been recognized as a Student Member with Honors by the Human Factors in Ergonomics Society. Nat has several publications in high impact journals including Annals of Emergency Medicine and the Journal of the American Medical Association.