

Health Information Technology to Enable Chronic Illness Care

Maggie Ramirez, PhD

Assistant Professor

Department of Health Services

University of Washington

Abstract: We studied health information technology (IT) to control risk factors for diabetes complications in low-income Latino populations. While the application of health IT holds the promise of accelerating adoption of evidence-based care, studies report low usage rates for diabetes management. It is unclear what improvements are needed since factors known to influence technology use are rarely evaluated. To close the gap, we explored patient acceptance of diabetes management health IT. The first study evaluated an automated telephonic assessment system that called patients to assess depression – a high risk in patients with diabetes – and alerted providers to follow up with patients needing care. Study findings suggested design characteristics that can be incorporated in automated depression monitoring technology to improve patient acceptance. The second study elicited patient preferences for potential, evidence-based features of a text and voice messaging system to prompt physical activity and family support. Results identified which configurations of these features would be the most likely to gain patient acceptance. The third study compared different system configurations in a pilot study. Findings from mixed methods analyses showed that low-income Latino patients accepted health promotion using electronic communication. The study recommended ways to improve patients' receipt of and engagement with the messaging system. Overall, our research advanced the evaluation of health IT for diabetes management by focusing on the patient experience and identifying directions for improving their interaction with the technology.

Bio: Dr. Maggie Ramirez is an Assistant Professor in the Department of Health Services at the University of Washington, School of Public Health. She has a PhD in Industrial and Systems Engineering from the University of Southern California. Dr. Ramirez also completed a postdoctoral fellowship and an MS in Health Policy and Management at the UCLA Fielding School of Public Health. As a faculty member at the University of Washington, she was selected in the inaugural cohort of the CATALyST K12 Scholar Program, which trains early-career investigators in the innovative methods of learning health system science and patient-centered outcomes methodology. Dr. Ramirez is currently studying how to design, implement, and evaluate health IT to accelerate adoption of evidence-based care for elderly Latinos and their family caregivers.