SYMPOSIUM

Safety Events during an Automated Telephone Self-Management Support Intervention

Courtney R. Lyles, Ph.D.,[1] Dean Schillinger, M.D.,[1] Andrea Lopez, B.S.,[1]
Margaret Handley, Ph.D., M.P.H.,[1,2] Neda Ratanawongsa, M.D., M.P.H.,[1]
and Urmimala Sarkar, M.D., M.P.H.[1]

Abstract

Background:

Interactive health information technology (HIT) can support the complex self-management tasks for diabetes. However, less is known about between-visit interactions and patient safety among chronic illness patients treated in the outpatient setting.

Methods:

We classified 13 categories for safety events and potential safety events within a larger trial evaluating a multilingual automated telephone self-management support system for diabetes using interactive voice response. Participants could trigger safety concerns by reporting hyperglycemia or hypoglycemia, inability to obtain medications, medication nonadherence and side effects, and needing appointments and/or supplies. We then examined these triggers across patient demographic and health characteristics to determine which patients were most likely to experience safety events.

Results:

Overall, there were 360 safety triggers that occurred among 155 participants, which represented 53% of individuals and 7.6% of all automated calls over the 27-week intervention. The most common triggers were for pain or medication side effects (22%) and not checking blood sugars (13%). In adjusted models, race/ethnicity and language were related to safety triggers; Spanish-speaking participants were significantly ($p = .02$) more likely than English-speaking participants to experience a safety trigger, and black participants were marginally more likely ($p = .09$) than white participants to experience a safety trigger.

Conclusion:

About half of patients enrolled in a self-management technology intervention triggered at least one potential safety event over the course of the trial, and this was more frequent among some patients. Systems implementing HIT strategies to improve self-care and remote monitoring should consider specific program design elements to address these potential safety events.

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Author Affiliations: [1]Division of General Internal Medicine at San Francisco General Hospital, Center for Vulnerable Populations, University of California, San Francisco, San Francisco, California; and [2]Department of Epidemiology and Biostatistics, Division of Preventive Medicine and Public Health, University of California, San Francisco, San Francisco, California

Abbreviations: (HIT) health information technology

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Corresponding Author: Urmimala Sarkar, M.D., M.P.H., University of California, San Francisco, 1001 Potrero Ave., Building 10, Ward 13, Box 1364, San Francisco, CA 94110; email address *usarkar@medsfgh.ucsf.edu*