Delivery of automated text message reminders to improve medication adherence across two institutions: A pilot study

Presented by: Phat Luong MS

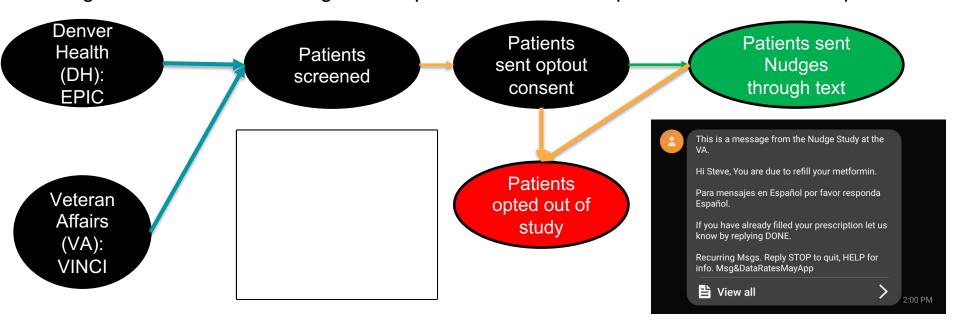
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MAIN FINDINGS:

- Sending automated interventional "Nudges" across two healthcare delivery systems is feasible and shows potential for improving medication adherence. Patient engagement with the Nudge messages suggests they resonate and that the messages show promise to impact CVD medication refill behavior. A large multi-site randomized trial to determine the impact of textbased "Nudges" on overall CVD morbidity and mortality should be further explored.
- It is possible to detect persons who haven't refilled medications across two large healthcare delivery systems.
- We successfully sent text message reminders to facilitate medication refills.
- Participant engagement with the system suggests it can clarify gaps in care.

INTRO/METHODS:

Many patients with cardiovascular disease (CVD) have suboptimal refill behavior. Imperfect refill behavior results in increased morbidity, mortality, and healthcare costs. We sought to improve refill behaviors by automating delivery of theoretically informed, engaging and persuasive text message reminders called "Nudges" to impact refill behavior in patients at two local hospitals.



RESULTS:

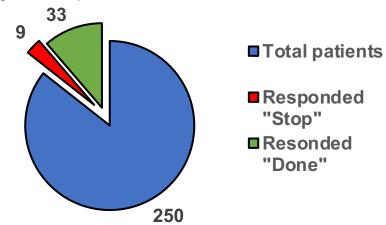
Medication re-fill rates following phase II enrollment

	Arm 1	Arm 2	Arm 3	Arm 4
Total N	50	53	52	52
N Medications Gapping at Baseline - Median (IQR)	2 (1, 3)	1 (1, 3)	1 (1, 2)	2 (1, 3)
Filled at Least 1 Gapping Medication	18.0% (9)	32.1% (17)	32.7% (17)	26.9% (14)
Filled All Gapping Medications	10.0% (5)	17.0% (9)	21.2% (11)	15.4% (8)

Arm 1= usual care arm, Arm 2= generic text message, Arm 3 Optimized Text messages, Arm 4= Optimized texts+ AI chatbot

Common Responses:

- "Who is this?"
- "I thought my medications were up to date"
- "Can you tell me which medications I'm late on?"
- "Mas informacion no se cual medicamento" (I need more information because I do not know what medications [I need]"
- "No se ha cambiado los medicamentos siguen los mismos" (I haven't changed medication—I'm still taking the same ones)
- Yano tengo el descuento por eso no e ido a pedir me medicina (I no longer have the medication discount and haven't gone to get my medication)



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Phat Luong, MS¹, Thomas Glorioso, MS², Gary Grunwald, PhD³, Pamela Peterson, MD, MPH, MSPH⁴, Larry Allen, MD³, Khanna Amber, MD³, Joy Waughtal, MPH⁵, Lisa Sandy, MA³, Michael Ho, MD¹ and Sheana Bull, PhD, MPH⁵, (1)Colorado School of Medicine, Aurora, CO, (2)Veterans Affairs Hospital, Aurora, CO, (3)University of Colorado at Denver, Aurora, CO, (4)Denver Health and Hospital Authority, Denver, CO, (5)Colorado School of Public Health, Aurora, CO



Principal Investigators
Michael Ho, MD, PhD

Professor of Medicine, University of Colorado Denver
Staff Cardiologist, Eastern Colorado Health Care (Veterans
Affairs)

Michael.Ho@cuanschutz.edu



Professional research assistant Joy Waughtal, MPH joy.waughtal@cuanschutz.edu



Sheana Bull, PhD, MPH
Director, mHealth Impact Laboratory
Professor, Colorado School of Public Health, University of
Colorado Denver

Sheana.Bull@cuanschutz.edu



Project Manager
Lisa Sandy, MA
Lisa.Sandy@@cuanschutz.edu



Denver Health Clinical Site Lead Pamela Peterson, MD, MSPH Pamela.Peterson@dhha.org



Lead analyst
Thomas Glorioso, MS
Thomas.glorioso@va.gov













