Closing the Equity Gap in Hospital-to-Home Care Transitions with Automated Post-Discharge Calls, Text Messages, and Tailored Outreach

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Background

The Care Transitions Outreach Program

Post-discharge calls are recommended as part of comprehensive care transitions programs, because they reduce patient anxiety and improve clinical outcomes.[1]

Since 2013, UCSF has deployed a hospital-wide automated, multilingual post-discharge phone call program as part of the Care Transitions Outreach Program (CTOP). Patient-reported post-discharge concerns are first identified via automated telephonic outreach. Patients who identify a concern receive a call from a nurse to provide symptom triage, teaching, care coordination, and referrals to social work, pharmacy, and/or patient relations.

For certain 'at-risk' patients who fail to answer the automated call, a nurse screens and manually calls those who have not already been contacted by another clinician.

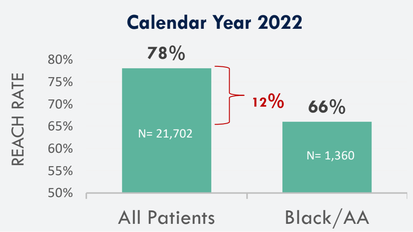
Manual Outreach Criteria

- Age 85 years and older
- Primary language other than English
- Home health ordered at discharge

Disparity in Reach Rates

While post-discharge phone calls are a best practice, they are resource-intensive and may not reach patients equitably. Studies have shown that adding a text message option to post-discharge programs can increase post-discharge follow-up in surgical and established primary care patients, but this approach has not been tested in other at-risk populations.[2-3]

In 2022, CTOP called ~27,000 patients, reaching 78% of all patients. Black and/or African American (B/AA) patients had a markedly lower 66% reach rate.



Objectives

We aimed to test our hypothesis that patients who do not engage with the automated call might be more likely to respond to other forms of outreach.

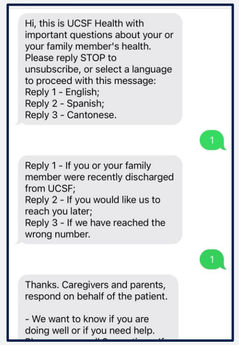
To improve overall reach rates and to address the identified inequity, we developed a tailored outreach escalation approach.

Methods

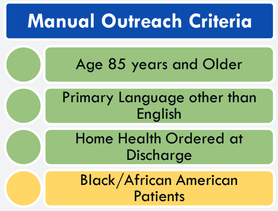
Step 1: Designed and integrated a text message option with the same questions as the automated call and translated into the same languages.

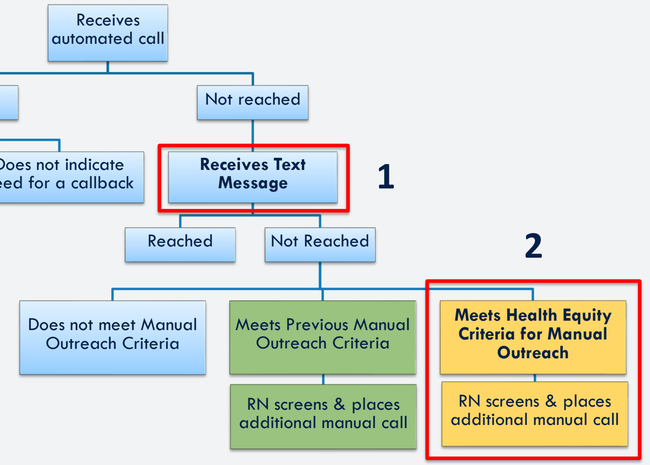
Step 2: Leveraged existing process for screening and calling unreached patients, adding health equity criterion for manual outreach to Black/AA patients

Step 1: Text Message Option



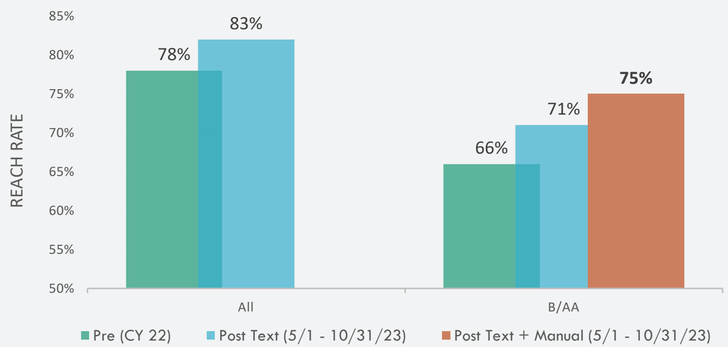
Step 2: Manual Outreach





Results

Impact of Text & Manual Outreach Interventions on Reach Rates



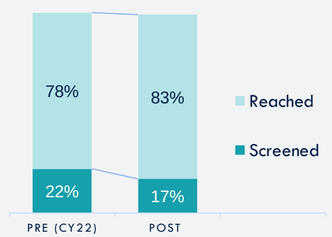
Overall Reach Rate

Adding text messages increased the overall reach rate 5%

Black/AA Reach Rate

For Black/AA patients, adding text messages increased the reach rate 5%. Adding a personal call further increased the reach from 71% to 75%

Impact of Increased Reach Rate on Screening Volume



Efficiency

Increasing overall reach rate with text messages reduced the volume needing to be screened for manual outreach (by ~ 1,400 patients annually).

This created capacity to screen and call all unreached Black/AA patients, without requiring additional RN hours.

Conclusions

- Patients were more likely to engage with the post-discharge follow-up program if they were sent a text message in addition to the automated phone calls.
- Black/AA patients were more likely to engage with the program if they received a manual call from a nurse.
- While the text message option increased engagement overall, manual calls were required to improve equitable engagement.
- Operational efficiency afforded by leveraging technology created a sustainable intervention to continue addressing the reach rate disparity

References

1. Shupe, R. (2014). Post-visit phone calls: Reducing preventable readmissions and improving the patient experience. Journal of Nursing Education and Practice. 4. 10.5430/jnep.v4n4p45.
2. Leconte, D., Beloeil, H., Dreano, T., & Ecoffey, C. (2019). Post Ambulatory Discharge Follow-up Using Automated Text Messaging. Journal of medical systems, 43(7), 217. https://doi.org/10.1007/s10916-019-1278-5
3. Bressman E, Long JA, Honig K, et al. Evaluation of an Automated Text Message–Based Program to Reduce Use of Acute Health Care Resources After Hospital Discharge. JAMA Netw Open. 2022;5(10):e2238293. doi:10.1001/jamanetworkopen.2022.38293