mPulse
mobile

CASE STUDY

Conversational Text Messaging Improves Pre-Procedure Preparation

Absent patients during scheduled procedures is a major challenge that causes increased costs and creates additional strain on the health system.[1] Studies show that no-show rates for procedures like colonoscopies can range from 27–40%.

A range of factors cause no-shows and no-goes, including forgetting the appointment and more complex factors like anxiety or incorrect preparation. When patients miss procedures and screenings, they not only cause a high increase in pre-procedural costs such as staff scheduling and equipment procurement but are also subject to longer wait times, and the patient ultimately does not receive the care they need.[2]

Goals

After seeing success with mPulse across a range of other solutions, the IDN sought to reduce the number of members who are absent for colonoscopies and pulmonary function tests (PFT) and improve the member experience. The care organization assessed automated conversational messaging to provide the guidance and pre-procedural instructions needed, and reduce support required from care staff. The impact of the solution would be measured by the no-show rate for screening procedures, and a patient satisfaction survey to measure the experience.

Execution

The IDN implemented mPulse mobile's Procedure Compliance Solution which was configured for colonoscopy and PFT procedures. During the assessment period 23,000 automated touchpoints were delivered to patients using text conversations and starting at least 4 days prior to the scheduled procedure. A prior opt-in approach based on member preferences was leveraged to maximize reach. The solution leveraged natural language understanding (NLU) to create a more engaging experience and to respond to patient messages.

The automated conversations helped members navigate preparatory steps and were targeted to alleviate member concerns around upcoming procedures. Appointment reminders and key information about transportation and fasting were proactively sent to members on a scheduled cadence to improve preparation and reduce late cancellations and no-shows. Patients were proactively asked questions on how nervous they were and any issues that may create barriers to attending the procedure. The solution's automated conversational capabilities provided tailored replies with appropriate content to address concerns and connect worried patients to resources.

Results

For both the colonoscopy and PFT procedures, the mPulse solution drove significant improvement in no-show/cancellation rates. For PFTs, the patient no-show rate dropped 7 percentage points (from 15.3% to 8.5%) after the introduction of the solution. For colonoscopies, the no-show rate dropped 3 percentage points. Because more patients were present for procedures and fewer appointments with trained staff were cancelled, the IDN reported an annual cost savings of over $110,000.00 per site. Results from satisfaction surveys delivered to patients after engaging with the solution were very high for both procedure types, with over 75% of patients rating the solution as 5 on a 1-5 rating system.

The conversational messages also provided the IDN with key insights about patient concerns regarding scheduled procedures. Of the colonoscopy patients, 7% said they were nervous about the upcoming procedure and received additional information on resources and supportive messaging. In the PFT population, 30% of patients said they were nervous and received additional follow-up messages to address concerns. A key insight during this study was the value of a two-way conversational solution, rather than sending a sequence of appointment reminders only. Because patients were able to express their concerns and fears about their upcoming procedure, the solution's NLU was able to process responses and ensure patients were armed with the information and resources needed to feel confident to attend their procedure.

Conclusion

The study demonstrated mPulse's Procedure Compliance Solution can provide the high touch support needed to prepare patients for screening procedures. The solution created efficiencies by reducing no show rates and reducing the amount of involvement required from care staff, for a significant ROI. The study demonstrated NLU was effective at uncovering barriers and identifying members who were showing signs of anxiousness and in need of additional support. Importantly, patients considered the solution to be extremely positive experience, which indicates use of intelligent automated conversations is an effective approach to patient engagement.

STUDY RESULTS

7pp
DECREASE IN NO-SHOW RATE FOR RECOMMENDED PFT PROCEDURES

3pp
REDUCTION IN COLONOSCOPY PROCEDURAL NO-SHOW/CANCELATIONS

72%
OF MEMBERS RATED THEIR VISIT A 5 ON A SATISFACTION SCALE OF 1-5

5,000
CONVERSATIONS VIA PROCEDURE COMPLIANCE SOLUTION PROGRAM

$110k
ANNUAL COST SAVINGS PER SITE

References

1. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4589132/

2. https://www.cghjournal.org/article/S1542-3565(15)01127-1/pdf

About mPulse Mobile

mPulse Mobile, the leader in Conversational AI solutions for the healthcare industry, drives improved health outcomes and business efficiencies by engaging individuals with tailored and meaningful dialogue. mPulse Mobile combines behavioral science, analytics and industry expertise that helps healthcare organizations activate their consumers to adopt healthy behaviors.

With over a decade of experience,100+ healthcare customers and more than 300 million conversations annually, mPulse Mobile has the data, the expertise and the solutions to drive healthy behavior change.

To ask a question or request a call, go to: mpulsemobile.com/contact

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