Initial Patient Feedback on a Digitally Driven Radiology Navigation Project to Provide Pre-test Information

Shrawan Patel, MD1, James Sheehan2, Shashank Garg, MS3, Sarthak Kakkar, MS3, Mary Ellen Pappas2, Gary Biasucci3, Andy Pfau, JD3, Matthew Zawalich3, David Facchini, MBA3, Cera Jaffe1, Ashish Atreja, MD MPH3, Melody Burgo, MBBS MHA1, Natalie Bishop, MPH1, Jay Pahade, MD4
1Rx.Health, New York, NY, USA; 2Yale New Haven Hospital, New Haven, CT, USA; 3Ichan School of Medicine at Mount Sinai, New York, NY, USA; 4Yale School of Medicine & Yale New Haven Hospital, New Haven, CT, USA

Background

Despite desiring imaging examination information, over 20% of patients receive no explanatory information1. The Department of Radiology at a tertiary referral center sought to change this through an innovative pilot project. A SMS (cellular texting) based Digital Navigation Program (DNP) was created to provide patients with relevant pre-test information. The specific content to be relayed was designed using patient and patient advocate feedback, however, it was noted that little published information existed on many patient preferences regarding these types of SMS programs.

Objectives

To compare patient preference for shorter individual message length with increased touch points versus longer message length with fewer touch points utilizing Net Promoter Score (NPS) scaled from 0-10 (unlikely to extremely likely).

Methodology

Rx.Health’s RxUniverse platform delivered tailored DNPs for all adult outpatient MRI scans (220+ scan types) across 6 locations. Each DNP included information such as what to expect before and during each scan, and 2 patient cohorts (Split content vs Consolidated content) were assessed. The substance of the content delivered was identical in both cohorts with the only difference being whether the DNP messages were short in length, and delivered as 5 separate messages over 4 days (split content) or 3 longer combined messages delivered over 4 days (consolidated content). Patient satisfaction was calculated for each cohort using NPS collected via SMS and compared using a Chi-Squared test. Inclusion criteria included a quantified patient response (e.g. “10”, “10 extremely likely”). Unquantifiable qualitative responses were excluded from analysis (e.g. “Very good”).

Results

A total of 3632 patients interacted with the DNP and 957 patient NPS responses were included for analysis – 781 responses to the split content and 176 responses to the consolidated content. A significant NPS difference was noted between the split content cohort (61) vs consolidated content cohort (66) (p=0.017). Also of note a 37% relative reduction (14.47% vs 9.09%) of detractor scores (patient scores 0-6) was seen in the consolidated content cohort vs split content cohort (Figure 1).

![Figure 1. Change in patient NPS detractor responses: Split Content vs Consolidated Content.](image)

Conclusion

From the results seen we conclude that when interacting with DNPs there is an apparent patient preference towards longer and fewer messages. Additional work will need to be performed to explore further details such as any differences in NPS responses by scan type and whether the findings are unique to the radiology setting or are replicated in other specialty areas.

References