Assessing the Impact of myHealth Rewards Enrollment Emails (NCT03965754)

Study Protocol with Statistical Analysis Plan

August 27, 2020

Study Protocol

Purpose

The purpose of the study was to evaluate, prospectively, the potential impact of different email message conditions (no email, standard promotional email, social norms, and loss frame) on enrollment in a wellness program (myHealth Rewards) by Geisinger Health Plan (GHP) members. The current study was developed to test whether different versions of emails were more effective than a standard reminder email or no-email condition in increasing myHealth Rewards login and enrollment rates. It was hypothesized that, on average, each of the emails would increase enrollment compared with no email.

Methods

Sample

The population consisted of adult (age 18 and older) Geisinger employees who were eligible for the myHealth Rewards program. This group also included people who were employees but not GHP members. As long as the employee was eligible for GHP and the mHR program benefit, they can sign up for the program. The goal of the mHR program is to reach all employees who can or potentially can benefit from the program. With this inclusion criteria, if employees who are not GHP members later decide to get a GHP plan, they will be able to benefit from any rewards gained from participating in the program. We excluded non-employee spouses and domestic partners (as they could not benefit from the program), employees who had already registered for mHR in 2019, up through May 6, 2019, and new Geisinger employees hired between December 1, 2018 and May 6, 2019.

We also excluded existing Geisinger employees who transitioned from non-subscribers in 2018 to subscribers in 2019; i.e., these employees could not be included clearly with those who "never enrolled" (because they did not have an opportunity to enroll in 2018 for a monetary incentive), nor could they be included with those who "previously enrolled," even though they were likely similar to this latter group in terms of willingness.

After exclusions, there were 5,697 GHP members eligible for the study, with 2,967 having been enrolled previously and 2,730 never having been previously enrolled. In each of these subgroups, employees were randomly assigned to one of the four email conditions. See Table 1 for sample sizes for all three studies and their conditions.

Control and experimental conditions

No Email. From the start of the study, employees in the no-email group did not receive any communication related to mHR for at least seven days. This group served as the passive control group.

Standard Email. The standard email had the subject line “Are you still planning to join myHealth Rewards?” It mentioned the average premium savings, the speed and ease of starting the enrollment process, and the deadline for registering and having health measures on file. The standard email also provided two button links for registering and finding free health screenings where health measures could be collected and registered at one convenient time and location. This group served as the active control group.

The other emails contained and built upon all of the same information included in the standard email.

Social norms email. The social norms email had the subject line “Don't miss your chance to join in!” It noted that a majority of employees' colleagues had enrolled previously, provided a testimonial from a Geisinger medical director, and emphasized the simplicity and ease of taking the first step toward enrollment.

This intervention introduced recipients to descriptive social norms specifying that a majority of their colleagues (78%) had enrolled in the same program in 2018, which set a normative standard against which recipients were expected to compare themselves and to change their behavior accordingly (i.e., when they realized that their behaviors were discrepant from those of relevant others). The personal endorsement from a medical director at Geisinger's Commonwealth School of Medicine—stating the ways in which the mHR program helped that doctor personally—presented an exemplar that was intended to further enhance the effect of the social norms with an implicit indication that the behavior was desirable and feasible.

Loss frame email. The loss frame email had the subject line “Why are you throwing away $2,113?” It suggested that employees were currently "throwing away" a precise dollar amount by not participating and that they could therefore avoid missing out on substantial gains (i.e., savings) by taking action.

This intervention framed the status quo as a state from which recipients, via inaction, were slated to forfeit a sizable and precise monetary amount ($2,113; i.e., the total annual premium savings realized by successful enrollees in the family plan) to which they should otherwise feel entitled (via loss aversion and the endowment effect). People tend to be risk-seeking in the domain of losses; therefore, this intervention was hypothesized to increase enrollment via employees’ hopes of achieving zero loss by meeting program goals, as opposed to a sure loss via inaction.

Outcome measures

The outcome measures were (1) enrollment in the mHR program and (2) clicking on the link to the mHR program website portal. Both measures were binary and measured within 7 full

days of the beginning of the intervention (i.e., when the emails were first sent). The study period was from the morning of May 7 through the end of May 13, 2019.

Enrollment was the ultimate outcome of interest, since it reflected the terminal behavior that could lead to savings and health outcomes improvements. However, clicks were also of interest, in that they represented a more proximal measure of the impact of the experimental conditions on behavior.

Statistical Analysis Plan

We conducted separate, parallel analyses for those who previously participated and never participated in the program. Binary logistic generalized linear models (GLMs) were used to analyze (1) enrollment and (2) click rates as a function of experimental condition, with the standard email group as a reference group for both outcomes and the no-email group as an additional reference group for enrollment. We could not compare clicks to the no-email group, as employees need to receive an email to click on the link. Odds ratios (ORs) were calculated, along with 95% confidence intervals (CIs); two-tailed *p*-values < 0.05 were used to determine statistical significance. To represent effect size, the standardized statistic, Cohen's *d*, was estimated using the formula $LogOddsRatio \times \sqrt{3}/\pi$ (Hasselblad & Hedges, 1995). Raw percentages with 95% CIs were also presented in graphs. All analyses were conducted in R.