

Federal Health Insurance Marketplace Enrollment Emails

Email framing impacts open and click rates, but does not have a detectable effect on health insurance enrollment

Agency Objective. Assist uninsured Americans with completing their health insurance application by sending behaviorally designed emails prior to the deadline for open enrollment.

Background. During the Open Enrollment Period, qualifying individuals and families can purchase health insurance plans through the Federal Health Insurance Marketplace (FHIM).⁵² For the 2015 enrollment season, the close of open enrollment was February 15, 2015. As of early February 2015, millions of people had visited HealthCare.gov and started an online account, but had not yet submitted an application and selected a plan. The Department of Health and Human Services (HHS), in collaboration with SBST, developed, sent, and tested variations of emails to assist these individuals with completing their insurance application in time.

Methods. Many trials were run; we report here on a small number of trials that we selected before results were inspected. In a trial using deadline framing, three days before the open enrollment deadline, individuals who had registered for a HealthCare.gov user account but not yet enrolled in an insurance plan were randomly assigned to be sent one of two email variants encouraging them to enroll ($n = 7,318,780$).⁵³ The email variants framed the time left until the deadline either as “3 days” (emphasizing numerical nearness) or “72 hours” (emphasizing deadline urgency) in the email subject and body. All other content in the email about how to enroll was held constant across both email variants.

In a trial using different framing of progress toward the goal of enrolling in an insurance

plan,⁵⁴ individuals were randomly assigned to receive an email with one of two progress tracker graphics to mark the steps involved and the individual's progress towards picking an insurance plan ($n = 95,311$). All recipients are placed at the “Pick a Plan” step, but were randomly assigned for that step to be placed either in the middle or at the last step of the tracker graphic, varying the recipient's perception of their progress towards picking a plan.

In two trials focused on individual and social motivations, content which cued personal responsibility was compared to content which cued responsibility to family. In one iteration, individuals were randomly assigned to receive either an email with personal motivations (“Do it for yourself: Submit your application”) or a generic control (“Your application is ready for review”) message in the body of the email. In the second iteration, individuals were randomly assigned to receive an email emphasizing either personal or family benefits in the email subject and body (“Benefits for you” and “Protect yourself,” compared to “Benefits for your family” and “Protect yourself and your family”).

Results. In the deadline framing trial, 7.74 percent of individuals who received the 3 days framing opened the email, and 0.59 percent clicked through. For individuals who received the 72 hours framing, 8.00 percent opened the email (difference = 0.26 p.p., $p < 0.01$, 95% CI [0.22, 0.30]) and 0.66 percent clicked through (difference = 0.06 p.p., $p < 0.01$, 95% CI [0.05, 0.07]). By the February 15 deadline, 0.03 percent of individuals in each group had enrolled in insurance, with no statistically significant difference from the two framings (difference < 0.01 p.p., $p = 0.95$, 95% CI [0.00, 0.00]).

⁵² For more information on the FHIM, including the Open Enrollment Period, see www.healthcare.gov.

⁵³ The 7,318,780 individuals were divided into six similarly-sized subgroups, based on how much information they had entered into their HealthCare.gov account. Within each subgroup, individuals were randomly assigned to one of the two email variants.

⁵⁴ Clark L. Hull, “The Goal-Gradient Hypothesis and Maze Learning,” *Psychological Review* 39.1 (1932): 25-43.

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In the goal progress trial, there were no significant effects on open or click rates of varying individuals' perception of progress towards picking a plan. Consistent with the findings on deadline framing, we do not observe meaningful differences in enrollment: enrollment was 0.16 percent in the "middle step" group, compared to 0.14 percent in the "last step" group (difference < 0.01 p.p., $p=0.51$, 95% CI [-0.03, 0.07]).

In the first personal motivations trial, individuals who received the personal motivation email had lower open and click rates than individuals who received the generic control email. Open rates were 13.84 and 14.67 percent, respectively (difference = 0.83 p.p., $p < 0.01$, 95% CI [0.72, 0.94]). Click-through rates were 1.61 and 2.14 percent, respectively (difference = 0.53 p.p., $p < 0.01$, 95% CI [0.48, 0.57,]). Differences in enrollment rates could not be precisely estimated, with 0.03 percent enrollment in each group (difference < 0.01 p.p., $p = 0.17$, 95% CI [0.00, 0.01]).

In the second personal motivations trial, individuals who received the personal motivation

email had higher open rates than individuals who received the family motivation email: 12.36 percent compared to 11.73 percent (difference = 0.63 p.p., $p < 0.01$, 95% CI [0.50, 0.77]). There was no detectable effect on click rates between the groups (difference = 0.01 p.p., $p = 0.70$, 95% CI [-0.02, 0.04]). Enrollment rates were 0.014 percent and 0.008 percent in the personal and family motivation groups, respectively (difference = 0.006 p.p., $p < 0.01$, 95% CI [0.00, 0.01]), a statistically significant difference though small in magnitude.

Conclusions. Variations in framing an email about health insurance enrollment—hours until deadline rather than days; generic email rather than personal motivation; personal motivation rather than family motivation—can make individuals more likely to open their email and click through. However, even precisely estimated differences in open and click rates do not translate into large differences in health insurance enrollment rates, which may reflect some of the limitations of email campaigns. That is, email may have a limited impact on behaviors like enrollment.

Test / Group	Open (p.p.)	Click (p.p.)	Enroll (p.p.)	N
Deadline Framing				
3 days	7.74	0.59	0.03	3,659,230
72 hours	8.00	0.66	0.03	3,659,550
Difference	-0.26***	-0.06***	0.00	
p-value	p=0.0000	p=0.0000	p=0.9501	
95% CI	[-0.30,-0.22]	[-0.07,-0.05]	[-0.00,-0.00]	
Goal Progress				
Middle step	15.42	1.75	0.16	47,711
Last step	15.79	1.68	0.14	47,600
Difference	-0.38	0.01	0.00	
p-value	p=0.1095	p=0.4235	p=0.5106	
95% CI	[-0.84,0.08]	-0.10,0.23	[-0.03,0.07]	
Personal Motivations				
Personal motivation	13.84	1.61	0.03	743,522
Generic control	14.67	2.14	0.03	743,609
Difference	-0.83***	-0.53***	0.00	
p-value	p=0.0000	p=0.0000	p=0.1706	
95% CI	[-0.94,-0.72]	[-0.57,-0.48]	[-0.01,0.00]	
Personal motivation	12.36	0.60	0.01	472,257
Family motivation	11.73	0.59	0.00	471,910
Difference	0.63***	0.01	0.01***	
p-value	p=0.0000	p=0.6987	p=0.0051	
95% CI	[0.50,0.77]	[-0.02,0.04]	[0.00,0.01]	

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Notes: For each of the three sets of trials described above, the table shows levels and differences across treatment conditions for three outcomes: email open rates, click rates, and enrollment rates. * $p < 0.10$; ** $p < 0.05$; *** $p < 0.01$