

MOTIVATING BLOOD DONORS THROUGH PHONE REMINDERS: EVIDENCE FROM A LONG-TERM RANDOMIZED EVALUATION

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Mobilizing blood donors in times of temporary shortages is a common problem for many blood donation services. It has become more common to use phone calls and reminders to increase turnout among blood donors. Yet, the short-term and long-term effects of such strategies are largely unknown. Phone reminders seem to increase short-term turnout, but nothing is known about its long-term effects. Theory offers little guidance, as theories offer conflicting predictions: some theories predict positive long-term effects of nudging individuals to donate, other predict negative long-term consequences for donor motivation.

We perform a two-year randomized evaluation that allows us to examine how phone reminders affect donor motivation in the short-run and long-run, and to quantify the extent of heterogeneity in behavioral reactions to the interventions. We estimate a finite-mixture model that allows us to estimate heterogeneous treatment effects. Identification is particularly powerful in our application, as we have panel data over several invitation for each donor.

We find strong evidence on behavioral heterogeneity with sharply different behavioral responses. Information criteria show that there are two distinct behavioral types (not more and not less). We find that individuals are of one of two types: Approximately 65% of all individuals have a low baseline of attending a blood drive, but react positively and strongly to phone reminders: it raises their propensity to donate by approximately 5 %-points. It also raises their propensity to donate on the next invitation by almost the same magnitude. Thus, the long-run benefits for this group of individuals are almost twice the short-run benefits. However, the remaining 35% of donors react differently to the phone reminders: they have a strong response to the reminder and much more likely to show up when reminded. However, it reduces their future tendency to donate significantly.

Our results show that donor motivation is complex and heterogeneous. Modern statistical techniques are necessary to identify them. The results have practical implication for the optimal application of phone reminders: the statistical model allows one to predict a donor's type with high accuracy and thus to use the resources in the targeting of the donors optimally.