

Flu Shot Vaccination Mega-experiment

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BCFG Introduction

Co-directed by Kathrine Milkman and Angela Duckworth, the Behavior Change for Good Initiative unites a world-class, interdisciplinary team of academic experts with leading organizational partners to help advance the science and practice of behavior change. The initiative identify what works at scale by conducting mega-studies (massive random-assignment A/B tests), in which we simultaneously test Scientific Team's best ideas for changing a target behavior.

2020 FALL Flu Shot Mega-experiment

An array of studies will be run simultaneously in the experiment testing how to **boost flu shot adoption**. The individual studies that comprise the mega-study will be designed by behavioral science experts from the University of Pennsylvania's Behavior Change for Good Scientific Team, the Penn Medicine Nudge Unit, Walmart, and the Geisinger Behavior Insights Team .

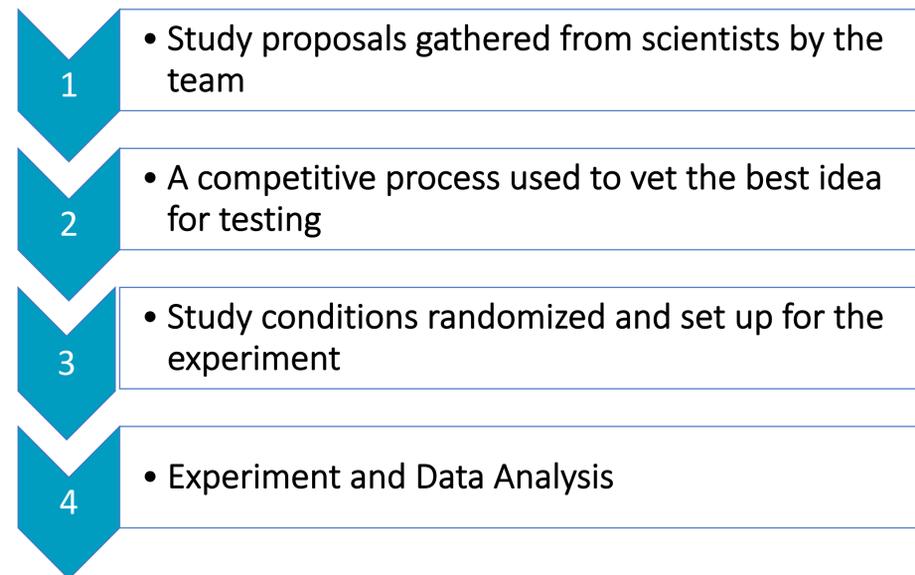
Research Aims

1. Identify which persuasion tactics cost effectively increase flu vaccination rates.
2. Find out which tactics are most effective for different patient subgroups (e.g., based on age, gender, race).

Covid-19 Application

- This mega-experiment is the largest study of its kind to inform how to encourage vaccination uptake.
- Insights can then be applied to boost COVID-19 vaccination rates once a vaccine becomes available, particularly among at-risk groups.

Experiment Design/Process



Condition Features

- All intervention content will be delivered via **text messages** sent to patients prior to their scheduled appointment
- The text message interventions may vary the **timing** and **content of communication** (including whether they are interactive and/or provide links to web-based experiences) as well as the incentives offered for receiving the flu shot.
- Each study will be self-contained with its own comparison conditions so it could be analyzed in isolation, but all study conditions will be **randomized simultaneously**.

Study Examples and Hypothesis

- **Prosocial Behavior:** giving prosocial reasons for vaccinating (protecting loved ones; preserving scarce resources), or both to increase flu vaccination
- **Just-in-time Reminder:** Informed flu vaccine text reminders sent immediately before a patient's healthcare appointment to increase vaccination rates.
- **Using Comedy:** Reminders that use affiliative humor (i.e., comedy that people intend to share with others) will lead to more patients getting a flu shot



- **Reverse Inference:** Highlighting that vaccinated Americans are healthier, wealthier, and more educated to increase flu shot planning and uptake as recipients will attribute the favorable social statuses to vaccination
- **Intergroup Competition:** Framing immunization as a cooperative behavior towards your group and increasing between-group competition via comparison to an outgroup to boost vaccination.

Sample Message Screenshot

Micah, this is a message from Penn Medicine about your upcoming appointment. Text & data rates apply. Reply stop to opt out at any time. It's flu season. Remember the last time you got sick? It probably interrupted your plans and wasn't much fun.

Josephgy, this is a message from Penn Medicine about your upcoming appointment. Text & data rates apply. Reply stop to opt out at any time. You have an appt w/ Dr. Moriarty on 29-Aug at 11:58AM & it's flu season. A flu vaccine is available for you. Protect yourself & your family's health! Look out for a vaccine reminder message before your appt. You can opt out of a reminder by texting back OPT OUT.