# Increasing Visits to Vaccines.gov

## *Variations in an ad campaign to drive website traffic*

**Agency Objective** To determine the relative effectiveness of different messaging to increase site visits to a Vaccines.gov page that informs pregnant women of the vaccines recommended during pregnancy.

**Background** As part of developing a national maternal immunization program, the National Vaccine Advisory Committee, which advises the Director of the National Vaccine Program at the Department of Health and Human Services, identified five major areas to strengthen maternal immunization programs and increase uptake of recommended vaccines among pregnant women. The first recommendation focuses on enhancing communications on the topic, and specifically to use "current and newly emerging communication tools to maximize the effectiveness and reach of communication efforts addressing the clinical benefits of maternal immunization."[1] As such, the National Vaccine Program Office (NVPO) developed an advertising campaign aimed at increasing site visits to Vaccines.gov, an informational website operated by NVPO.

**Program Change** The Office of Evaluation Sciences (OES) worked with NVPO to craft variations of a Facebook ad that targeted pregnant Facebook users. The ads informed users that "Getting vaccines during pregnancy is the best way to protect [expecting moms and their] babies from getting the flu and whooping cough." The ad also provided a link to a Vaccines.gov page that provides information about the types of vaccines recommended for pregnant women and when each vaccine is recommended during the pregnancy, and provided a calendar widget to set a reminder of when to get vaccinated.

Four variations of the ad were developed, in which the text and image both varied to focus on either the baby only, or the baby and expecting mom. The four conditions were: (1) Baby-only message with baby-only image, (2) Mom and baby message with baby-only image, (3) Baby-only message with mom and baby image, and (4) Mom and baby message with mom and baby image.

NVPO contracted a marketing vendor to purchase digital ads on Facebook. The ads were targeted at women ages 20-34 whom Facebook identified as interested in certain pregnancy-related groups and businesses.

**Evaluation Methods** Facebook users were randomly assigned to one of the four conditions based on their zip code. The two-by-two design allows comparisons across each of the four groups, across text variations or image variations, or across congruent and incongruent ads (i.e., where the text and the image align).

The digital ad campaign ran until it reached 250,000 impressions per condition. Impressions are the point in which an ad is viewed once by a visitor, or displayed once on a web page. The 1,000,000 impressions across four conditions were reached in roughly two weeks.


[1] The National Vaccine Advisory Committee: Reducing Patient and Provider Barriers to Maternal Immunizations: Approved by the National Vaccine Advisory Committee on June 11, 2014. (2015). *Public Health Reports*, *130*(1), 10–42.

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The primary outcome is the click-through rate (clicks per impression) and unique click-through rate (clicks per reach or individual) between the congruent conditions, Condition 1 with baby-only messaging and image, and Condition 4 with baby and mom message and image. Secondarily, we analyzed user behavior on the Vaccines.gov website using Google Analytics.

**Results** We did not observe any statistically significant differences between the ad variations. The difference between click-through rates for Condition 1 and Condition 4 is not statistically significant (p=(0.8795), 95% CI [-0.00026, 0.00021]). Similarly, the difference between unique click-through rates is not statistically significant (p=(0.667), 95% CI [-0.0005, 0.00031]). Both Condition 1 and Condition 4 have a click-through rate of 0.16.

**Conclusion** The low click-through rates for this public health Facebook ad campaign made it particularly unlikely that we would detect differences between ad variations. Future work to determine the relative effectiveness of baby- or baby and expecting mom-centered messaging to encourage vaccine uptake among pregnant women may be better addressed in other settings.