

Antibiotic Use Campaign: Round 2 (R2) Concept/Materials Testing with Health Care Professionals

Attachment 1. Project Description and Burden

Project Description

Each year in the United States, at least 2 million people become infected with antibiotic-resistant bacteria and 23,000 of these individuals die as a result of their infections. Antibiotic resistance—the ability of microbes to resist the effects of an antibiotic—is a specific type of drug resistance caused in part by improper antibiotic prescribing by HCPs and the overuse of antibiotics by consumers. Antibiotics are among the most commonly prescribed medications, yet at least 30 percent are unnecessary, and even more are likely to be inappropriate when antibiotics are prescribed for the wrong drug, dose, or duration. Many bacteria have now become resistant to more than one type or class of antibiotic. Widespread overprescribing and inappropriate use of antibiotics is fueling resistance that compromises the effectiveness of these drugs in the future.

In 2003, CDC launched its *Get Smart* campaign as an effort to improve antibiotic prescribing and use in primary care settings. The campaign used a two-pronged approach of educating both healthcare professionals (HCPs) and parents about appropriate antibiotic use. In 2010, the program expanded to include educational materials for inpatient medical settings, such as hospitals and nursing homes.

Since its launch in 2003, the *Get Smart* campaign has been at the forefront of successful education efforts to reduce inappropriate prescribing and overuse. However, this looming public health crisis continues to grow as drug-resistant microbes evolve and more drugs in our supply lose their effectiveness against them. In response, CDC is launching a reinvigorated campaign in November 2017, with highly targeted, well-tested messages and creative strategies. The campaign will be a fully integrated national program designed to reach defined target audiences through many channels and tactics for the broadest reach and the most meaningful and effective impact.

CDC requests approval to test creative concepts developed on the basis of findings from a first round of research conducted. This information collection is necessary to update CDC's *Get Smart* campaign such that it appeals to and meets the needs of its intended audiences. Findings will be used to finalize campaign materials on the basis of feedback and preferences of the consumer and HCP audiences it will target. Ultimately, the campaign will increase consumer knowledge about appropriate antibiotic use, confidence that they can feel better without an antibiotic, awareness of the consequences of inappropriate antibiotic use, and confidence in their ability to talk to their HCP about appropriate use. In addition, the campaign will increase HCP awareness of the consequences of inappropriate prescribing, awareness of how to increase patient satisfaction without prescribing antibiotics when they are unnecessary, confidence to effectively communicate when antibiotics are needed, and awareness of vital importance of reassessing antibiotic therapy (hospitalists).

The campaign aims to reach HCPs with the highest prescribing rates and consumers most likely to use antibiotics unnecessarily. The message testing outlined in this GenIC focuses on HCPs. Approval to test messages with consumers is being requested in a separate GenIC. The messages and materials are virtually identical for both groups, with one exception: message testing with HCPs includes testing of "Conversation Starters" that HCPs might use to initiate their conversations with patients about appropriate antibiotic use.

Method

We will conduct 24 in-depth interviews (IDIs) with HCPs to test creative concepts—specifically, visual identifies, television ads, print ads, and antibiotic use talking points (HCPs only)—to assess general reactions,

comprehension, ability to capture attention, readability, strong and weak points, personal/cultural relevance, and ability to motivate.

Participants

We are targeting six types of HCPs with the highest antibiotic prescribing rates—family practitioners, nurse practitioners (NPs), physician assistants (PAs), emergency department (ED) physicians, urgent care physicians, and hospitalists. Specifically, family practitioners prescribe 25% of all outpatient antibiotics, NPs/PAs together prescribe 14% of all outpatient antibiotics, and ED physicians prescribe 5% of all outpatient antibiotics and also face unique challenges to prescribing due to lack of patient retention (Hicks et al., 2015). The presence of urgent care physicians/clinics helps to fuel competition among local providers and contributes to increases in antibiotic prescribing (Klein, et al., 2015). Finally, 30 to 50% of antibiotic prescribed in hospitals are unnecessary and/or inappropriate as prescribed (CDC, 2013).

Exhibit 1. HCP IDI Segmentation Table

Activity	Family HCPs		Emergency/Urgent Care HCPs		Hospitalists	Total
	Family Practitioners	NPs/PAs	ED Attending Physicians	Urgent Care Physicians	Hospitalists	
Online IDIs	5	4	4	5	6	24

Screening and Recruitment

Up to 24 HCPs will participate in the online IDIs. IDIs will be conducted with the six types of HCPs. A professional recruiting firm will use a stratified, non-probability, purposive sample to recruit HCP participants. Half of HCP participants will be recruited from specific states in U.S. south census region, where antibiotic prescribing rates are the highest. The other half will be recruited from the other three regions of the U.S. The professional recruiter will deliver the HCP screener to potential participants to determine their eligibility and complete the HCP pre-discussion information survey (PDIS) with all eligible participants prior to the scheduled IDI.

During the IDIs, HCPs will be shown 9 concepts (i.e., 1–4 and 6–10 under List of Concepts for Testing; concept 5 will be shown if there is time).

Geography

Antibiotic prescribing rates are highest in the U.S. south census region. Thus, half of all consumer and HCP participants will be recruited from southern states and the other half will be recruited from other U.S. regions. Targeted states include: AZ, GA, IA, KY, LA, MO, MS, NE, NY, PA, OH, RI, TN, UT, and WV.

Incentives

We intend to provide incentives to all respondents in appreciation of their participation. Providing incentives is standard practice when conducting small group discussions and IDIs. Incentives are typically provided for focus group participants as a “stimulus to attend the session” and to help ensure the required number of individuals participate.

HCPs, particularly physicians, are notoriously difficult to recruit because they receive many requests for their participation in research. Because we are recruiting very specific types of HCPs, recruiting is even more difficult. We request approval for the following incentives: physicians, \$125; NPs/PAs, \$75.

Burden

Exhibit 1 describes the response burden associated with this information collection. Eligible HCPs will participate in the screener (5 min), PDIS (5 min), and interview (60 min) guide. We expect to screen approximately 4x as many HCPs as needed to recruit enough participants for the IDIs.

Exhibit 1. Burden Table

Type of Respondent	Form Name	No. of Respondents	No. of Responses per Respondent	Average Burden Per Response (hours)	Total Burden Hours
HCPs	HCP Screener	96	1	5/60	8
	HCP PDIS	24	1	5/60	2
	IDI Guide	24	1	1	24
Total					34

References

- Centers for Disease Control and Prevention (CDC). (2013). Antibiotic resistance threats in the United States, 2013. Retrieved March 5, 2016 from <https://www.cdc.gov/drugresistance/threat-report-2013/index.html>.
- Hicks, L., Bartoces, M., Roberts, R., Suda, K., Hunkler, R., Taylor, T., and Schrag, S. (2015). U.S. outpatient antibiotic prescribing variation according to geography, patient population, and provider specialty in 2011. *Clinical Infectious Diseases*, 60(9):1308–1316
- Klein, E., Makowsky, M., Orlando, M., Hatna, E., Braykov, N., and Laxminarayan, R. (2015). Influence of provider and urgent care density across different socioeconomic strata on outpatient antibiotic prescribing in the USA. *Journal of Antimicrobial Chemotherapy*, 70, 1580-1587.
- Krueger, R., and Casey, M. (2015). Focus groups: A practical guide for applied research, 5th Edition. Thousand Oaks, Calif: Sage Publications.
- National Cancer Institute. (2001). Making Health Communication Programs Work. Retrieved April 28, 2017 from http://www.cancer.gov/cancertopics/cancerlibrary/pinkbook/Pink_Book.pdf.

List of Attachments

- Health Message Testing System Expedited Review Form
- Attach 1_AU R2 Project Description and Burden Table (HCPs) 062117
- Attach 2_ HCP Screener FINAL 062117
- Attach 3_ HCP PDIS FINAL 062117
- Attach 4_ HCP IDI Guide FINAL 062117
- Attach 5_Verbal Consent IDI-FG FINAL 062117
- Attach 6_Observer Confidentiality_FINAL 062117

List of Concepts for Testing

1. Conversation Starters_FINAL 04.21.17
2. AU PSA Print Ad_Safe Play
3. AU PSA Print Ad_Status Update
4. AU PSA Print Ad_The Right Tool
5. AU Campaign Stimulus_TV Ads
6. Visual with slogan_A
7. Visual with slogan_B
8. Visual with slogan_C
9. Visual with slogan_D
10. Visual with slogan_E