

Attachment A: Overview of the Assessment for the *Be Antibiotics Aware* HCP Campaign

CDC is conducting a pilot study in Memphis, TN to test the communication tactics and associated outcomes with three specific HCP audiences--(1) Family Practitioners in outpatient settings, (2) Nurse Practitioners (NPs)/Physician Assistants (PAs) in outpatient settings, and (3) Urgent Care Physicians, NPs, and PAs. CDC wants to understand if the targeted campaign efforts (beyond the national initiative) reached target HCP audiences and influenced their knowledge and behavior related to appropriate antibiotic prescribing to inform future refinement and implementation of the campaign (materials and tactics) in this pilot site.

To assess the reach and outcomes of the campaign tactics, ICF will conduct a pre- and post-intervention survey with each audience.

HCP Target Audiences:

- Family Practitioners in outpatient settings
- Nurse practitioners (NPs)/Physician assistants (PAs) in outpatient settings
- Urgent Care Physicians, NPs, and PAs

HCP Audience	The “Why”	Criteria for eligibility
Family Practitioners in outpatient settings	The majority of antibiotics are prescribed in outpatient settings. Primary care providers, and especially family practitioners have the highest prescribing rates within outpatient settings.	<ul style="list-style-type: none"> • Licensed MD or DO • Works in a primary care practice/facility, retail health clinic, or emergency department • Provides patient care in an outpatient setting for more than 30 hours per week • Prescribes antibiotics at least once a week • Works in Memphis, TN
Nurse Practitioners (NPs)/Physician Assistants (PAs) in outpatient settings	The majority of antibiotics are prescribed in outpatient settings. NPs and PAs have the second highest prescribing rates after physicians within outpatient settings.	<ul style="list-style-type: none"> • Physician assistant or nurse practitioner • Works in a primary care practice/facility, retail health clinic, or emergency department • Provides patient care in an outpatient setting for more than 30 hours per week • Prescribes antibiotics at least once a week • Works in Memphis, TN
Urgent Care physicians, NPs, and PAs	The majority of antibiotics are prescribed in outpatient settings, including urgent care clinics. Because they are generally more convenient	<ul style="list-style-type: none"> • Physician (MD or DO), Physician assistant, or nurse practitioner • Works in an Urgent Care facility • Provides patient care in an

HCP Audience	The “Why”	Criteria for eligibility
	and less expensive, the presence of urgent care clinics in a community can drive competition with physicians’ offices, resulting in higher overall antibiotic prescribing rates.	outpatient setting for more than 30 hours per week <ul style="list-style-type: none"> • Prescribes antibiotics at least once a week • Works in Memphis, TN

Identification, Recruitment, Inclusion and Exclusion Criteria for Assessment:

Data for this study will be collected from a sample of HCPs in the Memphis, TN area who have already indicated a willingness to participate in surveys (online sample panelists). The study will not include any participants under 18 years of age and individuals who, as themselves or a family member, work in marketing will be excluded from the study.

ICF will subcontract with an online panel provider to recruit the sample for the study. The subcontractor will program the survey, will invite their panelists to participate and field the online survey. Panelists registered with the online panel who have provided their consent to receive invitations to participate in online surveys, and who meet the preliminary eligibility criteria (geographic location and age) will receive an email invitation to participate (Attachment C). Individuals interested in participating in the survey, will click the link provided and be directed to the informed consent page of the survey. Individuals agreeing to the consent will select “Yes” and be redirected to the survey (Attachments D, E, F, G). Those who do not consent will be thanked for their time and not continue to the survey.

Panelists eligible and consenting to participate will become survey respondents. ICF will obtain a dataset of all eligible respondents, including those who did and did not complete the full survey. Specifically, the vendor will provide a de-identified data set that does not include any personally identifying information of the respondents. The subcontractor will also provide ICF with weekly aggregate reports on the number of individuals who opened and started the screener, stopped taking the screener, completed the screener, and were eligible for the full survey. For those deemed ineligible, they will provide an aggregate report of the eligibility criteria not met. The subcontractor will not provide the individual screener responses for those who are ineligible. We will use these data to describe the sampling and data collection process.

Invited individuals will have approximately three weeks to complete the survey on a computer from a location where they feel most comfortable. Web surveys allow respondents to complete as much of the survey as desired in one sitting and to continue the survey at another time, while also minimizing respondent burden and error. The vendor will use responsive design to facilitate completion of the survey on different types of devices (e.g., desktop computer, tablet, mobile phone). The use of this technology also helps minimize social desirability and interview bias by allowing respondents to self-administer the survey rather than participate in an interview.

The IRB exemption determination for this study is included in Attachment H. Samples of the materials used in the *Be Antibiotics Aware* educational effort can be found in Attachment I.

Sample Sizes:

- For pre-test, we will survey 30 individuals from each target audience (TA).
- For the post-test, we will collect the full survey (knowledge, behavior) for up to 30 individuals per target audience who reported exposure to the campaign. We will also collect media use/habits and demographic characteristics for up to 30 unexposed individuals per target audience. After the initial 30/TA, the exposure question will be asked as part of the screener to assess what % of respondents were exposed to the campaign; this will be used to assess the reach of the campaign.

Survey Section	Pretest (n=30/TA)	Posttest		
		Exposed (n = 30/TA)	Unexposed (n =30/TA)	Unexposed (unlimited n)
Informed Consent	X	X	X	X
Screener	X	X	X	X
Exposure to Campaign	X	X	X	X
Frequency and Channel of Exposure	X	X		
Risks and Benefits of Antibiotics: Attitudes and Beliefs	X	X		
Discussing antibiotics with patients: Attitudes, Beliefs, and Behavior	X	X		
Media Use and Habits			X	
Demographic Characteristics	X	X	X	