**Survey Section by Test Segment**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Survey Section** | **Pretest (n=30/TA)** | **Posttest** | | |
| **Exposed**  **(n = 30/TA)** | **Unexposed (n= 30)** | **Unexposed (unlimited)\*** |
| Screener | X | X | X | X |
| Exposure to Campaign | X | X | X | X |
| Frequency and Channel of Exposure | X | X |  |  |
| Knowledge | X | X |  |  |
| Appropriate antibiotic prescribing: Attitudes, Beliefs, and Behavior | X | X |  |  |
| Discussing antibiotics with patients: Attitudes, Beliefs, and Behavior | X | X |  |  |
| Media Use and Habits |  |  | X |  |
| Demographic Characteristics | X | X | X |  |

\* We will continue to screen participants until we have 30 exposed respondents who complete the full survey.

**Target Audiences (TA)**:

* Family practitioners (MDs and DOs), outpatient settings
* Nurse practitioners (NPs) and physician assistances (PAs), outpatient settings
* Urgent care physicians (MDs and DOs)
* Nurse practitioners (NPs) and physician assistances (PAs), urgent care settings

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# Informed Consent Form [ALL ELIGIBLE RESPONDENTS]

**Before beginning the survey, there are a few things you should know.**

On behalf of the Centers for Disease Control and Prevention (CDC), the research firm ICF is conducting an online survey with healthcare providers to gather feedback on educational materials related to antibiotic use. These materials were developed in partnership with the CDC, and we hope to use what we learn from these survey results to improve these materials and/or how and where we promote them to raise awareness within your community. We expect this survey to take about 15 minutes. You will only be asked to complete this survey once.

We want to learn from you, so we encourage you to answer honestly. There are no right or wrong answers. If you agree to participate in the survey, here are some points to know:

* **Rights Regarding Participation:** Your participation in this survey is completely voluntary. You may choose to leave the survey and/or not answer a question at any time for any reason. Refusal to participate will involve no penalty or loss of benefits.
* **Privacy:** We will take every precaution to protect your identity and ensure your privacy. We will keep your name and answers to these survey questions private. Your name and contact information will be kept separate from any survey responses. We will never use your name in any reports.
* **Benefits:** Your participation in the survey will not result in any direct benefits to you. However, your input will help us to develop and improve educational materials about sepsis for people like you.
* **Risks:** There is no known risk to you for your participation in the survey.
* **Incentive:** In appreciation of your time and participation, the recruiter will give you a token of appreciation valued at $\_\_\_\_ for participating in today’s survey.
* **Contact Information:** If you have any questions about this survey or the campaign, please contact the research director, Kristen Cincotta, PhD, at 404-320-4433.

Do you agree to participate in the survey?  Yes  No

Programmer: If respondent selects yes, please proceed to the survey.  
If respondent selects no, display termination text.

Termination text: “Thank you for your time. Click here [insert URL] to exit this survey.”

# SCREENER [ALL]

The results of this survey will help the Centers for Disease Control and Prevention (CDC) refine and improve its ongoing campaign to improve antibiotic use. You will be asked to complete different versions of a survey depending on whether or not you have seen or heard certain messages from CDC about antibiotic use.

Programmer: Include one question per page.  
Screener should terminate as soon as respondent selects an option that deems him/her ineligible.

1. May we ask you some questions to see if you are a good match to take this survey?

* Yes
* No [INELIGIBLE]

1. Are you a healthcare provider?

* Yes
* No [INELIGIBLE]

1. What type of healthcare provider are you?

* Physician (MD or DO)
* Physician Assistant (PA)
* Nurse Practitioner (NP)
* Licensed Practical Nurse (LPN) [INELIGIBLE]
* Registered Nurse (RN) [INELIGIBLE]
* None of the above [INELIGIBLE]

1. Do you work in an outpatient setting?

* Yes
* No [INELIGIBLE]

1. In what type of outpatient setting do you work?

* Primary care practice/facility
* Urgent care facility
* Retail health clinic
* Emergency department
* None of the above [INELIGIBLE]

1. On average, how many hours a week do you provide patient care in an outpatient setting?

* 0-10 hours [INELIGIBLE]
* 11-20 hours [INELIGIBLE]
* 21-30 hours [INELIGIBLE]
* 30 or more hours

1. In what zip code do you work? \_\_\_\_\_\_ (#####)

Programmer: Limit ZIP code entry to 5 digits and require respondent provide the full ZIP in order to proceed.  
  
If ZIP code is within the target areas, proceed to Q4.  
If not within the target area, TERMINATE.

1. On average, how often do you prescribe antibiotics?

* Never [INELIGIBLE]
* 1-3 times a month [INELIGIBLE]
* Once a week
* Multiple times every week

Programmer: If respondent selects *Never* or *1-3 times a month*, TERMINATE.   
If respondent selects *Once a week* or *multiple times every week*, proceed to Q9.

Programmer: Categorize respondent.

Categorize respondent as “Primary Care Physician, Outpatient Setting”

* Q3 = Physician (MD or DO)
* Q4 = Yes
* Q5 = Primary care practice/facility, Retail health clinic, or Emergency department
* Q6 = 30 or more hours
* Q8 = Once a week or multiple times every week

Categorize respondent as “Nurse Practitioner or Physician Assistant, Outpatient Setting”

* Q3 = Physician Assistant (PA) or Nurse Practitioner (NP)
* Q4 = Yes
* Q5 = Primary care practice/facility, Retail health clinic, or Emergency department
* Q6 = 30 or more hours
* Q8 = Once a week or multiple times every week

Categorize respondent as “Urgent Care Physicians, NPs, or PAs”

* Q3 = Physician (MD or DO), Physician Assistant (PA), or Nurse Practitioner (NP)
* Q4 = Yes
* Q5 = Urgent Care facility
* Q6 = 30 or more hours
* Q8 = Once a week or multiple times every week

Programmer:  TERMINATION TEXT:

Thank you for your willingness to participate and answer our questions. Unfortunately, you do not meet the criteria to continue with the survey. If you have any questions about your participation and/or any questions about this survey, please contact the research director, Kristen Cincotta, Ph.D., at (404) 321-3211 or [Kristen.Cincotta@icf.com](mailto:Kristen.Cincotta@icf.com). Thank you for your time.

Programmer:  If ELIGIBLE, proceed with survey.

Thank you for answering the questions. We have determined that you are a good match for this survey. If you have any questions about your participation and/or any questions about this survey, please contact the research director, Kristen Cincotta, Ph.D., at (404) 321-3211 or [Kristen.Cincotta@icf.com](mailto:Kristen.Cincotta@icf.com).

# EXPOSURE TO CAMPAIGN [ALL]

Programmer: Include one question per page

Now we would like to ask you about a CDC campaign on appropriate antibiotic use that you may or may not have seen or heard about in the past **12** months.

1. Please indicate below whether you have **seen or heard any of following campaign names or slogans in the past 12 months.**

| **Campaigns** | **Yes** | **No** | **Don’t know  /cannot recall** |
| --- | --- | --- | --- |
| 1. Get Ahead of Antibiotics |  |  |  |
| 1. Flip the Script on Antibiotics |  |  |  |
| 1. Get Smart about Antibiotic Use |  |  |  |
| 1. Be Antibiotics Aware |  |  |  |
| 1. Don’t Mis-take Antibiotics |  |  |  |

1. A close up of a sign

   Description automatically generated**In the past 12 months, did you see or hear this slogan and/or logo?**

* Yes
* No
* Don’t know/cannot recall

Programmer:

TERMINATION TEXT if INELIGIBLE:

“Thank you for your willingness to participate and answer our questions. Unfortunately, you do not meet the criteria to continue with the survey. If you have any questions about your participation and/or any questions about this survey, please contact the research director, Kristen Cincotta, Ph.D., at (404) 321-3211 or [Kristen.Cincotta@icf.com](mailto:Kristen.Cincotta@icf.com). Thank you for your time.”

If ELIGIBLE: Determine Exposure status:  
If respondent selects *C* for Q9 and/or *Yes* or *Don’t recall* for Q10, classify as “Exposed.”  
If *A, B, D, or E* (but not C) are selected for Q9 and *No* for Q10, classify as “Unexposed”

PRE-TEST: Continue to Frequency and Channel of Exposure section if exposed or to Risks and Benefits of Antibiotics section if unexposed.

# FREQUENCY AND CHANNEL OF EXPOSURE [PRE-TEST, EXPOSED ONLY]

Programmer: Include one question per page

You indicated that you had seen or heard the campaign name, *Be Antibiotics Aware*, or seen the campaign logo **in the past 12** **months.**

1. In the **past 12 months**, approximately how often did you see CDC’s *Be Antibiotics Aware* campaign messages, campaign name, or logoin …?

| **PRINTED MEDIA** | 1-2 times a day | Once a week | 1-3 times a month | Less than once a month | Never | Don’t know/cannot recall |
| --- | --- | --- | --- | --- | --- | --- |
| Poster |  |  |  |  |  |  |
| Fact sheet |  |  |  |  |  |  |
| Brochure |  |  |  |  |  |  |
| Graphic |  |  |  |  |  |  |
| Newspaper/magazine advertisement |  |  |  |  |  |  |
| Flyer |  |  |  |  |  |  |
| Other print media  (please specify: \_\_\_\_\_\_\_\_\_\_\_\_\_ ) |  |  |  |  |  |  |

1. In the **past 12 months**, approximately how often did you see CDC’s *Be Antibiotics Aware* campaign messages, campaign name, or logo on …?

| **SOCIAL MEDIA** | 1-2 times a day | Once a week | 1-3 times a month | Less than once a month | Never | Don’t know/cannot recall |
| --- | --- | --- | --- | --- | --- | --- |
| Facebook |  |  |  |  |  |  |
| Instagram |  |  |  |  |  |  |
| Twitter |  |  |  |  |  |  |
| LinkedIn |  |  |  |  |  |  |
| YouTube |  |  |  |  |  |  |
| Other social media  (please specify: \_\_\_\_\_\_\_\_\_\_\_\_\_ ) |  |  |  |  |  |  |

1. In the **past 12 months**, approximately how often did you see CDC’s *Be Antibiotics Aware* campaign messages, campaign name, or logo in …?

| **ONLINE/INTERNET MEDIA** | 1-2 times a day | Once a week | 1-3 times a month | Less than once a month | Never | Don’t know/cannot recall |
| --- | --- | --- | --- | --- | --- | --- |
| Health websites /resources |  |  |  |  |  |  |
| Website advertisements |  |  |  |  |  |  |
| Online news articles |  |  |  |  |  |  |
| Streaming TV/video services (e.g., Hulu, Netflix, [Amazon] Prime Video) |  |  |  |  |  |  |
| Blogs |  |  |  |  |  |  |
| Advertisement on mobile phone (including mobile apps) |  |  |  |  |  |  |
| Search engines (e.g., Google) |  |  |  |  |  |  |
| Other websites  (please specify: \_\_\_\_\_\_\_\_\_\_\_\_\_ ) |  |  |  |  |  |  |

1. In the **past 12 months**, approximately how often did you see or hear CDC’s *Be Antibiotics Aware* campaign messages, campaign name, or logo on …?

| **TV AND RADIO MEDIA** | 1-2 times a day | Once a week | 1-3 times a month | Less than once a month | Never | Don’t know/cannot recall |
| --- | --- | --- | --- | --- | --- | --- |
| Television (cable, satellite, or antenna) |  |  |  |  |  |  |
| Broadcast radio |  |  |  |  |  |  |
| Other media formats (please specify: \_\_\_\_\_\_\_\_\_\_\_\_\_ ) |  |  |  |  |  |  |

1. In the **past 12 months**, how often did you see CDC’s *Be Antibiotics Aware* campaign messages, campaign name, or logo in …?

| **PUBLIC PLACES** | 1-2 times a day | Once a week | 1-3 times a month | Less than once a month | Never | Don’t know/cannot recall |
| --- | --- | --- | --- | --- | --- | --- |
| Billboards |  |  |  |  |  |  |
| Bus, train, or subway stations |  |  |  |  |  |  |
| On buses or taxi cabs |  |  |  |  |  |  |
| Advertisement in a mall |  |  |  |  |  |  |
| Advertisement in a grocery store |  |  |  |  |  |  |
| Advertisement in a store pharmacy (e.g., CVS, Walgreens, Walmart) |  |  |  |  |  |  |
| Other public places (please specify: \_\_\_\_\_\_\_\_\_\_\_\_\_) |  |  |  |  |  |  |

1. In the **past 12 months**, did you see CDC’s *Be Antibiotics Aware* campaign messages, campaign name, or logo **at work**?

* Yes, I personally placed or shared CDC’s *Be Antibiotics Aware* Campaign materials at my workplace in the **past 12 months**.
* Yes, I saw CDC’s *Be Antibiotics Aware* Campaign at my workplace in the **past 12 months**, but I **was not** responsible for placing or sharing it.
* No, but I saw materials from another antibiotic use campaign at my workplace in the **past 12 months.**
* No, I have not seen any materials about antibiotic use at my workplace in the **past 12 months.**

Programmer: PRE-TEST: If respondent selects “Never” or “Don’t know/cannot recall” for ALL of the options in Q11-Q15 and either No option to Q16, reclassify these respondents as “Unexposed”, skip Q17, and proceed to “Risks and Benefits of Antibiotics” section.   
  
PRE-TEST: If respondent selects “1-2 times a day,” “Once a week,” “1-3 times a month,” or “Less than once a month” for any of the options in Q11-Q15, and either *Yes* option to Q16, proceed to Q17 and then “Risks and Benefits of Antibiotics” section.

1. In the past 12 months, where did you see CDC’s *Be Antibiotics Aware* campaign messages, campaign name, or logo at your workplace? (select all that apply)

* Posters or other print material(s) designed to educate patients about appropriate antibiotic use
* Posters or other print material(s) designed to improve antibiotic prescribing by healthcare providers
* Video displays in patient waiting areas
* Workplace website or internal email/newsletter
* Email or e-newsletter from external health organization, such as a state or local public health agency or professional association
* Other, please specify: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**RISKS AND BENEFITS OF ANTIBIOTICS - ATTITUDES AND BELIEFS [PRE-TEST, ALL]**

**Programmer: Include one question per page (include disclaimer statement below only with Q18). Do not allow participants to go back and change their answer to a previous question.**

Next, we are going to ask you some questions to learn more about your perspective on antibiotic prescribing. Research shows that healthcare provider face challenges to antibiotic prescribing. Your responses on this survey will help CDC understand how to better support healthcare providers’ antibiotic prescribing. Please give us your honest responses. There are no right or wrong answers to any of these questions.

1. Please indicate the extent to which you agree with the following statements, from strongly disagree to strongly agree.

| **Perceived Severity** | Strongly disagree | Disagree | Neither  Agree nor Disagree | Agree | Strongly Agree |
| --- | --- | --- | --- | --- | --- |
| 1. Antibiotic resistance is a serious public health issue. |  |  |  |  |  |
| 1. Antibiotic resistance can have serious consequences for my patients. |  |  |  |  |  |
| 1. Side effects caused by antibiotics could be very serious for my patients. |  |  |  |  |  |

1. Please indicate the extent to which you agree with the following statements, from strongly disagree to strongly agree.

| **Perceived Susceptibility** | Strongly disagree | Disagree | Neither  Agree nor Disagree | Agree | Strongly Agree |
| --- | --- | --- | --- | --- | --- |
| 1. If my patients are prescribed antibiotics when they’re not needed, they could experience minor side effects, like a rash. |  |  |  |  |  |
| 1. If my patients are prescribed antibiotics, even whether needed or not, they could experience very serious health problems, such as *C. diff* infection. |  |  |  |  |  |

1. Please indicate the extent to which you agree with the following statements, from strongly disagree to strongly agree.

| **Perceived Benefits** | Strongly disagree | Disagree | Neither  Agree nor Disagree | Agree | Strongly Agree |
| --- | --- | --- | --- | --- | --- |
| 1. Prescribing antibiotics only when needed is the best care for my patients. |  |  |  |  |  |
| 1. Prescribing antibiotics only when needed helps protect my patients from unnecessary side effects. |  |  |  |  |  |
| 1. Prescribing antibiotics only when needed helps combat antibiotic resistance. |  |  |  |  |  |

1. **In the past 12 months**, please indicate how often you did the following when prescribing antibiotics.

| **Behavior (Prescribing)** | Never | Rarely | Sometimes | Often | Always |
| --- | --- | --- | --- | --- | --- |
| 1. Patient satisfaction factors into my decisions to prescribe antibiotics. |  |  |  |  |  |
| 1. I prescribe antibiotics according to clinical guidelines. |  |  |  |  |  |
| 1. I take antibiotic resistance into consideration when prescribing antibiotics to my patients. |  |  |  |  |  |
| 1. I consider antibiotic adverse events, like *C. diff* infection, when prescribing antibiotics to my patients. |  |  |  |  |  |

1. What barriers do you commonly experience to prescribing antibiotics according to clinical guidelines? (Select all that apply)

* Current clinical guidance doesn’t always apply to my patients.
* I am not as familiar as I would like to be with current clinical guidance for prescribing antibiotics.
* My patients will be dissatisfied with their visit if I do not prescribe antibiotics and they believe they need them for their illness.
* My patients demand antibiotics, even if I don’t think an antibiotic is needed to treat their illness.
* My patients are unaware of or unconcerned about potential side effects of antibiotics, such as rash, nausea, or *C. diff* infection.
* Uncertainty of diagnosis can make it challenging to determine if the patient needs antibiotics.
* I have not encountered any barriers to prescribing antibiotics based on clinical guidelines.
* Don’t know/cannot recall
* Prefer not to answer
* Other, please explain:\_\_\_\_\_\_\_\_\_\_\_

# DISCUSSING ANTIBIOTICS WITH PATIENTS: ATTITUDES, BELIEFS AND BEHAVIORS [PRE-TEST, ALL]

Programmer: Include one question per page. Do not allow participants to go back and change their answer to a previous question.

1. Please indicate the extent to which you agree with the following statements, from strongly disagree to strongly agree.

| **Knowledge of Need for Conversations** | Strongly disagree | Disagree | Neither  Agree nor Disagree | Agree | Strongly Agree |
| --- | --- | --- | --- | --- | --- |
| 1. It’s important for me to discuss with my patients that antibiotics can cause side effects that can range from minor issues, like a rash, to very adverse events, such as *C. diff* infection. |  |  |  |  |  |
| 1. It’s important for me to discuss with my patients that antibiotic use can lead to antibiotic resistance. |  |  |  |  |  |
| 1. It’s important for me to help my patients understand ways they can feel better, such as taking over the counter (OTC) medications that can help relieve symptoms, when an antibiotic isn’t needed to treat their illness |  |  |  |  |  |
| 1. It’s important for me to educate patients about when antibiotics are and aren’t needed for their illness. |  |  |  |  |  |

1. Please indicate the extent to which you agree with the following statements, from strongly disagree to strongly agree.

| **Perceived Benefits of Conversations** | Strongly disagree | Disagree | Neither  Agree nor Disagree | Agree | Strongly Agree |
| --- | --- | --- | --- | --- | --- |
| 1. I believe that educating my patients about appropriate antibiotic use can protect them from unnecessary side effects. |  |  |  |  |  |
| 1. I believe that educating my patients about appropriate antibiotic use can help reduce unnecessary antibiotic use, thus helping to combat antibiotic resistance. |  |  |  |  |  |
| 1. I believe that educating my patients about which infections antibiotics do and do not treat helps them understand my decision on whether or not to prescribe an antibiotic for their illness. |  |  |  |  |  |

1. When prescribing antibiotics, please indicate how frequently you discuss the following with your patients.

| **Behavior (Conversations)** | Never | Rarely | Sometimes | Often | Always |
| --- | --- | --- | --- | --- | --- |
| 1. When antibiotics are and aren’t needed for their illness. |  |  |  |  |  |
| 1. Other ways to feel better, such as taking OTC medications that can help relieve symptoms, when a patient has an infection that does not need an antibiotic. |  |  |  |  |  |
| 1. Common side effects, such as rash, diarrhea, and nausea, when prescribing antibiotics. |  |  |  |  |  |
| 1. Possible severe side effects, such as *C. diff* infection or allergic reactions. |  |  |  |  |  |
| 1. Antibiotic use can lead to antibiotic resistance. |  |  |  |  |  |

1. What are the barriers you commonly encounter when educating your patients on the topics of appropriate antibiotic use, and antibiotic resistance? Select all that apply.

* I am not familiar enough with these topics.
* I do not feel confident educating my patients on these topics.
* I do not think my patients will understand these topics.
* I do not think it is important for my patients to understand these topics.
* I do not think my patients will be interested in or receptive to learning about these topics.
* I do not have time to educate my patients on these topics.
* Other, please explain:\_\_\_\_\_\_\_\_\_\_\_
* I have not encountered any barriers to educating my patients on these topics.
* Don’t know/cannot recall
* Prefer not to answer

1. Did you know that CDC’s *Be Antibiotics Aware* campaign has resources you can use to help educate your patients about appropriate antibiotic use?

* Yes
* No

**Programmer: PRE-TEST: skip to Demographic Characteristics section**

# DEMOGRAPHIC CHARACTERISTICS [ALL]

Thank you. Now we would like to know more about you.

1. How long have you worked in your current role/position?

* Less than one year
* 1-5 years
* 6-9 years
* 10 or more years
  + Prefer not to answer

1. What is your sex?
   * Male
   * Female
   * Prefer not to answer
   * Don’t know
2. How would you describe your racial background? Select all that apply.

* White
* Black or African American
* Asian
* Native Hawaiian or Other Pacific Islander
* American Indian or Alaska Native
* Other, please specify: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Prefer not to answer

1. Are you Hispanic or Latino?

* Yes
* No
* Prefer not to answer

Thank you for taking the time to participate in this important survey!