# FORMATIVE RESEARCH TO DEVELOP ZIKA TOOLS FOR HEALTHCARE PROVIDERS

Supporting Statement B

February 5, 2018

CDC Contact:

Catlin Green Epidemiologist National Center on Birth Defects & Developmental Disabilities Centers for Disease Control and Prevention 4770 Buford Hwy. Mailstop E86 Atlanta, GA 30341 Phone: 404-498-1462

# **Table of Contents**

Collection of Information employing Statistical Methods

- 1. Respondent Universe and Sampling Methods
- 2. Procedures for the Collection of Information
- 3. Methods to Maximize Response Rates and Deal with Nonresponse
- 4. Tests of Procedures or Methods to be Undertaken

5. Individuals Consulted on Statistical Aspects and Individuals Collecting and/or Analyzing Data

# B. Collections of Information Employing Statistical Methods

## **1.**Respondent Universe and Sampling Methods

For the Survey of Obstetrician-Gynecologists, Focus Groups of Healthcare Providers, and Survey of Local Health Department CDC Field Assignees, refer to Request for genIC Approval, selection of targeted respondents.

## 2. Procedures for the Collection of Information

#### Survey of Obstetrician-Gynecologists

The survey will be administered by a combined electronic and paper mailing protocol. American College of Obstetricians and Gynecologists (ACOG) Research staff will send the survey invitation by email to 4,000 ACOG members sampled from Fellows and Junior Fellows currently in practice. The sample is generated by stratifying Fellows and Junior Fellows by district and taking a proportionate, random sample from each district. The sample will be representative of ACOG members, but will not be generalizable to obstetrician-gynecologists beyond ACOG members, all physician types, the healthcare community at large, or the public.

The invitation (Att B) will orient survey respondents to the study and provide a link to a full online survey. The online survey will be administered through Qualtrics

(https://acog.az1.qualtrics.com/jfe/form/SV\_afJALEIAeqsv5qJ). Follow-up email reminders (Att C) will be sent each week for 9 weeks to individuals who have neither completed the survey nor have opted out. Those who do not respond or opt-out after 3 follow-up email reminders will be sent a mailing with the following materials: the cover letter for paper survey (Att D), a paper version of the survey (Att A), and pre-paid coded return envelope. The survey will close 10 weeks after the initial invitations are sent. ACOG will assign an identification number to track respondents versus non-respondents to maintain anonymity of responses overall.

ACOG will develop a data entry system and codebook and enter data after the last mailing deadline has been reached. Electronic data will be downloaded from Qualtrics to a Microsoft Excel file. ACOG Research staff will enter responses from the paper survey into a Microsoft Excel spreadsheet which will then be combined with the downloaded spreadsheet of electronic responses from Qualtrics. Excel files will be converted into an SPSS data file for statistical analysis with a coded identification number and demographic information for Fellows who were sent the survey. This allows ACOG to compare the basic demographic characteristics of respondents and non-respondents. An initial data analysis will be performed to screen for highly implausible answers (e.g. Fellows who completed residency training at age 8), inconsistent answers (e.g., contradictory responses to similar questions), and to check randomly selected survey items for data entry accuracy.

#### Focus Groups of Healthcare Providers

APCO Worldwide will coordinate recruitment for the focus groups, which will consist of 8-20 providers each, with their online panel provider M3 Global Research. Appropriate provider types for the panels will be invited by M3 Global Research from their panel of healthcare professionals who have opted in to receiving invitations to participate in market research. Potential participants for the focus groups will be screened during recruitment to ensure they meet the criteria for inclusion (Att

G). The target audience is ob-gyns, pediatricians, nurse practitioners, and certified nurse-midwives; the screener will filter out candidates that don't meet those specifications. Certain subspecialties and individuals spending less than 75% of their professional time treating patients will also be excluded so that participants are more representative of the audience to which Zika education has been targeted. Based on the screening criteria and scheduling requirements, it is anticipated that approximately 25% of individuals screened will ultimately be scheduled to participate in a focus group.

After recruitment is complete, APCO will host the 90-minute virtual focus groups facilitated by a moderator. Discussion guide questions (free response, ranking, check all that apply, and Likert-style scales) will appear on participants' computer screens and participants will type or complete the questions (Att F). Participants will not appear on video or audio, nor will they see other participants' responses. The moderator will also initiate instant messaging chat discussions in which participants will be able to see other participants' comments and respond to them. The moderator may also initiate private chats with individual participants which cannot be seen by other participants.

APCO's research staff will collect, organize, and analyze the qualitative and quantitative data acquired to identify key themes and trends. Due to the qualitative nature of the study and small sample sizes within groups, it will not be possible to conduct analysis that rises to the level of statistical significance.

## Survey of Local Health Department CDC Field Assignees

The survey will be administered electronically. ACOG Research staff will send the survey invitation by email to the 22 CDC field assignees who participated in the Local Health Department Initiative calls. The invitation (Att J) will orient survey respondents to the study and provide a link to a full online survey. The online survey will be administered through Qualtrics (Att I). Follow-up email reminders will be sent each week for 6 weeks to individuals who have neither completed the survey nor have opted out (Att K). ACOG will assign an identification number to track respondents versus non-respondents to maintain anonymity of responses overall.

Electronic data will be downloaded from Qualtrics to a Microsoft Excel file. Excel files will be converted into an SPSS data file for statistical analysis with a coded identification number. An initial data analysis will be performed to screen for highly implausible answers (e.g. local health department population size of 10 million), inconsistent answers (e.g., contradictory responses to similar questions), and to check randomly selected survey items for data entry accuracy.

None of the activities will report prevalence data.

#### 3. Methods to Maximize Response Rates and Deal with No Response

#### Survey of Obstetrician-Gynecologists

The survey was developed to be concise with the shortest number of questions possible to encourage a high response rate while still gathering adequate data. The survey will be presented in a clear and easy to complete format, based on previous surveys and recommendations from the ACOG survey methodologists. Sampled individuals will be able to complete the survey at their leisure, and will answer only questions about themselves and their practice. The introductory cover

letter and follow-up reminders will assure potential respondents that their answers will be maintained in a secure manner, and that results will only be released in summary form to ensure confidentiality.

The availability of web-based and paper-based forms; flexible windows for completion online via a computer, tablet, or smartphone; and follow-up email reminders will help to maximize response rates.

ACOG has demographic information regarding the gender, age, and primary state of residency of non-respondents. These demographic characteristics for non-respondents and respondents will be compared using Chi-squared tests and all statistically significant differences between these groups will be reported. We expect to find little to no significant differences between those who respond and those who do not, given that prior research has shown that nonresponse bias is minimal among physician groups compared to other groups (Kellerman and Herold, 2001).

## Focus Groups of Healthcare Providers

Focus group participants will be offered an incentive to facilitate focus group recruitment and to encourage participation during the groups. Incentive amounts are industry standard set by recruitment professionals based on extensive market experience with a variety of provider types. Higher amounts are offered to provider groups that are more challenging to recruit. Incentive amounts are set to encourage responsiveness and full participation from each audience target within the timeline. Lower incentives would not generate the same level of responsiveness and would make recruitment efforts more challenging, requiring more extensive efforts and thus longer recruitment times and higher recruitment cost investment.

Incentives offered to each group are as follows:

- Obstetrician-gynecologists: \$300 each
- Pediatricians: \$300 each
- Obstetrician-gynecologists and pediatricians in geographic areas most impacted by Zika (Florida, Texas, New York, and California): \$300 each
- Certified nurse-midwives: \$200 each
- Nurse practitioners: \$200 each

#### Survey of Local Health Department CDC Field Assignees

The survey was developed to be concise with the shortest number of questions possible to encourage a high response rate while still gathering adequate data. The survey will be presented in a clear and easy to complete format, based on previous surveys and recommendations from the ACOG survey methodologists. Individuals will be able to complete the survey at their leisure, and will answer only questions about themselves and their experiences with the Local Health Department Initiative. The introductory cover letter and follow-up reminders will assure potential respondents that their answers will be maintained in a secure manner, and that results will only be released in summary form to ensure confidentiality.

The availability of a web-based form that can be completed online via a computer, tablet, or smartphone, and follow-up email reminders will help to maximize response rates. Additionally, the individuals who will be invited to participate in the survey are those who elected to participate in

optional calls with ACOG and AAP staff and thus likely will be more inclined to participate in a followup activity than if participation in the calls had been mandatory.

# 4. Test of Procedures or Methods to Be Undertaken

# Survey of Obstetrician-Gynecologists

The survey was reviewed for accuracy, clear wording, and appropriate and adequate response options by ACOG Immunization staff, ACOG Research staff, ACOG's Zika Expert Work Group, AAP Disaster Preparedness and Response staff, CDC subject-matter experts, and Institutional Review Board (IRB). Reviewer feedback was incorporated as appropriate.

## Focus Groups of Healthcare Providers

The focus group discussion guide questions were developed by the focus group professionals at APCO Worldwide and were reviewed for accuracy, clear wording, and appropriate and adequate response options by ACOG Immunization staff, ACOG Research staff, ACOG's Zika Expert Work Group, AAP Disaster Preparedness and Response staff, CDC subject-matter experts, and IRB. Reviewer feedback was incorporated as appropriate.

## Survey of Local Health Department CDC Field Assignees

The survey was reviewed by ACOG Immunization staff, ACOG Research staff, AAP Disaster Preparedness and Response staff, CDC subject-matter experts, and IRB. Reviewer feedback was incorporated as appropriate.

# **5.** Individuals Consulted on Statistical Aspects and Individuals Collecting and/or Analyzing Data

ACOG's Zika Expert Work Group consists of subject-matter experts Laura E. Riley, MD; R. Phillips Heine, MD; Karen Harris, MD; Rita Driggers, MD; Neil S. Silverman, MD; Richard Beigi, MD; Natali Aziz, MD; Kim Fortner, MD; Jeanne Sheffield, MD; Burton Rochelson, MD; Francisco Garcia, MD, MPH; Catherine Eppes, MD; and Kristina Adams Waldorf, MD.

CDC subject-matter experts include staff from the National Center for Emerging and Zoonotic Infectious Diseases (NCEZID), National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP), and National Center on Birth Defects and Developmental Disabilities (NCBDDD): Kara Polen, MPH; Titilope Oduyebo, MD, MPH, CPH; Siobhan Dolan, MD, MPH; Dana Meaney-Delman, MD, MPH; Maria Michaels; and Suzanne Gilboa, PhD, MHS.

ACOG's Research department, consisting of research assistant Carrie Snead, MA, and research coordinator Neko Castleberry, MPP, will be responsible for data collection and data analysis for both surveys. ACOG's Research staff regularly develop and administer surveys, analyze data, and publish results.

The focus group data will be collected and analyzed by senior director of health care research Chrystine Zacherau, MA, BSN; associate director of health care research Kevin Schmidt; and data analyst Kerry Kilgallin.

# References

Kellerman, S.E., Herold, J., 2001. Physician response to surveys. A review of the literature. Am. J. Prev. Med. 20 (1), 61–67.