Justification for Incentives

Overview

CDC has contracted with a consulting firm, ICF, to conduct an assessment of the recently launched *Get Ahead of Sepsis* (GAOS) educational effort. For this assessment, we will field an online survey with health care provides (HCPs) and with consumers to gather information on exposure to the educational effort, key message and ad receptivity, and the impact of the educational effort materials on predetermined health-related outcomes. Target audience outcomes to be assessed include improved knowledge and awareness of sepsis, perceived susceptibility to sepsis, perceived severity of sepsis, belief in their ability to respond effectively to prevent or respond to sepsis, and intent to partake in associated behaviors related to the prevention and/or treatment of sepsis.

Prior to the launch of the GAOS educational effort, ICF conducted two rounds of formative research to support the development of the key messages and materials for the educational effort. Round 1 (R1) involved conduct of 36 online, in-depth interviews (IDIs) with seven types of healthcare professionals (HCPs) at 60 minutes each and 9 online, consumer focus groups at 90 minutes each. In Round 2 (R2), ICF fielded an online survey of HCPs (n = 42) and an online survey of consumers (n = 18) over a course of six weeks that was designed to test concepts and materials developed to increase knowledge and awareness of sepsis. For both rounds of testing, ICF was responsible for the data collection, analysis and reporting.

For the purposes of the post-launch assessment (R3), the HCP and consumer audiences will be the same as in both of the preceding rounds of formative research. For the purposes of this survey, the only inclusion criteria is that respondents are 18 years of age or older at the time of the survey. Participants who self-identify as healthcare providers will be shown questions specific to the materials and messages developed for HCPs. All other participants will be classified as consumers and shown questions relating to the consumer-facing materials and messages.

This OMB package and justification are related to the post-launch assessment of the Get Ahead of Sepsis educational effort message and materials.

Timeline

The GAOS educational effort launched at the beginning of Sepsis Awareness month, which took place in September 2017. In order to ensure that the educational effort has had sufficient time to reach consumers and HCPs, ICF and CDC have determined that the post-launch R3 assessment should take place *no sooner than* 12 weeks after the launch. Because the CDC and ICF will use the results of this assessment to determine if modifications are needed for the continued implementation of the GAOS educational effort in Year 2, the results of this R3 assessment must be submitted by March 2018. This is an external deadline that is not adjustable. Because of the clearances required for this effort, the September launch date, and the need to share findings with the CDC prior to start of the Year 2 activities, data collection for this R3 assessment must be expedited for conduct during 3 weeks in January and February 2018.

Incentives and Rationale

For the post-launch R3 assessment of the GAOS campaign, we are requesting approval for incentives valued at a point equivalent \$30 (not cash or cash equivalent) for all HCPs. The online panel provider

administering the survey will award points equivalent to \$30 which can be redeemed online or at a retailer. This incentive is lower than the incentive offered in R2 which utilized a similar online survey of comparable length. We are requesting approval for this incentive on the basis of several factors: (1) limited incentives represent a significant challenge to the overall timeline of the educational effort (the research timeline is based the effort launch date in September 2017 and the need to provide outcomes information prior to the modification and/or development of materials for the second year of the effort); (2) the post-launch assessment requires participation by specific HCP respondents; (3) difficulties experienced in recruiting with low incentives; and (4) and lack of alternative approaches to research design and respondent burden.

Factor 1: Lower incentives represent a significant challenge to the overall timeline of the GAOS educational effort. We have limited time to conduct the post-launch R3 assessment in order to obtain results to develop materials for the second year of the effort.

In our experience (and per discussion with recruitment firms) approximately \$10 is needed for consumers and at least \$30 is needed for HCPs to incentivize consumers and HCPs to participate in online surveys. From experience we know that lower incentives make recruiting these audiences exceptionally difficult and increase the amount of time needed for recruitment and data collection. Although we will be using a pre-registered online panel of respondents, the competition for HCP participation necessitates a competitive incentive among similar surveys. Offering a lower incentive may result in potential respondents choosing to complete other, more lucrative surveys in lieu of ours, resulting in a longer time to collect the required number of responses for our work. Increasing the time for the research will significantly delay the development of a new dissemination strategy and tailored materials to be used in the second year of this effort. In addition, this survey was developed to capture consumer and HCP feedback on the educational effort no sooner than 12 weeks following campaign launch. We feel that this window is optimal for capturing first reactions to the education effort before they are forgotten while still maximizing the likelihood of respondent exposure to the GAOS educational effort. Delaying data capture due to a long respondent recruiting period may jeopardize the quality of information we are able to collect from our target audiences.

Factor 2: The post-launch R3 assessment of the GAOS educational effort involves a difficult recruit of very specific types of HCPs. However, it is critical that we recruit these specific audiences as they are most likely to treat patients at risk for sepsis or experiencing sepsis. The specific HCP types are those who it is critical to reach in order to raise awareness about infections that can lead to sepsis and rapid diagnosis.

- We need very specific HCPs for this assessment, including primary care providers (PCPs), nurse practitioners (NPs), physician's assistants (PAs), and other types of professionals who are most likely to treat patients who are at risk for infection from sepsis and sepsis. These types of HCPs are notoriously difficult to recruit due to overwhelming requests for their participation in research and their busy schedules, and/or because they often serve in primary care roles caring for patients. In our experience, higher incentives are needed to recruit these audiences to participate in research.
- HCP inclusion criteria are relatively broad to ensure that we are able to recruit a significant number of HCPs for this study. However, our analysis plan includes comparing responses to the GAOS materials and messages among specific target audiences that were identified through our earlier formative research work. The audiences we are hoping to recruit from are those most likely to treat patients who are at risk for infections that can lead to sepsis, or patients who are

experiencing sepsis. For example, PCPs are more likely to treat patients with chronic conditions; emergency department triage nurses are more likely to encounter patients exhibiting signs and symptoms of sepsis. Patients' risk factors and signs and symptoms warrant preventative measures implemented by HCPs and rapid assessment and treatment by front line staff. Performing subgroup analyses with these specific HCP groups will provide a deeper understanding of how effective the GAOS educational effort creative concepts/materials are at increasing HCP target audiences' knowledge and awareness about infections that can lead to sepsis, sepsis, and the importance of rapid diagnosis to prevent sepsis complications and death. Recruiting these specific HCPs warrants a higher incentive to ensure timely recruitment to meet deadlines.

 We are recruiting HCPs (and consumers) from across the country, but from very specific regions. Because the GAOS educational effort was launched nationwide, we have designed a sampling plan that will ensure data collection from 16 randomly selected states spread evenly across four census regions. This sampling design will add an additional layer of specificity to our consumer and HCP recruitment efforts.

Factor 3: During our previous rounds of formative research, we experienced many difficulties recruiting the same HCP audiences being targeted during this post-launch R3 assessment, indicating the need for a higher incentive as a token of appreciation for participation in this research.

During R1, we learned that HCPs are frequently inundated with requests to participate in interviews or surveys. As a result, HCPs often declined to participate in R1 research or, if they did consent to participate, may not show up for interviews. Based on research and experience, a low incentive hampers recruiting HCPs to this type of research as low monetary incentives fail to motivate this group to participate due to the demands of their work schedules, professional commitments, and patient loads. In R1 we used a much higher incentive for HCPs to participate in a 60 minute IDI (\$125 for PCPs and \$75 for all other HCPs). However, based on our experience in R2, we recognize that the online survey presents less burden (30 minutes) to respondents, as they can take the survey at any time convenient to them (versus waiting to be scheduled with an interviewer). For this reason we are requesting a lower incentive than in R1 or in R2 but still higher than that offered to general consumers to complete a 30 minute online survey (points equivalent to \$10 per consumer).

Factor 4: We considered alternatives approaches to fielding a 30-minute survey with HCPs and consumers, such as shortening the length of the survey. However, this is not feasible due to the number of messages and materials developed as part of the GAOS educational effort and the number of identified outcomes we are assessing.

- During development of the R2 design, we considered alternative approaches to testing concepts/messages and materials. For example, we considered using a qualitative design similar to the R1 design, however qualitative approaches take more time, and the R2 testing had to be done quickly to meet external deadlines. A quantitative design was determined to be ideal for R2 research since it allowed for data collection across a larger sample of respondents in a shorter time frame. This approach also allowed for gathering quantitative data on perceived effectiveness of concepts/messages and materials which is valuable to help inform decisions about final materials. Based on the success of the R2 survey, we have decided to conduct the post-launch R3 assessment in a similar manner.
- During development of the post-launch R3 assessment, we also considered shortening the online survey for HCPs and consumers. However, because of the large number of messages and

materials developed for the GAOS educational effort and the number of outcomes to be assessed, at least 30 minutes is needed for testing. We also considered testing with fewer respondents. However, the CDC has requested a sub-group analysis based on their specific SMEidentified HCP and consumer target audiences in order to fully understand the impact of the education effort on these groups. We conducted a statistical power analysis to determine the minimum number of respondents needed in order to conduct the planned analyses.