Attachment 19

PATH Study Field Test Experiment

November 16, 2012

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The field-test experiment is designed to empirically determine the most cost-effective combination of incentive amount and household screener version that maximizes both the accuracy of the screener data and the response rate. To inform decisions on the household screener incentive and length, the field test will vary two factors in an experiment. The first factor will be the value of the incentive offered for completing the household screener. Three levels of incentives are proposed for testing ($0 versus $5 versus $10); respondents in both the $5 and $10 groups will get a check when they complete the screener, on the spot. The second experimental variable will be the format of the screening questions. Two versions are proposed for testing. Version A asks a brief set of questions about adults in the household (after a roster of the household has been compiled); Version B asks a more detailed set of questions about the different forms of tobacco use by adults (after a roster has been compiled). (Version B is the household screener included in this information collection request.)

The main outcome variables will be the screener response rates, the percentage of households classified as containing a tobacco user, and the response rate to the baseline interview. Detailed questions will also be asked of a certain number of cases classified as non-users (n=508 in total) to try to estimate a misclassification rate. These detailed questions about tobacco use will be administered directly to the target person, not to a proxy. This is the same method that has been used to estimate error rates in several previous studies of tobacco reporting (Gilpin, Pierce, Cavin, Berry, Evan, Johnson, and Bal, 1994; Hyland, Cummings, Lynn, Corle, and Giffen, 1997; Navarro, 1999).

Three-thousand one-hundred and sixty-six (3,166) addresses are proposed to be fielded. Assuming that about 87 percent of these are occupied dwelling units, there will be approximately 2,800 households to screen. Two-thirds of these households (1,870 households in total) will be assigned to get the promised incentive for completing the screener, with half (n=935) being promised $10 and the other half promised $5; the remaining third will be assigned not to receive an incentive. The screener version variable will be crossed with the incentive factor; 1,400 households will be assigned to get each version of the screener. Both of these experimental variables will be varied within-segment. Power calculations indicate power well above 0.80 for detecting differences between the two screener groups of five percentage points in response rates. For example, assuming a design effect of 1, there will be power of 0.99 to detect a difference between a 92 percent screener response rate in the short screener group versus an 87 percent response rate in the long screener group. Similarly, if the response rates are 72 percent in the short screener group but 67 percent in the long screener group, the power is still above .80. The power is also adequate for detecting incentive effects. There will be power of 0.60 or above to detect 5 percent differences in response rates between pairs of incentive groups (for example, $10 versus $5 or $5 versus no incentive). Power will be even higher if analytical models that incorporate covariates are used.

Finally, baseline individual screener interviews (which include detailed tobacco use questions) will be conducted with 840 adults (including 332 tobacco users and 508 cases classified as non-users based on the household screener). Extended interviews also will be conducted with 590 of these adults, including all 332 of the tobacco users and approximately 258 of the non-users; individual screeners only will be conducted with the remaining 250 non-users (to allow detection of false negative classifications from the household screener). There will be adequate numbers of persons who have been screened to support these sample sizes.

Final decisions about which version of the screener and which incentive level to use will be based on three criteria: 1) the screener response rate; 2) the percentage of persons classified as tobacco users; and 3) the agreement between screener classifications and classifications based on the more detailed questions administered directly to the sample person. The longer screener is predicted to produce more accurate identification of tobacco uses (i.e., more persons classified as tobacco users and greater agreement between the screener and the more detailed questions) but to have lower screener response rates. The combination of a long screener and the $10 incentive may represent the best approach for minimizing response errors without lowering response rates. Analysis of field test data will also examine the impact of the incentive on callbacks and main interview response rates. In summary, the field test experiment is expected to provide evidence on the most cost-effective combination of incentive amount and screener version that maximizes the accuracy of the screener data and the response rates for the screener and the main interview.

References

Gilpin, E.A., Pierce, J.P., Cavin, S.W., Berry, C.C., Evan, N.J., Johnson, M., & Bal, D.G. (1994). Estimates of population smoking prevalence: Self- vs proxy reports of smoking status. *American Journal of Public Health*, *84*, 1576-1579.

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