

## PRINTING A TOLL-FREE NUMBER ON SURVEY MAILINGS TO REASSURE APPREHENSIVE RESPONDENTS

Martha Stapleton Kudela, W. Sherman Edwards, Westat;  
Barbara Crawley, Lori Teichman, Centers for Medicare & Medicaid Services

**KEY WORDS:** Mail survey, survey packaging, survey envelopes, envelope design, response, survey methods

### Description of Study

In the fall of 2001, the Centers for Medicare & Medicaid Services (CMS) contracted with Westat to conduct the Medicare & You Regional Survey, a mail survey of Medicare beneficiaries with telephone follow-up. The purpose of the survey was to help assess the impact of the Medicare program's national and regional outreach and education efforts. The survey asks a variety of questions about where beneficiaries get information about Medicare and where they prefer to get such information, their television-viewing and radio-listening habits, and their knowledge of the Medicare program. It was conducted in the ten CMS Regions.

### Impetus for Printing toll-free number on envelopes

The field period was scheduled to begin in January, 2002. During survey development, the terrorist attacks of September 11<sup>th</sup> and the anthrax incidents happened. Shortly thereafter, other Westat projects began reporting that survey respondents were refusing delivery of Federal Express packages from Westat, throwing away advance letters without opening them, and placing more calls to study-specific toll-free numbers to express concerns about mail from an unrecognized source. Westat convened a company-wide brainstorming session to find ways to address respondent concerns about mail from us, as well as what appeared to be lower response rates in the wake of last Fall's events. One idea was to print a toll-free number on the outside of survey mailing envelopes so that respondents could verify the legitimacy of Westat studies before opening mail from us.

### Literature Review

There has been little previous research about the effect of printing study contact information on survey mailing envelopes. Dillman's Total Design Method (1978) addresses the dimensions of envelopes containing survey materials, as well as the type of postage used and appearance of address labels. He

advises against using advertising catchphrases such as "immediate reply requested" on envelopes, but he does not mention any other kinds of messages that may be printed there. O'Hare (1999) found that the design used on an envelope does not appear to affect response rates, but that returns are higher from respondents who receive their materials in a box versus an envelope. Asch and Christakis (1994) mailed surveys in university envelopes and U.S. Department of Veterans Affairs (VA) envelopes to physicians. They found that the packaging of survey materials can make a difference in response rates (those who received the survey in the VA envelopes responded at a higher rate than those in the university envelope condition), but were unable to attribute that difference to any specific aspect of the envelopes. As part of their quantitative analysis of published results of 98 mailed questionnaires, Heberlein and Baumgartner (1978) included three factors related to the appearance of a survey mailing envelope – class of mail (e.g., first class, third class, etc.), whether the respondent's address was personalized, and type of postage. Of these, they found that use of metered postage had a positive effect on response rates. Several other researchers have looked at the effect on response rates of other survey design factors such as questionnaire color and format, personalization of the cover letter, and type of stamp (White and Chambers, 1997; Helgeson, Voss, and Terpening, 2002; Gendall, 1995; Buttle and Thomas, 1997; LaGarce and Kuhn, 1995; LaGarce and Washburn, 1995). None, however, included envelope design in their analysis.

### Description of Experiment

Approximately 3,000 respondents were sampled from each of nine regions, and slightly more than that in the New York Region to help compensate for generally higher non-response in the New York City area. The total sample size for the ten Regions was 31,745. The mailout schedule followed Dillman's Total Design Method – an advance letter was mailed the first week, the survey booklet with cover letter the next week, a reminder/thank you postcard shortly after that, and finally a second survey booklet with cover letter was mailed to those who had not yet returned a survey booklet after two to three weeks. The advance letter was mailed March 21, 2002.

We selected about one-quarter of the sample in Region II (New York, New Jersey, Puerto Rico) and in Region V (Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin) as the control group. We chose these particular Regions to account for the possibility that the impact of the September 11<sup>th</sup> and anthrax events on response rates would be greater in those areas of the country where the incidents happened (Region II) than in those areas where they did not (Region V). The control group beneficiaries received their materials in envelopes with no message printed on the outside (plain envelopes). Sampled beneficiaries in the other eight regions, as well as three-quarters of those in Regions II and V, received their materials in envelopes printed with the words, "Questions about this letter? Please call toll-free 1-888-608-0608." (Envelopes with this message on them are referred to here as printed envelopes.) All envelopes, regardless of whether a toll-free number was printed on the outside or not, displayed the Department of Health and Human Services (DHHS) and CMS logos, and both names were listed in the return address. Table 1 shows the distribution of the sample in Region II and Region V by type of envelope received.

**Table 1. Distribution of sample by type of envelope received, Region II and Region V**

	Plain envelope		Printed envelope	
	Number	Percent	Number	Percent
<b>Region II</b>	881	53.5	2646	53.7
<b>Region V</b>	767	46.5	2285	46.3
<b>Total</b>	1648	100.0	4931	100.0

In order to track how many calls came from those who received plain envelopes and those who received printed envelopes, we set up two toll-free numbers. As described above, the first (referred to as the 0608 number) was displayed on the printed envelopes. The second number, 1-888-274-0104 (referred to here as the 0104 number), appeared only on the letters and survey booklets that came in the plain envelopes. Finally, we asked those who called the 0608 number whether they opened their envelope before calling.

**Results**

Table 2 shows the number of calls made to each toll-free number within six weeks of the start of the field period. About 4½ percent of those who received the printed envelope called the 0608 number, and a similar proportion of those who received the plain envelope called the 0104 number. These totals represent all calls that were made to the toll-free lines, whether the caller spoke to a live

operator, left a voicemail message, or hung up without leaving a message. Twenty percent of the calls made to the 0608 line were answered by a live operator, as were 24 percent of the 0104 calls.

**Table 2. Number and proportion of beneficiaries who called each toll-free number**

	0608 Number (Printed envelope)	0104 Number (Plain envelope)
<b>Total number of calls</b>	1345	72
<b>Percent of sample</b>	4.5 <sup>1</sup>	4.4

<sup>1</sup>Calculated as total calls/total sample in 10 regions-(number who received plain envelope+beneficiaries identified as deceased before mailout began)

Table 3 shows that, of those who received the printed envelope and called the 0608 number, about 4½ times as many reported opening their envelopes first as reported calling first.

**Table 3. Number of callers to 0608 number who did and did not open their envelopes before calling**

Printed Envelope Opened Before Calling?	
YES	NO
170	37

Finally, Table 4 shows the number of completed surveys by Region and type of envelope received, along with the response rate in each Region and for the two Regions combined. The response rate of those who received the plain envelope was somewhat higher than that of those who received the printed envelope. This difference was not significant.

**Table 4. Response rates by type of envelope received, Region II and Region V**

Region and State	Response rates <sup>1</sup>			
	Plain envelope		Printed envelope	
	Number	Percent	Number	Percent
Region II Total <sup>2</sup>	380	43.1	1097	41.5
Region V Total <sup>2</sup>	408	53.2	1177	51.5
Regions II and V Total <sup>2</sup>	788	47.8	2274	46.1

<sup>1</sup>Where response rate = completed surveys/sample size-beneficiaries identified as deceased before mailout began

<sup>2</sup>None of the proportional differences were significant (all z-values were less than 1).

## Discussion and Conclusions

By the time data collection for the Medicare & You Regional Survey began (March 21, 2002), concerns raised by the anthrax attacks about contaminated mail had virtually disappeared. Printing a toll-free number on the outside of survey mailing envelopes probably did not address the fears it was intended to address. In fact, only about 20 percent of those who received a printed envelope and called the toll-free number reported that they placed the call before opening their envelopes. Perhaps these people would have behaved differently if they had received the plain envelope. However, we cannot say with certainty whether they would have simply thrown the envelope away without opening it, opened the envelope and called the number that appeared on the cover letter, or even whether they would have completed the survey or not. Furthermore, the appearance of the number on the outside of the envelope may have raised concerns that would not otherwise have occurred to these beneficiaries.

The same percentage of those who were sent the plain envelope called the toll-free number as did those who received the printed envelope. It appears that printing a toll-free number on the outside of survey mailing envelopes does not increase the volume of calls to that number.

We found that printing a toll-free number on the outside of our envelopes did not improve response rates to the questionnaire. In fact, the response rate of those who received the printed envelopes was lower than those who got the plain envelopes (although this difference was not significant). This outcome may, in part, support Dillman's recommendation not to print messages on survey envelopes. In fact, it is unlikely that printing a toll-free number on survey mailing envelopes will boost response rates.

## References

- Asch, D.A. and Christakis, N.A. (1994). Different Response Rates in a Trial of Two Envelope Styles in Mail Survey Research. *Epidemiology*, 5(3), 364-365.
- Buttle, F. and Thomas, G. (1997). Questionnaire Colour and Mail Survey Response Rate. *Journal of the Market Research Society*, 39(4), 625-626.
- Dillman, D. (1978). *Mail and Telephone Surveys: The Total Design Method*. New York: John Wiley & Sons.
- Gendall, P. (1995). *The Effect of Questionnaire Cover Design in Mail Surveys*. Proceedings of

- the Section on Survey Research Methods, Vol. II.
- Heberlein, T.A. and Baumgartner, R. (1978). Factors Affecting Response Rates to Mailed Questionnaires: A Quantitative Analysis of the Published Literature. *American Sociological Review*, 43(4), 447-462.
- Helgeson, J.G., Voss, K.E. and Terpening, W.D. (2002). Determinants of Mail-Survey Response: Survey Design Factors and Respondent Factors. *Psychology & Marketing*, 19(3), 303-328.
- LaGarce, R and Kuhn, L.D. (1995). The Effect of Visual Stimuli on Mail Survey Response Rates. *Industrial Marketing Management*, 24, 11-18.
- LaGarce, R. and Washburn, J. (1995). An Investigation into the Effects of Questionnaire Format and Color Variations on Mail Survey Response Rates. *Journal of Technical Writing and Communication*, 25(1), 57-70.
- O'Hare, B. (1999, May). *Don't Judge a Survey by Its Cover: Experiments in Alternative Mail Survey Package Design*. Presented at the American Association of Public Opinion Research's 54<sup>th</sup> Annual Conference, St. Pete Beach, FL.
- White, M.B. and Chambers, K.M. (1997). Type of Cover Letter and Questionnaire Color: Do They Influence the Response Rate in Survey Research with Marriage and Family Therapists? *Family Therapy*, 24(1), 19-24.