BACKGROUND

Survey researchers are sometimes uncertain about the amount of time that should be allowed for the return of mail questionnaires sent to various kinds of respondents. This paper presents the results of nine mail surveys conducted by Abt Associates during the past three years.

The mail surveys analyzed in this paper were purposively selected to obtain a broad range of respondent groups (including telecommunications employees, automotive service department managers, mortgage customers, physicians, medical laboratory directors), different questionnaire lengths, variation in mail contact procedures (e.g., personalized versus generic letters) and follow-up procedures (postcard reminders, second mailing of the questionnaire package).

Most of these survey efforts began with an advance letter, or advisory letter, to respondents alerting them to the upcoming survey. About half of the surveys reported here used personalized advance letters; the others used generic advance letters with a “Dear survey respondent” type of salutation. One survey effort did not utilize an advisory letter to respondents.

The survey package typically included a cover letter -- either a personalized letter or a generic one, a questionnaire, and a pre-addressed Business Reply Envelope with a first class mail permit. The questionnaires varied in length from 2 to 12 pages.

A reminder postcard was mailed to respondents in about half of these surveys. For three of the surveys, a second mailing of the survey package was sent to sampled respondents.

Table 1 on the following page summarizes the major characteristics of the nine mail surveys reported here. The table is divided into three main sections:

- the top section presents “Overall Survey and Sample Information” for each of the nine surveys by describing the respondent population(s) sampled, total sample size, number of questionnaires returned, overall response rate to the mail survey, and so forth;
- the middle section of the table provides “Mailout and Follow-up Details”, indicating whether a personalized or generic advisory letter preceded the mailout of the survey package, whether a postcard reminder was sent to respondents and, if so, the date of the mailing, whether the follow-up effort included a second mailing of the questionnaire, and related details;
- the final section of the table displays the “Cumulative Percent of Questionnaires Returned” after 10 days from the initial mailout of the survey package, after 20 days, 30 days, 40 days, 50 days, and 60 days. The initial mailout of the questionnaire is considered “Day Zero”, and all calculations of the number and percent of questionnaires returned are based on calendar days, not business days.

METHOD

All mail surveys reported here included a first class Business Reply Envelope (BRE) in the survey package that respondents were requested to use for returning their completed questionnaires. The calculations of the number of questionnaires received are based on the charges to Abt Associates’ BRE permit account.

Questionnaires returns have been tracked from the initial mailout of the full questionnaire package (which, as noted above is considered as “Day Zero”). When the initial mailing extended over more than one day -- because of the large sample size being surveyed -- the first day of the mailout has been used for tracking purposes. Questionnaire returns were tracked for a period of 60 days or more from the initial mailout.

Researchers should be aware of the limitations of this analysis. There are likely to be seasonal variations in respondents’ response time to mail survey requests as well as overall response rates. No attempt has been made to control for seasonality. Importantly, these surveys did not utilize any kind of experimental design that explicitly tested variations in response time as it might relate to various independent variables (e.g., timing of reminders, mailing of a second questionnaire package). The data should be viewed with these limitations in mind.

SUMMARY OF FINDINGS

The nine mail surveys were conducted with samples ranging from 1,755 potential respondents (for the Survey of Auto Dealers and Auto Shop Managers) to 83,186 potential respondents (Survey of Physicians and Office Managers). Overall mail survey response rates ranged from 15% (Survey of Physician Specialists) to 47% (Survey of Auto Dealers and Auto Shop Managers).

Questionnaires started being received in as little as three calendar days after the initial mailout of the survey package, as in the case of the Survey of Auto Dealers and Auto Shop Managers. Of the nine mail surveys included in the analysis, the latest that questionnaires began being received was seven calendar days (for the Physician Survey...
Table 1: Summary Characteristics of Various Mail Surveys

<table>
<thead>
<tr>
<th>Study</th>
<th>Study A</th>
<th>Study B</th>
<th>Study C</th>
<th>Study D</th>
<th>Study E</th>
<th>Study F</th>
<th>Study G</th>
<th>Study H</th>
<th>Study I</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description of Telecommunications Health plan respondents</strong></td>
<td>Total Sample Size</td>
<td>24,262</td>
<td>59,664</td>
<td>10,665</td>
<td>1,755</td>
<td>5,100</td>
<td>4,500</td>
<td>18,063</td>
<td>83,186</td>
</tr>
<tr>
<td><strong>Number Reached</strong></td>
<td>6,040</td>
<td>27,286</td>
<td>2,453</td>
<td>818</td>
<td>1,967</td>
<td>807</td>
<td>6,606</td>
<td>18,207</td>
<td>3,861</td>
</tr>
<tr>
<td><strong>Last Receipt date recorded</strong></td>
<td>25-Jan-96</td>
<td>09-Jun-95</td>
<td>25-Mar-95</td>
<td>23-Jan-95</td>
<td>01-Dec-94</td>
<td>25-Mar-95</td>
<td>14-Aug-95</td>
<td>10-May-96</td>
<td>03-Nov-95</td>
</tr>
<tr>
<td><strong>Overall Mail response rate</strong></td>
<td>25%</td>
<td>46%</td>
<td>23%</td>
<td>47%</td>
<td>15%</td>
<td>31%</td>
<td>22%</td>
<td>32%</td>
<td></td>
</tr>
</tbody>
</table>

**Mailout and Follow-up Details**

<table>
<thead>
<tr>
<th>Advance letter</th>
<th>Personalized or generic</th>
<th>Date mailed</th>
<th>Initial Survey pkg</th>
<th>Personalized or generic</th>
<th>Date mailed</th>
<th>Reminder postcard?</th>
<th>Date mailed</th>
<th>Second Survey pkg?</th>
<th>Personalized or generic</th>
<th>Date mailed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personalized or generic</td>
<td>generic</td>
<td>09-Nov-95</td>
<td>generic</td>
<td>generic</td>
<td>13-Nov-95</td>
<td>no</td>
<td>23-Mar-95</td>
<td>no</td>
<td>generic</td>
<td>30-Apr-95</td>
</tr>
<tr>
<td>Date mailed</td>
<td>17-Mar-95</td>
<td>05-Jan-96</td>
<td>01-Dec-94</td>
<td>16-Jan-96</td>
<td>03-Nov-95</td>
<td>no</td>
<td>29-Nov-95</td>
<td>no</td>
<td>31-Dec-94</td>
<td>14-Dec-94</td>
</tr>
<tr>
<td>Reminder postcard?</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>no</td>
<td>yes</td>
<td>no</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>Second Survey pkg?</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>yes</td>
<td>no</td>
<td>yes</td>
<td>no</td>
<td>all</td>
<td></td>
</tr>
<tr>
<td>Personalized or generic</td>
<td>generic</td>
<td>01-Dec-94</td>
<td>29-Mar-95</td>
<td>01-Nov-95</td>
<td>16-Nov-94</td>
<td>12-Apr-96</td>
<td>17-Nov-95</td>
<td>17-Nov-95</td>
<td>17-Nov-95</td>
<td></td>
</tr>
<tr>
<td>Date mailed</td>
<td>09-Jan-96</td>
<td>16-Nov-95</td>
<td>16-Nov-94</td>
<td>12-Apr-96</td>
<td>31-Dec-95</td>
<td>31-Dec-95</td>
<td>31-Dec-95</td>
<td>31-Dec-95</td>
<td>31-Dec-95</td>
<td></td>
</tr>
</tbody>
</table>

**Cumulative Percent of Returned Questionnaires**

<table>
<thead>
<tr>
<th># of Days after initial survey mailout</th>
<th>10</th>
<th>20</th>
<th>30</th>
<th>40</th>
<th>50</th>
<th>60</th>
</tr>
</thead>
<tbody>
<tr>
<td>10-14</td>
<td>41.2</td>
<td>17.2</td>
<td>23.3</td>
<td>46.9</td>
<td>44.1</td>
<td>50.6</td>
</tr>
<tr>
<td>20-29</td>
<td>84.4</td>
<td>78.1</td>
<td>77.8</td>
<td>84.0</td>
<td>68.9</td>
<td>85.0</td>
</tr>
<tr>
<td>30-40</td>
<td>94.1</td>
<td>80.5</td>
<td>89.1</td>
<td>94.6</td>
<td>92.9</td>
<td>94.0</td>
</tr>
<tr>
<td>40-50</td>
<td>96.4</td>
<td>84.0</td>
<td>96.8</td>
<td>96.5</td>
<td>97.3</td>
<td>96.0</td>
</tr>
<tr>
<td>50-60</td>
<td>97.6</td>
<td>85.7</td>
<td>99.0</td>
<td>99.1</td>
<td>98.0</td>
<td>99.7</td>
</tr>
<tr>
<td>60-70</td>
<td>98.9</td>
<td>96.6</td>
<td>99.9</td>
<td>99.8</td>
<td>99.1</td>
<td>98.7</td>
</tr>
</tbody>
</table>

As well as the Survey of Automotive Service Department Managers).

In most cases, a relatively large volume of questionnaires -- often as much as three-quarters of all returns were received within the first three weeks, and 80% - 90% of completed questionnaires were often received within 30 days after the initial questionnaire mailout. For those survey efforts that utilized a remailing of the complete survey package, there was generally a noticeable rise in returns after the remailing.

One might reasonably expect the flow of daily questionnaires received to exhibit a relatively predictable pattern of returns from the Post Office (except, of course, for weekends and holidays when our office is not staffed to receive weekend/holiday mail or the Post Office is not scheduled to deliver mail). The analysis of daily returns on all nine surveys, however, indicate numerous business days when no questionnaires were received on the particular study, though questionnaires were received for other studies; this may be related to the size of the return envelope (e.g., #9 envelope, 9x12 envelope). In addition, there were days when no business reply mail was delivered at all. Such situations were often the result of postal employees being out sick, on vacation, or the post office was simply short-handed and did not get to sorting the BRE permit mail.

**Detailed Analysis: Study A**

The Survey of Telecommunications Employees was conducted from November, 1995 through late January, 1996 and involved a sample of 24,262 potential respondents. A generic advisory letter was mailed to the sample on 9 November and the full survey package was mailed the following week on 13 November (which is indicated as Day 0 for calculation purposes). This survey did not involve any reminder postcards or follow-up mailings.

Questionnaires began being returned on the fourth day after the mailout of the questionnaire package. By late January, a total of 6,040 questionnaires had been returned for a mail response rate of 24%. Of the questionnaires received, 41% were returned by Day 10 (see Table 1...
by Day 30, 94% of all questionnaires were received; by Day 60, a total of 98.9% of the questionnaires had been received.

Chart 1 displays the daily returns for this mail survey.

**Detailed Analysis: Study B**

The Health Plan Members Satisfaction Survey was conducted with a sample of 59,664 respondents. A generic advance letter was mailed to all respondents on 17 March 1995 and the full questionnaire followed on 20 March (Day 0). A reminder postcard was mailed to all respondents on 23 March (Day 3). On 30 April (Day 43) a second mailing of the questionnaire was mailed to nonresponders.

In all, questionnaires were received from 27,286 respondents for an overall response rate of 45%. After 10 days from the initial mailout of the survey package, 17% of the questionnaires had been received (see Table 1 above). A total of 80% of the questionnaires were received by Day 30, and 97% of the forms were received by Day 60.

**Detailed Analysis: Study C**

The Survey of Mortgage Customers was conducted with a sample of 10,665 respondents. This survey did not utilize an advance letter. The initial mailing of the full survey package was conducted on 1 December 1994 (Day 0), and a reminder postcard was mailed on 9 January 1995 (Day 39).

A total of 2,453 questionnaires were returned for an overall response rate of 23%. Of the returned questionnaires, 23% were received by Day 10 after the initial mailout, 89% by Day 30, and 99.9% by Day 60 (see Table 1 above). Chart 2 displays the daily returns on this survey.

**Detailed Analysis: Study D**

The Survey of Auto Dealers and Shop Managers was conducted in January 1996 and involved a sample of 1,755 respondents. A generic advisory letter was mailed to the sample on 5 January 1996, and the initial mailout of the full survey package was conducted on 16 January (Day 0). This survey did not use a reminder postcard or a second mailing of the questionnaire.

Questionnaires were received from 818 respondents for an overall response rate of 47%. Of the questionnaires returned, 47% were received by Day 10 after the initial mailout (see Table 1 above). By Day 20, 84% of the questionnaires had been returned, about 95% were received by Day 30, and by Day 60, 99.8% of the questionnaires had been returned.

**Detailed Analysis: Study E**

The Survey of Automotive Service Department Managers was conducted in the fall of 1994 with a sample of 5,100 managers. A generic advisory letter was mailed to the sample on 28 October 1994, and the full questionnaire package was mailed out on 7 November (Day 0). A reminder postcard was sent to the sample the next week, on 16 November 1994 (Day 9).

A total of 1,987 managers returned questionnaires on this study, for an overall response rate of 39%. By Day 10 after the initial mailout, 44% of all questionnaires had been received, by Day 30, about 93% of forms had been received, and by Day 60, 99% of the questionnaires had been returned (see Table 1 above).

**Detailed Analysis: Study F**

In the spring of 1996, a mail survey of 4,500 Physician Specialists was conducted. A personalized advisory letter was mailed to physicians on 25 March 1996, and the full questionnaire package (also with a personalized letter) was sent on 29 March (Day 0). A reminder postcard was mailed to the sample on 12 April (Day 14).

Questionnaires were returned by 687 physicians, for an overall response rate of 15%. On this survey effort, 51% of the returned questionnaires had been received by Day 10 after the initial questionnaire mailout. By Day 30, a total of 94% of the questionnaires had been received, close to 100% were returned by Day 60 (see Table 1 above). Chart 3 displays the daily questionnaire returns on this study.

**Detailed Analysis: Study G**

The Physician Opinion and Satisfaction Survey was conducted during the summer of 1995 with a sample of 18,063 physicians. A personalized advisory letter was mailed to each sampled physician on 14 August 1995, and the initial mailing of a personalized questionnaire package was sent on 18 August (Day 0). A full remail of the survey package was sent on 31 August (Day 13).

A total of 6,606 physicians returned questionnaires, for an overall mail survey response rate of 37%. By Day 10 after the initial questionnaire mailout, only about 16% of the returned questionnaires were returned, and about 45% by Day 20 (see Table 1 above). The relatively slow response time, especially as compared with the other mail surveys analyzed, may be a seasonal affect of mailing the initial survey package in mid-August. By Day 30, 83% of the questionnaire returns had been received; 97% of all returns were received by Day 60.

**Detailed Analysis: Study H**

The Physician and Office Manager Survey was a large scale survey effort involving a sample of 83,186 respondents. Personalized advisory letters were mailed on 29 April 1996, and the initial questionnaire package mailout began on 10 May 1996 (Day 0). This project did not use a reminder postcard but, instead, conducted a full remail of the questionnaire package (including personalized letter) on 24 May (Day 14).

Questionnaires began being received by the fifth day. Of all questionnaires returned on this survey, 27% had been...
received by Day 10, 78% by Day 30, and nearly 100% by Day 60 (see Table 1 above). In all, 18,507 questionnaires were returned for an overall response rate of 22%. Chart 4 presents the daily returns on this survey. The second peak of returns beginning on Day 24 is most likely a function of the second mailing.

**Detailed Analysis: Study I**

The Survey of Medical Laboratory Directors and CEOs was conducted during the fall of 1995 and involved a sample of 12,000 respondents. A generic advance letter was mailed to the sample on 3 November 1995 and the full questionnaire package was mailed on 10 November (Day 0). A reminder postcard was dropped in the mail the following week, on 17 November (Day 7).

A total of 3,861 questionnaires were returned by respondents for an overall response rate of 32%. Of the questionnaires returned, about 9% had been received by Day 10, and 80% by Day 20 (see Table 1 above). Over 90% of returned questionnaires were received by Day 30, and nearly 99% by Day 60.

Chart 5 the daily returns of questionnaires.

**Conclusion**

Chart 6 summarizes the returns for the nine mail survey efforts. The pattern of cumulative returns is very similar across studies, even though different populations were surveyed, questionnaire length differed, and different contact methods (personalized versus generic communications) had been employed.

Within 30 days after the initial mailout of questionnaire materials to respondents, 80-90% of the questionnaires that will be returned had already been received. The additional period from days 31 to 60 nets some additional responses, and for a few surveys the number of additional questionnaires received are significant. As is noted in the above discussion, the pattern and timing of questionnaire returns can be affected by the nature of follow-up efforts and many other factors (e.g., season).

What is interesting to note, however, is that even though the overall response rate to these mail survey efforts show a fairly wide range from 15% to 47%, the cumulative response time curves appear quite similar.
Chart 2: Mortgage Customer Satisfaction Survey

Chart 3: Survey of Physician Specialists

Chart 4: Physician & Office Manager Survey