New Reminder Methods Can Boost Establishment Survey Response Rates

by Matthew Anderson¹, Melissa Krakowiecki², Larry Vittoriano¹, Karen CyBulski¹, and Cathie Alderks²

Mathematica conducts the National Survey of Substance Abuse Treatment Services (N-SSATS), an annual multimode establishment survey of more than 17,000 substance abuse treatment facilities across the nation, on behalf of the Substance Abuse and Mental Health Services Administration (SAMHSA). The survey includes information on facility characteristics, treatment services provided, and client count information. It also provides data for the National Directory of Drug and Alcohol Abuse Treatment Programs as well as an online treatment facility locator. In 2011, Mathematica implemented a new strategy for handling respondent reminders to help maintain its historically high response rate. The multimode strategy used bulk faxes and emails, single mail reminders, and single telephone reminders, as well as more frequent reminders. The reminder process also started earlier than in previous years. This paper compares the 2011 and 2010 data collection cycles. To determine if the new strategy affected the rate of return or the overall response rate, we compare response rates at six points in the data collection cycle and then examine the number of completes per week to identify any peaks in response rates that coincide with dates of the reminders.

Encouraging Survey Completion

Maintaining high response rates year after year for an establishment survey is a difficult undertaking. The recurring burden on respondents tends to decrease their motivation, and increase the need to encourage survey completion. N-SSATS response rates have declined during the past few years. To boost these rates for the 2011 data collection, we tested an enhanced respondent reminder protocol. Before 2011, the typical protocol consisted of a mailed reminder letter, a single reminder phone call, limited fax reminders, and a single email reminder, with most bulk reminders occurring in the final month of data collection.

Overview of N-SSATS

The N-SSATS employs mail, telephone, and web modes to collect data from respondents. Mathematica has conducted this survey for the past 15 years, and the response rate has consistently been above 90 percent.¹ The annual data collection includes the following milestones, which provide baseline comparison points for response rates across the years of data collection:

- Date of first packet mailing
- Mailing date of reminder letter
- Date reminder call process begins and one and two months after the reminder call process ends
- End date of data collection

¹ Response rates have been calculated according to the accepted American Association of Public Opinion Research (AAPOR) formula.
² The 2011 first packet mailing did not include a hard-copy questionnaire, as was standard practice in all previous years of the N-SSATS. Only respondents who requested a hard-copy questionnaire during the period between the first and second packet mailings were sent a paper version of the questionnaire. All nonresponders were provided a questionnaire in the second packet mailing.
³ The dates for the six points in the standard data collection cycle are approximately March 31, mid-April, mid-June, approximately one month after reminder call, approximately two months after reminder call, and early October.

¹ Mathematica Policy Research.
² Center for Behavioral Health Statistics and Quality (CBHSQ/SAMHSA).
³ Email addresses were collected using only the web mode in 2010. In 2011, the mail mode also collected email addresses to create a more comprehensive database.
Why Focus on Respondent Reminders?

In reviewing the past five years of data, the project team identified a downward trend in response rates. The 2010 response rate proved to be the lowest in the previous five years and prompted the need to stimulate responses for the 2011 round of the N-SSATS. Figure 1 illustrates response rates in each of the five years preceding the 2011 data collection cycle.

In previous rounds of N-SSATS, the typical reminder protocol included a single mailed reminder letter (one month after the first packet mailing), as well as a single reminder call (a process that starts in mid-June), and culminated in the last month of data collection with bulk fax reminders and a single bulk reminder email (initiated in 2010). This protocol normally increased response rates. Furthermore, the reminders historically boosted the number of completes to maximize final response rates. With this trend in mind, the N-SSATS team initiated an enhanced protocol that started the reminder process earlier and increased the number of fax and email reminders. This accelerated and enhanced protocol facilitated the release of bulk fax and email reminders to respondents starting in mid-July rather than waiting until the final month of data collection (the typical protocol used in 2010). The enhanced protocol was designed to boost the number of completes earlier in the cycle and achieve a higher response rate than achieved in 2010.

Comparison and Descriptive Analysis

To identify differences in overall response rates between the 2010 and 2011 data collection cycles, we looked at six milestones in the process:

(1) Date of the first packet mailing
(2) Date of the reminder letter mailing
(3) Date the reminder call process began
(4) One month after the reminder call process ended
(5) Two months after the reminder call ended
(6) End date of data collection (see Figure 2)

Comparing response rates at the same points in time during both data collection cycles reveals variation in completes that can be attributed to the enhanced respondent reminder protocol.

The Figure suggests that there was a noticeable improvement (approximately 3 percent) in the rate of response in 2011 and that the divergence in the response rate at the comparable points in data collection in the respective years might be the result of the enhanced respondent reminder protocol implemented in mid-July.

Given this difference, the project team examined the total number of completes by week from the beginning of the implementation of the 2011 enhanced protocol to the end of data collection for both data collection years. Figure 3 shows the difference between the two years and the peaks in 2011 that coincide with release dates of the various modes of respondent reminders.

Figure 3 suggests that the enhanced protocol for respondent reminders had a positive effect on the response rate in 2011, providing the boost needed to increase response rates from the 2010 cycle. Figure 4 displays the same positive effect using a breakdown of daily completes.
The enhanced protocol for respondent bulk reminders proved to be a benefit for the 2011 data collection cycle and increased the total number of completes. Figure 5 shows the final response rates for the past six years of the N-SSATS, including 2011, which reversed a declining response rate, produced an increase in overall completes, and increased the overall annual response rate as much as 3 percent for the N-SSATS from the previous year.

**Recommendations and Conclusions**

Using varying modes of respondent reminders, increasing the use of bulk faxes and emails, and sending reminders earlier in the data collection cycle had a noticeable impact on increasing the response rate for the 2011 N-SSATS. We will continue using this enhanced and accelerated protocol in the future. It will be important to continue to collect email addresses by web and mail modes and as well as by telephone to increase penetration of bulk email reminders. In addition, the project team is exploring social media and emerging technologies that may extend the variety of reminder modes used.

Further research on the effects of respondent reminders may provide additional information on how to maintain or increase already high response rates for different groups. Because this was a descriptive study, we also have to confirm whether the observed increase in response rate can be attributed to the enhanced respondent reminder protocol or if other variables contributed to the change. An experimental study could examine the sample and rates of response based on the length of time a facility had been included in data collection for the N-SSATS. A comparison of the varying groups (those that completed before, those new to the sample, and those that left the sample and returned in a nonsubsequent year) could provide additional insight about whether reminders have a greater impact on one group of respondents over another.

For more information, contact Matthew Anderson at: MAnderson@Mathematica-mpr.com.