USING ON-SITE COORDINATORS TO ENCOURAGE PHYSICIAN RESPONSE TO A MAIL SURVEY[1]

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Introduction

Researchers are concerned about a continuing trend toward declining response rates to surveys from both the general population (Groves & Couper 1998) and from specific populations, including physicians (Asch, Jedrziewski & Cristakis 1997). This concern is justified because, all things being equal, the higher the response rate from a sample, the greater the confidence in the generalizability of the data to the larger population. In addition to improved data quality, higher response rates, particularly from early responders, can reduce the costs for data collection.

It is known that increased personalization of surveys enhances response rates (Mangione 1995, Dillman 1978, 2000). Individualization strategies that have proven helpful in motivating physicians to participate in survey research include calls from an investigator, research assistant, or another physician (Ward & Wain 1994) and the inclusion of handwritten notes from the principal investigator (Maheux et al. 1989).

Extending the idea of personalization, we recruited personnel at 91 HIV/AIDS clinics to serve as on-site coordinators for a longitudinal study that involved surveying multiple physicians at each site at two points in time. The on-site coordinators identified clinic staff eligible for inclusion in the baseline and follow-up sampling frames, distributed the individualized questionnaire packets, and reminded nonrespondents to complete the surveys. The coordinators were provided prepaid cash incentives.

The use of on-site coordinators proved to be an effective strategy. The overall response rate to the baseline survey was 89%, and to the follow-up survey, 85%. (Response rates were calculated using AAPOR's RR1 formula (AAPOR 2000)). This paper describes our experiences in implementing this method for contacting physicians and other providers to enlist cooperation for a self-administered survey.

Background

Many clinics that provide medical care for the most vulnerable populations of HIV- infected persons receive financial support through the Ryan White Comprehensive AIDS Resources Emergency (CARE) Act, which is administered by the Health Resources and Services Administration (HRSA). Through grants to over 200 clinics nationwide, the CARE Act supports the development and operation of coordinated health care delivery systems that provide medical care to people diagnosed with HIV/AIDS. With its emphasis on serving vulnerable populations, CARE Act clinics are often the only choice for the poor, the unemployed, and the uninsured.

Concerned with the quality of care provided by CARE Act supported clinics, HRSA provided supplemental funding to many of these clinics to participate in a HRSA-sponsored continuous quality improvement program (McInnes 2002). Newly funded Ryan White clinics were mandated by HRSA to participate in the "Improving Care for People Infected with HIV Collaborative" program, while previously funded clinics were invited, but not required, to participate. The data collection protocols reported in this paper were employed in an evaluation study designed to examine the impact of that program. The evaluation includes a patient chart review component as well as a longitudinal survey to collect information from clinicians, medical directors and HIV-program administrators. This paper reports our experiences with using on-site study coordinators to assist with the survey data collection efforts.

Overview

HIV clinic personnel were recruited to serve as our agents in distributing survey instruments and gaining the cooperation of clinicians for a self-administered survey. For both waves of this longitudinal study, the on-site coordinators were expected to provide lists of the names of eligible clinicians and administrators, deliver initial and replacement questionnaire packets to sample members, and remind non-responders to complete the forms. They were offered a prepaid $200 incentive to perform these activities for each wave [total $400].

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Two professional telephone interviewers experienced with physician surveys were assigned to contact specific HIV clinics sampled for the longitudinal evaluation study. The interviewers placed calls to the clinic personnel who had been nominated to serve as on-site study coordinators. By assigning interviewers to on-site coordinators, it was hoped that rapport would develop that would facilitate project communications.

Once the coordinators were recruited and samples created, three types of questionnaires, Clinician, Medical Director, and Site Surveys, were sent to the coordinator at each clinic to distribute. The Clinician instruments were developed for physicians and other ancillary health care providers, e.g., nurse practitioners and physician assistants, eligible for the study because they had responsibility for a panel of patients that included individuals with HIV/AIDS. Both the Clinician and the Medical Director questionnaires were designed to collect information about clinic personnel's experiences with quality improvement initiatives at the clinic. The third questionnaire, the Site Survey, was developed to gather demographic and other administrative information about the HIV/AIDS clinic. All sample members received a prepaid $20 cash incentive to encourage participation.

The interviewers made follow up calls to coordinators to confirm the receipt of the survey materials and incentives. Over the course of the field period, coordinators were contacted periodically and given the names of non-responders at the clinic. We asked the coordinators to remind sample members about the study and encourage their participation. The entire process was repeated about a year following the baseline survey, after the intervention sites had participated in the HRSA-sponsored quality improvement program.

Methods and Materials

Samples

Wave 1. The study was conducted in 91 HIV/AIDS health clinics located across the country. A two-stage sampling design was employed. First, clinics were sampled, then a sample of eligible clinicians was selected from each sampled clinic. For sites with 5 or fewer eligible clinicians, all clinicians were surveyed, but in sites with more than 5 clinicians, a random sample of 5 was selected from the list of eligibles.

The clinic sampling frame derived from the list of CARE-supported clinics and included HIV clinics participating in the quality improvement intervention and those that did not. Clinic representatives completed a brief form requesting data about site characteristics and the contact information for a clinic employee nominated to serve as the on-site study coordinator. For the intervention sites, these forms were completed at the first Collaborative session, while non-intervention sites were mailed the request for information. Attempts were made by a representative of Harvard's Department of Health Care Policy (the evaluation study grantee) to gather the information by telephone from clinics that did not respond.

Using a 3-group design (mandated intervention sites, self-selected intervention sites, and control sites), clinics were matched on a combination of caseload, type of organization, urbanicity, geographic region, and number of associated clinic sites. A probability sample was selected for each subgroup. Sites with a caseload of fewer than 100 HIV-positive patients were considered ineligible.

The on-site study coordinators provided a list of the names of clinicians at the site who had responsibility for a panel that included HIV-positive patients. Up to 5 clinicians per site were randomly selected to complete a Clinician questionnaire. In addition, coordinators were asked for the names of both the clinic's medical director and the person who would be most knowledgeable about administrative aspects of the HIV clinic, in order to direct the Medical Director and Site questionnaires to the appropriate respondents.

Wave 2. To create the sample for the follow-up survey, the coordinators at all of the clinics who were eligible for the baseline survey were contacted and asked to once again provide lists of clinicians meeting study criteria and the names of the medical director and of a staff member who was knowledgeable enough to complete the Site Survey. A sample of clinicians was selected

Contact with Sampled Clinics

The nominated on-site coordinators were mailed a packet of information about the study, an outline the role of the on-site-coordinator, and an offer for a $200 honorarium. They were subsequently contacted by specially trained telephone interviewers from the Center for Survey Research at the University of Massachusetts Boston. The goals for the initial call were to answer any questions the staff person might have about the study and to enlist their cooperation. Once the staff member agreed to help with the study, s/he was asked to provide a list of the names of clinicians at the site for sampling as outlined above.

First Mailing of Questionnaire Packets. Coordinators were each sent a package via special delivery (Federal Express) that contained an instruction sheet, a check for the $200 incentive, and a sealed

questionnaire packet for each sampled staff member. A $20 cash incentive was attached to the cover letter in each of the questionnaire packets.

Results

Coordinators in only about half (54%) of the sites personally accepted the $200 incentive. In a handful of cases, the coordinators opted to donate the money to the clinic. Administrative decisions were made in the remaining sites to have the incentive go to the clinic, either to something like the coffee fund or back into the general fund. One clinic declined to accept the incentive.

Overall, the interviewers were able to make contact with the coordinators in a reasonable amount of time, requiring on average no more than about 5 calls to make contact and complete a given task. Obtaining the lists of eligible clinicians took more effort than any of the other tasks, with some coordinators requiring up to 19 call attempts in Wave 1 and up to 23 calls in Wave 2. Each set of reminder calls, however, took no more than 8 calls to any single clinic.

Response rates were calculated for both waves of administration by type of questionnaire, by type of site, and by type of clinician [see Table 1]. Sampled respondents were equally likely to return the Site [W1: 93%; W2: 93%] and Medical Director [W1: 86%; W2: 87%] surveys in both time frames. Although they achieved an adequate response rate, clinicians proved significantly less likely to return a questionnaire at Wave 2 [80%] than at Wave 1 [89%; $p<.05$].

Another way to think about response rates is by type of site. Control sites were equally likely to respond to the survey requests at both times [about 85% for both field periods]. Intervention sites produced significantly fewer returns at follow up [87%] than at baseline [93.4%; $p<.05$], with the clinics that were required to attend the Collaborative session the least responsive, particularly during the second wave [W1: 88%; W2: 78%; $p<.05$]. The clinics that voluntarily chose to attend the quality improvement sessions proved to be the most responsive, with more than 95% completing the survey in Wave 1. They also, however, had a significantly lower response in the follow up survey [85%; $p<.05$].

Because the samples of clinicians included both physicians and ancillary medical providers, we looked at response rates by training, hypothesizing that the physicians would be less willing respondents. This proved to be true. Across both waves, the physicians performed less well [W1: 86%; W2: 80%] than the Nurse Practitioner and Physician Assistant group [W1: 95%; W2: 90%].

Discussion

Without the benefit of being in a position to randomize the sample to experimental conditions, it is impossible to tease out the effect on the response rates of using on-site coordinators from any of the other strategies employed in this survey that are known to influence response rates. However, previous work has demonstrated that the provision of prepaid cash incentives has a large, significantly positive effect on response rates from physicians. Looking at the response to another mail survey where a $20 cash incentive was provided via special delivery of physicians practicing in a clinic setting might provide a reasonable comparison group. A 62% response rate [AAPOR RR1] was obtained under those conditions in a survey of physicians working in managed care settings in Minnesota (Gallagher 2001). Although the doctors' offices were not HIV/AIDS clinics, comparing the 86% response rate obtained from the physicians in the first wave of the current study gives us reason to believe that the on-site coordinators had a significant effect on physicians' willingness to respond over and above any effect of the cash incentives. Researchers who survey doctors would benefit from an empirical test of this finding.

There are obviously non-trivial costs associated with the use of on-site coordinators, including the cost of the coordinator incentives and the telephone interviewer costs. However, in a longitudinal survey such as this, and in other situations where achieving a satisfactory response rate is key to the success of the project, these costs are offset by improvements in the confidence in the generalizability of the data. In addition, the timeliness of the returns also reflects well on the use of on-site survey agents. Over 75% of the clinics in the baseline survey had returned all questionnaires sent to the site by the seventh week of the field period.

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Table 1. Response Rates by Questionnaire & Site

	Wave 1		Wave 2	
	Eligible Sample n	Response Rate %	Eligible Sample n	Response Rate %
By Type of Questionnaire:				
Clinician	337	**89%**	365	**80%**
Director	91	**86%**	87	**87%**
Site	91	**93%**	87	**93%**
By Type of Site:				
Control Sites	231	**84%**	227	**85%**
Intervention Sites:	288	**93%**	312	**82%**
Mandated	75	**88%**	98	**78%**
Self-Selected	213	**95%**	214	**85%**
By Type of Clinician:				
Physician	330	**86%**	330	**80%**
NP/PA	189	**95%**	209	**90%**
Total	519	**89%**	539	**84%**