

Factors Influencing the Response Rates for the Physician Practice Information (PPI) and Supplemental Practice Expense (SPE) Surveys

Recent discussions regarding the differences in the response rates obtained for some of the medical specialties that participated both in the 2007-2008 Physician Practice Information (PPI) survey and the privately sponsored "Supplemental" Practice Expense (SPE) surveys conducted in 2003-2004 have led to a request for **dmrkynetec** to highlight differences in the methodologies between the two survey formats. For example, since **dmrkynetec** administered both the PPI survey for the AMA and the SPE surveys for Radiology, Cardiology and Radiation Oncology, we have the opportunity to provide a "unique" perspective on the relationship between the two survey formats and to examine factors that may have contributed to the differences in response rates.

The SPEs that were conducted in 2003–2004 for the American College of Radiology (ACR), the American College of Cardiology (ACC) and the American Society for Therapeutic and Radiation Oncology (ASTRO) all complied with criteria specified by The Lewin Group, who served as the consultant for assuring appropriate survey methodology on behalf of CMS. The PPI had a large degree of scrutiny in its development and many of the questions added to the supplemental survey versions were added at the specific request of CMS. The initial 2007 version of the PPI survey was developed in conjunction with the participating medical specialties, RUC, CMS, and The Lewin Group. The final 2008 version of the PPI survey, which contained a small number of additions and deletions from the 2007 version, also received approval from CMS.

The following text describes the differences in the AMA (PPI) and The Lewin Group (SPE) methodologies and how the response rates for the PPI and the SPE surveys may have been influenced by the methodologies used.

Sample Size and Composition

In general, the SPEs used larger sample pools to obtain a sufficient number of completed surveys to reach precision levels required by CMS. The initial SPE sample pool for Cardiology, for example, used 7,600 records with complete contact information from the AMA Physician Masterfile. The PPI survey, consisted of 3,500 cardiologists drawn in two waves from the AMA Physician Masterfile. The larger sample SPE pools allowed **dmrkynetec** to focus on those physicians most willing to cooperate with the survey.

While the SPE sample pool for Radiation Oncology (RO) was smaller than that used for the PPI survey, it was open to all practicing ROs who met the basic eligibility requirements. In contrast, the larger PPI sample pool had to account for a much larger group of ineligible ROs. In the PPI survey, only RO physicians who were totally hospital based (estimated to be less than 65% of the population of practicing ROs) met eligibility. Given that more than 35% of the ROs would not meet this criterion, the PPI sample had to be larger in scope.

Unlike the PPI survey of practicing radiologists, the radiology SPE sample pool was not physician based, but instead consisted of practices represented by the Radiology Business Managers Association (RBMA). The RBMA supplied the list of 936 practices with complete contact information and also encouraged their membership to participate in the survey. Many of the questionnaires were completed, in fact, by practice managers, who are typically more available for direct contact than physicians.

Eligibility Requirements

All of the SPE surveys were geared towards owners of the practice, whereas the PPI survey included both owners and non-owners (employees and sub-contractors). While the PPI survey was more comprehensive in scope, many of these employees and sub-contractors did not have sufficient access to or knowledge of the required expense information to submit acceptable surveys. Missing expense information rendered many of their surveys incomplete or unacceptable.

The same applied to physicians who had only practiced for a portion of the year designated for reporting expenses. The SPE surveys screened these respondents out as ineligible, where the PPI survey wound up rejecting those with less than 26 weeks of service as unacceptable.

The radiology SPE survey screened out radiologists practicing in an academic setting, such as a teaching hospital, which would eliminated many non-practice owning physicians. Similar to employees, even practice owners in the type of setting may not have had access to staff records and expenses that would have been necessary to complete an acceptable questionnaire.

These eligibility requirements helped the SPE surveys obtain higher response rates, as only accepted surveys are used in the numerator for calculating response rate. In general, ineligible respondents are subtracted from the total pool which shrinks the denominator, while those submitting incomplete or rejected questionnaires are left in the denominator.

Length and Complexity of the Questionnaires

The SPE questionnaires were exclusively focused on Practice Expense as specified by The Lewin Group and CMS, where the AMA PPI survey was much more comprehensive in the scope of information sought. The SPE surveys varied from about 34 questions (Radiology) to 42 questions (Cardiology) and required about 12 – 15 minutes to complete, once the information that required some form of record searching (included in the advance worksheet) was compiled. The AMA PPI survey averaged about 84 questions and took 35 minutes to complete, once advanced worksheet information was compiled.

The worksheet itself differed between the two survey formats. The SPE worksheet for radiation oncologist contained 8 advanced lookup questions, cardiologists contained 11 questions, and the radiologists contained 12. The number of questions grew as both **dmrkynetec** and The Lewin Group gained experience with the questions physicians found most difficult to answer. In contrast, the basic AMA PPI advanced worksheet contained about 66 questions contained on a four page worksheet. The advanced worksheet for radiologists was somewhat shorter. Their 55 question worksheet contained fewer weekly activities and eliminated six demographic questions already contained in their sample records.

As an advanced worksheet was mailed to all participants in the sample pool, both for the SPE and PPI surveys, the physicians would have had an opportunity to gauge the effort needed to complete the survey. The difference in length and complexity of the AMA PPI survey may have contributed both to a larger number of incompletes and early terminates, as well as a large number of passive refusals (where physicians instruct their reception area not to bother them about the questionnaire and never respond to the requests to participate in the survey).

Data Collection Methodologies

The final methodological difference that may have contributed to the divergent response rates between the two survey types would be the manner in which the data was collected. The earlier SPE surveys were all collected by CATI interview, which began several weeks after the worksheet material was mailed to the targeted physicians. In the more recent PPI survey, a multimodal data collection methodology was employed. Physicians were allowed to participate in a CATI interview, if desired, but also had the options to submit their completed worksheets by fax or to complete the questionnaire on-line.

As the PPI survey progressed, the on-line web survey quickly became the data collection method of choice, as 75 percent of the physicians surveyed submitted their questionnaires in this form. Worksheets sent in by fax was the second most frequent method of questionnaire completion (19%), while the CATI interviews accounted for the least number of completes (6%).

While the web and fax options proved to be effective methods for collecting information from a greater volume of physicians (dmrkynetec collected over 5,000 surveys in 2008), they also permitted a greater number of incompletes to be submitted. In a CATI survey, the one to one exchange between interviewer and participant can help motivate the participant to provide answers for difficult questions. If there are questions that cannot be answered at the time of the interview, the respondent may make a personal agreement to find the answer and supply it when called back. This sense of obligation may not have existed with those respondents who submitted information through the web and fax formats.

The faxed-back worksheet was the only format in which answers could have remained missing or unanswered. Attempts to reach the respondent and obtain the missing information often failed, as the respondents frequently felt they had already completed the survey. In the web version, the respondent often used zero, Don't Know and Refused to get past questions for which they had not obtained a valid response. While these were also pursued in call-back attempts, many of these attempts failed to provide valid answers. The large number of incompletes that resulted from these less personal forms of respondent participation would have served to lower the response rates of the medical specialties participating in the 2008 PPI survey.

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