

# Finding meaning in reporting requirements

## Provider sampling and survey length

### Abstract

*Meeting compliance requirements to report information such as provider satisfaction typically inspires groans, followed by*

**Key words:**  
Surveys, data collection, provider sampling

*hasty actions by those who must collect and supply the information. Reports often reflect this lack of interest as findings are rarely defended as representative. Our medical group employed statistical methodology to make this process meaningful while also keeping it fairly simple and without incurring added costs.*

*By establishing our provider satisfaction survey as a scientifically based endeavor, we improved the likelihood the providers would actively and honestly participate, and report findings with confidence.*

A health care organization does well to assess its effectiveness in helping its providers deliver medical care. But even good ideas — such as provider satisfaction surveys — quickly become nuisances. Creating and completing surveys typically involves three problematic considerations: (1) how long to make the survey; (2) how many doctors to survey; and (3) how to hold down survey costs and still obtain a suitable outcome. These very real and important issues inevitably result in survey degradation as fewer doctors get asked fewer questions for fewer dollars.

This paper describes how we used a few simple techniques — stratified random sampling and preliminary piloting — to hold down the cost of our provider satisfaction survey and contact just enough physicians to produce meaningful results.

### Make it easy for the docs

In our current era of heightened accountability, physicians and other health care providers are inundated with mountains of paper and electronic information. The first question in designing a successful survey is how to get providers to complete it. This is much easier said than done, as evidenced by chronically low return rates. Physicians often discard a survey after a cursory glance because they believe the time demand is too great. One-page, easy-to-complete surveys — ones with an intuitive

*By Steven H. Stumpf, Ed.D., Sam J.W. Romeo, M.D., Luis N. Pacheco, M.D., and Marji E. Gerstein, R.N.*

rating scale and fewer than 15 items — can greatly enhance return rate. Multipage surveys with non-intuitive formats — for example, embedded questions — are more likely to be tossed by the typical provider.

Critics correctly warn that shorter surveys may trade convenience for meaningfulness. However, we believe the degree to which the respondents represent the entire membership is critical. Ensuring a representative sample requires careful planning, but saves considerable cost and ensures valid information in the end.

### The importance of sampling

Reports of survey outcomes rarely describe how results were ascertained; that is, what methodologies were used to collect opinions from a representative group of providers. People apparently assume that because it is cost-prohibitive and generally difficult to distribute surveys, they need not report response rates or, if they report them, are above questioning.

However, without information such as response rate or sample representativeness, the reader cannot and should not conclude results are valid. Unless the survey-takers employed sound scientific methods such as sampling and piloting, regard results as anecdotal information. Simply mailing surveys to all providers in the network and reporting outcomes for completed forms should be unacceptable. Laudatory interpretations based on data gathered unscientifically are more appropriately regarded as good marketing than meaningful information.

At the time we surveyed, our organization had 2,828 physician members (702 in primary care and 2,126 in specialty care). By using a statistical formula to calculate sample power,<sup>1</sup> we estimated we needed 258 completed surveys to detect a true difference in mean scores as small as 0.35; that is, we could be confident a difference as small as 0.35 on the survey questions would represent an actual difference in the population 90 out of 100 times. We also determined that 500 providers would have to receive surveys in order to ensure that 258 providers would complete them.

We employed a stratified, random sampling strategy to identify our pool of 500.

We stratified according to three criteria, ranked by priority: practice size, primary or specialty care, and category of medicine. We automatically included the 68 providers with the largest practices (representing approximately 40 percent of all patient members). We selected the remaining 432 randomly, making sure that primary and specialty care providers were proportionally represented, and that medical areas were represented according to group presence. We had to collapse 56 medical areas into 17 to accommodate the last criterion.

We scored the seven-item survey, addressing phone assistance, provider credentialing and claims processing on a four-point scale from "strongly disagree" to "strongly agree." We needed 12 weeks to design and pilot the survey, which we distributed and collected over the course of three weeks. We called providers who did not return surveys after the first week no more than twice during the subsequent two weeks.

### Outcomes from our survey

We received 278 surveys from our strategically selected sample pool of 500 (a 55.6 percent response rate). Total responses per item ranged from 242 to 254. We drew the sample from a provider pool of 2,828. Twenty-nine percent of responses came back by mail. Results indicated that providers agreed the organization delivered services at a satisfactory level (see Figure 1, p.48).

Carefully designed surveys can yield two important benefits to a management organization:

- They provide objective evidence of improvement or deterioration in performance. Both are important where satisfaction helps retain physician membership and loyalty; and
- by evaluating satisfaction scientifically, they fulfill the reporting needs of the organization and provide an objective platform for monitoring success in helping doctors do their work with maximum assistance and minimum hindrance.



*Steven H. Stumpf, Ed.D., is director of funding, research and education, University Affiliates IPA, an MGMA member organization, 1000 South Fremont Avenue, A-11, Alhambra, CA 91803; telephone (800) 287-2472.*



*Sam J.W. Romeo, M.D., is an MGMA member and president and CEO of University Affiliates.*



*Luis N. Pacheco, M.D., is an MGMA member and medical director, and Marji E. Gerstein, R.N., is an MGMA member and director of quality management and credentialing at University Affiliates.*

We can succinctly describe our approach as one that employed statistical methodology to ensure provider representativeness and limited the number of questions to encourage provider response. In other words, we tried to keep it simple and thorough. In the final analysis, we also kept costs under control without sacrificing results. Establishing the survey as a scientifically based endeavor is vital to winning provider confidence and improve the likelihood they will actively and honestly participate. Without this disciplined approach, anecdotal results, which tend to identify the loudest complainers and the most loyal champions of the organization, tend to get reported. A statistically valid process allowed us to identify specific areas for improvement. Repeated studies employing the same methods should provide a sound base for planning change in the future.


**Figure 1**

**Mean scores for survey items**

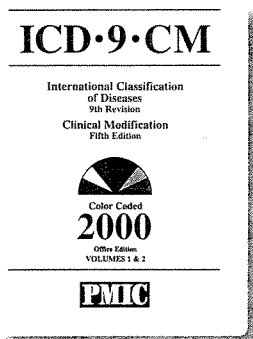
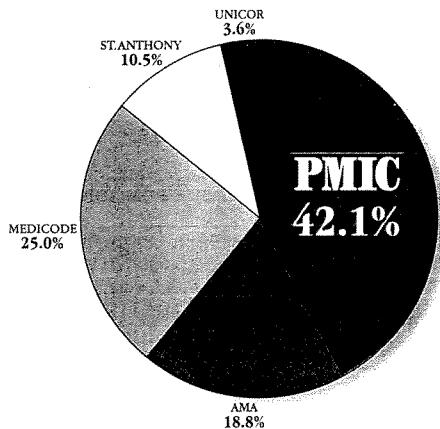
	Mean score	Standard deviation	Total
1. Phone calls are picked up promptly.	3.16	1.20	254
2. Phone calls are handled in a friendly, courteous and helpful way.	3.32	1.20	252
3. Credentialing is handled as promised in a timely way.	3.12	1.09	252
4. Claims are handled in a timely way.	2.88	1.20	254
5. Questions about claims are handled courteously and in a timely way.	3.22	1.32	254
6. Referrals are picked up quickly.	3.04	1.23	242
7. Overall, I am satisfied with the IPA.	3.29	1.12	254

**Notes**

1. Fink, A. *How To Sample In Surveys* (Thousand Oaks: Sage Publications, 1995); and Shavelson, R.J. *Statistical Reasoning for the Behavioral Sciences* (Allyn & Bacon, 1988).

The authors wish to thank Larry Hurgick of Princeton Research Survey Associates for his kind assistance in preparing this article. 

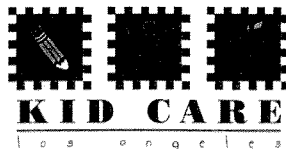
**WHEN YOU BUY THE BEST-SELLING ICD-9-CM IN AMERICA, YOU HELP FEED HUNGRY KIDS!**



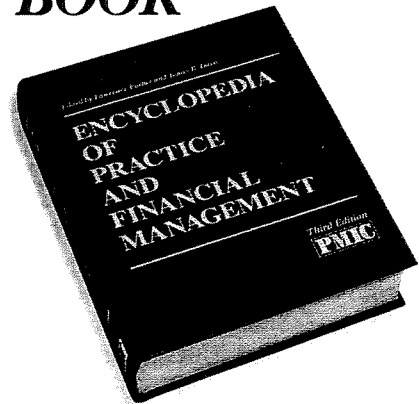
We're not blowing smoke with our claim to the best-selling ICD-9-CM in the United States. As you can see for yourself, based upon sales reported by Login Brothers, one of the nation's leading medical book distributors, our version outsells all other versions. This award winning (Doody Journal, Brandon-Hill) book sells over 100,000 copies every year!

And when you buy any of our best-selling coding and reimbursement books, you're also helping to end hunger among the children of America. PMIC is the major corporate sponsor of Kid Care Los Angeles, a non-profit organization which funds hundreds of free lunches for hungry children every day. A portion of the profits from every order is donated to Kid Care.

**So to buy a book and feed a kid call  
1-800-MED-SHOP**



**THE ANSWER BOOK**



Completely revised third edition of this best-selling reference book. Covers everything you need to know about the business and financial management of a medical practice. Covers all the basics from coding insurance and reimbursement to the more complex issues like managed care and health care reform. A must-buy for every medical practice.

ENCYCLOPEDIA OF PRACTICE AND FINANCIAL MANAGEMENT, 3RD EDITION  
ISBN 1-878487-89-2 \$69.95

VISIT OUR BOOKSTORE ON THE INTERNET  
<http://medicalbookstore.com>