

**Supporting Statement B
National Practitioner Data Bank and
Healthcare Integrity and Protection Data Bank
Market Surveys and Survey of Use of Data Bank Information by Queriers _**

B. Statistical Methods

Collection of Information Employing Statistical Methods

Respondent Universe and Sampling Methods

A stratified sample design will be used to sample from each of the following groups of entities: (i) NPDB users (ii) HIPDB users (iii) NPDB non-users and (iv) HIPDB non-users. Entities registered in the NPDB will constitute the group of NPDB users regardless of their level of activity (reporting or querying). Since Malpractice Payers can't query, the only possible activity type for this group will be reporting. Entities that are eligible to query and/or report to NPDB but have not registered to do so will form the group of NPDB non-users. Similarly, entities registered in the HIPDB will be identified as HIPDB users whereas entities eligible to query and/or report to HIPDB but not already registered in HIPDB will belong to the group of HIPDB non-users.

Table 1 below presents the estimated population size, proposed sample size and the expected number of completed interviews for all strata within the NPDB and HIPDB Current User groups.

Table 1: Estimated Population Size, Initial Sample Size and Expected Number of Completed Surveys for the NPDB and HIPDB Current Users Groups

Population	Stratum	Stratum Description	Activity	Estimated Population Size	Initial Sample Size	Expected number of completed surveys
NPDB Current Users	1	Malpractice Payers	Reporting	286	286	228
	2	Licensing Boards	Reporting/Querying	113	113	90
	3	Hospitals	Reporting ¹	583	583	466
	4	Hospitals	Querying ²	5876	1242	994

	5	MCOs	Reporting/ Querying	1126	1126	900
	6	Other HCEs	Reporting ¹	72	72	57
	7	Other HCEs	Querying ²	5269	1220	976
<i>NPDB Total</i>				<i>13325</i>	<i>4642</i>	<i>3711</i>
HIPDB Current Users	2	Licensing Boards	Reporting/Querying	289	289	231
	3&4	Government Hospitals	Reporting/Querying	487	487	390
	5	MCOs	Reporting/Querying	725	725	580
	6&7	Other HCEs	Reporting/Querying	326	326	260
<i>HIPDB Total</i>				<i>1827</i>	<i>1827</i>	<i>1461</i>
Total				15152	6469	5172

¹Include all entities that have reported to NPDB during the first nine months of 2006;

²Include all entities that have queried NPDB during the first nine months of 2006

In nine out of the eleven strata in Table 3 for NPDB and HIPDB Current Users, all entities will be surveyed i.e. a census will be carried out. The required sample size to achieve ± 3 percent precision with 95% confidence level in each of these strata (after accounting for an expected response rate of 80 percent) is close to the total number of entities (stratum size) and that is why a census is planned for these strata. In the remaining two (Stratum 4 & Stratum 7), the stratum sizes are relatively large and hence sampling is proposed. The expected number of completed surveys for each stratum for both NPDB and HIPDB was derived based on an assumption of 80 percent response rate.

The samples (Stratum 4 & Stratum 7) will be selected using a simple stratified sample design where the stratification will be based on 'Size' of the entities. For Stratum 4 and Stratum 7, size of an entity will be defined as the number of queries made by that entity during the reference period of twelve months. The exact specification of the different strata based on size will be determined using database counts at the time of final sample size calculations.

For the purpose of surveying **matched responses**, we plan to develop the sampling frames for the following population segments: (i) State Licensing Boards (ii) Hospitals (iii) MCOs and (iv) Other HCEs. Also, we propose to draw samples of entities from Current Users only. It will be consistent with what was done in 2000 survey. Moreover, it

will be difficult for respondents to answer questions relating to matched responses prior to the reference period.

The sampling frame for each stratum will consist of all queriers (entities) with at least one matched response. A ‘No Response’ (or non-match) is not considered a matched response. However, entities with at least one matched response may also receive one or more ‘No Response’ for some of their other queries. In 2007 survey, we propose to draw independent samples from the sampling frames for each of the 4 strata as shown below in Table 2. This will ensure better control of the number of entities to be surveyed for matched responses. Table 2 provides the description of the different strata and estimates of the population size, initial sample size and the expected number of completed surveys for the survey of matched responses for NPDB Current Users. Table 4 provides similar information for HIPDB Users. The expected number of completed surveys included in these tables is derived based on an assumption of 80 percent response rate.

Table 2: Estimated Population Size, Sample Size and Expected Number of Completed Surveys for the Survey of Matched Responses for NPDB Users Groups

Population	Stratum	Stratum Description	Activity	Estimated Population Size	Initial Sample Size	Expected number of completed surveys
NPDB Current Users	2	Licensing Boards	Use of matched responses	69	69	55
	3&4	Hospitals	Use of matched responses	5512	1230	984
	5	MCOs	Use of matched responses	1060	1060	848
	6&7	Other HCEs	Use of matched responses	3556	1130	904
Total				10197	3489	2791

Table 3: Estimated Population size, Initial Sample Size and Expected Number of Completed Surveys for the Survey of Matched Responses for HIPDB Users Groups

Population	Stratum	Stratum Description	Activity	Estimated Population Size	Initial Sample Size	Expected number of completed surveys
HIPDB Current Users	2	Licensing Boards	Use of matched responses	54	54	43
	3&4	Government Hospitals	Use of matched responses	253	253	202
	5	MCOs	Use of matched responses	540	540	432
	6&7	Other HCEs	Use of matched responses	109	109	87
Total				956	956	764

The overall purpose and sample design of the survey of **non-users** will be similar to that for the 2000 survey. However, the definition of non-users will now only include entities that are eligible to query and/or report but have not registered to do so. This approach will eliminate entities (from the group of non-users) that have registered to use the data banks but have neither reported to or queried the data bank they have registered to use.

Table 4: Estimated Population size, Initial Sample Size and Expected Number of Completed Surveys for the NPDB and the HIPDB Non-User Groups

Population	Stratum	Stratum Description	Activity	Estimated Population Size	Initial Sample Size	Expected number of completed surveys
NPDB non-users	1	Licensing Boards	Non-user	266	266	213
	2	MCOs	Non-user	501	426	341
	3	Other HCEs	Non-user	5038	1101	881

HIPDB non-users	4	Licensing Boards	Non-user	37	37	30
	5	MCOs	Non-user	669	514	411
	6	Other HCEs	Non-user	11171	1218	974
Total				17682	3562	2850

Data Collection Procedures

We have designed data collection procedures to maximize timely response, reduce burden to respondents, and promote accuracy and completeness of responses. Specifically, the following steps are planned.

Gallup will contact potential survey respondents via telephone by trained, professional interviewers. Interviewers will conduct these initial screening calls with the assistance of Computer Assisted Telephone Interviewing (CATI). These very brief calls will be made during business hours to ensure that appropriate respondents are identified and that information and instructions regarding the web survey are provided in a timely manner.

Within 24 hours of the screening call, Gallup will email invitations, which include directions to complete the survey, to eligible respondents. Respondents then may log in to the web-based survey at their convenience to complete the questionnaire. The ability to complete the interview at their own schedule should help maximize overall response rates.

We plan to send a series of email reminders to encourage participation and completion of all surveys. Additionally, respondents will have access to a Gallup Helpline in case they encounter problems completing the survey, lose their log-in credentials, or have other questions.

Additionally, a series of CATI call reminders are planned. For those few respondents that have yet to complete the survey after the planned series of telephone and email reminders, Gallup will offer respondents the opportunity to complete the survey with a telephone interviewer during the final round of CATI calls.

Finally, we will send an informational letter to difficult to locate respondents or respondents that initially refuse participation. The letter will detail the importance of their participation and instructions on ways to register their opinions.

Methods to Maximize Response Rates and Deal with Nonresponse

Respondents will receive advance notification of the survey as well as follow-up reminders. Information regarding the survey will be made available on the NPDB/HIPDB web site, so that users accessing the databases during their usual reporting and

querying activities will also encounter information encouraging their participation in the survey.

An evaluation of potential nonresponse bias will be conducted for entities in the reporting sample, the querying sample and the non-user sample (e.g., type of organization, geographic location) to make comparisons of responders and non-responders (using chi-square and t-tests). This will tell us whether there were any specific types of organizations that were less likely to respond to the survey and, if significant differences are found, hypothesize as to the direction and significance of the impact this bias will have on the results, if any. We will not wait until the end of the study to perform this analysis. If we see midway through the study that a certain entity type is under-represented, extra effort will be targeted toward that group to increase response rates. One intervention that we would use to raise the response rate is to administer the web instrument by CATI during the initial recruiting call.

Test of Procedures or Methods to be Undertaken

The questionnaires were tested internally to assess survey length and comprehensibility, and the instruments were pre-tested on fewer than 9 respondents to assess estimates of burden, and clarity of the instructions and questions.

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