

SUPPORTING STATEMENT

Part B

Collection of Information for Agency for Healthcare Research and Quality's (AHRQ) Medical Office Survey on Patient Safety Culture Database

September 8, 2021

Agency of Healthcare Research and Quality (AHRQ)

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B. Collection of Information Employing Statistical Methods

1. Respondent universe and sampling methods

The AHRQ Surveys on Patient Safety Culture™ (SOPS®) Medical Office Database serves as a central U.S. repository for data from the survey. However, the database is comprised of data that are voluntarily submitted by medical offices that have administered the survey, and is not a statistically selected sample, nor is it a representative sample of all U.S. medical offices. Estimates based on this self-selected group may produce biased estimates of the population and it is not possible to compute estimates of precision from such a self-selected group.

AHRQ developed and pilot tested the Medical Office SOPS in 2007 with OMB approval (OMB #0935-0132; approved on July 5, 2007). The original Medical Office SOPS Database was approved on June 12, 2012 (OMB #0935-0196; expiration date 6/30/2015).

The first Medical Office Survey on Patient Safety Culture Database report was published in 2012. Results from 1,475 medical offices that participated in the 2020 Database are available on the AHRQ website¹.

Quantifying the universe of medical offices is not straightforward. Medical offices are typically characterized as either those with 1 or 2 physicians or group medical practices consisting of 3 or more physicians. According to the U.S. Census Bureau 2018 Economic Census (2018 NAICS code 6211 “Offices of physicians”), there were 221,580 physicians’ offices in the U.S.² These offices consist of those with only 1 or 2 physicians as well as offices from medical groups with 3 or more physicians. In the 2020 Medical Office SOPS Database, 80% of medical offices were group practices with 3 or more providers.

Table 1 shows the geographic distribution of the AHRQ Medical Office SOPS Database medical offices compared to the distribution of offices of physicians based on the 2017 U.S. Economic Census³.

Table 1. Distribution of Offices of Physicians in AHRQ Database Medical Offices (2020), U.S. Economic Census, Offices of Physicians (2017), by Region

Census Region	AHRQ MO SOPS Database Medical Offices (2020)		U.S. Economic Census, Offices of Physicians (2017)	
	Number	Percent	Number	Percent
South	862	58%	90,246	40%
Northeast	97	7%	41,499	19%
Midwest	299	20%	36,632	16%
West	217	15%	54,665	25%
TOTAL	1,475	100%	223,042	100%

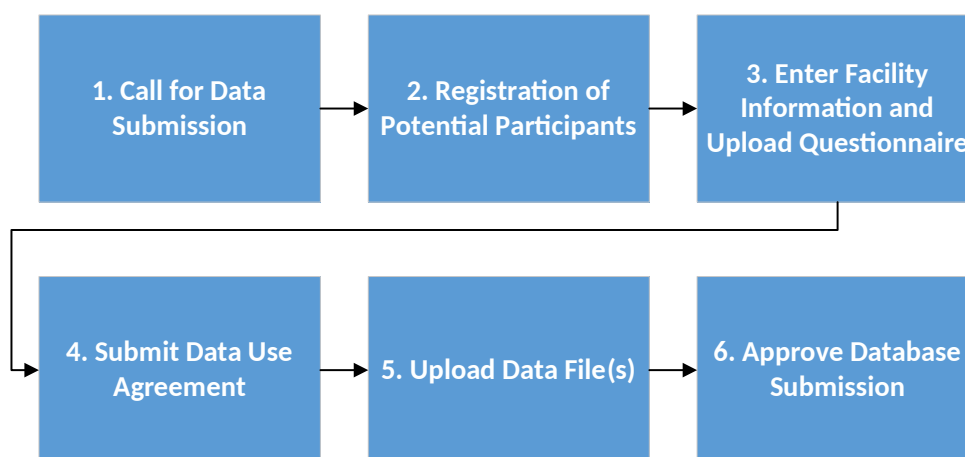
Medical offices that submit data to the Database receive a free, customized feedback report that displays their medical office's results against the aggregated and de-identified results of other medical offices submitting data to the Database. Medical offices that do not submit data to the database can still view the Medical Office SOPS Database report for aggregate results of those medical offices who voluntarily submitted their data to the Database. As part of a toolkit of support materials for the Medical Office SOPS survey, medical offices can also use a Microsoft® Excel-based Data Entry and Analysis Tool that is an Excel file with macros that will automatically produce graphs and charts of a medical office's results once data are entered into a data sheet. Many medical offices use this tool to produce their results.

In the overall database report, medical offices are provided with a detailed description and explanation of the statistics that are presented and given examples and guidance on how to calculate their own scores for comparison.

2. Information Collection Procedures

Information collection for the AHRQ Medical Office Survey on Patient Safety Culture Database occurs in a periodic data collection cycle approximately every other year in September. The next submission period is September 2021. Information collection procedures for submitting and processing data are shown in Figure 1.

Figure 1. Medical Office SOPS Database Data Submission



Step 1: Call for Data Submission. Announcements about the opening of data submission go out through various publicity sources. AHRQ's patient safety and electronic newsletters target approximately 50,000 subscribers. In addition, the AHRQ Surveys on Patient Safety Culture listserv targets approximately 46,000 subscribers. An example of email announcements calling for data submission is shown in Attachment D, Email # 1 and # 3. Through these efforts, U.S. medical offices are made aware of and invited to submit their survey data to the database.

As the administrator of the database and under contract with AHRQ, Westat provides free technical assistance to submitting medical offices through a dedicated email address (DatabasesOnSafetyCulture@westat.com) and toll-free phone number (1-888-324-9790).

Step 2: Registration of Potential Participants. A secure data submission website allows interested parties such as medical offices and medical groups to register and submit data. Registration takes about 3 minutes to complete and asks for contact and other basic information (see Attachment A). After registering, if registrants are deemed eligible to submit data, an automated email is sent to authenticate the account and update the user password (see Attachment D, Email # 2).

Once users are registered and have a password, they can enter the main page of the website. Information about eligibility requirements, data use agreements, and data file specifications regarding how to prepare their data for inclusion in the SOPS Database is posted on the main page and can be reviewed.

Step 3: Enter Facility Information and Upload Questionnaire. At this step, users provide information about each of their medical offices, such as point-of-contact, method of survey administration, overall response rate, and other characteristics that we use to analyze collected data (e.g., specialty, number of staff and providers, and ownership) (see Attachment C). They also upload their survey questionnaire that they administered to enable us to determine whether any changes were made to the survey (see Attachment G, Figure 1).

Step 4: Submit Data Use Agreement (DUA). To protect the privacy of all participating medical offices, a duly authorized representative from the medical office must sign a Data Use Agreement (DUA) (see Attachment B). The DUA language was reviewed and approved by AHRQ's general counsel and asserts that the medical office's data will be handled in a secure manner using necessary administrative, technical and physical safeguards to limit access to it and maintain its confidentiality. In addition, the DUA explains that the data are used for the purposes of the database, that only aggregated results are reported, and that the medical office will not be identified by name. Data are not included in the database without this signed DUA. Users can fax, mail, or upload a copy of the signed agreement.

Step 5: Upload Data File(s). At this step, users are asked to upload their individual-level survey data for each medical office (see Attachment G, Figure 2). Data submitted through the secure data submission website are encrypted to ensure secure transmission of the survey data. Data are accepted in Microsoft Excel® format since this is the format preferred by medical offices. Users must upload one data file per medical office. If a user has multiple offices within a medical group, users can upload one data file that identifies all of the offices in their group. The data file specifications (see Attachment E) are provided to data submitters to ensure that users submit standardized and consistent data in the way variables are named, coded, and formatted.

Once a data file is uploaded, a separate load program developed in Visual Basic (VB) reads the submitted files and loads them into the SQL database that stores the data. A data quality report is then produced and made available to the participant. This report displays item frequencies and flags out-of-range values and incorrectly reverse-coded items. If there are no problems with the data, an acknowledgement of data upload and acceptance will be granted during the user session. If data are improperly coded, the user is informed by having a message post on the screen indicating that the data file failed during the user session. Users are expected to fix any errors and resubmit their data file(s) for processing. Once there are no problems, the user is informed of the acceptance of data during the user session with an online message of acceptance.

Step 6: Approve Data Submission. Once all of the information required for submission has been submitted and approved, an email is sent to the medical office contact indicating that their data have received final acceptance.

3. Methods to Maximize Response Rates

AHRQ makes a number of toolkit materials available to assist medical offices with the SOPS surveys. The Medical Office SOPS has a Survey User's Guide that gives users guidance and tips about survey administration on the following topics: planning; selecting a sample; determining their data collection method; data collection procedures (including a section on web surveys); and analyzing data and producing reports⁴. The Survey User's Guide also gives medical offices tips about how to increase response rates through publicity efforts, top management support, use of incentives, and following all steps of proper data collection protocols. Of the medical offices that voluntarily submitted their data for the 2020 Medical Office SOPS Database, the average response rate for was 61% across 1,475 medical offices.

The SOPS User Network promotes the database in a number of ways:

- a) AHRQ and AHRQ SOPS email listservs;
- b) Organizational partners and stakeholders that have national reach to primary care and specialty practices;
- c) Users that have contacted the SOPS technical assistance helpline about the medical office survey;
- d) Other outlets such as webcasts and conferences.

As noted earlier in this document under Information Collection Procedures, Step 1 – Call for Data Submission, announcements about the opening of data submission go out through various publicity sources as a way to boost medical office participation in the database. AHRQ's electronic newsletter target approximately 50,000 subscribers. In addition, the AHRQ Surveys on Patient Safety Culture listserv targets approximately 46,000 subscribers. AHRQ, through its contractor Westat, provides free technical assistance to users through a dedicated email box and toll-free phone number. In addition, reminders are sent to database registrants to remind them of the deadline for data submission.

4. Tests of Procedures

Input and Feedback for the Development of the SOPS Database

Submission System. Because the Surveys on Patient Safety Culture are public-use instruments, the SOPS program has generally modeled its data submission processes after those used by the Consumer Assessment of Healthcare Providers and Systems (CAHPS) Database that has been in operation for many years. SOPS staff consulted with CAHPS Database staff and programmers to determine best practices for data submission. This information, as well as feedback obtained during the provision of technical assistance each year the database has been running, has been used to improve the SOPS online data submission system and process over time.

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¹ SOPS Medical Office Database. Content last reviewed March 2020. Agency for Healthcare Research and Quality, Rockville, MD. <https://www.ahrq.gov/sops/databases/medical-office/index.html>. Last accessed 12/28/2020.

² U.S. Census Bureau, 2018 Economic Census. <https://data.census.gov/cedsci/>. Last accessed 1/6/2021.

³ U.S. Census Bureau, 2017 Economic Census. <https://data.census.gov/cedsci/>. Last accessed 1/6/2021.

⁴ Medical Office Survey on Patient Safety Culture. Content last reviewed March 2020. Agency for Healthcare Research and Quality, Rockville, MD. <https://www.ahrq.gov/sops/databases/medical-office/index.html>. Last accessed 12/28/2020.