

**SUPPORTING STATEMENT**

**Part B**

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

**Version June 13, 2017**

Agency of Healthcare Research and Quality (AHRQ)

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## B. Collections of Information Employing Statistical Methods

### 1. Respondent universe and sampling methods

The AHRQ Pharmacy Survey on Patient Safety Culture (Pharmacy SOPS) Database serves as a central U.S. repository for data from the survey. Community pharmacies voluntarily submit their data to the database. Since the voluntary organizations are not a random sample of the community pharmacy population, and only a small percentage of all community pharmacies may choose to participate, the submitting pharmacies are not representative of all pharmacies in the U.S. 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. The Pharmacy SOPS was developed and pilot tested with OMB approval (OMB NO. 0935-0183; Approved 8/12/2011). The original Pharmacy SOPS Database was last approved on June 12, 2014 (OMB NO. 0935-0218). The first Pharmacy SOPS Database in 2015 includes only 255 pharmacies that voluntarily administered and submitted their data, which represents less than 0.5% of pharmacies in the U.S. While a very limited number of community pharmacies submitted to the initial database, AHRQ's intent for the database is to continue promoting the adoption of the survey and foster an increasing number of pharmacies submitting to future databases. An AHRQ Pharmacy Survey on Patient Safety Culture Database Report was produced in 2015. The report is on the AHRQ web site at <http://www.ahrq.gov/professionals/quality-patient-safety/patientsafetyculture/pharmacy/pharm-reports.html>.

There are estimated to be around 61,036 retail pharmacies in the United States (National Association of Chain Drug Stores (NACDS). NACDS 2011-2012 Chain Pharmacy Industry Profile. 2011). The distribution of pharmacies by type is presented in Table 1.

**Table 1. Distribution of Pharmacies by Type of Store for U.S. Pharmacies and 2015 Database Community Pharmacies**

Pharmacy Type	U.S. Pharmacies*		Database Community Pharmacies	
	Number	Percent	Number	Percent
Mass merchant/discount retailer pharmacy/supermarket pharmacy	17,606	29%	112	44%
Independent pharmacy	20,835	34%	7	3%
Integrated health system pharmacy/chain drugstore (local, regional, national)	22,595	37%	136	53%
Total	61,036	100%	255	100%

\*Source of data for U.S. pharmacies: National Association of Chain Drug Stores. NACDS 2011-2012 Chain Pharmacy Industry Profile. 2011. Statistics for integrated health system pharmacies that are open to the public are combined with statistics for chain drugstores in the NACDS results.

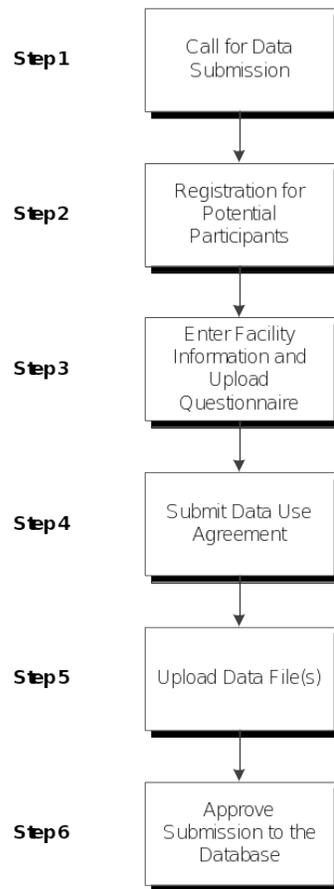
Pharmacies that submit data to the database receive a free, customized feedback report that displays their pharmacy's results against the database. Pharmacies that do not submit data to the database can still view the aggregate results of those pharmacies who voluntarily submitted their data to for the Database report. As part of a toolkit of support materials for the Pharmacy SOPS survey, pharmacies 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 pharmacy's results once data are entered into a data sheet. Many pharmacies use this tool to produce their results.

In the overall database report, pharmacies 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 results.

## ***2. Information Collection Procedures***

Information collection for the AHRQ Pharmacy Survey on Patient Safety Culture Database occurs in a periodic data collection cycle every two years from September 15 to November 1. The next submission period is September 2018. Information collection procedures for submitting and processing data are shown in Figure 1.

**Figure 1. Pharmacy 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 over 29,000 subscribers. An example of email announcements calling for data submission is shown in Attachment D, Email # 1 and # 3. Through these efforts, U.S. pharmacies 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 pharmacies through a dedicated email address ([DatabasesOnSafetyCulture@westat.com](mailto:DatabasesOnSafetyCulture@westat.com)) and toll-free phone number (1-888-324-9790).

**Step 2: Registration for Potential Participants.** A secure data submission web site allows interested parties such as pharmacies and health systems to register and submit data. Registration takes about 5 minutes to complete and asks for contact information 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 menu of the web site. 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 and can be reviewed.

**Step 3: Enter Facility Information and Upload Questionnaire.** At this step, users provide information about each of their pharmacies, such as point-of-contact, methods of survey administration, overall response rate, and other pharmacy characteristics (e.g., type of pharmacy, number of locations, average number of prescriptions dispensed per week, and number of pharmacists and pharmacy technicians) (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 pharmacies, a duly authorized representative from the pharmacy must sign a Data Use Agreement (DUA) (see Attachment B). The DUA language was reviewed and approved by AHRQ's general counsel. The DUA states that the pharmacy's data will be handled in a secure manner using necessary administrative, technical and physical safeguards to limit access to it and maintain its privacy. In addition, the DUA states the data will be used for the purposes of the database, that only aggregated results are reported, and that the pharmacy will not be identified by name. Data are not included in the database without this signed data use agreement. Users can fax, scan and email, scan and upload to a secure web site, or mail back 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 pharmacy (Attachment G, Figure 2). Data submitted through the secure data submission Web site are encrypted to ensure secure transmission of the survey data. Data are accepted in Microsoft Excel® format since this is the format preferred by pharmacies. Users must upload one data file per pharmacy. If a user has multiple pharmacies within a health system, users can upload one data file that identifies all of the pharmacies in their system. 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 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 pharmacy 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 pharmacies with the SOPS surveys. The Pharmacy 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 reports (at <http://www.ahrq.gov/professionals/quality-patient-safety/patientsafetyculture/pharmacy/index.html>). The Survey User's Guide also gives pharmacies 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 pharmacies that voluntarily submitted their data for the 2015 Pharmacy Survey on Patient Safety Culture Database, the average response rate was 64% across 255 pharmacies.

The Surveys on Patient Safety Culture User Network promotes the database in a number of ways:

- a) The GovDelivery listserv of subscribers to the AHRQ Pharmacy Survey on Patient Safety Culture;
- b) National partners that have national reach to pharmacies;
- c) Users that have contacted the Surveys on Patient Safety Culture technical assistance helpline about the pharmacy 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 pharmacy participation in the database. AHRQ's electronic newsletter targets approximately 50,000 subscribers. In addition, the AHRQ Surveys on Patient Safety Culture listserv targets over 29,000 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 utilized 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.

### **5. Statistical Consultants**

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