Educational Brief

PSOPPC Data Stewardship and Privacy Protections

Issue 49: April 2022
Last edited: May 2024

Introduction

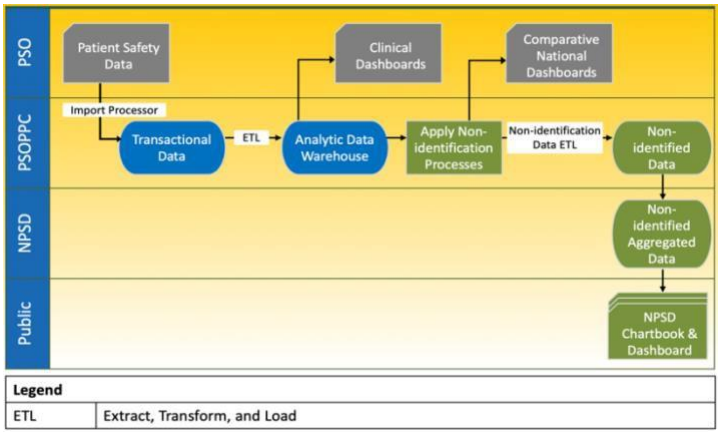
This brief provides an overview of the PSO Privacy Protection Center's (PSOPPC's) role in processing data from providers and Patient Safety Organizations (PSOs) and the processes in place within the PSOPPC to ensure that the data is transmitted securely to the Network of Patient Safety Databases (NPSD).

To promote shared learning and enhance quality of care and patient safety, the Patient Safety and Quality Improvement Act of 2005 (PSQIA) authorizes the Agency for Healthcare Research and Quality (AHRQ) to develop and maintain the NPSD. The NPSD is an interactive, evidence-based management resource for providers, PSOs, and other entities.

By law, the NPSD only receives and reports on non-identifiable patient safety events. AHRQ established the PSOPPC, presently staffed by AHRQ's contractor CORMAC, to assist PSOs and others to contribute patient safety event information (Patient Safety Work Product or PSWP) to the NPSD for analysis.

NPSD Data Flow

Figure 1: Data flows from the PSOs through PSOPPC, where it is deidentified. It then flows to NPSD to be aggregated and published to the NPSD public facing website. (More information: Issue 22 - Why Submit Patient Safety Event Data)



PSOs collect and aggregate patient safety information across providers and submit data to the PSOPPC using AHRQ's Common Formats for Event Reporting (CFER). The data is then imported into an analytic warehouse and rendered non-identifiable through a process of blinding and aggregating provider and patient information. The data is then submitted to AHRQ's NPSD System. Working with AHRQ and the HHS Office for Civil Rights, the PSOPPC maintains non-identification protocols that are consistent with the Patient Safety Rule and appropriate for the type and volume of data received.

Protection Measures within the PSOPPC

All data is hosted on a FedRAMP approved system used solely for PSOPPC business. Additionally, the protection steps below are in place to ensure that PSO data is kept confidential and secure.

1. **Data Use Agreements (DUAs).** To submit data to the PSOPPC, DUAs must be signed by PSOs. DUAs define CORMAC's obligation to PSOs to safeguard data privacy, confidentiality, and nonidentification. Further, should a PSO be delisted, its DUA will be terminated and its identifiable data will be removed from the PSOPPC. Non-identifiable data may be retained for NPSD analytics. Delisted PSOs are not included in the Clinical Dashboards or Comparative National Dashboard.

2. **Limited Access Levels for the PSOPPC Website.** The public-facing PSOPPC website provides resources for PSOs, providers, developers/vendors, and the public. However, the general public does not have access to the secure pages, like the data submission tools, the PSOPPC Help Center, and other resources. The PSOPPC Account Setup web page provides specific information on access levels for PSOs and their designated vendors.

Agency for Healthcare Research and Quality

This educational brief was prepared under Contract No. 75Q80121C00004 for the Agency for Healthcare Research and Quality, U.S. Department of Health and Human Services.

3. **Exclusion of Identifying Information.** The Patient Safety and Quality Improvement Final Rule, 42 C.F.R. § 3.212 (Patient Safety Rule) sets the standards for non-identifiability to protect providers, reporters, and patients. To protect providers and reporters and their affiliated organizations, corporate parents, subsidiaries, practice partners, employers, members of the workforce, or household members, certain identifiers are not entered in structured data that are submitted to the PSOPPC (see Table 1a). For patients, the Patient Safety Rule incorporates the Health Insurance Portability and Accountability Act (HIPAA) specifications provided in 45 C.F.R. § 164.514(a) through (c). Table 1b lists the patient identifiers that are not entered in PSWP submissions to the PSOPPC.

4. **Removal of Local Use Identifiers.** To make the CFER useful within local settings, identifiers such as patient name and medical record number were defined. Providers and PSOs are instructed not to submit these data elements to the PSOPPC. However, if they are present in the submitted data, the PSOPPC import processor removes them from the data prior to adding it to the database. Table 2 lists CFER local use identifiers that are not accepted by the PSOPPC to align with the nonidentification standard in the Patient Safety Rule.

Table 1: Identifiers not included in data submission to the PSOPPC for a) providers and reporters; b) patients and their relatives

Providers, Reporters*	Patients and Relatives**
Name (1)	Geographic subdivisions smaller than a state (B)
Geographic subdivisions smaller than a state***, including Postal address (2)	Telephone number (D)
Fax numbers (4)	Fax numbers (E)
Taxpayer identification numbers (6)	Electronic email addresses (F)
Provider or practitioner credentialing or DEA numbers (7)	Social Security Numbers (G)
National Provider Identification Number (8)	Health plan beneficiary numbers (I)
Certificate/License numbers (9)	Account numbers (J)
Web Universal Resource Locators (URLs) (10)	Certificate/License numbers (K)
Internet Protocol (IP) address numbers (11)	Vehicle identifiers and serial numbers, including license plate numbers (L)
Biometric identifiers, including finger and voice prints (12)	Device identifiers and serial numbers (M)
Full face photographic images and any comparable images (13)	Web Universal Resource Locators (URLs) (N)
	Internet Protocol (IP) address numbers (O)
	Biometric identifiers, including finger and voice prints (P)
	Full face photographic images and any comparable images (Q)
	Any other unique identifying number, characteristic, or code (R)
*Numbers in parentheses correspond to subitems in the Final Rule 42 C.F.R. § 3.206(b)(4)(iv)(A)	**Letters in parentheses correspond to subitems in the Final Rule 45 C.F.R. § 164.514(b)(2)(i).
***42 C.F.R. § 3.212(a)(2)(i)(B).	

Table 2: CFER Local Use Identifiers Not Accepted by the PSOPPC

Providers, Reporters*	Patients and Relatives**
Reporter email address† (5)*	Patient name† (A)
Reporter telephone number† (3)*	Neonate name† (A)
Reporter name† (1)*	Patient Medical Record Number† (H)
Device Serial Number†,***	Neonate Medical Record Number† (H)
Unique Device Identifier†,***	
Asset tag number†,***	
*Numbers in parentheses correspond to subitems in the Final Rule 42 C.F.R. § 3.206(b)(4)(iv)(A)	**Letters in parentheses correspond to subitems in the Final Rule 45 C.F.R. § 164.514(b)(2)(i).
***42 C.F.R. § 3.212(a)(2)(i)(D).	
†Data Element is specified in CFER-H v1.2 only.	

PSOPPC Non-identification Procedures

To further render PSWP nonidentifiable before submitting to the NPSD for inclusion in the NPSD Dashboards and Chartbooks, additional procedures are applied to the data. These include:

- Global recoding of dates to retain only the year (see Table 3)
- Data aggregation of record-level data
- Tabular suppression to eliminate the possibility of disclosure where a PSO is the sole contributor of information
- Exclusion of unstructured text to prevent unintentional disclosure of identifiers

Table 3: Dates Recoded by PSOPPC Before Submission to NPSD

Providers, Reporters*	Patients and Relatives**
Report date*	Patient or Neonate Date of Birth (C)
Event date*	Dates (C)
	Delivery date (C)
*42 C.F.R. § 3.206(b)(4)(iv)(B)	**Letters in parentheses correspond to subitems in 45 C.F.R. §164.514(b)(2)(i). "Dates" include all other dates directly related to an individual, such as admission date, discharge date, date of death, etc.

Conclusion

The PSOPPC assists PSOs and providers with contributing nonidentifiable PSWP to the NPSD for national learning. The processes in place within the PSOPPC ensure that data is transmitted securely in accordance with the Patient Safety Rule's nonidentification standard.

Technical Assistance

Contact the PSOPPC Help Desk for additional technical assistance via email at support@psoppc.org, or via phone at (866) 571-7712, Mon-Fri, 9am – 5:30pm, ET. You can also submit an inquiry via the PSOPPC Website – Contact Us page.

This educational brief was prepared under Contract No. 75Q80121C00004 for the Agency for Healthcare Research and Quality, U.S. Department of Health and Human Services.