

Implementation Guide
ASAP Standard
for
Pseudoephedrine (PSE)-Tracking
Programs

September 30, 2007

Version 1 • Release 000

**American Society for Automation in Pharmacy
492 Norristown Road • Suite 160 • Blue Bell, PA 19422
610/825-7783 • 610/825-7641 (fax) • www.asapnet.org**

Table of Contents

Introduction.....	3
Data Element Summary.....	5
Data Delimiters and Segment Terminators.....	5
Segment and Data Ordering.....	6
A Word About Patient Privacy and Security.....	6
This is a Rules-Based Standard.....	6
Real Time versus Batch Transmissions	6
Interfaces Supported	7
An Example of Looping in Batch Transmissions	7
Outbound Transmission	8
Segment: TH Transaction Header	9
Segment: PRV Provider Header	10
Segment: PUR Purchaser Information	11
Segment: SAI Selling Agent Information	13
Segment: PSE Transaction	14
Segment: PT Provider Trailer.....	16
Segment: TT Transaction Trailer	17
Response	18
Segment: TH Transaction Header	19
Segment: RSP Response Segment	20
Segment: INF Information Segment	21
Segment: TT Transaction Trailer	22
Appendix A	23
Examples of a Real-Time Transmission, Batch Transmission, and a Search	24

Introduction

This implementation guide explains how to use the ASAP standard for electronic transmission of data concerning the sale of pseudoephedrine (PSE). Typically, pharmacies and other retailers transmit such data to law enforcement authorities concerned about the use of pseudoephedrine to manufacture methamphetamine. In turn, law enforcement authorities use the data to identify persons whose pseudoephedrine purchases violate state or federal law.

Establishing a uniform standard for the transmission of pseudoephedrine sales data benefits all of these actors, just as the establishment of a uniform standard for the transmission of prescription drug data for prescription monitoring programs has benefited the actors involved in the transmission and tracking of these data. Both this standard for PSE Tracking and the standard for Prescription Monitoring Programs have been developed under the leadership of the American Society for Automation in Pharmacy (ASAP) with support from both the retail and law enforcement communities.

The immediate catalyst for the creation of this standard was a meeting of law enforcement officials in March 2007 sponsored by the National Alliance for Model State Drug Laws (NAMSDL), with support from the Office of National Drug Control Policy and the Bureau of Justice Assistance, Office of Justice Programs, United States Department of Justice. The meeting resulted in the formation of the NAMSDL Methamphetamine Precursor Tracking Advisory Committee, and several members of that committee made significant contributions to the development of this standard.

This PSE-Tracking standard assumes that pharmacies or other retailers will transmit, at a minimum, the pseudoephedrine sales data that must be recorded under the terms of the federal Combat Methamphetamine Epidemic Act (CMEA). In addition, we strongly recommend that the sellers of these products follow the transmission framework and associated segments and data elements of the standard for electronic reporting. The following pages explain this in more detail.

Other than the CMEA and surrounding transmission requirements, this standard is policy-neutral. Although it seeks to anticipate every shred of data relating to pseudoephedrine sales that law enforcement authorities could possibly need to gather, it neither encourages nor discourages the gathering of particular types of data. Instead, it seeks to ensure that **if** a particular type of data is collected **then** it will be collected in a standard format that all parties understand.

For example, State A may follow the advice of law enforcement authorities and require that its pharmacies and other retailers record and transmit the driver's license number of every person who purchases pseudoephedrine. State B may follow the advice of privacy advocates and prohibit this practice. State C may allow, but not require, this practice. State D may follow State C initially but then change course and follow State A. This standard does not judge the wisdom of any of these policies. What this reporting standard **does** do is ensure that **if** a state collects driver's license information from PSE purchasers, **then** it does so in a standardized way.

This version of the implementation guide for the ASAP PSE-Tracking standard was developed under the assumption that the primary drug of interest is pseudoephedrine.

But the developers of the standard understood the fluid nature of both drug technology and state and federal statutes, and have crafted it to be sufficiently flexible to respond to future contingencies.

This standard is also designed to be sufficiently flexible to cover periodic batch transmissions, real-time transmissions, and stop-sale transmissions.

- Periodic batch transmissions contain pseudoephedrine sales data covering a set period of time, such as a week. At the end of each week, a pharmacy or retailer transmits pseudoephedrine sales data to a law-enforcement database.
- Real-time transmissions occur in real time. In other words, a pharmacy or retailer transmits pseudoephedrine sales data as each such sale occurs, at the time of or immediately after the sale.
- Stop-sale transmissions. A stop-sale transmission is a special kind of real-time transmission. A pharmacy or retailer asks a law enforcement database for permission to sell a particular product to a particular individual, transmitting relevant information **before** completing the sale. The law enforcement database transmits back to the pharmacy or retailer a message that, at a minimum, instructs the pharmacy or retailer to allow or stop the sale (hence the name stop-sale transmission).

Data Element Summary

The Data Element Summary included within each segment includes the following types of information:

Reference Designator: This uses the segment identifier plus a data element sequence number within the segment to create a unique ID.

Data Element Name: This is the name assigned to the data element by ASAP.

Element Type: There are five basic data element types.

AN (Alphanumeric): An alphanumeric field can accept both numbers and characters. Alphanumeric fields are space filled in fixed length files.

N (Numeric): A numeric field is in character format, without a decimal point included. It is treated as alphanumeric. For negative values, the leading minus sign (-) is used. Lack of a minus sign indicates a positive number. For example, to send the number 0123 the field contains 123. To send -567, the field contains -567.

D (Decimal): This is a numeric field in character format, with a decimal point included. It is treated as alphanumeric. The decimal point is not sent for whole numbers. For negative values, the leading minus sign (-) is used. Absence of a minus sign indicates a positive number. For example, to send the number 0123.987 the field contains 123.987. To send the number 567.00 the field contains 567.

DT (Date): All dates expressed in the format CCYYMMDD.

TM (Time): Time expressed in 24-hour clock time (HHMMSS or HHMM). Time range: 000000 through 235959. The time zone is assumed to be that of the reporting entity.

Maximum Length: This is the maximum length the field can be.

Data Delimiters and Segment Terminators

The ASAP standard uses segments to carry information. This information is sent as a single file or transaction set. Each file is an ordered collection of segments and each segment is an ordered collection of data elements. Data elements are composed of one or more characters and may be variable in length. This document specifies the maximum length of each data element. The structure of the ASAP standard is variable in both file length and data element length. This means if a data element is sized for a specific number of characters, but the actual number being transmitted is smaller, the smaller length becomes the size of the field. However, the field size can not be exceeded.

Should the receiver not require specific optional segments or specific situational data elements within a file, these would not be sent to maintain the integrity of the standard implementation for the application.

The segment identifier marks the beginning of each segment. The first two characters of any transaction are always TH to indicate Transaction Header. The third character (byte 3) is always the data element separator and that character is used throughout the transaction set to separate the data elements within the segment. ASAP uses the asterisk (*) character in the examples in this document as the data element separator. A segment terminator character is used to mark the end of a segment. The examples in this document use the backslash (\) character as the segment terminator. TH10 is always required since it terminates the TH segment and sets the value of the data segment for the entire transaction.

Example PRV****123443256\ (Shows use of DEA certification number in PRV.)

TH08 sets the value for all composite data elements. ASAP recommends the use of the : (colon).

Note: Care should be taken when selecting delimiters and terminators. In the examples in this document, the asterisk and backslash are used as delimiters and segment terminators respectively. These characters, while acceptable with transactions that follow X12 syntax, are not encouraged in live implementations. The originator of the file establishes delimiters through usage, which must remain consistent for the transaction. Upper case characters, lower case characters, digits, special characters, and space should not be used as delimiters. We refer you to X12.6 Application Control Structures for further information on preferred use of delimiters and terminators.

Segment and Data Ordering

You will note that the PRV segment is the first segment in the detail segments, followed by the PUR segment in order to loop sales by provider in batch transmissions (see page 7).

Because the transaction is an ordered collection of segments, the segments must be reported in a consistent sequence to allow for correct processing.

Header and Trailer segments should be implemented as instructed and never modified.

A Word about Privacy and Security

For any standard that includes the transmission of sensitive information outside the pharmacy or retail location, measures to protect the privacy and security of such information should be employed. It is advised that the company and/or person implementing the standard be fully versed in federal and state privacy and security laws and rules that may apply and take all necessary steps in the implementation to ensure compliance.

This is a Rules-Based Standard

What this means is that the data elements are classified as either required or situational. In the case of “situational” the situation or condition that must be met in order for the data element to be used is spelled out. Those that are required must be sent. If the receiving party has no use for “required” data elements, they are parsed out by the receiver.

Real-Time versus Batch Transmissions

This standard can be used for either real-time, point-of-sale transmissions or batch-file transmissions. When used as a real-time transmission there will be only one provider and one purchaser combination in the transmission submitted. The response from the PSE-tracking program will be specific for that transmission. With real-time transmissions 95 percent of all responses should be returned to the provider in under 10 seconds. Real-time transmissions would use the Visa telecommunications protocol. The standard also includes functionality to allow real-time transmission of two or more products purchased by the same person on the same date and time, at the same location.

When used to transmit product sales as a batch file, the transmissions reported can have multiple providers or sellers for a location with multiple purchasers. The response for a batch transmission simply confirms that the file of sales records was received and that the data that came through could be read. It is particularly important to pay attention to the syntax requirements and data element attributes as spelled out in this implementation guide, whether transmitted in real time or batch.

This standard can also be used to search (query) a PSE-Tracking Program's database in real time before a sale takes place. In addition, a provision has been made for a safety-sale override in the case of a stop sale, where the selling agent feels jeopardized by not selling the product.

Interfaces Supported

This standard can be used to transmit the information via a pharmacy management system or a retail point-of-sale checkout system. It can also be used for a web page where the provider would manually enter the data consistent with the data elements, and the appropriate attributes, as defined in the following pages. Or it can also be used to transmit via a web page through a web service/server that would pass on the information and return the response within seconds.

An Example of Looping in Batch Transmissions

The following is an example of how looping would take place within a TH/TT transaction set.

TH – Transaction Header

 PRV – Provider

 PUR – Purchaser

 SAI – Selling Agent

 PSE – PSE Transaction

 PUR – Purchaser

 SAI – Selling Agent

 PSE – PSE Transaction

 PRV – Provider

 PUR – Purchaser

 SAI – Selling Agent

 PSE – PSE Transaction

 PSE – PSE Transaction

 PUR – Purchaser

 SAI – Selling Agent

 PSE – PSE Transaction

 PUR – Purchaser

 SAI – Selling Agent

 PSE – PSE Transaction

 PUR – Purchaser

 SAI – Selling Agent

 PSE – PSE Transaction

 PRV – Provider

 PUR – Purchaser

 SAI – Selling Agent

 PSE – PSE Transaction

 PUR – Purchaser

 SAI – Selling Agent

 PSE – PSE Transaction

TT – Transaction Total

Outbound Transmission