

**Implementation Guide  
for the  
ASAP Standard  
for  
Prescription-Monitoring Programs**

**2007**

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## ASAP Rules-Based Implementation Guide for Prescription-Monitoring Programs

### Prescription-Monitoring Program Model Act October 2002

The data elements in this standard include those described in the Prescription-Monitoring Program Model Act of October 2002 developed by the Alliance of States with Prescription-Monitoring Programs and the National Association of State Controlled Substances Authorities. Per the model act, the information submitted for each prescription, should include, but not be limited to:

- Dispenser identification number
- Date prescription filled
- Prescription number
- Prescription is new or is a refill
- NDC code for drug dispensed
- Quantity dispensed
- Number of days supply of the drug
- Patient identification number
- Patient name
- Patient address
- Patient date of birth
- Prescriber identification number
- Date prescription issued by prescriber
- Person who received the prescription from the dispenser, if other than the patient
- Source of payment for prescription
- State issued serial number [If state chooses to establish a serialized prescription system]

### 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.

#### **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 will contain 123. To send -567, the field will contain -567. If the number is a code value (rather than a counting number),

with any leading zeros, do not drop the leading zero. For example, a code value 01 would be sent as 01. An increment number of 1 would be sent as 1. Note: If a value is zero, report as 0 rather than a blank or empty value.

#### **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. 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 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. TH09 is always required since it terminates the TH segment and sets the value of the data segment terminator for the entire transaction.

Example PHA\*\*\*AB9999999\ (Shows use of pharmacy DEA number in PHA segment.)

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 PAT segment is the first segment in the detail segments, followed by the DSP segment in order to loop prescriptions by pharmacy in batch transmissions.

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, 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 segments classified as mandatory must be transmitted. If the prescription-monitoring program does not have a need for these segments then they are stripped out by the receiving computer. The same rule applies for data elements within a segment that are classified as required. Where data elements within the segments are classified as “situational,” the situation or condition that must be met in order for the data element to be used is spelled out. Again, those that are required must be sent. If the prescription-monitoring program has no use for certain “required” data elements, then they are stripped out by the receiving computer. Required data elements cannot be changed in definition to “not used.” To do so would compromise the standard.

### **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 patient combination in the transmission submitted. The response from the PMP system will be specific for that transmission. Real-time transmissions would use the Visa telecommunications protocol. The standard also includes functionality to allow real-time transmission of two or more prescriptions on the same date and time, at the same location.

When used to transmit prescriptions as a batch file, the transmissions reported can have one or more pharmacies with multiple patients. The response for a batch transmission simply confirms that the file 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.

## **Reporting Quantity Dispensed (DSP09), Drug Dosage Units Code (DSP11), Component Ingredient Quantity (CDI04), and Compound Dosage Units Code (CDI05)**

In solid oral dosage forms, the metric quantity is assumed to be "each solid," regardless of package size. However, other dosage forms may be confusing. If the product dispensed is an injectable, 2 ml per unit with 10 units in the package, reporting a quantity of "2" could mean 2 ml, 2 units, or 2 packages. The problem is more evident with compounds. Therefore it is essential — for accurate and consistent data — to report the proper dosage unit codes in DSP11 and CDI05 and the appropriate metric quantities in DSP09 and CDI04. A lot of the basis for the rationale used comes from the commercial databases most frequently used in pharmacy.

Typical dosage forms reported as EACH — capsule, diaphragm, disc, patch, plaster, suppository, suture, tablet, troche, wafer.

Typical dosage forms reported as ML — aerosol (some formulations are GM), elixir, emulsion, extract, mouthwash, oil, shampoo, soap, solution, spray, suspension, syrup, tincture.

Typical dosage forms reported as GM — aerosol (some formulations are ML), cream, crystal (some formulations are MG), gel, jelly, granule, ointment, powder.

Examples of commercially available products:

Diazepam syringes: Dispensed 1 package of 10 syringes, each containing 2 ml of 5 mg/ml diazepam.

The metric quantity dispensed is 20 ml. Report DSP09 as 20 and DSP11 as 02.

Acetaminophen with Codeine Elixir 120-12 mg/5 ml: Dispensed 4 oz.

The metric quantity dispensed is 120 ml. Report DSP09 as 120 and DSP11 as 02.

Stadol Nasal Spray: Dispensed 1 package containing 2.5 ml.

The metric quantity dispensed is 2.5 ml. Report DSP09 as 2.5 and DSP11 as 02.

Codeine 15 mg tablets: Dispensed 10 tablets. The metric quantity is 10 each. Report DSP09 as 10 and DSP11 as 01.

Fentanyl 25 MCG/HR patch: Dispensed 20 patches. The metric quantity is 20 each. Report DSP09 as 20 and DSP11 as 01.

Nicotine Gum: Dispensed 100 pieces. The metric quantity is 100. Report DSP09 as 100 and DSP11 as 01.

Actiq oral transmucosal lozenges: Dispensed six "lollipops." The metric quantity is 6 each. Report DSP09 as 6 and DSP11 as 01.

Dilaudid-HP lyophilized 250 mg. 25 ml of sterile water is added by the dispenser to reconstitute the product. If one ampoule is dispensed, the metric quantity is 25 ml. Report DSP09 as 25 and DSP11 as 02.

Examples of compounded products:

TAC solution 12%: Dispensed 5 Gm of cocaine powder, 20.6 ml of Adrenaline 1:1000, 7 ml sterile water, and 10.6 ml of pontocaine 2%. The metric quantity dispensed is 5 gm if the entire volume is dispensed on a single prescription. Report CDI04 as 5 and CDI05 as 03. If a partial quantity is dispensed, the metric quantity is reduced proportionately. Report only the drug(s) as required by the PMP, not each ingredient.

Hydromorphone Infusion 2 mg/hr: Dispensed 50 mg of hydromorphone in 250 ml of 0.9% sodium chloride solution. If the product is compounded with hydromorphone injectable 10 mg/ml, the metric quantity dispensed is 5 ml. Report CDI04 as 5 and CDI05 as 02. Do not report as 50 mg. Report only the drug(s) as required by the PMP, not each ingredient.

### Use of Qualifiers

When a qualifier field is used, it must be followed by the appropriate ID indicated in the qualifier field. Therefore, if you use one field, the other is automatically required.

### An Example of Looping

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

#### Batch Transmission

TH – Transaction Header

IS – Information Source

PHA – Pharmacy Header

PAT – Patient Information

DSP – Dispensing Record

PRE – Prescriber Information

CDI – Compound Ingredient

AIR – Additional Information Reporting

PAT – Patient Information

DSP – Dispensing Record

PRE – Prescriber Information

CDI – Compound Ingredient

AIR – Additional Information Reporting

DSP – Dispensing Record

PRE – Prescriber Information

CDI – Compound Ingredient

AIR – Additional Information Reporting

DSP – Dispensing Record

PRE – Prescriber Information

CDI – Compound Ingredient

AIR – Additional Information Reporting

PAT – Patient Information

DSP – Dispensing Record

PRE – Prescriber Information

CDI – Compound Ingredient

AIR – Additional Information Reporting

- TP — Pharmacy Trailer
  - PHA — Pharmacy Header
    - PAT — Patient Information
      - DSP — Dispensing Record
        - PRE — Prescriber Information
        - CDI — Compound Drug Ingredient Detail
        - AIR — Additional Information Reporting
    - PAT — Patient Information
      - DSP — Dispensing Record
        - PRE — Prescriber Information
        - CDI — Compound Drug Ingredient Detail
        - AIR — Additional Information Reporting
- TP — Pharmacy Trailer
- TT — Transaction Trailer

### **An Example of Real-Time Looping**

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

#### **Real-Time Transmission**

- TH — Transaction Header
- IS — Information Source
  - PHA — Pharmacy Header
    - PAT — Patient Information
      - DSP — Dispensing Record
        - PRE — Prescriber Information
        - CDI — Compound Drug Ingredient Detail
        - CDI — Compound Drug Ingredient Detail
        - AIR — Additional Information Reporting
      - DSP — Dispensing Record
        - PRE — Prescriber Information
        - AIR — Additional Information Reporting
- TP — Pharmacy Trailer
- TT — Transaction Trailer

## Core Reporting Segments

### Header

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TH	Transaction Header	Mandatory
IS	Information Source	Mandatory
PHA	Pharmacy Header	Mandatory

### Detail

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PAT	Patient Information	Mandatory
DSP	Dispensing Record	Mandatory
PRE	Prescriber Information	Mandatory
CDI	Compound Drug Ingredient Detail	Situational
AIR	Additional Information Reporting	Situational

### Summary

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TP	Pharmacy Trailer	Mandatory
TT	Transaction Trailer	Mandatory

### Acknowledgment/Response