Washington State Department of
Health

Washington Prescription Monitoring Program Analytic Data File Documentation

Program overview

RCW 70.225 (2007) created Washington's Prescription Monitoring Program (PMP) also known as Prescription Review. The program was created to improve patient care and stop prescription drug misuse by collecting dispensing records for controlled substances, and by making the information available to medical providers and pharmacists as a patient care tool. Program rules, WAC 246-470, took effect on August 27, 2011, and the PMP started data collection from all dispensers on October 7, 2011.

Data overview

The Prescription Monitoring Program (PMP) collects dispensing records for Schedule II, III, IV and V drugs. All (non-veterinary) dispensers (mainly pharmacies) licensed by the Washington State Department of Health (DOH) are required to report this dispensing activity to the PMP within one business day (WAC 246-470). Prescriptions excluded from PMP include those dispensed outside of WA state, those prescribed for less than or equal to 24 hours, those administered or given to a patient in the hospital, and those dispensed from a Department of Corrections pharmacy (unless an offender is released with a prescription), an Opioid Treatment Program, and some federally operated pharmacies (Indian Health Services and Veterans Affairs report voluntarily).

The Data Submission Guide for Dispensers contains additional information on each of the data fields required by the state of Washington as well as the specifications required by the American Society for Automation in Pharmacy (ASAP) for non-veterinarians and veterinarians, respectively. ASAP 4.2 variables were reported to the WA PMP by the dispensing pharmacy from January 2013 through April 2020. ASAP 4.2A variables were reported thereafter.

Further information on collection and management of PMP data at DOH can be found on the PMP Website: http://www.doh.wa.gov/pmp/data. Contact the PMP at 360-236-4806 or at prescriptionmonitoring@doh.wa.gov if you have any questions.

Data file notes

Drug information is based on the national drug code (NDC), and obtained using an in-house cumulative NDC drug file based on the Food and Drug Administration's NDC data file (https://www.fda.gov/drugs/drug-approvals-and-databases/national-drug-code-directory) and a cumulative Center for Disease Control and Prevention's publicly available medication data file (https://www.cdc.gov/drugoverdose/resources/data.html). Prescription records beginning January 1, 2018 contain an additional 26 variables that were not available in prior years of data. On May 5, 2020, the data collection system was upgraded. This resulted in the refinement of some address-related variables and prescriber names, the addition of a dispensation ID, and the replacement of a cluster ID with a new consolidation ID.

DOH 505-164 December 2021

Table of Contents

Data file layout – PMP data 2011Q1 to 2017Q4

Variable Name	Variable Type	Variable Length
Lastname	Character	44
Firstname	Character	37
street	Character	63
city	Character	26
state	Character	2
zipcode9	Character	9
dob	Date	8
gender	Character	1
species	Character	2
cleanLastname	Character	36
cleanFirstname	Character	30
cleanStreet	Character	63
geoCounty	Character	43
latitude	Numeric	8
longitude	Numeric	8
clusterID	Character	8
recipientID	Character	8
county	Character	43
zipplus4	Character	4
zipcode	Character	5
animal	Character	1
clinicUse	Character	1
patientID	Character	9
dispenserDEA	Character	9
dispenserName	Character	40
dispenserAddress1	Character	40
dispenserAddress2	Character	77
dispenserCity	Character	23
dispenserState	Character	2
dispenserZipcode	Character	5
dispenserLatitude	Numeric	8
dispenserLongitude	Numeric	8
dispenserVet	Character	1
validDispenserDEA	Character	1
prescriberDEA	Character	32
prescriberName	Character	40
prescriberAddress1	Character	40
prescriberAddress2	Character	82
prescriberCity	Character	30
prescriberZipcode	Character	5
prescriberLatitude	Numeric	8

prescriberLongitude	Numeric	8
prescriberNPI	Character	10
prescriberCredential	Character	3
prescriberPracticeAddress1	Character	55
prescriberPracticeAddress2	Character	55
prescriberPracticeCountry	Character	2
prescriberPracticeState	Character	2
prescriberPracticeCity	Character	40
prescriberPracticeZip5	Character	5
prescriberPracticeZip4	Character	4
prescriber_primary_taxonomy	Character	10
prescriber_primary_taxonomy4	Character	4
prescriberGroup	Character	76
prescriber_primary_specialty	Character	100
prescriber_primary_subspecialty	Character	71
prescriberVet	Character	1
validPrescriberDEA	Character	1
rxNumber	Character	103
dateWritten	Date	8
refillsAuthorized	Numeric	8
dateFilled	Date	8
refillNumber	Numeric	8
ndc	Character	22
quantity	Numeric	8
daysSupply	Numeric	8
paymentMethod	Character	3
drugname	Character	35
drugnameWithStrength	Character	35
schedule	Character	1
genericDrugname	Character	50
masterForm	Character	30
strengthPerUnit	Numeric	8
units	Character	9
drug	Character	22
MMEFactor	Numeric	8
totalMME	Numeric	8
dailyMME	Numeric	8
drugclass	Character	18
longshortacting	Character	2
recordNumber	Character	9

Data file layout – PMP data 2018Q1 to 2019Q4

Variable Name	Variable Type	Variable Length
lastname	Character	44
firstname	Character	37
street	Character	63
city	Character	26
state	Character	2
zipcode9	Character	9
phoneNumber	Character	10
dob	Date	8
gender	Character	1
species	Character	2
location	Character	2
animalName	Character	80
cleanLastname	Character	36
cleanFirstname	Character	30
cleanStreet	Character	63
geoCounty	Character	43
latitude	Numeric	8
longitude	Numeric	8
clusterID	Character	8
recipientID	Character	10
county	Character	43
zipplus4	Character	4
zipcode	Character	5
animal	Character	1
clinicUse	Character	1
patientID	Character	9
dispenserDEA	Character	9
dispenserName	Character	40
dispenserAddress1	Character	40
dispenserAddress2	Character	77
dispenserCity	Character	23
dispenserState	Character	2
dispenserZipcode	Character	5
storeNumber	Character	16
dispenserLatitude	Numeric	8
dispenserLongitude	Numeric	8
dispenserVet	Character	1
validDispenserDEA	Character	1
prescriberNPIclaim	Character	11
prescriberDEA	Character	9
prescriberSuffix	Character	7
prescriberLicense	Character	10

prescriberName	Character	40
prescriberAddress1	Character	40
prescriberAddress2	Character	82
prescriberCity	Character	30
prescriberZipcode	Character	5
prescriberLatitude	Numeric	8
prescriberLongitude	Numeric	8
prescriberNPI	Character	10
prescriberCredential	Character	3
prescriberPracticeAddress1	Character	55
prescriberPracticeAddress2	Character	55
prescriberPracticeCountry	Character	2
prescriberPracticeState	Character	2
prescriberPracticeCity	Character	40
prescriberPracticeZip5	Character	5
prescriberPracticeZip4	Character	4
prescriber_primary_taxonomy	Character	10
prescriber_primary_taxonomy4	Character	4
prescriberGroup	Character	76
prescriber_primary_specialty	Character	100
prescriber_primary_subspecialty	Character	71
prescriberVet	Character	1
validPrescriberDEA	Character	1
status	Character	8
rxNumber	Character	103
dateWritten	Date	8
refillsAuthorized	Numeric	8
dateFilled	Date	8
refillNumber	Numeric	8
ndc	Character	11
quantity	Numeric	8
daysSupply	Numeric	8
dosageCode	Character	2
transmissionCode	Character	2
partialFill	Numeric	8
dispenserNPI	Character	10
dispenserLicense	Character	10
paymentMethod	Character	3
dateSold	Date	8
rxNormCode	Character	80
eReferenceNumber	Character	80
drugname	Character	35
drugnameWithStrength	Character	35
schedule	Character	1

genericDrugname	Character	50
masterForm	Character	30
strengthPerUnit	Numeric	8
units	Character	20
drug	Character	22
MMEFactor	Numeric	8
totalMME	Numeric	8
dailyMME	Numeric	8
drugclass	Character	20
longshortacting	Character	2
compoundDrugCode	Character	2
compoundDrugCodeType	Character	2
compoundDrugIngredients	Character	11
compoundDrugQuantity	Numeric	8
compoundDrugDosage	Character	2
personIDType	Character	2
personID	Character	40
personRelationship	Character	2
personLastname	Character	44
personFirstname	Character	37
recordNumber	Character	9

Data file layout – PMP data 2020Q1 to present

Variable Name	Variable Type	Variable Length
dispensationID	Character	8
lastname	Character	44
firstname	Character	37
street1	Character	63
street2	Character	63
street	Character	63
city	Character	26
state	Character	2
zipcode9	Character	9
phoneNumber	Character	10
dob	Date	8
gender	Character	1
species	Character	2
location	Character	2
animalName	Character	80
cleanLastname	Character	36
cleanFirstname	Character	30
cleanStreet1	Character	63
cleanStreet2	Character	63
cleanStreet	Character	63
geoCounty	Character	43
Latitude	Numeric	8
Longitude	Numeric	8
consolidationID	Character	8
recipientID	Character	10
County	Character	43
zipplus4	Character	4
zipcode	Character	5
Animal	Character	1
patientID	Character	9
dispenserDEA	Character	9
dispenserName	Character	40
dispenserAddress1	Character	40
dispenserAddress2	Character	77
dispenserCity	Character	23
dispenserState	Character	2
dispenserZipcode5	Character	5
dispenserZip4	Character	4
storeNumber	Character	16
dispenserLatitude	Numeric	8
dispenserLongitude	Numeric	8
dispenserVet	Character	1

validDispenserDEA	Character	1
prescriberNPIclaim	Character	11
prescriberDEA	Character	9
prescriberSuffix	Character	7
prescriberLicense	Character	10
prescriberName	Character	40
prescriberFirstname	Character	40
prescriberMiddlename	Character	40
prescriberLastname	Character	40
prescriberAddress1	Character	40
prescriberAddress2	Character	82
prescriberCity	Character	30
prescriberState	Character	2
prescriberZipcode	Character	5
prescriberZip4	Character	4
prescriberLatitude	Numeric	8
prescriberLongitude	Numeric	8
prescriberCredential	Character	3
prescriberPracticeAddress1	Character	55
prescriberPracticeAddress2	Character	55
prescriberPracticeCountry	Character	2
prescriberPracticeState	Character	2
prescriberPracticeCity	Character	40
prescriberPracticeZip5	Character	5
prescriberPracticeZip4	Character	4
prescriber_primary_taxonomy	Character	10
prescriber_primary_taxonomy4	Character	4
prescriberGroup	Character	76
prescriber_primary_specialty	Character	100
prescriber_primary_subspecialty	Character	71
prescriberVet	Character	1
validPrescriberDEA	Character	1
status	Character	8
rxNumber	Character	103
dateWritten	Date	8
refillsAuthorized	Numeric	8
dateFilled	Date	8
refillNumber	Numeric	8
ndc	Character	11
quantity	Numeric	8
daysSupply	Numeric	8
dosageCode	Character	2
transmissionCode	Character	2
partialFill	Numeric	8

dispenserNPI	Character	10
dispenserLicense	Character	10
paymentMethod	Character	3
dateSold	Date	8
rxNormCode	Character	80
eReferenceNumber	Character	80
drugnameWithStrength	Character	35
schedule	Character	1
genericDrugname	Character	50
masterForm	Character	30
strengthPerUnit	Numeric	8
units	Character	20
drug	Character	22
MMEFactor	Numeric	8
totalMME	Numeric	8
dailyMME	Numeric	8
drugclass	Character	20
longshortacting	Character	2
compoundDrugCode	Character	2
compoundDrugCodeType	Character	2
compoundDrugIngredients	Character	11
compoundDrugQuantity	Numeric	8
compoundDrugDosage	Character	2
personIDType	Character	2
personID	Character	40
personRelationship	Character	2
personLastname	Character	44
personFirstname	Character	37
recordNumber	Character	9

Patient domain variables

Variable Name	lastname
Domain	Patient
Data Source	PAT07 (ASAP 4.2A; Required by WA PMP)
Notes	Patient's last name as reported by the dispensing pharmacy. DOH processed the field to convert entries that look like phone numbers to missing.

Variable Name	firstname
Domain	Patient
Data Source	PAT08 (ASAP 4.2A; Required by WA PMP)
Notes	Patient's first name as reported by the dispensing pharmacy. DOH processed the field to convert entries that look like phone numbers to missing.

Variable Name	street1
Domain	Patient
Data Source	PAT12 (ASAP 4.2A; Required by WA PMP)
Notes	The first part of a standard USPS address (address line 1) of the patient's residence, as reported by the dispensing pharmacy. DOH converted entries that contained only numbers to missing, in order to remove dates and phone numbers from the field.

Variable Name	street2
Domain	Patient
Data Source	PAT13 (ASAP 4.2A; Not required by WA PMP)
Notes	The second part of a standard USPS address (address line 2) of the patient's residence, as reported by the dispensing pharmacy. DOH converted entries that contained only numbers to missing, in order to remove dates and phone numbers from the field.

Variable Name	street
Domain	Patient
Data Source	WA DOH; Created by WA PMP
Notes	Patient's residence street address created by combining street1 and street2 (i.e., PAT12 and PAT13).

Variable Name	city
Domain	Patient
Data Source	PAT14 (ASAP 4.2A; Required by WA PMP)
Notes	Patient's city of residence as reported by the dispensing pharmacy.

Variable Name	state
Domain	Patient
Data Source	PAT15 (ASAP 4.2A; Required by WA PMP)
Notes	Patient's state of residence as reported by the dispensing pharmacy. DOH converted values to upper case, and replaced values not found in the code list with missing.

Variable Name	zipcode9
Domain	Patient
Data Source	PAT16 (ASAP 4.2A; Required by WA PMP)
Notes	Patient's 9-digit zipcode of residence as reported by the dispensing pharmacy. Populated with zeros if patient address is outside the U.S.

Variable Name	phoneNumber
Domain	Patient
Data Source	PAT17 (ASAP 4.2A; Not required by WA PMP)
Notes	Patient's phone number with area code, as reported by the dispensing pharmacy.

Variable Name	dob
Domain	Patient
Data Source	PAT18 (ASAP 4.2A; Required by WA PMP)
Notes	Patient's date of birth as reported by the dispensing pharmacy.

Variable Name	gender
Domain	Patient
Data Source	PAT19 (ASAP 4.2A; Required by WA PMP)
Notes	Patient's sex as reported by the dispensing pharmacy.

Variable Name	species
Domain	Patient
Data Source	PAT20 (ASAP 4.2A; Situational (not required by WA PMP but supplied if available))
Notes	Used to help differentiate a prescription for a human from a prescription for an animal.

Variable Name	location
Domain	Patient
Data Source	PAT21 (ASAP 4.2A; Not Required by WA PMP)
Notes	Code indicating where patient is located when receiving pharmacy services.

Variable Name	animalName
Domain	Patient
Data Source	PAT23 (ASAP 4.2A; Situational (not required by WA PMP but supplied if available))
Notes	Supplied for prescriptions written by a veterinarian and the pharmacist has access to this information at time of dispensing. This field may also contain the animal owner's name when animal information is in the patient fields.

Variable Name	cleanLastname
Domain	Patient
Data Source	Appriss; Created by WA PMP Vendor through 2019q4. WA DOH; Created by WA PMP from 2020q1 to present.
Notes	Patient's last name created to 'clean' the variable *lastname*. Hyphenated last names were replaced by the first part of the name (e.g. "SMITH-MILLER" is replaced by "SMITH"). DOH converted entries that look like phone numbers to missing.

Variable Name	cleanFirstname
Domain	Patient
Data Source	Appriss; Created by WA PMP Vendor through 2019q4. WA DOH; Created by WA PMP from 2020q1 to present.
Notes	Patient's first name created to 'clean' the variable *firstname.* DOH converted entries that look like phone numbers to missing.

Variable Name	cleanStreet1
Domain	Patient
Data Source	Appriss; Created by WA PMP Vendor
Notes	Normalized version of the variable *street1*. The vendor used an address standardization program to convert entries to upper cases, remove punctuations, and convert abbreviations such as Suite to STE or Apartments to APT.

Variable Name	cleanStreet2
Domain	Patient
Data Source	Appriss; Created by WA PMP Vendor
Notes	Normalized version of the variable *street2*. The vendor used an address standardization program to convert entries to upper cases, remove punctuations, and convert abbreviations such as Suite to STE or Apartments to APT.

Variable Name	cleanStreet
Domain	Patient
Data Source	WA DOH; Created by WA PMP
Notes	Patient's residence street address cleaned by combining *cleanStreet1* and *cleanStreet2*.

Variable Name	geoCounty
Domain	Patient
Data Source	Appriss; Created by WA PMP Vendor
Notes	Patient's county of residence geocoded using patient's street information or zipcode.

Variable Name	latitude
Domain	Patient
Data Source	Appriss; Created by WA PMP Vendor
Notes	The patient's latitude geocoded from the patient's street information or zipcode.

Variable Name	longitude
Domain	Patient
Data Source	Appriss; Created by WA PMP Vendor
Notes	The patient's longitude geocoded from the patient's street information or zipcode.

Variable Name	clusterID
Domain	Patient
Data Source	Appriss; Created by WA PMP Vendor
Notes	A unique patient identifier. This field is deprecated in favor of the field *patientID* created by WA PMP.

Variable Name	consolidationID
Domain	Patient
Data Source	Appriss; Created by WA PMP Vendor
Notes	A unique patient identifier provided by Appriss, the data system vendor. This field is deprecated in favor of the field patientID provided by DOH.

Variable Name	recipientID
Domain	Patient
Data Source	Appriss; Created by WA PMP Vendor
Notes	A unique patient identifier. This field is deprecated in favor of the field *patientID* created by WA PMP.

Variable Name	county
Domain	Patient
Data Source	WA DOH; Created by WA PMP
Notes	Patient's imputed county of residence using patient zipcode when vendor-provided county of residence (*geoCounty*) is missing. Otherwise, the field is populated using *geoCounty*.

Variable Name	zipplus4
Domain	Patient
Data Source	WA DOH; Created by WA PMP
Notes	Patient's last four digits of zipcode of residence using PAT16.

Variable Name	zipcode
Domain	Patient
Data Source	WA DOH; Created by WA PMP
Notes	Patient's first five-digit of zipcode of residence using PAT16.

Variable Name	animal
Domain	Patient
Data Source	WA DOH; Created by WA PMP
Notes	Flag for possible animal prescription.

Variable Name	clinicUse
Domain	Patient
Data Source	WA DOH; Created by WA PMP
Notes	Flag for possible clinic or business use prescription.

Variable Name	patientID
Domain	Patient
Data Source	WA DOH; Created by WA PMP
Notes	Unique patient identifier created by WA PMP.

Dispenser domain variables

Variable Name	dispenserDEA
Domain	Dispenser
Data Source	PHA03 (ASAP 4.2A; Required by WA PMP)
Notes	Dispenser's Drug Enforcement Administration (DEA) identifier as reported by the dispensing pharmacy.

Variable Name	dispenserName
Domain	Dispenser
Data Source	PHA04 (ASAP 4.2A; Not Required by WA PMP)
Notes	Dispenser's name as reported by the dispensing pharmacy.

Variable Name	dispenserAddress1
Domain	Dispenser
Data Source	PHA05 (ASAP 4.2A; Not Required by WA PMP)
Notes	First line of the dispenser's street address as reported by the dispensing pharmacy.

Variable Name	dispenserAddress2
Domain	Dispenser
Data Source	PHA06 (ASAP 4.2A; Not Required by WA PMP)
Notes	Second line of the dispenser's street address as reported by the dispensing pharmacy.

Variable Name	dispenserCity
Domain	Dispenser
Data Source	PHA07 (ASAP 4.2A; Not Required by WA PMP)
Notes	Dispenser's city as reported by the dispensing pharmacy.

Variable Name	dispenserState
Domain	Dispenser
Data Source	PHA08 (ASAP 4.2A; Not Required by WA PMP)
Notes	Dispenser's state as reported by the dispensing pharmacy. This field uses the same two-letter postal abbreviations as *state*.

Variable Name	dispenserZipcode5
Domain	Dispenser
Data Source	PHA09 (ASAP 4.2A; Not Required by WA PMP)
Notes	Dispenser's zipcode as reported by the dispensing pharmacy.

Variable Name	dispenserZip4
Domain	Dispenser
Data Source	Appriss; Created by WA PMP Vendor
Notes	Last 4 digits of the dispenser's zipcode.

Variable Name	storeNumber
Domain	Dispenser
Data Source	PHA12 (ASAP 4.2A; Not Required by WA PMP)
Notes	Store number assigned by the pharmacy chain to the pharmacy location.

Variable Name	dispenserLatitude
Domain	Dispenser
Data Source	Appriss; Created by WA PMP Vendor
Notes	The dispenser's latitude geocoded by Appriss.

Variable Name	dispenserLongitude
Domain	Dispenser
Data Source	Appriss; Created by WA PMP Vendor
Notes	The dispenser's longitude geocoded by Appriss.

Variable Name	validDispenserDEA
Domain	Dispenser
Data Source	WA DOH; Linked and created by WA PMP from the U.S. Department of Justice, Drug Enforcement Administration, DEA Registrant file. *Reference: https://www.deadiversion.usdoj.gov/drugreg/index.html*
Notes	Flag indicating validity of dispenser's Drug Enforcement Agency (DEA) identifier.

Prescriber domain variables

Variable Name	prescriberNPIclaim
Domain	Prescriber
Data Source	PRE01 (ASAP 4.2A; Situational (not required by WA PMP but supplied if available))
Notes	Prescriber's National Provider Identifier assigned to the prescriber by the U.S. Centers for Medicare & Medicaid Services as reported by the dispensing pharmacy. *Reference: https://www.cms.gov/Regulations-and-Guidance/Administrative-Simplification/NationalProvIdentStand/*

Variable Name	prescriberDEA
Domain	Prescriber
Data Source	PRE02 (ASAP 4.2A; Required by WA PMP)
Notes	Prescriber's Drug Enforcement Administration registration number assigned to the prescriber by the U.S. Department of Justice, Drug Enforcement Administration, as reported by the dispensing pharmacy. *Reference: https://www.deadiversion.usdoj.gov/drugreg/index.html*

Variable Name	prescriberSuffix
Domain	Prescriber
Data Source	PRE03 (ASAP 4.2A; Not Required by WA PMP)
Notes	Prescriber's identifying number assigned to the prescriber by an institution when the institution's number is used as the Drug Enforcement Administration registration number.

Variable Name	prescriberLicense
Domain	Prescriber
Data Source	PRE04 (ASAP 4.2A; Not Required by WA PMP)
Notes	Identification assigned to the prescriber by the State Licensing Board, as reported by the dispensing pharmacy.

Variable Name	prescriberName
Domain	Prescriber
Data Source	WA DOH; Linked and created by WA PMP from the U.S. Department of Justice, Drug Enforcement Administration, DEA Registrant file. *Reference: https://www.deadiversion.usdoj.gov/drugreg/index.html*
Notes	Created by linking PRE02 to the DEA Registrant File.

Variable Name	prescriberFirstname
Domain	Prescriber
Data Source	PRE06 (ASAP 4.2A; Required by WA PMP)
Notes	The prescriber's first name. This is obtained by the data system vendor by using the prescriber's Drug Enforcement Administration (DEA) registration number to look up the name in the DEA prescriber file.

Variable Name	prescriberMiddlename
Domain	Prescriber
Data Source	PRE07 (ASAP 4.2A; Required by WA PMP)
Notes	The prescriber's middle name. This is obtained by the data system vendor by using the prescriber's Drug Enforcement Administration (DEA) registration number to look up the name in the DEA prescriber file.

Variable Name	prescriberLastname
Domain	Prescriber
Data Source	PRE05 (ASAP 4.2A; Required by WA PMP)
Notes	The prescriber's last name. This is obtained by the data system vendor by using the prescriber's Drug Enforcement Administration (DEA) registration number to look up the name in the DEA prescriber file.

Variable Name	prescriberAddress1
Domain	Prescriber
Data Source	Appriss; Provided by WA PMP Vendor
Notes	The first line of the prescriber's street address. This is obtained by Appriss by using the prescriber's Drug Enforcement Administration (DEA) registration number to look up the address in the DEA prescriber file.

Variable Name	prescriberAddress2
Domain	Prescriber
Data Source	Appriss; Provided by WA PMP Vendor
Notes	The second line of the prescriber's street address. This is obtained by Appriss by using the prescriber's Drug Enforcement Administration (DEA) registration number to look up the address in the DEA prescriber file.

Variable Name	prescriberCity
Domain	Prescriber
Data Source	Appriss; Provided by WA PMP Vendor
Notes	The prescriber's city. This is obtained by Appriss by using the prescriber's Drug Enforcement Administration (DEA) registration number to look up the address in the DEA prescriber file.

Variable Name	prescriberState
Domain	Prescriber
Data Source	Appriss; Provided by WA PMP Vendor
Notes	The prescriber's state. This is obtained by the data system vendor by using the prescriber's Drug Enforcement Administration (DEA) registration number to look up the address in the DEA prescriber file.

Variable Name	prescriberZipcode
Domain	Prescriber
Data Source	Appriss; Provided by WA PMP Vendor
Notes	The prescriber's zipcode. This is obtained by the data system vendor by using the prescriber's Drug Enforcement Administration (DEA) registration number to look up the address in the DEA prescriber file.

Variable Name	prescriberZip4
Domain	Prescriber
Data Source	Appriss; Provided by WA PMP Vendor
Notes	Last 4 digits of the prescriber's zipcode. This is obtained by the data system vendor by using the prescriber's Drug Enforcement Administration (DEA) registration number to look up the address in the DEA prescriber file.

Variable Name	prescriberLatitude
Domain	Prescriber
Data Source	Appriss; Created by WA PMP Vendor
Notes	The prescriber's latitude geocoded by Appriss.

Variable Name	prescriberLongitude
Domain	Prescriber
Data Source	Appriss; Created by WA PMP Vendor
Notes	The prescriber's longitude geocoded by Appriss.

Variable Name	prescriberNPI
Domain	Prescriber
Data Source	Appriss; Provided by WA PMP Vendor
Notes	The prescriber's National Provider Identifier (NPI) provided by Appriss using an unknown source and method.

Variable Name	prescriberPracticeAddress1
Domain	Prescriber
Data Source	WA DOH; Linked by WA PMP from the Centers for Medicare and Medicaid Services, National Plan and Provider Enumeration System, National Provider Index (NPI) Registry (administered by the National Uniforms Claims Committee). *Reference: https://www.cms.gov/Regulations-and-Guidance/Administrative-Simplification/NationalProvIdentStand/*
Notes	The first line of the prescriber's primary practice address from the NPI Registry File.

Variable Name	prescriberPracticeAddress2
Domain	Prescriber
Data Source	WA DOH; Linked by WA PMP from the Centers for Medicare and Medicaid Services, National Plan and Provider Enumeration System, National Provider Index (NPI) Registry (administered by the National Uniforms Claims Committee). *Reference: https://www.cms.gov/Regulations-and-Guidance/Administrative-Simplification/NationalProvIdentStand/*
Notes	The second line of the prescriber's primary practice address from the NPI Registry File.

Variable Name	prescriberPracticeCountry
Domain	Prescriber
Data Source	WA DOH; Linked by WA PMP from the Centers for Medicare and Medicaid Services, National Plan and Provider Enumeration System, National Provider Index (NPI) Registry (administered by the National Uniforms Claims Committee). *Reference: https://www.cms.gov/Regulations-and-Guidance/Administrative-Simplification/NationalProvIdentStand/*
Notes	The prescriber's primary practice country from the NPI Registry File.

Variable Name	prescriberPracticeState
Domain	Prescriber
Data Source	WA DOH; Linked by WA PMP from the Centers for Medicare and Medicaid Services, National Plan and Provider Enumeration System, National Provider Index (NPI) Registry (administered by the National Uniforms Claims Committee). *Reference: https://www.cms.gov/Regulations-and-Guidance/Administrative-Simplification/NationalProvIdentStand/*
Notes	The prescriber's primary practice state from the NPI Registry File.

Variable Name	prescriberPracticeCity
Domain	Prescriber
Data Source	WA DOH; Linked by WA PMP from the Centers for Medicare and Medicaid Services, National Plan and Provider Enumeration System, National Provider Index (NPI) Registry (administered by the National Uniforms Claims Committee). *Reference: https://www.cms.gov/Regulations-and-Guidance/Administrative-Simplification/NationalProvIdentStand/*
Notes	The prescriber's primary practice city from the NPI Registry File.

Variable Name	prescriberPracticeZip5
Domain	Prescriber
Data Source	WA DOH; Linked by WA PMP from the Centers for Medicare and Medicaid Services, National Plan and Provider Enumeration System, National Provider Index (NPI) Registry (administered by the National Uniforms Claims Committee). *Reference: https://www.cms.gov/Regulations-and-Guidance/Administrative-Simplification/NationalProvIdentStand/*
Notes	The prescriber's primary practice 5-digit zipcode from the NPI Registry File.

Variable Name	prescriberPracticeZip4
Domain	Prescriber
Data Source	WA DOH; Linked by WA PMP from the Centers for Medicare and Medicaid Services, National Plan and Provider Enumeration System, National Provider Index (NPI) Registry (administered by the National Uniforms Claims Committee). *Reference: https://www.cms.gov/Regulations-and-Guidance/Administrative-Simplification/NationalProvIdentStand/*
Notes	The prescriber's primary practice zip+4 code from the NPI Registry File.

Variable Name	prescriber_primary_taxonomy
Domain	Prescriber
Data Source	WA DOH; Linked by WA PMP from the Centers for Medicare and Medicaid Services, National Plan and Provider Enumeration System, National Provider Index (NPI) Registry (administered by the National Uniforms Claims Committee). *Reference: https://www.cms.gov/Regulations-and-Guidance/Administrative-Simplification/NationalProvIdentStand/*
Notes	The prescriber's primary or first-listed healthcare taxonomy code from the NPI Registry File.

Variable Name	prescriber_primary_taxonomy4
Domain	Prescriber
Data Source	WA DOH; Linked by WA PMP from the Centers for Medicare and Medicaid Services, National Plan and Provider Enumeration System, National Provider Index (NPI) Registry (administered by the National Uniforms Claims Committee). *Reference: https://www.cms.gov/Regulations-and-Guidance/Administrative-Simplification/NationalProvIdentStand/*
Notes	The first four characters of the prescriber's primary or first-listed healthcare taxonomy code from the NPI Registry File.

Variable Name	prescriberGroup
Domain	Prescriber
Data Source	WA DOH; Linked by WA PMP from the Centers for Medicare and Medicaid Services, National Plan and Provider Enumeration System, National Provider Index (NPI) Registry (administered by the National Uniforms Claims Committee). *Reference: https://www.cms.gov/Regulations-and-Guidance/Administrative-Simplification/NationalProvIdentStand/*
Notes	The prescriber's primary or first-listed healthcare taxonomy code level 1 specialty from the NPI Registry File.

Variable Name	prescriber_primary_specialty
Domain	Prescriber
Data Source	WA DOH; Linked by WA PMP from the Centers for Medicare and Medicaid Services, National Plan and Provider Enumeration System, National Provider Index (NPI) Registry (administered by the National Uniforms Claims Committee). *Reference: https://www.cms.gov/Regulations-and-Guidance/Administrative-Simplification/NationalProvIdentStand/*
Notes	The prescriber's primary or first-listed healthcare taxonomy code level 2 specialty from the NPI Registry File.

Variable Name	prescriber_primary_subspecialty
Domain	Prescriber
Data Source	WA DOH; Linked by WA PMP from the Centers for Medicare and Medicaid Services, National Plan and Provider Enumeration System, National Provider Index (NPI) Registry (administered by the National Uniforms Claims Committee). *Reference: https://www.cms.gov/Regulations-and-Guidance/Administrative-Simplification/NationalProvIdentStand/*
Notes	The prescriber's primary or first-listed healthcare taxonomy code level 3 specialty from the NPI Registry File.

Variable Name	prescriberVet
Domain	Prescriber
Data Source	WA DOH; Linked and created by WA PMP from the U.S. Department of Justice, Drug Enforcement Administration, DEA Registrant file. *Reference: https://www.deadiversion.usdoj.gov/drugreg/index.html*
Notes	A flag indicating the prescriber is a veterinarian by using name, degree, and address from the prescriber's Drug Enforcement Agency (DEA) registrant file.

Variable Name	validPrescriberDEA
Domain	Prescriber
Data Source	WA DOH; Linked and created by WA PMP from the U.S. Department of Justice, Drug Enforcement Administration, DEA Registrant file. *Reference: https://www.deadiversion.usdoj.gov/drugreg/index.html*
Notes	Flag indicating validity of prescriber's Drug Enforcement Agency (DEA) identifier.

Prescription domain variables

Variable Name	dispensationID
Domain	Prescription
Data Source	Appriss; Provided by WA PMP Vendor
Notes	Unique identification number assigned to every dispensation captured within the system.

Variable Name	Status
Domain	Prescription
Data Source	DSP01 (ASAP 4.2A; Required by ASAP)
Notes	Code indicating whether the submitted prescription record is a new record, revision, or void record as reported by the dispensing pharmacy.

Variable Name	rxNumber
Domain	Prescription
Data Source	DSP02 (ASAP 4.2A; Required by ASAP)
Notes	The prescription number as entered by dispensing pharmacy. It is supposed to be unique within the prescriber, but may not always be so. Refills have the same prescription number. For animal prescriptions, the animal's name is occasionally entered in this field.

Variable Name	dateWritten
Domain	Prescription
Data Source	DSP03 (ASAP 4.2A; Required by WA PMP)
Notes	The date the prescription was written by the prescriber. To remove possible birthdates, DOH converted values to missing when they were more than a year before or after the calendar year of dateFilled.

Variable Name	refillsAuthorized
Domain	Prescription
Data Source	DSP04 (ASAP 4.2A; Required by WA PMP)
Notes	The number of refills authorized by the prescriber when the prescription was written. Some records have implausibly high values, however, most of these are prescriptions for animals.

Variable Name	dateFilled
Domain	Prescription
Data Source	DSP05 (ASAP 4.2A; Required by WA PMP)
Notes	The date the prescription was dispensed by the pharmacy.

Variable Name	refillNumber
Domain	Prescription
Data Source	DSP06 (ASAP 4.2A; Required by WA PMP)
Notes	The refill number. This is usually recorded as 0 for the original prescription fill, 1 for the first refill, 2 for the second, and so on. Records with a value of 99 in this field, likely indicate missing data. Most such records are for prescriptions for animals.

Variable Name	ndc
Domain	Prescription
Data Source	DSP08 (ASAP 4.2A; Required by WA PMP)
Notes	The National Drug Code as entered by dispensing pharmacy. Valid NDCs are 10 characters long, but the field normally contains an extra character to identify the code format. Therefore, valid entries in this field are 11 characters long. If a compound drug, then "99999" are used as the first 5 characters.

Variable Name	quantity
Domain	Prescription
Data Source	DSP09 (ASAP 4.2A; Required by WA PMP)
Notes	The quantity of medication dispensed. If dispensed as tablets or capsules, this is their count. If dispensed in liquid form, this is the number of milliliters. If dispensed as powder, this is the number of grams.

Variable Name	daysSupply
Domain	Prescription
Data Source	DSP10 (ASAP 4.2A; Required by WA PMP)
Notes	The number of days' supply dispensed, as estimated by pharmacist from directions provided by the prescriber (e.g., if the prescriber wrote a prescription for 36 tablets and directed the patient to take 1 tablet every 4 hours, the days' supply would be calculated as 6.)

Variable Name	dosageCode
Domain	Prescription
Data Source	DSP11 (ASAP 4.2A; Not Required by WA PMP)
Notes	Identifies unit of measure for the quantity dispensed as reported by dispensing pharmacy.

Variable Name	transmissionCode
Domain	Prescription
Data Source	DSP12 (ASAP 4.2A; Not Required by WA PMP)
Notes	Identifies how the dispensing pharmacy received the prescription.

Variable Name	partialFill
Domain	Prescription
Data Source	DSP13 (ASAP 4.2A; Not Required by WA PMP)
Notes	Used when quantity dispensed is less than metric quantity per dispensing authorized by the prescriber.

Variable Name	dispenserNPI
Domain	Prescription
Data Source	DSP14 (ASAP 4.2A; Situational (not required by WA PMP but supplied if available))
Notes	Identifier assigned to the pharmacist by the U.S. Centers for Medicare & Medicaid Services as reported by the dispensing pharmacy. *Reference: https://www.cms.gov/Regulations-and-Guidance/Administrative-Simplification/NationalProvIdentStand/*

Variable Name	dispenserLicense
Domain	Prescription
Data Source	DSP15 (ASAP 4.2A; Not Required by WA PMP)
Notes	Pharmacist identifier assigned by State Licensing Board as reported by the dispensing pharmacy.

Variable Name	paymentMethod
Domain	Prescription
Data Source	DSP16 (ASAP 4.2A; Required by WA PMP)
Notes	Code identifying the type of payment used for the prescription.

Variable Name	dateSold
Domain	Prescription
Data Source	DSP17 (ASAP 4.2A; Not Required by WA PMP)
Notes	Dependent on pharmacy having a point-of-sale system that is integrated with the pharmacy management system, allowing a bidirectional flow of information. It is used to determine the date the prescription left the pharmacy, not the date it was filled, if the dates differ.

Variable Name	rxNormCode
Domain	Prescription
Data Source	DSP19 (ASAP 4.2A; Not Required by WA PMP)
Notes	Used for electronic prescriptions to capture the prescribed drug production identification.

Variable Name	eReferenceNumber
Domain	Prescription
Data Source	DSP20 (ASAP 4.2A; Not Required by WA PMP)
Notes	Used to provide an audit trail for electronic prescriptions.

Variable Name	drugname
Domain	Prescription
Data Source	Appriss; Provided by WA PMP Vendor
Notes	The labeled drug brand or generic name.

Variable Name	drugnameWithStrength
Domain	Prescription
Data Source	Appriss; Provided by WA PMP Vendor
Notes	The labeled drug brand or generic name abbreviated with strength of primary ingredient, unit of measure, and formulary.

Variable Name	schedule
Domain	Prescription
Data Source	WA DOH; Created by WA PMP
Notes	The labeled drug schedule of the primary ingredient for National Drug Code (NDC) records created using an internal cumulative NDC Table.

Variable Name	genericDrugname
Domain	Prescription
Data Source	WA DOH; Created by WA PMP
Notes	Generic drug name for National Drug Code (NDC) records created using an internal cumulative NDC Table.

Variable Name	masterForm
Domain	Prescription
Data Source	WA DOH; Created by WA PMP Program
Notes	Drug formulary for National Drug Code (NDC) records created using an internal cumulative NDC Table.

Variable Name	strengthPerUnit
Domain	Prescription
Data Source	WA DOH; Created by WA PMP Program
Notes	Calculation of drug ingredient strength expressed as a single measure per dispensed unit for National Drug Code (NDC) record created using an internal cumulative NDC Table.

Variable Name	units
Domain	Prescription
Data Source	WA DOH; Created by WA PMP Program
Notes	Calculation of primary drug ingredient labeled unit of measure for dispensation or treatment created using an internal cumulative National Drug Code Table.

Variable Name	drug
Domain	Prescription
Data Source	WA DOH; Created by WA PMP Program
Notes	Name of primary drug ingredient for National Drug Code (NDC) records, created using an internal cumulative NDC Table.

Variable Name	MMEFactor
Domain	Prescription
Data Source	WA DOH; Created by WA PMP Program
Notes	Morphine Milligram Equivalent (MME) for National Drug Code record determined by U.S. Centers for Disease Control and Prevention. Reference: https://www.cdc.gov/drugoverdose/resources/data.html

Variable Name	totalMME
Domain	Prescription
Data Source	WA DOH; Created by WA PMP Program
Notes	Created for drugs identified as opioids with a morphine milligram equivalence factor as (strengthperunit*quantity*mmefactor)

Variable Name	dailyMME
Domain	Prescription
Data Source	WA DOH; Created by WA PMP Program
Notes	Created for drugs identified as opioids with a morphine milligram equivalence factor as (strengthperunit*quantity*mmefactor)/daysSupply

Variable Name	drugclass
Domain	Prescription
Data Source	WA DOH; Created by WA PMP Program
Notes	Classification of primary drug ingredient for National Drug Code (NDC) records into several drug categories created using a cumulative U.S. Food and Drug Administration NDC Table.

Variable Name	longshortacting
Domain	Prescription
Data Source	WA DOH; Created by WA PMP Program

Notes	Identifies prescription as a long-acting/extended-release or short-acting drug.

Compound drug domain variables

Variable Name	compoundDrugCode
Domain	Compound Drug
Data Source	CDI01 (ASAP 4.2A; Required by ASAP)
Notes	The compound drug ingredient sequence number. First reportable ingredient is 1; each additional reportable ingredient is incremented by 1.

Variable Name	compoundDrugCodeType
Domain	Compound Drug
Data Source	CDI02 (ASAP 4.2A; Required by ASAP)
Notes	Code to identify the type of product ID contained in *compoundDrugCode*.

Variable Name	compoundDrugIngredients
Domain	Compound Drug
Data Source	CDI03 (ASAP 4.2A; Required by ASAP)
Notes	Full product identification as indicated in *CompoundDrugCodeType*.

Variable Name	compoundDrugQuantity
Domain	Compound Drug
Data Source	CDI04 (ASAP 4.2A; Required by ASAP)
Notes	Metric decimal quantity of the ingredient identified in *compoundDrugIngredients*.

Variable Name	compoundDrugDosage
Domain	Compound Drug
Data Source	CDI05 (ASAP 4.2A; Not required by ASAP)
Notes	Identifies the unit of measure for the compound drug quantity dispensed.

Additional information domain variables

Variable Name	personIDType
Domain	Additional Information
Data Source	AIR04 (ASAP 4.2A; Situational (not required by WA PMP but supplied if available))
Notes	Used to identify the type of ID for person dropping off or picking up the prescription.

Variable Name	personID
Domain	Additional Information
Data Source	AIR05 (ASAP 4.2A; Situational (not required by WA PMP but supplied if available))
Notes	ID number of patient or person picking up or dropping off the prescription.

Variable Name	personRelationship
Domain	Additional Information

Data Source	AIR06 (ASAP 4.2A; Not required by WA PMP)
Notes	Code indicating the relationship of person picking up or dropping off the prescription.

Variable Name	personLastname
Domain	Additional Information
Data Source	AIR07 (ASAP 4.2A; Situational (not required by WA PMP but supplied if available))
Notes	Last name of person picking up or dropping off the prescription.

Variable Name	personFirstname
Domain	Additional Information
Data Source	AIR08 (ASAP 4.2A; Situational (not required by WA PMP but supplied if available))
Notes	First name of person picking up or dropping off the prescription.

Miscellaneous domain variables

Variable Name	recordNumber
Domain	Miscellaneous
Data Source	WA DOH; Created by WA PMP Program
Notes	Created by incrementing each prescription record by 1.

Codebook

State codes and value

code	Value	code	Value
AL	Alabama	TX	Texas
AK	Alaska	UT	Utah
AZ	Arizona	VT	Vermont
AR	Arkansas	VA	Virginia
CA	California	WA	Washington
CO	Colorado	WV	West Virginia
CT	Connecticut	WI	Wisconsin
DE	Delaware	WY	Wyoming
FL	Florida	AS	American Samoa
GA	Georgia	DC	District of Columbia
HI	Hawaii	FM	Federated States of Micronesia
ID	Idaho	GU	Guam
IL	Illinois	MH	Marshall Islands
IN	Indiana	MP	Northern Mariana Islands
IA	Iowa	PW	Palau
KS	Kansas	PR	Puerto Rico
KY	Kentucky	VI	Virgin Islands
LA	Louisiana	AE	Armed Forces Africa
ME	Maine	AA	Armed Forces Americas
MD	Maryland	AE	Armed Forces Canada/Europe/Middle East
MA	Massachusetts	AP	Armed Forces Pacific
MI	Michigan		
MN	Minnesota		
MS	Mississippi		
MO	Missouri		
MT	Montana		
NE	Nebraska		
NV	Nevada		
NH	New Hampshire		
NJ	New Jersey		
NM	New Mexico		
NY	New York		
NC	North Carolina		
ND	North Dakota		
OH	Ohio		
OK	Oklahoma		
OR	Oregon		
PA	Pennsylvania		
RI	Rhode Island		
SC	South Carolina		
SD	South Dakota		
TN	Tennessee		

Gender codes and value

Code	Value
1	male
2	female

Species codes and value

Code	Value
01	human
02	non-human

Location codes and value

Code	Value
01	Home
02	Intermediary Care
03	Nursing Home
04	Long-Term/Extended-Care
05	Rest Home
06	Boarding Home
07	Skilled-Care Facility
08	Sub-Acute Care Facility
09	Acute Care Facility
10	Outpatient
11	Hospice
98	Unknown
99	Other

Refill number codes and value

Code	Value
0	New prescription
01–99	Refill number

Dosage codes and value

Code	Value
01	Each
02	Milliliters
03	Grams

Payment method codes and value

Code	Value	Code	Value
01	Private pay	05	Military installations and VA
02	Medicaid	06	Worker's compensation
03	Medicare	07	Indian nations
04	Commercial insurance	99	Other

Schedule codes and value

Code	Value
2	Schedule II
3	Schedule III
4	Schedule IV
5	Schedule V

Transmission codes and value

Code	Value
01	Written Prescription
02	Telephone Prescription
03	Telephone Emergency Prescription
04	Fax Prescription
05	Electronic Prescription
06	Transfer/Forwarded Prescription
99	Other

Partial fill codes and value

Code	Value
00	Not a partial fill
01	First partial fill
02–99	Subsequent partial fill

Compound drug code codes and value

Code	Value
0/Blank	Not a compound drug
01	First ingredient
02–99	Subsequent ingredient

Compound drug code type codes and value

Code	Value
00	Not a compound drug
01	NDC (National Drug Code)
02	UPC (Universal Product Code)
03	HRI (Health Related Item)
04	UPN (Universal Product Number)
05	DIN (Drug Identification Number)
06	Compound (this code is not used in this segment)

Person ID type codes and value

Code	Value
01	Military ID
02	State Issued ID
03	Unique System ID
04	Permanent Resident Card (Green Card)
05	Passport ID
06	Driver's License ID
07	Social Security Number
08	Tribal ID
99	Other (agreed upon ID)

Person relationship codes and value

Code	Value
01	Patient
02	Parent/Legal Guardian
03	Spouse
04	Caregiver
99	Other

Animal codes and value

Code	Value
N	not an animal
y	an animal

Clinic use codes and value

Code	Value
n	Prescription for a named person or animal
y	Prescription for use by a clinic, other non-human entity, or anonymous donor

Dispenser/prescriber vet codes and value

Code	Value
n	not a veterinarian
y	a veterinarian

Dispenser/prescriber valid DEA codes and value

Code	Value
n	Dispenser's/prescriber's DEA identifier failed a validity check as reported by dispensing pharmacy
y	Dispenser's/prescriber's DEA identifier passed a validity check as reported by dispensing pharmacy

Active drug substance to drug class crosswalk

Anabolic stimulant	Benzodiazepine	Central nervous system stimulant
Androstenedione	Alprazolam	Amphetamine
Fluoxymesterone	Chlordiazepoxide	Armodafinil
Methyltestosterone	Clobazam	Benzphetamine
Mixed Hormone Combin	Clonazepam	Cocaine
Nandrolone	Clorazepate	Dexmethylphenidate
Oxandrolone	Diazepam	Dextroamphetamine
Oxymetholone	Estazolam	Diethylpropion
Stanozolol	Flurazepam	Lisdexamfetamine
Testosterone	Lorazepam	Lorcaserin
	Meprobamate	Methamphetamine
	Midazolam	Methylphenidate
	Oxazepam	Modafinil
	Quazepam	Phendimetrazine
	Temazepam	Phentermine
	Triazolam	

Opioid		Sedative	Other controlled substance	Not classed
Alfentanil	Pentazocine	Butabarbital	Dronabinol	Amobarbital
Buprenorphine	Sufentanil	Butalbital	Ezogabine	Brivaracetam
Butorphanol	Tapentadol	Carisoprodol	Ketamine	Difenoxin
Codeine	Tramadol	Chloral Hydrate	Lacosamide	Fospropofol
Dihydrocodeine		Dichloralphenazone	Nabilone	Methohexital
Diphenoxylate		Eszopiclone	Perampanel	Remifentanil
Fentanyl		Pentobarbital	Pregabalin	Suvorexant
Hydrocodone		Phenobarbital		
Hydromorphone		Secobarbital		
Levorphanol		Sodium Oxybate		
Meperidine		Zaleplon		
Methadone		Zolpidem		
Morphine				
Opium				
Oxycodone				
Oxymorphone				

Morphine milligram equivalent calculation

The WA PMP calculates the morphine milligram equivalent (MME) by multiplying the dispensed quantity of an opioid by its morphine conversion factor (a value assigned to an opioid to represent its morphine-equivalent potency) and strength per unit. For example, the total MME for 180 tablets of 5 mg hydrocodone based on a 1:1 morphine conversion factor would be 5 mg x 180 x 1 = 900 MME[1]. The daily MME is calculated by dividing the total MME by the days' supply dispensed. For additional information about calculating morphine equivalency, please see the Opioid Dose Calculator (http://agencymeddirectors.wa.gov/Calculator/DoseCalculator.htm) and the CDC Data Resource page: https://www.cdc.gov/drugoverdose/resources/data.html

Drug	Master Form	Units of Measure	MME Factor
Buprenorphine	Film	mcg	0.03
Buprenorphine	Film/Tablet	mg	30
Buprenorphine	Patch, Extended Release	mcg/hr	12.6
Butorphanol	All formularies	All units	7
Codeine	All formularies	All units	0.15
Dihydrocodeine	All formularies	All units	0.25
Fentanyl	Aerosol/Spray	mcg/spray	0.16
Fentanyl	Film/Injection	mcg, mcg/ml	0.18
Fentanyl	Lozenge/Troche	mcg	0.13
Fentanyl	Patch	mcg, mcg/hr	7.2
Fentanyl	Spray	mcg	0.16
Hydrocodone	All formularies	All units	1
Hydromorphone	All formularies	All units	4
Levomethadyl	All formularies	All units	8
Levorphanol	All formularies	All units	11
Meperidine	All formularies	All units	0.1
Methadone	All formularies	All units	3
Morphine	All formularies	All units	1
Opium	All formularies	All units	1
Oxycodone	All formularies	All units	1.5
Oxymorphone	All formularies	All units	3
Pentazocine	All formularies	All units	0.37
Propoxyphene	All formularies	All units	0.23
Tapentadol	All formularies	All units	0.4
Tramadol	All formularies	All units	0.1

[1] Dr. Robert Bree Collaborative. 2017. "Opioid Prescribing Metrics." http://www.breecollaborative.org/wp-content/uploads/Bree-Opioid-Prescribing-Metrics-Final-2017.pdf.