

Nebraska's Innovative Approach to Medication Reconciliation using the PDMP

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Nebraska HIMSS 2018 Spring Meeting
April 23, 2018

Objectives

- ▶ Discuss the opioid epidemic on a national and local level
- ▶ Understand the costs of hospital readmissions
- ▶ Describe the need and importance for medication reconciliation
- ▶ Review the enhancements to prescription drug monitoring program
- ▶ Understand how to access and use the Nebraska PDMP and medication history

Opioid Epidemic

NBC NEWS

SECTIONS ▾

NIGHTLY NEWS

MSNBC

MEET THE PRESS

DATeline

TODAY



Opioid Epidemic: Trump to Set Up Commission on Addiction Crisis

by KELLY O'DONNELL

CNN

Health > Trump: 'The opioid crisis is an emergency'

Trump: 'The opioid crisis is an emergency'

By Wayne Drash and Dan Merica, CNN

Updated 1:43 AM ET, Fri August 11, 2017

State officials launch campaign targeting opioid drug abuse

By Martha Stoddard / World-Herald Bureau Feb 14, 2017 (1)



DEA chief on opioids: "It scares the hell out of me"

We visit Kentucky, where some paramedics rush to as many as 25 drug overdoses in a single day

On MARCH 31, 12:02 PM / 177

State leaders hold opioid summit to prevent epidemic's spread to Nebraska

By Julie Anderson / World-Herald staff writer Oct 15, 2016 (1)



politics

Updated 5:59 PM ET, Thu October 26, 2017

Trump declares opioid epidemic a national public health emergency



Opioid Epidemic

▶ Nationally

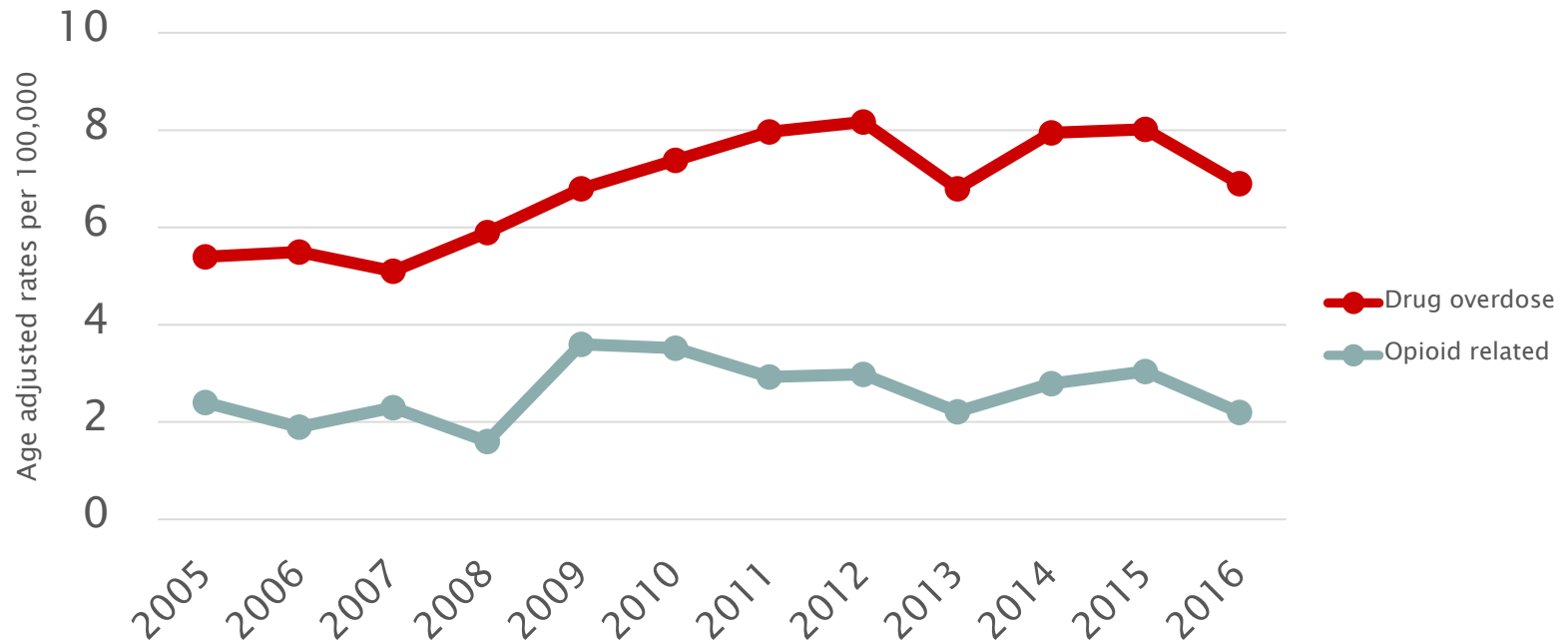
- “Opioid abuse is a serious public health issue. Drug overdose deaths are the leading cause of injury death in the United States.”¹

STATE ²	PERCENT OF MEMBERS WHO FILLED AT LEAST ONE OPIOID PRESCRIPTION IN 2015	PERCENT OF MEMBERS WHO WERE ON A LONG DURATION OPIOID REGIMEN IN 2015	OPIOID USE DISORDER DIAGNOSES IN 2016 (PER 1,000 MEMBERS)	PERCENT OF MEMBERS WITH OPIOID USE DISORDER WHO RECEIVED MEDICATION-ASSISTED TREATMENT IN 2016
National Average	21.4%	3.8%	8.3	37%
KS	19.0%	3.4%	4.2	38%
NE	17.8%	2.8%	2.4	56%
ND	17.5%	2.5%	3.8	45%
SD	15.8%	2.4%	3.0	27%

¹<https://www.HHS.gov/opioids/about-the-epidemic>

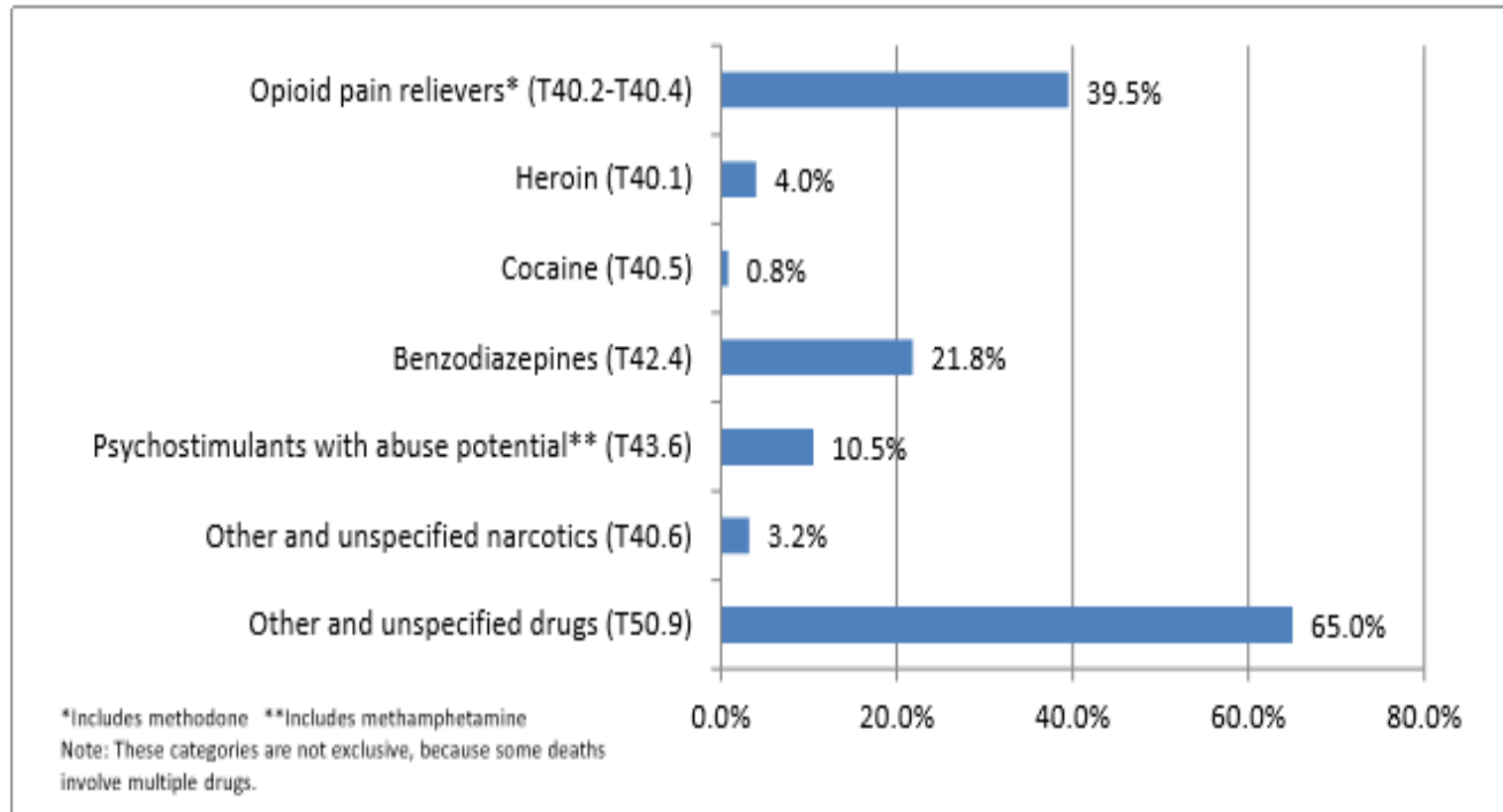
²America’s Opioid Epidemic and its Effect on the Nation’s Commercially-Insured Population. BCBS. June 29, 2017

All Drug-related and Opioid-related Overdose Fatalities, Nebraska, 2005 – 2016



Data source: Nebraska Vital Records, 2005-2016

Opioids contributed to up to 40% of Drug Overdose Deaths in Nebraska, 2014



Source: Nebraska Special Emphasis Report: Drug Overdose Deaths, 1999–2014. dhhs.ne.gov/injuryprevention. November, 2015

Combating the Opioid Epidemic

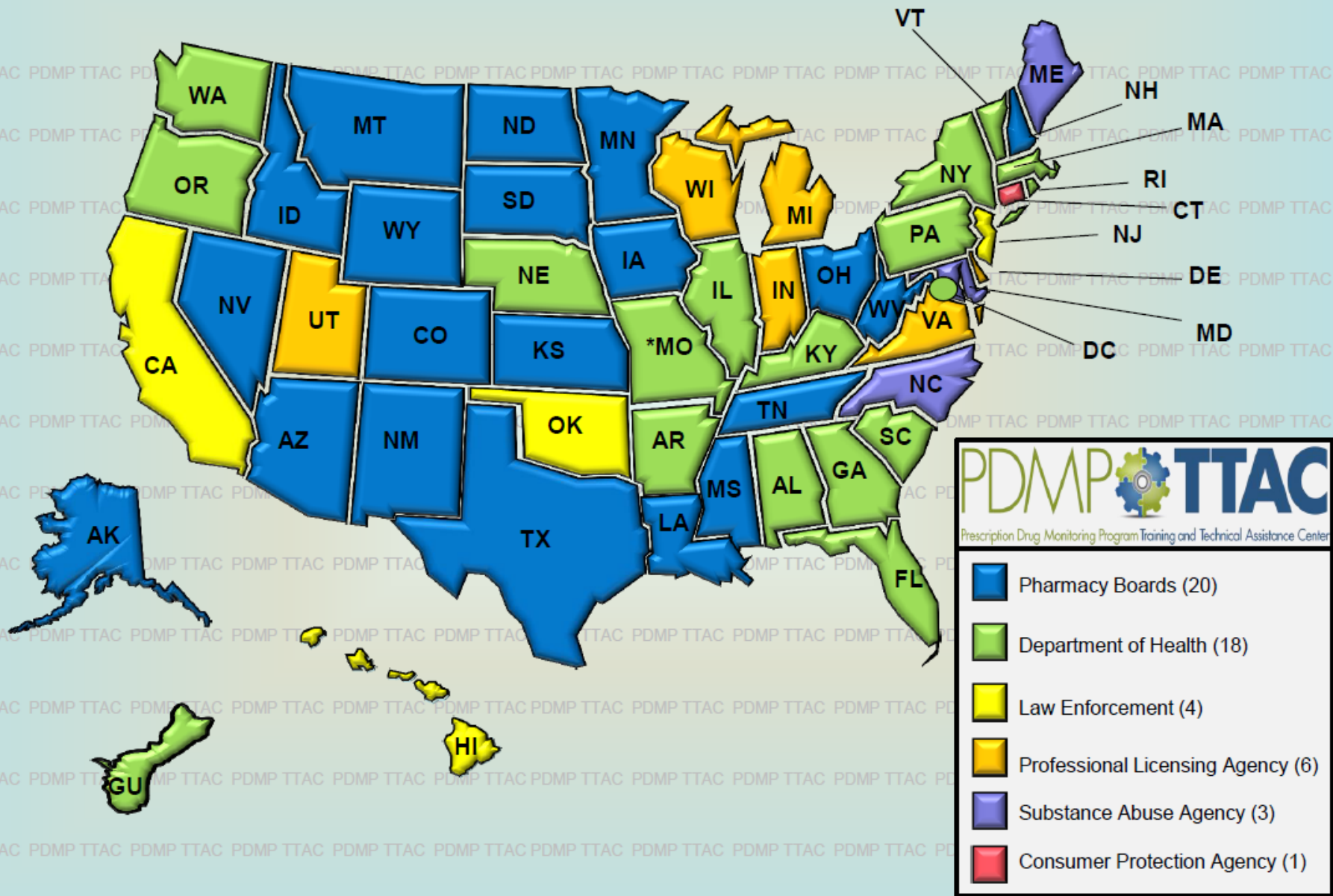
- ▶ Multi-faceted approach
- ▶ Prevention
 - Drug take-back
- ▶ Education
 - Schools
 - Pain Management Guidance Document
- ▶ Treatment/recovery
 - Naloxone
- ▶ Identification/monitoring
 - PDMP

PDMP

- ▶ A prescription drug monitoring program (PDMP) is an electronic database that tracks controlled substance prescriptions in a state. PDMPs can provide health authorities timely information about prescribing and patient behaviors that contribute to the epidemic and facilitate a nimble and targeted response.¹
- ▶ Tool to allow healthcare professionals to make better informed decisions relating to the treatment and safety of the patient

¹CDC. <https://www.cdc.gov/drugoverdose/pdmp/states.html>

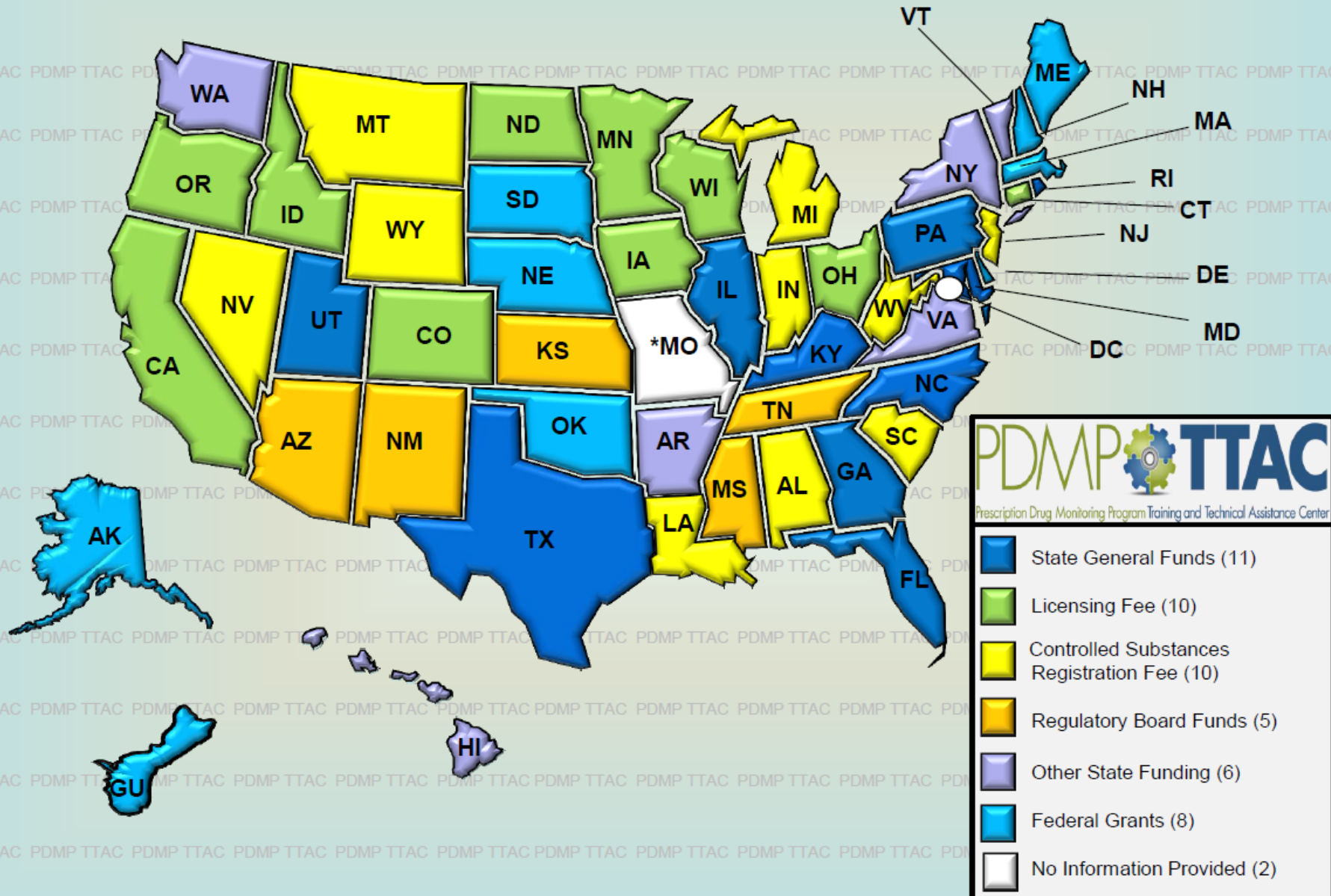
PDMP By Operating State Agency Type



Research is current as of August 24, 2017

*Missouri does not have a state-wide PDMP

PDMPs Major Source of Funding



Research is current as of August 24, 2017

*Missouri does not have a state-wide PDMP

Opioid prescriptions continue to decline nationwide

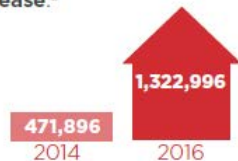
Between 2012 and 2016, the number of opioid prescriptions decreased by more than **43 million**—a **16.9 percent decrease** nationally. Every state saw a decrease in opioid prescriptions during this time period.¹



Sources: CDC, Quintiles IMS

America's physicians and health care professionals are using state PDMPs more than ever

Physicians' and other health care professionals' registrations with state-based prescription drug monitoring programs (PDMPs) grew from **471,896** in 2014 to **1,322,996** in 2016—marking a **180 percent increase**.²



Physicians and other health care professionals used state PDMPs more than **136.1 million times** in 2016—a **121 percent increase** from 2014.³



1. Xponent, QuintilesIMS, Danbury, CT Copyright 2017

2. Based on AMA survey and responses from 45 state PDMP administrators. Figures will be adjusted as new information becomes available.

3. Based on AMA survey and responses from 44 state PDMP administrators. Figures will be adjusted as new information becomes available.

AMERICAN MEDICAL ASSOCIATION OPIOID TASK FORCE

Physicians' progress to reverse the nation's opioid epidemic. AMA

History of the Nebraska PDMP

- ▶ LB 237 (2011) – Creation of a PDMP
 - Prevent misuse of prescription drugs in an efficient and cost-effective manner
 - Allow doctors and pharmacists to monitor the care and treatment of patients for whom a prescription drug is prescribed to ensure that prescription drugs are used for medically appropriate purposes
 - Identified Nebraska DHHS and NeHII as collaborative partners to administer PDMP
 - Prohibit use of state funding to implement or operate the PDMP
 - Neb. Rev. Stat. §§ 71-2454, 71-2455, 71-2456
- ▶ LB 1072 (2014)
 - Prevent misuse of controlled substances
 - Repealed the no funding stipulation

History of the Nebraska PDMP

- ▶ 2015
 - Stakeholder meetings
 - Awarded two grants
 - Bureau of Justice Assistance Harold Rogers PDMP Grant
 - \$250,000/year x 2 years
 - CDC Prescription Drug Overdose Prevention for States
 - \$771,000/year x 4 years

History of the Nebraska PDMP

- ▶ LB 471 (2016) –Enhancements of a PDMP
 - Report all dispensed controlled substance prescriptions by January 1, 2017
 - Prevents opting out
 - Allow prescribers and dispensers to access the system at no cost
 - *Report ALL dispensed prescriptions by January 1, 2018*
- ▶ LB 223 (2017) – Updates to 2016 Legislation
 - Allows for a designee of a prescriber or dispenser under the Uniform Credentialing Act
 - Mandatory PDMP training to grant access
 - Veterinarians to report dispensed controlled substance prescriptions beginning July 1, 2018

Purpose of Nebraska PDMP

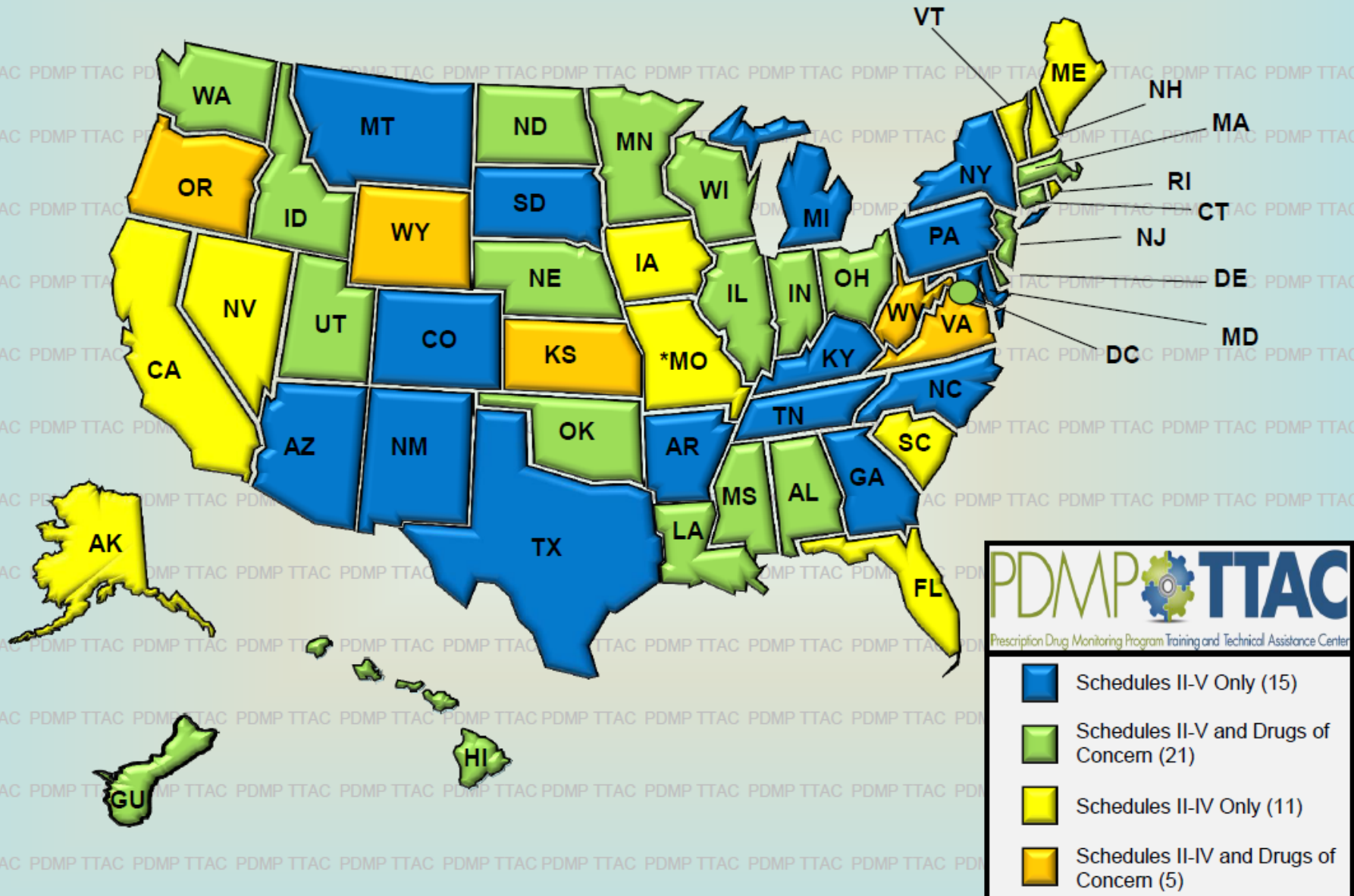
- ▶ Prevent the misuse of controlled substances that are prescribed
- ▶ The State of Nebraska remains on the cutting edge of medical information technology
- ▶ Allow prescribers and dispensers (doctors and pharmacists) to monitor the care and treatment of patients for whom such a prescription drug is prescribed to ensure that such prescription drugs are used for medically appropriate purposes

Drugs Reported to PDMP

- ▶ **Controlled substances**
 - Opioids
 - Oxycodone, hydrocodone, morphine, codeine
 - Benzodiazepines
 - Alprazolam, lorazepam, clonazepam
 - Stimulants
 - Methylphenidate, dextroamphetamine
- ▶ **“Drugs of Concern”**
 - Tramadol (prior to being scheduled)
 - Carisoprodol
 - Gabapentin
 - Naloxone

Source: Nebraska statute 71-2454(1)

Drugs Monitored by PDMP



Research is current as of December 5, 2017

*Missouri does not have a state-wide PDMP

Nebraska's Innovative Approach

- ▶ All prescription drugs can be drugs of concern
 - Drug interactions, allergies
- ▶ PDMP prior to 2017 contained gaps
- ▶ Users accustomed to seeing the entire med history, not just opioids, controlled substances

Nebraska's Innovative Approach

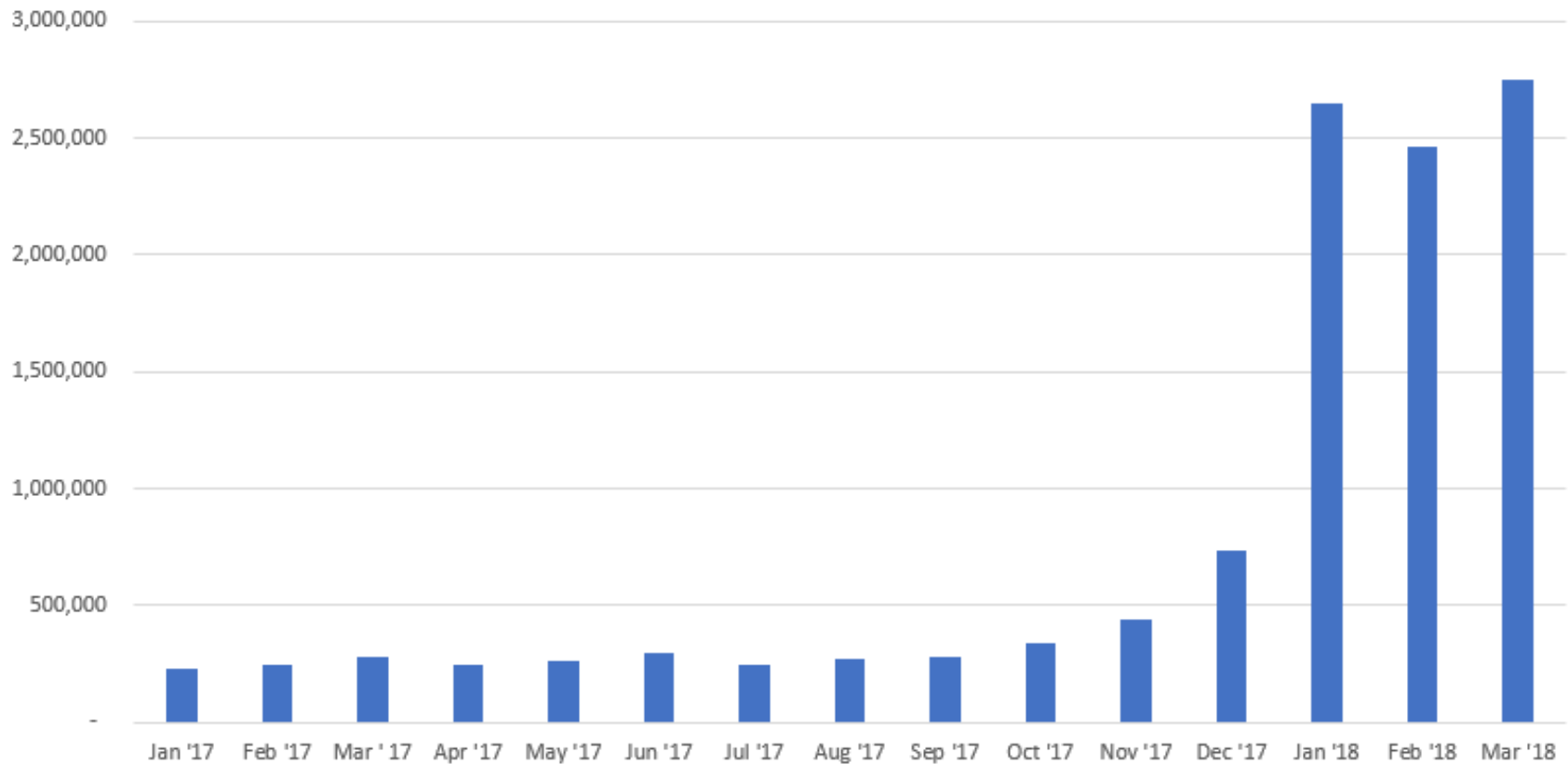
- ▶ First state to operate PDMP through HIE platform
- ▶ First state to mandate reporting of all dispensed prescription drugs
- ▶ Focus on Patient safety vs. law enforcement access

What We Have Seen So Far

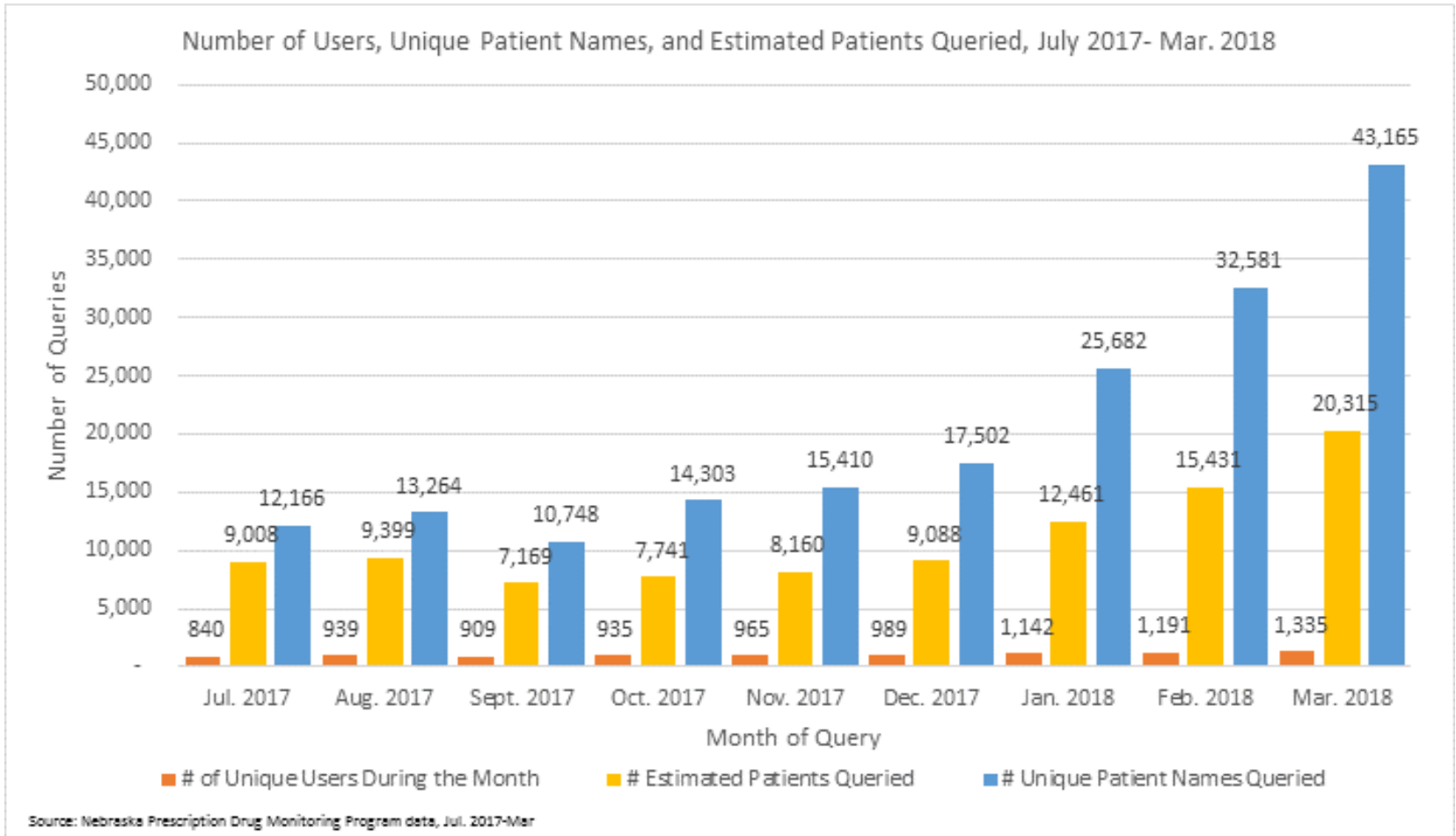
- ▶ January 1 – December 31, 2017
 - 3,882,974 prescription records
- ▶ January 1 – March 31, 2018
 - 7,864,609 prescription records
 - 7,076,641 dispensed non-controlled substances
- ▶ 2017 Average 10,638 Rx/day
- ▶ 2018 Average 87,384 Rx/day
- ▶ Enrolled users of the PDMP (as of 2/28/18)
 - 4,325 prescribers (MD, APRN, DDS, DVM, PA)
 - 23.9% of Nebraska licensed prescribers
 - 1,719 dispensers (i.e., pharmacists)
 - 32.8% of Nebraska licensed pharmacists
 - 248 designees (e.g., nurses, pharmacy technicians, pharmacist interns, etc.)

Nebraska PDMP Reported Data January 2017 – March 2018

Monthly # Unique Dispensed Prescriptions Reported



Users and Patients Queried July 2017 - March 2018



Opportunities for PDMPs

- Accuracy and completeness
 - Data is only as good as what is entered by the pharmacy
 - Timely reporting
 - Patient search
- Monitoring tools
 - Morphine Milligram Equivalency (MME) alerts or dashboard tiles
 - Multiple provider episodes (e.g., 5/5/6) alert
 - Risk score alerts

Opportunities for PDMPs

- Easy access
 - Workflow integration
 - Interoperability
 - Workflow integration
 - Directly access through health information exchange, electronic health record or pharmacy software
 - Single Sign-On (SSO)
 - Interstate data sharing
 - Available in many states
 - NE is exploring this

Reporting all dispensed prescriptions

- ▶ Required reporting as of January 1, 2018
- ▶ Comprehensive medication history
 - 10 x more data than traditional PDMP's that include controlled substances only
- ▶ **Patient safety tool**
- ▶ Allows clinicians to make better informed decisions
- ▶ Identify medications from multiple prescribers and pharmacies
- ▶ Identify potential drug interactions, allergies
- ▶ Provides a valuable resource in the event of natural disasters, system power interruptions
- ▶ Tool for medication reconciliation

Protection of Information

- ▶ Neb. Rev. Stat. §71-2454 (5)(a) All prescription drug information submitted pursuant to this section, all data contained in the prescription drug monitoring system, and any report obtained from data contained in the prescription drug monitoring system are confidential, are privileged, are not public records, and may be withheld pursuant to section 84-712.05.
- ▶ (b) No patient-identifying data as defined in section 81-664, including the data collected under subsection (3) of this section, shall be disclosed, made public, or released to any public or private person or entity except to the statewide health information exchange described in section 71-2455 and its participants and to prescribers and dispensers as provided in subsection (2) of this section.
- ▶ Neb. Rev. Stat. §84-712.05 The following records, unless publicly disclosed in an open court, open administrative proceeding, or open meeting or disclosed by a public entity pursuant to its duties, may be withheld from the public by the lawful custodian of the records: (19) All prescription drug information submitted pursuant to section 71-2454, all data contained in the prescription drug monitoring system, and any report obtained from data contained in the prescription drug monitoring system.

Nebraska Prescription Drug Monitoring Program Registration Process

Step:
1

Complete the **PDMP** Training located at: ***Training is mandatory to gain access to PDMP**

Prescribers:

<http://dhhs.ne.gov/publichealth/PDMP/Pages/PhysicianEducation.aspx>

Dispensers:

<http://dhhs.ne.gov/publichealth/PDMP/Pages/DispenserEducation.aspx>

Step:
2

Complete the **PDMP** User Access Request Form located at:

www.dhhs.ne.gov/pdmp

Designees must be designated by prescriber or dispenser.

Step:
3

Complete the **PDMP** Registration

Once you successfully complete the user access request form and training requirement instructions on setting up your username and password for the PDMP will be emailed directly to you.

***Check email spam/junk: noreply_provisioning@optum.com**

If you have questions about the Nebraska **PDMP** registration process please contact DHHS.PDMP@Nebraska.gov.

NEBRASKA
Good Life. Great Mission.
DEPT. OF HEALTH AND HUMAN SERVICES

PDMP User Access Request Form



PDMP User Access Request Form

Dispenser/Prescriber Information

This page is for Dispenser/Prescriber information only

1. Dispenser/Prescriber Action

2. Dispenser/Prescriber First Name

3. Dispenser/Prescriber Last Name

4. Dispenser/Prescriber PDMP Email (the email address where you would like to receive PDMP correspondence; can not be a shared or group inbox)

5. Dispenser/Prescriber Licensure Email (the email address on file with the Nebraska Licensure Unit; only required if different than the PDMP email address listed above)

6. Dispenser/Prescriber License State (if your License State is other than Nebraska; refer to the License State section of the instructions for additional requirements)

7. Dispenser/Prescriber Professional State License Number

8. Dispenser/Prescriber Professional State License Type

9. Dispenser/Prescriber Last four digits of SSN*

*This field is optional and is used to verify your credential issued by the Nebraska DHHS OPH Licensure Unit under the Uniform Credentialing Act to verify eligibility for access to the Nebraska PDMP under Neb. Rev. Stat. §71-2454.

10. Dispenser/Prescriber Place of Birth

11. Dispenser/Prescriber Facility Information

Office Manager Name

Facility Name

Office Manager Email

Office Manager Phone Number

12. Are you authorizing any designees?

Yes

No

Next

Training

▶ <http://dhhs.ne.gov/PDMP>

The screenshot shows the official Nebraska Government Website for the Nebraska Department of Health & Human Services. The page is titled "NEBRASKA DEPARTMENT OF HEALTH & HUMAN SERVICES" with the tagline "Helping People Live Better Lives". The navigation menu includes "BEHAVIORAL HEALTH", "CHILDREN & FAMILY SERVICES", "DEVELOPMENTAL DISABILITIES", "MEDICAID & LONG-TERM CARE", and "PUBLIC HEALTH". A search bar is located on the right side of the navigation menu.

The main content area is titled "Drug Overdose Prevention Homepage". It features a sidebar on the left with links: "PDMP Home", "Purpose of PDMP", "Project Partners", "Drug Safety Advisory Group", "Data", "Grant Information", "Latest News", "Resources", and "Contact Us".

The main content area contains several blue buttons arranged in a grid:

- Physicians & Other Prescribers
- Pharmacists & Other Dispensers** (circled in red)
- Veterinarians
- Pain Management
- Naloxone
- Consumers

Below the buttons, there is a "Welcome to the Nebraska Drug Overdose Prevention Website" section. Underneath, there is a "NEW DOCUMENTS & RESOURCES" section with a link to "Nebraska Pain Management Guidance Document". Below that is a "PDMP USER ACCESS INFORMATION" section with a link to "NEW - PDMP User Access Request Form".

At the bottom right, there are logos for "NEBRASKA Good Life. Great Mission. DEPT. OF HEALTH AND HUMAN SERVICES" and "PRESCRIPTION DRUG MONITORING PROGRAM". Below these is the "NeHI Nebraska Health Information Initiative" logo.

Training

Official Nebraska Government Website


NEBRASKA DEPARTMENT OF HEALTH & HUMAN SERVICES

Helping People Live Better Lives

BEHAVIORAL HEALTH | CHILDREN & FAMILY SERVICES | DEVELOPMENTAL DISABILITIES | MEDICAID & LONG-TERM CARE | PUBLIC HEALTH

Search this site...

- Home
- Physician & Prescriber Home
- PDMP Reporting
- PDMP Access
- PDMP Education**
- PDMP Benefits
- PDMP Documents
- Best Practices
- Resources
- FAQ



Prescription Drug Monitoring Program (PDMP)

PDMP Education

PDMP training materials provide the user with details on the purpose of the system, access to and proper usage of the system, and the law relating to the system, including confidentiality and security of the PDMP system. (Neb. Rev. Stat. § 71-2455)

Prior to attaining access to the PDMP, you will need to complete the mandatory training. Training opportunities that meet the mandatory training requirement include PDMP On-Demand, In-Person Trainings, and webinars.



NEW PDMP ON-DEMAND TRAINING

Access the PDMP training materials at anytime through the on-demand option. View entire 20-minute webinar and complete the brief Training Acknowledgement at the end of the webinar. ***This acknowledgement must be completed to receive PDMP training credit and access to the PDMP.***

IN PERSON TRAINING OPPORTUNITIES

To schedule an in person PDMP training for you and/or your staff please contact NeHII Support Desk at 1-866-978-1799.

In order to receive credit for completion of training you must sign in and attend the full training seminar.



Once You're Registered

- ▶ Access PDMP through:
 - <https://healthid.optum.com>
 - www.nehii.org
 - www.dhhs.ne.gov/PDMP

Optum Link Dashboard

Link

NeHII HIE users

NeHII

PDMP users

Optum™ Data Exchange

Nebraska PDMP

NeHII Nebraska Health Information Initiative

CONTACT US:
Phone: 1-866-978-1799
Email: Support@NeHII.org

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NEHII Nebraska Health Information Initiative

NEHII Nebraska Health Information Initiative

Viewing Patient Profiles

Search Medication History

Enter Patient Information

Need help? Call us at 866-978-1799

FIRST NAME*	LAST NAME*	DOB*	ZIPCODE	CITY	GENDER
<input type="text" value="al"/>	<input type="text" value="zz"/>	<input type="text" value="12/31/1999"/>	<input type="text"/>	<input type="text"/>	<input style="float: right;" type="text" value="Not Specified"/>

Patient Search Results

Disclaimer: You are selecting one or more patients to combine together into a single-use query. Please note any selections of multiple patients and use of query results are at the discretion of the user. Selections may or may not include all aliases for a particular patient. Patient selections will not be saved for future use.

ID	Patient Name	DOB	Gender	Address	City	Zip	Telephone #	
<input checked="" type="checkbox"/>	1	Al Zztest	12/31/1999	M	1234 Opioid Ave	Omaha	68111	4021234567
<input checked="" type="checkbox"/>	2	Alan Zztest	12/31/1999	M	1234 Opioid Ave	Omaha	68111	4021234567
<input type="checkbox"/>	3	Alvin Zztest	12/31/1999	M	16205 Hickory	Omaha	68165	4023332255
<input checked="" type="checkbox"/>	4	Allan Zztest	12/31/1999	M	1234 Opioid Ave	Omaha	68111	4021234567
<input type="checkbox"/>	5	Alicia Zztest	12/31/1999	F	16205 Hickory	Omaha	68165	4023334466
<input type="checkbox"/>	6	Albert Zztest	12/31/1999	M	43 North 4th Street	North plate	69109	3087654321

Viewing Patient Profiles

Medication History Combined Results

Search Date: 04/16/2018 11:50:08

- 1 AI Zztest, 12/31/1999, M, 1234 Opioid Ave, Omaha, 68111, 4021234567
- 2 Alan Zztest, 12/31/1999, M, 1234 Opioid Ave, Omaha, 68111, 4021234567
- 4 Allan Zztest, 12/31/1999, M, 1234 Opioid Ave, Omaha, 68111, 4021234567

DISPLAY Last 6 Months ▾ Controlled and Non-Controlled ▾

[View/Print PDF](#) [Download PDF](#)

MME Alert i

● This patient has received a daily morphine milligram equivalent (MME) of greater than 90 MME. CDC recommends to avoid increasing dosage above 90 MME/day or to carefully justify a decision to titrate dosage above 90 MME/day.

This patient's averages are: **7 day MME Average: 151.07 MME** **30 day MME Average: 91 MME**

Controlled Substances

+	Patient	Fill Date ▾	Sold Date ⓘ	Drug ^	Qty	Days	Refills	Prescriber	Pharmacy	Payment
+	1	04/10/2018	04/10/2018	hydrocodone-acetaminophen (hydrocodone-acetaminophen) 7.5-300 mg tablet	100	10	0	Doogie Howser	Test Pharmacy PH#: 4025599999	Commercial Insurance
+	1	04/05/2018	04/05/2018	hydrocodone-acetaminophen (Vicodin) 5-300 mg tablet	180	30	0	Doogie Howser	Hometown Pharmacy PH#: 4025599992	Private Pay
+	1	04/03/2018	04/03/2018	oxycodone (oxycodone) 10 mg tablet	50	8	0	Beverly Crusher	Kevin s Pharmacy PH#: 4025599992	Private Pay
+	1	03/25/2018	03/25/2018	alprazolam (alprazolam) 1 mg tablet	90	30	0	Gregory House	Newbie Pharmacy PH#: 4025599992	Commercial Insurance
+	4	01/28/2018	01/28/2018	alprazolam (Xanax XR) 3 mg tablet extended release 24 hr	90	30	0	Leonard McCoy	Newbie Pharmacy PH#: 4025599992	Private Pay
+	1	01/28/2018	01/28/2018	morphine (morphine) 15 mg tablet	90	30	0	Frank N Stein	Test Pharmacy PH#: 4025599992	Commercial Insurance
+	1	12/27/2017	12/27/2017	morphine (morphine) 15 mg tablet extended release	11	11	0	B J Hunnicutt	Test Pharmacy PH#: 4025599992	Commercial Insurance

Non-Controlled Substances

Viewing Patient Reports

DISPLAY

Last 6 Months

Controlled and Non-Controlled

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Controlled Substances

	+	Patient	Fill Date ↑↓	Sold Date ⓘ	Drug ↑↓	Qty	Days	Refills	Prescriber	Pharmacy	Payment
-	4		03/05/2018	03/05/2018	hydrocodone-acetaminophen (hydrocodone-acetaminophen) 7.5-300 mg tablet	120	15	0	Leonard McCoy	Test Pharmacy PH#: 4025599999	Commercial Insurance
	4		02/05/2018	02/05/2018	hydrocodone-acetaminophen (hydrocodone-acetaminophen) 7.5-300 mg tablet	120	15	0	S.T. MDTest	Test Pharmacy PH#: 4025599999	Commercial Insurance
	2		01/29/2018	01/29/2018	hydrocodone-acetaminophen (hydrocodone-acetaminophen) 7.5-300 mg tablet	20	5	0	Doogie Howser	Big Box Pharmacy PH#: 4025599992	Commercial Insurance
	4		01/27/2018	01/27/2018	hydrocodone-acetaminophen (hydrocodone-acetaminophen) 7.5-300 mg tablet	150	10	0	Wrong T Bones	Helpful Pharmacy PH#: 4025599992	Commercial Insurance
-	2		02/23/2018	02/23/2018	oxycodone (oxycodone) 10 mg tablet	150	20	0	Doogie Howser	Test Pharmacy PH#: 4025599992	Commercial Insurance
	2		01/23/2018	01/23/2018	oxycodone (oxycodone) 10 mg tablet	150	20	0	Frank N Stein	Test Pharmacy PH#: 4025599992	Commercial Insurance

Non-Controlled Substances

	+	Patient	Fill Date ↑↓	Sold Date ⓘ	Drug ↑↓	Qty	Days	Refills	Prescriber	Pharmacy	Payment
+	2		03/05/2018	03/05/2018	amlodipine (Norvasc) 5 mg tablet	30	30	0	Beverly Crusher	Big Box Pharmacy PH#: 4025599999	Private Pay
+	2		03/03/2018	03/03/2018	esomeprazole magnesium (Nexium) 40 mg capsule, delayed release(DR/EC)	30	30	0	Gregory House	Test Pharmacy PH#: 4025599999	Commercial Insurance
+	2		03/03/2018	03/03/2018	simvastatin (simvastatin) 40 mg tablet	60	30	6	Beverly Crusher	Test Pharmacy PH#: 4025599999	Commercial Insurance
+	2		03/02/2018	03/02/2018	bumetanide (bumetanide) 1 mg tablet	30	30	0	Gregory House	Newbie Pharmacy PH#: 4025599992	Commercial Insurance
	2		02/18/2018	02/18/2018	ciprofloxacin HCl (ciprofloxacin HCl) 500 mg tablet	10	10	0	Gregory House	Big Box Pharmacy PH#: 4025599999	Commercial Insurance

Viewing Patient Profiles

DISPLAY: Last 6 Months | All | [View/Print PDF](#) | [Download PDF](#)

All Substances

Controlled and Non-Controlled

Controlled Only

All

Patient	Fill Date	Sold	Qty	Days	Refills	Prescriber	Pharmacy	Payment		
+	4	02/10/2018	02/10/2018	tablet	90	30	0	Gregory House	Newbie Pharmacy PH#: 4025599992	Commercial Insurance
+	4	02/07/2018	02/07/2018	oxycodone (oxycodone) 10 mg tablet	50	20	0	Beverly Crusher	Kevin s Pharmacy PH#: 4025599992	Commercial Insurance
+	1	02/06/2018	02/06/2018	hydrocodone-acetaminophen (hydrocodone-acetaminophen) 7.5-300 mg tablet	100	10	0	Frank N Stein	Newbie Pharmacy PH#: 4025599992	Commercial Insurance
	4	01/08/2018	01/08/2018	hydrocodone-acetaminophen (Vicodin) 5-300 mg tablet	100	20	0	Wrong T. Bones	Hometown Pharmacy PH#: 4025599992	Commercial Insurance
+	1	12/05/2017	12/05/2017	esomeprazole magnesium (Nexium) 40 mg capsule, delayed release (DR/EC)	30	30	0	S.T. MDTest	Test Pharmacy PH#: 4025599999	Commercial Insurance
+	1	12/05/2017	12/05/2017	simvastatin (simvastatin) 40 mg tablet	30	30	0	S.T. Rong-Bones	zzTest Pharmacy PH#: 4025599999	Commercial Insurance
	1	12/02/2017	12/02/2017	ciprofloxacin HCl (ciprofloxacin HCl) 500 mg tablet	10	10	0	S.T. Testmd	zzTest Pharmacy PH#: 4025599999	Commercial Insurance
	1	12/02/2017	12/02/2017	clopidogrel (Plavix) 75 mg tablet	30	30	0	S.T. Testmd	zzTest Pharmacy PH#: 4025599999	Commercial Insurance
+	1	12/01/2017	12/01/2017	amlodipine (Norvasc) 5 mg tablet	30	30	0	S.T. Testmd	zzTest Pharmacy PH#: 4025599999	Private Pay
	1	11/29/2017	11/29/2017	omeprazole (omeprazole) 20 mg tablet, delayed release (DR/EC)	30	30	0	S.T. Testmd	zzTest Pharmacy PH#: 4025599999	Commercial Insurance
	1	11/25/2017	11/25/2017	warfarin (warfarin) 5 mg tablet	10	5	0	Leonard McCoy	zzMail Order Pharmacy PH#: 7025591234	Commercial Insurance
	1	11/02/2017	11/02/2017	enalapril maleate (enalapril maleate) 10 mg tablet	30	30	0	S.T. Testmd	zzTest Pharmacy PH#: 4025599999	Commercial Insurance

Drug Safety Advisory Group Prioritized Enhancements

- ▶ Drug Safety Advisory Group
 - Collaborative efforts between Nebraska DHHS and NeHII
 - Physicians, pharmacists, other key stakeholders
- ▶ Improved prescribing practices
- ▶ Prioritized Functionalities by Stakeholders
 - Morphine Milligram Equivalency (MME) Alert – *Live 11/2017*
 - Multiple Provider Episodes (5–5–6 rule) Alert
 - Overlapping Medication Alert
 - Concomitant use of opioids + benzodiazepines
 - Enhanced Patient Search
 - Risk Score Alert
 - GIS Mapping

Admissions / Readmissions / Transitions of Care

- ▶ Hospital
- ▶ SNF / LTC
- ▶ Ambulatory surgical center
- ▶ Ambulatory clinic

Workflow Integration

- ▶ Integration/Interoperability within HIE
 - H&P
 - Lab values
 - Clinic/progress notes
 - Discharge summary
 - Medication History

Current Methods to Obtain Medication History

- ▶ Only as accurate as the history obtained
- ▶ Time-consuming
- ▶ Distractions
- ▶ Patient
- ▶ Family/caregiver
- ▶ Patient/family to bring in all medication bottles
- ▶ Call pharmacies
- ▶ Review EHR

Medication Reconciliation

- ▶ Medication reconciliation is the process of creating the most accurate list possible of all medications a patient is taking — including drug name, dosage, frequency, and route — and comparing that list against the physician's admission, transfer, and/or discharge orders, with the goal of providing correct medications to the patient at all transition points within the hospital

Institute for Healthcare Improvement

Medication Reconciliation

▶ Med **WRECK**

Importance of Medication Reconciliation

- ▶ Medicare hospital readmissions (2003–2004)¹
 - 19.6% within 30 days
 - 34.0% within 90 days
 - Longer rehospitalization length of stay
 - Estimated cost of Medicare unplanned rehospitalizations in 2004 – \$17.4 billion
- ▶ Readmissions
 - 18.3–24.8% for HF, AMI, Pneumonia²
 - 13.1–17.8%³
- ▶ 23% suffered adverse event post-discharge⁴
 - 12% considered avoidable
 - 72% adverse drug events
- ▶ \$\$\$
 - Medicare Reimbursement/HRRP
 - 2,597 hospitals penalized in FY 2017⁵
 - \$528 million
 - 0.73% average penalty
 - 3% max penalty

1. Jencks SF, Williams MV, Coleman EA. Rehospitalizations among patients in the Medicare fee-for-service program. *N Engl J Med*. 2009;360(14):1418–1428.

2. Dharmarajan K, Hsieh AF, Lin Z, Bueno H, Ross JS, Horwitz LI, Barreto-Filho JA, Kim N, Bernheim SM, Suter LG, Drye EE, Krumholz HM. Diagnoses and Timing of 30-Day Readmissions After Hospitalization for Heart Failure, Acute Myocardial Infarction, or Pneumonia. *JAMA*. 2013;309(4):355–363.

3. Zuckerman RB, Sheingold SH et al. *NEJM* 2016; 374:1543–1551

4. Forster AJ, Clark HD, Menard A et al. Adverse events among medication patients after discharge from hospital. *Can Med Assoc J*. 2004; 170(3):345–349.

5. Kaiser Health News, 8/2/2016

Importance of Medication Reconciliation

- ▶ TJC 2005 National Patient Safety Goal #8
 - “accurately and completely reconcile medications across the continuum of care.”
- ▶ National Patient Safety Goal #3 (July, 2011)
 - 03.06.01 Obtain information on the medications the patient is currently taking when he or she is admitted to the hospital or is seen in an outpatient setting. This information is documented in a list or other format that is useful to those who manage medications. (Effective 1/1/15)

Importance of Medication Reconciliation

- ▶ Adverse Drug Events
- ▶ Strategies for effective medication reconciliation¹
 - Coordinated communication that includes standardized medication lists, medication administration programs (MAP), interventions, and referrals;
 - A foundation of automation and technology to close the communication gap between health care professionals

¹Hume K, Tomsik E. Enhancing Patient Education and Medication Reconciliation Strategies to Reduce Readmission Rates. *Hospital Pharmacy*. 2014;49(2):112-114. doi:10.1310/hpj4902-112.

Importance of Medication Reconciliation¹

- ▶ Studies demonstrate that electronic health record medication lists often contain errors or omissions
- ▶ Medication reconciliation – verifying the list of medications that a patient takes – is difficult, and increasingly so, due to multiple factors
- ▶ The success of prescription drug monitoring programs at reducing erroneous opiate prescriptions offers hope that such a program would work for all medications

¹Askin E, Margolius D. Am J Mag Care. Oct. 2016. www.ajmc.com e336–e337

Nebraska is #1

- ▶ First to integrate PDMP in HIE
- ▶ First to collect all dispensed prescription drugs in PDMP

Contact Information

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