

# Prescription Drug Monitoring Program (PDMP) Overview and Strategy

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### **RIDOH PDMP TEAM**







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### **RIDOH PDMP TEAM**



Special Thanks James McDonald MD, MPH



## **RI PDMP OVERVIEW**

#### Summary



#### General Limitations

- The Rhode Island PDMP collects data on all controlled substances (schedules II-V) and opioid agonist prescriptions that are dispensed by retail pharmacies with a controlled substance registration in Rhode Island or to Rhode Island residents.
- Complete data exists from April 1, 2016 to present.
- Incomplete data exist from February 2010 to March 2016.
- 9,823 registered prescribers and delegates; 723 registered pharmacies; 1,431 registered pharmacists and delegates
- This dataset only contains information for drugs that are <u>dispensed</u>, rather than all that are prescribed (24 hour required reporting period).
- Does not indicate if the medications were taken as prescribed.
- Does not capture in-office (as opposed to pharmacy) dispensed prescriptions (e.g. MAT)



## **RI PDMP OVERVIEW**

#### **Data Variables**

Patient name, DOB, sex, address, payment type

- Prescriber name, ID
- Dispensing pharmacy name and address
- Dispenser name and ID
- Prescription information
  - Product name
  - National Drug Code (NDC)
  - Days supply
  - Refill count
  - Date written
  - Date filled
  - ICD-10 (International Classification of Disease) diagnosis code (as of 2020)



## **RI PDMP OVERVIEW**

#### **Opioid-specific Data Variables**

- Prior opioid prescriptions
- Days on opioids
- Number of opioid prescriptions
- Provider Count
- Pharmacy Count
- Daily Morphine Milligram Equivalents (MME)
- Overlapping benzodiazepines and opioids
- Daily MME >100
- Active prescription at time of overdose



### RI PDMP SAMPLE

Doe, John, 42	Refine Search			Contact the Bambo	o Health Knowle	edge/Help Center
Date of Birth: Recent A 01/01/1980 101 Fak	ddress: ke Street Providence, RI 02901	View Linked Records (2) ^				
Report Criteria	Linked Records					
First Name: John Last Name: Doe DOB: 01/01/1980	Name: John Doe DOB: 01/01/1980 ID: 1 Gender: Male Address: 101 Fake Street Provi	dence, RI 02901	Name: John Doe DOB: 01/01/198 ID: 2 Gender: Male Address: 101 Fa		901	▲ ▼
Report generated o	n <b>07/18/2022</b> . Report Date F	ange: 07/18/2019 - 07/18/2022		PDF Report	ſ <b>1</b> Share	🖸 Export 🗸
RX Summary						
Summary		<b>Opioids</b> <sup>*</sup> (excluding Buprenorphine)		Buprenorphine <sup>*</sup>		
Total Prescriptions	2	Current Qty	0	Current Qty		0
Total Private Pay	0	Current MME/day	0.00	Current mg/day		0.00
Total Prescribers	1	30 Day Avg MME/day	0.00	30 Day Avg mg/day		0.00
Total Pharmacies	1					

#### Prescriptions

Total: 2   Private Pay	/: 0				Showing 1-2 of 2 Items	View 15 Items V	< 1 of 1 >
Filled 🔻	Drug 👙	QTY 🌲	Days 🛓	Prescriber 🛓	Dispenser 🛓	PMP 🛓	
✓ 09/27/2019	Oxycodone-Acetaminophen 5-32	25	360.00	30	Fa Doc	Rho (8953)	RI
✓ 09/07/2019	Oxycodone-Acetaminophen 5-32	25	30.00	30	Fa Doc	Rho (8953)	RI
Disclaimer					Showing 1-2 of 2 Items	View 15 Items 🗸	< 1 of 1 >
Providers							
Total: 1					Showing 1 Item	View 15 Items 🗸	< 1 of 1 >
Name 🛓	Address 🖕	Cit	ty ≜	State 🛓	Zipcode 🍦	Phone 🛓	
Name	Address 🌲	Cit	ty 🌲	State 🛓	Zipcode 🍦	Phone 🗍	
	Address 🜲	Cit	ty ≑	State 🛓	Zipcode 🜲 Showing 1 Item	-	< 1 of 1 >
	Address \$	Cit	ty 🜲	State 🌲		-	< 1 of 1 >
Family Doctor	Address \$	Cit	ty \$	State		- View 15 Items V	< 1 of 1 >
Family Doctor Pharmacies	Address \$	Address \$	ty \$ City		Showing 1 Item	- View 15 Items ✔ View 15 Items ✔	
Family Doctor Pharmacies Total: 1			City	♦	Showing 1 Item	- View 15 Items V View 15 Items Pho	< 1 of 1 >



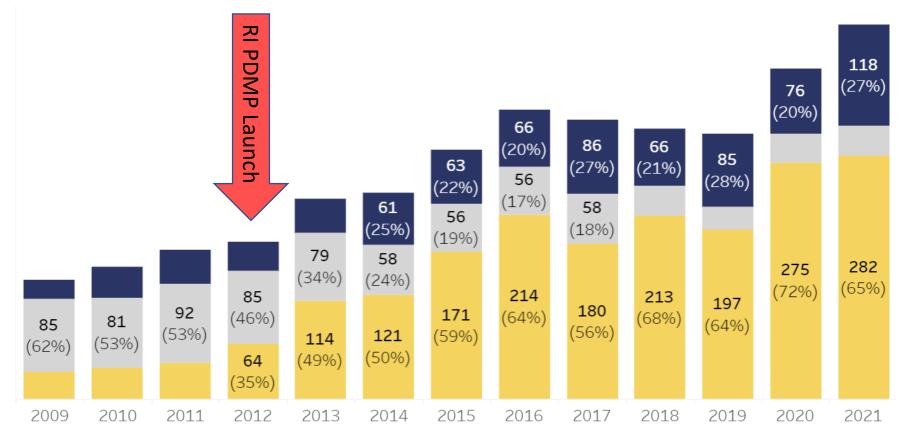
## **RI PDMP MILESTONES**

- 2012: Prescription Drug Monitoring Program (PDMP) established in Rhode Island
- 2014: Law passed requiring all practitioners who hold an active Controlled Substance Registration (CSR) to register for the PDMP.
- 2016: All practitioners automatically registered within the PDMP.
- 2019: Bureau of Justice Assistance (BJA) grant awarded to RIDOH
  \$2M over 3 years
- 2020: RI requires ICD-10 codes for all controlled substance prescriptions.
- 2022: Launch of Prescriber Report module



### PDMP AND OPIOID DATA

#### Overdose Deaths by **Drug Type**, 2009 to 2021



Note: Data updated biannually

Note: Counts may not add to annual totals due to missing case information

**Note:** Prescription medications include prescription opioids such as oxycodone, hydrocodone, and benzodiazepines. Illicit drugs include substances such as heroin, illicit fentanyl, and cocaine.

Combination

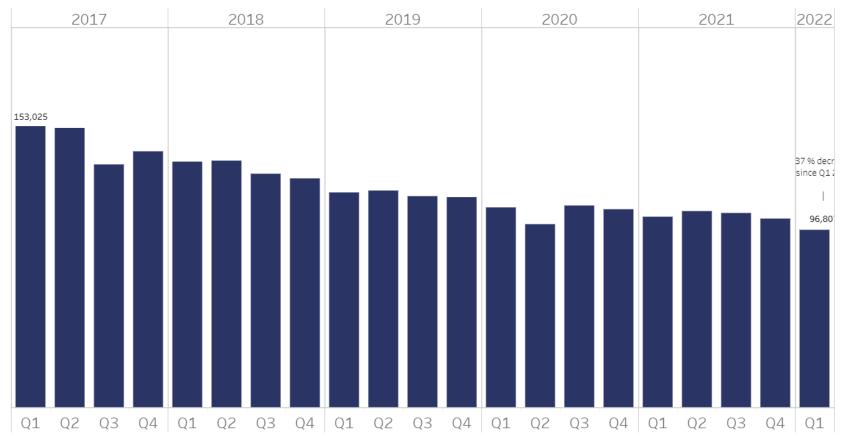
Illicit Drugs

#### Source: Prevent Overdose RI



### PDMP AND OPIOID DATA

#### Number of Opioid Prescriptions Dispensed, 2017 to 2022



Note: Data updated quarterly

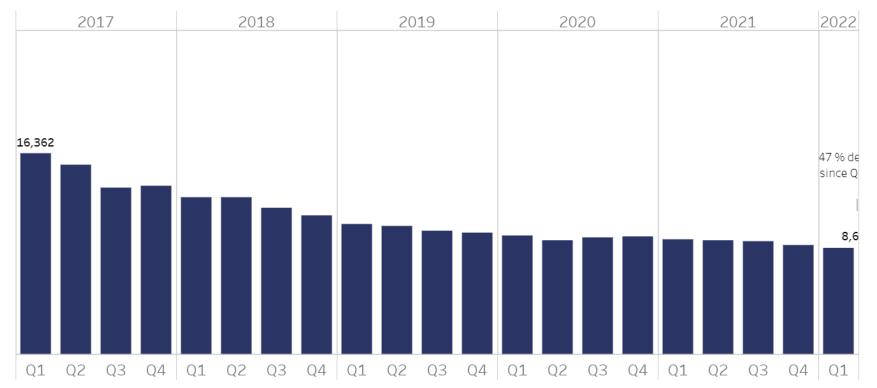
Note: Prescriptions for buprenorphine medication-assisted treatment for opioid use disorder are excluded from this measure. Note: On November 1, 2019, the PDMP data were revised to reflect updates to the PDMP data analysis protocol, including revised methods for removing veterinary prescriptions, matching patients, and querying drug types.

Source: Prevent Overdose RI



### PDMP AND OPIOID DATA

Number of People Prescribed **Overlapping Opioid and Benzodiazepine Prescriptions**, 2017 to 2022



#### Note: Data updated quarterly

**Note**: On November 1, 2019, the PDMP data were revised to reflect updates to the PDMP data analysis protocol, including revised methods for removing veterinary prescriptions, matching patients, and querying drug types.

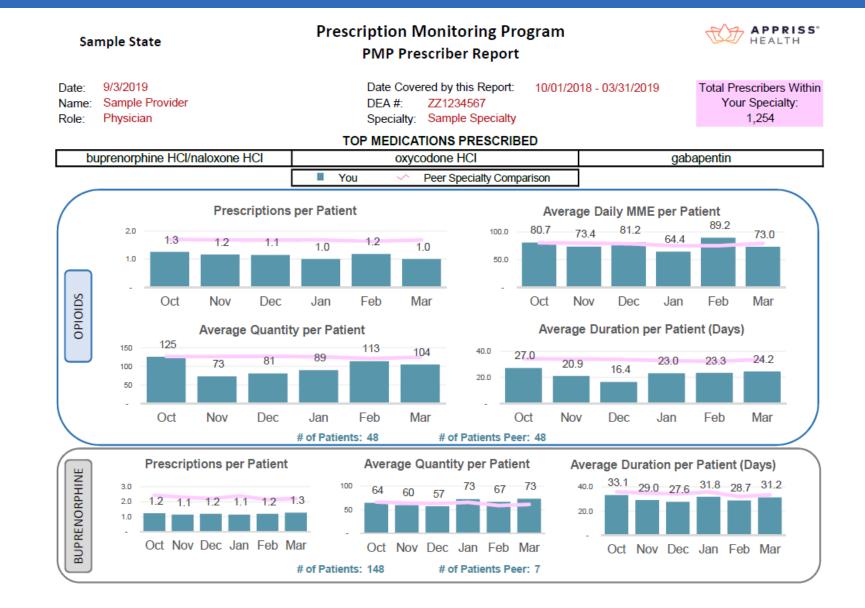
Note: Prescriptions for buprenorphine medication-assisted treatment for opioid use disorder are excluded from this measure.

**Note**: Data for overlapping opioid and benzodiazepine prescriptions are calculated differently by year or by quarter. Summing this quarterly data gives a higher number of people than the yearly prevention strategy metric on the Track Our Action Plan data page.

#### Source: Prevent Overdose RI



### PDMP PRESCRIBER REPORTS



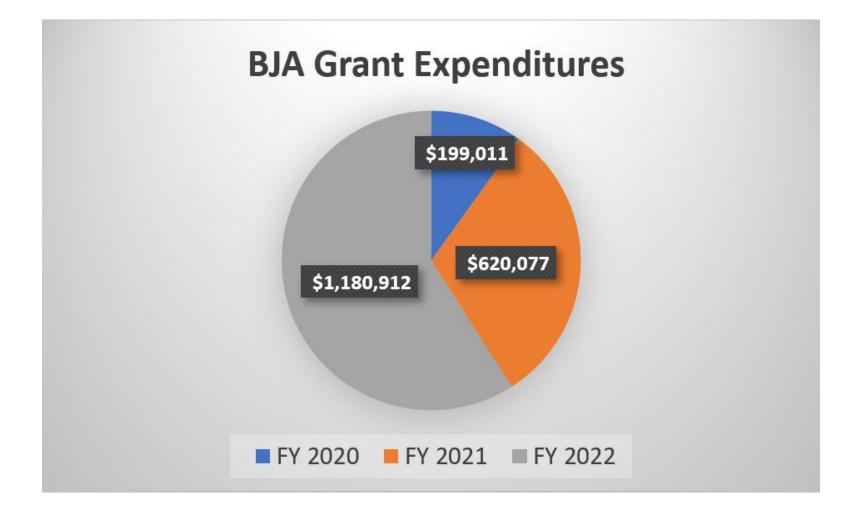


### PDMP PRESCRIBER REPORTS





### PDMP FUNDING AND SUSTAINABILITY



#### BJA FY19 Grant \$2,000,000 → BJA FY22 Grant \$1,400,000



Goal 1: Develop PDMP upgrades in pursuit of Medicaid Enterprise Systems (MES) certification

Goal	Objective	Deliverable	Year 1				Yea	r 2		Year 3				
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Develop PMDP	Achieve MES	Finalize action plan for	X	Х										
upgrades in pursuit of	Certification status	MES Certification												
MES Certification		Demonstrate Qualified			Х	Х								
		PDMP status												
	Secure Medicaid	Receive notice of						Х						
	Match Funding	Medicaid match funding												
		Complete MES								Х				
		Certification												
	Ensure ongoing	Create continued									Х	Х	Х	Х
	sustainability of PDMP operation	sustainability plan												



#### Goal 2: Establish linkages between the RI PDMP and other health information systems

Goal	Objective	Deliverable	Year 1				Yea	ar 2			Yea	ar 3		
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Establish linkages	Link PDMP with	Establish linkage between					Х	Х						
between the RI PDMP	health information	PDMP and state hospitals												
and other health	systems required for	and cancer registry												
information systems	MES Certification	Create roadmap to	Х	Х										
		integration with												
		Informatics Specialist												
	Improve functionality	Establish improved					Х	X	Х	X	Х	Х	Х	X
	of PDMP for Medicaid	PMDP integration into												
	users	provider workflow												



Goal 3: Improve communications with prescribers, pharmacies, state agencies, and stakeholders

Goal	Objective	Deliverable	Year 1				Yea	ar 2			Yea	ar 3		
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Improve	Coordinate with state	Participate in overdose	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	X	Х
communications with	agencies and healthcare	task forces												
prescribers,	community to ensure	Coordinate with	X	Х	Х	Х	Х	Х	Х	Х	Х	Χ	X	Х
pharmacies, state	alignment of goals	Communications												
agencies, and		specialist on outreach												
stakeholders	Onboard new PDMP	Expand allowable user	X	Х	Х	Х	Х	Х	Х	Х	Х	Χ	Χ	Х
	users	group												
		Provide training to new	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	X	Х
		users												



Goal 4: Perform data analytics and evaluations that will highlight potential future PDMP enhancements, as well as leverage PDMP data to help inform statewide response to the opioid epidemic

Goal	Objective	Deliverable	Year 1			Year 1 Year 2					Year 3			
			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Perform data analytics	Gather data to inform	Hire Epidemiologist	X											
and evaluation	future PDMP	Perform prescriber report				Х								
	Enhancements	evaluation												
		Perform Medicaid											Х	Х
		integration evaluation												
		Conduct additional	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
		evaluations												



#### PharmD Academic Detailing (PhAD) Project

Geographical analysis of prescribing data to identify target population

#### ICD-10 Codes Project

• Identify diagnoses associated with elevated rates of prolonged opioid use overall

#### **Buprenorphine Manuscript**

Identify patients who newly initiated buprenorphine treatment for OUD

Identify patient and prescribing factors that impact long-term treatment retention

#### **Pharmacy Utilization Project**

Examined PDMP utilization by RI pharmacists, factors that affect determination of PDMP utilization, barriers to utilization, and dispensing practices of controlled substance prescriptions after utilization



## PDMP ADDITIONAL ANALYTICS

#### **PDMP Annual Report**

Examine prescribing patterns for opioids, benzodiazepines, and stimulants

#### **Identifying optimal Buprenorphine Dosing**

Examine buprenorphine dose among patients starting buprenorphine treatment to identify whether differences exist among long-term treatment engagement and health outcomes based on doses.

#### Predicting overdose risk

Examine whether specific demographic or prescription characteristics predict overdose risk (link to fatal overdose data)

#### **Prescriber Reports**

Examine utilization and effect on prescribing behavior



## THANK YOU! QUESTIONS/COMMENTS?