

Controlled Substance Board Workgroup

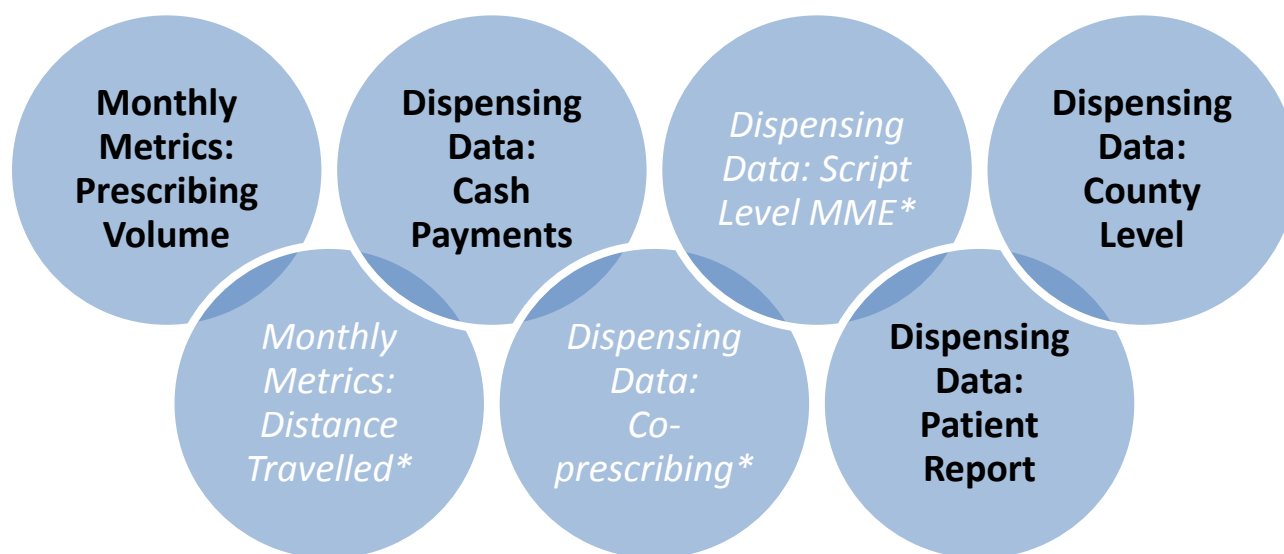
WI ePDMP Data Analysis Efforts

March 2018

The following visualizations are being provided to summarize the data sets available to DSPS PDMP staff for providing support to the CSB Workgroup. It captures summaries provided in 2018 as well as proposals for broader data monitoring.

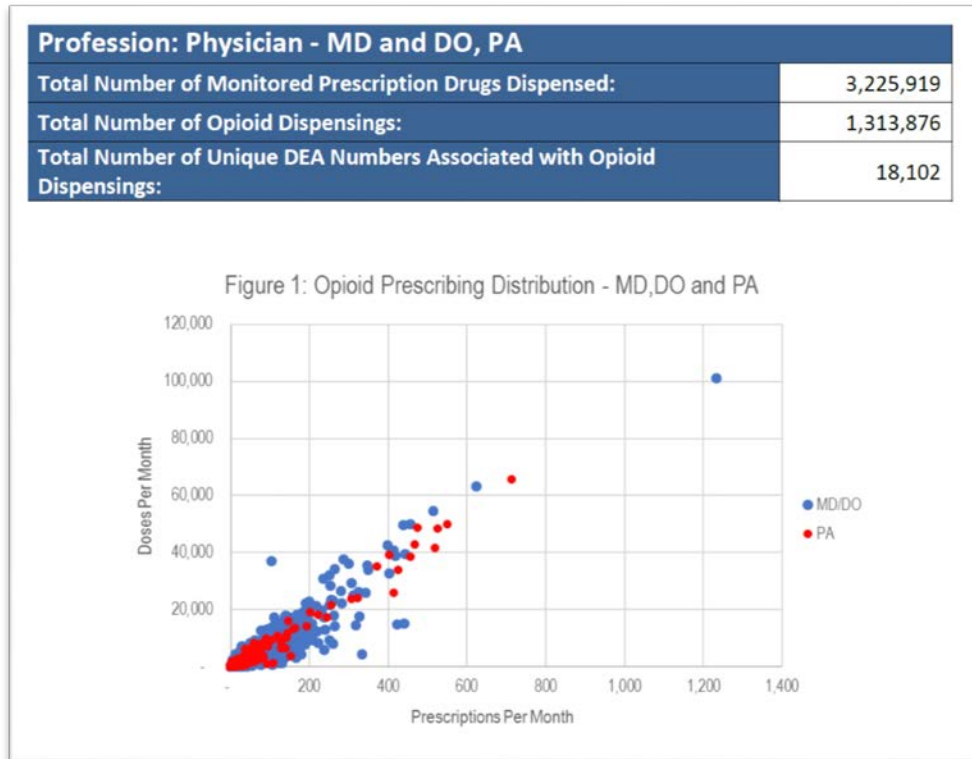
A. PDMP Data Sets

The following PDMP data sets are available to DSPS PDMP Staff. Those with an “*” will be available in the coming months to further expand data analysis efforts.



B. 2018: Opioid Prescribing Volume from Monthly Metrics

DSPS PDMP staff provided WI ePDMP reports to the Controlled Substances Board, Medical Examining Board, Board of Nursing and Dentistry Examining Board in 2018 specific to the volume of opioid dispensing for the time period of December 2017 through May 2018. This data mirrors the data provided to prescribers as part of the Prescribing Practice Assessment metrics. Below is a sample of what was provided to the Medical Examining Board.



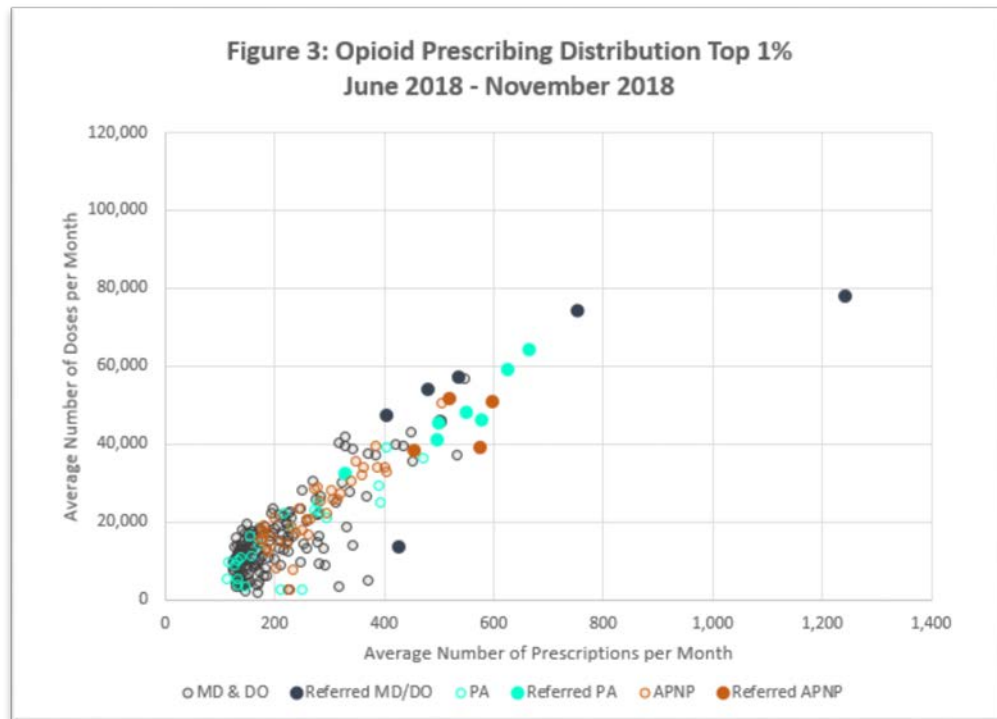
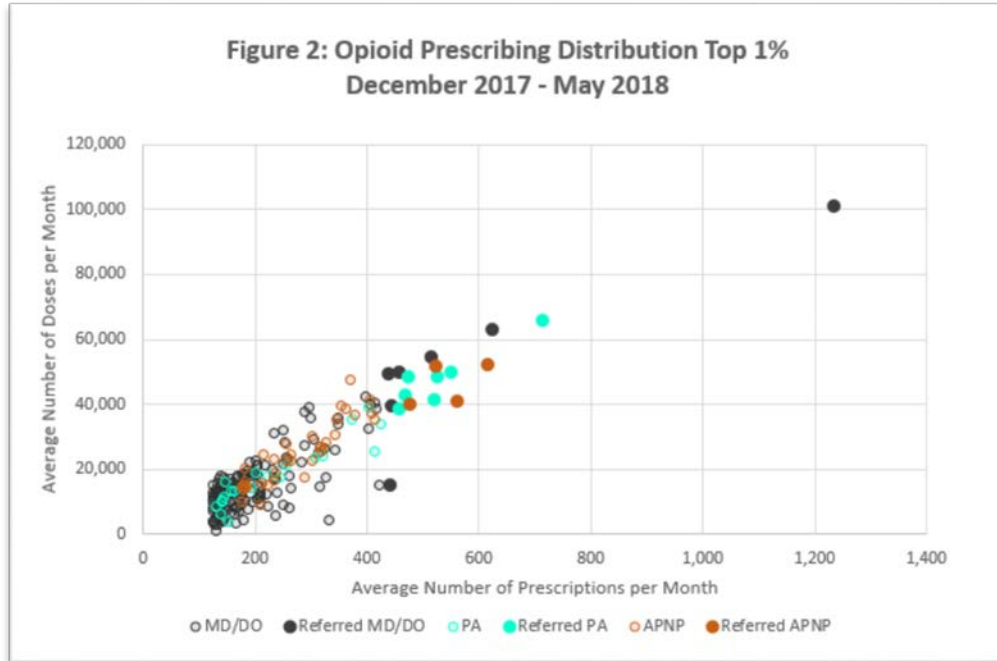
	Prescriber Detail		Monthly Average				
	Profession	Specialty	Opioid Orders	Percentile	Opioid Doses	Percentile	Avg Doses/Opioid Script
1.	MD	Anesthesiology	1,233.7	100.00%	101,137.5	99.99%	82.0
2.	PA	Pain Management	714.3	99.99%	65,637.3	99.98%	91.9
3.	MD	Physical Medicine/Rehabilitation	623.3	99.98%	63,150.2	99.98%	101.3
4.	PA	Pain Management	551.3	99.98%	49,805.0	99.96%	90.3
5.	PA	Pain Management	525.3	99.97%	48,408.3	99.95%	92.1
6.	PA	Pain Management	519.3	99.97%	41,449.2	99.93%	79.8
7.	MD	Pain Management	514.8	99.96%	54,592.2	99.97%	106.0
8.	PA	Pain Management	475.0	99.96%	48,499.0	99.95%	102.1
9.	PA	Pain Management	468.8	99.95%	42,907.0	99.94%	91.5
10.	PA	Pain Management	458.0	99.95%	38,526.2	99.90%	84.1
11.	MD	Pain Management	456.2	99.94%	50,098.5	99.97%	109.8
12.	MD	Pain Management	442.5	99.93%	39,627.3	99.91%	89.6
13.	MD	Family Practice	440.3	99.93%	15,348.2	99.55%	34.9
14.	MD	Physical Medicine/Rehabilitation	438.7	99.92%	49,663.7	99.96%	113.2

Table 2: Prescriber 7

Profession:	PA	Registered with the WI ePDMP:	Yes		
Specialty (self-reported):	Pain Management	Estimated ePDMP Usage:	27.4%		
Prescribing Summary: 12/1/2017 - 5/31/2018					
Dispensing Data	# of scripts	% of overall	Number of Patients Prescribed Opioids by Prescriber:	1,248	
Opioids (includes buprenorphine)	3,041	92.77%			
Stimulants	0	0%			
Benzodiazepines	4	0.12%			
Other	233	7.11%			
Opioid Dispensing	Prescriber	Peer %	State Median	State Mean (Truncated)	Doses/ Prescription
Avg. Opioid Orders/Month	468.8	95.41%	45.8	120.1	
Avg. Opioid Doses/Month	42,907.0	95.41%	2,981.5	10,017.2	
Avg. Doses/Prescription	91.5				85.1
	3 days or less	More than 3 days ≤ 10 days	More than 10 days ≤ 30 days	More than 30 days	
Days Supply Opioid Orders	0	3	3,030	8	
Top 5 Monitored Prescription Drugs Ordered by Prescriber (All Drug Classes)	Drug Name		Number of Dispensing	% of all Dispensing	
	Oxycodone HCl		1,965	59.95%	
	Morphine Sulfate		297	9.06%	
	Oxycodone w/ Acetaminophen		176	5.37%	
	Methadone HCl		160	4.88%	
	Tramadol HCl		139	4.24%	
Data Driven Alerts: As of 6/1/2018 (preceding 100 days)					
	Alert Type			Number of Alerts	
Concerning Patient History	Concurrent Opioid/Benzo			158	
	High MME			686	

C. Opioid Prescribing Volume – 2nd Time Period Monthly Metrics

Figure 2 below represents the highest volume opioid prescribers for the initial time period of analysis with an indication of which prescribers have been referred for investigation. Figure 3 represents the highest volume opioid prescribers for the next 6 month period, along with an indication of the 2018 referrals.

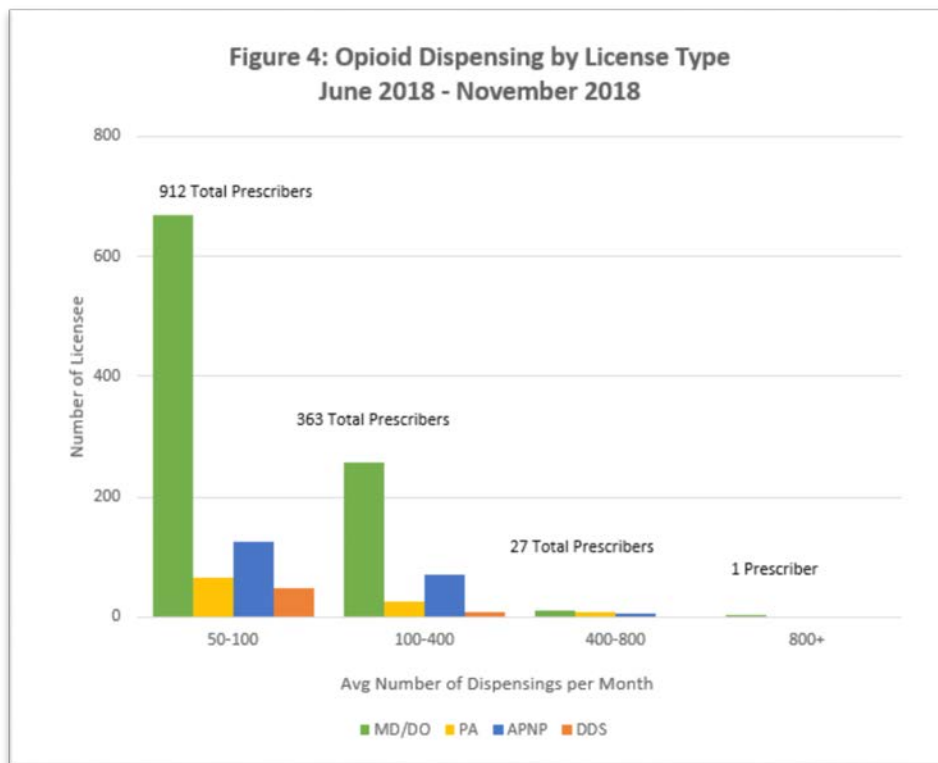


D. Prescriber Population – Additional Detail on Distribution

Similar to trends in other states, over 80% of opioid dispensings are associated with prescribers who are in the top 20% for prescription volume. The top 5% of prescribers account for almost 50% of opioid dispensings. Data below represents the time period of June 2018 through November 2018.

Percentiles	% of total opioid prescriptions per month	Rx Quantity	# of prescribers
Top 1 %	21.25%	63,193	278
Top 2 %	30.35%	90,249	554
Top 5 %	47.86%	142,289	1,382
Top 10 %	64.70%	192,360	2,771
Top 15 %	74.85%	222,553	4,129
Top 20 %	81.91%	243,523	5,536

Figure 4 further explores the prescribers in the top 5% by their average volume of opioid dispensings per month and displays the different prescribing professions in relation to each other.



E. Consideration of Regional Analysis

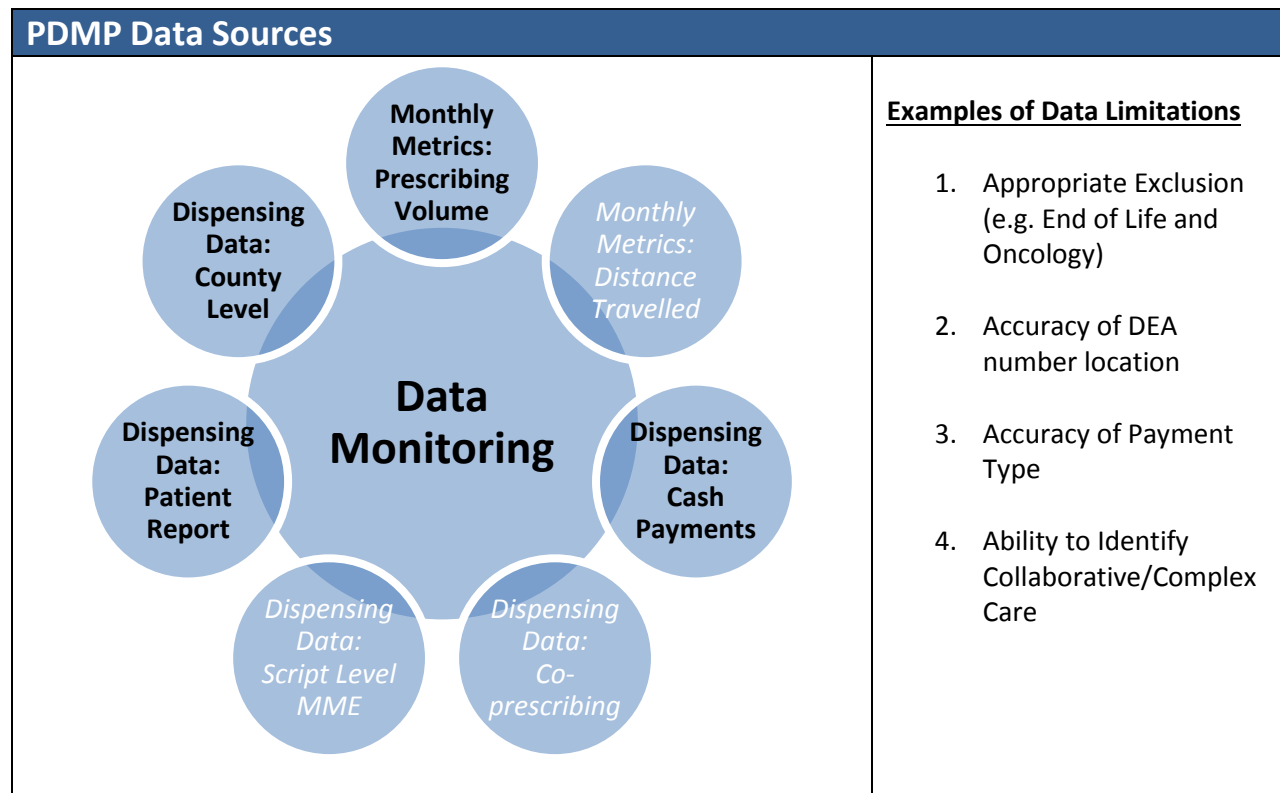
An area of consideration for future PDMP analysis is including the county level analysis of dispensing trends. The table below shows the statewide doses per capita for Q4 2018 compared to Q4 2017 as well as the top 10 counties for highest doses per capita based on Q4 2018 dispensing data.

Doses Per Capita			
Area	Q4 2017 DosesPerCapita	Q4 2018 DosesPerCapita	% Change
STATEWIDE	20.52	18.72	-8.73%
1 MARQUETTE	29.45	26.71	-9.30%
2 WASHBURN	29.61	26.13	-11.75%
3 RACINE	25.93	24.36	-6.05%
4 JUNEAU	27.83	23.6	-15.20%
5 LANGLADE	26.14	23.11	-11.59%
6 FOREST	25.15	22.32	-11.25%
7 MENOMINEE	25.98	22.17	-14.67%
8 ASHLAND	24.39	21.73	-10.91%
9 LINCOLN	23.61	21.57	-8.64%
10 SAWYER	22.49	21.45	-4.62%

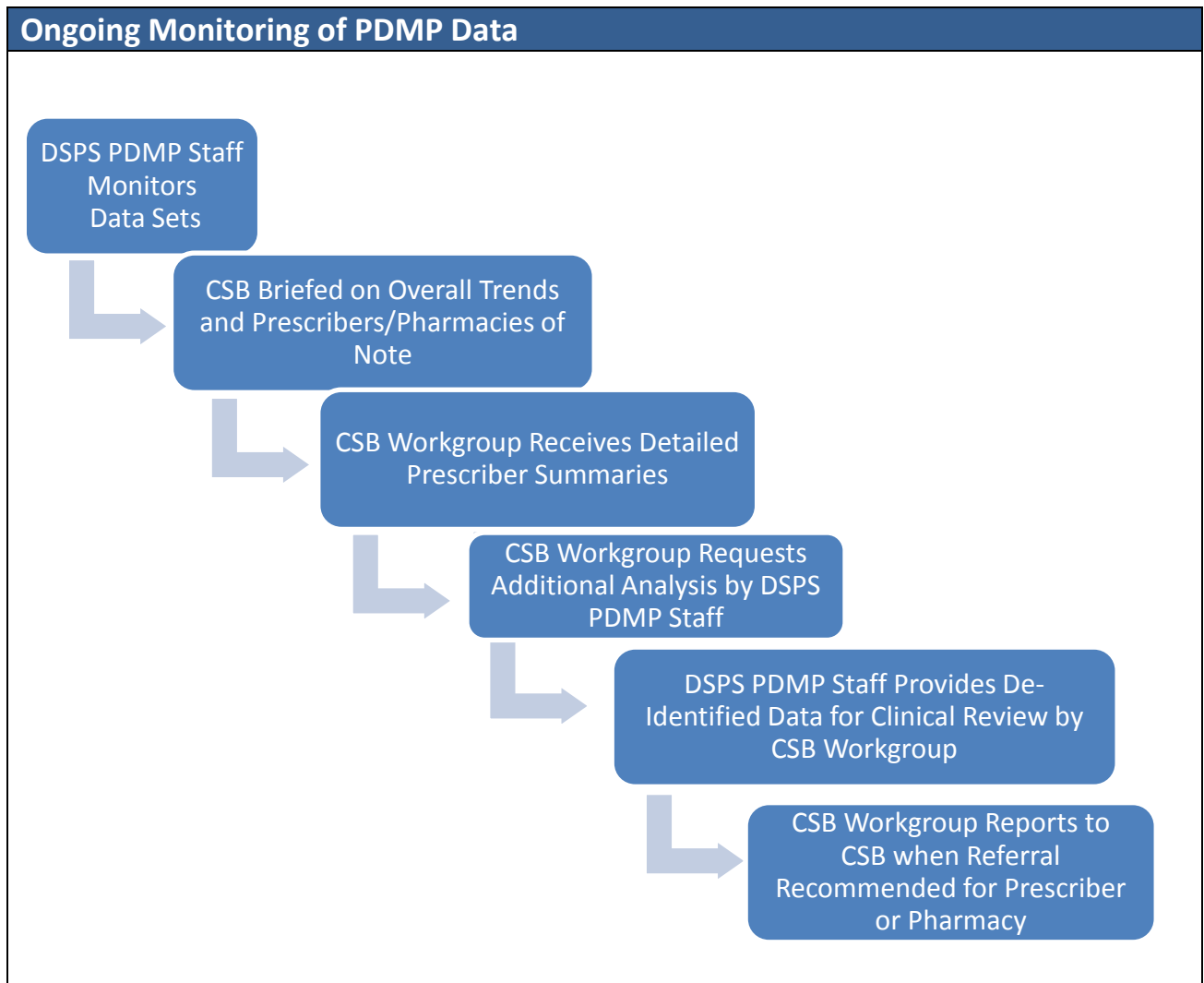
F. Proposed Data Monitoring for More Comprehensive Summary

The following visualizations are being provided for workgroup consideration for approaches that would incorporate additional PDMP data sources for monitoring prescribers for potentially critically dangerous prescribing patterns. This would lead to better identification of prescribers or pharmacies that are outliers in multiple data sets of the PDMP.

DSPS PDMP staff are seeking input on prioritization and additional areas of focus for high level monitoring in order to identify prescribers or pharmacies that may be engaged in potentially dangerous prescribing or dispensing practices. The initial focus would be on opioids but could later be expanded to other drug classes contained in the WI ePDMP.

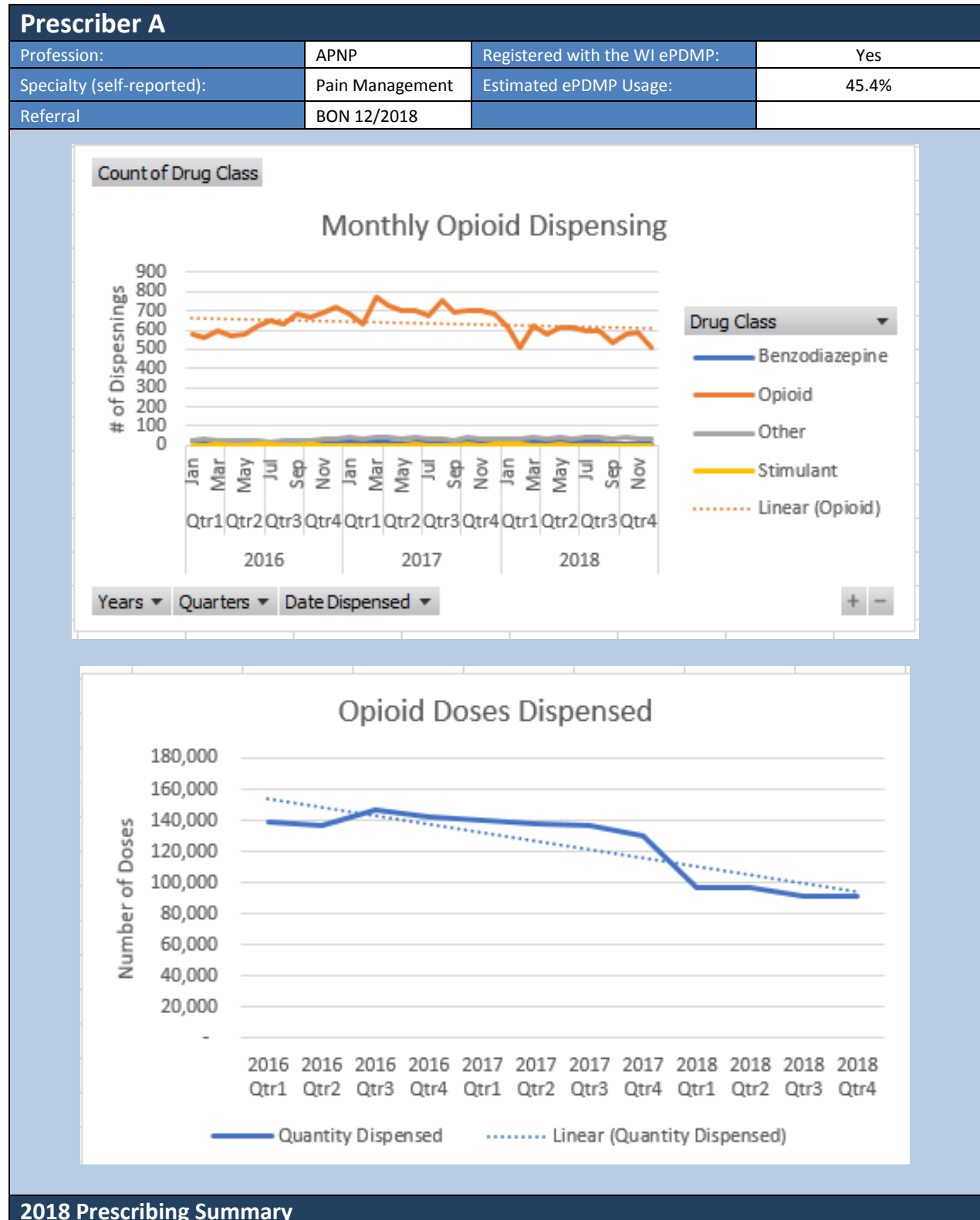


G. Proposed Process for CSB Review of PDMP Data



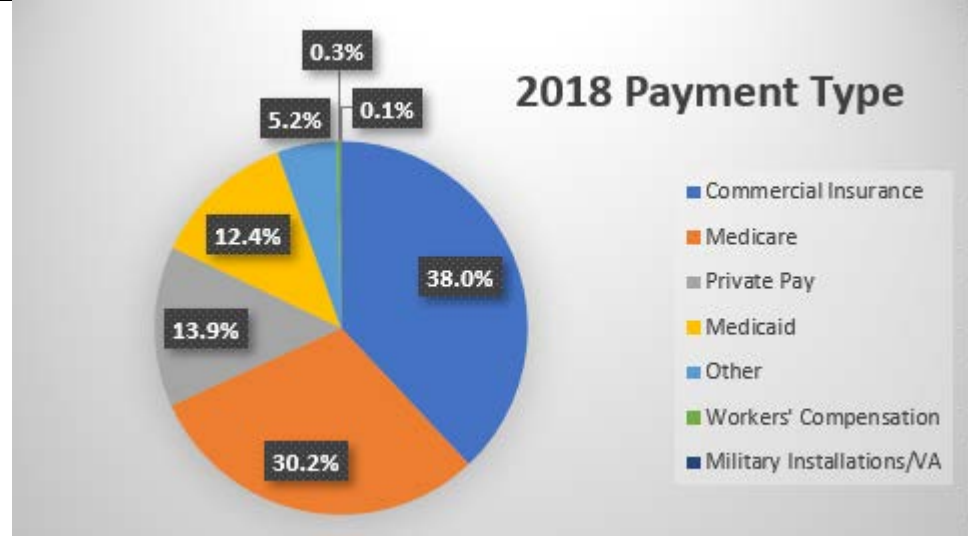
H. Sample of Expanded Prescriber Level Monitoring – Level 1

DSPS PDMP staff are requesting input and guidance from the CSB workgroup members on additional levels of detail that could assist the CSB monitoring for prescribers or pharmacies. Actual summaries could include statewide or profession specific comparisons.



Dispensing Data	# of scripts	% of overall	Top 5 Monitored Drugs by # Dispensings		
Opioids (includes buprenorphine)	6947	91.5%	Oxycodone HCl	1337	
Stimulants	36	0.5%	Oxycodone w/ Acetaminophen	1054	
Benzodiazepines	173	2.3%	Hydrocodone-Acetaminophen	1005	
Other	443	5.8%	Morphine Sulfate	899	
			Hydromorphone HCl	849	
Opioid Dispensing (June – Nov. 2018)	Prescriber	Percentile All	Percentile Specialty	Trend for Prior Timeframes	
Avg. Opioid Orders/Month	575	99.98%	TBD	TBD	
Avg. Opioid Doses/Month	39,049	99.9%	TBD	TBD	
Avg. Doses/Prescription	79.9				
	3 days or less	More than 3 days ≤ 10 days	More than 10 days ≤ 30 days	More than 30 days	
Days Supply Opioid Orders	11	239	5883	814	
Avg MME per Order	TBD	TBD	TBD	TBD	

2018 Pharmacy Summary



311 Pharmacies

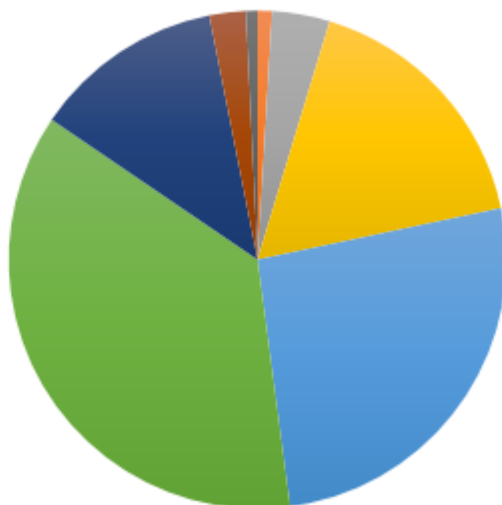
310 Pharmacies
3% or fewer of total dispensing

1 Pharmacy
12% of total dispensing

2018 Patient Population Summary

Unique Opioid Patients	729
Average Distance Travelled	TBD
Average Age	55.17

Patient Age Distribution



■ 12-17 ■ 18-24 ■ 25-34 ■ 35-44 ■ 45-54 ■ 55-64 ■ 65-74 ■ 75-84 ■ 85 and over