

The Michigan Automated Prescription System and Michigan

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The Problem- United States

- According to the CDC, between 1999 and 2017 nearly 218,000 people died in the United States from overdoses related to prescription opioids.
 - Overdose deaths involving prescription opioids were six times higher in 2017 than in 1999. This included prescription opioid and illicit opioids- heroin and fentanyl.
- U.S. residents constitute less than 5% of the world population but consume 80% of the global opioid supply, and approximately 99% of the hydrocodone supply.
- On average, 130 Americans die everyday from an opioid overdose.



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The Problem- Michigan

- In 2015, there were 21,472,326 controlled substance prescriptions filled in Michigan.
 - 10,833,681 *OF THOSE PESCRIPTIONS WERE FOR OPIOID DRUGS*
- In Michigan from 2007 to 2014, the total dosage units of Schedule 2 drugs quadrupled.
 - Approximately 180 to 745 million pills



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Controlled Substance Prescriptions Filled in Michigan by Year

	Total CS prescriptions dispensed	% change from previous year
2007	17,007,858	
2008	17,400,640	2.31%
2009	17,876,684	2.74%
2010	18,954,172	6.03%
2011	19,763,680	4.27%
2012	20,991,020	6.21%
2013	20,728,216	-1.25%
2014	20,904,764	0.85%
2015	21,472,326	2.71%
2016	21,092,674	-1.77%
2017	19,943,203	-5.45%
2018	17,642,901	-11.53%

Opioid Prescriptions Filled in Michigan by Year

	Total Opioid Prescriptions Dispensed	% Change from Previous Year
2013	9,920,288	
2014	10,301,142	3.84%
2015	10,833,681	5.17%
2016	10,507,059	-3.01%
2017	9,670,789	-7.96%
2018	8,223,103	-14.97%

Commonly Abused Controlled Substances Filled in Michigan (Summary)

	Alprazolam 1 mg	Alprazolam 2 mg	Carisoprodol 350 mg	Promethazine with Codeine
2015	41,499,216	10,227,915	13,124,785	41,758,634
2016	39,040,420	8,618,772	10,442,641	34,803,234
2017	34,379,472	6,939,880	7,808,190	28,579,490
2018	27,849,498	5,118,689	4,905,115	15,971,635
% Change from 2015 to 2016	-5.92%	-15.73%	-20.44%	-16.66%
% Change from 2016 to 2017	-11.94%	-19.48%	-25.23%	-17.88%
% Change from 2017 to 2018	-18.99%	-26.24%	-37.18%	-44.12%

	Hydrocodone 7.5 mg	Hydrocodone 10 mg	Oxycodone 30 mg	Oxymorphone 40 mg
2015	107,776,175	177,326,801	16,666,622	1,165,058
2016	99,473,052	172,038,459	14,859,323	1,358,611
2017	84,705,294	151,080,925	12,306,723	1,502,544
2018	66,741,785	118,239,581	9,456,126	1,040,705
% Change from 2015 to 2016	-7.70%	-2.98%	-10.84%	16.61%
% Change from 2016 to 2017	-14.85%	-12.18%	-17.18%	10.59%
% Change from 2017 to 2018	-21.21%	-21.74%	-23.16%	-30.74%

The numbers in these tables are drug totals dispensed by number of dosage units (e.g. number of tablets, milliliters, etc.)



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The Response

- In June 2015, Gov. Snyder convened a task force to “examine the recent trends, evaluate strategic options, and develop a statewide action plan by fall 2015.”
- In October 2015, the Task Force, chaired by Lt. Gov. Calley, produced their report.



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The Response

- Task force recommendation:

“The task force recommends requiring enhanced licensing sanctions for health professionals that violate proper prescribing and dispensing practices.”

- In January 2016, LARA created a Pilot Program to Reduce Overprescribing.

Objectives:

- Reduce prescription drug abuse and drug-related overdose deaths
- Develop best practices and protocols for identifying, investigating, and taking administrative action against overprescribers
- Determine ways to best collaborate with law enforcement and other local, state, and federal agencies.



The Response

- In August 2016, LARA created the Drug Monitoring Section to identify, investigate, and pursue administrative action against health professionals who overprescribe, overdispense, and divert controlled substances.
 - The Michigan Automated Prescription System (MAPS) was originally housed in the Drug Monitoring Section.
- Due to success and progress made, in August 2018, The Michigan Automated Prescription System became its own section: The previously established Drug Monitoring Section has since expanded and been renamed The Pharmacy and Drug Monitoring Section.
- Both sections sit within the Enforcement Division in the Bureau of Professional Licensing and work together closely.



The Response

The Enforcement Division is one of three Divisions within the *Bureau of Professional Licensing*:

- Established in July 2015
- 10 Occupational Licensing/Regulation Boards
- 24 Health Professional Licensing/Regulation Boards
- Boards are advisory and determine sanctions
- License and regulate over 758,000 individuals
- 3 Divisions: Licensing, Investigations & Inspections, Enforcement



MAPS Background

- Established in 2003; MCL 333.7333a *“The department shall establish, by rule, an electronic system for monitoring **schedule 2, 3, 4, and 5 controlled substances** dispensed in this state by veterinarians, and by pharmacists and dispensing prescribers licensed under part 177 or dispensed to an address in this state by a pharmacy licensed in this state.” Statute enacted in 2002.*
- Contains over 100 million records
- Data maintained for 5 years
- Required reporting from:
 - Prescribers who dispense CS Schedule 2-5
 - Pharmacists (dispensers)
 - Veterinarians
- ❖ Exemption from reporting:
 - Methadone Clinics (42 CFR)
 - *“The dispensing from a health facility or agency licensed under article 17 of a controlled substance by a dispensing prescriber in a quantity adequate to treat a patient for not more than 48 hours.”*



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MAPS access

Who has access to MAPS data:

- Prescribers (MD,DO, Nurse Practitioner, Physician Assistant, Dentist, Optometrist, Podiatrist, Veterinarian, Midwife with Prescribing Authority)
- Prescriber Delegate (an individual a prescriber elects to gain access to the system on behalf of them)
- Dispensers (Pharmacist)
- Dispenser Delegate (Pharmacist Intern, Licensed Pharmacy Technician)
- Law Enforcement (Conditional upon meeting statutory limitations)
- Representative of State Board (Conditional upon meeting statutory limitations)
- Health Care Payer/Benefit Provider (Conditional upon meeting statutory limitations)
- System Administrators (Department of Licensing and Regulatory Affairs)



MAPS access

When data can be accessed:

Michigan Statute outlines appropriate uses of Electronic monitoring system data in MCL 333.7333a.

Specifically it states (4) “a person that receives data or any other report under subsection (2) containing any patient identifiers of the system from the department shall not provide it to any other person except by order of a court of competent jurisdiction”



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MAPS Update

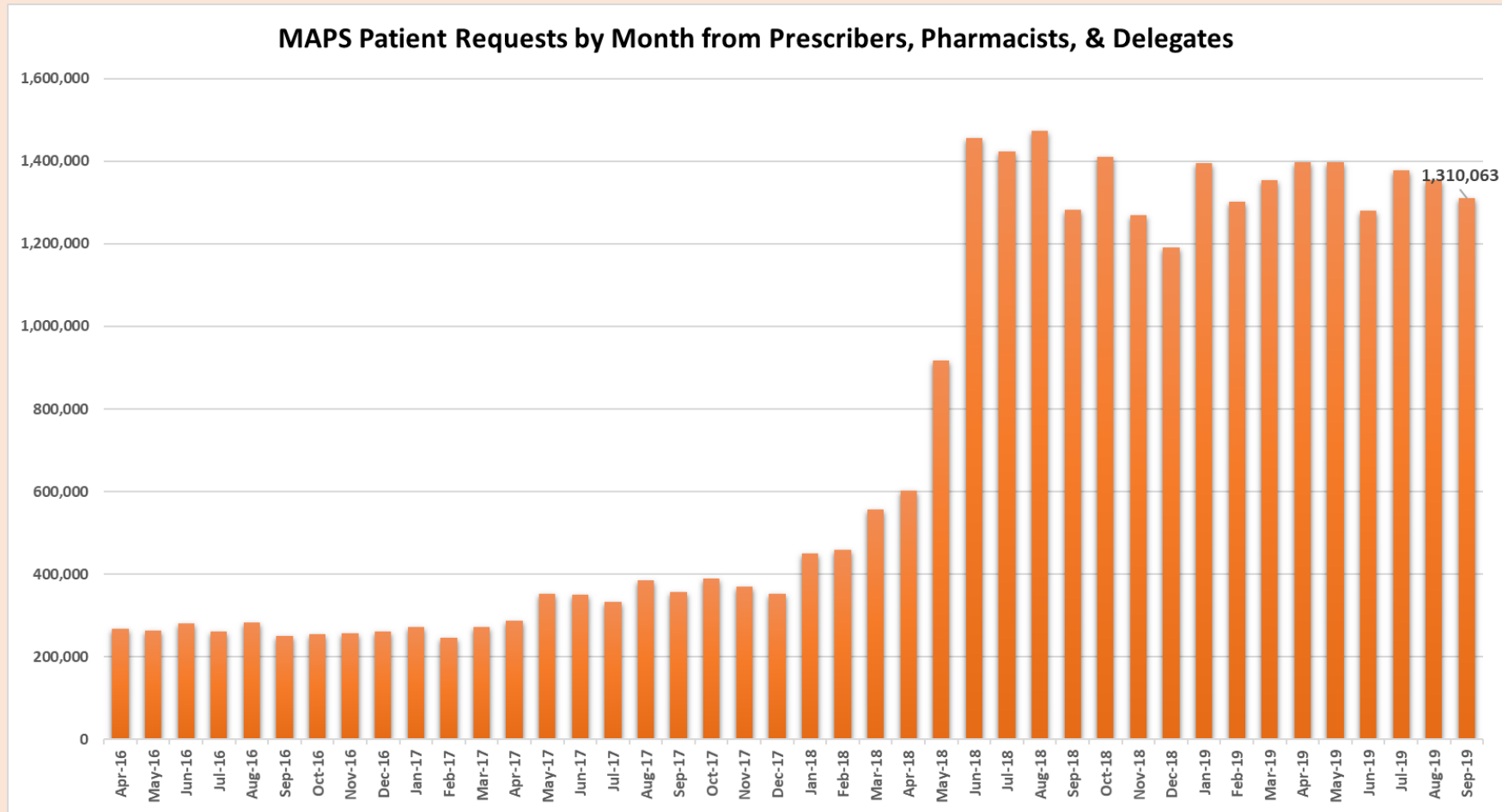
- Successfully launched Appriss Health's PMP AWARe on April 4, 2017
- Added Appriss Health's NarxCare report to MAPS on December 4, 2017
- Response times average 0.4-0.8 seconds
- Registered Users:

	As of 04/04/2017	As of 10/06/2019	Increase
Prescribers	9,156	47,623	38,467
Dispensers (Pharmacists)	3,994	8,741	4,747
Delegate Users	1,096	20,425	19,329
Law Enforcement	598	2,141	1,543
Benefit Plan Managers	29	127	98
State Board Reps.	0	53	53



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MAPS – Patient Requests



**Note: Includes online requests and integration requests from MAPS (Michigan) registered users*



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PMP Interconnect

States Connected

1. Alabama
2. Arizona
3. Colorado
4. Connecticut
5. Delaware
6. Florida
7. Idaho
8. Illinois
9. Indiana
10. Iowa
11. Kansas
12. Kentucky
13. Louisiana
14. Maine
15. *Military Health System*
16. Minnesota
17. Mississippi
18. Montana
19. Nevada
20. New Mexico
21. New York
22. North Carolina
23. North Dakota
24. Ohio
25. Rhode Island
26. South Carolina
27. South Dakota
28. Tennessee
29. Texas
30. Virginia
31. Washington, D.C.
32. West Virginia
33. Wisconsin

States Pending Connection

1. Puerto Rico
2. Washington State
3. Wyoming



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Patient Reports

NarxCare Reports



MAPS – NarxCare Report

- Narx Scores and Predictive Risk Scores (overdose)
 - Scores: based on algorithms, including MMEs, number of prescribers and number of dispensers
 - Scores: Ranges from 000-999; higher scores equate to higher risk and misuse
- Red Flags
- Rx Graphs
- PDMP Data



Red Flag Indicators

There are currently four **Red Flag** Indicators:

- More than 5 providers in any year
- More than 4 pharmacies in any 90-day period
- More than 40 Morphine Milligram Equivalent (MME) per day average and more than 100 MME total
- Combination Therapies: Opioids and Benzodiazepines

*Per CDC guidance, the MME conversion factors prescribed or provided as part of the medication-assisted treatment for opioid use disorder should not be used to benchmark against dosage thresholds meant for opioids prescribed for pain. Buprenorphine products have no agreed upon morphine equivalency, and as partial opioid agonists, are not expected to be associated with overdose risk in the same dose-dependent manner as doses for full agonist opioids. MME = morphine milligram equivalents. LME = Lorazepam milligram equivalents. mg = dose in milligrams.

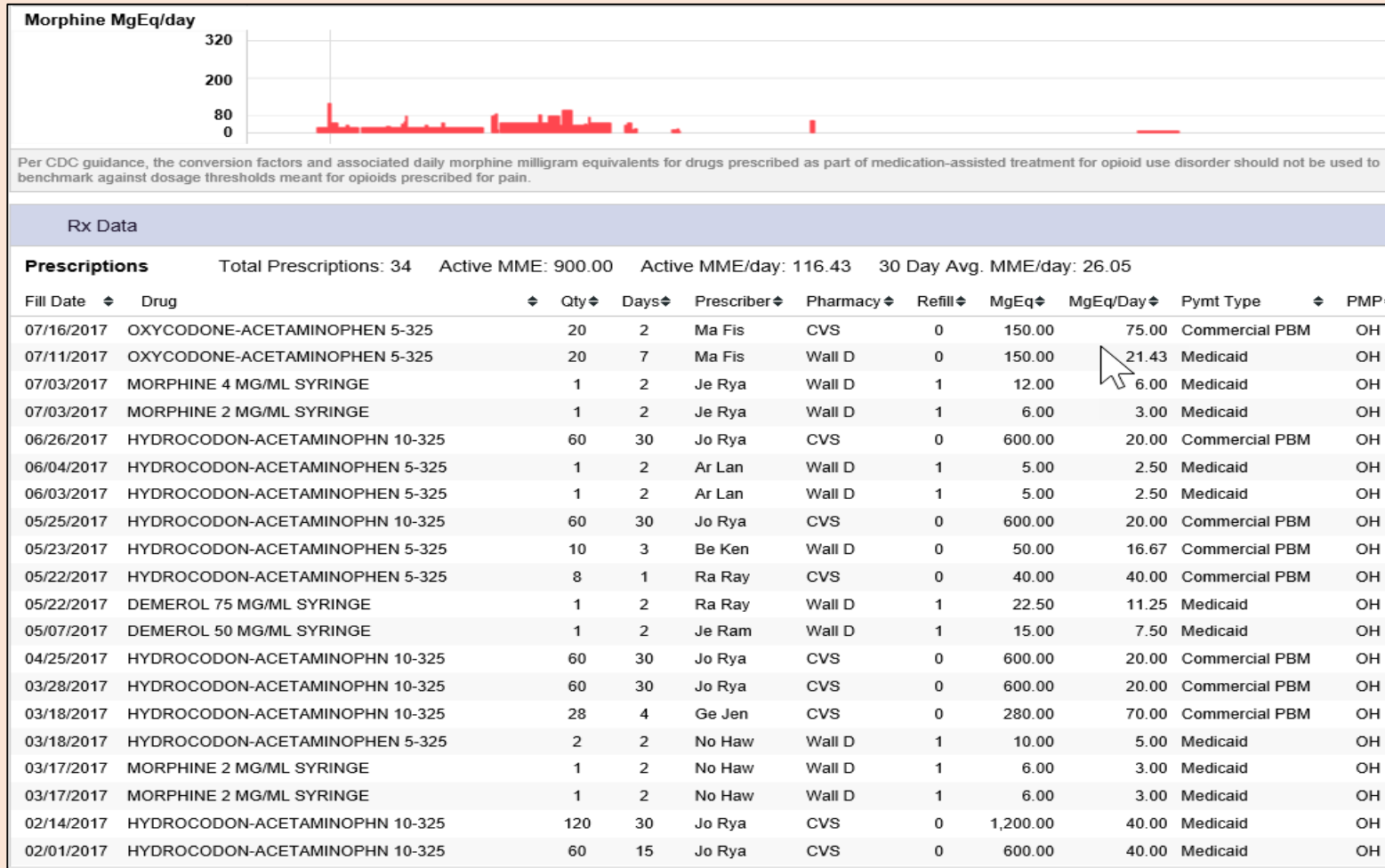


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MAPS - NarxCare Report



MAPS - NarxCare Report



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MAPS – NarxCare Report (continued)

02/01/2017	HYDROCODON-ACETAMINOPHN 10-325	60	15	Jo Rya	CVS	0	600.00	40.00	Medicaid	OH
01/23/2017	OXYCODONE-ACETAMINOPHEN 5-325	60	7	Ma Fis	CVS	0	450.00	64.29	Medicaid	OH
01/12/2017	MORPHINE 2 MG/ML SYRINGE	1	30	No Haw	Wall D	1	6.00	0.20	Private Pay	OH
01/12/2017	MORPHINE 4 MG/ML SYRINGE	1	2	No Haw	Wall D	1	12.00	6.00	Private Pay	OH
01/10/2017	OXYCODONE-ACETAMINOPHEN 5-325	120	30	Jo Rya	CVS	0	900.00	30.00	Commercial PBM	OH
01/07/2017	DEMEROL 25 MG/ML SYRINGE	1	2	Ja Kin	Wall D	1	7.50	3.75	Private Pay	OH
01/03/2017	HYDROCODON-ACETAMINOPHEN 5-325	60	8	Ja Nic	CVS	0	300.00	37.50	Medicaid	OH
12/26/2016	HYDROCODON-ACETAMINOPHEN 5-325	60	8	Ja Nic	Wall D	0	300.00	37.50	Commercial PBM	OH
12/11/2016	HYDROCODON-ACETAMINOPHEN 5-325	28	5	He Hol	CVS	0	140.00	28.00	Private Pay	OH
12/07/2016	HYDROCODON-ACETAMINOPHEN 5-325	14	7	Pa Mar	CVS	0	70.00	10.00	Commercial PBM	OH
12/07/2016	HYDROCODON-ACETAMINOPHEN 5-325	2	2	Pa Mar	Wall D	1	10.00	5.00	Private Pay	OH
11/07/2016	HYDROCODON-ACETAMINOPHEN 5-325	10	5	Pa Mar	CVS	0	50.00	10.00	Private Pay	OH
11/06/2016	HYDROCODON-ACETAMINOPHEN 5-325	1	2	Ru Har	Wall D	1	5.00	2.50	Private Pay	OH
08/01/2016	OXYCODONE-ACETAMINOPHEN 5-325	20	3	Br Fer	Wall D	0	150.00	50.00	Commercial PBM	OH
11/12/2015	MORPHINE 2 MG/ML SYRINGE	1	30	Pa Mar	Wall D	1	6.00	0.20	Private Pay	OH
Providers Total Providers: 15										
Name	Address	City	State	Zipcode	DEA					
Fernandez, Bruce	4367 Pleasant Crossing	Five Points	OH	44262-6811	234853					
Fisher, Marie	7175 Cozy Rabbit Vista	Anderson Ferry	OH	43622-1298	234756					
Harris, Ruth	2003 Stony Nectar Cove	Kingsleys Corners	OH	45983-3673	234843					
Hawkins, Norma	6763 Emerald Robin Parkway	Apple Grove	OH	45273-0588	234852					
Holmes, Helen	8869 Burning Fox Impasse	Bayer Trailer Court	OH	45202-9797	234841					
Jenkins, Gerald	9393 Lost Field	Maple	OH	43654-8273	234851					
Kennedy, Beverly	3099 Umber Pathway	Damascus	OH	44609-5908	234847					
King, James	3355 Rustic Cloud Wynd	Yankee Crossing	OH	45430-6188	234845					
Lane, Arthur	2331 Cozy Port	Holiday City	OH	45620-5987	234844					
Martin, Patricia	7600 Shady Hickory Stead	Fort Jennings	OH	44170-2847	234850					
Nichols, Jason	9093 Hidden Pioneer Lookout	East Gardens	OH	43321-4331	234848					
Ramos, Jesse	9166 Bright Pond Crescent	Belmore	OH	45970-9899	234840					
Ray, Ralph	1467 Little View Townline	West Akron	OH	43739-7351	234849					
Ryan, Jerry	163 Sleepy Edge	Oakthorpe	OH	44740-5125	234846					
Ryan, Jonathan	9892 Silent Elk Ramp	Sites Lake Cottage Area	OH	44502-5801	234842					



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MAPS – NarxCare Report (continued)

Pharmacies		Total Pharmacies: 6									
Name	◆	Address	◆	City	◆	State	◆	Zipcode	◆	DEA	◆
CVS		5483 Gentle Impasse		Home Park		OH		43242-6009		345796	
CVS		7139 High Pond Walk		Randolph Landing		OH		45487-2143		345840	
Wall Drug		3799 Foggy Dale		Herner Corners		OH		45658-6817		345841	
Wall Drug		4543 Iron Carrefour		Powers		OH		43803-2784		345839	
Wall Drug		5639 Cotton Dale Close		Cedar Springs		OH		43423-4846		345842	
Wall Drug		8129 Easy Dell		Antiquity		OH		45300-0810		345843	
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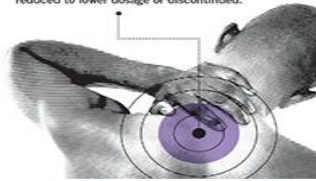
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MAPS – NarxCare Report (continued)

Pocket Guide: Tapering

POCKET GUIDE: TAPERING OPIOIDS FOR CHRONIC PAIN

Follow up regularly with patients to determine whether opioids are meeting treatment goals and whether opioids can be reduced to lower dosage or discontinued.



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Fact Sheet

GUIDELINE FOR PRESCRIBING OPIOIDS FOR CHRONIC PAIN

IMPROVING PRACTICE THROUGH RECOMMENDATIONS

CDC's Guideline for Prescribing Opioids for Chronic Pain is intended to improve communication between providers and patients about the risks and benefits of opioid therapy for chronic pain, monitor the safety and effectiveness of pain treatment, and reduce the risks associated with long-term opioid therapy, including opioid use disorder and overdose. The guideline is not intended to restrict access to or the value of opioid therapy for patients who are in pain and who have been prescribed opioids for chronic pain.

DETERMINING WHEN TO INITIATE OR CONTINUE OPIOIDS FOR CHRONIC PAIN

1. Assess the patient's pain and functional status. Consider the patient's history, current and past pain, and the impact of pain on the patient's life. Consider the patient's history of substance use, mental health, and other medical conditions.
2. Consider the patient's goals for pain treatment. Consider the patient's goals for pain treatment, including the patient's goals for pain relief, functional improvement, and quality of life.
3. Consider the patient's risks for opioid use disorder and overdose. Consider the patient's risks for opioid use disorder and overdose, including the patient's history of substance use, mental health, and other medical conditions.



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Checklist *

Checklist for prescribing opioids for chronic pain

When considering long-term opioid therapy

1. Have you assessed the patient's pain and functional status?
2. Have you assessed the patient's goals for pain treatment?
3. Have you assessed the patient's risks for opioid use disorder and overdose?
4. Have you discussed the risks and benefits of opioid therapy with the patient?
5. Have you discussed the patient's goals for pain treatment with the patient?
6. Have you discussed the patient's risks for opioid use disorder and overdose with the patient?

When reassessing at intervals and

1. Have you reassessed the patient's pain and functional status?
2. Have you reassessed the patient's goals for pain treatment?
3. Have you reassessed the patient's risks for opioid use disorder and overdose?
4. Have you discussed the risks and benefits of opioid therapy with the patient?
5. Have you discussed the patient's goals for pain treatment with the patient?
6. Have you discussed the patient's risks for opioid use disorder and overdose with the patient?

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Nonopioid Treatments

NONOPIOID TREATMENTS FOR CHRONIC PAIN

PRINCIPLES OF CHRONIC PAIN TREATMENT

Chronic pain is a complex condition that can significantly impact a person's quality of life. It is often caused by an injury, surgery, or a chronic medical condition. Chronic pain can be difficult to treat, and it is important to work with a healthcare provider to develop a treatment plan that addresses the underlying cause of the pain.



Medication	Indication	Comments
Acetaminophen	Pain relief	First-line treatment for chronic pain.
NSAIDs	Pain relief	Effective for pain relief, but may have side effects.
Antidepressants	Pain relief	May be helpful for chronic pain.
Anticonvulsants	Pain relief	May be helpful for chronic pain.

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Assessing Benefits and Harms

ASSESSING BENEFITS AND HARMS OF OPIOID THERAPY

THE EPIDEMIOLOGY

The CDC estimates that there are 100 million people in the United States who are taking opioids for chronic pain. This is a significant increase from 2002, when there were 50 million people taking opioids for chronic pain.



Benefit	Harm
Pain relief	Opioid use disorder
Improved quality of life	Overdose
Improved functional status	Respiratory depression

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Calculating Dosage

CALCULATING TOTAL DAILY DOSE OF OPIOIDS FOR SAFER DOSAGE

Higher Dosage, Higher Risk

Higher dosages of opioids are associated with a higher risk of overdose and death. It is important to calculate the total daily dose of opioids to ensure that the patient is receiving the lowest effective dose.



Drug	Dose
Hydrocodone	10 mg
Hydrocodone/acetaminophen	10 mg/325 mg
Hydrocodone/buprenorphine	10 mg/2 mg

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Contacts for MAPS

For technical assistance, please contact Appriss' customer first center at:

- 844-364-4767

For policy or administrative assistance and more information about integrating with MAPS, please contact MAPS support:

- 517-241-0166 or BPL-MAPS@Michigan.gov
- Info: www.Michigan.gov/bpl, click on MAPS
- Integrations: Click on Software Integration Resources

For additional resources for providers and the public, please go to the State website: www.michigan.gov/opioids



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Questions?



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