EXECUTIVE SUMMARY

- In 2015, Michigan ranked 15th out of 51 U.S. states and the District of Columbia in drug overdose mortality. Nearly 20% of Michigan's overdose deaths between 2009-2012 were opioid-related.

- In 2016, the National Safety Council, examining key indicators of progress addressing the opioid epidemic nationally, found that Michigan was 1 of 3 states that had met zero indicators of progress, highlighting the need to address this critical public health problem within Michigan.

- The U-M Injury Center Policy Workgroup conducted a review of the current medical and public health literature, as well as the gray literature and current pending legislative proposals, to understand the state of the opioid epidemic in Michigan and the status of state-level policies addressing the epidemic within seven key focus areas. Based on this review, best practice recommendations from other states, and the series of stakeholder interviews conducted, we developed a series of Michigan-specific recommendations that could have maximal impact curtailing the current epidemic. Recommendations are summarized below and include:

PRESCRIBING GUIDELINES

- Mandate pain management and safe opioid prescribing education for trainees (i.e., medical students, medical/surgical resident trainees) and continuing education requirements for all licensed providers (e.g., physicians, dentists, nurses, social workers) regardless of specialty.

- Require state licensing organizations (e.g., Board of Medicine, Board of Dentistry, etc.) to adopt the 2016 CDC chronic pain management guidelines and a set of newly developed acute care prescribing guidelines that are tied to licensing and continuing medical education.

PRESCRIPTION DRUG MONITORING PROGRAMS (PDMPs)

- Mandate provider PDMP registration at the time of controlled substance licensing and mandate provider PDMP use prior to prescribing controlled substances.

- Provide incentives that enhance public-private partnerships that integrate PDMP data into electronic health records to promote provider use while limiting impact on physician workflow.

- Provide unsolicited feedback on prescribing data to providers on a quarterly basis, including specialty-specific feedback and linkage to continuing education resources.

- Allow MAPS (Michigan Automated Prescribing System) data to be available to public health researchers and enhance efforts to link data across multiple data sources.

- Engage state and national lawmakers to improve the interconnection of state PDMPs so that clinicians are able to review medications prescribed to patients within neighboring states.

- Electronically scan prescription dispensing information when pharmacists input data into the PDMP to minimize entry error and increase turnaround time for data availability to prescribers.

- Generate, validate, and continually audit algorithms for high-risk medication fill patterns (e.g., doctor shopping) to be flagged in patient PDMP records.

- Encourage PDMP use to refer patients with high-risk prescription patterns to addiction treatment services.

PHARMACY BENEFIT MANAGERS (PBMs) and PHARMACIES

- Expand "lock-in" programs to include Medicare and non-governmental insurance enrollees, while examining mechanisms to limit unintended consequences of such programs (e.g., increased out-of-pocket prescription opioid fills to avoid “lock-in” program restrictions).

- Provide resources to support the expansion of electronic prescribing throughout Michigan.

- Improve hospital, pharmacy, and insurance formulary coverage of non-opioid alternatives, including non-opioid medications and behavioral therapies to treat pain.
• Consider legislation increasing pharmacist discretion on dispensing controlled substances when they suspect doctor shopping or fraudulent prescriptions.

**ADDICTION TREATMENT**
• Provide additional funding to address barriers to accessing medication-assisted treatment (MAT) for patients with opioid addiction.
• Consider state-level reimbursement for behavioral health counselors to be available on-site at community mental health sites and strategically located primary care sites providing MAT.
• Provide additional funding to pay for physician buprenorphine training and waivers that increase the number of patients who have access to licensed providers.
• Reinforce the need at the state and national level for policies that continue to include medication-assisted treatment (MAT) as an essential health insurance benefit.
• Consider greater state-level enforcement of mental health parity laws to ensure that all health care plans are covering addiction treatment services on par with medical services.
• Expand the capacity for opioid addiction treatment in underserved settings, such as prison and jails, including access to behavioral therapy and MAT.
• Expand funding (beyond the State Targeted Response [STR] to opioids initiative) aimed at improving access to MAT treatment options in communities without local treatment options.
• Consider telemedicine approaches, and subsequent necessary policies for reimbursement, that increase reach of addiction treatment specialist to underserved communities.
• Encourage clinicians and providers to provide information on substance use disorder services to patients treated for an opioid-related overdose.
• Encourage healthcare provider training in addiction and medication-assisted therapy (MAT), through state medical schools and continuing medical education of licensed providers.

**COMMUNITY-BASED PREVENTION STRATEGIES**
• Support greater public awareness of the risks of prescription opioid abuse, especially among adolescents, adults, and elderly patient populations.
• Develop and promote safe, secure medication disposal facilities in non-law enforcement-associated sites and integrate take-back programs into acute healthcare settings.
• Support greater public awareness and knowledge of current Michigan take-back programs.
• Mandate that opioids are dispensed with warning labels about risks of addiction and overdose, as well as instructions on safe storage and options for safe disposal.

**OVERDOSE EDUCATION AND NALOXONE DISTRIBUTION PROGRAMS**
• Encourage additional pharmacies to make intranasal naloxone available over-the-counter (OTC) to expand access to naloxone for overdose prevention.
• Recommend that ED patients treated for an opioid overdose be provided with an overdose (naloxone) kit and instructions for families or acquaintances, as well as referral to addiction treatment programs providing MAT and behavioral health services.
• Support pilot programs for publicly available naloxone (analogous to AEDs) in places where overdoses frequently occur (e.g., public and fast food restaurant restrooms, libraries).
• Expand public awareness of laws limiting civil liabilities for bystander naloxone administration and providing immunity for offences discovered during bystander overdose reporting.

**SURVEILLANCE**
• Expand funding for the development and implementation of high-quality real-time surveillance systems for identifying fatal and non-fatal overdose events.
• Conduct surveillance of rates of opioid use disorders (e.g., dependence) to identify geographic locations most in need of targeted prevention and treatment services.
• Improve information sharing of de-identified data between local law enforcement and public health via surveillance systems to develop effective prevention initiatives.
BACKGROUND

Since 1999, prescription opioid overdoses have quadrupled and were responsible for 33,091 fatalities in 2015, accounting for over 63% of all drug overdoses in the United States. Further, 2 million people in the United States are estimated to currently have a substance use disorder (i.e., abuse or dependence) associated with the use of prescription opioids and 4.3 million adolescents and adults reported recent non-medical use of prescription opioids (e.g., used “to get high” in the past month), an important precursor to opioid dependence. The economic cost to the U.S. economy of prescription opioid abuse, dependence, and overdose is substantial, estimated to be as high as $78.5 billion annually. Despite widespread recognition of this emerging crisis during the past decade, the number of opioid overdose fatalities has continued to increase and attempts to reduce the supply of prescription opioids have been associated with an inadvertent increase in heroin use/abuse. The current opioid crisis now represents the single deadliest drug epidemic in U.S. history and there is consensus among the medical, public health, and public policy communities that urgent action is needed to address this critical public health problem.

This project is a collaboration between the University of Michigan Injury Center (UMIC) and several other CDC-funded Injury Centers, including the Johns Hopkins Center for Injury Research and Policy, the University of Iowa Injury Prevention Research Center, and West Virginia University Injury Control Research Center. Building off of a 2015 policy brief developed by the Johns Hopkins Center for Injury Research and Policy that developed best practice policy recommendations for addressing the opioid epidemic, the current report analyzes the state of the opioid epidemic within Michigan, including the state of legislative actions addressing the opioid epidemic, and synthesizes key input from stakeholders around the state about the potential policy interventions that are most urgently needed to address this public health problem. Finally, we propose a series of University of Michigan Injury Center recommendations for addressing critical aspects of this public health problem within Michigan.

METHODOLOGY

- As part of this collaborative project with other CDC-funded Injury Centers, a diverse group of experts - including clinicians, public health researchers, policy experts, and injury prevention professionals - at the University of Michigan (U-M) Injury Center convened as a workgroup to review the current state of knowledge for public health policies addressing the prescription opioid epidemic and to determine Injury Center recommendations for action addressing this public health problem in Michigan.

- The workgroup began by reviewing the policy recommendations outlined in the 2015 Johns Hopkins Report entitled “The Prescription Opioid Epidemic: An Evidence Based Approach.” This policy report focused on establishing a best practice policy guide for action broadly for the United States, identifying seven key areas for recommendations, including policies related to prescribing guidelines, prescription drug monitoring programs, pharmacy benefit managers and pharmacies, engineering strategies, overdose education and naloxone distribution programs, addiction treatment, and community-based prevention strategies.

- Within the context of this report, the Policy Workgroup of the U-M Injury Center conducted a review of the current medical and public health literature, as well as the gray literature and current pending legislative proposals, to understand the state of the opioid epidemic in Michigan and the status of state-level policies addressing the epidemic within these focus areas. Additional focus areas were identified (e.g., surveillance) as appropriate.
The workgroup identified key Michigan stakeholders with knowledge of the current problem. In addition to participating in two public health stakeholder meetings focused on addressing prescription drug overdose through surveillance, prevention, and treatment (held by the Michigan Department of Health and Human Services, MDHHS), the policy workgroup also conducted twenty semi-structured interviews with relevant stakeholders and stakeholder groups to gain additional insight into the current views on the recommendations within the Johns Hopkins report, as well as additional solutions they felt were necessary to address the problem in Michigan. Each interview session was approximately 60 minutes and all data was collected anonymously. Stakeholders included input from a broad array of sources, including:

- Chief Medical Officers, Pharmacy Officers, and Controlled Substance Diversion Managers from two of the largest health systems within Michigan.
- Researchers from the fields of Psychiatry, Anesthesiology, Internal Medicine, and Public Health focused on addressing the problem of opioid dependence.
- State-level officials and public health researchers from the Michigan Department of Licensing & Regulatory Affairs (LARA), Michigan Pharmacists Association (MPA), Washtenaw County Public Health, and Michigan Department of Health & Human Services (MDHHS).
- Leadership from the Michigan College of Emergency Physicians.

Qualitative interview data was aggregated and based on synthesis of the current literature and the data gathered from stakeholders, Injury Center recommendations for action were developed to address identified policy gaps in the following areas: 1) Prescribing guidelines; 2) Prescription drug monitoring programs (PDMP); 3) Pharmacy Benefit Managers and Pharmacies; 4) Addiction Treatment; 5) Community-based Prevention Strategies; 6) Overdose education and naloxone distribution programs; and, 7) Surveillance.

The remainder of this report details, for each of these key areas, the recent trends within Michigan, a review of prior interventions, a synthesis of stakeholder interview data, any current or pending legislation, and the recommendations of the University of Michigan Injury Center for further action to address prevention, surveillance, and treatment in Michigan.

**PRESCRIPTION OPIOID EPIDEMIC IN MICHIGAN:**

Similar to other states in the industrial Midwest, Michigan has been significantly impacted by the prescription opioid epidemic:

- In 2015, Michigan ranked 15th out of 51 U.S. states and the District of Columbia in overall drug overdose mortality (20.4 deaths per 100,000 people, Figure 1), a 13.3% increase from 2014.\(^1\)
- Nearly 20% of Michigan’s drug overdose deaths between 2009 and 2012 were opioid-related.\(^2\)
- The number of Michigan fatalities resulting from opioid overdoses has increased exponentially since 1999, accounting for 1,275 fatalities in 2015 (Figure 2). The annual number of deaths due to opioid overdoses now surpasses the annual number of deaths in Michigan resulting from either firearms or motor vehicle crashes.\(^11\)
- While overdose deaths from non-opioid drugs has remained stable during the past decade, fatal overdoses from prescription opioids and heroin have increased markedly, accounting for 67% of all overdose deaths in 2015 (Figure 3).\(^11\)
Figure 1. Age-adjusted Rates of Drug Overdose Deaths by State, United States; 2015

Figure 2. Michigan Opioid Overdose Deaths by Type of Opioid, 1999-2014

Figure 3. Opioid Overdose Deaths as a % of Drug Overdose Deaths in Michigan, 1999-2014


- Of the 30 regions with ≥6 deaths between 2009 and 2012, the rate of opioid-related deaths tended to be higher in Michigan counties with higher opioid prescription rates (Figure 4).

Figure 4. Opioid-related Deaths per 100,000 Residents, Michigan 2009-2016

- The increase in overdose deaths has paralleled an increase in opioid pain reliever (OPR) sales (8.1 kg per 10,000 Michigan residents in 2011). In 2014, more than 21 million prescriptions for controlled substances were written by physicians in Michigan, with hydrocodone being the most prescribed controlled substance.

- Between 2009 and 2012, death rates from drug poisoning in Michigan were higher in men than women (14.9 vs. 9.5 per 100,000 residents); Native American residents (20.2 vs. 12.7 and 10.9 in White and Black residents, respectively); and among residents ages 25-54.

- Between 2009 and 2012, 52% of Michiganders who died of an opioid overdose had filled an opioid prescription in the prior 30 days, 36% of whom were reportedly doctor shopping (defined by the CDC as a patient obtaining a controlled substance from multiple health care providers without the prescriber knowing about other prescriptions, and/or a patient who has obtained \( \geq 5 \) controlled substance prescriptions within the past year).

- Michigan's opioid-related hospitalization rate in 2014 (Figure 5) was 229.6 per 100,000 residents, reflecting a 21.4% increase from 2009.

- Between 2000 and 2011, the number of hospitalizations increased 120% from 9,157 to 20,191 hospitalizations.

**Figure 5. Opioid-related Inpatient Hospital Admissions by State, 2014**

![Figure 5](http://www.hcup-us.ahrq.gov/faststats/landing.jsp)
PRESCRIBING GUIDELINES

Recent Trends in Michigan

- Controlled substance prescriptions in Michigan increased by more than 4 million between 2007 and 2016.\(^\text{15}\)
- In 2012, MI ranked 10\(^\text{th}\) (107 prescriptions per 100 persons) among U.S. states in opioid prescribing per capita.\(^\text{16}\)

Figure 6. Morphine Milligram Equivalents (MMEs) of Opioids Prescribed per Capita in 2015.

Michigan-based interventions

- Opioid prescribing guidelines for the treatment of acute pain have been developed by the Michigan College of Emergency Physicians (MCEP),\(^\text{17}\) which the Michigan Prescription Drug and Opioid Abuse Task Force, convened by Governor Rick Snyder, has endorsed as a model for opioid prescribing for acute pain management.\(^\text{18}\) Their recommendations include:
  - Providers are required by law to evaluate an ED patient with pain
  - Long-acting opioids (e.g., OxyContin) should not be prescribed
  - Do not use meperidine (Demerol)
  - Use short courses of opioids when appropriate for acute injuries
  - Injections of opioids should not be used for chronic non-cancer pain
  - Do not replace lost or stolen prescriptions
  - Utilization of the prescription drug monitoring program (i.e., MAPS) is highly encouraged prior to prescribing
  - Maintain lists of clinics and primary care sites for referral for addiction treatment
  - A single provider should prescribe any and all controlled substances for chronic pain (i.e., prescriptions should not be provided by multiple providers)

• Opioid prescribing guidelines are also being developed by the Michigan Opioid Prescribing Engagement Network (Michigan OPEN), a University of Michigan initiative promoting evidence-based peri- and post-operative pain management. Information on the Michigan OPEN program can be found at: michigan-open.org

• While not a Michigan-specific intervention, the CDC guidelines for prescribing opioids for chronic pain management were released during the construction of this report. They are available at: https://www.cdc.gov/mmwr/volumes/65/rr/rr6501e1.htm.

• The Michigan Prescription Drug and Opioid Abuse Task Force Advisory Committee on Pain and Symptom Management (ACPSM) developed recommendations for nine Michigan health professional boards and forwarded those continuing education (CE) requirements to the licensing boards to provide guidance on the appropriate level of content necessary for providers understanding guidelines for pain management. Suggested minimum numbers of CE/CME hours in comparison to overall CE/CME hours by specialty are summarized below in Table 1.

Table 1. Michigan ACPSM Recommendations for Continuing Education (CE) and Continuing Medical Education (CME) requirements for pain management and overdose education as a standard component of licensing cycle.19

<table>
<thead>
<tr>
<th>Suggested Minimum CE/CME hours in Pain and Symptom Management</th>
<th>Total CE/CME Hours Required Per Profession and Licensing Cycle</th>
<th>Examples of Boards for which CE/CME Hours Should Apply</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1-24</td>
<td>Massage therapy, Nursing home administrators</td>
</tr>
<tr>
<td>2</td>
<td>25-49</td>
<td>Nursing (23 hours) Pharmacy (30 hours) Social Work (45 hours)</td>
</tr>
<tr>
<td>3</td>
<td>50-74</td>
<td>Dentistry (60 hours)</td>
</tr>
<tr>
<td>4</td>
<td>75-99</td>
<td>Athletic Trainers (80 hours)</td>
</tr>
<tr>
<td>5</td>
<td>150 credits per 3 years</td>
<td>Allopathic and Osteopathic Medicine</td>
</tr>
</tbody>
</table>

Takeaways from Michigan stakeholder interviews

1.1 Improve state oversight of opioid prescribing and addiction treatment

• Interviewed stakeholders advocated for state medical boards to evaluate high-end prescribing and help identify “bad actors,” however determination of aberrant prescribing behaviors was felt to be best determined by physicians’ peers and hospital systems.

• A plurality of interviewed stakeholders advocated that the state legislature should focus on promoting laws that:
  ▪ Limit courses of opioid pain relievers [OPRs] prescribed for acute pain (e.g., no more than 5 days or 15 pill supply), noting that procedure specific guidelines (e.g., # of pills for appendectomy post-surgical course) are also needed.
  ▪ Tighten the regulation of pain clinics.
  ▪ Support medication-assisted therapy (MAT), including offering incentives or enticements to obtain a buprenorphine waiver.
1.2 Improve provider education at all levels (e.g., students, resident physicians, nursing and physician providers) in pain management and opioid prescribing

- Near universal support among interviewed stakeholders for the development of pain management curricula for medical students, residents and attending physicians, as well as other allied health care providers (e.g. nursing, pharmacy, social work).
- Moderate support for mandatory continuing education (CE/CME) tied to medical licensing among interviewed stakeholders.
- Stakeholders advocated for supporting CDC guidelines for chronic pain treatment, as well as acute care guidelines from specialty organizations (e.g., Michigan College of Emergency Physicians). In addition, interviewed stakeholders also identified the following factors around prescribing as important components of recommendations:
  - Avoid co-prescribing opioids and benzodiazepines
  - Need to consider patient risk factors for opioid overdose
  - Gauge pain severity and need for chronic pain prescription
  - Provide multimodal interventions for pain management, especially non-opioid interventions when appropriate (e.g., physical therapy)
  - Use non-opioid alternatives when possible (e.g., Tylenol or non-steroidal anti-inflammatory drugs like Motrin)
  - Manage expectations around analgesia (goal should be to decrease pain to improve function, not necessarily be "pain-free")
  - If an opioid pain reliever (OPR) is prescribed, use the lowest dose for the shortest time necessary

Pending legislation in Michigan

*Michigan Senate Bill 274*
- Prohibits prescriptions of >100 morphine milligram equivalents (MME) daily.
- No more than 30-day supply of opioid pills for patients with chronic pain.
- No more than a 7-day supply of opioid for acute pain.
- **Status**: Passed by the Michigan Senate; referred to the Michigan House Health Policy Committee.

*Michigan Senate Bill 171 and Senate Bill 172*
- Establishes sentencing guidelines for physicians and pharmacists who wrongfully prescribe, dispense, manufacture, or distribute controlled substance.
- Part of a two-bill package stipulating that if an individual willingly violates 333.7405, and is found guilty of this violation, that they will be guilty of a felony (up from a misdemeanor) punishable by imprisonment for not more than 15 years (up from 2 years), or a fine of $25,000, or both.
- **Status**: Bill introduced in the Michigan Senate, referred to the Committee on Health Policy.

*Michigan Senate Bill 270*
- Prohibit a licensed prescriber from prescribing a Schedule II to IV controlled substance to a patient unless the prescriber was in a bona fide prescriber-patient relationship with the patient, beginning March 31, 2018.
- Require a licensed prescriber who prescribed a controlled substance to provide follow-up care to the patient, and if the licensed prescriber were unable to do so, require him or her to refer the patient to the patient's primary care provider or to another licensed prescriber, depending on the circumstances.
• Allow the Department of Licensing and Regulatory Affairs (LARA) to promulgate rules describing circumstances in which a bona fide prescriber-patient relationship would not be required for the prescription of a Schedule II to V controlled substance.
• Include a violation of the proposed requirements among the grounds for disciplinary action.
• Prescribe disciplinary sanctions, including license revocation, for a violation.
• Status: Bill passed by the Michigan Senate, referred to the Committee on Health Policy in the Michigan House of Representatives.

**Michigan House Bill 4408**

• House Bill 4408 would add a section to the Public Health Code to require a prescriber to discuss certain issues and obtain a signed parental consent form before issuing the first prescription to a minor in a single course of treatment for a controlled substance containing an opioid. The bill would also amend two existing sections to make failure to comply with these requirements a violation punishable by probation, limitation, denial, fine, suspension, revocation, or permanent revocation of the prescriber's license.
• Specifically, the bill would require a prescriber to do both of the following:
  - Discuss the following with a minor and parent/guardian or another adult authorized to consent to the minor’s medical treatment, before issuing the minor the first prescription in a single course of treatment of a controlled substance containing an opioid, regardless of whether the prescriber modifies the dose during the treatment:
    - The risks of addiction and overdose associated with the controlled substance.
    - The increased risk of addiction to a controlled substance for an individual suffering from both mental and substance abuse disorders.
    - The danger of taking a controlled substance containing an opioid with a benzodiazepine, alcohol, or another central nervous system depressant.
  - Obtain the signature of the minor's parent or guardian on a *Start Talking consent* form. Another adult authorized to consent to the minor's medical treatment may also sign the form, but in that case the prescriber may only prescribe up to a single 72-hour supply of the controlled substance. The prescriber must include the signed form in the minor's medical record.
• Status: Bill passed by the Michigan House of Representatives; under consideration by the Michigan Senate Committee on Health Policy.

**Michigan House Bill 4601**

• Limits prescribed opioids to 100 MME daily in the aggregate.
• Limits chronic pain patients to 30-day supply, and acute pain patients to 10-day supply.
• Exceptions for palliative care, cancer, substance use disorder treatment.
• Status: Bill introduced in the Michigan House of Representatives, referred to the Committee on Health Policy.

**U-M Injury Center Recommendations**

• Develop evidence-based safe-opioid prescribing best practices and mandate pain management and safe opioid prescribing CE/CME for all licensed providers (e.g., physicians, dentists, nurses, social workers) regardless of specialty.
• Support implementation of state and/or national (e.g., ACGME) requirements for pain management and safe opioid prescribing education in Michigan's medical schools and medical/surgical residency training programs.
• Support the CDC’s guidelines regarding prescribing practices for *chronic pain management*, including the following guidelines:
Non-opioid therapies should be first line therapy for chronic pain management.
Treatment goals should be established prior to initiating opioid therapy, including realistic goals and expectations for pain management and functioning.
Clinicians should discuss risks and benefits of opioid therapy before initiating treatment, including the risks of overdose and dependence.
When initiating therapy, clinicians should prescribe immediate acting opiate medications instead of extended release or long-acting opiates.
Clinicians should prescribe the lowest effective dose and should avoid increasing dosages to >90 morphine milli-equivalents (MME) daily.
Clinicians should review the benefits and harms of continuing therapy every 3 months or more frequently, and the long-term goals of therapy should include optimizing the therapy overtime by lowering opiate dosages and/or tapering/discontinuing opioids if possible.
Prior to initiation of opioid therapy, physicians should evaluate risk factors for opioid-related harms and include such factors into the pain management plan. This includes considering co-prescribing of naloxone to patients with a history of overdose, history of substance abuse, higher opioid dosages (>50 MME daily), or those receiving co-prescriptions of benzodiazepines.
Prior to long-term opioid therapy, clinicians should review the state PDMP data to determine if the patient has other opioid prescriptions that would increase their risk of overdose. PDMP data should be reviewed every 3 months during long-term therapy.
Clinicians should consider urine drug testing prior to initiating long-term opioid therapy to assess for other prescribed medications and/or illicit drugs. This should be reviewed annually while the patient is receiving chronic pain management.
Clinicians should avoid co-prescribing opioids with benzodiazepines and exercise caution when co-prescribing other potentially sedating medications (e.g., sedative hypnotics, sleep aids, etc.).
For patients who have developed an opioid use disorder, patients should be offered or enrolled in evidence-based treatments, including medication-assisted treatment with buprenorphine or methadone in combination with behavioral therapy.
• Require state licensing organizations (e.g., State Board of Medicine, Michigan Board of Dentistry, etc.) to adopt pain management guidelines parallel to those of the CDC that are tied to licensing and continuing medical education, as well as allow for appropriate enforcement.
• Implement universal acute care guidelines for medical providers regarding prescribing practices for acutely painful conditions. The U-M Injury Center supports the following acute care prescribing guidelines:
  - For patients with acute exacerbations of chronic non-cancer pain (CNCP):
    - Non-opioid therapies should be used as first line therapy
    - Care coordination should be utilized for patients with frequent medical visits
    - Lost/stolen prescriptions should not be replaced
    - For patients with chronic non-cancer pain (CNCP) who are seeking care for an acute pain condition, providers are encouraged to use prescription drug monitoring programs (PDMPs) to screen for doctor shopping and to confirm opioid prescriptions originate with a single provider
  - For patients in methadone maintenance programs, replacement methadone should not be provided in the Emergency Department (ED) or the primary care clinic.
  - For patients presenting with acutely painful conditions:
    - Meperidine (Demerol) should not be used
    - Non-opioid therapies (e.g., acetaminophen, ketorolac) are encouraged as primary or adjunctive treatments
    - Non-pharmacologic therapies (e.g., ice, splinting, physical therapy) should be utilized as appropriate
Utilization of PDMPs is encouraged prior to prescribing opioids

For patients discharged from the Emergency Department or primary care clinic with an opioid prescription for acute pain:
- Long-acting opioids (e.g., Fentanyl, Methadone, OxyContin) should not be prescribed
- Short-acting opioids (e.g., hydrocodone, oxycodone) should be prescribed for no more than three-day courses
- Do not prescribe opioids with other sedative medications (e.g., benzodiazepines)
- Information should be provided about opioid side effects, overdose risks, potential for developing dependence or addiction, avoiding sharing and non-medical use, and safe storage and disposal
- Non-opioid therapies (e.g., acetaminophen, ibuprofen) are encouraged as adjunctive treatments
- Non-pharmacologic therapies (e.g., ice, splinting, physical therapy) should be encouraged as appropriate
- Patients without a primary care physician should be provided a list of primary care sites to encourage a single provider managing care, rather than serial providers
- Consider Naloxone co-prescription for patients who will be receiving greater than 50 milligrams of morphine equivalents per day
PRESCRIPTION DRUG MONITORING PROGRAMS (PDMPs)

Recent trends in Michigan

- Michigan's Automated Prescription System (MAPS) was initially rolled out in 2003 to track Schedule II-V drug prescribing and dispensing, however neither registration nor use prior to prescribing has been mandatory to date. As a result, only approximately 30-35% of eligible providers were registered with the system at the beginning of 2016.
- In April of 2017, Michigan's Department of Licensing and Regulatory Affairs (LARA) upgraded their MAPS platform to Appriss Health's PMP AWARxE and the new MAPS system was rolled out at the beginning of May 2017.
- Michigan’s PDMP allows medical practitioners, pharmacists, law enforcement officers, certain government agencies, and pharmacy benefit plan managers to register online and securely request MAPS data.\(^\text{18}\)
- Currently, all pharmacies and dispensing practitioners who dispense controlled substances are required to electronically report this prescription data to MAPS on a daily basis.\(^\text{20}\)
- Michigan MAPS reported >21 million prescriptions written for controlled substances in 2016.\(^\text{15}\)

Takeaways from Michigan Stakeholder Interviews

2.1 Mandating prescriber PDMP registration and use

- Near-unanimous agreement among stakeholders to automatically register licensees in medicine and pharmacy for the MAPS system as a component of applying for or renewing a state license.
- Several stakeholders supported mandatory PDMP use but strongly recommended that this should be contingent upon the following criteria:
  - Integration of MAPS data into electronic health records (EHRs), focusing on EHRs with the greatest market share (i.e., Cerner, McKesson, and Epic).
  - Development of guidelines or clinical pathways and EHR-based clinical decision rules for evidence-based opioid prescribing to ensure there is a reasonable standard for prescribers to adhere to when using the MAPS program.
  - Integration of a system that would provide rapid, automatic query results in real-time and that does not cause significant delays to physician workflow or add significantly to current provider workloads.

2.2 Empowering licensing boards, law enforcement, and third party payers to investigate high-risk prescribers and dispensers using PDMP data

- Stakeholders identified concerns focusing on potential privacy issues regarding the release of sensitive protected health information (PHI).
- Stakeholders identified concerns that sending information to law enforcement may affect the doctor-patient relationship and/or compromise the ability of physicians to provide optimal care to the patient.

2.3 Providing unsolicited MAPS data as part of an audit-feedback tool to improve opioid prescribing

- Stakeholders were broadly interested in having Michigan's PDMP provide regular unsolicited reports to prescribers with opioid prescribing history, with the disclaimer that it includes peer norms and recommendations about how to use the data constructively to improve practice.
• Stakeholders also identified that while MAPS are in the early stages of developing algorithms to identify high-risk prescribing practices, as well as beginning to refer high-risk patients to addiction treatment, these efforts should be expanded as the new system is implemented.

2.4 Provide access to PDMP data for research purposes

• Public health researchers and other stakeholders were strongly interested in having access to MAPS data in order to facilitate a better understanding of prescribing practices, as well as to support the development of creative solutions to the opioid crisis, with the understanding that adequate safeguards be in place to prevent against inadvertent disclosure of protected health information (PHI). Multiple stakeholders noted that this has been done in several other states and has enhanced the research base for decision making and innovative solutions.

Pending legislation

_Michigan Senate Bills 166 and 167_

• Mandatory MAPS registration and mandatory use and recording of queries about patient use of other controlled substances prior to opioid prescribing.
• Starting in 2020, obtain a PDMP report for all patients prior to prescribing a Schedule II-V controlled substance (first time violations penalized with CME and additional training, repeat violators risk license suspension or revocation).
  ▪ Exception: if the dispensing occurs in a HOSPITAL licensed under Art. 17 AND the controlled substance is for patient's inpatient use.
• **Status:** Both bills passed by the Michigan Senate; under consideration by the Michigan House Health Policy Committee.

_Michigan Senate Bill 47_

• The bill would amend the Public Health Code to delete a provision under which rules promulgated by the Department of Licensing and Regulatory Affairs must exempt from reporting requirements the administration of a controlled substance directly to a patient.
• Instead, under the bill, the following would apply for the purposes of reporting to the electronic monitoring system:
  ▪ The dispensing of a controlled substance in a hospital that administers a controlled substance to an inpatient would be exempt from the reporting requirements, and, as currently required, the dispensing from a health facility or agency of a controlled substance in a quantity adequate to treat a patient for not more than 48 hours would be exempt.
  ▪ A dispensing prescriber would have to report certain data to the electronic system for monitoring Schedule II, III, IV, and V controlled substances if the prescriber dispensed buprenorphine, or a drug containing buprenorphine or methadone, in a substance use disorder program and the patient consented.
• **Status:** Passed by the Michigan Senate; under consideration by the Michigan House Health Policy Committee

_Michigan House Bill 4284_

• Requires Michigan Licensing and Regulatory Affairs (LARA) to revise its system for monitoring controlled substance prescriptions, so as to allow interstate information sharing with other states that have entered an agreement for this and related purposes.
• **Status:** Introduced in the Michigan House of Representatives; under consideration by the Michigan House Health Policy Committee
U-M Injury Center Recommendations

- Mandate automatic PDMP registration when providers apply or renew a Michigan controlled substance license.
- Mandate PDMP use prior to prescribing controlled substances (with exceptions for hospice patients and/or IV/PO administration during an ED visit or during in-patient hospital care).
- Expand incentives for Industry to partner with the state MAPS program to integrate PDMP data into electronic health records in a way that provides rapid access to controlled substance prescription history summaries and limits the impact on physician workflow.
- Unsolicited feedback on prescribing data should be provided to all registered providers on a quarterly basis. Feedback should include information on individual provider prescribing practices relative to other providers in similar specialties, practice populations, and clinical locations. Feedback should include linkages to continuing education on optimal prescribing practices. Consider requirements for providers to certify contents of feedback reports.
- MAPS data should be made available to public health researchers. Efforts at the state level should be undertaken to aid in linking individuals' pre-hospital, hospital, or medical examiner data, criminal justice/law enforcement data, all-payer claims data, and PDMP data to enhance the understanding of the problem, as well as identify policy and public health solutions.
- Engage state and national lawmakers to improve the interconnection of state PDMPs so that clinicians are able to review medications prescribed to patients within neighboring states.
- Electronically scan prescription dispensing information when pharmacists input data into PDMP to minimize entry error and increase turnaround time for data availability to prescribers.
- Generate, validate, and continually audit algorithms for high-risk medication fill patterns (e.g., doctor shopping, overlapping prescriptions, co-prescribing of opioids and benzodiazepines, high-dose prescribing) to be flagged in patient PDMP records.
- Encourage use of PDMP data to refer patients with high-risk opioid prescription patterns to addiction treatment.
PHARMACY BENEFIT MANAGERS (PBMs) and PHARMACIES

Recent trends in Michigan

- The Michigan Prescription Drug and Opioid Abuse Task Force recommended that Michigan look at Washington and Tennessee as possible models for limiting doctor and pharmacy shopping (e.g., by limiting opioids to single provider and dispenser). The Michigan Department of Health and Human Services (MDHHS) conducted a review of the programs in both states and noted that Michigan has similar procedures in place for limiting doctor and pharmacy shopping, as well as similar types of lock-in programs.
  - Lock-in programs are restricted recipient programs that limit an individual to receiving a controlled substance prescription from a single prescriber and a single pharmacy if the prescription will be billed to insurance rather than paid for by cash.
  - Doctor shopping is defined by the CDC as a patient obtaining a controlled substance from multiple health care providers without the prescriber knowing about other prescriptions, and/or a patient who has obtained at least 5 controlled substance prescriptions within the past year.

- Michigan requires that patients produce identification prior to opioid pain reliever (OPR) dispensing, and that Medicaid patients suspected of misusing opioids are required to use a single provider and pharmacy (a.k.a., a "lock-in" program).
- Similar to all states, Michigan has a "doctor shopping law" that prohibits patients from withholding prior prescription information from health care providers.

Takeaways from Michigan Stakeholder Interviews

3.1 Support restricted recipient (lock-in) programs

- Some support among stakeholders interviewed for the expansion of current lock-in programs to apply to non-Medicaid populations.

3.2 Improve monitoring of pharmacies, prescribers and beneficiaries

- Stakeholders signaled strong support for allowing Michigan's Department of Licensing and Regulatory Affairs (LARA) and Michigan law enforcement organizations to use MAPS to investigate pharmacists and providers engaged in high-risk dispensing practices.

3.3 Incentivize electronic prescribing

- Stakeholders indicated strong support for the widespread use of e-prescribing to aid in preventing prescription tampering, but were mixed on whether this should be mandatory for all prescribed opioids.

Pending legislation

Michigan Senate Bill 360

- Allows a pharmacist to dispense additional quantities of a prescription drug up to the amount authorized on an original prescription. However, bill does not apply to controlled substances.
- Status: Passed by the Michigan Senate; referred to the Michigan House Health Policy Committee
Michigan House Bill 4405

- House Bill 4405 would amend the Public Health Code (Proposed MCL 333.17751a) to allow a pharmacist to refuse to dispense a prescription for a controlled substance if the pharmacist has a reasonable and good-faith belief that the prescription was not written in good faith or would not be used for a medical purpose. A pharmacist who does refuse to dispense the prescription will not be held liable for damages in a civil action for injury, death, or loss to person or property arising from that refusal.

- Status: Passed by the Michigan House of Representatives; referred to the Michigan House Health Policy Committee

U-M Injury Center Recommendations

- Implement public policies that expand the use of "lock-in" programs to include both Medicare enrollees and non-governmental insured populations, while examining mechanisms to limit unintended consequences of such programs (e.g., increased out-of-pocket prescription opioid fills to avoid “lock-in” program restrictions).

- Provide resources to support the expansion of electronic prescribing throughout Michigan (e-prescribing) to reduce forgery and fraudulent controlled substance prescriptions.

- Improve hospital, pharmacy, and insurance formulary coverage of non-opioid alternatives for pain management, including non-pharmacologic options to pain management.

- Consider legislation that would support pharmacist discretion on dispensing controlled substances when they have a reasonable and good-faith belief that the prescription was not written by a licensed medical provider and/or the patient is engaging in doctor shopping to obtain additional prescription opioids.
ADDICTION TREATMENT

Recent trends in Michigan

- As one of the states that expanded Medicaid under the Affordable Care Act (ACA), Michigan currently subsidizes substance abuse treatment for eligible patients.
- As of 2012, Michigan's maximum potential buprenorphine treatment capacity was 5.3 per 1000 people ≥12 years of age (as compared to a low of 0.7 in South Dakota, and a high of 13.8 in Vermont), with 77.3% of Michigan's treatment programs at ≥80% of capacity.21
- In 2016, President Obama signed the Comprehensive Addiction and Recovery Act (CARA) and the 21st Century Cures Act into law. These laws provided additional funding for treatment initiatives (e.g., increased access to overdose treatment, increased access to MAT services by providing the opportunity for a physician waiver to treat additional patients, expanding treatment options for mid-level providers), as well as providing funding through SAMSA for individual state targeted responses (STR) to the opioid epidemic. Michigan is currently the recipient of a two-year STR grant ($16 million/year) to address the opioid crisis.

Table 2. State Targeted Response (STR) to Opioid Crisis: Summary of Michigan Initiatives

<table>
<thead>
<tr>
<th>Prevention Initiatives</th>
<th>Treatment Initiatives</th>
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<tbody>
<tr>
<td>Statewide Opioid Media Campaign</td>
<td>Funding for statewide training of mental health providers in motivational interviewing</td>
</tr>
<tr>
<td>Training and Expansion of Strengthening Families – Iowa Model</td>
<td>Enhance Medication-Assisted Treatment (MAT) services, including funding for:</td>
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<tr>
<td></td>
<td>- incentivizing MAT rates</td>
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<td></td>
<td>- MAT training peers</td>
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<td>- Peer navigators &amp; recovery coaches</td>
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<td></td>
<td>- Medications: Suboxone and Vivitrol</td>
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<tr>
<td></td>
<td>- Transportation to clinics for dosing</td>
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<td></td>
<td>- Access to psychiatric services</td>
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<tr>
<td></td>
<td>- Additional treatment of medical and psychiatric disorders</td>
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<tr>
<td>Training and Expansion of Community-based Opioid Overdose Prevention (i.e., Utilizing the SAMHSA Opioid Overdose Tool Kit; Project Red)</td>
<td>Expansion of MAT programs to rural areas through the Michigan Opioid Collaborative (U-M Injury Center Initiative)</td>
</tr>
<tr>
<td>PDMP initiative: LARA enhancements to MAPS including: 1) Upgrade software to include NarxCare; and, 2) Conduct study of effectiveness of NarxCare</td>
<td>Funding for Project Assert training and implementation (i.e., Screening for brief intervention and referral to treatment programs in health clinics or EDs)</td>
</tr>
<tr>
<td>Expansion of Michigan Open Program to provide training consultation to primary care physicians, surgeons, oral surgeons, and dentists on proper opioid prescribing</td>
<td>Funding for the Angel Project, which provides funds for Narcan to be available at Michigan State Police Posts for overdose prevention</td>
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<tr>
<td>Tribal Overdose Prevention Project</td>
<td>Funds for the Native American Access to Recovery Project</td>
</tr>
<tr>
<td></td>
<td>Funds for the MISSION Project – Providing peer recovery support services and MAT to offenders in prison and offenders re-entering the community</td>
</tr>
</tbody>
</table>
Substance use treatment that is covered by Medicaid would potentially be reduced by recent legislation under consideration in the U.S. Congress (e.g., Better Care Reconciliation Act) to rollback several provisions of the Affordable Care Act (ACA). Such legislation would potentially repeal provisions that included mediation-assisted treatment (MAT) as an essential health benefit covered by insurance.

The Michigan Department of Health and Human Services (MDHHS), through the Behavioral Health and Developmental Disabilities Administration, established a workforce development workgroup to create a plan for increasing the substance use disorder prevention and treatment specialist workforce within Michigan.

**Takeaways from Michigan Stakeholder Interviews**

**4.1 Expansion of medication-assisted therapy (MAT) programs**

- Broad agreement among interviewed stakeholders that medication-assisted therapy with methadone or buprenorphine is the most effective current treatment option available for opioid use disorders.
- Broad agreement among interviewed stakeholders that all Michigan insurers should be required to cover medication-assisted therapy (MAT) services on par with medical services.
- Several stakeholders recommended expanding the availability of substance use disorder counseling through the use of telemedicine and/or other pilot programs in order to increase the reach of addiction specialists.
- Several stakeholders recommended coordination of care across medical disciplines, capitalizing on the use of addiction specialists for most severe cases and/or initiating the therapy, followed by primary care providers treating lower severity cases and/or continuing treatment after the patient has made sufficient progress.
- The August 2016 amendment to the DATA 2000 law allows physicians to prescribe up to 275 patients/year with a waiver if they have additional credentialing in addiction or work in a qualified practice setting providing comprehensive MAT treatment. Stakeholders felt that the state should provide the funding to pay for these physician waivers.

**4.2 Expansion of harm reduction modalities**

- Multiple stakeholders advocated for improved access to services such as needle exchange and supervised injection sites (e.g., the Vancouver model).

**Pending legislation**

*Michigan Senate Bill 273*
- Requires physicians to provide information on substance use disorder services to patients being treated for opioid-related overdoses.
- **Status:** Bill passed by the Michigan Senate; under consideration by the Michigan House Health Policy Committee.

*Michigan House Bill 4403*
- Provides for inpatient opioid abuse services as a covered benefit under Medicaid.
- **Status:** Bill passed by the Michigan House of Representatives; under consideration by the Michigan Senate Committee on Health Policy.
U-M Injury Center Recommendations

- Provide additional funding to address barriers to medication-assisted treatment (MAT) for patients with opioid addiction, including increasing incentives to primary care physicians that provide MAT services (e.g., bundled re-imbursement of services that allow clinic staff to perform several necessary and time-intensive components of MAT services [e.g., urine drug screens, monitoring] in concert with addiction care specialists).
- Consider state-level reimbursement for behavioral health counselors to be available on-site at community mental health sites and strategically located primary care sites that provide MAT services.
- Provide additional funding to pay for physician buprenorphine training to increase the number of patients who have access to licensed providers.
- Provide additional funding for physician buprenorphine waivers to allow individual providers to increase the number of patients that they can treat in a single practice setting.
- Reinforce the need at the state and national level for policies that continue to include medication-assisted treatment (MAT) as an essential health benefit covered by health insurance and/or Medicaid.
- Consider greater state-level enforcement of mental health parity laws (i.e., Mental Health Parity and Addiction Equity Act and the extensions provided under the Affordable Care Act) to ensure that all health care plans are covering behavioral health services on par with medical services. For example, address prior authorization policies of health insurance companies and/or Medicaid that limit or restrict coverage of the three FDA approved medications used in MAT treatment (i.e., methadone, suboxone, injectable naltrexone).
- Expand the capacity for opioid addiction treatment in underserved settings, such as prison and jails, including access to behavioral therapy and MAT.
- Expand funding (beyond the STR initiative) aimed at improving access to MAT treatment options in communities that do not currently have local treatment options.
- Consider telemedicine approaches, and subsequent necessary policies for reimbursement, that increase reach of addiction treatment specialist to underserved communities.
- Encourage clinicians and providers to provide information on substance use disorder services to patients who are being treated or recently received treatment for an opioid-related overdose.
- Encourage healthcare provider training in addiction and medication-assisted therapy (MAT), including through medical schools and continuing medical education requirements of licensed providers.
COMMUNITY-BASED PREVENTION STRATEGIES

Recent trends in Michigan

- A number of community-based programs are working to address problems around prescription drug misuse, abuse and overdose in Michigan.\textsuperscript{22-28}
- The Community Health Awareness Group works to reduce the number of accidental heroin-related overdoses, increase access to drug treatment, and serve the community at-large by reducing the number of publicly discarded needles and syringes.\textsuperscript{22}
- The Harm Reduction program provides free overdose prevention information and services to avoid/fight dependence/addiction and aims to campaign and to create policies that will address the existing disparities in the provision of health care and basic human services for drug users and their communities.\textsuperscript{23}
- The Prevention Network program trains and educates members in the community and organizations on substance-abuse.\textsuperscript{24}
- The Project Lazarus (Wake Up Livingston) program provides training and technical assistance to communities and clinicians addressing prescription medication issues, uses data to understand substance abuse, and creates intervention programs that help individuals with a history of substance abuse.\textsuperscript{25}
- Spartan grocery stores created a program where pharmacists educate customers on safe opioid medication use, and provides individuals with an overdose reversal kit and instructions on proper use.\textsuperscript{26}
- The Red Project\textsuperscript{27} and Wellness Services, Inc.\textsuperscript{28} provides needle exchange and naloxone services.

Takeaways from Michigan Stakeholder Interviews

5.1 Provide clear and consistent guidance on safe storage of prescription drugs

- Stakeholders identified strategies important to improving safety of opioid storage and disposal, including:
  - Public educational campaigns should be delivered on safe storage and disposal of opiates.
  - Education of patients should be provided on safe storage (i.e., lock and key/direct supervision) of opioid medications in the household when they receive a prescription.
  - Product labeling (notification stickers) on safe storage and disposal should be considered as standard for all opioid prescriptions that are filled at a pharmacy.
  - Educational materials (e.g., pamphlets) to be provided alongside prescriptions and/or as part of a public health campaign.
  - Educational materials/guidance for providers on how to counsel patients should be provided from the Michigan Department of Health and Human Services (MDHHS) and should be distributed at PCP offices and pharmacies.

5.2 Develop clear and consistent guidance on safe disposal of prescription drugs; expand access to take-back programs

- Strong support among stakeholders that prescription drug take-back programs are one vital component to reducing harms from prescription opioids and should be coordinated within Michigan to raise awareness and efficacy.
  - Stakeholders felt that prescription drug takeback programs should be integrated into healthcare systems at multiple potential points of contact.
Stakeholders noted that current programs should be expanded; possible areas of expansion that were recommended by stakeholders included EDs, fire stations, and post-operative surgery visits (DEA-registered sites).

Stakeholders identified the importance of avoiding placing take-back programs at or near police stations to avoid criminalizing behavior.

Stakeholders noted that take-back programs should be regularly scheduled, centralized, and well promoted (e.g., highly visualized campaigns in pharmacies where patients would identify opportunities for safe disposal on regular basis).

- Stakeholders noted that the public at large should be informed about appropriate drug disposal and the reason for disposal through public health campaigns and counseling, and identified several possible options for increasing safe disposal, including:
  - Pharmacies offering kits to dispose of medications at home.
  - Providing patients at the point of distribution of the medications (i.e., pharmacy) with a list of facilities that can safely dispose of the medications.
  - Public service announcements and opinion-editorials by notable public health and medical leaders.

**Pending legislation**

**Michigan Senate Bill 272**

- Requirement for a patient or the patient's representative to sign a form when being prescribed opioids indicating that the patient has received information on the danger of opioid addiction, how to properly dispose of expired, unwanted or unused controlled substances.
- **Status:** Bill introduced in the Michigan Senate; referred to the Senate Committee on Health Policy.

**Michigan Senate Bill 460**

- To make it a criminal act to give someone a Schedule I or II illegal drug other than marijuana if it is a cause of a serious injury, subject to two years in prison, and up to 10 years for a third or subsequent violation.
- **Status:** Introduced in the Michigan Senate; referred to the Judiciary Committee.

**Michigan Senate Bill 236**

- Require the Opioid Abuse Commission to develop or adopt recommendations for the instruction of pupils on prescription opioid drug abuse, and make them available to the Michigan Department of Education by January 1, 2018.
- **Status:** Introduced in the Michigan Senate; referred to Committee on Health Policy.

**Michigan Senate Bill 237**

- Directs local school boards and the boards of public school academies to include education related to the opioid abuse as part of health education requirement.
- **Status:** Introduced in the Michigan Senate; Referred to Committee on Health Policy.

**Michigan House Bill 4406**

- House Bill 4406 would add a section to the Public Health Code (proposed MCL 333.7113a), which would require the Prescription Drug and Opioid Abuse Commission to develop and provide recommendations for the instruction of students on prescription opioid drug abuse to the Michigan Department of Education (MDE) by January 1, 2018. These must include recommendations for instruction on the prescription drug epidemic and the connection.
between prescription drug epidemic and the connection between prescription opioid drug abuse and addiction to other drugs.

- **Status**: Bill passed by the Michigan House of Representatives; under consideration by the Michigan Senate Committee on Health Policy.

**Michigan House Bill 4407**

- House Bill 4407 would add a section to the Revised School Code that would require the Michigan Department of Education (MDE) to make available to school districts and public school academies (PSAs, or charter schools) a model program of instruction on prescription opioid drug abuse no later than July 1, 2018. This program must at least include instruction on the prescription drug epidemic and the connection between prescription opioid abuse and addiction to other drugs. Additionally, the MDE must ensure that the state’s Model Core Curriculum content standards and subject area content expectations and guidelines for health education include instruction on prescription opioid drug abuse.

- **Status**: Bill passed by the Michigan House of Representatives; under consideration by the Michigan Senate Committee on Health Policy.

**U-M Injury Center Recommendations**

- Support greater awareness of the risks of prescription opioid abuse through broader education of adolescents within the health education curriculum.
- Develop and promote safe, secure medication disposal facilities in non-law enforcement-associated sites (e.g., 24-hour pharmacies) and integrate take-back programs into the provision of acute care (for example, take-back programs at post-operative follow-up appointments or emergency department wound check visits).
- Support greater public awareness and knowledge of on-going take-back programs in Michigan (Figure 7).
- Mandate that all opioids be dispensed with both warning labels about risks of addiction and overdose, as well as instructions on safe storage and options for safe disposal (including proprietary home disposal kits).

**Figure 7.** Google Searchable Map of all Take-Back Program locations in Michigan.

Interactive Map available at Michigan-OPEN Website: [http://michigan-open.org/takebackmap](http://michigan-open.org/takebackmap)
OVERDOSE EDUCATION AND NALOXONE DISTRIBUTION PROGRAMS

Recent trends in Michigan

- Governor Rick Snyder signed the "Naloxone Law" in 2014 (Public Acts 311, 312, 313, and 314) that required all EMS agencies to carry naloxone and use it in cases of suspected opioid overdose.\(^1\)
- In 2016, Governor Snyder signed Public Acts 307-308, which expanded Good Samaritan laws to those responding to a drug overdose.\(^2\)
- In May 2017, Governor Snyder authorized the Michigan Department of Health and Human Services (MDHHS) to issue a standing order that allows pharmacies to dispense naloxone to at-risk individuals and their families.\(^3\) Multiple pharmacies (857 in total) across the state are currently participating in this program to increase naloxone availability.

Figure 8. Number and location of community overdose prevention programs providing naloxone to laypersons (June 2014) and age-adjusted rates of drug overdose deaths per 100,000 (2013).


Takeaways from Michigan Stakeholder Interviews

6.1 Partner with product developers to design naloxone formulations that are easier to use by nonmedical personnel and less costly to deliver

- Intranasal naloxone is believed to be the most effective and cost-effective for the administration of naloxone by bystanders according to the stakeholders interviewed.
- Most stakeholders recommended making naloxone available to first responders, police, fire officials, schools and universities that may have trained public safety and nursing providers, who could administer naloxone in overdose cases.

6.2 Partner with community-based overdose education and naloxone distribution programs to identify stable funding sources to ensure program sustainability

- Stakeholders identified potential OEND sponsors, including pharmaceutical companies, substance abuse block grants, CURES Act Grants, SAMHSA funding, and private foundations.
6.3 Engage with the healthcare professional community to advance consensus guidelines on the co-prescription of naloxone with prescription opioids

- Majority support among interviewed stakeholders for naloxone to be co-prescribed with opioids for at-risk patients (including the ED setting), but stakeholders also recommended that clear guidelines be developed about which populations of patients are most appropriate, what type of prescriptions should be provided, and the duration of prescription regimens, etc.
- Among interviewed stakeholders, there was more limited support for naloxone availability in public places (i.e., restaurants, bars, schools, nightclubs, airports) or access by patients over the counter (OTC) without a prescription; concerns about this approach included both the expense and implementation logistics of wider availability.

Pending legislation

*Michigan Senate Bill 274*

- Allows providers to prescribe naloxone to individuals at risk for an opioid overdose, and their family, friends, and acquaintances.
- Allows providers to prescribe naloxone to school boards.
- Requires naloxone be prescribed to all patients receiving ≥ 50 MME/day and being at-risk for overdose.
- *Status:* Bill passed by the Michigan Senate; under consideration by the Michigan House Health Policy Committee.

U-M Injury Center Recommendations

- Encourage additional pharmacies to make intranasal naloxone available over-the-counter (OTC) to expand access to naloxone for overdose prevention.
- Recommend that patients discharged from the Emergency Department after treatment for an opioid overdose be provided with an overdose (naloxone) kit and instructions for families or acquaintances. Recommend that all individuals who are administered naloxone also receive a referral to an addiction treatment program that provides MAT and behavioral health services.
- Support pilot programs for publicly available naloxone (analogous to Automated External Defibrillators [AEDs]) in places where overdoses frequently occur (e.g., public and fast food restaurant restrooms, libraries).
- Continue to conduct public health campaigns that expand general awareness regarding the new laws that limit civil liabilities for bystander administration of naloxone and possibilities of statutory immunity for low-level offences discovered during bystander reporting of an overdose and while seeking medical assistance.
SURVEILLANCE

Recent trends in Michigan

- The Washington/Baltimore High Intensity Drug Trafficking Area (HIDTA), with support from the Office of National Drug Control Policy, launched its real-time overdose mapping smartphone application known as ODMap in January 2017, allowing first responders (e.g., EMS providers) to report overdose events that are the geocoded to map data in real-time. This aids in identification of potential overdose hotspots.
- The System for Opioid Overdose Surveillance (S.O.S.) is a collaborative effort of the Michigan High Intensity Trafficking Areas (HIDTA), the CDC-funded U-M Injury Center, and the U-M Acute Care Research Unit (ACRU) to collect and link EMS, emergency department, and medical examiner office data for real-time surveillance of fatal and non-fatal opioid overdoses in Michigan. The program is in process of scaling up to a fully operational real-time opioid overdose surveillance of all Michigan HIDTA hotspots, with plans for statewide expansion as funding permits.

Takeaways from Michigan Stakeholder Interviews

7.1 Develop and invest in real-time surveillance of overdose events

Stakeholder suggestions included the following:
- Need real-time hospital-based surveillance of fatal overdoses and near-fatal overdoses is urgently needed throughout Michigan.
  - Currently, medical examiner data is collected using a decentralized process and there is no tracking of ED admissions for overdoses. Stakeholders recommended that the surveillance system that is developed should have the ability to more rapidly obtain medical examiner data and should incorporate overdose data in a centralized real-time system similar to processes currently in place to collect near real-time motor vehicle crash data.

Pending legislation

N/A; None Pending

U-M Injury Center Recommendations

- Expand funding for the development and implementation of high-quality surveillance systems for identifying fatal and non-fatal overdose events.
- Improved information sharing of de-identified data between local law enforcement and public health via surveillance systems is needed.
THE PRESCRIPTION OPIOID EPIDEMIC IN MICHIGAN

EVIDENCE, EXPERTISE, & RECOMMENDATIONS FOR ACTION

PREPARED BY

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