Policy and Program Recommendations to Reduce Overdose Deaths in Rural Iowa

FEBRUARY 10, 2020
Stakeholders

The following participated in the stakeholder meeting on September 23rd, 2019 in Des Moines, Iowa.

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Executive Summary

The opioid epidemic continues to devastate the United States through increasingly dangerous variations and combinations of drugs. In Iowa, a state of over three million people, there were 137 overdose deaths involving opioids in 2018. While Iowa’s opioid-related overdose death totals remain lower than the national average, there is growing concern that the rurality of the state could contribute to future increases in opioid involved deaths. Between 1999 and 2016, opioid mortality rates in rural counties in the U.S. increased by 740%. In the rural Midwest specifically, the rate increased 1600%. Rural states, such as Iowa, face unique challenges in the opioid epidemic that include a lack of physicians trained to provide medication assisted treatment, increased distances to treatment clinics, higher rates of manual labor jobs, and less social support.

The University of Iowa Injury Prevention Research Center (UI IPRC) examined how Iowa’s policies and programs compared to evidenced-based recommendations for addressing the opioid epidemic presented in the Johns Hopkins University 2017 report America’s Opioid Epidemic: From Evidence to Impact. The UI IPRC presented the recommendations, along with Iowa’s current policies and programs, to stakeholders in the state via a stakeholder meeting in September 2019. During the meeting, stakeholders identified priorities to address overdose concerns. Through a follow-up online survey, the stakeholders then identified the top five priorities for addressing overdose concerns in the state.

Top five stakeholder priorities:

- **Develop treatment and recovery programs** that take a holistic approach to helping those with substance use disorders by providing housing resources, counseling services, and job placement or retention programs.
- **Develop timely communication networks** between stakeholders (e.g. pharmacies, service providers, law enforcement, employers).
- **Consider polysubstance drug use** in surveillance, prevention, and treatment efforts.
- **Provide funding for naloxone access and distribution**.
- **Develop and implement a public education campaign** with the goal of decreasing the stigma associated with substance use disorders.

This report builds upon a previous successful UI IPRC project funded by the Centers for Disease Control and Prevention (CDC). In 2017, the UI IPRC gathered Iowa stakeholders to identify policy and program priorities to address prescription opioid concerns in Iowa using recommendations from the 2015 Johns Hopkins University report The Prescription Opioid Epidemic: An Evidence-Based Approach. The culmination of these efforts was a UI IPRC report available at https://iprc.public-health.uiowa.edu/resources/reports/. This report highlighted five stakeholder priorities around improving prescriber education, strengthening surveillance, reducing barriers to Iowa’s Prescription Monitoring Program (PMP) and increasing insurance coverage for opioid use disorder treatment. These priorities were published in an op-ed in seven newspapers across Iowa. Stakeholder priorities were also presented to a state legislative committee tasked to evaluate the opioid issue in Iowa and make recommendations to Iowa Governor Kim Reynolds. In May 2018, the governor signed the “Opioid Bill” (HF 2377) that mandated prescriber use of the Prescription Monitoring Program, strengthened prescriber education requirements on prescribing for chronic pain, and included a Good Samaritan Law.
Trends in Iowa

**Drug Death Rates Are Increasing.** Heroin, psychostimulants including methamphetamine and amphetamines, other opioids such as prescription opioids, and other synthetic narcotics such as fentanyl are contributing to increases in poisoning death rates in Iowa. While death rates by all drug types have increased, none are as drastic as the increase in psychostimulant rates. In 2009, psychostimulants caused approximately one death per 100,000 people in Iowa, and by 2017 the rate more than quadrupled to 4.6.

**Synthetic Narcotic Use Is Increasing in Iowa.** Fentanyl is a synthetic short acting opioid that is 50-100 times more potent than morphine. Most of the fentanyl-related morbidity and mortality stems from illicit non-pharmaceutical fentanyl. Iowa’s Department of Public Safety Criminalistics Lab (DCI) reported 34 fentanyl cases and 144 cases of fentanyl mixed with heroin in 2018 among instances of illicit drugs identified in drug seizures. DCI also reported 55 cases of fentanyl mixed with non-pharmaceutical or other synthetic opioids, which increased significantly from the three reported cases in 2014. Carfentanil, a synthetic opioid 100 times more potent than fentanyl, was also reported in three cases.

**Urban Counties Have More Deaths Than Rural Counties.** Drug overdose deaths involving opioids are more prevalent in urban counties in Iowa. According to Iowa Death Certificate Records from 2009-2018, 73% of all opioid-related overdose deaths in Iowa occurred in urban counties, in which 64% of the population resides. The four urban counties with the highest number of deaths during this time span were Johnson, Linn, Scott, and Polk counties.

**Young Adult and Middle Age Groups Are at an Increased Risk of an Opioid-Related Overdose.** According to Iowa Death Certificate Records from 2009-2018, adults 25-54 years old made up approximately 71% of all opioid-related deaths in Iowa. During this same time span, adults ages 25-54 had more than double the opioid-related drug overdose death rates as compared to those 15-24 and 55-64 years of age.

**Males Experience Higher Opioid-Related Deaths than Females.** Drug overdose deaths involving opioids are more prevalent among males in Iowa. According to Iowa Death Certificate Records from 2009-2018, males experienced approximately 58% of all opioid-related drug overdose deaths in the state.

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**Figure 1.** Age adjusted poisoning death rates, by drug type and year, Iowa Death Certificate Records 2008-2017

**Age-Adjusted Death Rates by Drug Type and Year in Iowa**

- Psychostimulants (including methamphetamines)
- Other Synthetic Narcotics (including fentanyl)
- Other Opioids (including prescription opioids)
- Heroin

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PRESCRIPTION PRESCRIBING PRACTICES
The number of schedule II, III, and IV* prescriptions filled in Iowa decreased from 4.71 million in 2017 to 4.65 million in 2018.\(^8,10\) This decrease may be partially attributed to the 2018 Iowa law (HF 2377) requiring prescribers to review the patient’s prescription drug history in the Prescription Monitoring Program (PMP) before prescribing opioids. The decrease may also be due to changes in prescribing practices and heightened patient awareness of the potential for opioid addiction and overdose. The number of PMP queries by prescribers increased from 447,476 in 2017 to 1,669,922 in 2018.\(^8,10\)

HIGH NUMBERS OF OPIOID PRESCRIPTIONS ARE FILLED IN BOTH RURAL AND URBAN AREAS OF IOWA.
Appanoose, Montgomery, and Union Counties (all rural counties) had the highest numbers of opioid prescriptions filled per county resident from 2014 – 2018, which may be driven in part by the slightly larger percentage of older adults in rural counties. Each of these three counties had an average population of less than 12,000 people across the last five years. Counties in the Southwest part of Iowa, including Montgomery and Union Counties, had the highest numbers of opioid prescriptions filled per county resident. Generally, urban counties in the state had lower numbers of opioid prescriptions filled per county resident with the exception of Guthrie, Madison, Pottawattamie, Mills and Harrison counties.
On September 23rd, 2019, over 30 people gathered for a stakeholder meeting in Des Moines to identify priorities to address rural overdose concerns in Iowa. The UI IPRC Associate Director Carri Casteel led the meeting to discuss evidence-based recommendations for reducing the opioid epidemic. These recommendations were developed by a consortium of experts coordinated by the Johns Hopkins Bloomberg School of Public Health and the Clinton Foundation, Clinton Health Matters Initiative in 2017 and are highlighted in the Johns Hopkins Bloomberg School of Public Health report *America’s Opioid Epidemic: From Evidence to Impact.* The ten recommendations for action in the report included optimizing prescription drug monitoring programs; standardizing clinical guidelines; engaging pharmacy benefits managers and pharmacies; implementing innovative engineering strategies; engaging patients and the general public; improving surveillance; treating opioid use disorders; improving naloxone access and use; expanding harm reduction strategies; and combating stigma.

These recommendations for action were reviewed during the September 2019 meeting and compared to policies and programs underway in Iowa with the goal of identifying priorities in addressing Iowa’s overdose issues. Those participating in the stakeholder meeting represented public health, emergency medicine, law enforcement, insurance agencies, the lived experience, pharmacy, harm reduction, farming groups, legislative staff, psychiatry, nursing, treatment, poison control, emergency medical service, and more. An inventory of Iowa’s opioid policies and programs is available at https://iprc.public-health.uiowa.edu/resources/policy/. Twenty-three priorities were identified at the meeting and included in an online survey that UI IPRC then emailed to participating stakeholders. The survey asked stakeholders to identify their top five priorities and/or contribute new priorities. The UI IPRC also sent the survey to additional invited stakeholders who were unable to attend the stakeholder meeting.
BACKGROUND
Access to treatment for opioid use disorders (OUD) has grown significantly in Iowa during the last few years especially with increases in federal funding for treatment in the state. The most effective method of OUD treatment, medication assisted treatment (MAT), treats OUD with medication and behavioral therapies. However, there is growing concern among Iowa stakeholders that while MAT for OUD can help with immediate treatment needs, it may not be enough to sustain recovery. After treatment, individuals are often left with the same fundamental issues that may have led them to misusing substances in the first place, such as housing needs or unemployment.

IOWA’S CURRENT TREATMENT OPTIONS
According to the Substance Abuse and Mental Health Services Administration (SAMHSA), there are over 150 registered practitioners in Iowa authorized to treat opioid dependence with the medication buprenorphine. However, SAMSHA only has data on the practitioners who give consent for their information to be documented on the SAMSHA practitioner locator webpage. It is estimated that there are another 80 prescribers in Iowa with buprenorphine waivers who have elected not to have their names listed on the SAMSHA website.

The Iowa Department of Public Health (IDPH) has an Integrated Provider Network (IPN) of providers who provide substance use disorder (SUD) treatment to eligible Iowans. The IPN has 19 different service areas that represent all 99 counties in Iowa. Residents of certain counties may not have services located in their county; however, every county is served by one of the 19 service providers in the network.

RECOVERY COMMUNITY CENTERS
An emerging resource for individuals in recovery from substance use disorders (SUD) are recovery community centers (RCCs). RCCs are free standing centers within a community focused entirely on recovery for individuals with SUDs. These centers serve as a resource for access to recovery coaching, recovery meetings, recovery calls, and resource navigation in the community through housing placement, employment programs, and food services. RCCs serve a crucial role in encouraging supportive relationships among individuals in recovery and helping individuals sustain recovery over time.

Currently, Iowa does not have any RCCs. However, according to Kevin Gabbert, Opioid Initiatives Director at the IDPH, the IDPH will provide State Opioid Response grant funding opportunities to fund up to four RCCs in Iowa starting in November 2019.

“Recovery community centers (RCCs) are important for Iowa because people considering, seeking, or in recovery need a place where they can receive peer-based support. RCCs, as proposed by IDPH, are places that provide recovery supports without the requirement of a specific recovery model, curriculum or philosophy. RCCs are a resource for a population that has been overly stigmatized, and who need a safe, welcoming place to go that is free of judgement and encourages them to explore, build, and support the recovery path that is right for them.”

KEVIN GABBERT, IOWA DEPARTMENT OF PUBLIC HEALTH
BACKGROUND
The opioid epidemic is a multifaceted issue that requires collaborative efforts from various stakeholders including prescribers, treatment providers, law enforcement, emergency medical services, harm reduction organizations, and the public. Communication between these stakeholder groups has proven to be difficult for small communities with fewer resources to efficiently combat the opioid epidemic. Unfortunately, projects and models based around communication in the opioid epidemic are scarce.

Perhaps the most well-known model is Project Lazarus based out of North Carolina. The Project Lazarus model works to promote public awareness and coalition action among different stakeholders in communities by identifying and evaluating the resources communities currently have to address the opioid epidemic. By constantly engaging with the public through different education plans, encouraging safe prescribing practices in hospitals, and preventing diversion of drugs, the Project Lazarus model aims to increase communication efficiency among community members and organizations with the ultimate goal of reducing opioid misuse and overdose.

TOOLKITS AS A COMMUNITY RESOURCE
A simple but effective method for promoting communication between community stakeholders is through the use of a toolkit. Toolkits or toolboxes are internet-based sources that provide a comprehensive overview of resources available for a specific issue locally and nationally. For the opioid epidemic, a toolkit could include resources such as monitoring and surveillance data, local prevention efforts, harm reduction and response information, linkages to treatment providers, and information about existing collaboration networks. Profession specific toolkits can be made for different stakeholders such as treatment providers, pharmacists, and emergency departments. A comprehensive toolkit can also serve as a means of identifying potential gaps in resources available to a community.

CLINTON’S COMMUNICATION STRATEGIES
Clinton, a city in Eastern Iowa (population 25,000) has long struggled with opioid and methamphetamine concerns. On the forefront of combating these concerns through effective communication, Clinton developed a drug misuse response team consisting of law enforcement, emergency medical services, and treatment providers. The team works to improve communication between key stakeholders and makes connections for individuals interested in substance use treatment. It convenes every two weeks to discuss updates about the drug issues occurring in the city while also ensuring the individuals it identifies as having a substance use disorder (SUD) receive treatment. Within six months of implementation, Clinton’s team identified 40 individuals struggling with SUD in Clinton and has offered treatment resources.
BACKGROUND
The opioid epidemic is often described by different “waves.” The first wave is characterized by an increase in opioid prescribing in the 1990s. The second wave began in 2010 when heroin overdose rates began to rapidly increase. The third wave started in 2013 with significant increases in overdoses from synthetic opioids such as fentanyl. Such overdoses have dominated the news and public health efforts in recent years; however, a fourth wave may be emerging. Polysubstance drug use, or using more than one drug at once, is now being described as the core of the next wave of the opioid epidemic in the U.S. The combination of opioids and stimulants, such as methamphetamine and cocaine, is of particular concern. According to the CDC, in 2017 nearly 73% of cocaine and 50% of methamphetamine (psychostimulant) deaths involved the use of an opioid. CDC data also suggests that increases in cocaine involved deaths from 2010 to 2017 were driven primarily by synthetic opioids. However, there are very few research studies that examine the fourth wave of the opioid epidemic at both the state and local levels.

IOWA’S POLYSUBSTANCE DRUG TRENDS
Psychostimulant use including the use of amphetamine and methamphetamine is of growing concern in Iowa. Largely due to methamphetamine, the number of psychostimulant deaths rose from 38 deaths in 2014 to 91 deaths in 2018. Iowans now have greater access to methamphetamine through increased methamphetamine smuggling into the state and lower price points for the drugs. Of the 11,271 treatment admissions in Iowa involving methamphetamine in 2017, only 19% reported no other substance use.

Recent death certificate data indicates that from 2008 – 2017 the percentage of polysubstance overdose deaths in Iowa increased. During this time span, there were 189 cocaine overdose deaths and 573 psychostimulant overdose deaths. More than half (105) of the cocaine overdose deaths involved an opioid. Of the 573 psychostimulant overdose deaths, about one third (182) of the deaths involved an opioid. Iowa treatment admissions data for 2017 indicate that of the 3,634 opioid use admissions, nearly 40% also involved methamphetamine.

Data sources: CDC Wonder, Treatment Episode Data Set: Admissions (TEDS-A), Iowa Death Certificate Records

POLYSUBSTANCE DRUG USE

RECOMMENDATION FROM IOWA STAKEHOLDERS
Consider polysubstance drug use in surveillance, prevention, and treatment efforts.

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NALOXONE ACCESS AND DISTRIBUTION

RECOMMENDATION FROM IOWA STAKEHOLDERS
Provide funding for naloxone access and distribution

BACKGROUND
Naloxone is a medication that prevents opioid overdoses by blocking opioid receptor sites and reversing the adverse effects of an overdose. Naloxone is incredibly effective, but many Iowans who misuse opioids have difficulty obtaining the life-saving drug. Currently, Iowa does not have dedicated state funding for naloxone, leaving many Iowans to rely on harm reduction organizations, pharmacies, law enforcement officers, and other first responders to receive naloxone. However, the Iowa Department of Public Health (IDPH) is using federal funds to provide naloxone to Iowa’s emergency departments, the Department of Public Safety, the Department of Corrections, and the IDPH Bureau of Emergency and Trauma Services (for distribution to emergency medical services providers).20 IDPH funds are also being allocated to law enforcement agencies to equip every interested law enforcement officer in the state with one free naloxone (Narcan nasal) kit.21

NALOXONE ACCESS IN PHARMACIES
In 2016, a standing order was issued allowing Iowa pharmacists to dispense naloxone to an individual or family members of an individual at risk of an opioid-related overdose. As of January 2019, over 25 different pharmacy companies (e.g., Hyvee, CVS) carry and participate in naloxone distribution to the general public.22 However, there are barriers in obtaining naloxone in this way. A standard Narcan (naloxone) nasal spray kit can cost around $150 for two doses. An injectable version of naloxone ranges from $20 to $140.23 People may also be reluctant to obtain naloxone from a local pharmacy due to perceived stigma, fear of judgement, and lengthy wait times.

According to a recent survey, pharmacists may not be a trusted source of naloxone distribution for people who are actively using opioids. Between March 2019 and July 2019, the Iowa Harm Reduction Coalition (IHRC) partnered with the Quad Cities Harm Reduction Coalition to survey 170 individuals using opioids on their preferred routes of access to naloxone. While 68% reported receiving naloxone in the prior six months to the survey, only one participant had accessed naloxone through a pharmacy.

THE IOWA HARM REDUCTION COALITION
IHRC is Iowa’s largest free naloxone distribution program. The organization provides free naloxone kits and training on naloxone use to individuals, families and organizations. As of August 2019, the IHRC has distributed nearly 9,000 naloxone kits and received reports of nearly 2,000 lives saved.

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COMBATING STIGMA

RECOMMENDATION FROM IOWA STAKEHOLDERS
Develop and implement a public education campaign with the goal of decreasing the stigma associated with substance use disorders

BACKGROUND
Substance use disorders (SUD) are often stigmatized within both the general public and health care sector. Stigma against SUD is often reflected through the derogatory language used to describe an individual experiencing a SUD, the reluctance of medical treatment providers to offer services, and the belief that an individual cannot receive medication to be in recovery. The current standard of care for opioid use disorder (OUD), medication assisted treatment (MAT), is often misunderstood and heavily stigmatized due to the misperception that it is only replacing one drug for another. Non-stigmatizing language can emphasize the disease qualities of SUD while humanizing the individuals struggling with the disease.

CHANGING THE NARRATIVE
A simple but effective approach to reducing the stigma associated with SUD is to decrease stigmatizing language. Separating individuals from their disorder through non-stigmatizing language is crucial to promote SUD as a disease which should be treated as such. Non-stigmatizing language can emphasize the disease qualities of SUD while humanizing the individuals struggling with the disease.

DIGITAL STORYTELLING
In 2018, the University of Iowa College of Public Health and School of Journalism and Mass Communication partnered with the Iowa Harm Reduction Coalition (IHRC) to implement a pilot project focused on telling personal stories about substance use through digital storytelling. Digital stories are short videos with narration, photos, and artwork that aim to empower the storyteller. Volunteers, staff, and clients of IHRC work with researchers from the UI College of Public Health and College of Education in StoryCenter workshops that help storytellers develop and create their videos. StoryCenter is an organization that supports communities and individuals through digital storytelling for reflection, education, and social change. These digital storytelling workshops serve as an opportunity for storytellers to provide and receive support and reflect on their personal journey while telling a meaningful story about drug use. The videos developed for this pilot project help humanize people who use drugs and reduce the stigma associated with drug misuse.

Currently, videos from the digital storytelling project can be found at: https://www.iowaharmreductioncoalition.org/the-consequence-of-a-single-story/.
An emerging source of treatment for individuals with substance use disorder (SUD) is the administration of buprenorphine in the emergency department (ED) of hospitals. Buprenorphine treatment in an ED can help fill the gaps of care due to a lack of access to medication assisted treatment (MAT) often experienced by those with a SUD, especially in rural areas of a state. Recently, under the leadership of Dr. Alison Lynch, the University of Iowa Hospitals and Clinics (UIHC) received funding from a SAMHSA grant to implement a buprenorphine administration program in the UIHC ED. An ED physician identifies individuals who have overdosed on opioids or who have a history of an opioid use disorder and discusses a buprenorphine treatment option. With consent from the patient, the ED will start the individual on the medication. The ED also ensures that the individual will have a follow up appointment with a MAT clinic and begin the process of getting insurance to cover the medication. After determining the correct dosage for the patient, the ED will discharge them with a prescription that will ideally cover the individual until they have their follow-up appointment in the MAT clinic.

“Our Emergency Department buprenorphine program offers a shortcut to those interested in treatment for opioid use disorder. People who use drugs already have a lot of hurdles to overcome when trying to access healthcare, especially when it comes to treatment options for substance misuse. Now, instead of waiting days or weeks to get an appointment with a provider that offers buprenorphine, we can start someone when they show up to the ED and streamline follow-up with the UIHC Opioid Addiction Clinic for ongoing care.”

DR. JOSHUA RADKE
UNIVERSITY OF IOWA HOSPITALS AND CLINICS
The University of Iowa Hospitals and Clinics (UIHC) has partnered with the Johnson County Sheriff's Department to provide medication assisted treatment (MAT) to individuals with substance use disorder (SUD) in Johnson County Jail. Often, when individuals with a SUD enter a jail system, they will not have access to the proper medication or therapy needed to prevent severe withdrawal. The Johnson County Jail Recovery Program works to increase MAT access in Eastern Iowa through buprenorphine waiver trainings, coordination of care for MAT patients, and the delivery of MAT services to inmates.

“Treatment for opioid addiction saves lives and has other beneficial effects, such as reducing criminal behaviors. When a person is incarcerated, we don’t prevent them from getting treatment for other medical conditions, like diabetes or high blood pressure, and we shouldn’t prevent them from getting treatment for an opioid addiction. Our project is trying to help more people get access to treatment and stay in treatment, even if they go to jail. Being that the program is in its early stages, we believe it has only scratched the surface of opioid use disorder issues in jail systems. We hope to extend this program to other local jails in order to develop a system to identify individuals at risk of an opioid overdose or substance use disorder and provide access to treatment.”

**DR. ALISON LYNCH**  
**UNIVERSITY OF IOWA HOSPITALS AND CLINICS**

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