Master of Public Health

Integrative Learning Experience Report

OPIOID OVERDOSE CRISIS PREVENTION IN RILEY COUNTY

by

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submitted in partial fulfillment of the requirements for the degree

MASTER OF PUBLIC HEALTH

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Abstract

According to the Centers for Disease Control and Prevention (CDC), since 1999 drug overdose deaths involving opioids have increased nearly six times. In 2018, opioids were involved in almost 47,000 overdose deaths in the United States. Over the past two decades the U.S. has experienced a crisis of opioid addiction and overdose that has escalated at an alarming rate. In recent years the CDC has responded through the implementation of both public awareness and health professional education campaigns. In 2018, the CDC promoted prevention on a local level by awarding grant funds to county health departments under the Opioid Overdose Crisis Response Cooperative Agreement. Riley County was one of the recipients of this grant, and over a nine-month period, myself and my colleagues worked under this agreement to improve opioid addiction awareness and prevent overdose in the community. Our work included the completion of a community needs assessment, regular contact and collaboration with first responders, law enforcement, and healthcare providers, the implementation and assessment of a public awareness ad campaign, promotion of referral to treatment and prescription drug monitoring programs among local healthcare providers, promotion of services for at-risk community members, and providing relevant training sessions to healthcare providers, first responders, and community members. We found that our efforts served as a timely resource for professionals serving citizens in crisis and engaged the community in conversation and awareness of this epidemic.

Subject Keywords: Opioid, health department, addiction, overdose, Riley county, ad campaign

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Chapter 1 - Literature Review

Starting in the 1990's, the United States has suffered a crisis of opioid addiction that has affected people of all ages, backgrounds, and socioeconomic status. From 1999 to 2018, nearly 450,000 overdose deaths involved opioids (WONDER 2020). Throughout this period, there have been three distinct surges in overdose deaths involving three forms of opioids: prescription opioids, heroin, and synthetic opioids. (Figure 1.1)

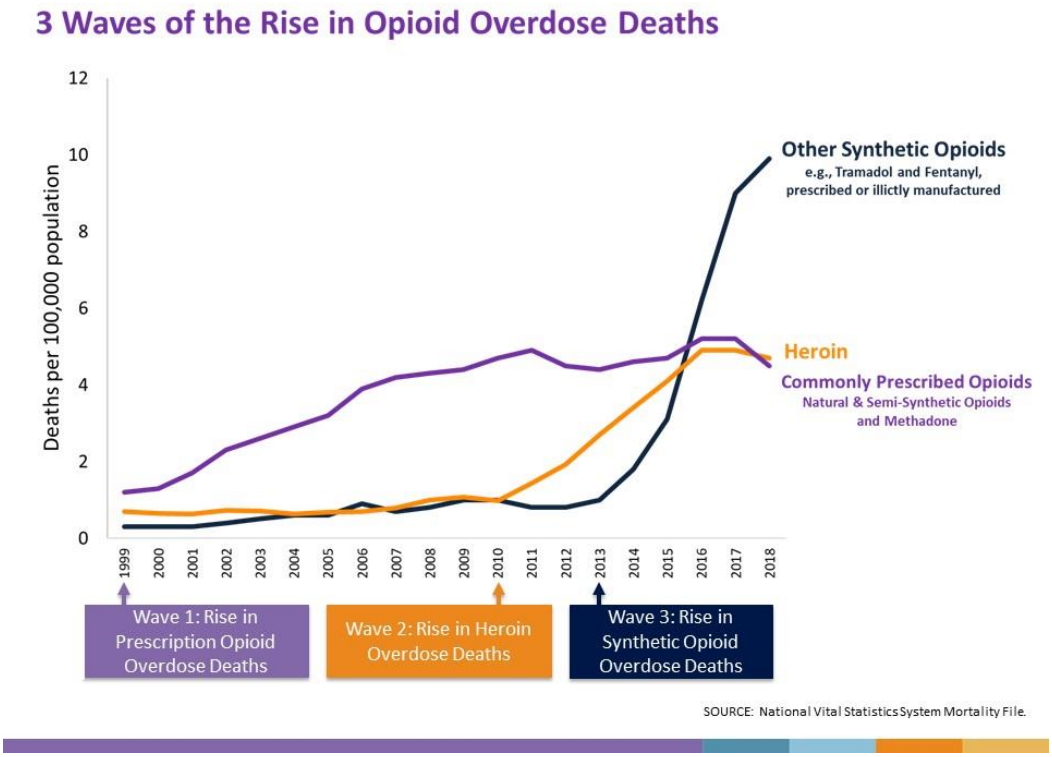

Figure 1.1 The Three Waves of Opioid Overdose Deaths. Source: https://www.cdc.gov/drugoverdose/epidemic/index.html

The first wave involved physician-prescribed opioids, including natural and semi-synthetic opioids and methadone (CDC 2011). Prior to this time opioids were mainly prescribed in cases of terminal illness, but pharmaceutical companies began marketing them as safe and effective for treatment of chronic pain. Opioids were soon being prescribed for all causes of pain and often without monitoring, and opioid addiction rose to the level of an epidemic. As more and more people became heavily addicted to prescription opioids, they came to find heroin to be less cost-prohibitive and more easily obtained, and thus began the second wave of opioid overdose deaths around 2010 (Rudd 2014). As demand increased, new synthetic drugs such as tramadol and fentanyl began to emerge, both through prescription and illicit manufacturing

(O'Donnell 2017). As of 2018, illicitly manufactured fentanyl in particular was attributed to an overwhelming number of overdose deaths, often combined with heroin, cocaine, and/or other counterfeit pills. New combinations continue to appear to this day, often with extreme potential to result in overdose (DEA 2019). In 2018, two out of three drug overdose deaths in the U.S. involved an opioid, amounting to nearly 47,000 deaths (Wilson 2020).

The State of Kansas and Riley County have been affected by the opioid epidemic as well. Riley County is located in Northeast Kansas and contains five cities: Leonardville, Riley, Manhattan, Ogden and Randolph. (Figure 1.2)

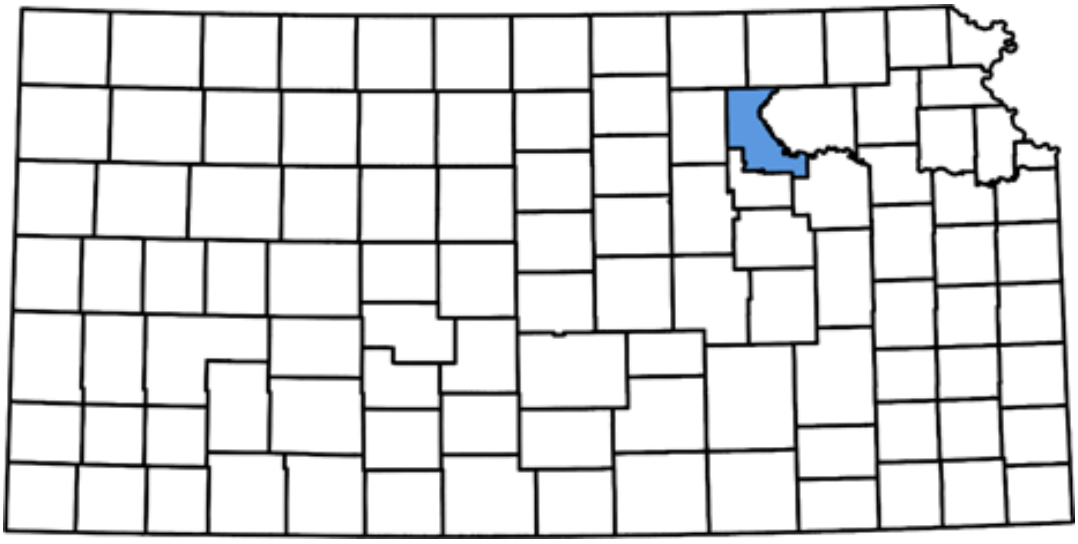

Figure 1.2 Riley County Highlighted on a County Map of Kansas

Riley County has several attributes that make it particularly unique and diverse in population. Kansas State University (KSU) contributes approximately 20,799 students, as of the Spring 2019 semester, to Manhattan's population of nearly 75,000 (KSU Registrar 2019). Popular annual events such as Country Stampede and Fake Patty's Day bring in over 100,000 visitors from across the country each year. The Fort Riley military installation is partially located within Riley County, contributing to a diverse local population. The location of Interstate 70 in proximity to Manhattan and Fort Riley make the area an important transportation hub as well.

As of 2017, Kansas had a higher opioid prescribing rate than the national average, at 69.8 per 100 people compared to 58.7 (NIDA 2019). (Figure 1.3)

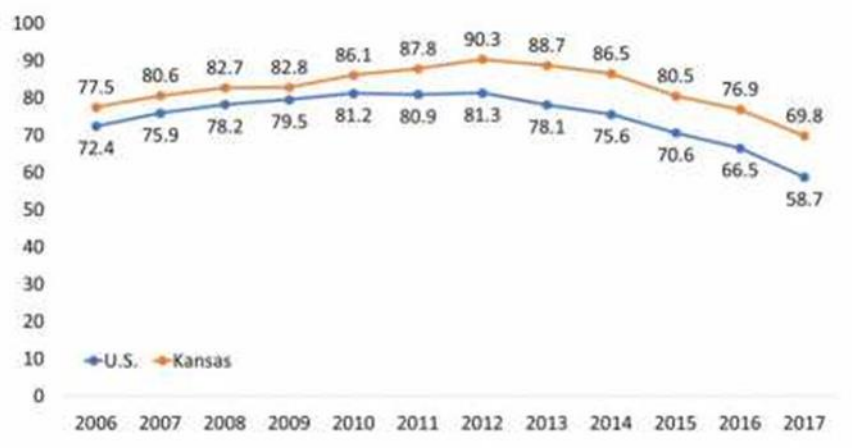

Figure 1.3 The U.S. and Kansas Opioid Prescribing Rate Per 100 Persons

However, drug overdose death rates in Kansas were lower than the national average, at 11.8 per 100,000 versus 21.7. (Figure 1.4)

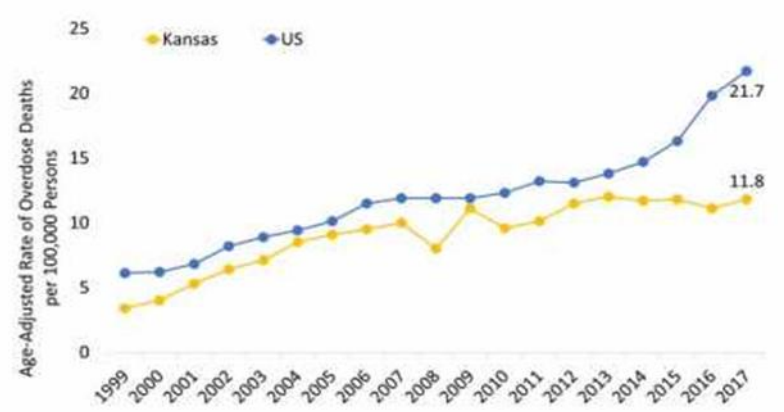

Figure 1.4 Drug Overdose Deaths, Rate Per 100,000 Persons, in the U.S. and Kansas

In 2017, Riley County had the lowest rate of opioid prescriptions in the State of Kansas, at 50.5 per 100 residents (KDHE 2019). (Figure 1.5)

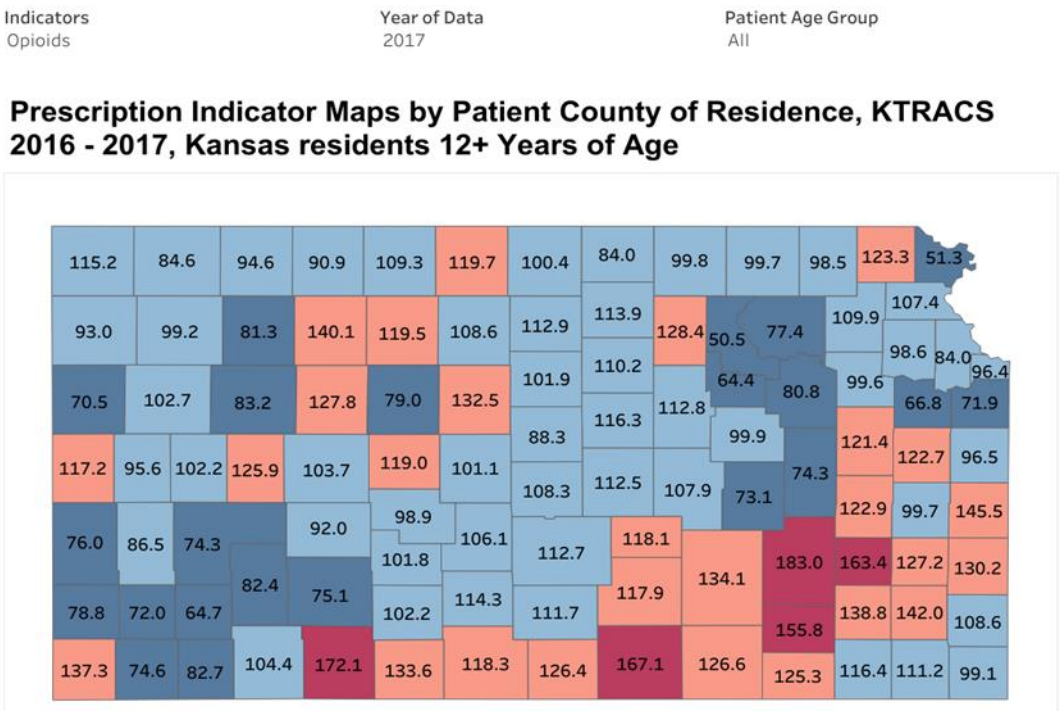

Figure 1.5 Prescription Indicator Maps by Patient County of Residence

Though Riley County had the lowest opioid prescription rate in Kansas, at 32,399 prescriptions and over 50 per 100 people, there is still cause for concern and a need for improvement of safe prescription practices.

It has become clear to the medical community that opioid misuse and addiction has become a major public health crisis, yet many healthcare professionals across the country continue to prescribe opioids irresponsibly. The CDC has been making great efforts to address this crisis by educating both healthcare providers and the public about the dangers of opioid addiction. One way the CDC is initiating change is by awarding grants to local health departments to combat opioid abuse on a community level, catered to the specific needs of each county involved. The Riley County Health Department (RCHD) in Manhattan, Kansas was a recipient of one such grant in December of 2018. The CDC, in collaboration with the Kansas Department of Health and Environment (KDHE), funded Riley County and others across the state under the Opioid Overdose Crisis Response Cooperative Agreement. Recipient counties were to identify the needs of their communities and respond with education and training aimed at the prevention of opioid abuse, misuse, and overdose. This included collaboration with both community leaders and other recipients across the state, keeping continual communication in order to share ideas and learn what was proving to be most effective.

The cooperative agreement identified multiple goals and guidelines for the use of funding. One project involved the development of a high-level community needs assessment regarding opioid abuse, misuse, and overdose in the community in order to identify potential strengths, resources, and areas in need of improvement. Another important use of funds went toward providing a variety of relevant training sessions for healthcare providers, first responders, and community members, including Adverse Childhood Experiences (ACEs), Mental Health First Aid (MHFA), and Screening, Brief Intervention, and Referral to Treatment (SBIRT) informative meetings. Grant recipients were encouraged to promote SBIRT- an evidence-based referral to treatment system aimed at identifying individuals at high risk for substance abuse- among area healthcare providers, as well as the Integrated Referral and Intake System (IRIS), a referral system for community leaders and providers to offer support to members of the community, and the Kansas Prescription Drug Monitoring Program (K-TRACS). Finally, the cooperative agreement allowed funds to support the implementation of a public awareness ad campaign spanning multiple forms of media that educated the public about the dangers of opioid addiction and healthcare providers about responsible prescribing practices.

These projects were carried out from February to October of 2019 at the Riley County Health Department. The RCHD was established in 1952 and strives “to promote and protect the health, safety and well-being of (our) community through prevention, policies, education, and quality services” (RCHD Citation). In addition to opioid overdose prevention and response, the RCHD provides a variety of public health services to the community, some of which include emergency preparedness, maternal and child health, reproductive health, immunizations, childcare licensing, and a community healthcare clinic. Jennifer Green served as the director of the RCHD and as the preceptor of my project throughout its duration. After receiving a master’s and PhD in public health from Baylor University and the University of Oklahoma, Dr. Green worked as the director of the RCHD from August 2016 to November 2019.

Chapter 2 - Learning Objectives and Project Description

Learning objectives from my work with the RCHD include: experiencing the field of public health from the perspective of a health department employee and learning the role of the health department in the community, acquiring education about the history of public health in Kansas, the structure of different levels of state public health organizations, and the policies that govern them, exploring and employing various methods of acquiring public health data, studying recent trends in local, state, and nationwide drug abuse and the factors driving them, identifying areas needing improvement and creating steps to address them in screening, referral, and prevention, studying evidence-based research and incorporating findings into improving community response to the opioid epidemic, collaborating with leaders from all disciplines and backgrounds in order to both understand how perspectives differ and to find common solutions, identifying the source of the problem, both in the local community and in general, and using the knowledge to initiate change, and gaining a deeper understanding of the local community and how social and economic disparities contribute to the issue of opioid addiction. As an employee of the RCHD, I was expected to professionally represent the organization to community leaders in collaboration with them to improve the health of our community. I worked alongside two other interns as a part of a team to fulfill the cooperative agreement requirements in a timely manner, following the timelines given to us and keeping in touch with others under the agreement statewide through the Wichita State University (WSU) Community Engagement Institute. In addition to our funded projects, we were expected to fill out quarterly grant reports.

One of the first major projects my team was expected to complete was a high-level needs assessment of opioid abuse in Riley County, examining demographic statistics but also communicating with a diverse group of community leaders in understanding their experiences with the epidemic and their thoughts about how best to address it in this setting. We were able to compile our local data from the census, the National Institute on Drug Abuse (NIDA), the CDC, the KDHE, K-TRACS, and ESSENCE. RCHD Emergency Preparedness Coordinator Andrew Adams introduced us to ESSENCE, which is a tool created by the U.S. Department of Defense that is used to monitor local health data to identify potential health concerns and epidemics before they rise beyond control. All patients that enter the county emergency facility at Ascension Via Christi Hospital in Manhattan are coded by their diagnoses and related information. ESSENCE allows designated professionals like Adams to search for key terms and obtain relevant community data regarding emergency room visits. He assisted us in searching for drug and opioid-related emergency visits, including demographic data, time and

circumstances, that led us to a better understanding of the current nature of overdose emergencies in Riley County.

A critical component of our needs assessment was frequent and in depth conversation with community leaders in first response, law enforcement, education, and healthcare. At the start of the cooperative agreement we assembled a committee of these individuals who agreed to attend monthly meetings during which we would update them on our work under the agreement and request their input and suggestions. The committee included leaders from the Riley County Police Department (RCPD), Riley County Emergency Medical Services (EMS), Ascension Via Christi Hospital, KSU, Lafene Health Center, Riley County Community Corrections, the Riley County Senior Services Center, and Pawnee Mental Health Services. These community leaders took an active interest in assisting us in fulfilling our goals and provided advice about how to best reach members of the community and healthcare providers.

In addition to the input we received from our community leader meetings, we sought out others in law enforcement, first response, and healthcare and requested to meet with and interview them about their experiences with the opioid epidemic. We engaged in nine such meetings with leaders from the RCPD, EMS, the Via Christi emergency department, Lafene Health Center's Alcohol and Other Drug Education (AODE) office, Community Corrections, Senior Services, Pawnee Mental Health, Bowen Family Dentistry, and Fresh Start Recovery Options, a local outpatient substance abuse rehabilitation facility. The meetings lasted on average from 45 minutes to an hour. We used a set of focus group questions from MassTapp Technical Assistance Partnership for Prevention as a foundation, but were flexible in our line of questioning as conversations progressed. These questions can be found in Appendix 1. The community leaders we interviewed had experienced firsthand how the opioid epidemic was impacting the community and were passionate about helping us get our message out effectively. We obtained a great and diverse collection of experiences, perspectives and ideas from these individuals, which we included in our community needs assessment with their names omitted. A link to the completed needs assessment can be found in Appendix 2.

Another major component of our work under the cooperative agreement was implementing a community-wide public awareness ad campaign. The CDC had a large collection of informative posters, videos, graphics, radio ads, and factsheets available on their website for our use (located at https://www.cdc.gov/rxawareness/index.html). Grant funds allowed us to print these materials and purchase billboards, radio time and Facebook ad space. We printed the materials as designed by the CDC, but included the RCHD logo or radio acknowledgment with every ad. (Figure 2.1)

Figure 2.1 The RCHD Logo Added to All Ad Campaign Materials

Pottawatomie County, which borders Riley County on the east, was also a recipient of the Opioid Overdose Crisis Response Cooperative Agreement. Because of its proximity, we collaborated with the Pottawatomie County Health Department in placing opioid abuse awareness billboards at three different locations for a month each. (Figure 2.2)

Figure 2.2 CDC Opioid Abuse Awareness Ad Used in Billboards and Posters

For the first billboard, we chose a location in downtown Manhattan on 3rd and Humboldt Street near Poyntz Avenue, which contains a lot of businesses, shopping areas, and city buildings. We placed this billboard in April to coincide with Drug Take Back Day- an event held by the RCPD encouraging people to bring unused or expired prescription drugs for safe disposal. This billboard location was determined by the rental company to have a Daily Effective Count (DEC) of 8,330, meaning that it had the potential of approximately 8,330 views per day.

We placed the second billboard on the corner of Tuttle Creek Boulevard and Kimball Avenue- a busy intersection on the northeast corner of Manhattan. We chose this location to coincide with Country Stampede, a popular annual outdoor country music and camping festival. Through the use of ESSENCE we have found that around the time of both Country Stampede and Aggieville's annual Fake Patty's Day there is a great surge in the number of drug overdoses. Community partners in the EMS and Via Christi emergency department claim to see a lot of drugs of all types brought in from out of state during these events. We placed the billboard at this intersection in June because it leads out of town directly to Country Stampede. Unfortunately, due to major citywide flooding the event was moved to Topeka this year. Regardless, this location was reported to have a DEC of 19,390. We placed our final billboard along Highway 24 between Manhattan and Wamego in July. Our strategy for this billboard location was to reach commuters traveling to Wamego's popular annual Fourth of July Fireworks Show. This billboard was in the most frequently viewed location of the three by far, with a DEC of 26,665.

Another important component to our ad campaign was the distribution of posters, handouts, and factsheets to community buildings and healthcare facilities around Manhattan. Our largest posters featured the same design as our billboards and were placed in all community centers and healthcare facilities we were able to identify. Other posters, handouts and factsheets were distributed at healthcare facilities specifically. The posters featured facts and graphics designed by the CDC and targeted either patients in waiting rooms, or physicians, and carried the RCHD logo. (Figures 2.3 & 2.4) These posters and handouts can be viewed in greater detail at the following link: https://www.cdc.gov/drugoverdose/prescribing/clinical-tools.html.

Figure 2.3 CDC Posters Placed in Healthcare Facility Waiting Rooms

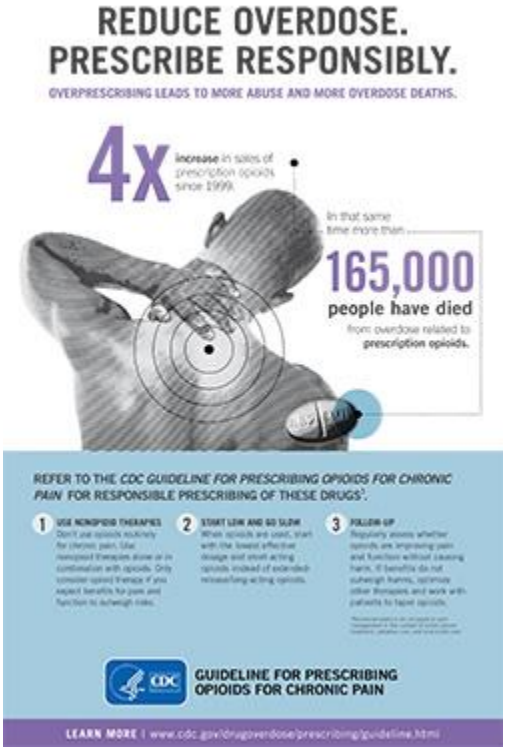

Figure 2.4 CDC Posters for Healthcare Providers

We printed informative factsheets on high quality glossy cardstock for physicians that detailed safe prescribing practices, nonopioid treatments for chronic pain, dosage calculating tips, and prescribing checklists. (Figure 2.5)

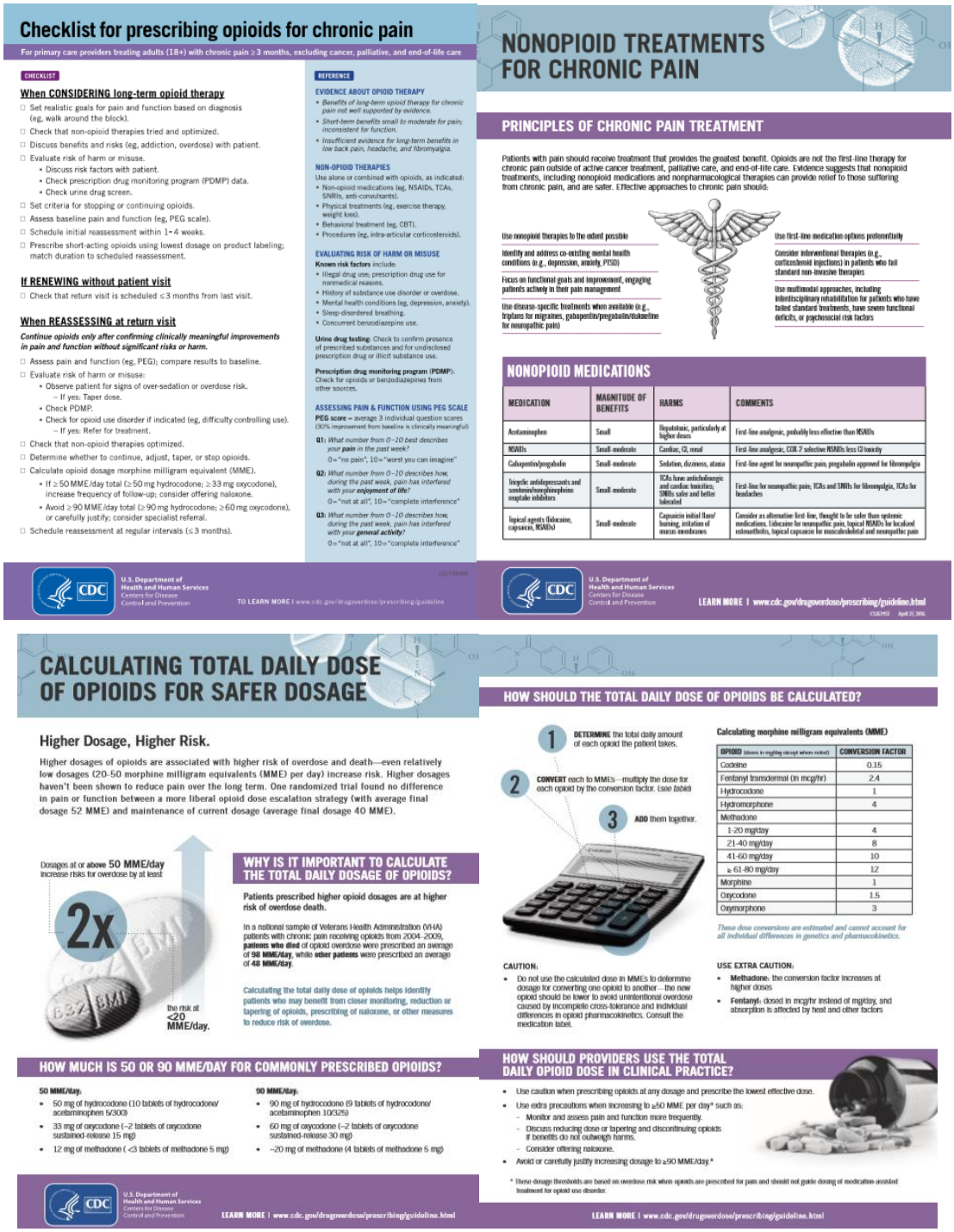

Figure 2.5 CDC Factsheets for Healthcare Providers

It was our intention that physicians would keep these factsheets on their desks as a source of reference and a helpful reminder. The factsheets were a part of packets we assembled for healthcare providers of all fields in Manhattan that we distributed along with the posters. In addition to the factsheets, the packets contained cover letters addressed to each physician, handouts promoting K-TRACS and the CDC Opioid Prescribing Guideline mobile app, and a document describing the referral to treatment program SBIRT. I adapted the SBIRT document for our purposes from one originally created by SBIRT Colorado with their permission. A copy can be found in Appendix 3.

Another use of ad campaign funds went to radio ad time. We used radio ads created by the CDC and available on their website, at https://www.cdc.gov/rxawareness/resources/radio.html. The ads featured real individuals telling stories of their experiences with opioid addiction or those of their loved ones. The ads ran thirty seconds long and included Riley and Pottawatomie County Health Department acknowledgments at the end. We ran the ads in bi-weekly rotations from April to October on the local stations Sunny 102.5 and Z96.3. The TSA Cume, or total number of people estimated to listen to a station for at least five minutes a day, for these stations was 26,800 and 24,000, respectively. We took out additional spots on B104.7, a country music station, around the time of Country Stampede. Its TSA Cume was 17,300, but this was not taking into account the increased number of listeners in the area for the event. The remainder of our ad campaign funds went towards the promotion of Facebook posts of CDC opioid addiction awareness and education videos, located at the following address: https://www.youtube.com/playlist?list=PLvrp9iOILTQYcHqukShtAIqk01FTDGV9m. We alternated two videos in June and July- one an individual's personal story of addiction, and the other an educational video about what opioids are and how they can lead to addiction. Over a thirteen-day period, 6,100 people viewed the posts and 170 clicked on the links to watch the videos.

After six months of running the ad campaign in its various forms, with the help of my preceptor, I developed a survey to gauge the public's reaction to these ads. I asked which types of ads they had seen and for each that they had, what they remembered about it, whether or not they had learned something new from it, whether or not they would be more likely to use opioids as prescribed in the future as a result of it, whether or not it made them more likely to seek treatment for addiction, and whether or not they felt the content of the ad was relevant to them. I allowed space for suggestions for improvement of the ad campaign and for demographic data. The survey can be found in Appendix 4. With the help of the MPH office, I distributed a link to an

online version of the survey to MPH students, and I took paper copies to the RCHD clinic waiting room, the Senior Center, the Via Christi emergency waiting room, and the Riley County Child and Family Resource Center. I left slotted boxes with instructions next to the surveys and returned to gather the completed forms after two weeks. (Figure 2.6)

Figure 2.6 Presentation of Paper Surveys and Collection Boxes

The surveys were available from August 28 to September 27. I analyzed the preliminary results using Excel, and then presented them on a poster at the 2019 Kansas Public Health Association (KPHA) Conference in Topeka on September 25. (Figures 2.7 & 2.8)

Effectiveness of an Awareness Campaign on Opioid Addiction in Riley County

Brittany Blattner, Quentin Courtney, Patty McKenna and Jennifer Green, MPH, PhD

Riley County Health Department, Manhattan, KS

The Opioid Epidemic in Riley County

The 1990s saw the first wave of the opioid epidemic in the U.S. (CDC, 2017). In 2017 in Riley County, there were 32,399 opioid prescriptions, or 50.5 per 100 people- the lowest of all counties in the state of Kansas, which averages 69.8. There were 9,080 opioid patients, or 14.1 per 100 people- the second lowest in Kansas (KDHE, 2019).

The Cooperative Agreement

In December 2018, Riley County was a recipient of the Opioid Overdose Crisis Response Agreement from the Kansas Department of Health and Environment. The purpose is to implement local prevention initiatives for opioid misuse, abuse, dependence, and fatal/non-fatal overdose. A public awareness media campaign about misusing and abusing opioids was implemented as a part of these initiatives.

The Ad Campaign

We implemented the CDC Rx awareness campaign in Riley County from March to September of 2019. Campaign strategies included:

- Billboards (Figure 1)
- Posters
- Handouts
- Radio ads
- Facebook ads

Based on feedback from community partners, we strategically increased radio time and placed billboards during major community events, such as the 4th of July. We chose three different billboard locations- downtown, along a highway leading to the location of the annual Country Stampede, and on the highway from Manhattan to Wamego leading up to the 4th of July annual celebration.

Methods

We distributed a survey, online through Survey Monkey and on paper, to measure public reaction to the ad campaign. For each form of media, the survey asked the following:

- Please write what you remember about the ad.
- Please rate your agreement with each statement:
  1) I learned something new from this ad.
  2) As a result of seeing this ad I will be more likely to use opioids as prescribed by my healthcare provider in the future.
  3) This ad made me more likely to seek treatment for opioid addiction (if relevant).
  4) The content of this ad was relevant to me.

Ratings for the four statements included "completely disagree (CD)", "somewhat disagree (SD)", "somewhat agree (SA)" and "completely agree (CA)." The survey also measured basic demographic information, including gender, age, and ethnicity. The online version of the survey was promoted on the RCHD Facebook page and emailed to students of the Kansas State University Master of Public Health (MPH) Program, members of the Flint Hills Wellness Coalition, and contributors to the grant community partners group. Paper versions were made available at the RCHD, the Riley County Seniors Services Center, and the Via Christi Emergency Department. The survey began on August 27, 2019, and will continue until September 27. Results were recorded and analyzed on Excel.

Figure 1: Image utilized for posters and billboards in ad campaign. Source: CDC

Results

The preliminary analysis of 19 online responses was conducted using Excel. Five respondents saw an ad on Facebook, three heard a radio ad, five saw a billboard, four saw a poster, and two saw a handout (Table 1).

- For the Facebook ads, 57% of respondents somewhat agreed with Statement 1 ("I learned something new from this ad), 50% somewhat agreed with Statement 2 ("As a result of seeing this ad I will be more likely to use opioids as prescribed by my healthcare provider in the future"), and 50% completely disagreed with Statement 4 ("The content of this ad was relevant to me"). Half somewhat agreed and half completely disagreed with Statement 3 ("This ad made me more likely to seek treatment for opioid addiction (if relevant") (Table 2).
- For the radio ads, responses were middle of the road to Statement 1. All respondents completely agreed with Statements 2 and 3, and all disagreed with Statement 4.
- For the billboards, 67% somewhat agreed with Statements 1 and 2, and 75% completely disagreed with Statement 4. Half somewhat agreed and half completely disagreed with Statement 3.
- For the posters, 67% somewhat agreed with Statement 1, all agreed with Statement 2, and 67% somewhat disagreed with Statement 4. Half somewhat agreed and half completely disagreed with Statement 3 (Table 3).
- For the handouts, responses were middle of the road to Statements 1 and 2. Half somewhat agreed and half completely disagreed with Statement 3 (Table 1).

Discussion

Preliminary results indicate a generally positive response from the community to our ad campaign. The only negative responses were to S4. One explanation is that most respondents disagreed with this statement because they did not identify as being addicted to opioids. Most positive responses came to S2, indicating that the ads made people aware of opioid abuse potential and more likely to take care with prescriptions in the future.

Limitations

At the present time the number of respondents to the survey is limited. These are only preliminary results. In addition, recall bias could be a factor, as respondents could have seen an ad from outside our campaign and responded to it rather than ours.

References

Centers for Disease Control and Prevention. (2017). Understanding the Epidemic. Retrieved from https://www.cdc.gov/drugoverdose/epidemic/index.html

Kansas Department of Health and Environment, 2019. The Department of Health and Environment. Retrieved from http://www.preventoverdoseks.org/kpdo_data.html

The ad campaign was developed by the Centers for Disease Control and Prevention and supported by the Grant or Cooperative Agreement Number, 1 NU90TP921961-01-00, funded by the Centers for Disease Control and Prevention.

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Figure 2.7 KPHA Poster About Ad Campaign Effectiveness

Figure 2.8 Poster Presentation at the 2019 KPHA Conference

Another important responsibility we had under the cooperative agreement was providing training sessions for healthcare providers, first responders, and community members. Training topics included Adverse Childhood Experiences (ACEs), Mental Health First Aid (MHFA), and SBIRT and K-TRACS informative meetings. We promoted upcoming meetings throughout the community and to healthcare providers through email, RCHD newsletters, and flyers, and allowed those interested to sign up on EventBrite. We held these meetings from March to October for as many as were interested, in Manhattan and Leonardville. One final project I participated in involved the Community Care Team (CCT)- a multi-agency team of health and social service providers who meet weekly at the RCHD to help community members in need receive access to care and services. My colleagues and I had the opportunity to attend some of these meetings and watch members of EMS, the RCHD, and local healthcare facilities come together to find ways to help those they have repeatedly had contact with on the job. They wanted to promote their services to individuals in the community and asked me to develop brochures to put in the Via Christi emergency department waiting room for individuals who might be interested in getting help or helping someone they know. The CCT offers help in finding

access to healthcare, housing, transportation, nutrition, drug rehabilitation, and social, legal, and financial services. Many of the individuals they were assisting were struggling with opioid addiction, so promoting their services was another good way of countering opioid addiction in the community. A link to the brochure can be found in Appendix 2.

Chapter 3 - Results

Most of our work under the cooperative agreement was focused on listening to and learning from community members and using the information we obtained from them to educate the public. I have identified three categories of results from the work we did. The first is the data we were able to pull from ESSENCE describing drug overdose emergency department visits in Manhattan. The second results section includes the experiences and opinions we obtained from professionals in law enforcement, first response, and healthcare. Finally, I have included the results of my opioid addiction awareness ad campaign response survey.

3.1 ESSENCE Data

ESSENCE allowed us to examine drug overdose emergency admissions across time in Riley County, as well as the factors surrounding them. It includes a system of codes from physician diagnoses, patient chief complaints, and notes from first responders and emergency department staff. Results differ depending upon the particular codes used and what category they fall under, so we accumulated data from 2015 to the first part of 2019 using multiple combinations of codes. Our first search resulted in a count of the number of emergency room visits that were in any way drug- including alcohol- related. (Table 3.1)

Table 3.1 All Drug and Alcohol-Related Visits to Via Christi by Year

All Drug-related Visits to Via Christi Manhattan by Year	
Number of Visits	
2015	11
2016	108
2017	118
2018	117
2019	34
(All 2019 Data from 1 January – 30 April) Using CDC Opioid Overdose v2 Query	

The coding used in this search was broad and included not only drug-related diagnoses and chief complaints, but also any situational drug involvement. There were relatively few visits in 2015, then a significant increase in 2016 before leveling off from 2017 to 2018. The next search was confined to cases in which drugs and alcohol were specifically identified in the diagnostic codes and thus directly related to the reason for the visit. This could range from “poisonings by drug and/or medicinal substance”, to more specific wording, such as “intravenous drug user”. (Table 3.2)

Table 3.2 Drug and Alcohol-Related Diagnosis Visits to Via Christi by Year

Drug and Alcohol-related Visits to Via Christi Manhattan by Year	
Year	**Number of Visits**
2015	4
2016	1
2017	38
2018	51
2019	20
(All 2019 Data from 1 January – 30 April) Based on CDC All Drug v1 CCandDD Category Query	

The data show that drug and alcohol-related visits increased sharply from 2016 to 2017, and then increased further into 2018. Running just until April 30, the data from 2019 is on track to equal or slightly surpass the number of visits in 2018. The next set of data eliminate all alcohol-related diagnostic codes and contains only visits due to other drugs. (Table 3.3)

Table 3.3 Non-Alcohol Drug-Related Diagnosis Visits to Via Christi by Year

Drug-related Visits to Via Christi Manhattan by Year	
Year	**Number of Visits**
2015	3
2016	1
2017	29
2018	48
2019	17
(All 2019 Data from 1 January – 30 April) Excluding alcohol-related visits Based on CDC All Drug v1 CCandDD Category Query	

The majority of these visits were categorized as pain medication-seeking. Again, there is a sharp increase in visits from 2016 to 2017 and another large increase to 2018, while the potential for an increased number of visits in 2019 appears likely given the preliminary 2019 data. The next subset includes all non-alcohol drug overdose visits, whether accidental or intentional. (Table 3.4)

Table 3.4 Non-Alcohol Drug Overdose Visits to Via Christi by Year

Accidental and Intentional Overdose Visits to Via Christi Manhattan by Year	
Year	**Number of Visits**
2015	0
2016	1
2017	21
2018	28
2019	8
(All 2019 Data from 1 January – 30 April) Does not include “poisoning” dx codes Based on CDC All Drug v1 CCandDD Category Query	

The same trend as in the previous data subsets can be seen, with a spike after 2016 and the potential for the number of visits in 2019 to equal or exceed those in 2018. The final table includes overdose visits primarily involving opioids. (Table 3.5)

Table 3.5 Opioid Overdose Visits to Via Christi by Year

Opioid Overdose Visits to Via Christi Manhattan by Year	
Year	**Number of Visits**
2015	1
2016	9
2017	14
2018	10
2019	6
(All 2019 Data from 1 January – 30 April)	

When compared to the data on Table 3.4, it is apparent that opioids have been involved in a significant number of drug overdose emergencies in Manhattan over the past few years.

3.2 Reports from Community Partners

The majority of the results we obtained throughout our time working on this cooperative agreement consist of the accounts of professionals regarding their experience with opioid addiction in this community. They informed us of what they see on a daily basis, what they have seen change over time, what they think the root of the problem is, and what they believe needs to change to improve the situation. Some of these professionals have worked to help individuals with opioid addictions for decades, and every one of them saw the opioid epidemic as a major threat to the health of our community. In the following pages I have included summaries of what these members of first response, law enforcement and healthcare had to say about various topics regarding opioid abuse in Riley County, taken in part from our needs assessment.

Factors Contributing to Opioid Abuse in Riley County

Because Riley County contains Fort Riley and I-70 is nearby, there unfortunately are frequent occurrences of human and drug trafficking taking place in the area. Emergency department staff report seeing many sex trafficking victims who are also caught up in drugs. Staff members believe that a significant proportion of opioid addiction has resulted from the hospital administration's efforts to obtain positive patient satisfaction ratings. Pain control was a big factor in these ratings, and therefore providers felt pressure to prescribe more pain medication than they perhaps should have. Riley County has a high poverty rate at 20.4%, and healthcare providers and community members agree that access to healthcare and insurance is a big problem, as 9% of residents under 65 have no health insurance (Census Profile, 2019).

Community correspondents say that it's difficult to get in to see primary care providers so the emergency department is abused. Many residents cannot afford dental insurance especially, so they avoid treatment and go to the ER when the pain is too severe to ignore. The cost of both healthcare and medication is prohibitive for many people, so some turn to heroin, which is cheaper and more attainable on the street. Another factor in opioid availability in Riley County is the large student population. Students come from all across the country and can bring drugs in- especially during major events like Country Stampede and Fake Patty's Day. Mental healthcare providers make a point that despite its growing population, Manhattan still has few alternative and holistic pain management options. Those who are addicted have limited options for treatment, as there are no inpatient treatment facilities in the region.

Recent Trends in Drug and Alcohol Use in Riley County

According to interviews, staff of the Via Christi Emergency Department noted an increase in polysubstance abuse in recent years. Staff reported more intakes involving street drugs combined with illegally-obtained prescription drugs. Some of these emerging street drugs include acid, heroin, and cocaine, particularly abused by incoming college students in the fall. Marijuana use is common among these patients. They see a variety of abused prescription drugs, including benzodiazepines, some amphetamines and fentanyl, and occasionally, barbiturates. The emergency department receives a lot of patients who abuse methamphetamine. They note the presence of a "meth county" nearby, and the abundance of rural farming communities in Kansas contributing to a high prevalence of the drug. Riley County Police Department staff agree that meth use is steadily increasing. The RCPD and EMS have also seen an increase in overdoses and the need for detoxification in jail. Like most other community correspondents, EMS believe that alcohol abuse is on the rise in Riley County. Community Corrections noted a transition in popularity from cocaine to meth, as well as an increase in prescription drug abuse. Local outpatient mental health facilities have noted that the attitude toward marijuana use has lightened to the point that most of their substance abuse clients don't consider it problematic and believe that they are maintaining sobriety even while using it. The local emergency department has noticed a sharp rise in overdoses that require Narcan administration in the last couple of years. Naloxone, or Narcan, is a medication used to block the effects of opioids in cases of overdose emergencies. They have also noticed a strong increase in heroin use recently. Law enforcement and first responders have reported an increase in prescription and illicit opioid use in recent years. The emergency department reports an increase in the use of street drugs in combination with illegally-obtained prescription drugs. They have noticed a recent rise in fentanyl-laced heroin in particular. Police and first responders

find that there is no particular demographic that they can commonly associate with opioid abuse- it affects all ages and members of every socioeconomic status.

Naloxone Use and Other Protocol in the Emergency Department and Among First Responders

When people are admitted to the ER for opioid overdose, doctors administer a standard dose of naloxone intravenously and adjust it as needed. They always offer resources, referrals, and/or mental health screenings to overdose patients. In cases of intentional overdose, the staff arranges for mental health treatment and secure transport to a facility. Though the emergency department administers naloxone to treat opioid overdose, they use it conservatively. They find that patients have a varied reaction to it, depending on the amount of opiate in their system and their own individual tolerance. The reversal can be extreme, in which case patients might become violent, exhibiting rage and severe anxiety. The Riley County EMS also believes in conservative use of naloxone and only administers it when a patient is experiencing a Code Blue respiratory arrest. The police department does not carry naloxone, as a matter of cost and comfort level of the officers. However, Kansas State campus police have started carrying naloxone, as of 2019, under the funding and training of Lafene Health Center. Riley County police officers have Narcan available at the jail where it is administered by a nurse when necessary. They and EMS believe that it is commonly seen as completely safe but that it can have dangerous effects if there are certain other drugs in an individual's system. Like the emergency department, EMS titrates naloxone to effect. The police department does not deal much with overdoses- usually EMS is already present and they rely on them to respond in those situations. EMS believes that only trained medical professionals should be administering naloxone, and not law enforcement.

Experience of Law Enforcement and First Responders

The police find that despite the Good Samaritan Law, some people are still afraid to call first responders in the event of an overdose. Overall however, EMS believes that the Good Samaritan Law has had a significant positive impact. Regarding prescription opioids, RCPD commented, "It's important to remember that this is a legal drug- although it's legally prescribed it can have severe effects when abused. We like to tell people to be careful because they don't know if they happen to be the type of person for whom a drug becomes very quickly and intensely addictive. Many people don't even know that what they are taking or what they have in their medicine cabinet is an opioid, so it could be helpful to provide a list of common opioids to the public."

Prescription Drug Monitoring Systems

K-TRACS is the Kansas electronic database that tracks all controlled substance prescriptions in pharmacies that employ it. Authorized users can access prescription data such as medications dispensed and doses. This tool allows providers, pharmacists and authorized support staff to check patients' prescription history for problematic opioid use before providing a prescription. Nearly all primary care and specialist healthcare clinics in Riley County have taken up this technology. However, we found that only 3 out of 13 dental clinics were using it. It is up to individual providers and their support staff to ensure that K-TRACS data are accessed and reviewed before each opioid prescription is given. K-TRACS usage is an important tool to ensure safe and appropriate opioid prescribing. Increased K-TRACS use by dental clinics coupled with consistent use by all prescribers would go a long way in preventing opioid misuse and overdose. K-TRACS is not used to trace veterinary prescriptions, leaving a window of opportunity for some who would abuse their pet's prescription opioids. A veterinary prescription drug monitoring system for pet owners, if developed, would be beneficial in reducing the number of occurrences of opioid abuse in this form.

Referral to Treatment

Doctors in the ER work with a patient's primary care provider when they suspect opioid abuse, but they find that there is not a lot they can do unless the patient wants help. The emergency department does not use SBIRT. They always offer resources to overdose patients and will help arrange for treatment if the patient is willing. They have never been able to discharge a patient directly to treatment because there's always a long waiting list. They mostly discharge on good faith that the patient will enter treatment. Case management sets up and schedules rehab when a physician notifies them that a patient is interested. Local mental health professionals claim that most of their recent admissions for opioid abuse entered treatment of their own will, which is unusual as most of their substance abuse clients are there under court order. They typically seek treatment after their addiction has caused conflict in their familial or romantic relationships, or their job is under threat. Sometimes they receive direct referrals from primary care physicians who refuse to continue seeing the patient unless he or she gets help. The emergency department uses K-TRACS to see all that has been prescribed to a patient before prescribing opioids. They find that the use of K-TRACS among primary care providers in the community varies- even among providers in the same facility. Although most have access to it, some use it all the time and others only rarely.

Treatment Options

Mental healthcare providers find that the most effective treatment for opioid addiction involves a combination of counselling and medications for treating opioid dependence, such as suboxone or methadone. They believe that accountability is crucial and that there should be constant communication between themselves, the primary care provider, and the patient. They find that patients addicted to opioids don't stay in therapy for long due to a lack of engagement. The ones that stay engaged are usually on suboxone, which they find to be more effective than methadone. People struggling with opioid addiction often view their addiction as being different from other substance use disorders, because they are addicted due to pain and not for the typical reasons that people start using illicit drugs. The mental healthcare providers find it easier to get through to these patients by first acknowledging that they are in pain, but reminding them that it is still a dangerous addiction, whether the drugs were obtained by prescription or on the street. They validate the pain but tell them that they still have a choice. Mental health professionals believe that there should be better marketing of holistic pain management options and other alternatives to opioids. They think it would be helpful to have handouts available that feature a step-by-step list of where to start when you realize you have an addiction.

3.3 Results of the Opioid Abuse Public Awareness Ad Campaign Survey

The analysis of 19 online responses and 4 paper responses was conducted using Excel. Ages of respondents ranged from 23 to 79 with an average age of 51. 65% identified as female and 35% as male. 80% of the respondents listed their race/ethnicity as white, 10% as Hispanic, Latino, or Spanish origin, and 10% as black/African American. Seven of the respondents saw an ad on Facebook, five heard a radio ad, five saw a billboard, six saw a poster, and four saw a handout. (Figure 3.1)

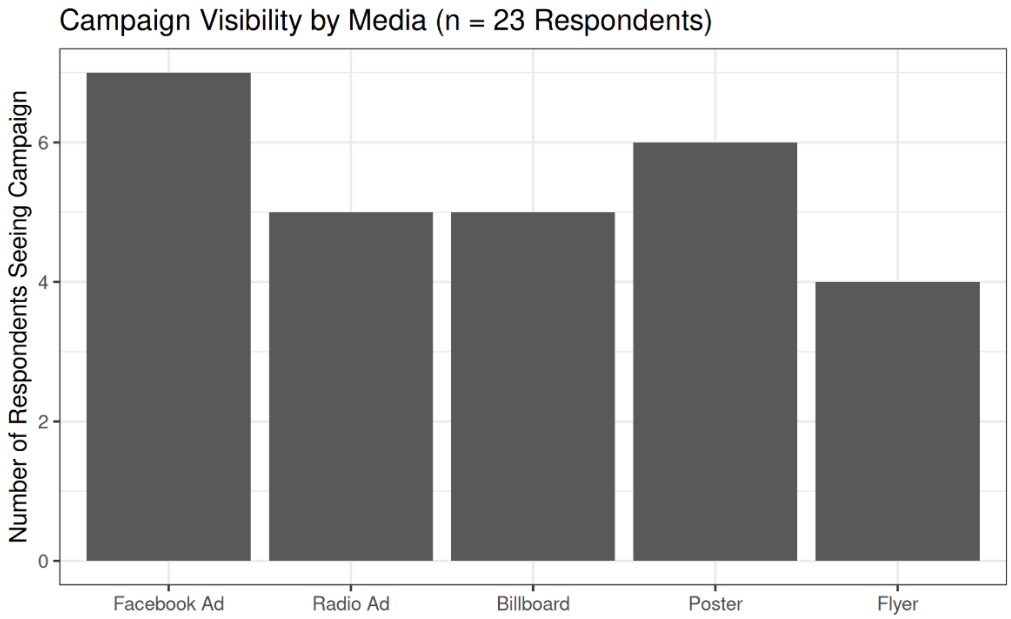

Figure 3.1 Ad Campaign Visibility by Media

The percentage of responses to each level of agreement with each statement for each media form is displayed in the following tables. (Tables 3.6, 3.7, 3.8, 3.9, & 3.10) The statements participants responded to are the following:

Statement 1: “I learned something new from this ad.”
Statement 2: “As a result of seeing this ad, I will be more likely to use opioids as prescribed by my healthcare provider in the future.”
Statement 3: “This ad made me more likely to seek treatment for opioid addiction (if relevant).”
Statement 4: “The content of this ad was relevant to me.”

Table 3.6 Percentage of Responses to Statements for Facebook Ads

	Completely Disagree	Somewhat Disagree	Somewhat Agree	Completely Agree
Statement 1	33%	22%	44%	0%
Statement 2	40%	0%	50%	10%
Statement 3	50%	0%	50%	0%
Statement 4	50%	20%	20%	10%

Table 3.7 Percentage of Responses to Statements for Radio Ads

	Completely Disagree	Somewhat Disagree	Somewhat Agree	Completely Agree
Statement 1	25%	50%	25%	0%
Statement 2	25%	0%	25%	50%
Statement 3	33%	0%	33%	33%
Statement 4	50%	25%	25%	0%

Table 3.8 Percentage of Responses to Statements for Billboards

	Completely Disagree	Somewhat Disagree	Somewhat Agree	Completely Agree
Statement 1	33%	0%	67%	0%
Statement 2	33%	0%	67%	0%
Statement 3	50%	0%	50%	0%
Statement 4	75%	25%	0%	0%

Table 3.9 Percentage of Responses to Statements for Posters

	Completely Disagree	Somewhat Disagree	Somewhat Agree	Completely Agree
Statement 1	50%	0%	50%	0%
Statement 2	25%	0%	25%	50%
Statement 3	67%	0%	33%	0%
Statement 4	50%	50%	0%	0%

Table 3.10 Percentage of Responses to Statements for Handouts

	Completely Disagree	Somewhat Disagree	Somewhat Agree	Completely Agree
Statement 1	0%	33%	67%	0%
Statement 2	0%	67%	33%	0%
Statement 3	N/A	N/A	N/A	N/A
Statement 4	50%	0%	50%	0%

Some examples of written responses to the statement, “Please write what you remember about the ad” include the following:

“The (radio) ads seem to be relatively frequent - almost each time I have the radio on. I seem to recall lines such as "it only takes one." Stories are intended to be relatable for a variety of situations - adults/parents, sons/daughters, etc.”

(Regarding the billboards) “I recall an ad with large text and a simple, clear message.”

“Have seen posters in my work area about opioid and other drugs. Talked about the dangers of these and addiction.”

“Good poster, talked about risks in a pertinent way, graphics were appropriate and catchy.”

Chapter 4 - Discussion

Having not formerly had much exposure to or knowledge of the opioid epidemic, this experience was eye opening to me in many ways. I had heard about it from the media and knew it was a problem, but in my community it was a hidden problem. Particularly striking was the fact that everyone I spoke to, across all different professions, had experienced this to be an epidemic in our community. One of the greatest attributes of this cooperative agreement was that it truly was cooperative in nature. It continually brought together leaders in law enforcement, first response, and healthcare and created communication and collaboration in combatting this public health concern that would never have occurred otherwise. This project was timely, as our community experienced the loss of a few of its members to synthetic fentanyl overdose during this time. Community members had a strong desire to help, and I believe that our project brought awareness and discussion to our community, and it was hopefully a catalyst to change.

Given that Riley County has some of the lowest rates of opioid prescriptions in the state (KDHE 2019), one may assume there is not much immediate cause for concern. However, our research has revealed that opioid addiction is a serious and indeed growing problem in our

community. The ESSENCE data we obtained were highly concerning. Across all variations of diagnostic coding, it is clear that in the past five years, overdose emergencies in Riley County have increased at an alarming rate. Riley County is at particular risk given the large amount of transient population, including people from all over the United States and even across the world. Community leaders have noticed many drugs being trafficked in from other states as people visit or move to Riley County. While it is unclear exactly why there was such a rise in overdose ER visits after 2015, it is apparent that now is the time to take action to stop this trend.

Community leaders did offer many suggestions as to what they thought needed to change in order to prevent opioid abuse in Riley County. Those who were interviewed all agree that awareness and education are critical when it comes to preventing opioid addiction. They believe that prescribers need to know not to prescribe opioids for chronic pain. There is a lack of awareness in the community of how potentially dangerous opioid abuse can be. Fortunately, there are a number of pain clinics in Manhattan. K-TRACS is used by all the pharmacies in Manhattan and has been helpful in curbing seeking behavior. The Riley County Police Department has made a difference by hosting events such as Drug Take Back Day and by maintaining an active presence on social media to raise awareness about opioid addiction. Mental healthcare providers have found that, in treating clients with opioid addiction, accountability is a significant determinant of treatment outcome. They believe that there should be constant communication between a patient, the primary care provider, and the mental health professional.

In regards to preventing opiate use, community members made the following statements:

- There needs to be improved access to healthcare and it should not be prohibitively expensive.
- There is a strong need for an in-patient rehab center in Manhattan.
- Doctors need to be educated on the proper use of opioids and prescribe responsibly.
- Medication take-back programs and pill drop boxes are helpful.
- The general public needs to be educated about the dangers of opioid abuse.
- Policy changes related to chronic pain and the number of pills prescribed to individuals could be helpful.
- People need better access to mental health services.
- It is important to have more doctors certified to taper patients off of opioids.

- More state and federal funding opportunities for suboxone would help, as would better referral systems for patients.
- Most of the dental clinics in town do not use K-TRACs, but they should.
- There should be more alternative and holistic pain management options in Manhattan, as well as more medication-assisted therapy options.
- Existing alternative therapy options should be better marketed.
- A list of alternative pain management options should be made available to patients.
- Healthcare providers have indicated that there is insufficient access to healthcare in the community.
- Many people abusing opioids do so because they are experiencing uncontrolled pain due to a lack of proper healthcare.
- A significant portion of opioid overdose patients in the ER overdosed intentionally as attempted suicide.

From all my interviews and collaborations with community leaders, I was able to reach several conclusions about what needs to be done to improve conditions and prevent further overdose tragedies in our community. The source of the problem is the over-prescription of opioids, and in particular, opioid prescription when it is inappropriate. Doctors should understand that there is a lack of data regarding the safety of long-term opioid treatment, and the potential for addiction is significant. Certainly there has been enough media coverage of the opioid epidemic in recent years that even physicians who don't regularly keep up with current medical research should have known to prescribe with caution, yet many continue to prescribe irresponsibly for chronic, non-cancer pain treatment. We heavily targeted prescribing physicians with our educational packets, and we hope that what we provided them with will serve as a tool and a reminder. K-TRACS has been helpful in keeping individuals from obtaining opioids excessively in most pharmacies, but we would like to see dental clinics get on board with it as well. Lack of access to healthcare is unfortunately a significant contributor to opioid addiction, as people without proper healthcare don't receive proper treatment to alleviate their pain. On a local level there is not much that can be done about this in general, but groups like the Community Care Team are doing their best to help low income individuals gain access to insurance when possible. One improvement that would be a tremendous step in preventing opioid overdose in the area would be the installation of an in-patient treatment facility. There are so few in-patient facilities available in the state and especially in our area that hospital staff are simply unable to provide a reasonable option to overdose patients. Local out-patient treatment centers have expressed a

great interest in starting an in-patient facility, so if this is on the horizon there is soon to be a much-needed source of help for people struggling with addiction in our area.

The results of our opioid addiction awareness ad campaign are somewhat unclear. While we received mostly positive written feedback, survey responses were all across the board. I believe this was in part due to the wording of the statements that ratings were assigned to. Statements 2 ("As a result of seeing this ad, I will be more likely to use opioids as prescribed by my healthcare provider in the future."), 3 ("This ad made me more likely to seek treatment for opioid addiction (if relevant)."), and 4 ("The content of this ad was relevant to me.") easily could have elicited a negative agreement response for someone who had never used or been addicted to opioids. It could almost be construed as an indication of their own current opioid use. Another important factor is a narrow sample population. Nineteen of our 23 respondents were MPH students who took the survey online, so our sample more than likely consisted of more highly educated individuals of a higher than average socioeconomic background. Regardless, I felt reassured that people in the community were coming into contact with the ads and taking notice of their content. I personally noticed the radio ads playing quite frequently, even in the short periods of time that I was driving in my car. I also found the fact that 170 people clicked the links to our videos on Facebook encouraging, because it is a strong indication that these people learned something, were wanting to seek help, or were wanting to find ways to help others who were struggling. The CDC's Rx Awareness campaign only focused on abuse of prescription opioids, limiting its reach to only part of the population. Those who were already addicted and turning to street drugs could have benefited from ads promoting treatment options, so this was one limitation to our ad campaign.

Overall I believe that our work under the cooperative agreement had a positive and lasting impact on the community. We brought leaders from multiple disciplines together to address opioid addiction, and they took ideas from each other back to practice in their own organizations. We provided valuable training to community members and promoted safe prescribing practices and referral systems to healthcare providers. Finally, we made our best efforts to reach as many people in the community as possible with our message. I learned a tremendous amount from this experience- both about the opioid epidemic nationally and in our community, and about what it is like to be a public health worker and engage the community in an important cause. From this experience I feel equipped to step confidently into a career in public health and make a positive difference.

Chapter 5 - Competencies

Student Attainment of MPH Foundational Competencies

#4 Interpret results of data analysis for public health research, policy, or practice.

I assisted in completing a needs assessment in which I compiled statistics on opioid prescription rates in our county using official data collection sources such as the U.S. census and KDHE. I also helped compile and analyze data from ESSENCE about drug overdose emergency department visits in our county over the past few years. In addition, I held multiple meetings with local leaders in law enforcement, first response, and healthcare to record their experiences with the opioid epidemic and suggestions for preventing overdoses. My fellow interns and I compiled these data into a high-level community needs assessment, which we presented to our community partners. In addition, I designed and distributed a survey to measure public reaction to our opioid addiction awareness ad campaign and then analyzed the data and presented it at the 2019 KPHA Conference.

#6 Discuss the means by which structural bias, social inequities, and racism undermine health and create challenges to achieving health equity at organizational, community, and societal levels.

In creating our community needs assessment, I compiled a significant amount of demographic data for Riley County in addition to data involving opioid prescription and overdose. I also gained a great amount of insight into the socioeconomic factors that make some people in our community more vulnerable to and more burdened in overcoming opioid addiction. I found that poverty levels are high in Riley County and access to healthcare is a major problem for a lot of people, meaning that they suffer from chronic pain and often feel the need to turn to cheaper street drugs for pain relief and in order to maintain their addiction.

#8 Apply awareness of cultural values and practices to the design or implementation of public health policies or programs.

A major part of implementing our opioid addiction awareness ad campaign involved consideration of the best way to reach our local community and make our message relatable and accessible. These considerations were also heavily involved in the creation of our

Community Care Team brochure, which was targeted to the most vulnerable members of our community. Much thought was involved in presenting the information in a compassionate and non-intimidating manner.

#16 Apply principles of leadership, governance, and management, which include creating a vision, empowering others, fostering collaboration, and guiding decision making.

Although I was one of three interns working on this cooperative agreement, I had multiple opportunities to take a leadership role. This included leading community partner meetings, taking the lead on choosing, developing, and printing ad campaign materials, designing promotional packets and brochures, developing, distributing and analyzing a survey, and interviewing community leaders. With this project, taking the lead was just as essential as collaborating with my co-interns and community partners. Every day I found different tasks that I could take the lead on while keeping constant communication and cooperation with my co-interns. We each identified tasks that would suit our individual strengths and took action to complete them and contribute to our common goal in the best way possible.

#21 Perform effectively on interprofessional teams.

Working as a part of an interprofessional team was something I did throughout the course of this project every day. Collaboration with leaders in law enforcement, education, first response, and healthcare as well as other RCHD employees and members of the cooperative agreement statewide was essential to the work I did. We held monthly community partner meetings with leaders from all different backgrounds as well as conducted individual interviews with a variety of leaders. We kept in continual contact with the Wichita State University (WSU) Community Engagement Institute and other grant recipients to communicate what actions were proving most effective in our communities. Under this cooperative agreement, I was able to bring together professionals from many different fields under one common goal.

Table 5.1 Summary of MPH Foundational Competencies

Number and Competency		**Description**
4	Interpret results of data analysis for public health research, policy, or practice.	Assisted in completing a needs assessment and completed a public survey.

6	Discuss the means by which structural bias, social inequities, and racism undermine health and create challenges to achieving health equity at organizational, community, and societal levels.	In creating the needs assessment, I explored the societal factors behind addiction.
8	Apply awareness of cultural values and practices to the design or implementation of public health policies or programs.	Considered the most effective ways to reach out to community members with an ad campaign and access to services system.
16	Apply principles of leadership, governance, and management, which include creating a vision, empowering others, fostering collaboration, and guiding decision making.	Took the lead in initiating various tasks while in collaboration with others.
21	Perform effectively on interprofessional teams.	Collaborated with leaders from multiple disciplines as well as other grant recipients statewide.

Table 5.2 MPH Foundational Competencies and Course Taught In

22 Public Health Foundational Competencies Course Mapping	MPH 701	MPH 720	MPH 754	MPH 802	MPH 818
Evidence-based Approaches to Public Health					
1. Apply epidemiological methods to the breadth of settings and situations in public health practice	x		x		
2. Select quantitative and qualitative data collection methods appropriate for a given public health context	x	x	x		
3. Analyze quantitative and qualitative data using biostatistics, informatics, computer-based programming and software, as appropriate	x	x	x		
4. Interpret results of data analysis for public health research, policy or practice	x		x		
Public Health and Health Care Systems					
5. Compare the organization, structure and function of health care, public health and regulatory systems across national and international settings		x			
6. Discuss the means by which structural bias, social inequities and racism undermine health and create challenges to achieving health equity at organizational, community and societal levels					x
Planning and Management to Promote Health					
7. Assess population needs, assets and capacities that affect communities' health		x		x	
8. Apply awareness of cultural values and practices to the design or implementation of public health policies or programs					x

22 Public Health Foundational Competencies Course Mapping	MPH 701	MPH 720	MPH 754	MPH 802	MPH 818
9. Design a population-based policy, program, project or intervention			x		
10. Explain basic principles and tools of budget and resource management		x	x		
11. Select methods to evaluate public health programs	x	x	x		
Policy in Public Health					
12. Discuss multiple dimensions of the policy-making process, including the roles of ethics and evidence		x	x	x	
13. Propose strategies to identify stakeholders and build coalitions and partnerships for influencing public health outcomes		x		x	
14. Advocate for political, social or economic policies and programs that will improve health in diverse populations		x			x
15. Evaluate policies for their impact on public health and health equity		x		x	
Leadership					
16. Apply principles of leadership, governance and management, which include creating a vision, empowering others, fostering collaboration and guiding decision making		x			x
17. Apply negotiation and mediation skills to address organizational or community challenges		x			
Communication					
18. Select communication strategies for different audiences and sectors	DMP 815, FNDH 880 or KIN 796				
19. Communicate audience-appropriate public health content, both in writing and through oral presentation	DMP 815, FNDH 880 or KIN 796				
20. Describe the importance of cultural competence in communicating public health content		x			x
Interprofessional Practice					
21. Perform effectively on interprofessional teams		x			x
Systems Thinking					
22. Apply systems thinking tools to a public health issue			x	x	

Student Attainment of MPH Emphasis Area Competencies

Table 5.3 Summary of MPH Emphasis Area Competencies

MPH Emphasis Area: Infectious Disease/ Zoonoses		
Number and Competency		**Description**
1	Pathogens/ Pathogenic mechanisms	The pathological process of opioid addiction
2	Host response to pathogens/ Immunology	The attributes of an individual's health status which make him/her more or less vulnerable to addiction
3	Environmental/ Ecological influences	The environmental and social factors that make an individual more or less vulnerable to addiction

4	Disease surveillance	The analysis of opioid overdose data across time and location
5	Disease vectors	N/A

Although my emphasis is Infectious and Zoonotic Disease, the project I chose for my ILE/APE did not involve infectious disease. It did however involve a disease- opioid addiction- that in some ways behaves as an infectious disease. It has its own pathological mechanisms, varies in its action depending upon the health status of its "host", is influenced by environmental factors such as socioeconomic status and access to healthcare, and is monitored by public health surveillance. Trying to assign a vector in this model, whether it be in the form of the disease for which an opioid is prescribed or the prescribing physician him/herself is too much of a stretch to be considered here, so that competency cannot be incorporated into my project.

#1 Pathogens/ Pathogenic Mechanisms

Opioid addiction, just like any substance dependency, follows a particular pathological process. When opioids are used excessively, the brain is flooded with neurochemicals like dopamine and serotonin. The body becomes accustomed to the high levels of these chemicals and the euphoric feeling they produce, and higher and higher doses are needed to create the same effect. With opioid misuse and abuse there is always the potential for overdose, characterized by respiratory distress and failure. When opioids are prescribed inappropriately, this initiates the pathological process that can lead to overdose and death. In order to prevent occurrences of opioid abuse and overdose, we distributed educational packets and posters to prescribers and offered them and their staff free trainings for implementation of SBIRT and K-TRACS in their practice. With education and caution, we hope that physicians will take care to prescribe opioids responsibly.

#2 Host Response to Pathogens/ Immunology

In infectious disease, a host's immune status is a significant part of the disease triad which determines the outcome of exposure. Although immunology is not as critical in addiction, it does play an important role. A compromised immune system allows vulnerability to any physical threat. In the case of prolonged opioid use, there is evidence to suggest that the immune system is compromised (Mefford 2020). Genetic factors also come into play when it comes to the tendency to develop addiction (Crist 2019). Some people can take opioids for a fairly long period of time without complications, while others rapidly become addicted. Perhaps

even more importantly, mental health is a big factor in the development of and struggle with addiction. Without proper access to mental healthcare, an individual is at higher risk of developing any form of addiction.

#3 Environmental/ Ecological Influences

One unusual attribute of opioid addiction is that it tends to affect people of all demographics, all races, all socioeconomic statuses, all ages, and all levels of education. However, those lacking access to healthcare are at a distinct disadvantage when it comes to falling into opioid addiction. In compiling our community needs assessment, I spoke with healthcare workers who repeatedly saw patients in the emergency department seeking medication for pain because they could not afford whatever procedures were required to treat it. Prescription drugs were their only option, and when these became cost-prohibitive or no longer available, they turned to cheaper and more dangerous street drugs. Another environmental factor in the disease of opioid addiction is access to treatment, which Riley County is unfortunately lacking. An in-patient rehab facility in the area would be a tremendous source of support for struggling individuals.

Another important consideration is the effects of opioids on the environment. Improper disposal of prescription opioids can have serious environmental impacts. Some people flush their unwanted medications down the toilet, and most are not removed by wastewater treatment processes and linger in the water supply. Throwing old medications in the garbage is harmful too, as these drugs are still chemically active and able to leach into the environment. Education of the public is crucial in protecting the environment from improperly discarded prescription drugs. Kansas State's Veterinary Health Center includes drug disposal information and a link to an informative website (https://www.vet.k-state.edu/vhc/med-disposal.html) with every outgoing prescription. More physicians and pharmacists need to take the time to inform patients about the need for safe disposal and how they can do it.

#4 Disease Surveillance

Many governmental organizations monitor opioid prescription, addiction, and overdose. We examined their data in completing our needs assessment. We also conducted our own surveillance through the use of ESSENCE, which allowed us to view the occurrences of emergency department intakes and the circumstances surrounding them over the past five years in Riley County. Surveillance such as this is critical in fighting the opioid epidemic. If we had simply relied upon state surveillance statistics, it would appear that Riley County is not

particularly vulnerable to the opioid epidemic, but when we explored the numbers for our county specifically over time we could see a rather sharp increase in overdose hospital admissions. Surveillance is as important for opioid addiction and overdose as it is for any disease because it allows us to catch dangerous trends and take action to prevent them before they escalate.

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Appendix 1

Sample Question Guide for MOAPC focus groups

Definitions	
What are opioids?	What is "opioid misuse"? What are the consequences for opioid misuse?
• Opioid is a broad term that encompasses both natural opiates obtained from the opium poppy plant and chemicals manufactured synthetically to have a chemical structure similar to that of an opiate. • Heroin is an opioid drug that is synthesized from morphine, a naturally occurring substance extracted from the seed pod of the Asian opium poppy plant. Heroin usually appears as a white or brown powder or as a black sticky substance, known as "black tar heroin." Some common Prescription Opioids (generic & brand names): • Fentanyl (Duragesic®)	• Opioid misuse: o A general term to encompass the use of illegal opioid drugs (e.g. heroin) and the misuse of prescription opioid medications (e.g. OxyContin). o Taking or being given a medication without a prescription (whether purchased illegally from a drug dealer or stolen from a friend or family member's medicine cabinet). o Taking a prescribed medication for a purpose other than what the drug was prescribed for usually to elicit a particular experience or feeling. o "Double doctoring" (also called doctor shopping)—obtaining a prescription from more than one doctor without telling the prescribing doctor about other prescriptions received in the past 30 days. • Consequences for opioid misuse: the social, economic, and health problems associated with substance abuse (e.g. illnesses, overdose, crime and car crashes or suicides related to substance use).

• Hydrocodone (Vicodin®) • Oxycodone (OxyContin®) • Oxymorphone (Opana®) • Propoxyphene (Darvon®) • Hydromorphone (Dilaudid®) • Meperidine (Demerol®) • Diphenoxylate (Lomotil®)	• Effects on the body: produce drowsiness, nausea, constipation and depending upon the amount of drug taken, depress respiration. These drugs also can induce euphoria by affecting the pleasure center of the brain. This feeling is often intensified for those who abuse opioids when administered through snorting or injecting. • Signs of opioid overdose: slow, shallow breathing, clammy skin, convulsions, respiratory depression and arrest (stop breathing), coma and death. • Anyone who misuses opioids is at risk of overdosing: It doesn't matter if they are a new or experienced user or if they snort, inject or take pills.

For ALL Groups

- Have you noticed any trends in the use of drugs and alcohol in this area?
- Have you noticed any changes in the use of opiates over time (pills and heroin)?
- Is there anything about this community that you think makes it more likely for people to use opiates?
- Is there anything that you think is working well to keep people from using opiates?
- Can you think of anything else that could be done to prevent opiate use?

For Treatment Providers

- What opiates are your clients using? Are there any patterns or changes over time?
- Based on what clients tell you, what do you think drives overdose?
- What has been your experience with overdose in your workplace? (Probes: Did you know what to do? What did you do? What happened?)
- What has been your experience with Narcan? (Probes: Has your agency provided training? Has it ever been used on a client? How has it affected your work? Do you know how to use it?)
- Have you identified anything that helps people seek treatment?
- What treatments do you see as most effective for opiate addiction? Why?
- Is there anything else that you think it's important for us to know?

For Police and First Responders (EMT/Fire)

- What has your experience been with people with substance use disorders?
- Have you received any information or training regarding overdose and/or Narcan?
- What has been your experience with people who were overdosing? (Probes: What happened? How did you come upon the person? How did you respond?)
- What is your understanding of the Good Samaritan Law? (Probe: What do you think about it? How has it changed the way you do your job?)
- Before we finish, is there anything else that you think it's important for us to know?

For Emergency Department staff

- What has been your experience of working with patients who have or are overdosing?' (Challenges, successes, etc)
- What has your experience been with SBIRT?
- What is your experience with prescription monitoring (challenges, successes)
- What is your experience with discharge planning for overdose patients? (challenges, successes)
- Is there anything else that you think it's important for us to know?

Appendix 2

Riley County Community Needs Assessment PDF:
file:///C:/Users/britt/Desktop/RCHD%20Needs%20Assessment.pdf

Community Care Team Promotional Brochure:
file:///C:/Users/britt/Desktop/CCT%20Brochure%20final%209.26.2019.pdf

Appendix 3

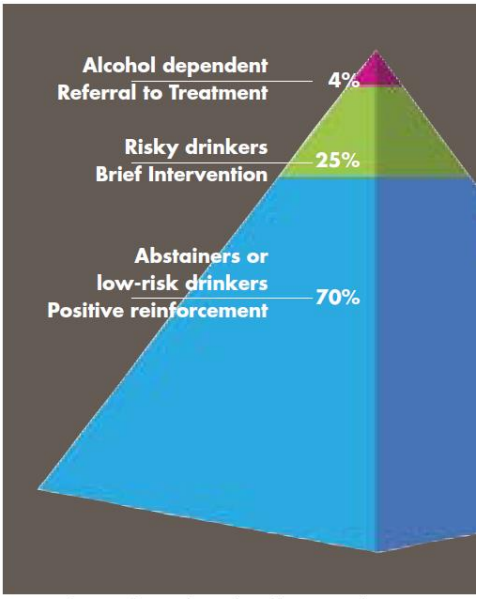
Why SBIRT?

Screening, Brief Intervention and Referral to Treatment (SBIRT) is an evidence-based approach to identifying patients who use alcohol and other drugs at risky levels, with the goal of reducing and preventing related health consequences, disease, accidents, and injuries.

SBIRT is unique in that it screens for all types of substance use, not just dependencies. Each part of the SBIRT process provides information and assistance tailored to the individual patient and his or her needs.

The primary goal of SBIRT is not to identify alcohol- or other drug-dependent individuals. SBIRT is intended to meet the public health goal of reducing the harms and societal costs associated with risky use. The goal of the Riley County Health Department, under the CDC cooperative agreement, is to integrate SBIRT into the standard delivery of healthcare in our community.

While most of the attention given to alcohol and drug issues has been focused on alcohol and illicit drug users who meet the clinical criteria for substance dependence, risky users incur more adverse consequences and costs at the population level. Even if they are not dependent on alcohol, people who drink above the recommended guidelines- up to one drink per day for women and up to two drinks per day for men[1]- face a number of health risks. A risky drinker is someone who is not dependent on alcohol, but who has a drinking pattern that can lead to a variety of health consequences, alcohol-related traffic and other accidents, and alcohol-involved violence. Risky drinkers, though individually less likely to experience alcohol-related problems than those who are alcohol-dependent, make up the greater portion of the



Source: Substance Abuse and Mental Health Services Administration. (2006) Results from the 2005 National Survey on Drug Use and Health: National findings Rockville (MD): Office of Applied Studies

general population; thus more harm is caused by the population of risky drinkers. SBIRT provides the opportunity to intervene with this group to prevent serious consequences.

In Kansas and many other states, SBIRT has emerged as a critical strategy for targeting the large but often overlooked population that exceeds low-risk use. Research demonstrates that intervening early with individuals at moderate risk is effective in reducing substance use, in preventing health and other related consequences, and in saving healthcare costs.

SBIRT places risky substance use where it belongs- in the realm of healthcare. It focuses on identifying risky substance use to help prevent the onset of the more costly disease of addiction. Similar to preventive screenings for chronic diseases such as cancer, diabetes, and hypertension, SBIRT is an effective tool for identifying risk levels related to substance use and for providing the appropriate intervention.

SBIRT treats alcohol and drug use as the healthcare issue it is.

Just as checking a patient's blood pressure can reveal health issues and guide recommendations for a healthier lifestyle, universal screening for substance use gives healthcare providers insight to recognize a potential health problem, or to address an existing problem before it worsens or becomes fatal. Evidence-based brief interventions focusing on health and other consequences give healthcare providers the tools they need to promote awareness regarding risky substance use.

Alcohol is the most commonly used drug in the United States and is a factor in the majority of crimes, motor vehicle crashes and other fatal injuries. People who exceed the recommended guidelines for alcohol consumption face increased health risks even if they are not dependent on alcohol: risk increases for depression, hypertension, anemia, heart failure, liver damage, ulcers, pancreatitis, and some types of cancer.

> As a nation we must face the fact that substance abuse is a public health problem and addiction is a medical problem and respond accordingly.[3]
>
> —JOSEPH A. CALIFANO, JR., FOUNDER AND CHAIRMAN, CASA COLUMBIA

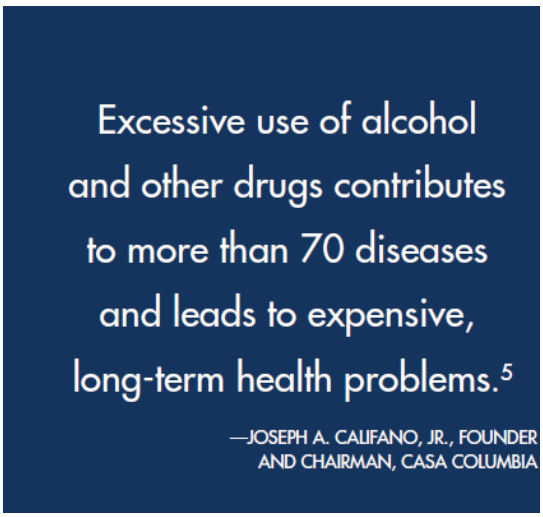
Universal screening creates awareness about the number-one preventable health issue- substance abuse.[2] SBIRT provides the tools, counseling and coaching that healthcare providers and patients need to understand the potential negative health consequences of substance abuse. SBIRT targets the large population of risky to harmful users before they become dependent.

SBIRT teaches patients and healthcare workers alike to view risky substance use as a healthcare issue that can be addressed by changes in habits and behavior. The result is improved healthcare and healthier patients.

SBIRT. A standard of practice resulting in better healthcare.

The American College of Surgeons Committee on Trauma, the accrediting body for the nation's trauma centers, requires that all Level I and Level II trauma centers screen patients for risky alcohol use and provide a brief intervention to those who screen positive. Nationally, more than 20,000 people enter emergency rooms each day for alcohol-related injuries and illnesses.[3] SBIRT has proven effective in changing the behavior of risky substance users and reducing emergency room usage.

In 2009, the Joint Commission (formerly the Joint Commission on Accreditation of Healthcare Organizations) released for comment a list of proposed hospital performance measures for SBIRT universally administered to patients for problems related to or exacerbated by alcohol, tobacco, and other drug use.[4]



Introducing SBIRT to a wider range of healthcare settings beyond hospitals and trauma centers increases the likelihood of SBIRT becoming a standard of care. Universal screening can take place in primary care offices, HIV clinics, community health centers, dental offices and other healthcare settings. An evidence-based guideline and training in standardized screening and brief interventions ensure that the SBIRT practice can be administered by nearly every type of healthcare provider.

While SBIRT is not a new approach, it is not yet incorporated universally into medical and healthcare education. The Riley County Health Department is offering free screening and brief intervention training to healthcare providers who want to learn how to incorporate the practice as a standard of care. Ensuring SBIRT is implemented universally in all healthcare settings is the best way for SBIRT to become a standard healthcare practice.

What exactly is SBIRT?

SBIRT- Screening, Brief Intervention, Referral to Treatment- is a comprehensive, integrated, public health approach based on universal screenings which create awareness about America's number one preventable health issue- substance abuse.

THE SBIRT PROCESS

SCREENING Universal pre-screening of all patients for alcohol and other drug use is incorporated into the normal routine in healthcare settings and identifies people with risky substance use. For those with a positive screen, further screening identifies the appropriate level of intervention that is required. Screening can be through interview and self-report using validated screening tools such as the AUDIT, DAST, ASSIST for adults and the CRAFFT for adolescents.

> Screening programs have repeatedly proven to be extremely cost-effective by interrupting drug-use patterns before severe addiction develops.
>
> R. GIL KERLIKOWSKE, DIRECTOR, OFFICE OF NATIONAL DRUG CONTROL POLICY

BRIEF INTERVENTION Provided when a screening indicates moderate risk. A brief intervention utilizes motivational interviewing techniques focused on raising a person's awareness of his or her substance use and its consequences, and then motivating them toward positive behavioral change. A typical brief intervention takes from five to 15 minutes to conduct. Brief interventions, required in approximately 15 percent of screenings, work in two ways: (1) to educate people at low risk about moderate drinking limits and health risks if limits are exceeded; and (2) to encourage those at risk of heath and other consequences to think differently about their use and make changes to improve their health.

	MAXIMUM DAILY LIMITS	MAXIMUM WEEKLY LIMITS
WOMEN	3	7
MEN UNDER 65	4	14
MEN OVER 65	3	7
LESS IS BETTER		

Source: National Institute on Alcohol Abuse and Alcoholism

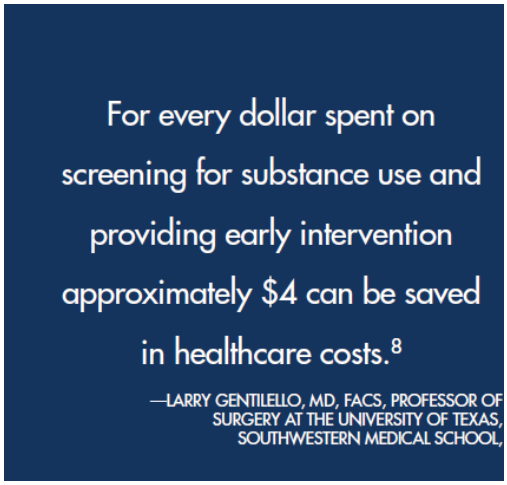
BRIEF THERAPY After a screening result of moderate to high risk (approximately 3.2 percent of those screened*), a referral to brief therapy is recommended. Similar to brief intervention, brief therapy involves motivational discussion and client empowerment, and includes assessment, education, problem-solving, coping mechanisms, and building a supportive social environment- all centered around client goals. Brief therapy consists of four to six sessions, each one treated as if it could be the last. It encourages a shift in thinking for therapists, engaging clients in the development and implementation of their therapy.

REFERRAL TO TREATMENT Following a screening result of high risk (around 3.7% of those screened*), a referral to treatment is provided. This is a proactive process that facilitates access to specialty care for those requiring more extensive assessment.

SBIRT reduces healthcare usage and costs.

Our healthcare system is failing to prevent and treat the problem of substance abuse. Only 1.9 percent of federal and state substance-related spending goes toward preventing or treating addiction. If substance abuse and addiction were its own budget category, it would rank second behind elementary and secondary education. States spend more on substance abuse and addiction than Medicaid, higher education, transportation or justice.[6]

Individual state governments have spent $135.8 billion in previous years to deal with substance abuse and addiction. Considering the potential for long-term cost savings, it is clearly important to invest in prevention. Quality, evidence-based prevention services can help lower the ever-increasing costs in our healthcare system, criminal justice system, and in the workplace. Whether in the emergency room, trauma center, primary care, or school, offering SBIRT as a universal standard of care is the key to preventing negative health consequences and their related cost.



SBIRT. A small investment with a large return.

SBIRT is more than a health screening technique- it offers a simple and cost-effective way to reform healthcare in America. The return on investment for substance screening and intervention is significant: according to the National Commission on Prevention Priorities, alcohol screening and intervention provides the fourth greatest return on medical investment, behind only aspirin, childhood immunizations and tobacco cessation.

Although the federal government has committed $260 million in matching funds to support SBIRT reimbursement codes at the state level, reimbursement for SBIRT is not consistently provided. Momentum and support from the healthcare industry leans toward the universal implementation of reimbursement codes for SBIRT services across the country. The Current Procedural Terminology (CPT) issued by the American Medical Association and other codes from the Center for Medicine and Medicaid Services have provided a way for healthcare providers to bill for SBIRT.

Currently, federal employees are the first large group of people who are seeing the positive effects of SBIRT. These services are now a guaranteed part of the health plans that cover federal employees. Large employers are also purchasing SBIRT in their bulk plans and recognize the value provided to their employees.[7]

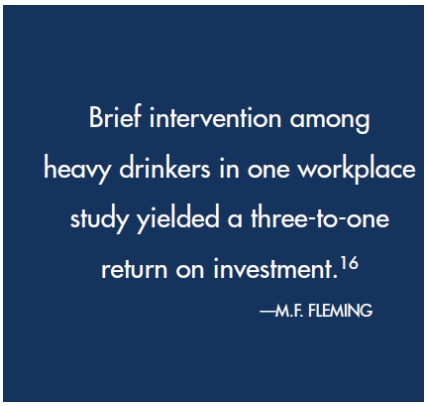
SBIRT. A proven approach that motivates individuals to make changes now.

SBIRT is good for business. If you are an employer, risky substance use is your concern. Why? Because 67.3 percent of individuals who use substances at a risky level are employed full-time. Employers pay the price of employee substance abuse in the form of healthcare premiums for related injuries and illnesses, tardiness, absenteeism, workers' compensation and disability claims, turnover and decreased productivity.

PAYER	CODE	DESCRIPTION	FEE SCHEDULE*
COMMERCIAL INSURANCE	CPT 99408	Alcohol and/or substance abuse structured SBI services; 15 to 30 minutes	$33.41
	CPT 99409	Alcohol and/or substance abuse structured SBI services; greater than 30 minutes	$65.51
MEDICARE	G0396	Alcohol and/or substance abuse structured SBI services; 15 to 30 minutes	$29.42
	G0397	Alcohol and/or substance abuse structured SBI services; greater than 30 minutes	$57.69
MEDICAID	H0049	Alcohol and/or drug screening	$24.00
	H0050	Alcohol and/or drug service, brief intervention; per 15 minutes	$48.00

Each year, untreated alcohol problems cost American businesses an estimated $134 billion. National statistics reveal the magnitude of the problem:

- Healthcare costs for employees who have alcohol problems are about twice as high as for an average employee.[8]
- Each untreated substance-abuse issue among employees cost the employer an estimated $640 annually. [9]
- One in five employees report that their co-workers' alcohol problems caused them to fear injury, work harder, redo work or cover for the drinker.[10]
- Heavy drinkers have high rates of absence due to injuries, illness, unexcused absences and job turnover. [11]
- In a company that employs 200 workers, employees and family members make 40 alcohol-related emergency room visits per year and 121 alcohol-related ambulatory care visits per year.



In addition to SBIRT implementation saving money for the employer, SBIRT services are an employee benefit. SBIRT provides the employees opportunity to improve their health by realizing how substance use affects their health.

SBIRT can be incorporated in the workplace EAP and covered in the company health plan. A residual benefit of providing SBIRT in healthcare facilities is the off-site assistance that can be provided to employees in confidential settings, alleviating concerns about stigma or privacy at the workplace, which might otherwise discourage them from seeking assistance in the first place.

SBIRT can help employers save a significant amount of money annually. To learn exactly how much alcohol abuse is affecting your business, visit the Alcohol Cost Calculator at Ensuring Solutions (www.AlcoholCostCalculator.org).

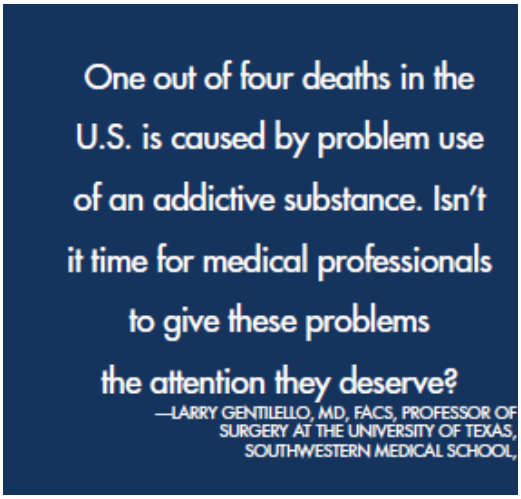
SBIRT. Integrating substance abuse into healthcare.

For SBIRT to become a standard of care in Kansas, changes in national and local policies must occur to enhance the bridge between multiple healthcare disciplines.

The White House Office of National Drug Control Policy (ONDCP) is dedicated to addressing the issues of substance abuse and the disease of addiction with attention to the full spectrum of substance use; and identifying the need for effective programming in prevention, treatment and recovery support services. ONDCP is committed to implementing a strategy that emphasizes evidence-based programs, balance and collaboration. The plan includes the need to integrate SBIRT in a variety of settings.[12]

In Kansas, many strategies can be implemented to further support SBIRT as a best practice to prevent risky substance use. Examples of these strategies include:

- Engaging private and public insurers to recognize SBIRT as a best practice and reimburse providers for delivering screening and brief interventions
- Offering training and support for providers to adopt SBIRT as a standard of care in their practices maintaining fidelity to the model
- Assuring adequate resources and efficient tools are in place to assist providers in referring to behavioral health providers



- Reducing existing barriers and promoting collaboration between healthcare and behavioral health providers
- Recognizing as a community the importance of addressing substance abuse as a healthcare issue in the general population
- Promoting, developing and implementing a systems cross-training model to insure that healthcare and behavioral health providers recognize how they can work together to improve healthcare.

SBIRT. What can you do?

Every person in Kansas benefits from SBIRT services. Implementation of SBIRT lessens the burden shared by everyone in our healthcare, social services and criminal justice systems. As Kansas residents, we stand to gain by making SBIRT a standard of care and encouraging all interested individuals and organizations to engage in this initiative.

HEALTHCARE PROVIDERS: Tell your workplace associates and the communities you're a part of about the value of SBIRT. The Riley County Health Department in collaboration with SBIRT offers training, support and technical assistance in a number of ways.

BEHAVIORAL HEALTH PROVIDERS: Provide training and education to your employees. Attend one of our informative training sessions and ask questions of concern to your practice.

COMMUNITY-BASED ORGANIZATIONS: Make sure your employees and the members of your organization are aware of SBIRT and are educated about the benefits of universal screening and the positive effects it could have on the community.

BUSINESSES: Find out whether your company's health insurance plan covers SBIRT and whether your providers administer the service. If not, inform your insurance purchaser and provider that such services are important to your employees' health and your company's success.

INSURANCE COMPANIES: Understand the importance of SBIRT and reimburse healthcare providers for SBIRT.

POLICY MAKERS: Educate yourself and local citizens about the cost benefit of SBIRT to the community as well as the lasting health benefits for individuals. Support local initiatives that promote sustainability of the SBIRT practice.

CITIZENS, PATIENTS AND VOTERS: Ask whether your insurance coverage includes SBIRT- and if it doesn't, let your insurance provider know you want the service covered.

- Encourage healthcare purchasers to demand health insurance plans include SBIRT.
- Communicate your support to your local political representatives.
- Continue to stay educated by visiting **www.samhsa.gov.**

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This document was obtained from SBIRT Colorado- a program of Peer Assistance Services, Inc. - and adapted for use by the Riley County Health Department. For more information, please contact:

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http://www.rileycountyks.gov/1800/Opioid-Prevention-and-Response

RILEY COUNTY
HEALTH DEPARTMENT

Appendix 4

Opioid Abuse Public Awareness Ad Campaign Survey

The Riley County Health Department (RCHD) recently launched an ad campaign directed at preventing opioid abuse and misuse. Your anonymous and confidential responses to this survey will help us improve our campaign and better prevent opioid addiction in our community. Regarding this campaign, please provide your responses to the following questions.

1) Since March of 2019 I have seen an opioid abuse awareness ad on Facebook. Please circle 'yes' or 'no'.

Yes No

If you responded 'yes':

a) Please write what you remember about the Facebook ad:

_____

_____

Please rate your agreement with each statement- 1 being "completely disagree", 2-"somewhat disagree", 3-"somewhat agree", and 4-"completely agree"

	Completely Disagree	Somewhat Disagree	Somewhat Agree	Completely Agree
b) I learned something new from this ad	1	2	3	4
c) As a result of seeing this ad, I will be more likely to use opioids as prescribed by my healthcare provider in the future	1	2	3	4
d) This ad made me more likely to seek treatment for opioid addiction (if relevant)	1	2	3	4

e) The content of this ad was relevant to me	1	2	3	4

f) Please provide suggestions for improvement of this ad:

_____

_____

_____

2) Since March of 2019 I have heard an opioid abuse awareness ad on the radio. Please circle 'yes' or 'no'.

Yes No

If you responded 'yes':

a) Please write what you remember about the radio ad:

_____

_____

Please rate your agreement with each statement- 1 being "completely disagree", 2- "somewhat disagree", 3-"somewhat agree", and 4-"completely agree":

	Completely Disagree	Somewhat Disagree	Somewhat Agree	Completely Agree
b) I learned something new from this radio ad:	1	2	3	4
c) As a result of hearing this ad, I will be more likely to use opioids as prescribed by my healthcare provider in the future:	1	2	3	4
d) This ad made me more likely to seek treatment for opioid addiction (if relevant):	1	2	3	4
e) The content of this ad was relevant to me:	1	2	3	4

f) Please provide suggestions for improvement of this ad:

_____

_____

_____

3). Since March of 2019 I have seen an opioid abuse awareness ad on a billboard. Please circle 'yes' or 'no'.

Yes No

If you responded 'yes':

a) Please write what you remember about the billboard:

_____

_____

Please rate your agreement with each statement- 1 being "completely disagree", 2- "somewhat disagree", 3-"somewhat agree", and 4-"completely agree":

	Completely Disagree	Somewhat Disagree	Somewhat Agree	Completely Agree
b) I learned something new from this billboard:	1	2	3	4
c) As a result of seeing this ad, I will be more likely to use opioids as prescribed by my healthcare provider in the future:	1	2	3	4
d) This ad made me more likely to seek treatment for opioid addiction (if relevant):	1	2	3	4
e) The content of this ad was relevant to me:	1	2	3	4

f) Please provide suggestions for improvement of this ad:

_____

_____

_____

4) Since March of 2019 I have seen an opioid abuse awareness poster. Please circle ‘yes’ or ‘no’.

Yes No

If you responded ‘yes’:

a) Please write what you remember about the poster:

_____

_____

Please rate your agreement with each statement- 1 being “completely disagree”, 2- “somewhat disagree”, 3-“somewhat agree”, and 4-“completely agree”:

	Completely Disagree	Somewhat Disagree	Somewhat Agree	Completely Agree
b) I learned something new from this poster:	1	2	3	4
c) As a result of seeing this poster, I will be more likely to use opioids as prescribed by my healthcare provider in the future:	1	2	3	4
d) This poster made me more likely to seek treatment for opioid addiction (if relevant):	1	2	3	4
e) The content of this poster was relevant to me:	1	2	3	4

f) Please provide suggestions for improvement of this poster:

_____

_____

_____

5) Since March of 2019 I have seen an opioid abuse awareness handout. Please select ‘yes’ or ‘no’ in response.

Yes No

If you responded 'yes':

a) Please write what you remember about the handout:

_____

_____

Please rate your agreement with each statement- 1 being "completely disagree", 2- "somewhat disagree", 3-"somewhat agree", and 4-"completely agree":

	Completely Disagree	Somewhat Disagree	Somewhat Agree	Completely Agree
b) I learned something new from this handout:	1	2	3	4
c) As a result of seeing this handout, I will be more likely to use opioids as prescribed by my healthcare provider in the future:	1	2	3	4
d) This handout made me more likely to seek treatment for opioid addiction (if relevant):	1	2	3	4
e) The content of this handout was relevant to me:	1	2	3	4

f) Please provide suggestions for improvement of this handout:

_____

_____

_____

6) I identify as…. Circle one.

Female Male Transgender Female Transgender Male

Gender Variant/Non-Conforming Not Listed Prefer Not to Answer

7) What is your date of birth? (mm/dd/yyyy) __ __ / __ __ / __ __ __ _

8) Which categories describe you? Circle all that apply. Note you may circle more than one group.
   a. White
   b. Hispanic, Latino, or Spanish Origin
   c. Black or African-American
   d. Asian
   e. American Indian or Alaska Native
   f. Native Hawaiian or Pacific Islander
   g. Other, please specify _____

Thank you for helping us reach out to the community!

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