You Can Narcan: Developing an Educational Naloxone Program for Pharmacists

By:

Karleigh Smith

A practicum submitted in fulfillment of the requirements for the degree of Master of Public Health at Oklahoma State University

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Abstract of Work

You Can Narcan: Developing an Educational Naloxone Program for Pharmacists

Wal-Mart opened its first pharmacies in 1978 with the Coweta location opening in 1981. The Coweta Wal-Mart Pharmacy averages about 2,100 prescriptions per week. Patients come to this pharmacy from all over the county. Although this is the practicum site, I plan on using information from other pharmacies located within Wagoner County to see the potential impact Wal-mart Pharmacy can have on the use of opioid and narcan prescriptions.

The objective of this practicum project was to assess the need of a naloxone intervention in Wagoner County. This was accomplished by developing a baseline assessment directed at pharmacists in the community. Information collected helped to develop an intervention that would assist pharmacists in encouraging patients to keep naloxone in their homes. In turn, this could help accomplish the ultimate goal of decreasing the number of deaths related to prescription opioid overdose in Wagoner County.

A total of 17 pharmacists completed the baseline questionnaire over a three-day period. Most pharmacists worked for Wal-Mart and a few worked for other pharmacies. Key findings from the baseline questionnaire indicated that none of the pharmacists had seen naloxone used, 29% of them do not feel they have adequate time to counsel patients on its use, and 53% of pharmacists experienced a negative counseling experience related to naloxone, with 35% of all the pharmacists having lost confidence counseling their patients because of this.

Pharmacists were provided with infographics and videos to assist them in counseling patients on naloxone. The infographics included how to use naloxone and some talking points to increase the pharmacists' confidence during counseling. Follow-up questionnaires were completed by eleven pharmacists, with nine reporting an increase in confidence counseling their patients.

Based on what I have learned, I believe pharmacists can make a difference by decreasing the death rate due to prescription opioid overdoses. Pharmacies need to provide adequate time to counsel on opioids and naloxone. It is important for the community to assist pharmacies with eliminating the stigma around opioids and naloxone. Doing this, we can provide people with the help they need to live happier and healthier lives.

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Profile Agency and Project

Wal-Mart Pharmacy #374 is located at 11207 South Highway 51 in Coweta. This city is located in Wagoner County, Oklahoma. Although this particular Wal-Mart Pharmacy will be used as the primary site for the project, other pharmacies, including other Wal-Mart pharmacies located in Coweta and within Wagoner County will be used to gather information and implement this public health intervention.

Tyler Metcalfe will take on the role of site supervisor and practicum supervisor for my practicum project. Tyler is both a pharmacy manager and pharmacist for Wal-Mart Pharmacy #374. He began his career in pharmaceuticals in 2007 as a pharmacy technician. Since then, he has completed his undergraduate studies at the University of Oklahoma and graduated from the University of Oklahoma College of Pharmacy in 2013 with special distinction. Tyler has worked at a couple of pharmacies as a pharmacist before becoming pharmacy manager of Wal-Mart Pharmacy #374 in 2017. Overall, he has a total of 14 years experience working for Wal-Mart Pharmacies. As a pharmacist, he sees opioids come in and out of the pharmacy and has the opportunity to provide naloxone to his patients. Due to his experiences in the field, I believe he is qualified to assist in anything I may need to accomplish my goals in this pharmaceutical focused public health practicum.

I have chosen Wal-Mart Pharmacy as my practicum site for a multitude of reasons, one of which being my association with the pharmacy. I have worked for Wal-Mart Pharmacy as a pharmacy technician for three years and have been a nationally certified pharmacy technician for two of those years. This has given me the opportunity to see first hand the dosages and uses of opioids and naloxone. I have noticed that opioid prescriptions are not usually followed by naloxone prescriptions and are not always thought of as necessary. Being associated with the

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pharmacy also allows me a better platform to promote my intervention that has a personal connection to me. A few close family members have suffered from using drugs. One cousin, who fortunately did not have a fatal drug overdose, suffered from multiple strokes and myocardial infarctions. This left him with about 50% usage in his right arm. Although he did not die from this overdose, naloxone, if given in early stages of overdose, has the potential to prevent some of the symptoms associated with overdosing.

The second reason for choosing Wal-Mart Pharmacy was the impact it has on the community. This particular location and the city provide a great opportunity to collect data on a variety of cultures and backgrounds. For example, individuals from urban to rural areas, from rich to poor, etc., visit this pharmacy. This includes individuals from Porter, Haskell, Boynton, Wagoner, Broken Arrow and Coweta. Since medication is an important part of many people's lives, I feel that this Wal-Mart Pharmacy can have a positive impact on the community if the intervention is promoted properly.

Another reason I chose Wal-Mart Pharmacy as my practicum site are their values. It is important to share the same values as a company that you work with to maintain a common goal and attitude in the work environment. Healthcare is already a costly endeavor for many people and can become easily overwhelming. I enjoy helping people by making them feel like they are important and providing them with a few extra dollars to put food on their table. This can be increasingly difficult for some people if they suffer from opioid drug addiction and may need naloxone in their homes to prevent other medical conditions.

My role in this organization, other than pharmacy technician, can be defined as a public health ambassador between pharmacists and patients. As a public health ambassador, I am able to notice different things that the pharmacists or patients may be oblivious to during counseling.

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In this role I have had the opportunity to help promote the use of naloxone to pharmacists and patients by using the knowledge I have collected during this practicum. This has also allowed me to speak with some of the health directors and managers of Wal-Mart Pharmacy to encourage training and confidence building exercises for pharmacists. I have used this opportunity to share the information collected during this practicum with the Wagoner Health Department.

The mission statement for Wal-Mart is "save people money so they can live better."

Wal-Mart Pharmacy takes the mission statement a little further by encouraging "Moments of Care." This can be described as a short-lived, interpersonal interaction that healthcare providers have with their patients. I believe that these two ideas are beneficial to the health of all patients. The idea of "Moments of Care" is not a new idea, however, it is not as commonly used in the retail pharmacy setting. Wal-Mart Pharmacy is one of the only large-chain pharmacies that encourages counseling on new prescriptions. This person to person communication is not common in today's world and has been referred to as a luxury good. The interaction between the pharmacist and the patient helps bolster medication compliance and promotes a trusting relationship between them.

The core values of Wal-Mart and their pharmacies were established in 1979. They are listed and defined below:

- Service to the Customer: Put the customer first by listening and anticipating what the
 customer needs and wants. Find creative ways to help customers and help empower
 coworkers to serve customers.
- 2) **Respect for the Individual:** Collaborate with other associates and provide and receive feedback. Lead others by example. Embrace differences in individuals and their ideas and experiences.

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- 3) **Strive for excellence:** Set aggressive goals and work towards achieving them. Take ownership for successes and failures. Make clear decisions and work towards the future of your path and others.
- 4) **Act with Integrity:** Be honest, fair, and courageous. Keep promises, do right by others, and do not be afraid to ask others for help. Know when it is appropriate to say no and speak up when you feel something is wrong.

A governmental health policy that is followed by Wal-Mart Pharmacy and many other pharmacies, is the ability of pharmacists to prescribe and dispense naloxone to their patients without consent from their doctor. This has been a major milestone in the prescription opioid overdose crisis. However, there is still room for improvement and the addition of more policies directed at this public health issue.

In 2017, opioid overdoses were declared a public health emergency by the United States Health Department (Assistant Secretary of Public Affairs (ASPA), n.d.). Since then, there has been an increase of 5 % in opioid overdose deaths from 2018 to 2019 (CDC, 2021 b). There have been three waves of rise in opioid overdose deaths. The first wave began in the late 1999s, when pharmaceutical companies stated that patients would not become addicted to these medications. This resulted in physicians prescribing them at higher rates. The second wave began in 2010 and was due to a rapid increase in the rate of heroin overdoses. The third wave began in 2013. This wave was due to an increase in illicitly manufactured opioids, such as fentanyl (CDC, 2021 b).

In the state of Oklahoma, there are about 32 individuals that die from opioid overdose every month. In addition, it was reported that more than 150,000 people were hospitalized due to

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unintentional prescription opioid overdose between 2017 and 2018. That is equal to about 100 Oklahomans hospitalized per week (OK.gov, n.d.).

The Wagoner County Health Department found that between 2013 and 2017 there were a total of 75 unintentional overdose deaths. There were about 51 of those deaths caused by prescription opioids. To put this in perspective, prescription opioid overdoses account for more deaths than all illicit drug overdoses combined. Wagoner County's opioid prescription rate is 8 % higher than the state of Oklahoma's rate. This makes Wagoner County rank 19th in highest death rate due to prescription opioid overdoses. Wagoner County is also adjacent to Muskogee County, which is one of the top five counties in overdose deaths in the state (OK.gov, 2019).

To address this public health issue we need to encourage pharmacists to dispense naloxone in their pharmacies. Naloxone, also known by its brand name Narcan, is an opioid antagonist that is used to reverse the effects of opioids (SAMHSA, n.d.). Due to this opioid epidemic, state laws have allowed pharmacists to prescribe and dispense naloxone without a doctor's approval. This has shown to increase the number of naloxone prescriptions being dispensed. However, many patients simply think they do not need it (Xu & Mukheriee, 2021).

Learning Objectives and Outcomes

The first learning objective for my practicum project is, "Analyze epidemiological data to determine the specific needs of a targeted priority population by developing a comprehensive assessment used at baseline to assist healthcare professionals in promoting awareness of a public health issue."

To accomplish this learning objective I began by researching the targeted priority population. I gathered opioid overdose statistics from the Wagoner Health Department and later used this information as a pitch to encourage pharmacists to take a questionnaire. Some

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pharmacists were interviewed to garner a better understanding of the pharmacists' point of view and what they thought were major barriers to patients receiving naloxone. I explored the most effective ways to gather information from pharmacists outside of the Coweta Wal-Mart Pharmacy. From this information I developed a short 15-question questionnaire and discussed the questions with my site preceptor. He was the first pharmacist to participate in my questionnaire and give me feedback on the clarity of the questions being asked. This allowed me to make changes as needed before sending it to the market director for approval. Once approved it was sent via email, if the pharmacist worked for Wal-Mart or via link, for all other pharmacists. This survey was given to pharmacists from many different backgrounds within the county limits of Wagoner. Upon completion, I was able to collect data from 17 pharmacists. This provided me with pertinent information that would be needed to identify barriers and develop an intervention. A follow-up questionnaire containing 10 questions was utilized to determine if the intervention was having positive effects on the targeted priority population. Collecting epidemiological data is important to establish a baseline for any public health program and to monitor the effect it has on the target population once the program is implemented.

The next learning objective for my practicum project is, "Exhibit learning and application of systems thinking skills to develop health policies."

To accomplish this learning objective, I interviewed pharmacists to understand what they thought about opioids and naloxone. By immersing myself into their state of mind, I was able to develop appropriate measurement tools, such as questionnaires and infographics, to better assist them with encouraging their patients to receive naloxone. This information allowed me to investigate barriers to the intended health outcome. There are many health factors that can contribute to the quality of life of a community. I analyzed these factors, the results from my

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baseline questionnaire, and the knowledge obtained from immersing myself in the world of naloxone and opioids, to develop health policies for Wal-Mart Pharmacy #374. These policies include the collaboration of different health teams in the community. Since Wal-Mart Pharmacy is a large corporation, it was difficult for me to make decisions that affect policies for the entire company. Withthatsaid, I used the information I collected to focus on the immediate policies within this particular Wal-Mart Pharmacy location. I eventually would like to implement this program to encompass pharmacists from all over the county, especially because this information is a representation of the county overall. When completed, I had planned to provide the Wagoner County Health Department with the data and artifacts I have uncovered during my practicum project. This will allow them to develop and implement policies of their own using the backbone of the program I created.

The third learning objective I set out to accomplish was, "Demonstrate leadership skills by fostering collaboration between different health teams who support the community."

For this learning objective, I requested the participation of multiple pharmacists from different pharmacies within Wagoner County. They participated in questionnaires and interviews, in which they provided information to help me develop resources that would benefit them and the community. Through discussions between pharmacists, pharmacy technicians, and myself, I have encouraged them to work with other pharmacies and doctors' offices to recommend naloxone to patients. Doctors' offices are asked to include a naloxone prescription with their opioid prescriptions when called to determine a diagnosis code and if the condition in which the patient needs opioids is acute or chronic. The infographics were used to help all stakeholders get on the same page and work with each other to make it less confusing and decrease the stigma surrounding opioids. By accomplishing this, the overall quality of life of the community should

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improve with fewer prescription opioid overdoses. I also took control of my practicum and provided my preceptor with the information I needed. This gave me the freedom to establish small goals for myself during the practicum project and receive feedback from my preceptor on what could be improved and how to handle certain situations. This collaboration has taught me how to work with my peers and communicate effectively between them.

The final learning objective is, "Demonstrate knowledge of cultural competency and its impact on communication strategies."

I accomplished this learning objective by developing assessments and educational materials and resources for my project. Having pharmacists and patients coming from different backgrounds, I had to determine the most appropriate and efficient way to provide and distribute these materials. For the pharmacists I had to take into consideration some of their personal feelings they may have on opioid and naloxone. While developing the baseline questionnaire, I asked questions that may make individuals uncomfortable during the counseling session. This included the gender, race/ ethnicity, age, attitudes, and beliefs of both the pharmacists and patients. Religion could also play a major role. For example, female Muslim patients may require their male spouses to converse with a male pharmacist due to their religious beliefs. I also demonstrated cultural competency by creating talking points for the pharmacists that refrain from using jargon. This assisted the pharmacists in communicating effectively with their patients and encouraging naloxone prescriptions. Most pharmacies have a translation service available to them for patients who are not fluent English speakers. However, with my experience working in a pharmacy, I rarely have seen it be used although there are patients that could benefit from it. Wagoner county has 2.7 % of Spanish speaking residents that can not speak English (DATA USA, 2019). Although this does not seem like very many, quite a few of these Spanish speakers

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use this Wal-Mart Pharmacy location. So, I worked with Wal-Mart Pharmacy to develop easy to understand resources on naloxone for these Spanish speaking patients. From my experience working at Wal-Mart Pharmacy #374, there are quite a few Russian speakers as well. About 10.5 % of Wagoner County's population consists of Native American/ Alaskan Native individuals (United States Census Bureau, 2019). The Centers for Disease Control and Prevention's (CDC) National Center for Injury Prevention and Control (NCIPC) works to address opioid overdoses within tribal communities. They found that the number of overdoses in these groups is higher than the national average and is projected to continue to increase in the coming years (CDC, 2021). By understanding cultural competency and diversity, I am able to address health disparities and increase the health quality of individuals in the community.

Demonstration of Program Core Competencies

Evidence-Based Approaches to Public Health competencies

I demonstrated the competency, "Select quantitative and qualitative data collection methods appropriate for the given public health context." I collected both quantitative and qualitative data for my practicum project in the form of baseline and follow-up questionnaires. The baseline questionnaire consisted of 15 questions and was provided to pharmacists located at Wal-Mart, Walgreens, City Drug, Express RX, and other independently owned pharmacies in Wagoner County. This questionnaire was conducted over a three day period using Survey Hero, an easy to use online survey program. The Survey Hero program was also utilized to keep track of the completion rate of the questionnaires, as well as, the individual and group reports of the responses given. Once the deadline for responses had passed, all of the information from the 17

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responses was then converted into graphs and charts to show a visual representation of the results.

The follow-up questionnaire was provided shortly after the educational resources and infographics were distributed to all the pharmacies that participated in the baseline questionnaire. Similar to the baseline questionnaire, the follow-up questionnaire was provided on the same platform and the participants were given a deadline of three days to complete it. A total of 11 participants completed the follow-up questionnaire. After the deadline passed, data was converted into graphs using Survey Hero.

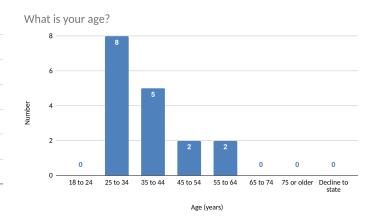
I demonstrated the competency, "Interpret results of data analysis for public health research, policy, or practice." The key findings from the baseline questionnaire are shown in Graphs 1-6 and are as follows: female pharmacists represented 70.59 % of the total responses, the age of pharmacists ranged from 25 to 64 years of age (with 47.06 % of them falling in the 25 to 34 age range), and all participants had at least three years of experience working as a pharmacist. None of the pharmacists had ever used or seen someone else use naloxone. Unfortunately, a total of five pharmacists felt that they did not have adequate time to counsel their patients on naloxone, 52.94 % had a negative naloxone counseling experience, and 35.3 % felt that that experience affected their counseling ability. This data showed that pharmacists needed to become more confident and demonstrate an appropriate form of assertiveness towards patients when recommending naloxone.

Graph 1: Gender

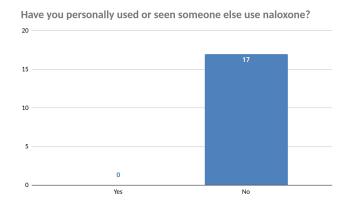
What is your gender?

12
10
8
8
4
5
2
0
Male
Female
Gender

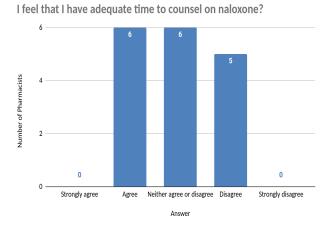
Graph 2: Age



Graph 3: Naloxone Use



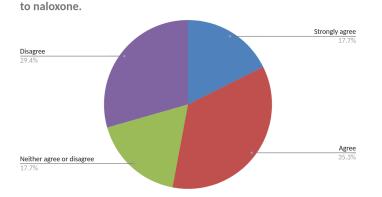
Graph 4: Counseling Time



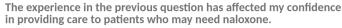
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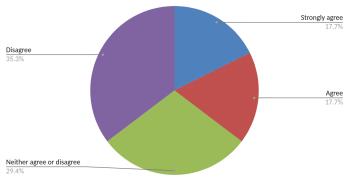
Graph 5: Counseling Experience

I have had a difficult or challenging counseling experience related



Graph 6: Confidence and Counseling





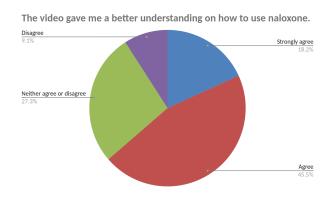
Key findings from the follow-up questionnaire are shown in Graphs 7- 9 and are as follows: 63.63 % of pharmacists reported the video on how to use nasal naloxone gave them a better understanding of it, 72.73 % reported that the infographic helped them build confidence on counseling patients on naloxone, 54.54 % reported that the talking points helped them save time on counseling.

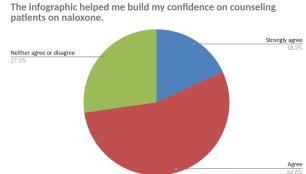
Graph 7: Naloxone Video

Confidence

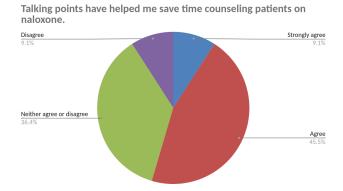
Graph 8: Pharmacist Infographic/

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Graph 9: Talking Points/ Time



I believe that understanding how to determine the best course of action when developing a data collection method and applying it to develop an intervention is a very crucial part of public health. It provides insight into why certain decisions are made. For example, the information I gathered from the baseline questionnaire helped me determine what was in need of improvement to accomplish the intended health outcome. In addition, evidence-based public health can provide insight on the effectiveness of an intervention.

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Communication competencies

I demonstrated the competency, "Select communication strategies for different audiences and sectors." I developed two infographics: one aimed at pharmacists and one aimed at patients. The infographic for pharmacists was easy to read and was intended to be used to assist in building confidence during the counseling experience. The talking points on the infographic are provided to help jump start the conversation on naloxone between the pharmacist and patient. It eliminates the amount of time and thought it takes to counsel on this medication. On the other side of the pharmacists' infographic is epidemiologic data from the Oklahoma State Department of Health on the opioid epidemic in Wagoner County. The patients' infographic closely resembles the pharmacists' infographic with the only difference being it does not provide talking points. Tools such as these, when provided can all work together to benefit the stakeholders in this practicum project.

I demonstrated the competency, "Communicate audience-appropriate public health content, both in writing and through oral presentation." During this practicum project I had to pitch my idea of encouraging naloxone to many different groups of people. These people included pharmacists from different pharmacies, the Wal-Mart Pharmacy Market # 347 director, pharmacy technicians, physicians, and patients. I did an oral presentation of my project idea to pharmacists from different pharmacies to have them participate in my questionnaires. I also communicated to them through the infographics directed towards them. The Wal-Mart Pharmacy #347 director was contacted via email to discuss my practicum and encourage the distribution of the questionnaires, infographics, and provide the results. I had to take into consideration that my practicum project was not their first priority and that they had many other things to worry about. Withthatsaid, I wrote these emails in a way where all of the pertinent information was bullet

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pointed and addressed briefly. I spoke with the pharmacy technicians on the implementation of my intervention and encouraged them to ask physicians about prescribing naloxone when they had to call them. This task needed to be seen as important and luckily since they were all my coworkers, I shared a bond with them that assisted me in stressing the importance of this task. Lastly, I needed to provide unbiased and non judgemental material on naloxone for patients. Due to the stigma surrounding naloxone and opioids, this infographic needed to refrain from stating anything that could be taken in a negative light. This includes words as simple as "misuse" and "abuse."

Planning and Management to Promote Health competency

I demonstrated the competency, "Assess population needs, assets and capacities that affect communities' health." When determining my priority target population and prescription opioid overdose deaths, I first looked at the patients. The data collected from epidemiological research and from personal observation provided me with insight into what the population needs. I determined there needed to be an increase in naloxone prescriptions to go along with the opioid prescriptions. An asset of the patient population was pharmacists. This is when they became my priority target population. I then developed an assessment to determine the pharmacists' needs. The data gathered during the baseline questionnaire provided me with an overview of what the priority population of pharmacists looked like. I also used epidemiological data that was previously gathered by the Oklahoma State Department of Health to determine the need for the intervention I set out to develop and implement in the community. The follow-up questionnaire, although given shortly after the intervention was implemented, provided evidence of how the barriers of the health issue have changed over time.

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I demonstrated the competency, "Design a population-based policy, program, project or intervention." After I analyzed the results of my needs assessment on the pharmacists in the county of Wagoner, I designed an intervention to overcome the obstacles they stated they had. These obstacles as previously mentioned included a decrease in confidence following a negative naloxone counseling experience, lack of adequate time to perform this counseling, and no previous experience with using naloxone. To increase the confidence level of the pharmacists, I created the infographic previously mentioned, shown in Appendix 1. The talking points on this infographic were intended to make it easier for pharmacists to counsel on naloxone. This included, but was not limited to, how to talk to patients in a non-judgmental way. The talking points were also used to assist the pharmacists in lack of adequate time for counseling by cutting down on the amount of time it would take the pharmacists to determine what to say to the patient and how to say it unprejudiced. A video on how to use the nasal naloxone spray was provided to pharmacists via email and link (provided on paper) to ensure that they know how to properly administer naloxone to assist with counseling patients on how to use it. This could also raise their confidence. This intervention

Leadership competency

I demonstrated the competency, "Apply principles of leadership, governance and management, which include creating a vision, empowering others, fostering collaboration and guiding decision making." Excellent leadership skills are vital to perform successfully in this branch of public health. Wal-Mart Pharmacy #374 is a location within Market #347. Due to the size of this corporation, I will focus solely on developing policies within this particular location and possibly suggesting change for the entire region.

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Like previously stated, Wal-Mart is a large corporation and the further up you go in the organizational structure of the company the less the managers care about the individual employees. Sadly, in this company you become so small to the higher up managers that all they care about is numbers and not how you are getting them. This can create difficulties in implementing interventions to every portion of the company.

Fortunately, my site preceptor demonstrated very good leadership skills in the pharmacy. Tyler is self-aware of how he treats others and provides a solid moral ground to encourage the development of his team. I used some of the leadership skills Tyler demonstrated to take control of my practicum project. System thinking skills were utilized to determine the best route on how to approach different situations throughout my practicum. For example, when I visited Walgreens to pitch my project and gather questionnaire responses, I had to determine the best way to address the encouragement of completing the questionnaires. If I had not practiced some of these skills during the collection process, I may not have received as many responses as I did.

I collaborated with different pharmacies all over Wagoner County and also encouraged working with physicians to increase the number of naloxone prescriptions. This collaboration can help increase the confidence level of the pharmacists recommending naloxone to their patients if the patient's physician is also recommending it.

Assignment

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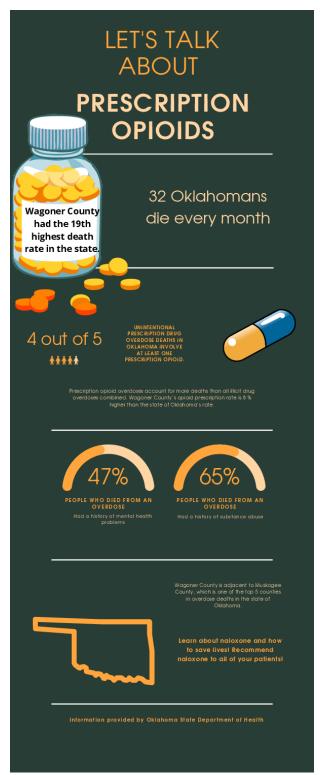
Appendices

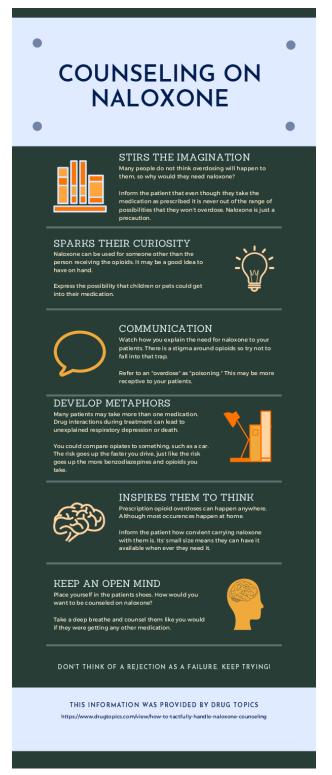
Appendix 1: Pharmacist InfographicPage #23
Appendix 2: Patient Infographic Page #24
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Appendix 4: Student Evaluation of Site Page # 30-31
Appendix 5: Self-Evaluation of Practicum Page # 32-35
Appendix 6: Faculty Advisor Signature Page Page # 36

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Pharmacist Infographic

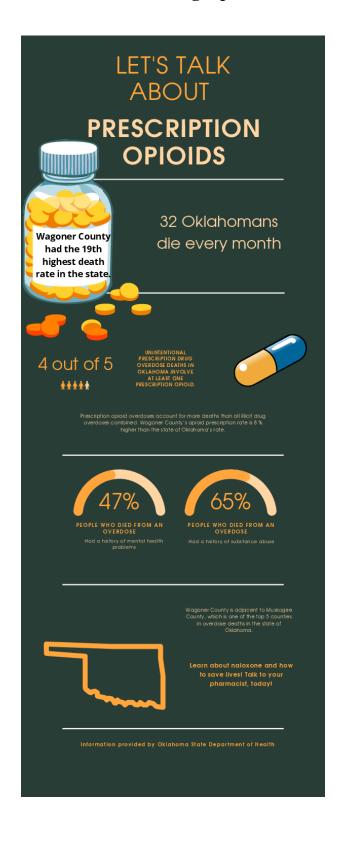
(FRONT) (BACK)





Assignment

Patient Infographic



Assignment



MPH Practicum

Learning Agreement

Student Name: Karleigh Smith	Campus Wide ID (CWID): 11617694
Phone: 918-978-1783	Email: karleigh.clanin@okstate.edu
Preceptors Name: Tyler Metcalfe	Title: Pharmacy Manager/ Pharmacist
Phone: 918-282-1516	Email:tylerjmetcalfe@gmail.com
	rmacy #374 located at 11207 S Highway 51 Coweta,
Oklahoma 74429	
Beginning Date: October 30, 2021	Ending Date: December 2, 2021
Experience (circle one): Paid	Unpaid

Please provide a brief description of your purpose during this practicum:

My intended purpose during this practicum project will be to develop a better understanding of public health and its uses on real world issues. I also want to understand all of the different components that make up public health and how they work together to accomplish a common goal of bettering the quality of life of individuals within a community.

To accomplish these goals, I will observe pharmacist- patient relationships and immerse myself in the world of prescription opioids and the use of naloxone. I will develop a baseline questionnaire to determine the needs of the specific priority population. I will consider the environmental factors, behavioral factors, social factors, and medical care factors of both pharmacists and their patients. Using the baseline questionnaire, I will be able to create artifacts to

assist my priority population and use a follow-up questionnaire to determine the effectiveness of the artifacts.

With this information, I want to increase the public's knowledge and awareness of an important public health issue. The goal is to increase the number of naloxone prescriptions being dispensed, and ultimately decrease the number of deaths related to prescription opioid overdoses. This public health issue requires the collaboration of pharmacists, doctors, and patients to overcome barriers presented during this practicum.

Prescription opioid overdoses are considered a major public health issue and contrary to popular belief, an overdose can occur even if taken as directed by your physician. This is why it is important to have naloxone on hand. The stigma around receiving naloxone is that it makes you look like you are addicted to drugs. We need to overcome this stigma as a community and help individuals feel more comfortable with keeping naloxone in their homes.

Describe 2 – 4 learning objectives that will underlie the ability to achieve the overall goal of this practicum. These objectives should be unique learning experiences that support and reinforce classroom learning in the MPH curriculum. Learning objectives should be agreed upon between the student and the preceptor and allow the faculty advisor, as well as the practicum preceptor a clear set of guidelines to support the student in his/her practicum experience.

Tips for writing learning objectives: learning objectives should follow a similar format, stating the skill statement a student should be able to accomplish after a specified activity. Skill statements should include words like demonstrate, analyze, synthesize, develop, et cetera. Activity statements should be brief and describe the actions the student will be completing to achieve learning objective.

1. Analyze epidemiological data to determine the specific needs of a targeted priority population by developing a comprehensive assessment used at baseline to assist healthcare professionals in promoting awareness of a public health issue.

Activities: I will develop a questionnaire to determine the needs of a specific population and it will be administered to pharmacists located within Wagoner County. This needs assessment will provide information to determine the baseline of the community and develop appropriate educational materials to promote awareness. The assessment will mostly focus on the barriers that prevent patients from receiving life saving medication, such as naloxone.

2. Exhibit learning and application of systems thinking skills to develop and promote health policies.

Activities: I will use system thinking skills to analyze the data I collect through coursework, research, and observation. By doing this, I will be able to immerse myself into the world of prescription opioids and naloxone to develop a better understanding of the target priority population. I will analyze how these components work together and adapt to achieve common health goals and create health policies. I will provide the Wagoner County Health Department with the data I gathered, as well as, the artifacts created to develop health policies in the county.

3. Demonstrate leadership skills by fostering collaboration between different health teams who support the community.

Activities: Stakeholders of this intervention include: patients, physicians, and pharmacists. I will work with these stakeholders to promote awareness of this public health issue. I will encourage pharmacists from different competitor pharmacies and doctors from from different competitor offices to work together to decrease the number of prescription opioid overdoses in their community.

4. Demonstrate knowledge of cultural competency and its impact on communication strategies.

Activities: I will develop questionnaires and educational resources that refrain from using jargon and are easy to understand for anyone that may use them. The social stigma around opioids and naloxone will be identified and taken into consideration when when discussing this topic to individuals and creating needed materials. By understanding cultural competency, I will help diminish ethnic and racial health disparities and ensure everyone, no matter their background, receives the information they need to increase their quality of life. I will also work with Wal-Mart Pharmacy to provide material for Spanish-speaking patients.

Approval Signatures:	
Faculty Advisor:	Date: December 9. 2021
Preceptor:	Date: December 6, 2021
Student:	Date: December 5, 2021

Students: Please submit this completed document to the MPH Director with an electronic copy of your preceptor's resume. The preceptor should be the person who directly supervises your practicum experiences and acquisition of your learning goals.



MPH Practicum

Site Evaluation of Student

Student Name: Karleigh Smith	Semester: Fall 2021
Practicum Site & Address: Wal-Mart Pharmac	y #374 11207 S Highway 51 Coweta, OK 74429
Preceptors Name: Tyler Metcalfe	Title: Pharmacy Manager/ Pharmacist

This Practicum		Agree	Disagree	Strongly Disagree	N/A
1. Contributed to the development of the student's career interests	X				
2. Provided the student with the opportunity to address his/her learning objectives	X				
3. Provided the student with the opportunity to showcase skills learned in MPH		X			
I could use additional guidance on how to best structure practical opportunities for OSU MPH students		X			
5. Served as valuable experience in public health practice	X				
6. I would be interested in directing practica for OSU MPH students in the future	X				
The student	Strongly Agree	Agree	Disagree	Strongly Disagree	N/A
7. Obtained with appropriate skills through MPH coursework	X				
8. Had valuable suggestions	X				
9. Initiated communication relevant to organizational interests	X				
10. Was knowledgeable in his/heer area of study	X				

Karleigh Smith

Written Practicum

Assignment

11. Completed at least 200 practical hours with our site	X			
12. I would hire this student if I had a full time position available	X			
13. Used an existing Graduate Assistantship or my current place of employment as my practicum site	Yes	3	No	

Please include any comments that can be used to support your responses. Include this form in your written report to be submitted to your faculty advisor and the MPH Program Director.

Preceptor Signature: December 6, 2021



MPH Practicum

Student Evaluation of Site

Student Name: Kareigh Smith	Campus Wide ID (CWID): 11617694
Faculty Advisor: Julie Croff	
Practicum Site & Address: Wal-Mart Phart	nacy #374 11207 S Highway 51 Coweta, OK 74429

Preceptors Name: Tyler Metcalfe Title: Pharmacy Manager/ Pharmacist

My practicum experience	Strongly Agree	Agree	Disagree	Strongly Disagree	N/A
Contributed to the development of my career interests		X			
2. Provided me with the opportunity to address my learning objectives	X				
Provided me the opportunity to use skills obtained through MPH coursework	X				
4. Required skills I did not have			X		
5. Required skills I obtained outside of MPH coursework		X			
6. Added new information or skills to my graduate education		X			
7. Served as a valuable experience in public health practice	X				
8. I would recommend this organization to others for a practicum	X				
My preceptor	Strongly Agree	Agree	Disagree	Strongly Disagree	N/A
9. Enabled me to achieve my learning goals	X				
10. Accepted me as a functional member of the staff	X				
Integrated me into all appropriate levels in activities, programs, and projects	X				
12. Listened to my suggestions	X				
13. Involved me in the decision making process within the organization		X			
14. Initiated communication relevant to my assignment or topics that		X			

he/she knew to be of interest to me				
15. Was knowledgeable in his/her area of study	X			
I would recommend this preceptor as a supervisor for future practica	X			
17. I used an existing Graduate Assistantship or my current place of employment as my practicum site	Yes	3	No	

Please include any comments that can be used to support your responses. Include this form in your written report to be submitted to your faculty advisor and the MPH Program Director.

Wal-Mart Pharmacy provided me with the perfect environment to immerse myself in public health opportunities. I was able to use knowledge I obtained from the MPH coursework, as well as, from working at the pharmacy. This allowed me to build on my skills and better myself for a career in public health. Since Wal-Mart Pharmacy is such a large corporation, it was difficult to be a part of the decision making process for the company as a whole. However, I was able to discuss my practicum project within this particular store and provide input on some of those pharmacy decisions.

My site preceptor was very knowledgeable on his area of study and we were able to have in depth conversations about the practicum project and the data I collected. Tyler did everything he could to assist me in accomplishing my learning goals for this practicum. He allowed me to work at my own pace and take control of my project. I believe this helped strengthen my time management and leadership skills.

Overall, this has been a great experience and I have learned so much hands on experience dealing with social stigmas during this practicum project. Everyone that I worked with during this practicum are the same individuals that I work with on a daily basis. They were very supportive of my project and were always willing to assist me when needed. It has been amazing being able to delve into a topic that I otherwise may overlook in my place of employment. It is great that I was able to be a part of something and bring awareness to something so life changing.

Student Signature:	life set	Date:	December 5, 2021

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MPH Practicum

Student Self-Evaluation

Student Name: Karleigh Smith	Semester: Fall 2021
<u> </u>	
Practicum Site: Wal-Mart Pharmacy #374	11207 S Highway 51 Coweta, Ok 74429
Precentors Name: Tyler Metcalfe	Title: Pharmacy Manager/ Pharmacisi

1. Reflect on your strengths and your ability to demonstrate these strengths during the practicum experience. Specifically, address strengths related to the demonstration of core program competencies. Also, reflect on your challenges related to demonstrating the core program competencies.

Evidence-Based Approaches to Public Health competencies

Select quantitative and qualitative data collection methods appropriate for the given public health context.

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

I collected both quantitative and qualitative data for my practicum project in the form of baseline and follow-up questionnaires. The baseline questionnaire consisted of 15 questions and was provided to pharmacists located at Wal-Mart, Walgreens, City Drug, Express RX, and other independently owned pharmacies in Wagoner County. This questionnaire was conducted over a three day period using Survey Hero, an easy to use online survey program. The Survey Hero program was also utilized to keep track of the completion rate of the questionnaires, as well as, the individual and group reports of the responses given. Once the deadline for responses had passed, all of the information from the 17 responses was then converted into graphs and charts to show a visual representation of the results. Additionally, a 10 question follow-up questionnaire was administered in the same way as the baseline questionnaire. This questionnaire was administered after educational materials and resources were provided.

I believe I possess a good understanding of evidence-based approaches to public health. Without collecting data on a population, it is hard to pinpoint exactly what kind of intervention you are trying to implement and who it should be directed to. Using this information I was able to determine that some barriers of patients not receiving naloxone prescriptions is due to them not fully understanding the importance of it and the constant battle of the stigma around it. One of the challenges that occurred during the practicum was the initial target population I had chosen. I was looking at collecting data on patients, however, after talking with my committee, we decided

that the best course would be to focus on pharmacists. If I had continued with patients, it could have been very difficult to get individuals willing to participate in a questionnaire. There was also a potential of a HIPPA violation if a patient was picking up an opioid and I asked them to take the survey. I was able to communicate with more patients by using pharmacists. Although it was more practical to use pharmacists as my target population, that meant that my sample size would be a lot smaller

Communication competency

Select communication strategies for different audiences and sectors.

Communicate audience-appropriate public health content, both in writing and through oral presentation.

Communication is crucial for daily life. Even more important is how you use communication strategies and present information to your audiences. The materials used for this practicum project include questionnaires (baseline and follow-up) and infographics (for pharmacists and patients). These needed to use wording that would be unprejudiced or unbiased to the readers. That means the information needed to be written in a way that anyone can read, understand, and not feel singled out. I accomplished this by using layman's terms and previous MPH coursework on cultural issues and ethics. I also reached out to the market director to promote my intervention. Overall, I had to use writing and oral communication to address different audiences and alter these strategies depending on the person.

I believe I have developed a good understanding of how to alter my communication strategies to assist me in promoting public health content in the community. With the many communication tools and opportunities during my practicum, I would say the most difficult thing was determining how to address this public health issue with the regional director. They are all business, and could care less about a project so this proved difficult trying to get them on board.

Planning and Management to Promote Health competency

Assess population needs, assets and capacities that affect communities' health.

Design a population-based policy, program, project or intervention.

When determining my priority target population and prescription opioid overdose deaths, I first looked at the patients. The data collected from epidemiological research and from personal observation provided me with insight into what the population needs. I determined there needed to be an increase in naloxone prescriptions to go along with the opioid prescriptions. An asset of the patient population was pharmacists. This is when they became my priority target population. I then developed an assessment to determine the pharmacists' needs. The data gathered during the baseline questionnaire provided me with an overview of what the priority population of pharmacists looked like. I also used epidemiological data that was previously

gathered by the Oklahoma State Department of Health to determine the need for the intervention I set out to develop and implement in the community. The follow-up questionnaire, although given shortly after the intervention was implemented, provided evidence of how the barriers of the health issue have changed over time.

I believe that I possess an understanding on how to analyze and utilize epidemiological data to find pertinent information on a specific population or health issue. I determined what was important to know for the intervention and used that knowledge to develop an intervention to promote awareness of a public health issue. However, I feel one of the limitations to this practicum project was the small sample size of pharmacists that participated in the data collection.

Leadership competency

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

Excellent leadership skills are vital to perform successfully in this branch of public health. Wal-Mart Pharmacy #374 is a location within Market #347. Due to the size of this corporation, I will focus solely on developing policies within this particular location and possibly suggesting change for the entire region.

Fortunately, my site preceptor demonstrated very good leadership skills in the pharmacy. Tyler is self-aware of how he treats others and provides a solid moral ground to encourage the development of his team. I used some of the leadership skills Tyler demonstrated to take control of my practicum project. System thinking skills were utilized to determine the best route on how to approach different situations throughout my practicum. For example, when I visited Walgreens to pitch my project and gather questionnaire responses, I had to determine the best way to address the encouragement of completing the questionnaires. If I had not practiced some of these skills during the collection process, I may not have received as many responses as I did.

I collaborated with different pharmacies all over Wagoner County and also encouraged working with physicians to increase the number of naloxone prescriptions. This collaboration can help increase the confidence level of the pharmacists recommending naloxone to their patients if the patient's physician is also recommending it.

2. What are your plans for continued professional development? Do you plan to build upon strengths, improve upon challenges, or some combination?

As long as I continue to work with Wal-Mart Pharmacy I will continue to push for an increase in the dispensing of naloxone. I will create more educational resources and materials for both pharmacists and patients to promote awareness of this health issue. I want to build upon my

strengths and reach out to more physicians and possibly develop a baseline assessment for them just like I did for the pharmacists.

Outside of Wal-Mart Pharmacy, I want to research the impact opioids can have on the health of animals, such as narcotic working dogs. For example, Fentanyl in very minute airborne amounts can result in overdose if one of these narcotic working dogs gets too close. I would also be interested in investigating how the abundance of human opioid prescriptions creating a shortage, leaves very little left for veterinarians to prescribe their patients.



MPH Practicum

Committee

Signature Page

Student Name: Karleigh Smith	Campus Wide ID (CWID): 1161/694
	- · · · · · ·
Practicum Site & Location: Wal-Mart Pharmacy #374 11207 S Highway 51, Coweta, OK 74429	
The student named above has successfully comple 200-hour practicum to my satisfaction.	eted the written practicum assignment and
Additional comments:	
Chair Signature:	Date:
Chair Name: Julie Croff	
Committee Member Signature:	Date:
Committee Member Name: Micah Hartwell	
Committee Member Signature:	Date:
Committee Member Name: Kelley Rhoads	