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The document mentioned above has been reviewed and accepted by the student's advisor, on behalf of the advisory committee, and by the Assistant Dean for MSN and DNP Studies, on behalf of the program; we verify that this is the final, approved version of the student's DNP Project including all changes required by the advisory committee. The undersigned agree to abide by the statements above.

Christina Schipper, Student

Dr. Sheila Melander, Advisor

Final DNP Project Report

Evaluation of a Peer Mentor Program on Adult Heroin Overdose Patients in the Emergency
Department

Christina M. Schipper

University of Kentucky | Norton Healthcare

College of Nursing

Fall 2018

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Dedication

This project is dedicated to my husband. He has stood by me and pushed me to complete this program when I've felt like giving up. I am forever thankful for his support and love. This is for my family and friends, who have assisted and encouraged me, even in times where I have had to say "no" to experiences because I had school work to complete. They have been understanding and have cheered me on, even knowing I have FOMO (fear of missing out)! This is for my work family who have been so flexible with my schedule, accommodating so many of my needs, for always asking how school is going and encouraging me to get to the finish line. This is also for my patients I have encountered on this three year journey who have allowed me to live out my life's passion and purpose.

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Abstract

PURPOSE: According to the Centers for Disease Control and Prevention (CDC), the rate of heroin use and heroin overdoses has greatly increased in the last decade, regardless of sex, age, race or income. The emergency department (ED) is a common place heroin users present, often as an overdose or due to a complication from their drug use. To address the current opioid epidemic, the CDC calls for increased access to substance abuse treatment services. Peer Mentors placed in the ED serve as a link for the patient to recovery services. The purpose of this study is to evaluate the effectiveness of a Peer Mentor Program on adult patients who overdosed on or admitted to using heroin at the time of ED presentation. METHODS: This descriptive single-center study used convenience sampling and a retrospective chart review of patients who consulted with a Peer Mentor. Data were obtained through the Peer Mentor Documentation Sheet, electronic health record chart review, and data extraction from the healthcare system's data analytics team. RESULTS: Nine patients were seen by Peer Mentors from June through September 2018, two of whom met all inclusion criteria. No patients went directly from the ED to the treatment service center. The healthcare system's data analytics team compared the patient population of heroin-related ED visits from the same time period; no statistically significant difference ($p < 0.05$) was noted among patient demographics, date and time of ED arrival, ED disposition, and 30-day ED readmit. CONCLUSION: Clinically significant outcomes include identification of the patient population demographics and recognition of the most common days and times where Peer Mentors should be available to engage the majority of patients. Further research is needed to determine the most optimal location and time to present options for substance abuse treatment services.

Key words: heroin, substance abuse, emergency department, peer mentor

Evaluation of a Peer Mentor Program on Adult Heroin Overdose Patients in the Emergency
Department

Introduction

In the past decade, there has been a significant increase in heroin use and heroin overdoses. The Centers for Disease Control and Prevention (CDC) report a 12% increase in drug-related deaths in Kentucky from 2015 to 2016 and Kentucky ranks fifth highest in death rates due to drug overdose (2017). According to the Substance Abuse and Mental Health Services Administration (2015), “substance use disorder” encompasses the use of alcohol, tobacco, marijuana, stimulants, hallucinogens, and/or opioids, however, heroin use in particular has significantly impacted the city of Louisville, Kentucky. The 2017 Overdose Fatality Report indicates that Jefferson County is the number one county in Kentucky for number of heroin-related overdose deaths (Kentucky Office of Drug Control Policy, 2018). Extensive prescription opioid exposure and opioid addiction have affected heroin abuse (CDC, 2017).

Heroin use does not discriminate with regard to age, sex, race, or socioeconomic status (CDC, 2017). The opioid crisis has been coined an “epidemic” and the federal government has declared it a public health emergency. The CDC (2015) suggests that one option to combat this problem is to improve access to evidence-based substance abuse treatment services. In 2015, an estimated 26 per 100,000 people visited an emergency department (ED) for unintentional, heroin-related poisonings in America (CDC, 2017). If patients who use heroin are not presenting to the emergency department for an overdose, they often present to the ED due to some complication of their drug use, such as an abscess or infection. Clearly, the emergency department is a frequent place for heroin users to present; therefore, the ED was deemed a possible location to offer these patients the opportunity for substance abuse treatment services.

Background

Deaths due to opioid overdose continue to rise at the local, regional, and national levels. Nationwide, the rate of heroin use and heroin overdoses has continued to increase over the past ten years; this epidemic affects all areas of the United States (CDC, 2018). The Department of Health and Human Services (2017) report that an estimated \$504 billion were spent in 2015 on the opioid epidemic. Without intervention, this problem will continue to affect not only those suffering from addiction, but also their friends and loved ones. Substance use disorder is a complex issue that affects patients of all demographics and care with a treatment program is crucial to a successful recovery (National Institute on Drug Abuse, 2014).

The Healing Place in Louisville, Kentucky is a recovery facility that specializes in mainly abstinence-based substance abuse recovery. Once an individual completes a recovery program at The Healing Place, they may become a “Peer Mentor” and volunteer as a leader and role model for individuals going through the recovery process (The Healing Place, 2017). Peer Mentors act as liaisons between the healthcare team and the patients, and are often able to connect more profoundly with the patient than the providers can.

With the CDC calling for an increase in access to substance abuse treatment services, one hospital of the healthcare system formed a partnership with The Healing Place to provide two Peer Mentors in the emergency department, three days per week, eight hours per day. Peer Mentors are notified by the provider of appropriate patients with whom they may discuss the possibility of detox treatment at The Healing Place directly upon discharge from the ED. Should the patient decide they are ready to attend the detox center, transportation is provided by The Healing Place to the facility. Although Peer Mentors are able to consult a patient with any type

of substance use disorder, this program evaluation was aimed specifically at patients who use heroin.

Florence Nightingale's Environmental Theory (Wayne, 2014) was used as a conceptual framework to evaluate this program. The framework is based on the balance of the relationship between the client, environment, and the nurse, always keeping the client of central focus. Utilizing this framework was essential to understand that the client's surroundings may affect their health. The environment of the emergency department was assessed for a possible location to intervene and offer the patient an opportunity for substance abuse treatment services.

Purpose

The purpose of this study was to evaluate the effectiveness of the Peer Mentor Program implemented at an emergency department during the summer of 2018. The objectives were aimed at evaluating the efficacy of the Peer Mentor Program, the follow-up of patients attending the detox treatment center, and changes in amount of patients who leave against medical advice. The ultimate goal of this program implementation was to improve the patients' quality of life, but that was not perceived to be quantifiable for this project. The objectives that were evaluated are:

1. Provide a Peer Mentor consultation to 100% of heroin overdose patients in the ED during the dates/times allotted.
2. Examine how many heroin overdose patients attended the detox program at The Healing Place.
3. Assess the change in proportion of heroin overdose patients leaving against medical advice (AMA) pre and post Peer Mentor Program implementation.

In addition to these objectives, patient demographics, date and time of ED arrival, ED triage chief complaint, administration of Narcan, urine toxicology screens, ED disposition, and 30-day readmission rates were evaluated for those who consulted with a Peer Mentor. Since the Peer Mentor sample was small, data regarding all patients who presented to the ED with a heroin-related diagnosis during the time period were also collected.

Methods

Design

For this study, a convenience sample with retrospective chart review was utilized. Data were obtained from information recorded by the Peer Mentors on the Peer Mentor Documentation Sheet (Figure 1). The Peer Mentor Documentation Sheet includes the patient's name, demographics, Peer Mentor name, verbal consent check box, the amount of time spent with the patient, the decision made by the patient for treatment, and an area for note-taking. Table 1 lists the information extracted from the Peer Mentor Documentation Sheet as well as the patient's electronic health record (EHR) chart. Charts were reviewed from June 2018 to September 2018. In addition, data from all patients who overdosed on or admitted to heroin use who presented during the study period were compared to data from patients who overdosed on or admitted to heroin use in the same months from the previous year.

Setting

The healthcare system consists of five main hospitals, numerous immediate care centers and many primary care offices serving the adult and pediatric population of Greater Louisville and Southern Indiana (Norton Healthcare, 2018). As one of the five hospitals in the system, Hospital A is a 432-bed acute care hospital offering full inpatient and outpatient medical and surgical services. This program took place in Hospital A's 34-bed emergency department, which

serves approximately 4,000 patients per month and staffs nearly 100 healthcare providers. Hospital A services mainly the adult population.

Sample

The sample of patients for this project included adult patients who overdosed on or admitted to using heroin who presented to Hospital A's ED during the eight hours, three days per week, when there was a male and female Peer Mentor present in the emergency department. The Peer Mentors were present in the ED on Wednesdays, Thursday, and Fridays from noon until 8pm from June 13th until August 31st. Starting on September 4th, the Peer Mentors went to an "on-call service" where they could be available to be in the ED within one hour Monday through Friday from 8am to 4:30pm. See Table 2 for inclusion and exclusion criteria used for this study.

Additionally, data were obtained on all adult patients with a heroin-related ICD-10 code who presented to the ED from June to September 2018 and were compared to the same months of the previous year. See Table 4 for data obtained from the healthcare system's data analytics team.

Data Collection

Approval from the University of Kentucky Institutional Review Board (IRB) and the Healthcare System's Office of Research and Administration (NHORA) was obtained prior to data collection. Patient demographics, decisional information, time spent with the Peer Mentor, and any notes the Peer Mentor made were extracted from the Peer Mentor Documentation Sheet. Outcomes from data extracted from the Peer Mentor Documentation Sheet and retrospective EHR chart review can be seen in Table 3.

The healthcare system's data analytics team provided patient data during two time periods, June through September 2017 and June through September 2018. For each time period, patients were included if they presented to the ED with a primary or up to one of 15 secondary

diagnoses of ICD-10 codes T40.0 and T40.1 (illicit opioid poisoning [opium and heroin]). Data extraction included patient demographics (age, sex, gender), date and time of ED arrival, ED disposition, and ED readmission within 30 days. For analysis purposes, age was categorized into groups (18-24, 25-44, 45-64, and >65 years), the date was used to determine the day of the week (Sunday through Saturday), and time of ED arrival was used to categorize the visit hour into 4-hour increments (12-4am, 4-8am, 8am-12pm, 12-4pm, 4-8pm, 8pm-12am). See Table 4 for categorical breakdown of this data.

To maintain patient anonymity and confidentiality, all information received was de-identified and transferred into an Excel spreadsheet and secured in a password-protected file.

Data Analysis

To analyze outcomes of this study, descriptive statistics including frequency distribution, means, and standard deviations were used to describe patient demographics. To compare age distributions between years, the two-sample *t*-test was utilized. Chi-square test of association was used to examine differences in demographics that were categorical (sex and race) between the two time points. The Mann-Whitney *U*-test was used to examine differences between years for demographics and/or visit characteristics that were ordinal (age, day of week, and time of arrival). Computer software program SPSS, version 24, was used for analysis. An alpha level of 0.05 was used for statistical significance throughout.

Results

The Peer Mentors encountered a total of nine patients in the ED during the evaluation period. Two of the encounters involved the same patient who presented two weeks apart. Electronic health record charts of each encounter were reviewed to obtain inclusion criteria information. Of those nine encounters, all met two of the three inclusion criteria, but only two received Narcan, meeting all three inclusion criteria. Of the nine Peer Mentor encounters, 67%

were female, 89% were white, and the average age was 35.5 years. The Peer Mentors spent an average of 35 minutes with each patient. The most common day of the week was Thursday where 44% of the encounters occurred with the most common time of ED arrival occurring between 12 and 4pm. Fifty-six percent of the patients were discharged and 44% were admitted to the hospital. Of the information collected from the Peer Mentor Documentation Sheet, 33% had documentation that the patient's treatment service disposition was "transport to Healing Place for detox"; however, there was no documentation of any patient going directly from Hospital A's ED to the Healing Place. Four patients presented back to the emergency department within 30 days, with two of them being re-admitted to the hospital.

Of the two encounters that met all three inclusion criteria, the average age was 35 and they were both white females. Both patients presented to the ED with the chief complaint of "drug overdose" and they each received 2mg of Narcan per emergency medical services (EMS) or the Fire Department prior to ED arrival. In one encounter, there was no urine toxicology screen ordered, but the patient admitted to heroin and methamphetamine use. In the other encounter, the patient's urine toxicology was positive only for amphetamines, but the patient admitted to heroin and methamphetamine use. One patient expressed no interest in treatment at the time of Peer Mentor consultation, and the other expressed interest in treatment but did not want to attend at that time. Both patients were discharged from the ED to "home/self-care."

Peer Mentor Consultation

The objective was to capture 100% of the patients who overdosed on or admitted to heroin use who presented to the ED during the times Peer Mentors were physically present in the emergency department. During the times the Peer Mentors were present in the ED, there were eight patients who presented for an overdose; however, only one of those eight patients was

consulted by the Peer Mentor, making the capture percentage 12.5%. Since only one patient cross-referenced from that list to the nine documented encounters from the Peer Mentor Documentation Sheet, a gap in provider documentation and/or identification was recognized. There were seven patients who could have possibly benefited from the services of the Peer Mentors, but it is unknown why the seven patients were not consulted. Since the Peer Mentors saw eight patients not on that list, this further supports the assumption that patients who use heroin often do not present to the ED as an ICD-10 code of heroin “overdose.” The nine patients who encountered Peer Mentors presented with various triage chief complaints such as chest pain, back pain, seizures, altered mental status, sore throat, near syncope, and pneumonia.

According to the documentation provided, no patients who received Peer Mentor consultation were sent directly from the ED to the detox center at the Healing Place. There was documentation that one patient was ready for transport to the detox center, but there were no available beds at the Healing Place at that time. The Healing Place confirmed that one of the nine patients did attend their treatment facility, but no information was obtained about what program was attended (detox versus inpatient, etc.) and how soon after the ED encounter.

There was a decrease in patients who left against medical advice (AMA) between 2017 and 2018, from 14.3% to 5.5%. However, since only one patient of the data set was captured by the Peer Mentors, the evidence does not suggest that the Peer Mentor Program impacted the decrease in patients who left AMA.

Comparing 2017 to 2018

The data analytics team reported 112 encounters in 2017 and 55 encounters in 2018 with the selected ICD-10 codes. There was no statistically significant difference between patient demographics, including age, sex, and race, between the two time periods. There was also no

statistically significant difference in time of arrival, day of the week, or patient disposition between the two time periods. Of clinical significance, in 2017, 55.4% arrived to the ED between noon and 8pm, compared to 2018 where only 38.2% presented during that time slot. Additionally, the most common days of the week that patients presented to the ED were Sunday and Thursday in 2017 and Sunday and Friday in 2018. In 2017, 24.1% of the patients left AMA or eloped, compared to 14.6% in 2018. There was no statistically significant difference in 30-day readmission rates between the two time periods.

Discussion

This study was aimed at evaluating the effectiveness of a Peer Mentor Program on the adult heroin overdose patient population who presented to Hospital A's ED from June to September of 2018. Of the three objectives evaluated in this study, outcomes were not deemed statistically significant, but even with the small study sample, clinically significant information was gathered for future research and practice implications. This information can be value-added should this project be revamped or studied further.

Key Findings

A common theme emerged upon examination of notes made by the Peer Mentors during the patient encounters. If patients were able to maintain relationships and care for their children, they listed those as reasons why they could not attend a recovery program, but not reasons to get help for their addiction. Moreover, it was obvious that the patient must be ready for a change to seek help and begin the journey to recovery. Application of the conceptual framework was important to understand that the patient's surroundings may produce barriers affecting their readiness and, in turn, decision for substance abuse treatment.

Notably, only 22% of the patients tested positive for opiates on their urine toxicology screen, but each of the nine patients admitted to heroin use; 78% were positive for at least one drug on their toxicology screen and 44% were positive for polysubstance abuse. Forty-four percent of the patients who encountered the Peer Mentors returned to the ED within 30 days. Further investigation of the reasons for this is warranted in order to decrease readmissions, which have financial implications for the healthcare system.

The goal of this program was to reach the patient who overdosed on or admitted to using heroin at a point of crisis in hopes that they might be ready for an intervention. Peer Mentors were not able to capture all of the appropriate patients who presented to the ED. However, improvements in documentation and communication may address that issue. The difficulty with this qualitative portion of the study is not knowing if the encounter with the Peer Mentor made an impact on the patient and if they decided to attend any detox center after their ED visit. One of the nine patients did follow up with the Healing Place, but it is uncertain if this incident had a direct correlation to the encounter with the Peer Mentor in the ED.

Practice Implications

The purpose of this program was well-intentioned. However, the small sample of patients seen during this time period may be attributed to multiple variables. Between summers, there was a greater than 50% decrease of patients who presented to the ED for heroin-related issues, providing fewer opportunities for Peer Mentor consultation. The decrease in number of visits could be attributed to provider fatigue; they may not feel the need to ICD-10 code the patient for a heroin-related diagnosis if it was not significant to their ED visit. There also could have simply been a decrease in heroin use between summers. In addition, the mixing of fentanyl and carfentanil with heroin was popular in previous years, causing patients to overdose on small amounts and present to the ED due to central nervous system depression (Warren, 2018). This

study's findings can lead to questions such as, "has there been a decrease in these dangerous drug combinations?" Furthermore, with improved access to needle exchange programs in the Louisville area (Kentucky Cabinet for Health and Family Services, 2017), "are fewer patients presenting to the ED for abscess or infection due to their IV drug use?" Possibly the biggest contributor to this decreased number of heroin-related ED visits is the increased access and availability of Naloxone (Narcan), the antidote to opiate overdose (Kentucky Harm Reduction Coalition, 2018). This leads to the question, "are patients being resuscitated outside of the hospital setting, not warranting a visit to the emergency department?" These questions could lead to important data points for future studies.

The Peer Mentors' purpose is not to advocate for the Healing Place specifically, but to provide the patient with a personal story of recovery and offer patients the hope of a substance-free future. However, the detox center at the Healing Place is the only facility to which the Peer Mentors were able to offer direct transportation. This factor could have influenced the patient's decision because the Healing Place recovery model is mostly abstinence-based (The Healing Place, 2017). Other services, such as medication assisted therapy (MAT) programs involving the use of medication (e.g., methadone) in combination with behavioral therapy (CDC, 2017), may be more appealing to this patient population.

Although there was a decrease in heroin-related visits at this specific ED, the city of Louisville still struggles with a large population of people who abuse drugs. For the one patient who was ready for treatment and wanted to be transported to the Healing Place, a bed was not available at that time. Overcrowding and full capacity of recovery facilities is an issue affecting the ability of patients to attend treatment (Hascal, 2018).

Conceivably one of the most important practice implications for advanced providers is to be cognizant of this patient population and the need to offer them recovery resources at every

type of encounter, in every type of environment. It is still unclear when the best time is to intervene and offer the patient the opportunity for recovery, but it may take multiple mentions before the patient decides that it is time to change. As providers, it is essential that care of this patient population is judgement-free and that their addiction does not negatively influence the care they receive during their hospital visit. Having open conversations about recovery and offering information about support groups, such as Alcoholics Anonymous (AA) or Narcotics Anonymous (NA), and treatment facilities may be the outreach the patient needs.

Future Research Implications

This study evaluation has highlighted several implications for future research. While the sample in the intervention was small, the information gained can be useful for further research of this patient population. Slight changes to the program including day and time of Peer Mentor availability may be beneficial to capture a larger sample; this study found that in 2018, Friday, Saturday, and Sunday were the most common days of heroin-related visits, with the most common time frame between 8pm and 4am. Further provider and Peer Mentor education regarding documentation and appropriate patients to consult should be provided. Screening through a different modality rather than using ICD-10 codes may help capture a more comprehensive sample. Expanding this study to multiple healthcare facilities may allow the results to be more abundant and generalizable. Noting the decrease in heroin-related visits and increase in use of methamphetamines and cocaine in this patient population, a broadened study regarding polysubstance abuse, instead of just heroin, may be more appropriate.

Future research should be aimed at prevention of substance abuse. However, observing the current state of the epidemic, it will be important to identify the best time to approach the patient about options for recovery. If the ED is not an optimal time for intervention with this patient population, when is the best time to intervene and propose an opportunity for recovery? Figuring

out how to optimize the patient's surroundings to bring balance to the relationship between the client, environment, and provider will be essential to this program's success.

For a future analysis, a case study design would be advantageous to better understand the thought processes and intentions of these patients. Listening to each individual's story may shed light on the specific needs and desires of the patient. Application of the Transtheoretical Model (Stages of Change) (LaMorte, 2018) may be beneficial in assessing the patient's readiness for change. Perhaps improving access to evidence-based treatment, such as motivational interviewing (MI) may be an effective strategy to inspire the patient to quit their addiction (American Addiction Centers, 2018). Offering multiple treatment modalities may be valuable for patients to choose what type of recovery service they want to attend. It is important to understand that each patient has different needs and no treatment is a "one size fits all" (Hascal, 2018). Studying outcomes of patients who attend different modalities of recovery treatment services may be helpful to understand why patients choose to attend one facility versus another.

Limitations

There are several limitations identified in reviewing this study. This was a single-center study where data were only obtained for four months. Expanding the sample population to a multi-center study for an extended period of time may help with generalizing and correlating data outcomes. Additionally, the Peer Mentors were present in the ED for a small window of time, limiting access to the patient population. Expanding Peer Mentor day and time availability, including night shift and weekends, may capture a larger population. Since data were extracted via retrospective chart review, accuracy was highly dependent on the documentation skills of the provider and Peer Mentor; relevant information could have been missed if it was not documented. Furthermore, since the partnership of the program was with a single recovery

facility, data were unable to be extracted if the patient followed up at a different substance abuse treatment program.

Conclusion

The outcomes of this evaluation revealed an opportunity to improve upon the Peer Mentor Program and further research this patient population. Clinically significant outcomes include documentation of decreased heroin-related visits between the summers of 2017 and 2018, identification of the patient population demographics and recognition of the most common days and times where Peer Mentors could be available to engage the majority of these patients. The Peer Mentor Program is a novel idea and is a step in the right direction for this specific healthcare system to provide a link between the provider and the patient suffering with substance use disorder; this program is a direct reflection of the system's mission, vision, and values. A few alterations and further education regarding this program may lead to more robust and positive outcomes. Providers must be sensitive to the patient who uses heroin and advocate for their recovery; they must be able to speak with the patient about options for detox and recovery programs while also connecting them to available support groups and resources. Future research and practice must be aimed at finding what approach works best for the healthcare team, Peer Mentors, and ultimately, the patient, in determining the most optimal situation to present an opportunity for substance abuse treatment services.

| Table 1 <i>“Peer Mentor Documentation Sheet” and EHR Chart Review Information</i> | |
|---|--|
| Category | Measurement |
| Patient demographics Age Sex *Race | Patient’s age in years Male, female White, Black or African American, Hispanic |
| Date of arrival to ED | Date and day of the week |
| *Time of arrival to ED | ED arrival time |
| *Presenting complaint | ED triage chief complaint |
| *Narcan administration | Yes, no |
| Time PM spent with patient | Minutes PM was with the patient |
| *Patient disposition | Admit, discharge, AMA, expired |
| Patient Treatment Decision | Transport to Healing Place for detox, Expressed interest but does not want to go at this time, Would prefer to attend another treatment center, Expressed no interest at this time, or Other |
| *Urine Toxicology Screen | Amphetamines, Barbiturates, Benzodiazepines, Cannabinoids, Cocaine, Opiates |
| *Repeat 30-day ED visit | Repeat ED visit within 30 days |
| <i>Notes: Electronic Health Record (EHR), Emergency department (ED), Peer Mentor (PM), against medical advice (AMA)</i> | |
| *= <i>indicates information obtained through EHR chart review</i> | |

| Table 2 <i>Inclusion and Exclusion Criteria</i> | |
|---|--------------------|
| Inclusion Criteria | Exclusion Criteria |
| Age ≥18 years | Intubated |
| Heroin overdose (admission of use or test + for opiates in urine drug screen) | Requires admission |
| Received Naloxone (Narcan) | Unresponsive |

| Table 3 <i>Variables of Patients who Consulted with a Peer Mentor</i> | |
|--|------------------------|
| Characteristic | <i>n = 9 n (%)</i> |
| Age, years (Mean, SD) | 35.5 (9.7) |
| Sex | |
| Male | 3 (33.3) |
| Female | 6 (66.7) |
| Race | |
| White | 8 (88.9) |
| Black or African American | 1 (11.1) |
| Hispanic | 0 (0) |
| Received Narcan | |
| Yes | 2 (22.2) |
| No/Unknown | 7 (77.8) |
| Time PM spent with patient Minutes, mean (SD) | 35 (20.3) |
| Time of Arrival/Visit Hour | |
| 12-4am | 0 (0) |
| 4-8am | 1 (11.1) |
| 8am-12pm | 2 (22.2) |
| 12-4pm | 4 (44.4) |
| 4-8pm | 2 (22.2) |
| 8pm-12am | 0 (0) |
| Day of the Week | |
| Monday | 1 (11.1) |
| Wednesday | 2 (22.2) |
| Thursday | 4 (44.4) |
| Friday | 2 (22.2) |
| Disposition | |
| Discharge | 5 (55.6) |
| Admission | 4 (44.4) |
| Treatment Service Decision | |
| Transport to Healing Place for detox | 3 (33.3) |
| Expressed interest but does not want to go at this time | 1 (11.1) |
| Would prefer to attend another treatment center | 1 (11.1) |
| Expressed no interest at this time | 1 (11.1) |
| Other | 1 (11.1) |
| Unknown | 2 (22.2) |
| ED readmit within 30 days | |
| Yes | 4 (44.4) |
| No | 5 (55.6) |
| <i>Notes: Standard Deviation (SD), Peer Mentor (PM)</i> | |

| Characteristic | 2017 (n = 112) n (%) | 2018 (n = 55) n (%) | P-value |
|------------------------------|-------------------------|------------------------|---------|
| Age, years (Mean, SD) | 32.6 (8.9) | 35.6 (12.0) | .11 |
| 18-24 | 19 (17.0) | 11 (20) | .43 |
| 25-44 | 78 (69.6) | 31 (56.4) | |
| 45-64 | 15 (13.4) | 11 (20) | |
| >65 | 0 (0) | 2 (3.6) | |
| Sex | | | .80 |
| Male | 67 (59.8) | 34 (61.8) | |
| Female | 45 (40.2) | 21 (38.2) | |
| Race | | | .07 |
| White | 101 (90.2) | 46 (83.6) | |
| Black or African American | 8 (7.1) | 7 (12.7) | |
| Hispanic | 3 (2.7) | 0 (0) | |
| Unknown | 0 (0) | 2 (3.6) | |
| Time of Arrival/Visit Hour | | | .44 |
| 12-4am | 7 (6.3) | 13 (23.6) | |
| 4-8am | 8 (7.1) | 3 (5.5) | |
| 8-12pm | 13 (11.6) | 4 (7.3) | |
| 12-4pm | 32 (28.6) | 10 (18.2) | |
| 4-8pm | 30 (26.8) | 11 (20) | |
| 8-12am | 22 (19.6) | 14 (25.5) | |
| Day of the Week | | | .99 |
| Sunday | 22 (19.6) | 12 (21.8) | |
| Monday | 13 (11.6) | 7 (12.7) | |
| Tuesday | 9 (8) | 8 (14.5) | |
| Wednesday | 12 (10.7) | 3 (5.5) | |
| Thursday | 24 (21.4) | 4 (7.3) | |
| Friday | 16 (14.3) | 11 (20) | |
| Saturday | 16 (14.3) | 10 (18.2) | |
| Disposition | | | .15 |
| Discharge | 77 (69) | 38 (69.1) | |
| Admit | 8 (7.1) | 8 (14.5) | |
| AMA | 16 (14.3) | 3 (5.5) | |
| Eloped | 11 (9.8) | 5 (9.1) | |
| Transfer to another facility | 0 (0) | 1 (1.8) | |
| ED readmit within 30 days | | | >.99 |
| Yes | 7 (6.3) | 3 (5.5) | |
| No | 105 (93.8) | 52 (94.5) | |

Notes: Standard Deviation (SD), Emergency Department (ED)
Significant at the p<0.05 value

For provider to complete:
 Heroin use/overdose

PATIENT STICKER

Peer Mentor Documentation Sheet

Date _____ Time _____

Peer Mentor name _____

Verbal consent given to speak with patient? YES ____ NO ____

Decision for treatment:

- Transport to The Healing Place for detox
- Expressed interest but does not want to go at this time
- Would prefer to attend another treatment center
- Expressed no interest in treatment at this time
- Other: _____

Total time spent with patient _____

Notes:

*When completed, please return to labeled folder

4/2018 CMS

Figure 1. Peer Mentor Documentation Sheet

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