

2018 EVALUATION

Report of the Kanawha-Charleston Health Department Harm Reduction Syringe Services Program



May 2018

2018 Evaluation Report of the Kanawha-Charleston Health Department Harm Reduction Syringe Services Program

Jim Justice Governor

Bill J. Crouch Cabinet Secretary West Virginia Department of Health and Human Resources

> Rahul Gupta, MD, MPH, MBA, FACP Commissioner Bureau for Public Health State Health Officer

> > Loretta Haddy, PhD State Epidemiologist

Evaluation Team:

Loretta Haddy, PhD Miguella Mark-Carew PhD Christina Mullins, MA Elizabeth Coffey, MA, LPC Sarah Sanders, PhD Laura Hunt, MPH Amy Atkins, MPA Holly Farkosh, BS Nils Haynes William Hoffman, MSW Vicki Hogan, MSW Samantha Batdorf, MPH Grace Kalmus Mialee Pritchard, BSW Terry Dye

Table of Contents

| Figures | . 5 |
|---|--|
| Executive Summary | .6 |
| Background | .6 |
| Methodology | .6 |
| Highlights of Findings | .6 |
| Conclusions and Recommendations | .7 |
| Intended Use and Users | .7 |
| Program Description | . 8 |
| Evaluation Focus | 17 |
| Data Sources and Methods | 18 |
| Demographic Information | 21 |
| Syringe Services | 31 |
| Disease Surveillance and Prevention Efforts | 35 |
| | |
| Clinical Services | 38 |
| Clinical Services | |
| | 41 |
| Education to HRSSP Staff and Patients and Outreach to the Community | 41 44 |
| Education to HRSSP Staff and Patients and Outreach to the Community | 41 44 49 |
| Education to HRSSP Staff and Patients and Outreach to the Community4 Stakeholder Engagement4 Conclusions | 41 44 49 51 |
| Education to HRSSP Staff and Patients and Outreach to the Community4 Stakeholder Engagement4 Conclusions4 Recommendations | 41 44 49 51 53 |
| Education to HRSSP Staff and Patients and Outreach to the Community4 Stakeholder Engagement4 Conclusions Recommendations References | 41 44 49 51 53 55 |
| Education to HRSSP Staff and Patients and Outreach to the Community | 41 44 49 51 53 55 57 |
| Education to HRSSP Staff and Patients and Outreach to the Community | 41 44 49 51 53 55 57 58 |
| Education to HRSSP Staff and Patients and Outreach to the Community | 41 44 51 53 55 57 58 59 |

Figures

| Figure 1. Map showing the location of KCHD HRSSP and West Virginia Health Right. Both entities | |
|---|-----|
| function as SSPs in Charleston, West Virginia (Kanawha County) | 11 |
| Figure 2. Map of area surrounding KCHD HRSSP (blue dot). | 12 |
| Figure 3. Reported risk factor by age group for acute HBV cases in 2015 | 12 |
| Figure 4. West Virginia counties considered vulnerable to rapid dissemination of HIV/HCV among | |
| persons who inject drugs | 13 |
| Figure 5. Newly diagnosed HIV cases by county – West Virginia, 2012-2016. | 14 |
| Figure 6. Newly diagnosed HIV cases by county with IDU as a reported risk factor – West Virginia, 202 | 12- |
| 2016 | 14 |
| Figure 7. HIV/HCV co-infections reported by county – West Virginia, 2012-2016 | 15 |
| Figure 8. County-level distribution of drug overdose deaths in West Virginia, 2012- 2015 | 16 |
| Figure 9. Recommended framework for program evaluation | 17 |
| Figure 10. Residency of New Patients by Quarter | 23 |
| Figure 11. KCHD HRSSP Estimate of New and Returning Patients | 24 |
| Figure 12. KCHD HRSSP Clinic Attendance | 24 |
| Figure 13. KCHD HRSSP Visit Type | 25 |
| Figure 14. KCHD HRSSP New Patient Gender | 25 |
| Figure 15. KCHD HRSSP Race of New Patients | 26 |
| Figure 16. KCHD HRSSP Educational Status | 26 |
| Figure 17. KCHD HRSSP Sexual Orientation | 27 |
| Figure 18. KCHD HRSSP Insurance Status | 28 |
| Figure 19. KCHD HRSSP Drug Preference | 28 |
| Figure 20. KCHD HRSSP Injection Frequency | 29 |
| Figure 21. KCHD HRSSP Age of First Drug Use | 29 |
| Figure 22. KCHD HRSSP Non-Fatal Overdose | 30 |
| Figure 23. KCHD HRSSP Patients Waiting for Recovery Services | 30 |
| Figure 24. KCHD HRSSP HCV, HBV, and HIV Status (KCHD Harm Reduction Database) | 36 |
| Figure 25. KCHD HRSSP Family Planning Program Patients by Sex and Age | 39 |
| Figure 26. KCHD HRSSP Family Planning Program Service Type | 40 |
| Figure 27. KCHD HRSSP Family Planning Program Services | 40 |
| Figure 28. Interaction of KCHD HRSSP stakeholders | |
| Figure 29. Worker's Compensation Reports for Needlestick Injury, Charleston, WV | 49 |

Executive Summary

Background

Persons who inject drugs can substantially reduce their risk of getting and transmitting HIV, viral hepatitis, and other blood borne infections by using a sterile needle and syringe for every injection. In many jurisdictions, persons who inject drugs can access sterile needles and syringes through syringe services programs (SSPs) also known at the Kanawha-Charleston Health Department (KCHD) as Harm Reduction Syringe Services Program (HRSSP). However, it is important that these programs are of high quality, well managed, and have good administrative oversight. It is also essential that programs operate in conformity to their design, reach the specific target population, and achieve its goals.

In recent months, there has been concern about KCHD's HRSSP operations and its effect on public safety due to reports of an increase in used needles in public spaces and needlestick injuries in Kanawha County. Both the Mayor of Charleston and the Interim Health Officer of KCHD, Dr. Dominic Gaziano, requested an evaluation of KCHD HRSSP by the West Virginia Department of Health and Human Resources (WVDHHR) Bureau for Public Health (BPH).

Methodology

The WVDHHR BPH formed an evaluation team under the leadership of the State Epidemiologist. Members of the team consisted of representatives from the Office of Epidemiology and Prevention Services (OEPS), Office of Maternal, Child and Family Health (OMCFH), and Center for Local Health (CLH). Members met to formulate an evaluation plan and to develop and review tools for gathering information. Once the evaluation tools were developed, the team conducted an onsite review at KCHD and interviewed representatives of the KCHD HRSSP, City of Charleston's Mayor's Office, Charleston City Council and its first responders (including police, fire and emergency medical services).

As part of the review, KCHD provided the KCHD HRSSP Database (2015-2018) and the Naloxone Distribution Database for analysis. Services were evaluated against criteria outlined in the KCHD HRSSP Program Procedure Manual and focused on demographic information, syringe services, disease surveillance and prevention efforts, clinical services, and stakeholder engagement.

Highlights of Findings

- 1. Many data quality issues were noted throughout the evaluation including data errors, incomplete data, inability to link patients to harm reduction services data for tracking purposes, incorrect data analysis resulting in misinformation to the public, and non-standardized data entry.
- The current patient identification system employed at KCHD HRSSP makes it possible for a patient identification number to be shared among multiple patients since it is based on the first and last name initials, month of birth, and year of birth. This presents a significant limitation to data analysis.
- 3. KCHD HRSSP participated in a variety of community and stakeholder meetings; however, to the best knowledge of the evaluation team, a steering committee as described in their Program Procedure Manual did not exist.
- 4. Increase in syringe litter is viewed as a threat to public safety. Regardless of the source of the syringes, it is important that a detailed plan is in place that addresses community concerns in a timely matter to avoid needlestick injuries and allay fears.
- 5. Data from November 2017 to March 2018 indicated that 34% of patients visited the clinic inperson, 46% were via a proxy, and 20% were unknown. This practice was not outlined as a

practice in the KCHD HRSSP Program Procedure Manual and creates a missed opportunity to provide linkage to treatment and other harm reduction services.

6. The current model at KCHD HRSSP indicates that patients are given clean injection equipment prior to receiving primary health care services. This evaluation team believes it is important for patients to obtain primary care and behavioral health services (specifically linkage to substance use disorder treatment) before syringes are dispensed so that medical attention is seen as the top priority over syringe exchange.

Conclusions and Recommendations

- 1. It is recommended that the WVDHHR BPH OEPS suspend KCHD's HRSSP certification.
- 2. If the KCHD HRSSP resumes services, the Kanawha-Charleston Board of Health should work with identified stakeholders to incorporate the following recommendations into HRSSP operations:
 - a) Offer Hepatitis A and B vaccine routinely.
 - b) Improve data collection, storage, management, analysis, and dissemination to strengthen validity and credibility of the program.
 - c) Each patient should receive a unique identifier that can be used to track clinical and behavioral care.
 - d) KCHD should maintain, in a confidential manner, written records for all patients who are treated by the health department or are referred for treatment by another physician, including patient histories, examination and test results, and any treatment provided.
 - e) Stakeholders should be thoroughly and routinely engaged by the program from implementation to maturity while ensuring that program goals are aligned with community stakeholder goals.
 - f) Develop a coordinated and timely plan in conjunction with key community partners (i.e. first responders) to pick-up and track syringe litter in public spaces.
 - g) Education campaigns should include general education about syringe services/harm reduction programs and specific education about the program, its goals, and community needs.
 - h) Primary care services and linkage to substance use treatment should be offered and provided at each visit to harm reduction program patients <u>prior</u> to syringe dispensing.
 - i) Attendance at HRSSP should be mandatory to obtain clean injection equipment.
 - j) Program procedures should specifically address the identification, treatment and referral of pregnant women.
- 3. The WVDHHR BPH Commissioner should seek explicit legislative authority to implement statewide minimum standards among Harm Reduction Programs including expansion of needlestick reporting to include those that occur in non-health care settings.

Intended Use and Users

In recent months, there has been concern about KCHD HRSSP's operations and its effect on public safety due to reports of an increase in used needles in public spaces and needlestick injuries in Kanawha County. Both the Mayor of Charleston and the Interim Health Officer of KCHD, Dr. Dominic Gaziano, requested an evaluation of KCHD HRSSP by BPH.

The purpose of this document is to provide feedback to the KCHD and Mayor of Charleston regarding the Program. The evaluation seeks to assess the following public health components of the harm reduction program using the KCHD's goals defined in the Program Procedure Manual.

- 1. Reduce incidence of substance-related health and social harms, including transmission of blood-borne pathogens through substance abuse;
- 2. Promote and facilitate referrals to primary health care and mental health and substance use services;
- 3. Reduce stigma and discrimination against people who use drugs;
- 4. Ensure full and equitable reach of harm reduction services and education to all who use substances;
- 5. Raise awareness about the risk of drug overdoses and associated fatalities; and
- 6. Provide safe disposal of used needles.

As such, the evaluation seeks to assess the following areas of interest:

- 1. Demographic information;
- 2. Syringe services (delivery, exchange, transaction, and disposal);
- 3. Disease surveillance and prevention efforts;
- 4. Clinical services delivery to HRSSP patients;
- 5. Education to HRSSP staff and patients and outreach to the community; and
- 6. Stakeholder engagement.

This document was compiled in conjunction with multiple stakeholders. At the request of both the Mayor of Charleston and the KCHD Health Officer, this evaluation was led by staff from the BPH including representatives from the Commissioner's Office, OEPS, CLH, and OMCFH. Representatives from KCHD participated in multiple interviews and provided available data regarding the HRSSP. In addition, representatives from Cabin Creek Health Systems participated in interviews and made Family Planning Program medical records available for review. Finally, representatives of the City of Charleston's Mayor's Office, Charleston City Council and its first responders (including police, fire and emergency medical services) participated in stakeholder interviews.

This report may be used by stakeholder groups in a variety of ways. It is expected that the Charleston City Council will use the document to make policy decisions regarding whether to recriminalize needles for illegal drug use, while KCHD may use the document to identify areas of improvement should they choose to resume the Program. The BPH is likely to use the findings to provide technical assistance to other community harm reduction programs, revise the Harm Reduction Program (HRP) Guidelines and Certification Procedures, and inform the development of recommendations for public policy.

Program Description

Substance use disorder is a significant public health issue with social, economic, and medical consequences. Among persons who inject drugs (PWIDs), the consequences are even greater due to the risk of Hepatitis B (HBV), Hepatitis C (HCV), and HIV. PWID are at high risk for HBV and HCV infection through the sharing of needles and drug-preparation equipment. While West Virginia is considered a low prevalence state for HIV (with less than 100 newly diagnosed cases annually), it ranks at the top in rates of acute HBV and HCV. In 2016, the incidence of acute HBV was 14.5 per 100,000 persons (compared to the national average of 1.0 per 100,000 persons). West Virginia has also ranked either first or second in the incidence of acute HCV in recent years. In 2016, West Virginia was nine times the national average incidence of acute HCV with a rate of 7.1 per 100,000 persons. Analysis of HBV and HCV surveillance shows that injection drug use is the most reported risk factor among cases (West Virginia Bureau for Public Health, 2017b).

SSPs (also known as needle exchange programs and syringe exchange programs) are community-based programs that provide access to sterile needles and syringes at no cost to patients. The first government-approved SSP was approved in Amsterdam, The Netherlands in 1983 following an outbreak of HBV among PWID. The worldwide HIV pandemic solidified the rationale for SSPs and a succession of programs followed. Over 40 countries have SSPs in operation.

SSPs also facilitate safe disposal of used needles and syringes and provide education on safe injection practices. Some SSPs offer additional services including:

- Screening, care, and treatment for HIV and viral hepatitis;
- HIV pre- and post-exposure prophylaxis;
- Hepatitis A and HBV vaccination;
- Screening for other sexually-transmitted diseases and tuberculosis;
- Linkage to substance use disorder treatment programs;
- Overdose prevention education;
- Other medical, social, and mental health services.

The United States has had a storied history in terms of financially supporting SSPs starting with the 1988 ban on use of federal funds on SSPs. The Consolidated Appropriations Act of 2016, signed by President Barack Obama in December 2015, is the most recent federal legislation allowing for use of Department of Health and Human Services (DHHS) funding to support certain components of SSPs including personnel, testing kits, syringe disposal services, educational material, and condoms. Current federal law prohibits the use of federal funds to purchase sterile needles or syringes for illicit injection drug use (Dent, 2015).

As a provision to the Consolidated Appropriations Act of 2016, state, local, and territorial entities must first consult with the Centers for Disease Control and Prevention (CDC) to "provide evidence that their jurisdiction is experiencing or at risk for significant increases in hepatitis infections or an HIV outbreak due to injection drug use." CDC determines if an entity has adequately demonstrated need according to federal law (Centers for Disease Prevention and Control, 2016). As such, three counties in West Virginia—Berkeley, Cabell, and Kanawha—have demonstrated individual need. In April 2017, the WVDHHR, BPH, OEPS requested and received statewide determination of need for the remaining 52 West Virginia counties, paving the way for statewide implementation of SSPs.

SSPs are relatively new to West Virginia. The first SSP started in August 2015 at Milan Puskar Health Right in Morgantown, West Virginia. Since then, at least 15 SSPs have been established across West Virginia. In an effort to ensure that SSPs provide appropriate and competent services, the WVDHHR, BPH developed Harm Reduction Program Guidelines and Certification Procedures to aid entities interested in implementing SSPs and allow for a mechanism for entities to receive federal funding to support SSPs upon being certified by BPH. To be BPH-certified, an HRP must meet criteria outlined in the Guidelines with the aim of reducing "drug-related harm while enhancing individual, family, and community wellness." Entities are certified for two-years and can seek renewal (West Virginia Bureau for Public Health, 2017a).

The Substance Abuse and Mental Health Services Administration (SAMSHA) released a funding opportunity announcement in late 2016 for the Opioid State Targeted Response (OSTR) grant. The aim of the two-year OSTR grant is "to address the opioid crisis by increasing access to treatment, reducing unmet treatment need, and reducing opioid overdose related deaths through the provision of prevention, treatment and recovery activities for opioid use disorder." (Substance Abuse and Mental Health Services Administration, 2016) The WVDHHR, Bureau for Behavioral Health and Health Facilities (BBHHF) serves as

the lead West Virginia agency on the grant but collaborates with the BPH, OEPS on secondary prevention services related to implementation and improvement of SSPs in the State. Of the \$5,881,983 awarded to West Virginia in April 2017, \$600,000 was allotted to BPH, OEPS to support SSPs.

In October 2017, an announcement of funding availability (AFA) was released by BPH, OEPS. Nineteen entities applied for this funding through OEPS' *Harm Reduction Program Improvement and Implementation* grants and 11 were funded and BPH-certified. KCHD HRSSP was one of the funding recipients and received \$75,000 to support expansion of its services through April 30, 2018 (per a sub-recipient grant agreement with BPH, OEPS). Three goals were outlined in KCHD HRSSP's application:

- 1. To reduce the transmission of HBV and HCV among PWID;
- 2. To expand KCHD HRSSP services to better serve increasing patient demand; and
- 3. To expand data collection, tracking, reporting, and evaluation capabilities of KCHD HRSSP.

The KCHD initiated its SSP in December 2015 following the unanimous passage of a city ordinance by City Council in September 2015 (See Timeline in Appendix A). According to the ordinance (Bill No. 7666, Sec 78-381):

"It shall be unlawful for any person or persons as principal, clerk, agent or servant to sell, market, or distribute any hypodermic syringes, needles and other similar objects used or designed for injecting substances into the human body, without obtaining and having any and all licenses required under state law to do so: except that, items distributed by or exchanged at a needle exchange program sponsored or approved by the Chief of Police of the Charleston Police Department, as provided by Subdivision III herein, are thereby approved and are not unlawful."

The ordinance also authorized KCHD's SSP (Bill No. 7666, Sec. 78-396):

"The City of Charleston, by and through its Chief of Police, may sponsor, approve, or participate in a program or programs within the City of Charleston for the distribution or exchange of hypodermic syringes, needles and other similar objects used or designed for injecting substances into the human body."

Finally, the ordinance authorized the Chief of Police to promulgate rules related to the operation of KCHD's SSP (Bill No. 7666, Sec. 78-397):

"The Chief of Police of the City of Charleston Police Department is authorized to promulgate reasonable rules or regulations deemed necessary to implement and administer a program within the City of Charleston provided for in Section 78-396 for the distribution or exchange of hypodermic syringes, needles and other similar objects used or designed for injecting substances into the human body."

KCHD adopted the term *harm reduction program* to describe its comprehensive public and behavioral health strategies aimed at reducing morbidity and mortality associated with substance use generally and injection drug use specifically. KCHD's SSP will further be referenced as KCHD HRSSP (as indicated in its May 2017 program procedure manual).

In recent months, there has been concern about KCHD HRSSP's operations and its effect on public safety due to reports of an increase in used needles in public spaces and needlestick injuries in Kanawha County.

In early March 2018, Charleston Mayor, Danny Jones, asked Charleston City Council to consider a bill that would reverse Bill No. 7666, effectively ending KCHD HRSSP. On March 19, 2018, City Council voted 16-11 to table a vote for 60 days until the May 21, 2018 council meeting (Kersey, 2018). The following week, Chief of Police, Steve Cooper used the authority given to him in Sec. 78-397 of Bill No. 7666 to promulgate seven rules that became effective on April 2, 2018. The syringe exchange portion of the KCHD HRSSP was also suspended on that day (Kersey and Beck, 2018). Both the Charleston Mayor and the Interim Health Officer of KCHD, Dr. Dominic Gaziano, requested an evaluation of KCHD HRSSP by BPH.

KCHD HRSSP is one of two SSPs in the city of Charleston in Kanawha County, West Virginia. It is a fixed site, located in Charleston, West Virginia, at 108 Lee Street East. Figure 1 shows the location of KCHD HRSSP and the location of West Virginia Health Right, the second SSP in Charleston. Figure 2 shows the area directly surrounding KCHD HRSSP which includes the Charleston Civic Center, Charleston Town Center, and the Charleston Marriot Hotel. KCHD HRSSP began operation in December 2015. Initially, the program operated once a week on Wednesdays from 10AM to 3PM. In January 2018 it expanded operations to include Thursdays from 1PM to 3PM.



Figure 1. Map showing the location of KCHD HRSSP and West Virginia Health Right. Both entities function as SSPs in Charleston, West Virginia (Kanawha County).



Figure 2. Map of area surrounding KCHD HRSSP (blue dot).

In considering the need for an SSP within a jurisdiction, it is important to use epidemiologic evidence to support transmission of bloodborne pathogens (HBV, HCV, and HIV) through needle sharing. It is also important to use data on drug use, specifically Injection Drug User (IDU), if available. BPH, OEPS collects statewide surveillance data for HBV, HCV, and HIV and has specific county-level surveillance data. Data collected by the BPH Health Statistics Center on drug overdose deaths was also used in considering the need for KCHD HRSSP.

The West Virginia Viral Hepatitis B and C Surveillance Report analyzed 2012-2015 surveillance data collected by staff in the OEPS, Division of Infectious Disease Epidemiology. The report cited injection drug use and street drug use as being the leading risk factors associated with HBV and HCV infections in West Virginia. When categorized by gender, around 30%-40% of cases during the study period reported injection drug use as a risk factor associated with acute HBV and HCV infections. Figure 3 shows risks factors by age among the 272 acute HBV cases reported in 2015 with over 60% of 20-29 year-olds reporting IDU as a risk factor for infection. Individual year data are available in the report for other years during the study period for acute HBV and acute HCV (West Virginia Bureau for Public Health Office of Epidemiology and Prevention Services, 2016).



Figure 3. Reported risk factor by age group for acute HBV cases in 2015.

A HIV outbreak in rural Scott County, Indiana from 2015-2016 highlighted the intersection of the current nationwide substance use epidemic, unsafe IDU practices, and increasing rates of bloodborne pathogens (Conrad *et al.*, 2015). A recent CDC study identified 220 rural counties considered most vulnerable to rapid dissemination of HIV and HCV among persons who inject drugs. Kentucky, Tennessee, and West Virginia accounted for 56% of the counties identified as vulnerable. Twenty-eight of West Virginia's counties were considered vulnerable, and Kanawha County ranked at 209 of the 220 counties (28th among the 28 counties in West Virginia) (Van Handel *et al.*, 2016).



Figure 4. West Virginia counties considered vulnerable to rapid dissemination of HIV/HCV among persons who inject drugs.

In early 2018, a comprehensive HIV Epidemiologic Profile was published by BPH, OEPS Division of Infectious Disease Epidemiology that included important surveillance data on persons living with HIV-AIDS in West Virginia. From 2012-2016, Kanawha County had the most number of newly diagnosed HIV cases in the state (n=44 cases) (Figure 5). The second highest county was Raleigh County with 25 newly diagnosed HIV cases. During the same study period, Kanawha County ranked in the top three counties for the number of cases diagnosed with HIV who reported IDU as a risk factor (IDU includes the risk factor men who have sex with men and IDU combined) (Figure 6). While reported HIV/HCV co-infections are low in West Virginia, Kanawha County had the most number of total co-infections through 2016 with 31 followed by Cabell County (n=22) and Raleigh County (n=16) (Figure 7) (Services, 2017).



Number of new diagnoses of HIV by county in West Virginia, 2012-2016

Figure 5. Newly diagnosed HIV cases by county – West Virginia, 2012-2016.



Number of diagnoses of HIV infection with IDU* risk factor by county in West Virginia, 2012–2016

*IDU includes male-to-male sexual contact and injection drug use (MSM/IDU).

Figure 6. Newly diagnosed HIV cases by county with IDU as a reported risk factor – West Virginia, 2012-2016.



Number of HIV/HCV coinfections by county in West Virginia, 2012–2016*

Figure 7. HIV/HCV co-infections reported by county – West Virginia, 2012-2016.

Overdose death data (all overdose deaths and deaths associated with specific drug classes) from 2012-2015 obtained from the West Virginia Health Statistics Center showed that the county with the most overdose deaths was Kanawha County with 309 deaths, followed by Cabell (198 deaths), and Raleigh (191 deaths). It is important to note that this data is not adjusted for population size and that Kanawha County, with the largest population in the state, would be expected to have the highest number of overdose deaths. Figure 8 shows the number of drug overdose deaths over the four-year period.



Figure 8. County-level distribution of drug overdose deaths in West Virginia, 2012-2015.

Kanawha County ranked first among West Virginia counties during the period of 2012-2015 for:

- Benzodiazepine-related overdose deaths (158 deaths)
- Opioid (one or more) only-related overdose deaths (251 deaths)
- Methamphetamine-related overdose deaths (43 deaths)
- Fentanyl-related overdose deaths (52 deaths)
- Amphetamine-related overdose deaths (50 deaths)

Another critical issue facing West Virginia is neonatal abstinence syndrome (NAS). NAS is one of the consequences of maternal drug use during pregnancy that leads to withdrawal symptoms in the newborn due to sudden discontinuation of drug exposure after birth. The rate of NAS in West Virginia is rising at an alarming rate and is nearly 10-folds compared to national estimates of 5.8 per 1000 live births per year in 2012. In 2017, the state prevalence of intrauterine substance exposure was 13.99% (n=2630) and the incidence of NAS was 5.12% (n=962). For Kanawha County residents, intrauterine substance exposure was slightly higher than the state rate at 14.59% and the rate for NAS was slightly lower at 3.94% (Umer, 2017).

Given the burden of HBV and HCV disease, drug overdoses, and risk factor data on injection drug use among HIV, HBV, and HCV, there is a strong argument for the need for harm reduction services in Kanawha County.

Evaluation Focus

CDC's Framework for Program Evaluation in Public Health and Updated Guidelines for Evaluating Public Health Surveillance Systems was used to guide the evaluation process. Figure 9 shows the steps involved in effective program evaluation per these guidelines:



Figure 9. Recommended framework for program evaluation.

The purpose of the current document is to evaluate the effectiveness of KCHD's HRSSP. Of the four purposes of evaluation described in *CDC's Framework for Program Evaluation in Public Health*, evaluations with the intent of assessing the effects of a program "examine the relationship between program activities and observed consequences. This type of evaluation is appropriate for mature programs that can define what interventions were delivered to what proportion of the target population." (Koplan, Director and Higgins Peter M Jenkins, 1999)

The purpose of this document is to provide feedback to the KCHD and Mayor of Charleston regarding the Program. The evaluation seeks to assess the following public health components of the harm reduction program using the KCHD's goals defined in the Program Procedure Manual.

- 1. Reduce incidence of substance-related health and social harms, including transmission of blood-borne pathogens through substance abuse;
- 2. Promote and facilitate referrals to primary health care and mental health and substance use services;
- 3. Reduce stigma and discrimination against people who use drugs;
- 4. Ensure full and equitable reach of harm reduction services and education to all who use substances;
- 5. Raise awareness about the risk of drug overdoses and associated fatalities; and
- 6. Provide safe disposal of used needles.

As such, the evaluation seeks to assess the following areas of interest as outlined throughout the KCHD HRSSP Program Procedure Manual (*KCHD Harm Reduction Syringe Services Program Procedure Manual*, 2017):

- Demographic Information
 - Number of IDUs reached through outreach;
 - Patient characteristics (e.g. demographics, injection drug use history, medical history, and substance abuse treatment history);
 - Drug use preferences (e.g. types of drugs used, including hormones or steroids) and practices (e.g. with whom and how often patients use drugs); and
 - Overdose risk and history.
- Syringe services (delivery, exchange, transaction, and disposal)
 - Protect IDUs and the public from dirty needles and syringes/disposal practices;

- Provide as close to 100% syringe coverage as possible, which means a sterile syringe for every injection of every IDU in a jurisdiction;
- Frequency and duration of HRSSP use, including estimation of numbers of syringes distributed in a given period; and
- Receptive and distributive syringe sharing.
- Disease surveillance and prevention efforts
 - Reduce incidence of substance related health and social harms, including transmission of bloodborne pathogens through substance abuse.
- Clinical services delivery to HRSSP patients
 - Types of services used at the HRSSP;
 - Access and linkage to drug treatment and medical and social services (e.g., referrals and linkage to medical homes, behavioral health services and homes and substance abuse treatment facilities); and
 - Changes in drug use, injection and treatment as a result of HRSSP participation.
- Education to HRSSP staff and patients and outreach to the community
 - Reduce stigma and discrimination against people who use drugs;
 - Ensure full and equitable reach of harm reduction services and education to all who use substances;
 - o Raise awareness about the risk of drug overdoses and associated fatalities; and
 - Build capacity of HRSSP staff.
- Stakeholder Engagement
 - Increase community support for HRSSP;
 - Increase stakeholder knowledge; and
 - Assure understanding of operation plan.

Data Sources and Methods

The WVDHHR BPH formed an evaluation team under the leadership of the State Epidemiologist. Members of the team consisted of representatives from the OEPS, OMCFH, and CLH. Members met to formulate an evaluation plan and develop and review tools to gather information. Once the evaluation tools were developed the team conducted an onsite review at KCHD on April 23-25, 2018 and interviewed representatives of the City of Charleston's Mayor's Office, Charleston City Council and its first responders (including police, fire and emergency medical services).

As part of the review, KCHD provided the KCHD HRSSP Database (2015-2018) and the Naloxone Distribution Database for analysis. Services were evaluated against criteria outlined in the KCHD HRSSP Program Procedures Manual and focused on demographic information, syringe services, disease surveillance and prevention efforts, clinical services, and stakeholder engagement.

Data was gathered using a variety of data collection tools. New patients complete a new patient intake form, while returning patients complete a returning patient form (Appendix B and C) while in the KCHD lobby area. Both forms contain a section for internal use by KCHD HRSSP staff/volunteers with data elements that document interest in clinical care by patients and syringes collected and dispensed. Data from intake forms are entered in a spreadsheet entitled *Harm Reduction Database* (through March 2018) which contains data tabs for each year of the program. Individual patient intake forms are not maintained and were therefore unavailable for review during the evaluation.

Once it is a patient's turn in the queue, he/she is asked about any services they may be interested in, in addition to clean syringes by volunteers and program staff. Based on both the new patient and returning patient intake forms, the following additional services are offered:

- Hepatitis B and C testing
- STD/HIV testing
- Speaking to a Recovery Coach
- Condoms/Contraceptive Counseling
- Naloxone

- IUD (Female Birth Control Device)
- Signing up for Health Insurance
- Flu Shot
- Information on STD Testing/Results
- Wound Assessment

With regard to evaluation of clinical services, the OMCFH Quality Assurance Monitoring Team developed an abbreviated monitoring tool based on program components outlined in the KCHD HRSSP Procedure Manual. To supplement this information, public health epidemiologists analyzed data available through the Family Planning Program data system for patients associated with KCHD HRSSP. Records from Cabin Creek Health Systems were included in the evaluation because the agency provides primary health care services, including reproductive health care and ambulatory mental health services at the KCHD location through a Memorandum of Agreement (MOA) (See Appendix D). According to the MOA dated June 28, 2017, the target population are the patients who participate in the KCHD HRSSP. A secondary purpose of the partnership between KCHD and Cabin Creek Health Systems is to better understand the primary care needs of the harm reduction program patient population and to determine effective methods of providing primary care (see Appendix D).

In order to obtain an identified list of patients associated with the HRSSP, the Family Planning Program analyzed the overall utilization of state sponsored reproductive health services provided by Cabin Creek Health Systems at the KCHD location. This review identified 152 unduplicated patients served at that location between July 19, 2017 to December 31, 2017. Fourteen records were selected for a medical record review.

Clinical information associated with the West Virginia Family Planning Program was readily available in the Cabin Creek Health Systems electronic medical record. Other HRSSP information was accessible only through a spreadsheet provided by KCHD. Data from HRSSP forms are entered in a spreadsheet entitled *Harm Reduction Database* (through March 2018) which contains data tabs for each year of the program. Individual patient intake forms are not maintained and were therefore unavailable for review during the evaluation. The spreadsheet provided demographic information, visit type, education, contraceptive methods, drug choice, sexually transmitted disease status, and interest in other services.

At the time of this evaluation, syringe services were suspended, and no patients were present during the on-site review; therefore, services could not be observed, which presents a significant limitation. Evaluation questions were presented to the Prevention Wellness Director, and an inspection of the health department location was conducted.

Finally, a small group from the evaluation team met with eleven Charleston city representatives of the KCHD HRSSP, City of Charleston's Mayor's Office, Charleston City Council and its first responders (including police, fire and emergency medical services), some of whom were important in the passing of the 2015 "enabling law" for legal syringe exchange within the city.

The following types of data were used in this evaluation:

Interviews

- KCHD HRSSP program staff (Tina Ramirez)
- City of Charleston officials (Mayor's Office, Charleston Police Department, Charleston Fire Department, Charleston City Council)
- Documents
 - KCHD HRSSP Program Procedure Manual (obtained from the internet and from KCHD HRSSP staff, May 2017)
 - KCHD HRSSP's *Harm Reduction Program Improvement and Implementation* application (internal, 2018)
 - KCHD HRSSP's sub-recipient grant agreement with BPH (internal, 2018)
 - KCHD HRSSP's website prior to suspension of the program in March 2018 (obtained from KCHD HRSSP staff)
 - Memorandum of Agreement between Kanawha County Health Department and Cabin Creek Health Systems
 - *Guide to Developing and Managing Syringe Access Programs* (Harm Reduction Coalition, 2010)
 - o BPH Harm Reduction Program Guidelines and Certification Procedures
 - o Newspaper articles
 - Board of health minutes
- Data and Databases
 - o KCHD HRSSP database (2015-2018)
 - Naloxone distribution database (obtained from KCHD HRSSP staff)
 - o Abstracted medical records from Cabin Creek Health Systems

To decrease burden on both the clinic staff and harm reduction patients, data was primarily collected on the initial harm reduction visit. To maintain anonymity, the KCHD HRSSP attempted to create a unique identifier by combining the first and last name initial with month and year of birth. However, it is possible that multiple patients had the same identifier. This imposes limitations on data analysis and conclusions. Data from the initial visit is unable to be linked to return visits. Consequently, the characteristics of the individuals that remain engaged with the KCHD HRSSP are unable to be described. Another consequence of the identifier is that an accurate count of unique individuals served is not available and further limits assessment of outcomes. For instance, a change in hepatitis status cannot be tracked because hepatitis status is only assessed on the initial visit. Furthermore, even if a patient indicates a change in status has occurred, the lack of a true unique identifier would not allow this change to be associated with the record of the patient's initial visit. In 2017, there was a possible 441 duplicate visits where the patient identifier had multiple same-day visits associated with that identifier. There was at least one day when it appears that a data entry mistake occurred, and 18 records were recorded four times. Data quality checks prior to the shredding of intake forms would allow the clinic to ensure accurate data entry.

The inability to link a return visit with the initial visit resulted in most analysis being conducted with new patient data only. It is possible that new patients and return patients have different characteristics, but this was not able to be assessed due to the above-mentioned data considerations.

Data from the HRSSP database appears to be free entry, which increases data entry errors, and decreases the quality of data, which in turn further limits conclusions. Not counting missing data, at least 25% of the visits recorded in the 2017 KCHD HRSSP database had errors comprised of misspellings, entries that matched other fields, inconsistency in reporting style, etc. This issue could be easily corrected with the

implementation of a database with dropdown tabs or set choice and designing a form to match this methodology. Another consideration is the amount of data fields with missing data. Even when only using data from new patients, some fields had up to 20% of its data missing. This introduces a large amount of uncertainty into the conclusions drawn from the data analysis.

It also appears that some of the data reported to the media is associated with patient self-reported data from the initial intake form. Additionally, the new patient form only assesses interest in other services. There are no additional fields in the database to indicate if services were received. BPH is unable to determine linkage to care, recovery services, and lives saved by naloxone via the data supplied by the KCHD.

Demographic Information

On page 82 of the Program Procedures Manual, the KCHD states that monitoring patient characteristics and demographics are important components of HRSSP outcome monitoring. Table 1 provides a summary of the evaluation methods for this section.

| Evaluation Question | Indicator | Data Source | Comments |
|---|---|--|---|
| Number of IDUs reached through outreach. | Number reached by KCHD including the number served by the HRSSP. | KCHD Harm Reduction Database; Stakeholder Interviews | Evaluation staff could estimate the number of patients that received services at the HRSSP. Unable to determine the number of IDUs reached that did not receive services in the HRSSP. |
| Patient characteristics (e.g. demographics, injection drug use history, medical history, and substance abuse treatment history). | Description of patients served by HRSSP including gender, sexual orientation, age at first use, insurance status and recovery history. | KCHD Harm Reduction Database | While data quality problems were observed, information for new patients was generally available. Medical history was available only for those patients served by Cabin Creek Health Systems. |
| Drug use preferences (e.g. types of drugs used, including hormones or steroids) and practices (e.g. with whom and how often patients use drugs). | Description of preferred drug type and daily number of injections. | KCHD Harm Reduction Database | Drug preference and frequency of injection was available in the database. However, data quality concerns were noted. |
| Overdose risk and history. | Description of overdose history. | KCHD Harm Reduction Database | Overdose history was available in the database, but information regarding linkages to treatment was not available. |

Residency

Members of the evaluation team conducted a detailed review of demographic information for 2017 provided through the KCHD Harm Reduction Database to assess the extent to which each of the above

outlined questions could be answered. Table 1 provides key demographic information related to both the number of new patients that visited the KCHD HRSSP and where they live. In addition, information about where patients lived was extremely important to local stakeholders. While most patients (71%) indicated that they resided within Kanawha County, 17%-18% of records were missing this information. KCHD staff reported during interviews that 86% of HRSSP patients are residents of Kanawha County based on zip code information. While the BPH evaluation team reports in Table 2 that 71% of patients were Kanawha County residents, the KCHD report of 86% can be replicated if records with missing information are excluded from the calculation.

| | Kanawha County | Missing | Out of State/Country | Bordering WV Counties | Other WV Counties | Total |
|-------------------------|-------------------|---------|-------------------------|--------------------------|----------------------|--------|
| 2016 | | | | | | |
| 1 st Overter | 84% | 6% | 3% | 5% | 2% | 100% |
| 1 st Quarter | (147) | (11) | (5) | (9) | (4) | (176) |
| 2 nd Quarter | 73% | 16% | 3% | 7% | 1% | 100% |
| 2 Quarter | (218) | (47) | (10) | (20) | (3) | (298) |
| 3 rd Quarter | 69% | 21% | 3% | 6% | 1% | 100% |
| 3 Quarter | (331) | (102) | (13) | (29) | (7) | (482) |
| 4 th Quarter | 68% | 18% | 2% | 10% | 2% | 100% |
| 4° Quarter | (388) | (104) | (13) | (58) | (10) | (573) |
| Total | | | | | | |
| Residency | 71% | 17% | 3% | 8% | 2% | 100% |
| Status for | (1084) | (264) | (41) | (116) | (24) | (1529) |
| 2016 | | | | | | |
| 2017 | | | | | | |
| 1 st Quarter | 71% | 21% | 2% | 6% | 1% | 100% |
| I Quarter | (552) | (166) | (14) | (46) | (4) | (782) |
| 2 nd Quarter | 72% | 17% | 1% | 9% | 1% | 100% |
| 2 Quarter | (666) | (154) | (12) | (87) | (10) | (929) |
| 3 rd Quarter | 72% | 17% | 1% | 9% | 1% | 100% |
| 5 Quarter | (582) | (138) | (12) | (73) | (6) | (811) |
| 4 th Quarter | 70% | 17% | 2% | 9% | 2% | 100% |
| 4 Quarter | (596) | (146) | (17) | (79) | (15) | (853) |
| Total | | | | | | |
| Residency | 71% | 18% | 2% | 8% | 1% | 100% |
| Status for | (2396) | (604) | (55) | (285) | (35) | (3375) |
| 2017 | | | | | | |

Table 2. County of Residence of New Harm Reduction Patients by Quarter for 2016 and 2017



Figure 10. Residency of New Patients by Quarter

Patient Visits

Page 31 of the KCHD HRSSP Program Procedure Manual indicates that there is a unique patient code (*KCHD Harm Reduction Syringe Services Program Procedure Manual*, 2017). However, a review of the spreadsheet appears to indicate that multiple people may have been assigned the same identifier as a result of the methodology used for developing the numbering system. The unique patient code is based on the patient's first and last name initials, birth month, and birth year. It is possible that more than one patient shared a patient ID since the letter-number combinations are limited. The number of reported unique identifiers can be assessed, but this is likely an underestimate of actual patients. There were 5,559 unique identifiers in 2017 (including new and returning patients), which provides an estimate of the number of individuals served. All visits associated with that ID number are counted as one person despite the possibility of more than one person with the same ID number. In 2017, approximately 57% were new to the Program, while 43% returned from a previous year (Figure 11). This information was calculated using unduplicated total visits¹. Due to the lack of data associated with return visits, evaluation staff could not unduplicate the full data set. Furthermore, minimal analysis could be conducted on the complete data set because most data was only collected on the first visit and there is no way to link subsequent visits.

¹ For detailed new client analysis, efforts were made to unduplicate data to the fullest extent possible.



Figure 11. KCHD HRSSP Estimate of New and Returning Patients

Two thirds of individuals attended only one harm reduction clinic in 2017, while an additional 22% attended 2-5 clinics (Figure 12). The range for the number of clinics attended was 1-69.



Figure 12. KCHD HRSSP Clinic Attendance

According to the Harm Reduction Database, there were 15,521 visits in 2017, by approximately 5,559 individuals. Most visits were return visits, which included individuals that were new in 2017 (and had a subsequent visit) and individuals that initiated harm reduction services in a previous year (Figure 13). Previous studies have found that roughly two-thirds of harm reduction patients return within 12 months of the initial visit (Gindi *et al.*, 2009). Due to data limitations, this analysis could not be replicated. However, the type of visit, return or new, was analyzed for all visits to the harm reduction clinic in 2017. Return visits, which included clients that were new in 2017 and had a return visit and those that returned from previous years, made up 76% of the visits to the clinic. While not directly comparable to other

studies, it does suggest that KCHD HRSSP may have retained patients better than other programs. However, better data quality, linkage to prior visits, and a unique identifier would help to confirm this finding.



Figure 13. KCHD HRSSP Visit Type

Patient Characteristics

Demographic information for patients in the HRSSP is remarkably similar to the demographic information of West Virginia residents that suffered a fatal overdose in 2016. In 2016, 67% of overdoses occurring in West Virginia were among males, the remaining 33% were among females (West Virginia Bureau for Public Health, 2017). This is comparable to new HRSSP patients. Missing data accounted for 20.6% of responses for sex/gender, while 34% of new patients were reported as females and 45% identified as male. When records missing gender data were excluded, males made up nearly 60% of the new patient population served.



Figure 14. KCHD HRSSP New Patient Gender

Reported race for new clients is similar to the overall West Virginia population for individuals reported as Black (3%). However, data among white HRSSP patients (90.5%) varied compared to overdose decedents (94.4%) and the overall West Virginia population (94%). New HRSSP patients that had missing data/unusable race/ethnicity data (2.5%) could be the reason for the difference across populations (Figure 15). A larger proportion of Asian/other/multiple race individuals was reported among HRSSP patients. However, due to poor data quality, it is unclear if this minority population was better represented, in need of more services, or if this finding was another consequence of data quality.



Figure 15. KCHD HRSSP Race of New Patients

West Virginians with an overdose death in 2016 typically had a higher education status than new patients attending the HRSSP clinic. Of new HRSSP patients, 50.9% (Figure 16) had a high school education or above compared to 78.7% of decedents who overdosed in West Virginia and 85% of all West Virginians. Variation between these populations could be a result of missing/unusable data (21.9%) or could be a true difference between populations.



Figure 16. KCHD HRSSP Educational Status

Of new patients in 2017, 70% identified as heterosexual. The remaining 30% were split evenly among declined to answer, missing, and lesbian, gay, bisexual, transgender, and questioning (LGBTQ), at 10% each. The percent of HRSSP patients identifying as LGBTQ is higher than in the general population. The estimation of LGBTQ in the general population varies but is generally around 2% to 4%. According to the 2015 National Survey on Drug Use and Health (NSDUH), 4.3% of adults age 18 or older identified as LGBTQ. Of individuals surveyed, LGBTQ individuals were more likely than heterosexuals to report use of an illicit substance in the past year (39% and 17%, respectively). Illicit and misused drugs such as Heroin, Methamphetamine, and prescription drugs follow the same trends for use among LGBTQ individuals as all illicit drugs, when compared individually (Substance Abuse and Mental Health Services Administration Center for Behavioral Health Statistics and Quality, 2016). These drugs were among the most common listed as drug of choice for new HRSSP patients.



Figure 17. KCHD HRSSP Sexual Orientation

Nearly half (46%) of new harm reduction patients in 2017 did not have insurance. Public insurance, which includes Medicaid and Medicare, was the most common type of insurance for new patients at 41%. Only 4% of new patients had private insurance (Figure 18). The large proportion of new patients with no insurance provides an opportunity for linkage to social services.



Figure 18. KCHD HRSSP Insurance Status

Drug Preference and Injection Frequency

Figure 19 illustrates the drug preference of KCHD HRSSP patients. Drug preference is assessed at the first visit. Most patients indicated that they preferred more than one drug type (51%). Two thirds (66%) indicated that heroin is their drug of choice, followed by methamphetamine (61%). These findings are consistent with preliminary overdose death data from the WVDHHR Health Statistics Center indicating that psychostimulant involvement in overdose death increased in 2017.



Figure 19. KCHD HRSSP Drug Preference

To determine injection frequency, an average was used when a range of injection frequency was recorded. This data field should be interpreted with caution as inconsistencies in documentation were noted. Figure 20 shows that approximately 80% of new harm reduction patients injected less than 11 times per day. However, 1% of new harm reduction patients injected over 20 times a day.



Figure 20. KCHD HRSSP Injection Frequency

Figure 21 illustrates the age of first drug use for new KCHD HRSSP patients in 2017. Over 75% initiated drug use prior to 20 years of age. The age group with the largest percent was 11-15 years (38%), while the second highest age group was 15-17 years (27%). This is consistent with prior research indicating that early initiation of substance use is associated with an increased risk of substance use disorder.



Figure 21. KCHD HRSSP Age of First Drug Use

Overdose Risk and History

The vulnerability of the population served by the KCHD HRSSP is further illustrated by non-fatal overdose data. Thirty-three percent (33%) of new patients indicated that they had a previous non-fatal overdose (see Figure 22), which increases their risk of death. In addition, 56% of KCHD HRSSP patients had witnessed the overdose of another person. This emphasizes the need for treatment and prevention of future overdoses as there is an association between non-fatal overdose and fatal overdose (Caudarella *et al.*, 2016).



Figure 22. KCHD HRSSP Non-Fatal Overdose

It is widely known that West Virginia has experienced a lack of treatment availability for persons with substance use disorder, and multiple attempts at recovery are often needed before someone with a substance use disorder can achieve success. Forty-five percent (45%) of new KCHD HRSSP patients in 2017 reported that they had been in recovery. While only 3% of patients indicated that they are waiting for recovery services (see Figure 23), this presented an enormous opportunity for intervention for those individuals. One of the challenges associated with treatment and recovery is the need to transition people who are ready to enter treatment quickly.



Figure 23. KCHD HRSSP Patients Waiting for Recovery Services

Syringe Services

On pages 7, 11, and 82 of the Program Procedures Manual, the KCHD outlines the important components of syringe services. Table 3 provides a summary of the evaluation methods for this section.

| Evaluation Question | Indicator | Data Source | Comments |
|---|---|------------------------|--------------------------|
| Protect IDUs and the | Describe syringe | KCHD Harm Reduction | KCHD syringe |
| public from dirty | disposal practices. | Database; KCHD HRSSP | distribution and |
| needles and | | staff interviews; | disposal practices are |
| syringes/disposal | | Stakeholder interviews | well defined for the |
| practices (page 11). | | | health department site. |
| | | | Syringe litter and its |
| | | | disposal remains a |
| | | | concern. 421,208 |
| | | | syringes were returned |
| | | | (a 66% return rate), |
| | | | leaving 220,919 |
| | | | syringes unreturned. |
| Provide as close to 100 | Describe frequency and | KCHD Harm Reduction | Syringe distribution is |
| percent syringe | duration of HRSSP use, | Database | well documented |
| coverage as possible, | including estimation of | | within the database. |
| which means a sterile | numbers of syringes distributed in a given | | |
| syringe for every injection of every IDU | period (page 82). | | |
| in a jurisdiction (page | perioù (page 62). | | |
| 7). | | | |
| Receptive and | Describe patients that | KCHD Harm Reduction | This data is recorded in |
| distributive syringe | injected with a syringe | Database | the database; however, |
| sharing (page 82). | that had previously | Database | there is no |
| | been used by someone | | corresponding data |
| | else (receptive) and | | collection fields on the |
| | patients that gave | | forms provided to the |
| | another IDU a syringe | | evaluation team. Thus, |
| | that they had | | it is unclear how this |
| | previously used | | data was collected. |
| | (distributive). | | |

Table 3. Evaluation Methods for Syringe Services

KCHD HRSSP uses the one-for-one-plus syringe exchange model, meaning that for every one syringe returned by a patient, it is possible for the patient to receive more than one sterile syringe as pre-defined by program policy.

Table 4 was adapted from KCHD HRSSP's *Harm Reduction Improvement and Implementation* application and shows the number of syringes that can be given to a patient based on the number of syringes returned.

Table 4. KCHD HRSSP's syringe dispensing scheme based on number of syringes returned (per OSTR funding application).

| Needles Returned | Needles to be Given |
|------------------|---------------------|
| 0-9 | 10 |
| 10-14 | 15 |
| 15-19 | 20 |
| 20-24 | 25 |
| 25 + | 30 |

On an initial visit, a patient is provided a minimum of 10 syringes and a maximum of 30 syringes, depending on reported injection drug use. Patients are offered short or long syringes or both. During the interview with program staff, they stated that if a patient returned 11 syringes, 20 syringes are received. This is a change from what was included in the OSTR application, likely due to the fact that syringes are purchased in packages of 10. Patients can be given fully sealed packages if syringes are distributed in multiples of 10. If a patient does not return any syringes, they receive 10 syringes. The number of syringes dispensed are documented on the back of a patient ID card which is checked each visit to see how many syringes were dispensed on the previous visit. The ID card is anonymous and has a patient code based on the patients first and last name initials, birth month, and birth year. It is possible that more than one patient shared a patient ID since the letter-number combinations are limited.

In 2017, a patient could leave KCHD HRSSP with a maximum of 300 clean syringes if 30 syringes were brought to exchange for themselves and 30 to exchange for each of up to nine other individuals. To be able to pick up syringes for others, the patient must have visited the program at least once and the patient picking up syringes for others must have each patient's ID card. The Harm Reduction Database does not distinguish whether the visit was in-person or via a proxy until November 2017. Data from November 2017 to March 2018 indicated that 34% were in-person visits, 46% were via a proxy, and 20% were unknown. This practice was not outlined as practice in the KCHD HRSSP Program Manual. Several weeks prior to the suspension of HRSSP services in March 2018, KCHD changed this policy, allowing patients to pick up syringes for themselves only. Interviewed staff reported that if the program reopens, patients will no longer be able to obtain clean syringes for other patients.

2017 data from the Harm Reduction Database were cleaned by program evaluation staff for further analyses. The range for the number of syringes dispensed was 0-170 syringes by an individual patient on an individual day. There were 22 entries in which a patient was given greater than 30 syringes. Given that 30 syringes are the most a single patient should receive in a given visit, possible reasons for numbers >30 syringes include:

- 1. Patient received syringes for additional patients and these numbers were tallied in the data.
- 2. The patient received more than the 30-syringe cap.
- 3. There were data entry errors.

Table 5 shows data collected by KCHD HRSSP on patients and syringe delivery and return from 2015 to 2018 (prior to suspension of the program in March 2018). Based on 2016 and 2017 (the only years with full program-year data), the numbers for the total number of patients increased by 308%, new patients increased by 225%, the number of syringes returned increased by 371%, and the number of syringes dispensed increased by 313%. These data indicate a high demand for the program by patients.

| Year | Total # of Patients | New Patients | Syringes Given | Syringes Returned | Return Rate | Difference |
|------------------------------|------------------------|-----------------|-------------------|----------------------|-------------|------------|
| 2015 | 67 | 43 | 1,694 | 282 | 17% | 1,412 |
| 2016 | 5,039 | 1,652 | 130,480 | 72,929 | 56% | 57,551 |
| 2017 ² | 15,521 | 3,720 | 408,711 | 270,250 | 66% | 138,461 |
| 2018 (through 03/2018) | 3,899 | 583 | 101,242 | 77,747 | 77% | 23,495 |
| Total (2015- 2018) | 24,526 | 5,998 | 642,127 | 421,208 | 66% | 220,919 |

Table 5. Yearly metrics on KCHD HRSSP from 2015 to 2018 (data provided by KCHD HRSSP as yearly totals).

During the duration of the needle exchange program, 642,127 syringes were dispensed according to the Harm Reduction Database. During this same time frame, an estimated 421,208 syringes were returned (a 66% return rate), leaving 220,919 syringes unreturned. This return is different from the rate documented in the September 2017 KCHD Board of Health meeting minutes (87%) (Brumage, 2017). After a review of available literature, the evaluation team replicated this higher return rate by using cumulative return visits from December 2015 to August 2017. This method shows that patients who repeatedly visited the program have a higher rate of syringe return. The evaluation team cannot say with certainty that this was the same methodology used by KCHD. It is important to understand both methodologies to assure good communication and trust among stakeholders.

An additional factor that may affect the syringe return rate is dispensing of clean syringes without the exchange for used ones. This occurs when new patients are given up to 30 syringes to start and returning patients who do not return syringes being given a maximum of 10 syringes (per the KCHD HRSSP Harm Reduction Manual). In order to assess factors that may contribute to a return rate of less than 100%, cleaned 2017 data were filtered to only include entries in which no syringes were returned by both new and returning patients. This resulted in 5,281 unique entries totaling 121,636 syringes dispensed without any being returned; 1,891 entries were from returning patients (20,872 syringes dispensed), and 3,384 entries were from new patients (100,684 syringes dispensed). Based on the cleaned 2017 data, there

² Within the KCHD Harm Reduction Database, there were 90 visits for 8/9/2017. However, in the total visit tab for the same date, 287 visits were reported. The missing 197 visits are not included in this table.

were 408,711 total syringes returned in 2017, meaning that 29.8% of syringes were given to patients without an exchange for used ones.

KCHD HRSSP staff reported that when patients were asked the reason used syringes were not returned, many stated the syringes had been confiscated by law enforcement, given to/taken by someone else, or safely disposed of at home. This was anecdotal information and could not be verified during the evaluation.

KCHD staff also reported that at each visit, patients are offered the following harm reduction supplies in addition to clean syringes: cooker, tourniquet, dental cotton, condoms, bag, alcohol wipes, sharps container, sterile water, and bleach. Patients are given the supplies for which they express a need. They also receive education on the importance of using their own supplies as well as the dangers of sharing syringes and supplies which could result in disease transmission.

KCHD HRSSP staff indicated that the time in which a patient is receiving harm reduction services can vary greatly. For those seeking only clean syringes, they can be in and out of KCHD in as little as 5 minutes. For those seeking other services, it can be as much as 20-30 minutes during a single visit, with follow-up visits likely, especially if STD/HIV testing was conducted.

At no time does any staff member or volunteer handle biohazard waste, nor do patients remove syringes from their disposal (sharps) containers, according to KCHD HRSSP staff. Patients are asked to open their sharps containers so that a room interviewer can obtain a visual estimate of the number of syringes returned. The patient is then asked to dump the syringes into a larger hard plastic sharps container. If a container cannot be opened for some reason, the patient places the sealed sharps container in a cardboard box with a plastic biohazard bag. The room interviewer also estimates, by weight, the number of syringes returned in unopened sealed containers. The two containers are sealed and collected by a waste management company on a weekly basis. Cost is determined per pound collected. The Sterilis machine originally intended for the KCHD HRSSP is only used for waste generated in-house and not for patient syringes due to the ambiguity as to what other objects may be placed in the patient sharps container which could possibly damage the machine.

The KCHD has a syringe disposal kiosk on Lee Street in front of the KCHD. Two additional kiosks have been purchased and are currently in storage waiting to be placed in two Cabin Creek Clinic locations yet to be determined. Maintenance employees empty the kiosks when they are full, weigh the disposed syringes, and the weight is recorded in the database by HRSSP staff. The total number of syringes from the evening kiosk was 142 pounds, or 26,696 syringes. This number is not included in the total number of syringes returned by patients.

If KCHD receives a call that a used syringe has been found in the community, the call is transferred to the Environmental Department (304-348-8050) at KCHD. Reported response time is within 1 hour during business hours or within 24 hours outside of business hours. Syringes are picked up with a kit containing gloves, a grasper device, a sharps container, and other material deemed necessary. If the hypodermic needle is not found after a minimum 10-minute search, the investigation is deemed completed (per April 2018 correspondence with KCHD staff). The exact coordinates of the syringe(s) is determined by GIS mapping, and a photo of the site is taken. Complaints are documented and tabulated in a monthly report to the director of the Division of Environmental Services.

Only one needlestick injury on KCHD property has been reported since the inception of the HRSSP. The needlestick occurred when a volunteer was stocking carts and was stuck with a sterile unused needle through its manufacturing bag. KCHD does not track needlestick injuries outside of their location. KCHD completes state mandated forms for needlesticks, reported to BPH on a monthly basis. The clinic follows the OEPS tracking and reporting guidelines. In addition to local health departments, only needlestick injuries in hospitals, nursing homes, and home health agencies are reported to BPH. Community needlesticks are not reported through this mechanism, nor is BPH mandated to receive these reports.

Disease Surveillance and Prevention Efforts

On page 8 of the Program Procedures Manual, the KCHD outlines the importance of reducing the transmission of bloodborne pathogens through substance abuse. Table 6 provides a summary of the evaluation methods for this section.

| Evaluation Question | Indicator | Data Source | Comments |
|----------------------------|--------------------------|---------------------|--------------------------|
| Reduce incidence of | Describe the number | KCHD Harm Reduction | Prior to late 2017, |
| substance related | and percentage of | Database; RedCap | KCHD HRSSP did not |
| health and social | patients tested for HIV, | Database | directly track screening |
| harms, including | HCV, and HBV. | | and results for the |
| transmission of | | | number of persons |
| bloodborne pathogens | | | tested for HIV, HBV, |
| through substance | | | and HCV because |
| abuse. | | | patients were |
| | | | anonymous. In |
| | | | addition, KCHD does |
| | | | not track the number |
| | | | of condoms distributed |
| | | | or the number of |
| | | | persons given condoms |
| | | | at the HRSSP. |

Table 6. Evaluation Methods for Disease Surveillance and Prevention Efforts

While KCHD HRSSP services were provided on Wednesdays, KCHD staff report that the HRSSP is interwoven into the greater KCHD, meaning that some aspects of the program utilize services of the health department as part of program practice. Because of this, patients can receive broader services in addition to syringe exchange. Since June 2017, KCHD has offered STD clinics on Tuesdays and Thursdays 12PM to 3PM by appointment. HIV testing is offered by appointment from 8AM to 3PM Monday through Friday, or through the STD clinic.

Prior to late 2017, KCHD HRSSP did not track screening and results for the number of persons tested for HIV, HBV, and HCV because patients were anonymous. The number of persons who were tested through the HRSSP is difficult to elucidate, which poses a significant limitation to this evaluation. The *Harm Reduction Database* provides some information about testing and other services offered to patients. One of the column headings is named "Other Services" and is based on the question located on the new and returning patient intake forms seeking to determine additional needs of patients. Because of this question (and the specific field "Hepatitis B and C Testing"), all patients appear to be offered STD/HIV testing at

least non-verbally at each visit. The number of condoms distributed, and the number of persons given condoms at the KCHD HRSSP are also not tracked by KCHD HRSSP.

According to the Harm Reduction Database, over 50% of new harm reduction patients in 2017 did not have a response to the hepatitis and HIV questions recorded in the Harm Reduction Database. Despite this lack of data, and being self-reported, which tends to result in under reporting, 27% of new harm reduction patients reported they had Hepatitis C. Hepatitis B was self-reported in 3% of new patients, and HIV was reported in less than 1% of new patients. Multiple diagnosis is possible, 2% of new patients reported more than one diagnosis. Of the new patients that responded to the question, more patients indicated a diagnosis than indicated they had been tested but had negative results. Even though 57% of diagnosis status was missing, there was indication of prior testing in 71% of new harm reductions patients (Figure 24). Due to the increase risk of Hepatitis and HIV in PWID regular testing would provide more accurate incidence rates. Furthermore, it may lead to less spread of disease due to knowledge of disease status and subsequent behavioral changes.



Figure 24. KCHD HRSSP HCV, HBV, and HIV Status (KCHD Harm Reduction Database)

In late 2017, KCHD partnered with the Gilead FOCUS Program. The FOCUS Program launched in 2010 "to develop replicable model program that embody best practices in HIV screening and linkage to care." (*Gilead's FOCUS Program: Increasing Routine V+HIV and HCV Screening and Linkage to Care*, no date) Routine screening integrates HIV and hepatitis testing into the KCHD HRSSP setting to address undiagnosed infection and engage individuals in care and treatment for these diseases. This program targets PWID for screening at no cost to the patient. The Gilead FOCUS Program provided funding beginning December 1, 2017, through December 31, 2018, to pay for HIV, HCV, and HBV testing. Training began in December 2017 for KCHD clinic staff to prepare them for the launch of the program on January 1, 2018. KCHD in conjunction with Cabin Creek Health Systems began offering testing to every patient who was seen during the HRSSP January 1, 2018. Cabin Creek Health Systems participated weekly with the KCHD HRSSP and offered family planning services, including long acting contraception, and other primary care services to harm reduction patients. As of March 2018, KCHD HRSSP began using a RedCap Database for data collection. A separate RedCap database is kept for the Gilead FOCUS Program, which provides opt-out testing for HCV and HIV. For testing to occur, demographic data on patients must be collected (making patients named individuals/patients).
Table 7 shows the reported number of and percentage of patients tested for HIV, HCV, and HBV from January 1, 2018 through March 8, 2018 through the Gilead FOCUS Program.

| | HIV | | HCV | | HBV | |
|--|-----|-----|-----|-----|-----|-----|
| | No. | % | No. | % | No. | % |
| Persons offered screening | 581 | 100 | 581 | 100 | 581 | 100 |
| Persons screened | 238 | 41 | 276 | 48 | 260 | 45 |
| Positive diagnoses | 1 | 0.4 | 95 | 34 | 8 | 3 |
| linked to care | 1 | 100 | 7 | 7 | 1 | 13 |
| Source: Kanawha-Charleston Health Department – RedCap database | | | | | | |
| *Number of unique individuals | | | | | | |

Table 7. Number and percentage of patients tested for HIV, HCV, and HBV January 1 - March 8, 2018.

KCHD's MOA with Cabin Creek Health Systems states that the purpose of their agreement is, "for Cabin Creek Health Systems and KCHD to provide primary health care services, including family planning services, and ambulatory mental health services for KCHD patients at the KCHD facility... Primary care would be provided on an urgent basis for any consenting HRSSP patient and continuing care would be provided for consenting HRSSP patients who do not have an established source of primary care and who choose to receive primary care at the KCHD facility. Other options for ongoing primary care will be offered to patients including care at [federally-qualified health centers] in the region (Appendix D)." Through its partnership with Cabin Creek Health Systems, KCHD HRSSP can provide positive patients with a nurse navigator for linkage to care. Cabin Creek refers patients to local physicians, the Ryan White Program, West Virginia Health Right, and drug treatment centers.

KCHD HRSSP currently does not offer HIV pre-exposure prophylaxis (PrEP). In addition to the use of clean injection equipment and use of condoms to decrease the risk of transmission of HIV, PrEP is another way to reduce disease transmission among high risk individuals. People who do not have HIV but who practice high risk behavior (such as injection drug use) may take Truvada, a combination of tenofovir and emtricitabine. When someone is exposed to HIV through sex or injection drug use, these medicines can work to keep the virus from establishing permanent infection. Currently, only one local health department in West Virginia, Beckley-Raleigh Health Department, offers HIV PrEP. HRSSP staff expressed an interest in receiving training for how to stand up a PrEP delivery program during an in-person interview.

KCHD HRSSP's previous practice of providing syringes to patients on behalf of others was suspended in March 2018. The purpose of this practice was to provide patients who may not be able to make it to KCHD HRSSP during the HRSSP hours of operation while sterile injection equipment. Conversely, this method of syringe distribution limits access to other HRSSP services (disease screening, immunization, condoms) and reduces face-to-face interactions that patients have with persons seeking to get them into care, treatment, and recovery.

Clinical Services

On page 82 of the Program Procedure Manual, the KCHD outlines the importance of access and linkage to drug treatment and medical and social services. Table 8 provides a summary of the evaluation methods for clinical services.

| Evaluation Question | Indicator | Data Source | Comments |
|----------------------------|-------------------------|----------------------|-------------------------|
| Types of services used | Describe the types of | KCHD Harm Reduction | The Program |
| at the HRSSP. | services made available | Database; Family | Procedure Manual |
| | to HRSSP patients. | Planning Program | indicates that a wide |
| | | Database; Abstracted | variety of services are |
| | | Medical Records | offered to program |
| | | | patients. However, the |
| | | | Harm Reduction |
| | | | Database only |
| | | | documents interest in |
| | | | service, not service |
| | | | delivery. |
| Access and linkage to | Describe wound | KCHD Harm Reduction | The Database only |
| drug treatment and | assessment, flu shot, | Database; Abstracted | documents interest in |
| medical and social | signing up for health | Medical Records | service, not service |
| services (e.g. referrals | insurance, naloxone, or | | delivery. Abstracted |
| and linkage to medical | speaking to a recovery | | medical records from |
| homes, behavioral | coach. | | Cabin Creek Health |
| health services and | | | Systems were |
| homes and substance | | | complete and included |
| abuse treatment | | | documentation about |
| facilities). | | | the services provided |
| | | | by their agency. |
| | | | However, not all |
| | | | services were provided. |
| Changes in drug use, | Describe changes in | KCHD Harm Reduction | This information was |
| injection and | drug use, injection and | Database | not collected in the |
| treatment as a result of | treatment. | | database until February |
| HRSSP participation. | | | 2018. Information was |
| | | | only documented for |
| | | | 25% of patients after |
| | | | this data field was |
| | | | implemented. |

Table 8. Evaluation Methods for Clinical Services

Cabin Creek Health Systems provided state sponsored reproductive health care to 152 unduplicated patients at the KCHD location during 2017. Due to the documentation procedures for the HRSSP, the Quality Assurance Monitoring Team could not verify through source documentation which Cabin Creek Health Systems patients were patients in the HRSSP. However, the MOA states that harm reduction patients are the target population. Therefore, both the Family Planning data system and medical records were reviewed to determine whether services were provided that were consistent with the KCHD HRSSP Program Procedure Manual.

The Family Planning Program data system indicated that there were 78 females and 74 males with a total of 172 visits in 2017. Services were provided between July 19, 2017 and December 28, 2017. The county of residence was reported as Kanawha County for 99.4% of patients. Remaining patients were from border counties. Overall, 11 females (14%) received long acting reversible contraceptives. Utilization of long acting reversible contraception is higher than would be expected when compared to West Virginia Family Planning clinics overall (3.3%). This observation is further supported by the document "Contraceptive use and method choice among women with opioid and other substance use disorders: A systematic review," in which the authors assert that people with SUD use contraception less often than non-drug users (56% vs. 81%, respectively) (Terplan *et al.*, 2015).

Cabin Creek Health Systems provided Family Planning Program services to a higher proportion of females that attended the HRSSP in general. This would be expected given the emphasis of reproductive health services. However, the proportion of males that received reproductive health services (49%) is significantly higher than the overall West Virginia Family Planning Program (10%), see Figure 25. People who inject drugs often exhibit behaviors that put them at risk for sexually transmitted disease.



Figure 25. KCHD HRSSP Family Planning Program Patients by Sex and Age

The figure below demonstrates that Cabin Creek Health Center provided a wide variety of services to 152 HRSSP patients. High rates of screening for chlamydia and gonorrhea are especially noteworthy (Figure 26).



Figure 26. KCHD HRSSP Family Planning Program Service Type

Data reported by the Family Planning Program supports that Cabin Creek Health Systems provided primary health care services as outlined in the MOA with KCHD (Figure 27).



Figure 27. KCHD HRSSP Family Planning Program Services

In addition to a review of Family Planning Program, the Quality Assurance Monitoring Team reviewed the actual medical records for 14 patients, 7 males and 7 females that were associated with the HRSSP during calendar year 2017. The age range for this subset was 20 to 49 years of age. The chart reviews were

consistent with the overall population described in the tables above. Eighty-six percent (86%) of patients received STD/HIV testing, 71% received condoms/contraceptive counseling, and 43% of females received long acting reversible contraceptives.

Wrap around services are often found at harm reduction clinics. Other medical program components including Hepatitis B and C testing, Hepatitis A and B vaccinations, wound assessment, flu shot, signing up for health insurance, naloxone, or speaking to a recovery coach was not documented in the Cabin Creek Health Systems medical records. The KCHD HRSSP assessed patient interest in other services. However, patients did not have documentation for these services within the Harm Reduction Database. Furthermore, there was no documentation of linkage to the services patients expressed interest in receiving. It is possible that patients received these services, but without supporting documentation, it cannot be confirmed. Patient education can increase the uptake of additional services to decrease the risk of overdose, and transmission of disease. Furthermore, services were provided at the harm reduction clinic. There was no data associated with the referrals that the harm reduction clinic made.

Education to HRSSP Staff and Patients and Outreach to the Community

On page 58, 82 and 85 of the Program Procedures Manual, the KCHD outlines the important components of education and outreach to patients, staff and the community. Table 9 provides a summary of the evaluation methods for education and outreach.

| Evaluation Question | Indicator | Data Source | Comments |
|--|---|--|--|
| Reduce stigma and discrimination against people who use drugs. | Describe efforts to reduce stigma. | STR Grant Application; KCHD HRSSP staff interviews | KCHD plans to launch an anti-stigma campaign on HIV and hepatitis stigma. This campaign will also include information on HIV/hepatitis testing and the principles of harm reduction. |
| Ensure full and equitable reach of Harm Reduction services and education to all who use substances. | Describe outreach efforts. | KCHD HRSSP staff interviews | KCHD staff report that they provide education on what is expected, testing services, patient rights and responsibilities, availability of contraceptives, and an explanation of the syringe exchange model and how the number of syringes they receive is dependent upon how many they return. |
| Raise awareness about the risk of drug overdoses and associated fatalities. | Describe education related to overdose risk. | Spreadsheet for naloxone training | Since April 2016, KCHD HRSSP has dispensed 2091 naloxone kits and trained 1,469 people on how to administer naloxone. |
| Build Capacity of HRSSP staff. | Describe staff training. | KCHD HRSSP staff interviews | HRSSP staff reportedly conduct volunteer orientations which include volunteer protocol, biohazard waste procedures, confidentiality form, room interviewer protocol, needlestick response procedures, and naloxone dispensation. |

Table 9. Evaluation Methods for Education to HRSSP Staff and Patients and Outreach to the Community

KCHD HRSSP is limited by staff and resources. There are only two full time staff members for the HRSSP who have additional job responsibilities outside of the HRSSP. Tina Ramirez, Director of Health and Wellness, indicated that her work with the HRSSP is based on a community health assessment that identified substance use disorder as a top priority for Kanawha County. Because diabetes and obesity are also top areas of need, she also does work to address these public health areas.

KCHD HRSSP has approximately 10-15 volunteers a week who typically rotate out every six to eight-weeks. Volunteers include students from the University of Charleston (i.e. pharmacy, physician assistant, and nursing), Marshall University (social work and behavioral services), West Virginia University (medical students), and members from the Charleston area community. Their roles as volunteers include: baggers in syringe exchange rooms, room interviewers, assembling supplies; assisting patients with forms, fielding calls, helping with the intake process, and data entry. HRSSP staff conduct volunteer orientations which include volunteer protocol, biohazard waste procedures, confidentiality form, room interviewer protocol, and needlestick response procedures. Volunteers and staff are also trained on naloxone dispensation by the University of Charleston School of Pharmacy.

In addition to syringe exchange services, the KCHD HRSSP offers the following harm reduction services: recovery coaches; hepatitis, HIV, and STD screening; referrals to behavioral health; naloxone training; acute and primary care services; vaccinations; and health insurance navigation. These services are offered to patients each visit before they receive syringes, except for naloxone training which is offered once on Wednesday afternoon and is open to patients as well as to other members of the community. They can also obtain naloxone refills in the event their existing naloxone has expired or has been used.

Based on data collected from a spreadsheet on naloxone trainings, since April 2016, KCHD HRSSP has dispensed 2091 naloxone kits and trained 1,469 people on how to administer naloxone. Table 10 shows the reason for which naloxone refills were given to training patients (based on the naloxone database that was shared with evaluation team by HRSSP staff).

| Reason for Refill (April 2016 - March 2018) | | | | |
|---|---------|-----------|-----------|-------------|
| Saves | Expired | Gave Away | Dispensed | Lost Stolen |
| 337 | 24 | 157 | 59 | 10 |

Table 10. Reason for naloxone refills (based on Naloxone Database provided by KCHD HRSSP staff).

Patients are informed of training opportunities by staff when their intake form is reviewed. KCHD focuses on educating and empowering patients about their role in the community and HRSSP operations. Patients, especially those new to the program, are provided education on what is expected, testing services, patient rights and responsibilities, availability of contraceptives, and an explanation of the syringe exchange model and how the number of syringes they receive is dependent upon how many they return. Educational materials are available on topics such as safe needle disposal, needlestick injury prevention and response, overdose response, and naloxone dispensing.

KCHD plans to launch an anti-stigma campaign on HIV and hepatitis stigma using OSTR funding (as outlined in the application). This campaign will also include information on HIV/hepatitis testing and the principles of harm reduction. Some of the material in development include:

- Pocket guides on hepatitis, HIV, and HRSSP locations;
- Video about HIV and hepatitis myths and misconceptions; and

Approximately 25 public service announcements (PSAs) featuring physicians and other health care
providers, persons living with the diseases or who have been treated, and others talking about
stigma of HIV/hepatitis, getting tested, and living with it.

This will be a yearlong campaign to educate the community with the purpose of decreasing stigma about these diseases and populations. About half to the individuals featured in the PSAs were patients of KCHD HRSSP who are in recovery. KCHD HRSSP works closely with substance abuse coalitions such as Kanawha Communities that Care and offers community classes which include a movie on addiction and drugs. Naloxone training is provided, and the class ends with a facilitated group discussion. These classes are requested by groups in the community, such as churches. State police and fire have also been provided naloxone through KCHD HRSSP.

The KCHD HRSSP staff attends several community-based organization meetings to speak about naloxone training. In addition, KCHD staff participate in town halls that are hosted to educate the community on harm reduction clinics and naloxone trainings. Other meetings staff attend include: Great Rivers Coalition meeting (monthly) the statewide Harm Reduction Coalition meeting (monthly); Family Resource Network meetings (monthly); substance abuse coalition (Kanawha Communities that Care); Putnam Wellness Steering Committee meetings (quarterly); meetings with IMPACT through the threat preparedness (monthly). KCHD has also been a part of prevention, intervention, and treatment panel discussions at town hall meetings in Kanawha and Putnam counties.

Before the KCHD HRSSP was suspended, the KCHD website had a webpage devoted to information on its HRSSP. John Law is the Public Information Officer for KCHD and handles all print, media, and web content. Appendix E displays a screenshot of the webpage which describes the program as a "harm reduction" "syringe services program." A link to its HRSSP manual was made available to the public as were links with information on syringe services programs and information about opioids. Hours of operation were listed as well as the names of key staff involved in the HRSSP. HRSSP data on the number of patients served available to visitors of the site. In a section titled, "What you can except," site visitors were informed of steps for syringe exchange and disposal for new and returning patients. Also included was a patient responsibility section that detailed expectations from KCHD HRSSP staff (Appendix F).

With regard to the relationship between KCHD HRSSP and the City of Charleston, KCHD staff indicated many reasons for the strained relationship. The location of the health department is seen as the major issue given its proximity to the new Charleston Civic Center and the ("failing") Charleston Town Center Mall. When asked if the program would be successful if it moved from its current location, staff were unsure because of the current pushback for mobile services.

It was noted that KCHD HRSSP staff met with the new Charleston Chief of Police and that he came to tour the facility. Staff believe that it cannot be proven or disproven that crime is going down since KCHD HRSSP was suspended. They believe that the program will resume on June 1 (after the May 21, 2018 city council vote) and plan to work with the new elected administration on issue and concerns.

Stakeholder Engagement

On page 9 of the Program Procedures Manual, the KCHD outlines building community stakeholder support for HRSSPs. Table 11 provides a summary of the evaluation methods for the stakeholder engagement.

| Evaluation Question | Indicator | Data Source | Comments |
|--|---|------------------------|---|
| Increase community support for HRSSP. | Describe community support for HRSSP. | Stakeholder interviews | External stakeholders were in support of "harm reduction" as a pathway to recovery but assert there is limited data to show linkage to drug treatment and recovery, especially when compared to program located at West Virginia Health Right. |
| Increase stakeholder knowledge. | Describe stakeholder knowledge of HRSSP. | Stakeholder interviews | Internal and external stakeholders were very knowledgeable about the HRSSP. However, there is strong concerns from external stakeholders related to syringe litter, communications, trust, public safety, disease prevention, and economic impact. |
| Assure understanding of operation plan. | Describe stakeholder understanding of operation plan. | Stakeholder interviews | External stakeholders do not support through distribution of syringes to proxies. |

| Tahle 11 | Evaluation | methods | for Stak | eholder | Engagement |
|-----------|------------|---------|--------------------------|---------|------------|
| TUDIE II. | Evaluation | methous | <i>յ</i> υι <u></u> σιακ | enoiuer | Enguyement |

Page 9 of the KCHD HRSSP Program Procedure Manual discusses the importance of understanding and addressing the concerns of resistant stakeholders in the community, and states that a "HRSSP may fail if it is framed negatively or communities resist it." (*KCHD Harm Reduction Syringe Services Program Procedure Manual*, 2017). Figure 28 illustrates the stakeholders identified as having an investment in the evaluation of KCHD HRSSP. Also shown are some of the roles stakeholders play in the KCHD HRSSP system.



Figure 28. Interaction of KCHD HRSSP stakeholders

Stakeholders were identified as those involved in program operations (internal stakeholders), those served or affected by the program (external stakeholders), and the primary users of the evaluation (internal and external stakeholders). Table 12 shows the stakeholders and their roles in this evaluation.

Table 12. Proposed stakeholders in evaluating KCHD HRSSP and their roles in the evaluation

| Stakeholders | Role in the Evaluation |
|----------------------------|---|
| Internal Stakeholders | |
| Dominic Gaziano | Define purpose of evaluation |
| Interim Director, KCHD | Disseminate findings to key stakeholders |
| Tina Ramirez/Ciara Ruske | Define the purpose of the HRSSP |
| Lead HRSSP Staff | Assist in describing the HRSSP and gathering credible evidence |
| | Provide answers to evaluation questions |
| | Provide data for the evaluation |
| Cabin Creek Health Systems | Provide data for the evaluation |
| | Provide answers to evaluation questions |
| External Stakeholders | |
| WVDHHR BPH | Lead evaluation of HRSSP |
| | Identify key stakeholders |
| | Provide recommendations to HRSSP for further dissemination |
| HRSSP Patients | Assist in describing the HRSSP and gathering credible evidence |
| City of Charleston | Inclusion of stakeholders affected by the HRSSP |
| Local Law Enforcement | Inclusion of stakeholders affected by the HRSSP |

Because KCHD HRSSP is currently suspended, patients were not engaged as stakeholders, a significant limitation to the program evaluation.

A small group of the evaluation team met with 11 Charleston city representatives from the Mayor's Office, Charleston Fire Department, Charleston Police Department, and Charleston City Council, some of whom were important in the passing of the 2015 "enabling law" for legal syringe exchange within the city. It is important to note that none of the representative were in support of resuming KCHD HRSSP operations.

All the City of Charleston stakeholders were in support of "harm reduction" as a pathway to recovery from substance use disorder. They did not believe there was a need for two syringe exchange programs and reinforced consistently during the interview that West Virginia Health Right's program was the better program because patients are viewed as identifiable, named patients. Syringe exchange is secondary to primary care. The stakeholders reported that West Virginia Health Right is able to link one-third of patients to recovery compared to 1.5% from KCHD HRSSP, though they indicated that KCHD HRSSP's number were not credible. City officials believe that West Virginia Health Right would be able to serve KCHD HRSSP patients in addition to their current patient load. Reportedly, Health Right currently serves 25,000 patients.

Use of retractable needles has been a highly controversial issue and was recently mandated by the City of Charleston for purposes of syringe exchange. The City of Charleston is very concerned about syringe litter and its impact on public safety. In October 2017, City officials engaged KCHD HRSSP to start a retractable needle pilot project with two aims: to determine if syringe litter was coming from KCHD HRSSP and see if safer, retractable syringes could replace less safe single-use syringes. Retractable syringes can cost four times as much as non-retractable syringes. Additionally, since federal funding cannot be used to procure syringes and other drug paraphernalia, only private grants and donations can be used to make such purchases.

City officials identified a retractable needle manufacturer in Texas who was interested in the pilot project and offered to donate 250,000 syringes to KCHD HRSSP. The manufacturer wanted to collect data with the end goal of developing safer syringes that could be used at harm reduction programs in West Virginia and across the United States. Reportedly, all (KCHD HRSSP, City of Charleston, and the manufacturer) were all in agreement to the terms described.

Reportedly, the manufacturer contacted the main point of contact from the city regarding the pilot project to inform him that the data collection would be outsourced to Johns Hopkins University and that a focus group with a maximum of 12 patients would receive the new retractable syringes. The city official was later told by KCHD HRSSP staff that there was a miscommunication and that the project was to proceed as originally planned with a start date of April 1, 2018. City officials relayed to their stakeholders, including the Mayor, that the pilot project would be initiated as planned to alleviate concerns about increased syringe litter and resulting consequences. It was later learned that KCHD had made the decision to proceed with the focus group route for April 1. Both City of Charleston officials and the manufacturer felt that they were misled. City officials believe they were made to look like liars to their constituents. As a result, they developed a list of seven rules that were promulgated by Police Chief Steve Cooper that became effective immediately; one rule explicitly stated that only retractable syringes could be distributed at syringe exchange programs. As results of the new rules, KCHD HRSSP suspended the program. West Virginia Health Right is still operating and is dispensing retractable needles.

Over the course of the four and a half-hour interview, representatives of the City voiced concerns spanning the spectrum of increased syringe litter to increased serious crimes within the City of Charleston attributable to KCHD HRSSP as outlined in Table 13.

Table 13. Summary of Charleston City Official's Concerns

| Concern | Reported Reason for Concern |
|--|--|
| Increased syringe litter | Public safety due to increased potential for needlestick injury among city workers including first responders and refuse workers (increased occupational hazards); Increased liability to the city for needlestick injuries in public spaces (i.e. city park); Syringe litter found on school premises; As high as 11,000 syringes dispensed in a single week by KCHD HRSSP; Lack of accountability by KCHD HRSSP for syringe litter; Slow pick up of syringe litter by KCHD HRSSP in the community; Increase in community sharps containers not a permanent solution and puts onus on community rather than KCHD HRSSP (also cost-prohibitive to community); and |
| Lack of communication (internally and externally) | Economic impact on local business. KCHD HRSSP leadership seemed not fully aware operations; City excluded from important stakeholder meetings (i.e. retractable needles meeting); and Some KCHD staff do not support the program. |
| Distrust for KCHD HRSSP | Misinformation disseminated by KCHD HRSSP to the city; Misled about retractable needles pilot; City credibility in question because of misinformation from KCHD HRSSP (specifically regarding the retractable needle pilot project) "Grossly mismanaged policies"; Inaccurate medical records and data collection; Children brought to KCHD HRSSP; Pregnant women being dispensed syringes (threat to unborn child); 33 neighborhood watch groups are against KCHD HRSSP; Charleston Police accused of planting syringes and using internet photos of syringes; Credibility of city officials drawn into questions they were led to believe misinformation relayed to them by KCHD HRSSP; and Syringes dispensed to patient who did not have governmentissued ID after rules were put in place requiring a governmentissued ID for syringe exchange. |
| Program is not a "gateway to treatment" as described to city | Limited data to support linkage to drug treatment and recovery; Number of patients in recovery changes; "Patients are herded through like cattle" because "addicts can't wait but five minutes"; Patients are not viewed as patients due to anonymity; and Main focus on disseminating syringes. |
| Decreased public safety | Persons engaged in drug use are more likely to be engaged in other, more serious crimes; |

| Concern | Reported Reason for Concern |
|---|--|
| Little impact on | Many persons arrested at the Charleston Town Center Mall had drug paraphernalia on their person; Reported increase in shoplifting at the Charleston Town Center Mall; Businesses closing/leaving Charleston; Increased crime reported the day before and the day after KCHD HRSSP; Increase in methamphetamine use in Charleston due to availability of free injection equipment; Increase in illicit drug transaction within city limits; and Increase illicit drugs brought in from other states. West Virginia still ranks first in acute HBV and HCV; and |
| decreasing HIV, HBV, and HCV | Rates in Kanawha County did not change greatly as a result of the program. |
| Patients able to pick up drug paraphernalia for others in the program | Reference one patient having 13 other ID cards and picking up syringes for others; and "Patients are herded through like cattle" leaving little time for offering extended services above clean syringes. |
| Economic impact on the City of Charleston | \$100 million Civic Center construction nearly completed; Visitors/tourist do not want to visit a city with syringe litter; and KCHD is operating as a regional or semi-state health department, resulting in increased burden on the City of Charleston to serve non-Kanawha County residents. |
| KCHD as a regional or semi-state health department | Increased burden on the City of Charleston to serve non-Kanawha County residents. |

In addition to participating in an interview with evaluation staff, representatives provided written documentation for structure fires and worker's compensation reports. This information is presented below:

According to data provided by the Charleston Fire Department, vacant structure fires have increased by 64% from 2015 to 2017. When comparing January through November 2015, which is prior to the start date of the HRSSP, to January through November 2017, a 100% increase in vacant structure fires is evident. Even more striking is the comparison between the first quarters of 2015 and 2018, in which vacant structure fires rose 250%. In addition, the Charleston Fire Department reported they experienced 28 days without a structure fire after syringe services were suspended (Table 14). This evaluation cannot conclusively state that the structure fires are the result of the KCHD HRSSP. However, the data does support why the Charleston Fire Department and other City officials have concerns about the program.

| Table 14. | Vacant Structure Fires in Charleston, V | NV |
|-----------|---|----|
|-----------|---|----|

| Time Period | 2015 | 2016 | 2017 | 2018 |
|------------------|------|------|------|------|
| January-November | 13 | 24 | 26 | |
| January-March | 6 | 6 | 7 | 21 |
| Calendar Year | 17 | 28 | 28 | |

The Mayor's Office provided information regarding incident reports to worker's compensation associated with needlestick injury. Out of 20 total worker's compensation cases related to needlestick incidents in Charleston from 2003-2017, 15 were associated with discarded needles. There were 10 total accidental needlesticks in 2016 and 2017 that may be associated with the increased availability of syringes following the implementation of the KCHD HRSSP in December 2015. This is a 150% increase from 2015 to 2017 and a 400% increase from 2013 to 2017 (Figure 29). The overall rise in injection drug use in West Virginia should also be considered when reviewing this data, as Heroin overdose deaths began increasing in 2010 and Fentanyl and Tramadol related deaths began to rise in 2013, all of which are commonly taken through injection via a syringe (*CDC Data: Overdose Deaths Involving Opioids, by Type of Opioid, United States, 2000-2016,* 2017).



Figure 29. Worker's Compensation Reports for Needlestick Injury, Charleston, WV

Conclusions

In December of 2015, the KCHD launched a HRSSP with the support of the Board of Health and the City of Charleston. Initially, the program was well received by its stakeholders, but that support eroded as the program expanded and matured. Once the Program lost stakeholder support, the Program suspended its syringe exchange and patients no longer attend the HRSSP for other harm reduction services.

A review of the available evidence shows that the KCHD HRSSP grew rapidly during its first year of implementation, and that data quality began to suffer as the program expanded. Despite challenges with data quality, there is strong evidence to support that the KCHD HRSSP was serving a vulnerable population, and that patients were returning for follow-up visits. Stakeholders viewed the HRSSP as a "gateway to treatment," but the data systems were not designed to track interest in services beyond syringe exchange. In addition, representatives of the City of Charleston reportedly believed that the Program offered a one-to-one needle exchange, while the KCHD was providing a one-to-one plus. In other words, the KCHD was distributing more needles than was returned to meet their goal of assuring that IDUs always had a clean needle available for use. This lead to communication problems and distrust among the program's stakeholders.

These problems were compounded by the quantity of syringe litter that was reported by community members and first responders. Stakeholders stated that syringe litter should be treated as an emergency situation, but KCHD procedures were not designed to meet stakeholder expectations. The issues associated with the HRSSP reached a tipping point when KCHD did not fully implement a plan for retractable needles that was supported by the City of Charleston. This lead to the Chief of Police issuing new rules for Charleston HRSSPs, requiring that only retractable needles could be distributed. The KCHD suspended needle exchange services in response to the new rules.

A summary of the evaluation findings is presented below:

- 1. Many data quality issues were noted throughout the evaluation including data errors, incomplete data, inability to link patients to harm reduction services data for tracking purposes, incorrect data analysis resulting in misinformation to the public, and non-standardized data entry. These data quality issues also made it very difficult for the evaluation staff to confirm that the KCHD implemented its HRSSP with fidelity to its Program Procedures Manual. In addition, the KCHD HRSSP database does not adequately describe access to and provision of "other services," especially provision of recovery/treatment services, reproductive health services, whether patients were assisted with health insurance, flu shots, and wound assessment, which were key stakeholder concerns. This concern is further supported by the West Virginia Board of Medicine's rules related to the licensing and discipline of physicians which provides that the Board may deny an application for a license, place a licensee on probation, suspend a license, limit or restrict a license, or revoke any license issued by the Board, upon satisfactory proof that the licensee has "[f]ailed to keep written records justifying the course of treatment of the patient, including, but not limited to, patient histories, examination results and test results and treatment rendered, if any". W.Va. Code R. § 11-1A-12.1. u.
- 2. The current patient identification system employed at KCHD HRSSP makes it possible for a patient identification number to be shared among multiple patients since it is based on the first and last name initials, month of birth, and year of birth. This poses a challenge to tracking a patient's progress to recovery from substance use disorder, which is a primary goal of City stakeholders.
- 3. KCHD HRSSP has gained acceptance among patients since it first started in late 2015, based on more than doubling of patients from 2016 to 2017 (per Harm Reduction Database). However, it has lost the support of some important community stakeholders, namely, officials from the City of Charleston. Per KCHD HRSSP's Program Manual:

"It is important to establish a steering committee with internal and external stakeholders that will help make decisions about the HRSSP after its inception. The steering committee will help with logistics, syringe exchange model decisions, procedural decisions, etc. It is also important to keep your community members informed. Community members will include lay persons from the community by also partnering organizations such as law enforcement, poison control, etc. During these meetings, it is a time to highlight the success of the programs, the progress made thus far, and to reaffirm community partner collaboration for the HRSSP."

KCHD HRSSP participated in a variety of community and stakeholder meetings; however, to the best knowledge of the evaluation team, a steering committee as described in the manual did not exist. The City of Charleston is a major stakeholder in the KCHD HRSSP, not only because the program is located within Charleston city limits but most significantly because of the City's role in

the program's existence. It is imperative to the success of harm reduction programs that relationships between program and the city and county in which they operate are strong.

- 4. Increase in syringe litter is viewed as a threat to public safety. With over 421,000 syringes reportedly dispensed in 2017 and a return rate of 66%, it is plausible that much of the syringe litter were ones that were dispensed by KCHD HRSSP. Regardless of the source of the syringes, it is important that a detailed plan is in place that addresses community concerns in a timely matter to avoid needlestick injuries and allay fears. Reportedly, KCHD HRSSP staff were available to pick up syringe litter within 24 hours on weekdays and within 48 hours on weekends. This time period was not acceptable to officials from the City of Charleston who stated that syringe litter should be picked up within 10 minutes. This then put the burden on the City of Charleston to meet its expectations for timely syringe litter pick-up, resulting in concerns about KCHD HRSSP's operations.
- 5. Data from November 2017 to March 2018 indicated that 34% of patients visited the clinic inperson, 46% were via a proxy, and 20% of were unknown. This practice was not outlined as a practice in the KCHD HRSSP Program Procedure Manual and creates a missed opportunity to provide linkage to treatment and other harm reduction services. The evaluation team overwhelmingly agree that patients should be present to obtain clean injection equipment and that one patient should not be able to pick up for other patients. Clinic attendance provides opportunities for bloodborne pathogen screening and a wealth of other services. Attendance may also be a segue to substance use disorder treatment and recovery programs. Patients who do not visit KCHD HRSSP are missing important linkage opportunities that are important to broader harm reduction strategies. Additionally, the concept of "syringe exchange" is not being optimally practiced. Instead, "syringe access" is employed. Access to clean syringes should be supplemental with additional harm reduction services.
- 6. The current model at KCHD HRSSP indicates that patients are given clean injection equipment prior to receiving primary health care services. The evaluation team believes it is important for patients to obtain primary care and behavioral health services before syringes are dispensed so that medical attention is seen as the top priority over syringe exchange.

Recommendations

- 1. It is recommended that the WVDHHR BPH OEPS suspend KCHD's HRSSP Certification.
- 2. If the KCHD HRSSP resumes services, the Kanawha-Charleston Board of Health should work with identified stakeholders to incorporate the following recommendations into HRSSP operations:
 - a) Offer Hepatitis A and B vaccine routinely.
 - b) Improve data collection, storage, management, analysis, and dissemination to strengthen validity and credibility of the program.
 - c) Each patient should receive a unique identifier that can be used to track clinical and behavioral care.
 - d) KCHD should maintain in a confidential manner, written records for all patients who are treated by the health department or are referred for treatment by another physician, including patient histories, examination and test results, and any treatment provided.
 - e) Stakeholders should be thoroughly and routinely engaged by the program from implementation to maturity while ensuring that program goals are aligned with community stakeholder goals.
 - f) Develop a coordinated and timely plan in conjunction with key community partners (i.e. first responders) to pick-up and track syringe litter in public spaces.

- g) Education campaigns should include general education about syringe services/harm reduction programs and specific education about the program, its goals, and community needs.
- h) Primary care services and linkage to substance use treatment should be offered and provided at each visit to harm reduction program patients <u>prior</u> to syringe dispensing.
- i) Attendance at HRSSP should be mandatory to obtain clean injection equipment.
- j) Program procedures should specifically address the identification, treatment and referral of pregnant women.
- 3. The WVDHHR BPH Commissioner should seek explicit legislative authority to implement statewide minimum standards among harm reduction programs, including expansion of needlestick reporting to include those that occur in non-health care settings.

References

Brumage, M. (2017) *Kanawha-Charleston Board of Health Meeting Minutes*. Charleston, WV. Available at: http://kchdwv.org/wp-content/uploads/sites/8/2017/11/20170921BoHMinutes.pdf (Accessed: 8 May 2018).

Caudarella, A. *et al.* (2016) 'Non-fatal overdose as a risk factor for subsequent fatal overdose among people who inject drugs', *Drug and Alcohol Dependence*, 162, pp. 51–55. doi: 10.1016/j.drugalcdep.2016.02.024.

CDC Data: Overdose Deaths Involving Opioids, by Type of Opioid, United States, 2000-2016 (2017). Available at: https://dhhr.wv.gov/vip/Pages/cdc-data.aspx (Accessed: 8 May 2018).

Centers for Disease Prevention and Control, N. (2016) *Department of Health and Human Services Implementation Guidance to Support Certain Components of Syringe Services Programs, 2016*. Available at: https://www.cdc.gov/hiv/pdf/risk/hhs-ssp-guidance.pdf (Accessed: 8 May 2018).

Conrad, C. *et al.* (2015) 'Community Outbreak of HIV Infection Linked to Injection Drug Use of Oxymorphone — Indiana, 2015', *MMWR*. Indiana. Available at: https://www.cdc.gov/mmwr/preview/mmwrhtml/mm6416a4.htm (Accessed: 4 May 2018).

Dent, C. (2015) *H.R.2029 Consolidated Appropriations Act, 2016*. 114th Congress (2015-2016). Available at: https://www.congress.gov/bill/114th-congress/house-bill/2029/text (Accessed: 4 May 2018).

Gilead's FOCUS Program: Increasing Routine V+HIV and HCV Screening and Linkage to Care (no date). Available at: http://www.gilead.com/~/media/Files/pdfs/other/HIV-FOCUS-Program.pdf (Accessed: 8 May 2018).

Gindi, R. M. *et al.* (2009) 'Utilization patterns and correlates of retention among clients of the needle exchange program in Baltimore, Maryland', *Drug and Alcohol Dependence*, 103(3), pp. 93–98. doi: 10.1016/j.drugalcdep.2008.12.018.

Van Handel, M. M. *et al.* (2016) 'County-Level Vulnerability Assessment for Rapid Dissemination of HIV or HCV Infections among Persons Who Inject Drugs, United States', *Journal of Acquired Immune Deficiency Syndromes*, 73(3), pp. 323–331. doi: 10.1097/QAI.000000000001098.

KCHD Harm Reduction Syringe Services Program Procedure Manual (2017). Available at: http://kchdwv.org/wp-content/uploads/sites/8/2017/12/Harm-Reduction-Manual.pdf (Accessed: 8 May 2018).

Kersey, L. (2018) *Charleston council delays vote on needle-exchange program, passes refuse bill hike | Kanawha County | wvgazettemail.com, Charleston Gazette-Mail*. Available at: https://www.wvgazettemail.com/news/kanawha_county/charleston-council-delays-vote-on-needleexchange-program-passes-refuse/article_60ba3092-f93d-5b2b-92ee-1ed887a88608.html (Accessed: 8 May 2018).

Kersey, L. and Beck, E. (2018) 'Health Department suspends needle-exchange portion of harm reduction clinic', *Charleston Gazette-Mail*, 26 March. Available at:

https://www.wvgazettemail.com/news/health/health-department-suspends-needle-exchange-portion-of-harm-reduction-clinic/article_8f995567-0895-5347-a0f0-1bf7ada6877e.html.

Koplan, J. P., Director, M. and Higgins Peter M Jenkins, M. M. (1999) 'Framework for Program Evaluation', *MMWR*, 48(11). Available at: https://www.cdc.gov/mmwr/PDF/rr/rr4811.pdf (Accessed: 4 May 2018).

Services, W. V. B. for P. H. O. of E. and P. S. (2017) *Epidemiological Profile of HIV/AIDS in West Virginia*. Available at: https://dhhr.wv.gov/oeps/std-hiv-hep/HIV_AIDS/Documents/HIV-AIDS Surveillance Summary 2017.pdf (Accessed: 4 May 2018).

Substance Abuse and Mental Health Services Administration (2016) *State Targeted Response to the Opioid Crisis Grants*. Available at: https://www.samhsa.gov/grants/grant-announcements/ti-17-014 (Accessed: 8 May 2018).

Substance Abuse and Mental Health Services Administration Center for Behavioral Health Statistics and Quality (2016) *Results from the 2015 National Survey on Drug Use and Health: Detailed Tables*. Rockville. Available at: https://www.samhsa.gov/data/sites/default/files/NSDUH-DetTabs-2015/NSDUH-DetTabs-2015/NSDUH-DetTabs-2015.pdf (Accessed: 4 May 2018).

Terplan, M. *et al.* (2015) 'Contraceptive use and method choice among women with opioid and other substance use disorders: A systematic review.', *Preventive medicine*, 80, pp. 23–31. doi: 10.1016/j.ypmed.2015.04.008.

Umer, A. (2017) Intrauterine Substrance Exposure and Neonatal Abstinence Syndrome In West Virginia, 2017.

West Virginia Bureau for Public Health (2017) 2016 West Virginia Overdose Fatality Analysis: Healthcare Systems Utilization, Risk Factors, and Opportunities for Intervention. Available at: https://dhhr.wv.gov/bph/Documents/ODCP Reports 2017/2016 West Virginia Overdose Fatality Analysis_004302018.pdf (Accessed: 9 May 2018).

West Virginia Bureau for Public Health (2017) *Harm Reduction Program Guidelines and Certification Procedures*. Available at: http://dhhr.wv.gov/oeps/harm-reduction/documents/harm-reduction-program-guidelines.pdf.

West Virginia Bureau for Public Health (2017) *West Virginia Viral Hepatitis Epidemiologic Profile 2017*. Charleston, WV. Available at: https://dhhr.wv.gov/oeps/disease/ob/documents/viral-hep-profile-2017.pdf (Accessed: 4 May 2018).

West Virginia Bureau for Public Health Office of Epidemiology and Prevention Services (2016) *West Virginia Viral Hepatitis B and C Surveillance: A surveillance overview of the incidence and risk factors associated with cases of viral hepatitis B and C from 2012-2015 in West Virginia.* Charleston, WV. Available at: http://dhhr.wv.gov/oeps/disease/viral-hepatitis/documents/Hepatitis-Report-2016.pdf (Accessed: 4 May 2018).

Appendix A: Timeline

| September 17, 2015 | KCHD announces launch of HRSSP for December of 2015 |
|--------------------|--|
| September 21, 2015 | Charleston City Ordinance is passed (9/21/15) to support HRSSPs. |
| December 16, 2015 | KCHD launches HRSSP to be held every Wednesday from 1PM-3PM. |
| March 2016 | KCHD announces \$5,000 received from Kanawha County Commission donation of 200 doses of naloxone from Kaleo Pharma and local health officer to serve as CPD's naloxone program medical director. |
| April 2016 | Program expands to offer naloxone training in partnership with University of Charleston. |
| May 2016 | CPD presence established at HRSSP. |
| July 2016 | KCHD announces program expansion to extend hours of operation from 1PM- 3PM to 10AM-3PM and receives determination of need from the CDC which allows the agency to receive federal funding to support HRSSP services. |
| November 2016 | KCHD presented HRSSP information to Charleston City Council's Finance Committee (specifically addresses needles in public places). |
| January 2017 | KCHD announced formation of Great Rivers Harm Reduction Coalition, awarded \$7,500 from the Comer Family Foundation and announced receipt of 1200 doses of naloxone (200 from CHHD and 1000 from Kaleo). Drop off container installed to address City's concern of needles in public places and Johns Hopkins is engaged to conduct a program review. Implementation of a participant survey is recommended, and number of participants served by KCHD is compared to those being served by a program in Baltimore. |
| April 2017 | KCHD reported launch of West Virginia Harm Reduction Coalition, awarded \$30,000 from Claude W. Benedum Foundation, \$50,000 from Greater Kanawha Valley Foundation (to support community syringe kiosks) and 500 naloxone kits from WVU. KCHD reported potential program changes to include mobile unit and resiliency training for first responders. |
| May 2017 | KCHD HRSSP Policy Manual dated May 1, 2017 available on KCHD website. |
| July 2017 | KCHD reported formation of partnership with Cabin Creek to include full spectrum of primary care services to be offered during harm reduction clinic, awarded \$50,000 to support resiliency/mindfulness training for first responders, and findings from John Hopkins evaluation reported at Harm Reduction Workshop which includes patients from 188 zip codes, 26 states, and 19 locations. |
| September 2017 | KCHD reported expansion of Cabin Creek clinic to include second day (Thursdays) of STI treatment and family planning services and reported tours of the program by CPD Police Chief and U SDHHS Regional Administrator. |
| November 2017 | WVBPH announces award of \$75,000 to KCHD to support the expansion of the HRSSP |
| January 2018 | KCHD awarded \$300,000 from Gilead Sciences, Inc. to support the FOCUS Program Pilot which supports opt out testing for Hepatitis B, C and HIV. |

| February 2018 | KCHD health officer resigned to accept appointment as Director of Office of Drug Control Policy and board approved appointment of Dr. Dominic Gaziano as interim health officer. |
|----------------|--|
| March 1, 2018 | Charleston Mayor announces intent "to reverse the process and make it illegal to pass out needles" through the passage of a new regulation and KCHD released media statement announcing robust review of the program. |
| March 9, 2018 | KCHD announced program changes in response to public concerns (participant required to be present to obtain needles). |
| March 15, 2018 | KCHD reports 30%-40% drop in program participation. |
| March 20, 2018 | Charleston City Council votes (16/11) to postpones vote on bill to recriminalize needles for 60 days. |
| March 21, 2018 | HRSSP offered by West Virginia Health Right announces pilot program to use only retractable needles. |
| March 26, 2018 | Charleston Mayor calls for audit by WVDHHR of KCHD HRSSP and Charleston City Police announces new regulations to become effective April 2, 2018 and include: Using retractable needles; Advising participants of offered rehabilitation services; Requiring participants to show photo ID; Testing participants for blood-borne illnesses; Implementing a one-for-one exchange; Submitting a monthly report to the chief; and Only allowing Kanawha County residents to participate. |
| March 27, 2018 | KCHD board voted to suspend the needle exchange portion of the HRSSP pending a legal review of the City's new regulations. |

Appendix B: New Patient Form

| Date: | Syringe Ac | on Health Department ccess Program <mark>Patient</mark> | # | | |
|---|-------------------------------|---|---|---|--|
| Condoms |] d: ⊡ Apartment | Circle One: Male or F Transgender Race/Ethnicity: White Black Asian Native Pacific Islander Latino Drug of Choice: Heroin | American Other mic <u>Route:</u> Oral | I Orientation: Heterosexual Homosexual Bisexual Questioning Declined <u>Insurance:</u> Private | |
| Birth Control Pills/Injection IUD/Nexplanon Zip Other: Zip | □ Home □ Homeless code: | Rx Opioids Cocaine Methamphetar Other: | | Medicare Medicaid None | |
| Hepatitis/HIV Status: • Hepatitis B: Positive/Negative • Hepatitis C: Positive/Negative • HIV: Positive/Negative • When were you last tested? | | Are you interested in other services? Image: Hepatitis B and C Testing Image: STD/HIV Testing Image: Speaking to a Recovery Coach Image: Speaking to a Recovery Coach Image: Condoms/Contraceptive Counseling Image: Naloxone Image: TUD (Female Birth Control Device) Image: Signing Up for Health Insurance Image: Flu Shot Image: Ary Image: Note State Stat | | | |
| # Of times you inject per day when you use: <u>Needles:</u> Short or Long Below For Clinical Use Only | | | | | |
| Was your patient seen by a nurse or doctor? Yes or No Did your patient receive any of the above other services? If so, what? | | | | | |
| # of needles return | ed today: | # of needles giv | ven today: | | |

Revised 5/8/2017

Appendix C: Return Patient Form

Kanawha-Charleston Health Department #_____ Syringe Access Program RETURN PATIENT

| Date: | ID number Any changes? Yes or No | | | |
|---|----------------------------------|--|--|--|
| | Explain: | | | |
| # of times you inject per day when you use: Length of needle preferred: Short or Long | | | | |
| FOR CLINIC USE ONLY: Was your patient seen by a nurse or doctor? Yes or No Did your patient receive any of the below other services? If so, what? | | | | |
| # of needles returned today: | # of needles given today: | | | |

Supply List: (please check which items you would like)



Recovery coaches are available today to speak with you if you would be interested in information regarding recovery.

Are you interested in other services?

34

- Hepatitis B and C Testing
- STD/HIV Testing
- Speaking to a Recovery Coach
- Condoms/Contraceptive Counseling
- Naloxone
- IUD (Female Birth Control Device)
- □ Signing Up for Health Insurance
- Flu Shot
- □ Information on STD Testing/Results
- Wound Assessments

Appendix D: Memorandum of Agreement

Memorandum of Agreement

The Parties:

Kanawha County Health Department (KCHD), a Local Health Department located in Charleston, WV (Kanawha County) . Business address: 108 Lee St., Charleston, WV 25301

and

The Cabin Creek Health Systems (CCHS), a Federally Qualified Health Center, with health center sites in five communities of Kanawha County. Business address: Box 70, Dawes, WV 25054

Purpose: The purpose of this agreement is for CCHS and KCHD to provide primary health care services, including family planning services, and ambulatory mental health services for KCHD clients at the KCHD facility. The particular target population are the clients who participate in the KCHD Harm Reduction Program (HRP), at the KCHD facility. Primary care would be provided on an urgent basis for any consenting HRP client and continuing care would be provided for consenting HRP clients who do not have an established source of primary care and who choose to receive primary care at the KCHD facility. Other options for ongoing primary care will be offered to clients including care at FQHCs in the region.

Furthermore, the purpose of this partnership is to better understand the primary care needs of the HRP client population and to determine effective methods of providing primary care.

FQHC Scope of Practice: The CCHS shall seek to include services at the KCHD in its scope of practice as an FQHC. The scope will, first, be for the purpose of providing short term primary care services on an intermittent basis for one or two days per week. If it appears feasible to provide part-time services on a long term basis a Change-in-Scope will be sought to include the KCHD as a long term site for services to the clients of the KCHD HRP program.

Referral Process:

Patients may be referred to the CCHS services by KCHD clinical staff members. Such referrals will only be initiated with the patient's agreement. HRP clients may also self-refer by presenting themselves to the CCHS receptionist.

Financial Access and Billing:

Patients receiving primary care services under this agreement will be registered as patients of CCHS by CCHS staff members.

All CCHS services will be provided regardless of the ability to pay. Appropriate public and private insurance coverage programs with which CCHS has participation agreements will be billed by CCHS. Patients without medical coverage, and with incomes at or below 200% of the Federal Poverty Level will be billed based on a sliding fee scale. For eligible consenting patients CCHS, and with approval of the payers, CCHS may bill the WV Family Planning and BCCSP programs.

Reference laboratory will be provided through a CCHS prepayment arrangement and patients will not be charged for reference laboratory tests or for laboratory tests performed on site. Patients of CCHS will be eligible for discounts for prescription medication provided from CCHS pharmacies, though there is not a CCHS pharmacy on site and prescription medication must be delivered by U.S. mail for patients who chose to receive their medication from CCHS pharmacies.

Medical Records and Patient Confidentiality:

CCHS and KCHD shall maintain separate electronic medical records. Patient confidentiality will be observed and no protected patient information will be released by either party without the prior written consent of the patient.

Organizational Practice and Control: Both parties maintain their own operational policies and procedures, personnel practices and controls.

Liabilities and Termination

Neither party will be responsible for legal liabilities incurred by the other. Either party may terminate this agreement with 30 days notice.

Distinguishing Providers and Staff:

The CCHS providers and support staff will be clearly distinguished from KCHD staff by means of internal and external signage and staff name tags and printed information.

Service Hours

Will be established by mutual agreement of the parties and will not exceed two days per week.

Space, supplies and Equipment

KCHD will make available space for patient scheduling, reception, and registration; clinical assessment and vital signs; and exam and consultation. There will be no cost charged to CCHS for the use of space nor any cost charged to

CCHS will provide all clinical and office supplies required to provide services and provide all clinical and office equipment and furnishings not provided by KCHD.

Services Evaluation

Services will be evaluated to determine the service utilization by diagnosis, patient satisfaction and quality of care. Evaluation reports will be provided by CCHS at least quarterly to the KCHD.

Approved for KCHD

Michael Brumage, M Position: Executive Director/Health Officer

Date: June 28, 2017

Approved for CCHS

Craig Robinson, MPH Position: Executive Director

Appendix E: Website



Appendix F: Patient Rights and Responsibilities

Kanawha-Charleston Health Department

Patient Rights and Responsibilities



The Kanawha-Charleston Health Department (KCHD) seeks to provide exceptional care to every client. We want to work together with you to ensure you receive the clinical care, compassion and services that you need. Use and distribution of illicit drugs is <u>strictly prohibited</u> on the Kanawha-Charleston Health Department property. If caught, you may face immediate removal from the program and may be subject to arrest and prosecution. Please remember the Harm Reduction Syringe Exchange program is a volunteer and donation based program, illegal activity on the premise could cause the permanent closure of the harm reduction clinic.

What you can expect

First visit

- 1. You will be asked to create a member ID# that you will use every time you participate in the program.
- 2. You will be asked several questions that will be used for statistical data.
- You will be educated about the program including your rights and responsibilities, needle exchange, referrals and available testing.
- 4. You will be given the number of needles you need as well as supplies for safe drug use.
- You will be given a card with your member ID# that identifies you as a participant in the KCHD needle exchange program (IF WE HAVE TO ISSUE YOU A NEW CARD, IT WILL COST YOU 5 NEEDLES)

Return visit

- 1. You will be asked your member ID#.
- 2. You will be asked follow-up questions.
- 3. You will dispose of your used needles in the sharps containers.
- 4. You will be given the number of needles and supplies that you will need until the next clinic.
- 5. You are required to return used needles. A MAXIUM of 10 WILL BE GIVEN TO THOSE

A MAXIUM of 10 WILL BE GIVEN TO THOSE WHO DO NOT RETURN NEEDLES Needles will only be available for pick-up and disposal on Wednesdays from 10:00am-3:00pm.

Services are only available to those 18 years of age and older.

You have the right to ...

 Be treated with respect and dignity regardless of race, ethnicity, sex or gender orientation, national origin, religion, class, medical status, or physical or mental ability.

- · Feel safe in an environment free from violence, threats and hateful language.
- Receive available services, supplies, information and education to keep you safe.
- Be respected and have the right to privacy.
- Be provided confidential case management upon request.

You have the responsibility to ...

- Be responsible for the syringes you are given and to return used syringes to KCHD in safe disposable containers.
- Treat staff, interns, volunteers and community members with courtesy and respect without physical, sexual, verbal and/or emotional abuse, threats or intimidation.
- Keep the area around the health department safe and do not engage in any drug activity that puts the KCHD at risk of closure.
- · Do not buy, sell or loan money or property while on the premises.
- Protect the confidentiality of other participants encountered while participating in the harm reduction
 program.
- Take only what is needed and dispose of used materials and supplies properly.
- Notify the KCHD of any areas in the community where used needles are located.

Revised December 2016

Nov. 2015