Holyoke Early Access to Treatment and Recovery (HEART) Initiative - Year 1 Implementation

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December 15, 2021

HEART | Holyoke Early Access to Recovery & Treatment

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INTRODUCTION

The District Court in Holyoke, Massachusetts is among the first courts nationwide to provide court-involved populations with rapid access to medications for opioid use disorder (MOUD) and other evidence-based treatment during court appearances and afterwards. Founded by Presiding Justice William P. Hadley, the program is known as Holyoke Early Access to Recovery and Treatment (HEART). The HEART Program is designed to use a multi-sectoral interdisciplinary public health approach to primarily serve a Latinx population living in communities of concentrated poverty. Soon after it was founded in March 2020, the HEART Program was paused due to the COVID-19 pandemic. In the subsequent months, key partners worked together to re-design the HEART Program to incorporate telemedicine and other COVID-19 mitigation policies. The program re-launched in January 2021.

A related development was that the HEART Program received funds from the HEALing Communities Study (HCS) in Massachusetts, funded by the National Institutes of Health and led by Boston Medical Center (PI: Jeffrey Samet, MD; https://healingcommunitiesstudy.org/sites/massachusetts.html), to support the development of telemedicine capacity. Also, an internship program with the University of Massachusetts Amherst (UMass) was established in partnership with Elizabeth Evans, PhD, to enable UMass students to assist with HEART Program development and implementation.

Since the HEART Program planning period in 2020, UMass student interns documented the activities to explore and prepare for the implementation and adaptation of the HEART Program. Along this process, interns developed resources to support program operation and evaluation, including the HEART Planning Report (2020) which detailed further information on program context and program planning.

In this report we describe the first year of program implementation. We briefly describe the context and origins of the HEART Program. Then we provide an overview of the salient literature on peer recovery coaches in substance use disorder treatment programs with a particular interest in programs situated in criminal justice settings. We describe current HEART activities and the characteristics of the HEART participant population, and we summarize current topics of focused consideration. We conclude by identifying potential next steps for HEART Program development. This report is intended to be a living document. Thus, as the HEART Program is further developed and then implemented, we intend to revise this report to create an accurate and up-to-date resource.

I. BACKGROUND AND SIGNIFICANCE

1.1 Context and Origin

Opioid Epidemic in Holyoke, Massachusetts

Over the past decade, opioid use in the United States has been characterized as an epidemic (Lyden & Binswanger, 2019) due to rates of opioid use disorder (OUD), non-fatal and fatal overdose, and premature avoidable death which have significantly impacted the economic, political, and social terrain (Hagemeier, 2018). In Massachusetts, provisional data estimates opioid overdoses increased by 5% from 2019 to 2020 (Massachusetts Department of Public Health, 2021a) (See Appendix B). Some researchers attribute this increase to the effect of social isolation during the COVID-19 pandemic (Eaves, Trotter, & Baldwin, 2020).

During the planning period, particular efforts were focused on the Hispanic/Latinx population engaging in the HEART Program due to the significant prevalence of Hispanic/Latinx persons residing in Holyoke, MA. Among the Hispanic/Latinx population in Holyoke, the opioid overdose death rate increased 63.6%, from 19.4 deaths/100,000 residents in 2018 to 53.3 deaths/100,000 residents in 2019 (Smeltzer et al., 2020). In contrast, opioid overdose death rates decreased for other racial ethnic groups. Since implementation of the HEART Program, there has been a continued increase of opioid overdose death among the Hispanic/Latinx population of Massachusetts (Massachusetts Department of Public Health, 2021d).

The severity of the opioid epidemic in Holyoke, Massachusetts, further necessitates the need for intervention in court-involved populations (Binswanger et al., 2013; Pizzicato et al., 2018), by increasing access to and utilization of treatment. A key strategy to address the opioid epidemic among court-involved populations is increased access to all FDA-approved medications to treat OUD (MOUD, i.e., buprenorphine, methadone, naltrexone) (Brinkley-Rubinstein et al., 2018; Malta et al., 2019) and the HEART Program is a key part of the effort to increase access to care.

1.2 Use of Peer Recovery Coaches

Peer recovery coaches (PRC) are individuals with lived experience and knowledge about substance use disorder (SUD) recovery that help others with SUD initiate and continue treatment. PRC staff maintain a relationship with clients throughout the entirety of their recovery journey and are a source of guidance, motivation, and mentorship. PRCs assist people by connecting them with a variety of services to support them during their treatment and recovery process. These service referrals include available treatment options and also transportation services, child-care options and job readiness. Due to the success of evidence-based programs utilizing PRCs, coaches have been implemented in various settings, including emergency departments, community centers, academic settings, mental health facilities, and judicial settings (Bassuk, 2016).

Given the recent addition of PRCs to the HEART Program, we conducted a literature review to explore the use of PRC implementation in other programs, including strengths and limitations of PRC integration and use of PRC criminal justice settings.

Literature on Peer Recovery Coaches

The majority of existing literature on PRC interventions for SUD take place in a non-criminal justice setting. A systematic review by Bassuk and colleagues (2016) discusses the general lack of publications studying PRC, as only nine studies were eligible for review in 2016. Of the nine, participants were often from a medical setting (n = 5), with fewer from a community-based setting (n = 2) and a criminal justice population (n = 2). Bassuk et al. (2016) serves to highlight the dearth of studies on PRCs in community and criminal justice settings.

Since Bassuk et al. (2016), more studies have been published on this topic but there is still a critical lack of PRC interventions in criminal justice settings and community-based settings. We searched PRC articles published after 2016 and found a few eligible studies: seven were medical based settings (Dahlem et al., 2020; Magidson et al., 2020, Samuels et al., 2018; Sokol et al., 2021; Wakeman et al., 2019; Watson et al., 2021; Waye et al., 2019), four were community based (Hansen et al., 2020; Kleinman et al., 2020; Satinsky et al., 2020; Victor et al., 2021), and two were criminal justice based (Belenko et al., 2021; Pho et al., 2021). Of note, some programs had a mix of medical and community settings.

Of the 13 publications we found, a few had notable features even though they do not take place in a criminal justice setting. Wakeman et al. (2019) explored how PRC used in conjunction with MOUD could improve recovery outcomes in those with SUD. This retrospective cohort study took place at four locations of Massachusetts General Hospital's primary care practices and included 2706 participants. The authors found that those who used PRC and MOUD had fewer inpatient days and fewer emergency department visits, compared to those without PRC and MOUD services (Wakeman et al., 2019).

Satinsky et al. (2020) and Kleinman et al. (2020) wrote about the same program in Baltimore, MD. This community-based program connected participants to a PRC for SUD treatment. The studies evaluated the program using administrative data and interview data to assess participant perceptions on the use of PRC. Of the 199 individuals approached by the PRC, 39 (20%) chose to continue contact and receive help for their SUD. Of those who continued to work with the PRC, 64% received treatment. Most participants who did not remain in treatment stayed in contact with the PRC (77%). Additionally, individuals preferred to work with PRC due to the connection and comfort they received compared to a clinician. Social determinants of health, including housing instability and safety threats, were a frequent barrier to receiving treatment. Participants shared MOUD was a facilitator to treatment retention (Satinsky et al., 2020).

There are few relevant publications on PRC based in a criminal justice setting. A peer recovery support intervention in the Philadelphia Treatment Court involved mandatory and

continued contact for clients with a PRC. An evaluation of this intervention reported reduced recidivism and improved engagement with the drug court process. However, illicit substance use and treatment engagement were not affected by the PRC support. Participants reported the program being a burden rather than a treatment incentive or motivator (Belenko et al., 2021). Another randomized clinical trial focused on the efficacy of the PRC model in a previously incarcerated population upon re-entry (Ray et al., 2021). Compared to a control group receiving treatment as usual, fewer participants receiving treatment and PRC services used alcohol and illicit drugs at six month and twelve month follow-up. The authors proposed external motivation and general self-efficacy as mediating variables, as both measures increased in the PRC intervention group at study follow-up (Ray et al., 2021).

Mangrum (2008) detailed a PRC intervention in a criminal justice setting. This trial took place in Texas, and participants were given access to resources upon enrollment, including a PRC, group support, and spiritual support. Participants in the intervention group were more likely to be abstinent from drugs and more likely to finish treatment. The study also found that treatment outcomes improved when drug court or probation was involved. Similarly, Ja et al. (2009) explored how a tailored PRC intervention ("PROSPER") impacted outcomes of those who are struggling with recovery as they re-enter society from prison. PROSPER was a PRC operated program which included groups, workshops, and community-based events (Andreas, 2010). The study found an increase in housing stability and a decrease in probation and parole among those with a PRC during the 12-month study period (Ja et al., 2009).

PRCs are incorporated into various settings. Some interventions place PRCs within a larger support network, such as within an interdisciplinary team of medical professionals (primary care physicians, nursing staff, administration), which enables support and education for PRC among the providers (Magidson et al., 2020; Wakeman et al., 2019). Other interventions have focused on having full-time PRCs on-call and readily available in emergency settings, often accessible through physician referrals and with patient consent (Dahlem et al., 2020; Magidson et al., 2020, Samuels et al., 2018; Wakeman et al., 2019; Waye et al., 2019). This method has proved largely successful with studies reporting approximately 77% - 86% of individuals engaged with a PRC after physician referral (Dahlem et al., 2020; Samuels et al., 2018; Waye et al., 2019). The qualifications for PRCs are also standardized among the studies included in our review, with most programs requiring at least two years of sobriety along with certified recovery coach training (Magidson et al., 2020; Samuels et al., 2018; Wakeman et al., 2019). According to one study, 96.8% of recovery coaches were satisfied with their training quality and experience (Hansen et al., 2020).

Summary

The literature has documented that PRC are beneficial for people with SUD (Bassuk et al., 2016; Sokol et al., 2021). PRCs are likely useful and preferable for those attempting to recover due to PRC lived experience which allows for empathetic connection (Watson et al., 2021). Studies have shown PRCs can support a variety of improved outcomes including

fewer hospital visits, increased use of MOUD (Wakeman et al., 2019), improved housing stability (Ja et al., 2009; Hansen, 2020), reduced recidivism (Belenko et al., 2021), reduction in alcohol and drug use (Ray et al., 2021), increased rate of treatment enrollment (Kleinman et al., 2020), and increased employment rate (Hansen et al., 2020).

PRC interventions are effective in improving health outcomes for individuals with SUD in a variety of settings. From our review, some gaps in the literature about PRC interventions were identified. There is a general lack of discussion about the implementation of PRC in judicial settings, especially a courtroom setting. There is also a lack of information about the attitudes towards recovery coaches and services among justice-involved individuals themselves. Further, participant quantitative and demographic recruitment data about engagement with PRC is also lacking for justice-involved individuals Future research directions on PRC interventions in justice settings could collect mixed-methods data on participant insight through qualitative interview and sociodemographic and treatment retention rates through participant self-report.

II. THE HEART PROGRAM

2.1 Implementation Overview

Adaptations Since Implementation

The Holyoke District Court is leading the HEART initiative with input from key collaborators. Since implementation of HEART ramped up in summer 2021, the advisory committee has met less frequently. The Holyoke District Court Community Advisory Committee is convened on a quarterly basis to invite input, disseminate information, and cultivate buy-in and collaboration.

Since implementation of the HEART Program, there have been a few adaptations in role, responsibility, and workflow. At implementation in January 2021, UMass interns were on-site at the court on a Monday, Wednesday, Friday 10 am – 1 pm schedule. Interns were tasked with connecting participants with information about the HEART Program and establishment of virtual connection with recovery coach, clinician, and treatment provider.

In the late summer of 2021, funds from the HEALing Communities Study (HCS) were allocated to support the daily presence of a PRC on-site at the court. A PRC is available at the court 9 am – 1 pm each weekday the court operates. PRC are tasked with connecting participants with information about the HEART Program, facilitating a conversation about local recovery engagement, and establishing virtual connection with clinician and treatment provider.

Characteristics of Program Participants

At implementation, the HEART Program was expected to disproportionately serve Hispanic/Latinx populations who live in poverty due to the court's geographic location (Smeltzer et al., 2020). Provisional data on current program participant characteristics indicates participant race and ethnicity represents the demographic characteristics of Holyoke. The **Participant Characteristics Table** shows the race and ethnicity, gender, and services discussed for a sample of participants who engaged in the HEART Program from August 1, 2021 to September 31, 2021 (See Appendix E). Data was collected from the PRC working with participants at the court. Participants included in the table represent individuals who spoke with the PRC about HEART Program services (n = 63). From this sample, the data suggests most participants identify as male compared to female (68.3% vs. 31.7%); most identify as Hispanic (50.8%), followed by those who identify as White (47.6%), and fewer participants identify as Black (1.6%). Services provided to participants will be discussed in further detail in the "Program Monitoring and Evaluation" section.

It is important to note that Holyoke District Court typically handles minor criminal offenses, all violations of city and town ordinances and bylaws, and felonies punishable by a sentence of no more than five years (Allen, 2017; Commonwealth of Massachusetts, 2020). Prior to the onset of the COVID-19 pandemic, the HEART Program was expected to serve about 50

people per week, comprised mostly of people with non-violent offenses, “community quality of life” cases, and dual-diagnosis persons. At the onset of HEART Program implementation, however, the COVID-19 pandemic resulted in an influx of more serious felony offense cases into the court and a decrease in the number of minor offense cases. The court was operating at 60% capacity for the initial months of implementation. At the time of this writing the court returned to pre-pandemic capacity, meaning approximately 50 – 60 individuals who enter the court each month are in the HEART Program target population.

2.2. Participant Flow and Activities

Outreach

Prospective participants are informed of the HEART Program through several outreach efforts. Communications are designed with an understanding of the value of participant empowerment and autonomy when making healthcare decisions (Cimino, Mendoza, Nochajski, & Farrell, 2017). These outreach efforts have not been adapted since the initial planning phase. However, there are currently plans to showcase key partners with an emphasis on PRC through video communication. The video will be broadcast in the courthouse and a video link will be disseminated to potential participants prior to their court date.

Participant Engagement

The current intended flow of participants at the court is as follows (See Appendix D):

Initial Engagement at Court

During the court appearance, individuals who are eligible to participate in the HEART Program will be approached by a PRC. Those who are interested in participation will immediately meet with a PRC in a space that is designed to permit a private but safe conversation. Those who are not interested are provided with PRC contact information for future purposes.

Peer Recovery Coach Connection

The PRC on-site for the HEART Program are from Gandara Center. The purpose of the recovery coach is to maintain a consistent, relatable, and supportive connection while the participant enters and engages with OUD treatment. The PRC will discuss options and identify next steps.

Screening and Assessment by Clinician

The PRC will use a computer to connect the participant via Zoom to a clinician from the Hampden County Sheriff’s Department. The clinician will conduct a screening and brief assessment for treatment and develop a treatment plan. Prospective participants will be provided with headphones to be able to have a private conversation with the clinician. Depending on the preferences of the individual, the PRC will be invited to join this conversation as well.

- *If the clinician determines that the participant does not have OUD*, the participant will leave the court with local resources for naloxone access.
- *If the clinician determines that the participant does have OUD*, the clinician will discuss treatment options and next steps.

Linkage to Treatment Services

Based on the next steps as identified by the clinician during screening and assessment, the PRC will connect the participant to the identified treatment provider. Possible treatment providers include Holyoke Health Center, Behavioral Health Network, and other local agencies. A goal will be to achieve same day access to treatment. Depending on the preferences of the individual, the PRC will be invited to join this conversation as well.

Check-Out

Before the participant leaves the court, the PRC will ensure that the participant has a written set of next steps for recovery, including:

- Recovery coach contact information
- Treatment program contact information and directions, if applicable
- Transportation options, if applicable

Program Monitoring and Evaluation

In the planning phase of HEART, partners agreed on the need to develop capacity to monitor the operation of the HEART Program and related program outcomes.

Currently, UMass has an agreement with the Holyoke District Court to collect data from participants through provision of brief participant interviews in the courthouse. While UMass interns are on-site at the courthouse, interns approach program participants for short interview with the goal of assessing participants' perception of the court in general, their perception of service provision at the court, and potential future directions to reduce barriers to service receipt at the court (See Appendix A for interview guide). Hearing the voices of those involved in the program is essential to inform effective program adaptations and increase engagement. In order to gain further participation for interviews, court staff are currently working to obtain a small incentive (e.g., a coupon valued under five dollars for a local coffee shop) to offer participants as a thank-you for interview participation.

Efforts are currently underway to gain UMass Amherst Institutional Review Board (IRB) to conduct detailed research. The goal of obtaining IRB approval is to interview HEART Program participants in a systematic manner where data collected can be used for more widespread dissemination of information (e.g., peer reviewed publication), to describe the HEART Program model to other organizations.

Perspectives from Participants in Target Population

Participant interviews are currently in the pilot testing phase. While our goal is to speak with individuals involved with the HEART Program, we also wanted to gather information on attitudes towards court services by all individuals who entered the court. When we spoke to individuals at the court who did not have a substance use disorder, we asked more general questions relating to thoughts and opinions about the court offering social services. Interns began interviewing individuals at the court in November 2021. At the time of this publication, there have been eight interviews conducted. From the interviews, here are a few themes participants shared, along with illustrative quotes:

Individuals were generally appreciative of the courts' efforts to provide help

> "Even if you can help just one person, it's a great start."
>
> "The drug problem in Holyoke, it's bad… I'm glad you guys are trying to do something."

A few interviewees noted that the court was doing as much as possible for individuals with substance use disorders

> "Any more would be too much… you can't force help onto people."
>
> "The court does enough… they're not responsible for it."

Several individuals lacked knowledge of HEART Program's existence, despite efforts to make the program known at the court

Of those who spoke with a PRC at the court, individuals shared positive feedback on their conversations

> "I've been so depressed lately, I don't know anyone here... talking to [PRC name], s/he made me feel better, s/he listened, s/he knows what I'm dealing with, I cried."
>
> "[PRC name] seemed so alive and happy, and s/he had a positive attitude. [PRC name] chased me down to talk to me, which showed that s/he cared."
>
> "I liked that I didn't have to seek [the PRC] out and that I was approached instead."

Participants shared their thoughts about maintaining a PRC relationship

- Participants indicated that they have spoken to various PRCs, but felt that they needed a strong personal connection to continue contact with a PRC
- Participants were seeking a variety of services from PRC support, including continuing education, employment, social security, and food stamps

Participants also openly shared information about their past and present with substance use and recovery

- One participant shared how serious their substance use was, as evidenced by their experience of multiple overdoses in the past
- Another participant shared how ingrained substance use was in their community, as family members used drugs and brought drugs into their house
- Several participants had made previous attempts of recovery, usually using many different approaches, including MOUD, counseling, and PRC
- Participants shared their desire to achieve recovery goals with the support of a PRC
  "I am more willing to speak to a recovery coach because I am sure about getting clean. I'm realizing that this is my last chance."

This insights from participants contribute to our growing understanding of the community of Holyoke and characteristics and needs of individuals who comprise our target population. Participants shared an understanding of PRC and the importance of connecting to services for recovery support, although most participants were unaware of services offered through the court.

Services Provided to Participants

The PRC also collected data on which services were discussed and/or which services the participants were connected to because of the HEART Program. During the months of August and September 2021, of all the people entered the court for an arraignment (240 people),115 people (47.9%) were in the HEART Program target population. Of those 115 people, 63 spoke with a PRC (54.8%). All participants (n = 63) discussed a service with the PRC. Services ranged from provision of recovery resources to a warm hand-off to a local MOUD provider (See Appendix E). Most participants discussed or received one service from the PRC (57.1%), some discussed or received two services from the PRC (38.1%), and few discussed or received three services from the PRC (4.8%). Services provided were not mutually exclusive. Most participants received discussion or provision of recovery resources (58.7%), MOUD (25.4%; of those, 18.8% were walked over to the MOUD provider by the PRC), section 35 (12.7%), and detoxification (11.1%). Fewer participants discussed or received services of unspecified treatment (7.9%), mentoring (6.3%), unspecified outpatient treatment (4.8%), unspecified community resources (4.8%), and harm reduction (4.8%).

How to monitor and evaluate the program is a topic of ongoing discussion. Looking into the future, process measures of interest include the following - Of adults seen by the Holyoke District Court: % screened for OUD; % positive for OUD; % received brief intervention; % assessed; % referred to MOUD in the community; % entered MOUD in the community. The primary outcome of interest is engagement with MOUD or other treatment in the community after initial referral (30-days, 60-days, 90-days). Secondary outcomes of interest (as measured 90 days after initial referral) include: opioid use; overdose events since referral – non-fatal and fatal; mortality; recidivism (arrests, incarcerations, violations, arraignments); mental health; and social functioning (housing, employment, other). Continuous documentation of the contextual factors that impact program implementation and outcomes are also important.

2.3. Key Partners

Roles and Responsibilities

Partners representing a diverse set of institutions and roles are involved in the implementation of the HEART Program. In the HEART Program Planning Report (2020), we provided a summary of each agency and the related roles and responsibilities.

Few adaptations have occurred since the planning phase, besides the introduction of dedicated PRC from Gandara Mental Health Center. Gandara Mental Health Center is an agency providing bilingual mental health and substance use support services in Holyoke. The Gandara Center supplies PRC for the HEART Program, who are on-site at HDC. Those recovery coaches have included Heriberto (Eddie) Rodriguez and Kelly Jean Deming.

Adaptations to Reduce Identified Challenges

During the planning phase of the HEART Program, partners identified program challenges and facilitators, as well as anticipated benefits. These are fully described in the HEART Program Planning Report (2020). Adaptations have been made to reduce challenges. Partners identified the challenge of utilizing physical space at the courthouse to arrange telemedicine appointments with appropriate privacy. The use of in-person PRC reduces the complexity of contacting the PRC virtually. In-person PRC are also utilized to increase participant engagement. The purpose of a PRC is to provide communication and knowledge about recovery resources for people with OUD to improve engagement with resources (Bassuk et al., 2016). Currently, other measures to improve participant engagement include creation of an informational video to disseminate to participants at the courthouse and virtually, revision of paper materials to provide contact information for PRC, and further communication with other court staff to establish greater understanding of program referral.

2.4. Logic Model

We created a **Logic Model** to portray the planned *inputs* and *activities* that are needed to operate the HEART Program and lead to intended goals (See Appendix F). The HEART Program logic model was revised in 2021 to reflect the workflow adaptations detailed in this report. In the *activities* phase, recovery coaches will now connect with individuals in-person rather than through virtual connection.

III. NEXT STEPS

The HEART Program entails organizational and systems-level changes that are aimed at achieving better health and health equity for a population of underserved residents in Holyoke. The core elements of the program have been developed and adapted since implementation. In this section we identify potential next steps for HEART Program development.

3.1. Peer Recovery Coach Adaptations

There are few criminal justice or court-based programs to model the HEART Program after. The use of PRC in a district court setting is novel (Bassuk et al., 2016). At the Holyoke District Court, the implementation of PRC introduced a new programmatic workflow and created changes in the organizational workflow. Other healthcare innovations which have adjusted organizational workflows have used process mapping to create a shared sense of understanding about the program goals and individual roles for all members of the staff team (Lu et al. 2021). Process mapping includes documenting the direct workflow of each staff member as it relates to the participants movement through services in a program. To streamline workflow of HEART Program operations, a written, standardized workflow for approaching potential participants could be developed for each staff position. For example, developing a standardized workflow which defines mutually agreed upon expectations for recovery coaches when they are present at the court. Then, developing regular check-ins between recovery coaches and HEART Program coordinators to discuss progress with these workflows to troubleshoot any issues. These are some adaptations that could standardize staff roles for the HEART Program.

Data collection is important for public health programs because findings from data can be used to better increase the program’s ability to best meet the needs of the individuals being served. The HEART Program could benefit from discussing, defining, and implementing what data is collected, how the data is collected, and who collects the data. Other public health programs have benefitted from training on-site staff to collect data (Rasmussen & Goodman, 2019), such as PRC. Some useful measures that could be collected by PRC in the courtroom include the number of individuals entering the court who are eligible, number of individuals approached, services discussed with each individual, services provided to each individual, and proportion of individuals who followed up after the first PRC interaction.

Unlike some of the PRC interventions in the literature, the recovery coaches at the Holyoke District Court are not a part of the court system and are not fully integrated within the regional healthcare network. Therefore, they do not have access to individuals’ electronic health records, making it more difficult to identify participants who could benefit from recovery coaching services. This also makes it difficult to track the health outcomes of HEART participants. With these data collection restraints, future directions for HEART Program data collection include contacting local health agencies (e.g., different MOUD providers in

Holyoke) to retrieve data on proportion of participants who were referred by the HEART Program and still receive treatment services.

An important barrier to participation in the HEART Program is the inability to reach arrested individuals appearing before the court. Unless they are later released, individuals who have been arrested are present in the lock-up area during the entire time they are at the court. PRC are not allowed into this space, so individuals are not easily accessible by recovery coaches and often need to ask their lawyers before they can speak to a recovery coach. This restriction is problematic because it is not uncommon for those in holding to be struggling with an opioid use disorder. Defining pathways for recovery coaches to access these individuals is an area for future program improvement among HEART Program coordinators.

3.2. Staffing Considerations

In the wake of the COVID-19 pandemic, there has been a decline in staffing for thousands of positions across the United States (US Bureau of Labor Statistics, 2021). Some media outlets are referring to this as the “great resignation” where individuals are resigning from their previous employment in hopes of finding higher pay or more suitable positions elsewhere (Rosalsky, 2021). The HEART Program is not immune to this staffing challenge. Changes in staff turnover among the PRC at the programmatic level and among defense attorneys at the organizational level have led to disruption in program operations. Challenges include not having enough PRC to staff each court date when potential participants could use the service and having revolving defense attorneys who lack knowledge of the HEART Program. Along with the great resignation, the number of individuals present at the court has resumed to pre-pandemic levels due to the lifting of COVID-19 mitigation policies. Due to this post-pandemic adjustment, court staff have had to re-prioritize their roles aside from the HEART Program. The combination of these challenges has led to difficulties in ability for staff to appropriately address all individuals who enter the court with the opportunity to engage in the HEART Program.

Previous public health and government programs have documented difficulties relating to staff turnover include loss of staff expertise and greater program costs (Allen et al., 2018; Cho & Lewis, 2012). Many programs fail to adequately prepare their workforce for this challenge (Goodman, French, & Battaglio, 2015). Potential avenues to reduce staffing issues revolve around robust training and development for new staff, including the creation and use of written protocols for staff roles and responsibilities (Goodman, French, & Battaglio, 2015; Hillard & Boulton, 2012). For the HEART Program, written protocols could be created for various positions (e.g., PRC, attorney) and could encapsulate specifics on the organization, the program, and the staff person’s role within the program. Another strategy to increase day-to-day functioning of the HEART Program is to define information sharing protocols within the program (Allen et al., 2018). For example, developing detailed information on which supervisor a new staff person should share monthly participant data or submit paid time off requests. By developing these protocols, the new staff person’s relationship with program

leadership will be strengthened and, therefore, will influence greater staff retention (Allen et al., 2018).

Additionally, organizations have developed materials to orient public safety staff to public health programs. Federally funded substance use programs have developed trainings, webinars, and resources to inform public safety leaders and staff persons about the importance of effectively addressing substance use through evidence-based programs. A few of these programs include the Justice Community Opioid Innovation Network (JCOIN) and the Substance Abuse and Mental Health Services Administration (SAMHSA), which have developed free online resources for criminal justice and judicial staff. Examples of trainings include *Stigma Course for Judicial Leaders: Addressing the Stigma Around Substance Use Disorders* and *MAT Course for Prosecutors: Understanding Overdose Risk and Medication Efficacy* (visit JCOIN to learn more). These resources may be brief and effective methods to increase program buy-in and reduce stigma among varying staff persons who interact with the HEART Program.

3.3. Conclusion

The District Court in Holyoke, Massachusetts is among the first courts nationwide to aim to provide court-involved populations with rapid access to medications for opioid use disorder (MOUD) and other evidence-based treatment during court appearances and afterwards. The program, known as Holyoke Early Access to Recovery and Treatment (HEART), uses a multi-sectoral interdisciplinary public health approach to primarily serve a Latinx population living in communities of concentrated poverty. In this report, we documented the adaptations during the first year of program implementation and the current context of program operations, including the use of on-site peer recovery coaches (PRC) and robust data collection efforts. We also discuss future directions to improve data collection and program workflow. In the future, we hope to elicit participant insight to inform program improvement with the eventual goal of creating a replicable program model. As the HEART Program is further developed and adaptations are implemented, we intend to revise this report to create an accurate and up-to-date resource.

ACKNOWLEDGEMENTS

The completion of this comprehensive review of the Holyoke Early Access to Treatment and Recovery (HEART) Program would not have been possible without the support and guidance of William P. Hadley, the presiding Judge of Holyoke District Court, in addition to Clerk Magistrate Manuel Moutinho. Judge Hadley and Clerk Magistrate Moutinho were instrumental in the design and implementation, and are essential to the continued adaptation of this program.

The authors would also like to extend their thanks to Aumani Harris and Rebecca Smeltzer of the Boston Medical Center for their linkage to the NIH HEALing Communities Study.

We'd like to thank Heriberto (Eddie) Rodriguez and Kelly Jean Deming for their support as peer recovery coaches at the court.

We would also like to acknowledge and thank:
Rafael Rodriguez
Georgina (Gina) Serrano
Samuel (Sam) Martin
Azizah Yasin
Deborah Flynn-Gonzalez
Jen Sordi
Sally Johnson Van Wright
Margaret (Maggie) O'Connell
Tammi Kozuch
Jessica DeFlumer-Trapp
Maria Quinn

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APPENDICES

Appendix A: Interview Materials

Figure 1a. Participant Interview Questions Outline (*HEART Program Interview Outline*, 2021)

One on One Semi-Structured Interview Questions

Thank you for agreeing to participate in this interview. My research team is interviewing individuals to get a better understanding of how to improve referral to treatment services for substance use here at the Holyoke District Court. We are interested in learning more about your experiences. You may skip any questions you don't feel comfortable answering. Personal identifiable information will not be collected. Your responses are anonymous and will not influence your court case in any way.

Substance use: The first two questions are about substance use.

1. What best describes your substance use? (check all that apply)

   □ I have been diagnosed with a substance use disorder

   - If so, please specify: ___________

   □ I think I have a substance use disorder

   - If so, please specify: ___________

   □ I do not have a substance use disorder

   □ I don't know if I have a substance use disorder

2. What substances have you used in the past 30 days? (check all that apply)

   □ Heroin, opiates, fentanyl, oxycodone, oxycontin

   □ Methamphetamine, cocaine, crack

   □ Benzodiazepines, valium, xanax

   □ Other, please specify: _______

Treatment: The next two questions are about treatment.

1. Do you currently see a medical professional for substance use treatment? (examples: medication, recovery coach support, sobriety support, groups, counseling)

   □ Yes □ No

   If yes, what kind of treatment? (examples: medication, recovery coach support, sobriety support, groups, counseling)

2. Have you ever seen a medical professional for substance use treatment? (examples: medication, recovery coach support, sobriety support groups, counseling)

   □ Yes □ No

   If yes, what kind of treatment? (examples: medication, recovery coach support, sobriety support, groups, counseling)

   When did you receive services?

   If stopped, why did you stop receiving treatment services?

The HEART program: The remaining questions are about the program.

3. How did you first hear about the HEART program?

   □ Mailed letter

   □ Poster at the court

   □ Flyer in the courtroom

   □ Court staff

   □ Speaking with recovery coach

   □ Other, please specify: _____________

If the individual chose NOT to speak with a recovery coach AT ALL, ask the following: "What would make you more willing to speak with a recovery coach at the court?" Then stop the survey as the rest doe not apply

1. Is today your first time speaking to a recovery coach?
   □ Yes □ No
   If yes, why did you decide to speak to a recovery coach today?

   If no, when have you previously spoken to a recovery coach?
   For what duration and how frequently did you speak to a recovery coach?
   What services, if any, were you able to access through a recovery coach?

   Do you still speak to a recovery coach?
   □ Yes □ No
   If no, why did you stop speaking to a recovery coach?

2. How did you feel speaking with the recovery coach today?

   Probe: Was there anything you liked about your conversation? Anything you did not like about your conversation?

3. What would make you more willing to speak with a recovery coach at the court?

4. Do you plan on working with the recovery coach after today?

   If yes, what do you hope to achieve from working with the recovery coach?
   Probe: What kind of services would you be interested in speaking about?

   If no, why do you not wish to work with the recovery coach?

5. Would you recommend the HEART program to other people with similar needs to you?

6. Is there anything else about the HEART program that you would like to mention today?

Survey: Demographic Information

1. How old are you? ________ Years

2. Do you consider yourself Hispanic, Latina/o or Chicana/o?

□ Yes □ No

3. Which best describes your race? (check all that apply) □ White

□ Black or African American

□ Asian

□ American Indian or Alaska Native

□ Other (please specify):___________________

4. What is your gender? (check all that apply)

□ Female

□ Male

□ Other (please specify): __________________

5. What is the zip code of where you live? _____________________________

6. What is the highest grade or year of college you have completed? (check one)

□ Less than high school or GED

□ High school diploma or GED

□ Trade, vocational or tech training after high school

□ Some college or an Associate's degree

□ College degree

□ Some graduate school

□ Master's, professional, or Doctoral degree

7. Which best describes your current employment status? (check one)

□ Employed full-time (35 or more hours per week)

□ Employed part-time (less than 35 hours per week)

□ Not employed and looking for work

□ Not employed and not looking for work (examples: retired, student, disabled, full-time homemaker)

Appendix B: Opioid Overdose Rates

Figure 1b. Massachusetts Opioid Overdose Rates (*Opioid-Related Overdose Deaths among Massachusetts Residents*, October 2019 – March 2021)

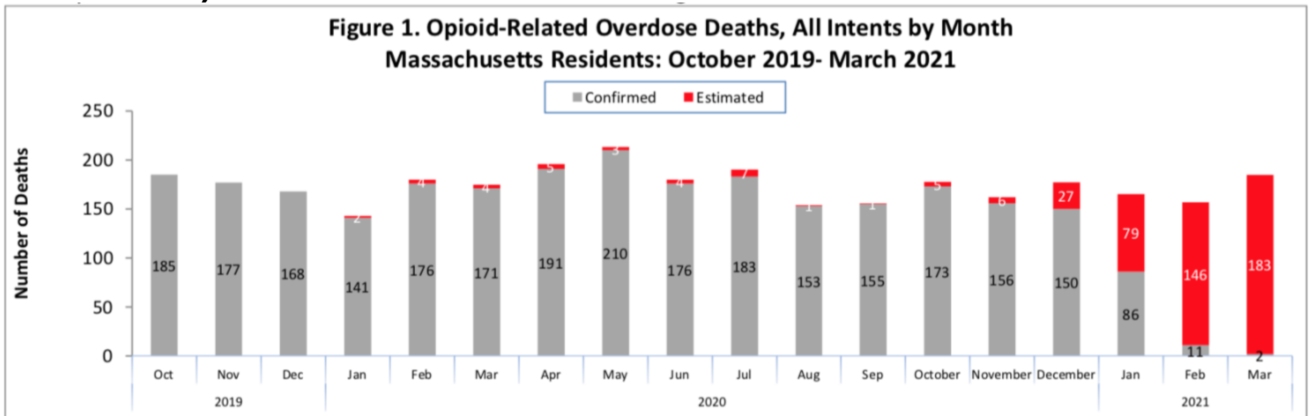


Figure 1 shows the month-by-month estimates for fatal opioid-related overdoses for all intents from October 2019 through March 2021. In 2020, there were 2,035 confirmed opioid-related overdose deaths and DPH estimates that there will be an additional 66 to 70 deaths. In the first three months of 2021, there were 99 confirmed opioid-related overdose deaths and DPH estimates that there will be an additional 368 to 447 deaths. Preliminary data from January- March 2021 show there were 507 confirmed and estimated opioid-related overdose deaths, an estimated 9 more deaths, which is a 1.9 percent increase compared to the first three months of 2020. (MDPH, 2021a).

Figure 2b. Hampden County Opioid Overdose Rates (*Number of Opioid-Related Overdose Deaths: All Intents by County*, 2010 - 2020)

County	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	Total 2010-2020
Barnstable	20	19	24	43	53	67	81	66	71	73	76	593
Berkshire	4	9	16	22	29	32	35	30	40	39	56	312
Bristol	78	82	95	115	145	172	243	239	218	260	232	1879
Dukes	0	0	0	1	5	7	3	2	4	3	7	32
Essex	49	57	93	119	205	234	274	299	272	277	249	2128
Franklin	6	6	8	10	11	18	14	9	22	17	20	141
Hampden	48	45	59	69	64	98	129	112	205	199	217	1245
Hampshire	12	10	11	30	26	16	36	28	37	39	35	280
Middlesex	91	130	118	152	272	339	402	346	321	303	299	2773
Nantucket	1	0	0	0	1	1	2	3	1	2	1	12
Norfolk	58	64	70	82	125	163	213	166	169	128	157	1395
Plymouth	38	67	57	86	109	174	190	201	150	176	186	1434
Suffolk	63	85	90	110	146	199	241	251	215	218	288	1906
Worcester	79	82	91	115	161	221	243	247	280	266	280	2065
Total Deaths	547	656	733	954	1,351	1,741	2,106	1,999	2,005	2,000	2,103	16,195

Figure 2 shows the number of Opioid-Related Overdose Deaths by County, among all Massachusetts Residents. Hampden County, the county in which the Holyoke District Court is located, is outlined in purple (MDPH, 2021b).

***Figure 3b*. Holyoke, MA Opioid Overdose Rates (*Number of Opioid-Related Overdose Deaths: All Intents by City/Town*, 2015 - 2020)**

City/Town of Residence	Year of Death					
	2015	2016	2017	2018	2019	2020
Holbrook	4	7	4	8	4	2
Holden	4	5	1	3	1	2
Holland	1	0	0	0	0	1
Holliston	5	1	3	1	1	1
Holyoke	6	11	13	14	16	21
Hopedale	0	1	2	1	0	1
Hopkinton	4	0	3	3	1	2
Hubbardston	2	1	1	2	1	1
Hudson	6	3	4	6	7	7

Figure 3 shows the number of confirmed opioid-related overdose deaths for all intents by city/town of residence for the decedent, among MA residents, 2015-2020. For 2017 to 2019, additional cases are still being confirmed by the Office of the Chief Medical Examiner. This report will be updated quarterly, and all new confirmed cases will be included in the table below with previously confirmed cases. (MDPHc, 2021). Holyoke, MA is outlined in purple.

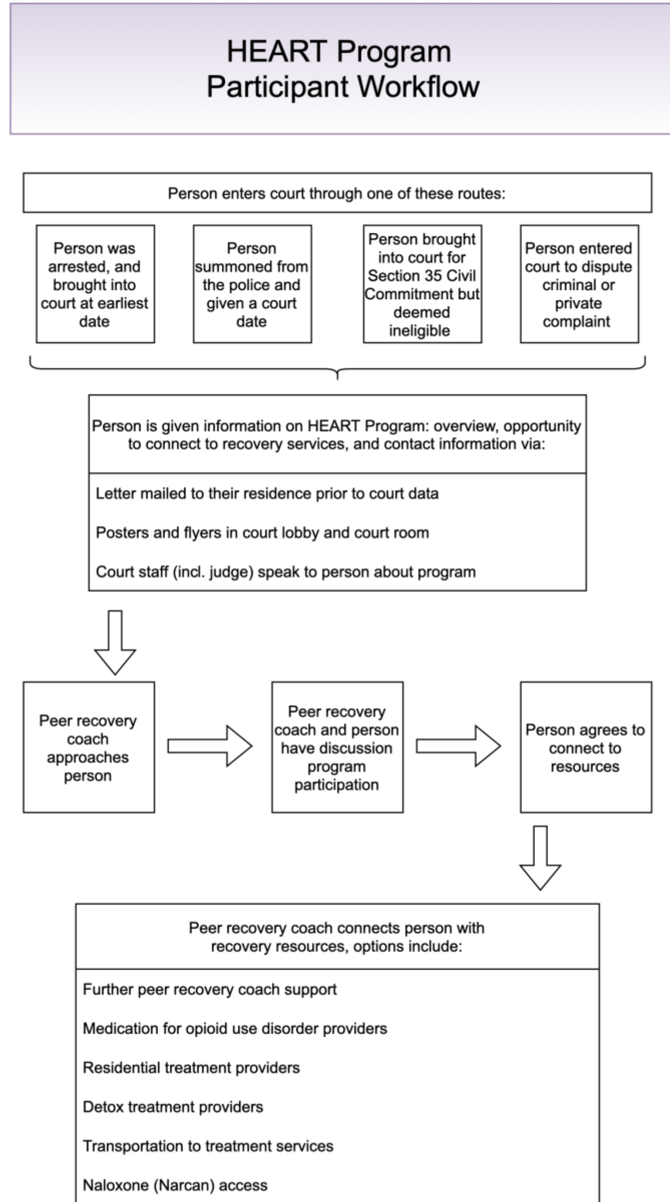
Appendix C: Peer Recovery Coach Programs

***Figure 1c*. Key Findings of Peer Recovery Coach Programs in Criminal Justice Settings (Senthilkumar & Gagnon, 2021)**

Article	Description	Study Population	Main Finding
Belenko, 2021	Investigated the impact of PRC in a drug court setting	Participants of the Philadelphia Treatment Court (n = 76)	Reduced recidivism and improved engagement
Ja, 2009	Evaluated the impact of program (PRC, workshops, groups) on individuals in prison re-entry program	Diverse population of individuals in Los Angeles with a SUD (n = 72)	Increased housing stability, reduced parole and probation involvement
Mangrum, 2008	Investigated PRC intervention (PRC, group work, spiritual support) on treatment outcomes	Diverse criminal justice population in Texas with a SUD (n = 4420)	Increased drug abstinence and increased treatment program completion. Drug court and probation involvement improved outcomes
Ray, 2021	Evaluated the impact of PRC on individuals in prison re-entry program	Population of individuals in Indiana with a SUD (n = 100)	Reduced rate of alcohol and drug use

Appendix D: HEART Program Participant Workflow

Figure 1d. **HEART Participant Workflow (*HEART Program Participant Workflow*, 2021)**



Appendix E: Key Partner Chart

Figure 1e. **HEART Program Participant Characteristics**

	Total individuals N = 63	
	N	%
August 2021	16	25.4%
September 2021	47	74.6%

Race/Ethnicity		
Hispanic	32	50.8%
White	30	47.6%
Black	1	1.6%
Gender		
Male	43	68.3%
Female	20	31.7%

Information or service provided		
Recovery coach resources	37	58.7%
Medication for opioid use disorder	16	25.4%
Walked participant to provider*	3	18.8%
Section 35	8	12.7%
Unspecified treatment	8	12.7%
Detoxification	7	11.1%
Mentoring	4	6.3%
Unspecified community resources	3	4.8%
Harm reduction	3	4.8%
Court statutes	2	3.2%
Mental health services	1	1.6%

Number of services discussed or provided per individual		
1	36	57.1%
2	24	38.1%
3	3	4.8%

*percentage out of those who discussed medication for opioid use disorder

Appendix F: Logic Model

Figure 1f. **Logic Model (*HEART Program Logic Model*, 2021).**