PUBLIC HEALTH CAMPAIGN FOR STIGMA FREE WORCESTER APP

PREPARED BY

MYLENA GUZMAN
JOE KERKACH
STEVE MEY
EMILY WOOD

ABSTRACT

In 2015, the City of Worcester's Community Health Assessment identified substance abuse, mental health issues, and access to care as the greatest challenges to public health. In 2018, WPI students created the Stigma Free Worcester app. We designed a marketing plan to increase public awareness of the app. This plan, which targets vulnerable populations, local industry workers, first responders and students, will be implemented by the Worcester Department of Health and Human Services, beginning in the spring of 2019.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

81.5% of Americans needing treatment
for substance abuse in 2015 did not receive treatment.[1]

From 1991 to 2013 opioid prescriptions rose from 76 million to 207 million. In 2014 approximately 2.1 million people abused opioid painkillers in the United States. The number of opioid-related deaths recently reached an all time high, rising to 47,600 deaths in 2017. [1] According to the Worcester Police Department's December 2018 overdose report, in Worcester there were 68 fatal overdoses and 1040 non-fatal overdoses in 2018. [2] This shows an increasing need for recovery resources for those who are dealing with opioid addictions.

IN 2017

47,600
PEOPLE DIED FROM OPIATE-RELATED OVERDOSES IN THE U.S.

1. MENTAL HEALTH
2. OPIATE ABUSE
3. SUBSTANCE ABUSE
2015 CHA Top Health Challenges

Every three years, the Worcester Department of Health and Human Services conducts a Community Health Assessment (CHA) that identifies the major health challenges impacting the area. In the 2015 CHA, access to care is regarded as a main priority area for community health. A survey in the 2015 CHA ranked behavioral and mental health, opiate and prescription drug abuse, and substance abuse as the top three health challenges in Worcester. [3]

Introducing the App

For low income and homeless populations of Worcester, it can be difficult to hear about or locate the health care resources that Worcester provides. [4] To address access to mental health and substance abuse resources in Worcester, the DHHS worked with a WPI student project team to create the Stigma Free Worcester application. The app consolidates information about local mental health support groups, addiction treatment programs, food and clothing relief organizations, clinics and advocacy groups. With the help of this app, the Worcester

1. National Institute on Drug Abuse. (2019) Treatment Approaches for Drug Addiction. Retrieved from https://www.drugabuse.gov/publications/drugfacts/treatment-approaches-drug-addiction
2. Shaner, B. (2019, January 09). Drug overdoses in Worcester lead to call for more services. Retrieved from https://www.worcestermag.com/news/20190109/drug-overdoses-in-worcester-lead-to-call-for-more-services
3. 2015 Greater Worcester Community Health Assessment. (2015). City of Worcester. Retrieved from http://www.worcesterma.gov/uploads/8d/0f/8d0fedff14b5801354711dac20b28126/cha-report.pdf

community will be more informed about health care services and support available in the city. Access to care was one of the 2015 CHA's nine priority areas. For low income and homeless populations of Worcester, it can be difficult to hear about or locate the health care resources that Worcester provides [4]. To address access to mental health and substance abuse resources in Worcester, the DHHS worked with a WPI student project team to create the Stigma Free Worcester application. The app consolidates information about local mental health support groups, addiction treatment programs, food and clothing relief organizations, clinics and advocacy groups. With the help of this application, the Worcester community will be more informed about health care services and support available in the city. The goal of our IQP was to create and provide the Worcester DHHS with a set of recommendations for ongoing promotion of the Stigma Free Worcester app, in order for it to be recognized as a resource for accessing care.

PROJECT GOAL

Create recommendations to the Worcester DHHS on implementing a long term marketing campaign for the app.

Project Overview

1 Methods of Outreach
Identified three methods of outreach to reach target users of app: emergency response groups, businesses and colleges, and public locations.

2 Informational Materials
Created informational materials to use for distribution, and as references for designing future materials. Designs created were for physical and digital concepts, with consciousness of different target audiences.

3 Tracking Campaign Progress
Detailed methods for tracking success to assess the effectiveness of materials distributed and of the app itself. Created materials to keep track of progress and guide the DHHS in materials distribution.

4 Next Steps
Provided general next steps for implementing and maintaining long-term promotional plan using established methods of outreach and materials for outreach and tracking campaign progress.

4. Kola, M., Honcharik, N., Foley, K., & Christie, W. (2018). A Mobile Application for Locating Treatment and Support. Worcester Polytechnic Institute. Retrieved from https://web.wpi.edu/Pubs/E-project/Available/E-project-121218-122521/unrestricted/HHS_Mobile_App_Final_Report.pdf

Long-Term Promotion Plan

The promotional plan for Stigma Free Worcester is designed to increase public awareness, downloads, and usage of the mobile application. Promotion will require both short term and long term planning to ensure ongoing success of the app within the Worcester community. The plan will feature various methods such as physical advertisements like flyers and also promotion through attending events like health fairs. The promotional plan is segmented by target audiences and avenues of communication. The Outreach section of the promotional plan details how promotional materials were curated for the different avenues outlined below. Additionally, in order to evaluate the effectiveness of the plan, methods for tracking campaign progress and success are described in the Measuring Success section. Accompanying this report are timetables for completing the different promotional tasks, an overall template of the promotional plan, and an interactive map pinpointing areas where informational materials are posted.

about Stigma Free Worcester were identified: Public locations, emergency responders, and large businesses and colleges.

Posting materials in public spaces such as the public library or at bus stops, and chain lots of foot traffic will reach many people in the general population. This includes people struggling with substance abuse, mental health issues, food and housing insecurity, and homelessness, as well as their friends and family. Emergency responders are a key group who can communicate information to target users of the app. If emergency responders are educated about the app and carry business cards with QR codes to allow easy downloading, they can give them to people they interact with around the city. Lastly, the plan targets larger businesses with Human Resources Departments and colleges.

Communication Avenues

Helping to eliminate the stigmas surrounding substance use and homelessness will greatly improve the success of an outreach campaign for Stigma Free Worcester. Reducing the stigma, and downloading Stigma Free Worcester go hand in hand to help save lives.
Three avenues for communicating information

PUBLIC LOCATIONS

BUSINESSES & COLLEGES

EMERGENCY RESPONSE

TARGET USERS FOR APPLICATION

PUBLIC LOCATIONS

The population of Worcester is over 182,000, making it the second largest city in the state. In Worcester, rates of substance abuse and homeless are above the Massachusetts average. As the central city of Massachusetts, many people converge in Worcester to access social services and care. With many people coming to the City who likely do not know the area, or about local resources, posting flyers in public locations and heavy traffic areas can be an effective way to reach the general population. A list of high traffic areas, especially for the homeless, was compiled for our group by members of Everyday Miracles (see below). Other frequented locations around the city where advertisements should be placed include the DCU Center, the courthouse, EcoTarium, Worcester Art Museum, the Worcester Historical Museum, the Palladium Theater, and the Hanover Theater. With heavy foot traffic in and around these local attractions, placing flyers inside facilities as well as in windows where they can be viewed from sidewalks is key.
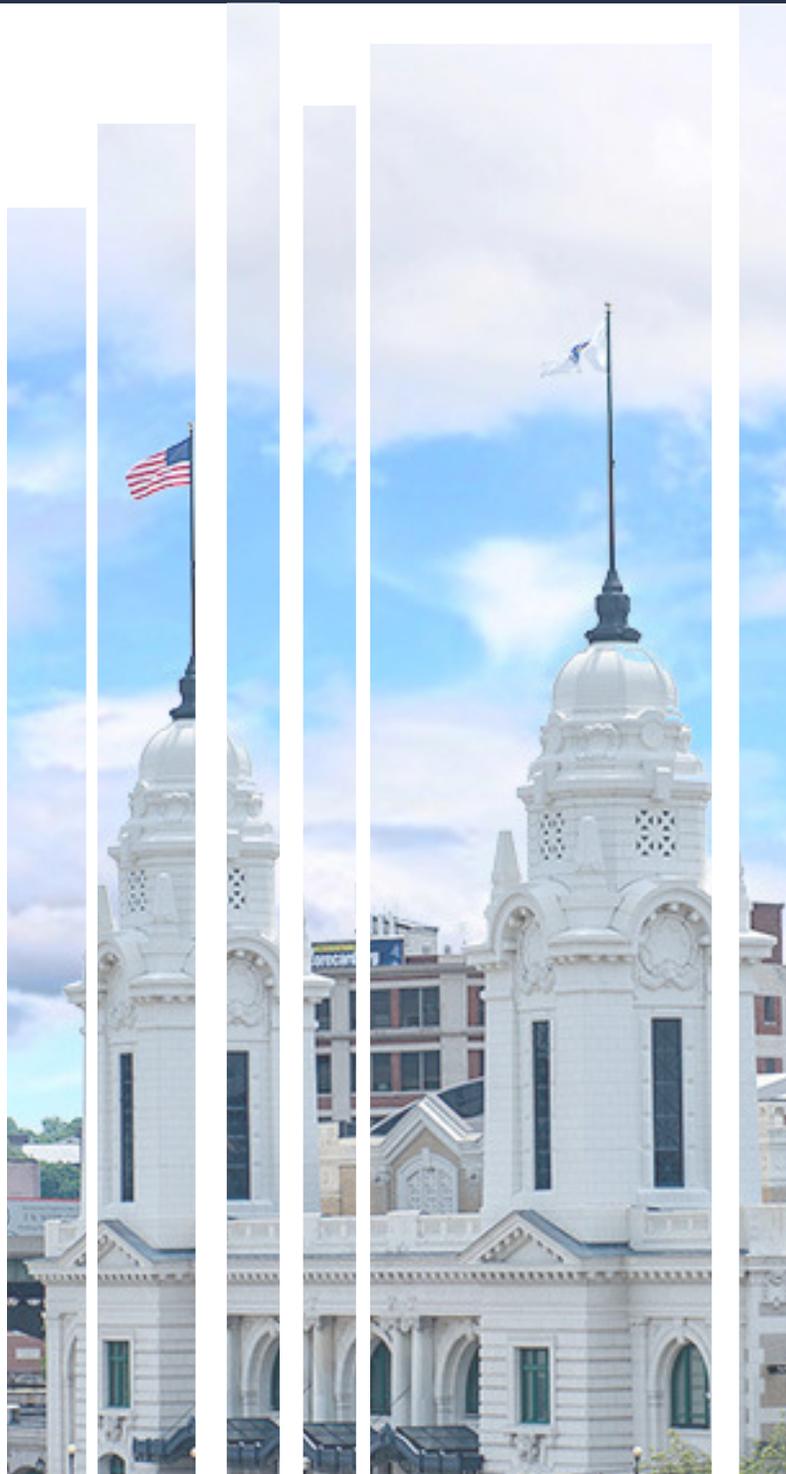
St. Johns
The Hub
Dunkin Donuts
City Hall
25 Queen Street
Colleges
Shelters

340 Main Street
Public Library
Union Station
Hotel Grace
YWCA
Chain Businesses
Soup Kitchens

DCU Center
Courthouse
EcoTarium
Worcester Art Museum
Worcester Historical Museum
Palladium Theater
Hanover Theater

BUSINESSES & COLLEGES

Human Resources representatives and Health Services employees at local businesses and colleges can send emails en masse to thousands of students and employees. As a secondary form of outreach to this group, flyers can be put up at the businesses and colleges. The best place to hang these flyers would be in bathrooms. Bathrooms are effective places because students and employees can look at the flyers discreetly, and can take their time to get all the information that they need.

Human Resources Departments at large businesses and colleges in Worcester have communication with thousands of employees. Providing HR departments with informational materials about the app will allow them to disseminate information at their company or institution. With the stigma surrounding substance abuse, employees and students are less likely to come forward to ask for information about local resources. By having HR departments distribute information about Stigma Free Worcester, everyone under their coverage will have discrete access to information about the app. Within HR departments, some businesses and colleges affinity groups set up. Affinity groups are groups of employees formed together based upon shared interests and common goals. Contacting and sharing information about the app with these affinity groups will allow it to be shared through these networks in Worcester. Along with HR departments, many large organizations have an Employee Assistance Program (EAP). An EAP is a resource setup for employees and their families to reach out to if they are facing any issues whether it is individual or family and work-related. EAPs could connect employees with Stigma Free Worcester if they are seeking information about a type of service listed on the app.

Along with many large corporations, there are a total of over 35,000 college students in the city of Worcester. Providing information at the app to students, faculty and staff will inform them about local resources, and allow them to pass it on to people they know. Having informational materials placed in college Health Services and Student Counseling Centers will also be useful. Health Services offices often have posters with cold, flu and STD information, and Counseling Services often provide materials about seeking care. Putting up posters and providing flyers with information about the app and QR codes, as well as a list of local resources for mental health and substance use will be key to reaching students who may be seeking care that cannot be provided by the school, or if they know someone who could benefit from these resources.

FIRST RESPONDERS

Emergency response teams in Worcester such as the police department, fire department and hospital workers have direct contact with target users of the app. Police Chief Ed McGinn says that his officers come in contact with people who can benefit from the app on a daily basis. It is important that they have informational materials to give these people, in order to connect them to the Stigma Free Worcester app so that they know what area resources are available to them. Law enforcement officers can take business cards for the app when they got out on routine patrols; if they see any homeless or at risk individuals they can offer the business cards and verbally provide information about the app. Hospital workers can give out informational material when any substance use patients are being discharged from the hospital.

OUTREACH

The promotional plan for Stigma Free Worcester contains many different aspects that can be categorized into sections based upon costs. No cost methods pertain to the use of social media outlets such as Facebook and Twitter, attending events, and spreading by word of mouth. Low cost advertisements include posters and flyers that can be placed in different areas around the city as well as basic videos. High cost options were not considered for outreach of the app. Overall, the outreach strategy can be summarized into digital advertising, creating physical informational materials, and participating in the community directly.
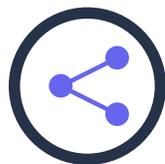
DIGITAL
Social media

PHYSICAL
Physical materials

PERSONAL
Direct community engagement

Social Media

Online advertising through social media and company websites is a very economic and effective way to promote Stigma Free Worcester. The Twitter and Facebook accounts will be used to provide the general population with updates about the app when needed. The DHHS IT team will be responsible for maintaining the app following the conclusion of the IQP. These social media outlets will also be used as a way for its followers to voice their opinions, questions and concerns to the administration of Stigma Free Worcester. Following the WPI students' IQP end date, the DHHS will be responsible for promoting the app. Connections with the organizations on the app have been made through Facebook and these connections will be continued with frequent communication through social media messaging and posts. Communication with the organizations on the app is crucial to maintenance of each resources page. The DHHS will also be using the page to provide general information and educate the public on the health issues related to Stigma Free Worcester.

"Digital media is the most cost effective and easiest way to promote your app."
— Sebastian Ebarb,
Boston Digital Team

Social Media Engagement

120

Existing Facebook followers

11

Existing Twitter followers

Flyers & Business Cards

Single page flyers have already been made for promotional use of Stigma Free Worcester. Flyers and posters will be geared towards promotion to the general population of Worcester because they will be pinned up around the city. Many homeless and at risk individuals tend to spend a lot of time near public places such as the public library, which makes them prime real estate for flyers. This is because of city bus routes and the access to electrical outlets at public spaces where they can charge their cellular devices. Flyers can also be placed at large businesses and restaurants, for example. Within these buildings, the best spots to hang flyers are in discrete locations such as bathrooms. This allows individuals to look through the flyer without having to feel judged by an onlooking coworker, friend or family member. The QR codes on the flyers also allow for quick downloading of the application.

For businesses, colleges and first responders, business cards and electronic flyers will be much more efficient. Business cards were developed as an even more discrete way for individuals to have the vital information they need to download the app right away and can be carried around by police officers and EMT to hand out to any substance users and homeless people. Hospitals can also give out the business cards and other informational material as part of a discharge packet. Electronic versions of the flyer can be sent out to even more of the target population through Human Resources departments of the larger business in Worcester as well as the many schools and universities. When sending out informational material and messages via email, using the Stigma Free Worcester email signature creates a much more professional feeling. After receiving these resources, the HR departments can then send out the electronic material to all company employees. Universities can send information out to all students with a single email. Both the universities and large corporations can also post the JPEG file on their

website. Also, organizations websites can feature images and information about the app. To accommodate a larger portion of Worcester's population, these informational material are available in both English and Spanish.

If there is a need to create new flyers and informational material there are certain aspects that can make for a better design. First off, these materials should be branded correctly with the City of Worcester and feature the correct logo for the city. Also, the QR codes for each app should be featured to make downloading even easier. There should be a very brief text describing the app and possibly a screenshot of the home page of the app. Lastly, there

should be English and Spanish versions of all material because of Worcester's large population of Spanish speaking individuals.

Community Engagement

In the city of Worcester, there are many events such as fairs and charity gatherings that could be used as promotional outlets for Stigma Free Worcester. For example, the Massachusetts College of Pharmacy and Health Sciences holds semi-annual health fairs where a table can be set up to advertise for and provide insight about the mobile application. Those who are representing Stigma Free Worcester at these events must have informational flyers and business cards with them to hand out to anyone inquiring about the app. Additionally, free rubber bracelets and magnets advertising Stigma Free Worcester set out to attract more people over to the table. Free items increase initial interest in approaching the table, which creates an opportunity for a DHHS Worcester representative to provide information about the app. While individual events may not increase the app's usage by significant

amounts, being seen consistently at community events and fairs will help the app become an important element of these events and eventually part of the culture of promoting health in Worcester and Massachusetts.

Organizations that are on the app should be contacted to find out about as many events as possible. Through these events, the Department of Health and Human Services can get in touch with more resources that can be put on the app, while connecting more people who may need substance use and mental health resources with Stigma Free

Potential Partnerships

Stigma Free Worcester is an app that could, at some point, benefit from a partnership. A partnership would only be necessary if promotion of the app by the City of Worcester does not generate a lot of measured success. Partners for Stigma Free Worcester can be hospitals like UMass Medical and or even insurance agencies such as Fallon Health. Partnerships can help the app with any funding issues and promotion with help from larger businesses. The app can also be expanded to contain resources outside of Worcester. Partnerships with the other thirteen major cities in Massachusetts can propel Stigma Free Worcester to a statewide level. This will be done through contacting other cities' offices and health departments and coordinating the implementation of possible Stigma Free Massachusetts.

TRACKING CAMPAIGN PROGRESS

The Worcester Department of Health and Human Services will need a system for tracking the success of the outreach campaign. Measuring success is key to understanding what outreach methods have been successful, and follow-up information will determine future promotional actions taken.

Tracking Downloads

To measure the effectiveness of the outreach campaign, data must be collected and analyzed. The number of app downloads is an important statistic but does not give the full picture. A large number of downloads could be from people who will never even use the app themselves, or inform someone they know, to access resources. However, we can get a sense of how the stigma around substance use and homelessness is changing. As more people download the app, more conversations get started about substance use, mental health homelessness. This will help lessen the stigma surrounding these conditions, and in turn make accessing care easier.

Survey for Patients & Clients

As a means for determining how many people are actually using Stigma Free Worcester to get to needed resources, surveys and questionnaires can be implemented by requesting the listed organizations add Stigma Free Worcester as an option to answer how new patients and clients found their organization. If an organization does not track this information already, the DHHS should provide a sample question such as "Did Stigma Free Worcester play a role in connecting you with this organization?" and request that it is used in the future. From this information, the DHHS will be able to gauge how effective the app is, not just how many people are downloading it. In order for this information to actually be of any use, the DHHS must periodically visit the organizations to obtain statistics from the surveys and can use tracking sheets to do it effectively.

Keeping Connections Updated Through Tracking Sheets

To ensure that all of our connections stay up to date on the app and the informational materials we have distributed, we created multiple excel sheets that list all organizations and people we have been in contact with. Excel sheets are categorized by target audience / means of communication, including the general population, emergency response, and large organizations. For the general

Measuring

SUCCESS

population, locations of where we recommend to put them were recorded along with the dates of the last time they were updated. For flyers to be placed outside, it is important to check their status to ensure they are still readable.

We also created two tracking sheets for the large organizations, including universities and large Human Resources Departments. All of the universities in Worcester are included, and we have provided contact information for their Health Services departments. Sections for what forms of advertisement they have received along with the dates they were sent out are provided to make sure they have our updated materials. Large Human Resources Departments are also included in an excel sheet with the same basic information as the schools. For Human Resources Departments, the best way to distribute information is through email. Emails including our informational materials about the app can be sent out to all employees and clients at these large organizations. Tracking the progress of this will be critical and it will be important to update the tracking sheets each time materials are sent out. Additionally, we created a larger excel sheet listing all of the resources on the Stigma Free Worcester app. Our flyers were handed out to all of these organizations, and this sheet will allow the HHS to easily track when the last time they were given our informational materials along with the last time each resource updated their page on the app and the last time information from the surveys were retrieved.

Interactive Map

Advertisements posted in public locations can be easily torn down or damaged due to weather conditions. To keep track of where and when public advertisements will be posted around the city, an online, interactive map of Worcester was created. The map was developed on MapHub and will be used to locate all Stigma Free Worcester public flyers. There are multiple categories that refer to the type of public location, including bus stops, public buildings, parks, and chain businesses. The bus stops we chose are high traffic areas in front of major buildings and organizations in Worcester. Some of these include Universities, hospitals, and City buildings. City Hall, the Worcester Public Library, and Union Station are examples of the public buildings category. Public parks also attract large groups of people, and multiple advertisements could be placed in each listed park. Lasty, we pinpointed popular chain businesses that have public restrooms where flyers could be posted. These locations include Dunkin Donuts and Honey Farms. A description of the specific location for each advertisement is included and a picture of the flyer should be uploaded.
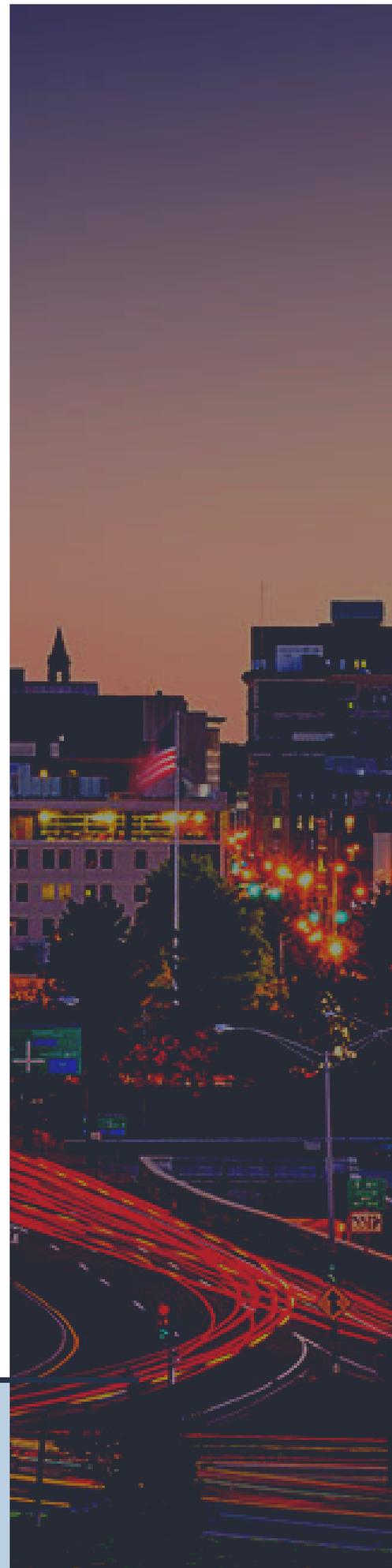
NEXT STEPS

At the conclusion of our project, we will be handing over our promotion plan and all supplemental materials to the Department of Health and Human Services. Below outlines the next steps the HHS should follow, utilizing all of the materials provided.

1 ## Email and Distribute Materials to Organizations and Public Locations

Electronic resources (flyers, JPEGs, etc) should be sent to listed organizations, businesses and HR departments, and Health Services at listed universities. These should be emailed with the request that the information be further distributed, and that flyers be printed and posted in areas like lobbies, bathrooms, and other frequented locations. Physical materials, such as business cards and flyers, should be given directly to the Emergency Response groups (Worcester Fire, Worcester Police, local hospitals), local businesses and HR departments, and posted in public locations, of which a comprehensive list and interactive map is provided. Additionally, all of the listed Stigma Free Worcester organizations should be sent both physical and electronic versions of advertisement.

2 ## Update Social Media Frequently

On a weekly basis posts should be made to the Stigma Free Worcester Facebook and Twitter pages. The accounts are linked, so any post on the Facebook page should automatically post on the Twitter account. Post content should include information about the app such as scheduled updates and/or maintenance, updates when organizations are added to the app, any pertinent events related to the app, DHHS, or listed organizations, and general information about health challenges in Worcester. Additionally, messages should be monitored and responded to as quickly as possible.

3 ## RSVP to Health Fairs and Community Events

To prepare for each event, several copies of different materials like flyers and business cards should be printed ahead of time, and a large promotional poster should be displayed. Ideally, each person who comes up to the table should have the app downloaded by the time they walk away.

4 ## Continue Contacting Other Cities' Health Departments

In order to reach a long term goal of Stigma Free Massachusetts, there needs to be sponsorship and implementation by all major cities within the state. The Commissioner of the DHHS is an ideal position to make this happen as it is connected to important representatives in the Health Departments from each city and that network can be used to get these cities on board.

5 ## Stay Connected With Listed Organizations

Ensuring the relevance of the information on the app is contingent upon staying connected with the organizations listed. Information for any of the resources is subject to change and it is the duty of the DHHS to update the app based upon these changes.

BIBLIOGRAPHY

2015 GREATER WORCESTER COMMUNITY HEALTH ASSESSMENT. (2015). CITY OF WORCESTER. RETRIEVED FROM HTTP://WWW.WORCESTERMA.GOV/UPLOADS/8D/0F/8D0FEDFF14B5801354711DAC20B28126/CHA-REPORT.PDF

2018 GREATER WORCESTER COMMUNITY HEALTH ASSESSMENT. (2018). CITY OF WORCESTER. RETRIEVED FROM HTTP://WWW.MILLBURY-MA.ORG/PUBLIC_DOCUMENTS/MILLBURYMA_BCOMM/BOH/CHA2018WHATIS.PDF

BROOK, J., & MCDONALD, T. (2009). THE IMPACT OF PARENTAL SUBSTANCE ABUSE ON THE STABILITY OF FAMILY REUNIFICATIONS FROM FOSTER CARE. CHILDREN AND YOUTH SERVICES REVIEW, 31(2), 193-198.DOI:10.1016/J.CHILDYOUTH.2008.07.010

CBS. (31 AUGUST 2018). GRANDPARENTS RAISING GRANDCHILDREN AS OPIOID EPIDEMIC TAKES TOLL. CBS NEWS. RETRIEVED FROM HTTPS://WWW.CBSNEWS.COM/NEWS/GRANDPARENTS-RAISING-GRANDCHILDREN-AMID-OPIOID-EPIDEMIC/

KOLA, M., HONCHARIK, N., FOLEY, K., & CHRISTIE, W. (2018). A MOBILE APPLICATION FOR LOCATING TREATMENT AND SUPPORT. WORCESTER POLYTECHNIC INSTITUTE. RETRIEVED FROM HTTPS://WEB.WPI.EDU/PUBS/E-PROJECT/AVAILABLE/E-PROJECT-121218-122521/UNRESTRICTED/HHS_MOBILE_APP_FINAL_REPORT.PDF

KULLGREN, J. T. (2010). HEALTH CARE USE AND DECISION MAKING AMONG LOWER-INCOME FAMILIES IN HIGH-DEDUCTIBLE HEALTH PLANS. ARCHIVES OF INTERNAL MEDICINE, 170(21), 1918. DOI:10.1001/ARCHINTERNMED.2010.428

NATIONAL INSTITUTE ON DRUG ABUSE. (2019) TREATMENT APPROACHES FOR DRUG ADDICTION. RETRIEVED FROM HTTPS://WWW.DRUGABUSE.GOV/PUBLICATIONS/DRUGFACTS/TREATMENT-APPROACHES-DRUG-ADDICTION

QUICK GUIDE TO HEALTH LITERACY. U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES. RETRIEVED FROM HTTPS://HEALTH.GOV/COMMUNICATION/LITERACY/QUICKGUIDE/QUICKGUIDE.PDF

TURNER, B. J., & LIANG, Y. (2015). DRUG OVERDOSE IN A RETROSPECTIVE COHORT WITH NON-CANCER PAIN TREATED WITH OPIOIDS, ANTIDEPRESSANTS, AND/OR SEDATIVE-HYPNOTICS: INTERACTIONS WITH MENTAL HEALTH DISORDERS. JOURNAL OF GENERAL INTERNAL MEDICINE, 30(8), 1081-1096. DOI:10.1007/S11606-015-3199-4