Narrative

lorida State University's School of Information

Margaret Sullivan, an assistant professor with Florida State University's (FSU) School of Information (SOI) and project director (PD), requests a two-year, \$344,598 Early Career Development grant, with no cost sharing, to investigate library outreach services and the opioid epidemic. This exploratory project is meant to answer the questions, *hat relationships exist between libraries and local opioid-rel ted harm reduction organizations in US communities hard-hit by the opioid crisis?* and *How has the local opioid use population (OUP) engaged with library services?* The proposed project will extend the PD's current research agenda into the health information needs and services provided to the OUP and

- 1. create an **evidence-based framework** of how public libraries responded to the opioid crisis within their communities;
- 2. with the help of an advisory board, provide evidence-based **recommendations for library professionals** to meet the needs of the OUP in their communities;
- 3. create a **free**, **open-sourced module for library and information science (LIS) schools** to use in their curriculum about library responses to the opioid epidemic and
- 4. bring social work and public health practices into LIS research and teaching.

This project is in perfect concert with IMLS goal number three, to enhance the training and professional development of the library workforce to meet their communities, and particularly objective two, to create and refine training programs that build library workforce skills and expertise in contributing to the well-being of communities related to health and increasing equity and access.

Project Justification

In 2021, 106,699 people in the United States died from drug overdoses, which pushed the multitude past **one million people during this century** (CDC, 2023). This is a staggering amount of loss- especially when considering that most of these deaths were preventable. In 2020 the rate of overdose deaths rose 30% from 2019 to 2020, numbers that represent an escalation theorized to have been brought on by the COVID-19 pandemic. It is also particularly disappointing, as the years before the pandemic saw the death rates decrease for the first time in two decades.

The United States is in the midst of an opioid catastrophe, largely fueled by the synthetic opioid fentanyl. Of the overdoses reported, seventy-five percent of these deaths involved opioids, and 82.3 percent of those involved synthetic opioids (CDC, 2023). Drug overdose is now the leading cause of accidental death in the United States, surpassing car accidents Opioid misuse results in approximately 1,000 emergency room visits per day (Schiller, Goyal, and Mechanic, 2022). In addition, opioid addiction has correlative relationships with other health and societal ills. There is a statistically significant relationship between people who experience homelessness and having a higher likelihood of experiencing opioid use disorder (OUD) along with opioid overdose (Yamamoto et al., 2019). Research suggests a direct relationship between increased acute HCV infections and increased injection drug use with opioids (Zibbell et al., 2018). Further, hospitalizations for serious bacterial infections such as skin and soft tissue infections, infective endocarditis, central nervous system abscesses, and osteomyelitis are also increasing in the OUP in the United States (Ciccarone et al., 2016; Collier, Doshani, and Asher, 2018). These infections are not only incredibly painful, but they can also be fatal.

The OUP is disproportionately burdened by the HIV epidemic. Syringe service programs and medication assisted treatment (MAT) have significantly reduced the incidence of HIV among the OUP

over the past 30 years (Fernandes et al., 2017; Woodak and Cooney, 2016). However, the ongoing opioid epidemic threatens to reverse this progress in HIV prevention. For example, the 2015 National HIV Behavioral Surveillance Survey among the OUP in 20 U.S. cities found that only 52 percent of HIV negative respondents utilized syringe service programs in the previous year while 27 percent reported receptive syringe sharing during the same time period (Burnett et al., 2018). At the end of 2018, 15.5% of all HIV infections in the United States were attributed to injection drug use (CDC, 2020).

Finally, one study found that in 2017 alone, the national cost of opioid use disorder was \$1,021 billion (Luo et al., 2021).

While the opioid crisis has exploded since the introduction of fentanyl, people who use these narcotics have traditionally been medically underserved due to the stigma and illegality of their substance issues. It has been found that the experience of stigma can jeopardize recovery, both by delaying seeking help and withholding information from providers (Cheetham et al. 2022). In the PD's own research, conducted last spring in the Kensington neighborhood of Philadelphia, the people that were interviewed, all of whom used opioids, cited fear of stigma from others as the central barrier to getting health or harm reduction information.

Success has been demonstrated when community organizations, such as libraries, implement health information outreach targeting underserved populations (Barr-Walker, 2016; Luo, 2018; Mi, Stefaniak, & Afonso, 2014). Examples of this found by the previous IMLS funded grant, "Assessment of Rural Library Professionals' Role in Community Engagement in the Southern and Central Appalachian Region: Mobilization from Change Agents to Community Anchors," include rural library programs that support nutrition, well-being, fitness, mental health, and illness support (Mehra, Sikes, and Singh, 2019). Libraries have been found to support vulnerable populations such as the unhoused, young pregnant women, and the elderly (Powell et al., 2022; Sikes, 2020). In case studies collected by another IMLS funded project, "Public Libraries Respond to the Opioid Crisis with Their Communities," some libraries have begun work to address the opioid epidemic in their communities with programs such as naloxone training for staff and resource days where local organizations come in to talk to community members about social services, including housing assistance and substance abuse treatment (Allen et al., 2019). These programs, while immensely valuable, typically take a top-down approach. They begin at the organizational level and determine what the needs are without necessarily consulting the target population.

Despite the understanding that the US is in crisis and that libraries, as ubiquitous and trusted community stakeholders, could potentially assist, research into how libraries work as partners fighting the opioid epidemic is limited to case studies and small research projects. These examples are of great value, but much more needs to be done. There has been limited research into evidence-based practices and the efficacy of the response of public libraries within their communities. What's more, exploration into the perspective of the target group, the OUP, into how library outreach has or may best help them is non-existent. This is significant, because concern over stigma may prevent the OUP from advocating for their own needs or seeking out health or harm reduction information on their own.

Dr. Sullivan's long-term research agenda explores the health information needs and behaviors of underserved, stigmatized people. She has been awarded two previous grants to create public library programming to assist librarians and library staff in helping the OUP in their communities in the southeastern US. She is a co-PI on a grant funded by the Substance Abuse and Mental Health Services

Administration with FSU's College of Social Work in which she is training rural library staff around the Southeastern United States on implementing the IMLS-funded project by the OCLC, the Call-to-Action Toolkit. The project, in which she delivers virtual presentations to library staff in rural southern libraries and presents at regional and national library conferences, has uniquely positioned her to engage with dozens of relevant stakeholders. In addition to the librarians and staff that receive the training, her team has consulted with the head librarians of each state, whether they are the official state librarian or a different title and networked with them to implement this project.

This project is meant to add to and firmly compliment the incredible IMLS funded work done by the team at the OCLC. The difference in this project has to do with the research being conducted with the OUP and adding their voices to the conversation. Dr. Sullivan is dedicated to a community-based participatory approach in which she consults the target group as much as possible and creates evidence-based practices. The addition of the learning module for LIS instruction, which has the potential to reach a whole future generation of librarians, is also significant to this work. However, because the OCLC has laid so much groundwork in this area, the lead member of their team, Kendra Morgan, has been invited and agreed to sit on the advisory board for this project. When the PD engages with the libraries for this grant, she plans to offer the training she has been conducting with the College of Social Work to further the work done by the OCLC, as we are all united in our goals to fight the opioid epidemic. This is especially helpful, as this training has information on emotional support and post-traumatic event care plans for library staff; significant information for the librarians and staff that encounter these issues frequently at work.

Dr. Sullivan also has experience walking around communities, such as the Kensington community in Philadelphia, and interviewing people who suffer from OUD. She is highly comfortable and very much enjoys meeting and talking with people in communities who often feel unheard. Over the past few years, she has begun to position herself as an expert in the health information needs and behaviors of the OUP and has three articles in production or forthcoming related to their health information needs and behaviors. This proposed project will further her long-term research agenda, and her personal lifegoal, to conduct research that benefits underserved, stigmatized, small-world communities.

More importantly, this project will enable library professionals to better address the crisis in their communities by investigating current library practices and harm reduction efforts in communities with high drug overdose death rates around the US. This will involve talking to library professionals, public health and social workers, and the OUP who use public library services. The research conducted here will be transferred to practical recommendations for professionals and an educational module for LIS professors to utilize in training future librarians in graduate programs across the country. This project will ultimately enhance the training and professional development of librarians to meet the needs of their communities in response to the opioid epidemic, thus contributing to community well-being. The beneficiaries of this project will be two-fold, including the OUP who will receive better health and harm reduction information when they visit the library, and library staff who will be better prepared to offer these services. The deliverables of this project will be a minimum of two peer-reviewed journal articles, two national conference presentations, an open-access resource guide that provides the developed framework and suggested practices for outreach, programming, and working with harm reduction agencies, and the standalone module for LIS programs.

Fighting the opioid epidemic, which is rooted in poverty and lack of opportunity (Ghertner and Groves, 2018), affords the chance to positively impact many of the social determinants of health: health care and access, economic stability, neighborhoods, and social factors. All of these directly relate to Laura Bush 21st Century Librarian Program Goals and Objective 3.2 to contribute to the well-being of communities, and align with the IMLS Agency Mission, Goals, and Objective 2.1: to strengthen community engagement and promote inclusive engagement across diverse audiences.

Project Work Plan

The ultimate goal of this project is to arm current and future librarians and library staff with the best possible evidence-based practices to conduct health and harm reduction outreach in their communities. This will be done by exploring current practices by libraries in particularly hard-hit communities and contrasting those practices with harm reduction organizations in the area and the voices of the target group. This project begins with two research questions:

- 1. What relationships exist between libraries and local opioid-related harm reduction organizations in US communities hard-hit by the opioid crisis?
- 2. How has the local opioid use population engaged with library services?

To address these, the proposed two-year project will be conducted in three phases using a mixed methods design and employing both qualitative and quantitative methods (Hanson et al., 2005). The first two phases will be approximately nine months each and overlap slightly. The final phase, which primarily concerns dissemination, will take 15 months but also overlap the other phases.

First, a survey will be created and disseminated to 50 public library directors in the hardest hit regions of the opioid crisis, based on population-level drug overdose rates. While the survey is being completed, research will be conducted into the availability of local opioid-related harm reduction organizations in the communities that we survey. Second, the PD will select six libraries from the results to visit and study in further depth. During these visits she will interview the library staff and the local OUP. Third, we will come up with a series of practical recommendations for library staff, publish them in a practitioner's journal, and create a learning module to be freely given to LIS programs around the country.

Methods

Prior to phase 1, the PD has already reached out to library, public health, and social work stakeholders, many of whom she has an existing relationship with, to request that they join the advisory board. Likewise, a graduate assistant (GA) will be recruited prior to the beginning of the grant timeline in order to be ready to hire them immediately at the start of the project. This graduate assistant will be from FSU's College of Education to help assist with curricular content.

hase 1

The goal for the first phase will be to initiate the study and address the first research question. For the first step in Phase 1, the PD will create a mixed methods survey using Qualtrics and assisted by Carli

Lucius, MSW of FSU's College of Social Work. The goal will be to generate data on the availability of library programming and outreach regarding OUD and harm reduction services in each community, and collaborative efforts between libraries and public health stakeholders. This survey will be based on the PD's prior research and already existing surveys meant to assess the scope of the epidemic.

The survey will ask questions about what programming is currently offered in response to the opioid epidemic, if outreach into the community is being conducted, what collaborative relationships exist between the library and OUD resource groups, and what the response from the OUP has been like. It will have quantitative metrics, such as number of programs, number of attendees, number of collaborative partners, and the estimated frequency of interactions with people from the OUP, as examples. It will also have openended questions to produce qualitative data that will provide opportunities for further description on the practices of each library. After finishing the initial draft, it will be circulated to the advisory panel for approval and to check for methodological rigor. Once the survey is created, the PD will seek approval from FSU's institutional review board (IRB).

The table on the right lists libraries that have been identified to be in areas that are the hardest hit by the opioid epidemic. In order to assess the responses of different types of communities, 25 of the libraries are in urban areas and 25 are rural. This table displays the state, the county name, if it is a rural or urban county, and the overdose death rate per 100,000 people.

State	County	Rural	Urban
CA	Lake County	90.8	
	San Francisco County		63.6
CO	Denver County		40.4
CT	Hartford County		42.0
DC	District of Columbia		59.0
FL	Duval County		51.7
	Pinellas County		50.4
IN	Fayette County	90.8	
	Grant County	66.2	
	Marion County		65.
KY	Bath County	79.2	
	Jefferson County		69.
	Lincoln County	65.7	
	Madison County	85.7	
	Montgomery County	83.3	
	Rockcastle County	76.1	
LA	Orleans Parish		85.
	Washington Parish	80.3	
MD	Baltimore city		91.
MI	Wayne County		46.
MO	St. Louis city		96.:
MS	Pearl River County	72.1	
NC	Richmond County	74.7	
	Robeson County	86.1	
NM	Rio Arriba County	118.2	
	San Miguel County	70.0	
NY	Bronx County		47.0
OH	Cuyahoga County		43
100000000000000000000000000000000000000	Franklin County		60.
	Gallia County	86.5	
	Hamilton County	XXXXX	46
	Ross County	78.9	
	Scioto County	134.1	
OR	Curry County	74.5	
PA	Allegheny County	80,000	51.
	Philadelphia County		70.0
RI	Providence County		42.:
TN	Davidson County		67.4
	Sevier County	66.9	(777)
	Shelby County		52.
VA	Henry County	86.5	1707000
	Richmond city		76.
	Tazewell County	74.6	1,000
WI	Milwaukee County		56.4
WV	Logan County	185.5	-7056
	Mason County	110.7	
	Mercer County	138.9	
CA	Mendocino County	65.0	
MA	Suffolk County	55.0	39.
MA	SHITOIK COMMIS		14

In addition, this map displays the 50 locations to be surveyed.

Washington Montana North Dakota Minnesota Minn

Map of Phase One Locations

The GA will be tasked with contacting the library directors of each of the chosen libraries and asking them to complete the survey. Each of the library directors will be compensated \$50 for completing the survey. While the survey is being disseminated, Ms. Lucius, who specializes in substance use disorder, will conduct research into the local opioid-related harm reduction organizations and resources in each of the communities that we have selected above. Aided by the GA, she will generate a list of organizations and resources available in each area, along with significant information about each organization. The information on each organization will include but not be limited to:

- What services are offered to the OUP?
- Is there an income requirement for assistance?
- Are services only offered for abusing specific substances?
- Are services only offered after detox?
- Is there a residency requirement such as a live-in facility?
- Is it a homeless shelter?
- Are services offered for family members?
- Is it religiously based?
- Does it offer harm reduction services? Does it call them harm reduction?
- Are services free?
- Is it run by people who are members of the OUP?
- Is it run by people with relevant credentials?

- Does it partner with other local organizations?
- Is it a government entity like a health department?

All this information will be collected and stored on an Excel spreadsheet. Once the survey data and the organizational information are collected, the PD and the graduate assistant will analyze the results of the surveys and compare them to the local availability of harm reduction resources. We will explore if the libraries are partnering with the organizations in their communities and how these partnerships manifest. Are they in contact with other stakeholder organizations? Have they conducted collaborative events? Do they invite members of local organizations to their events? Are the libraries and local organizations not interacting at all? The PD and the graduate assistant will analyze how the libraries engage with local organizations and if collaborative relationships are in place, what those relationships look like. Likewise, we will assess if opportunities are being missed in each community. This information will be presented to the advisory board and used to determine the answer to the first research question.

It will also provide the PD insight into which communities have the most active collaborative partnerships. Based on these findings, the PD will select three urban and three rural communities to explore further in the second phase of the project.

hase 2

Our goal during phase two will be to address the second research question. Having conducted the prior analysis, the PD will select six library systems, including three in rural communities and three in urban communities, that have taken an aggressive role, including active collaborative partnerships, in fighting the opioid epidemic. She will visit each of these and study them in greater depth. During these visits her purpose will be two-fold: First, she will conduct semi-structured interviews of library staff inquiring about their experiences working with the OUP and local harm reduction stakeholders (compensated \$50 per person). Second, using Elfreda Chatman's Theory of Information Poverty (Chatman, 1996) as her theoretical basis, she will survey members of the local OUP to determine their perceptions regarding the public library's efforts within their community, what health information and harm reduction resources they would like to have available to them, and what their perceived barriers are to engaging with library staff when they need information (compensated \$50 grocery store gift cards per person). It is of high interest to the PI to see if the OUP displays information-seeking behaviors that mirror the small worlds of Elfreda Chatman's research (Chatman, 1999).

To create the semi-structured interview questions for library staff, the PD will once again consult prior research, including her own. The questions will ask about the staff's experiences creating programming and outreach for the OUP. It will also ask about the staff member's experiences interacting with this population within the context of the library. Finally the staff member will be asked about their feelings about all these experiences and how they could be improved. The questions will be submitted to the advisory board and, upon incorporating their recommendations, submitted to the PD's IRB for approval.

The surveys for the OUP will be administered verbally and filled out by the PD. They will be created by an evaluation of the resources made available to the OUP in each individual community, as well as standard questions about the person's health and harm reduction information needs, what services they are aware of in their community and what they would like to see offered, and finally questions about

their experiences (or not) with the local public library. The reason that the first part of the questionnaire will be different for each location is that it will ask about specific programming offered in the community or by the library to determine if members of the OUP are aware of and utilizing the services already being offered to them. Once again, the creation of this survey will be based on the PD's prior research and already existing surveys, vetted by the advisory board, and submitted to the PD's IRB.

After the data is collected, the GA will enter it into Excel. The PD and the GA will then evaluate it to answer the second research question and to develop the framework and suggested practices. Our data analysis will be based upon Creswell's (2007) process of analyzing qualitative data by fragmenting and grouping like-responses into thematic codes and exploring the data for general topics that give explanation to the research questions- along with generating descriptive quantitative statistics to support the qualitative data. Throughout the project, a graduate assistant will help with data collection and processing, scheduling interviews of library staff, obtaining informed consent, and data analysis.

hase 3

During phase three the goal will be to create and disseminate content. The academic output of this project will be two publications, two or likely more, conference presentations, and the learning module. Guided by the advisory board and Ms. Lucius, who has assisted with curriculum development related to OUD, the PD will come up with a series of suggested practices, based on the evidence produced in this research, for librarians and library staff. The results of this research will be written and published in both an academic and a practitioner's journal. The PD will coauthor with the GA and Ms. Lucius. The PD will also seek out open access publications for this work and post the links to any publications on her institutional website and her personal website.

We will then create a stand-alone instructional module for LIS professors to employ in their classrooms. Dr. Sullivan has been teaching at the university level for 11 years and has over a decade of experience creating educational content. She has also taught introductory and core courses in LIS program for six years so far. In addition, the social work department at FSU, led by Ellen Piekalkiewicz, has created an introductory general course on substance use disorder that they have offered the PD to borrow from to assist in creating this learning module. The PD, aided by Ms. Lucius and the GA, will create the module for LIS students using the expertise of the social work department regarding substance use disorder, and the findings of this research project related to the OUP and libraries. The PD will host this on her institutional website and her personal website. She will advertise this module on listservs and at conferences for LIS professors and for librarians and library staff.

dvisory Board

Confirmed members:

- Ellen Piekalkiewicz Director, Center for the Study and Promotion of Communities, Families, and Children at FSU, expert on substance abuse and at outreach to the OUP
- Kendra Morgan OCLC/WebJunction Senior Program Manager and WebJunction lead on the IMLS-funded Public Libraries Respond to the Opioid Crisis with Their Communities project
- Lorin Jackson- Executive director, region 2, National Network of Libraries of Medicine, expert on libraries and medical librarianship
- Marcia Mardis Professor of information science at FSU and expert of rural library outreach

- Noah Lenstra Associate professor of library and information science at the University of North Carolina, Greensboro and expert on library health programming and outreach
- Linda Most Professor of library and information science from Valdosta State University and expert on library outreach
- Brad Schmidt Distinguished research professor, department chair of FSU's psychology department, director of the Anxiety and Behavioral Health Clinic, and expert of substance use and addiction, expert at social science research methodology and rigor

To be determined once grant is awarded, but prior to the project:

- Three public librarians
- Two or more members of the OUP

bridged Timeline

rior to the grant- Assemble advisory board and determine library systems to be surveyed. Year 1- Hire GA, create survey, get IRB approval, send out to 50 pre-determined library systems, receive and process data, compare responses to the availability of local opioid-related harm reduction organizations, create a report to be disseminated to the advisory board and later turned into a publication, determine the six library systems that have the most active harm reduction efforts, travel to three over the summer of year 1.

Year 2- Travel to the remaining three library systems in early fall, conduct data analysis and use this for the development of the framework and suggested practices, disseminate the framework and suggested practices through peer-reviewed publications in academic and practitioner journals, at the Public Library Association conference and the Medical Library Association conference, and through an online, openaccess, printable resource. Likewise, create a free-standing learning module for LIS schools to be hosted and freely disseminated on the PD's institutional website and her personal website.

Recruitment, human subjects, and confidentiality

It is incredibly important to the PD to protect the privacy of the participants of this study. However, each library study will be unique, and the details of that uniqueness will be critical to understanding them. As a result, we will not de-identify names of the six communities we study in phase 2. This procedure aligns with best practices in case study research, including in the field of LIS. See, for instance, the reports of the IMLS-funded "Public Libraries Respond to the Opioid Crisis with Their Communities." Library staff will be assigned pseudonyms to protect personal privacy. Members of the OUP will be anonymized completely. Participants will be informed of these procedures, and all actions will be approved by the Florida State IRB prior to the commencement of this study. The research team will also share drafts with participants to ensure they are comfortable with how they are represented, and to give them an opportunity to ask that sections be more thoroughly anonymized.

Diversity Plan

The driving motivation behind this project is to improve the lives of people suffering from OUD in traditionally underserved groups. While the media have focused on the effect of the opioid crisis in white communities, it has hit communities of color hard. The rate of synthetic opioid overdose deaths for Black people has increased 18-fold more than any other racial group (Andraka-Christou, 2021). Indigenous,

Black, and LGBTQ+ youth face great discrimination and stigma, which makes them especially vulnerable to substance use and misuse. (SAMHSA, 2022). Hispanic youth have the highest prevalence of prescription opioid misuse (SAMHSA, 2020). Older and elderly adults have had greatly increasing rates of opioid addiction over the past years (Yan et al., 2022). Between 2010 and 2017, the rate of babies born with opioid withdrawal symptoms increased 82 percent (HHS, 2021). This is an epidemic that is affecting every population in the US, and especially those that are traditionally underserved. Confronting the opioid epidemic will benefit diverse groups, providing increased opportunity for equity and inclusion. The fact that this project would include members of the OUP, both in the research and on the advisory board, means that the resultant publications and learning module would be informed by the perspective of the target group. This gives the OUP an opportunity to be involved in shaping library practices as they apply to that population.

Project Results

The results of this project are multi-layered and consist of the immediate academic output and the potential benefits to the target group. The beneficiaries of this project are both the librarians that are helped by the findings and the OUP. This research will aid public library staff in working with harm reduction efforts in their own communities. It will provide a framework of suggested practices for doing this successfully, which are backed by evidence, informed by an advisory board, other successful models, and the OUP. It will give both library staff and social and public health workers insight into the health and harm reduction information-needs of this underserved, stigmatized population as told by members of this group.

This project has the potential to truly help those suffering from OUD by providing services and resources that they want through their local library- a community organization which is typically highly trusted by all. The research conducted here will serve to better connect the OUP with health and harm reduction resources. This is the ultimate priority of this project and the PD. It also is of utmost benefit not only to the OUP, but to society in general. Improving the health of people who suffer from OUD gives them the opportunity to reduce or eliminate their drug consumption and increase their positive contribution to their communities.

The learning module that will be created will serve to impart that same information to future librarians. Many librarians that the PD has spoken to over the years have expressed that they were unaware and under-prepared to handle issues related to the OUP using libraries. One result of this project is that LIS professors at institutions around the country will have the opportunity to use and adapt this learning module in their own courses to better prepare future librarians to work with the OUP. Likewise, the information that we learn from the OUP in conducting this project will mean that the information the learning module imparts will be more helpful to the target group. This learning module will be supported and promoted by the PD for years past the timeline of the grant and has the potential to aid a generation of future librarians.

Finally, this Early Career Development project will help the PD in her own long-term goals. Dr. Sullivan will have the opportunity to learn a tremendous amount about library responses to the opioid epidemic, collaborations, and the perceptions of the OUP regarding these efforts and their needs. She will have the opportunity to conduct research that will shape her agenda for years to come, positioning her as an expert in this arena.

Schedule of Completion

Florida State University School of Information

SCHEDULE F C LETI	
Project Start: Tue, 8/1/202	
	YEAR 1 YEAR 2
AC _I I	A S O D F A
Phase 1	
Hire GA	
Create survey	
Send to 20 library directors	
Explore the availability of resources in each community	
Receive and process survey data	
Create first report including 6 libraries to include in phase 2	
Submit to advisory board	
Phase 2	
Travel to first three libraries	
Travel to second three libraries	
Data analysis	
Develop framewor and suggested practices	
Submit to advisory board	
Phase 3	
Write publications for practitioners' and academic journals	
Present project findings at conferences	
Create free resources and host on my and FSU's websites	
Create learning module and host on my and FSU's websites	
Submit final S report	

igital Products Plan

Public Libraries as Harm Reduction Resources will create a variety of digital materials, including multiple research datasets, a resource guide that provides the developed framework and suggested practices, and the standalone module for LIS programs. All content will be hosted open access and freely available for dissemination on the project director's personal website and her institutional site. This project will also produce digital content communicating findings, such as articles in a practitioners journal and in a scholarly journal. These resources will be submitted to open-access sources and links will be provided on the aforementioned websites. Hosted resource documents will likely be in PDF, Word, JPG or other standard document formats applicable to the type of resource. All documents will adhere to quality standards relevant to the document's format. The bulk of the publicly accessible digital project content will be made available on the PD's website. The website will be accessible to anyone with standard computing hardware and software and access to the internet via standard web browsers. During the funded project period, this digital data will be stored on secure Florida State University servers in a structured format appropriate to the data type. Florida State University provides secure storage for these types of data to each faculty member. Permission levels will be set to ensure appropriate access permissions for various project contributors based on role. At the close of the project, de-identified versions of these data will be submitted to Diginole, the Florida State University digital repository in accord with common practices after the competition of the final project outcomes and deliverables. All digital products created for this project that can be shared publicly will be made available on the project website and/or Diginole, the Florida State University digital repository. Whenever feasible, content will be available for use and sharing using a non-restrictive license that provides credit to the project. To make this clear to users, a statement will appear on applicable resources that reads "This work is licensed under a Creative Commons Attribution 4.0 International License." This license provides users with the permission to share and adapt content as long as attribution is provided. For materials where this license is not applicable, specific rights statements (e.g. copyright notices) will be clearly posted and communicated. Works involving privacy concerns or that lack permissions to be shared (e.g. PII, participants drawings without release permissions) will not be shared. Digital web content will be hosted on web server space offered and supported by the Florida State University School of Information. The site will be managed by the PD, Ms. Lucius, and the graduate assistant. Florida State University School of Information has successfully maintained a number of grant project websites for more than ten years. All sites continue to be monitored and updated on a regular basis. dditional digital content may be hosted on other secure Florida State University platforms, such as shared network drives or learning management systems. The School of Information has a proven track record with past IMLS and other grants of sustaining the staffing and funding to continue projects for years following the end of grant. Diginole, the Florida State University repository, is housed and maintained by the Florida State University Libraries, who have a long-standing commitment to preserving the works collected in the repository and ensuring their accessibility.

Data Management Plan

Public Libraries as Harm Reduction Resources will gather and produce a variety of data including but not limited to quantitative and qualitative questionnaire responses, interview data, observational data, and data related to local community harm-reduction resources. This data will be elicited from research participants and potential stakeholders in years 1 and 2. Please se the Narrative for a full outline of research methods, procedures, and timelines for data collection. It is estimated that this will include data from 100 surveys (50 from library directors in year 1, 50 from the opioid use population (OUP) during site visits in years 1 & 2), 50 interviews (50 from library staff during site visits in years 1 & 2), an extensive spreadshe t on community resources (ongoing), and observational data (generated from the PI during site visits in years 1 & 2) collected in an additional spreadsheet.

Digital data will be stored during the funded project period on secure Florida State University servers in a structured format appropriate to the data type. Florida State University provides secure storage for these types of data to each faculty member. Permission levels will be set to ensure appropriate access permissions for various project contributors based on role. Permissions and storage will be overseen by the PD, with assistance from Ms. Lucius and the graduate assistant, who will be responsible for organizing, cleaning, and securing data. All digital data will include the application of metadata appropriate to the data type to assist with organization as well as prepare the data for long-term archiving at the end of the project. Metadata will capture information such as type, format, date, time, responsible person(s), storage location, and context of data collection. We expect all digital data to be accessible with basic hardware and software tools (e.g. basic computing hardware, word processing, spreadshe t, database, and image viewing software, and internet access). We do not anticipate any specialized hardware or software ne ds to access the data from this project.

Very little sensitive information will be collected as part of the project work. Because many of the data types collected for this project involve identifiable data about living individuals, we must make special provisions for protecting the rights of these research participants as we plan for data management. This will include assigning psyuedonyms to each library survey participant and annonymizing all data received from the OUP. All data collection will be reviewed and approved by the Florida State University IRB to ensure it me ts with federal and university standards for collection of sensitive information. During the project period, data will be shared only among project collaborators and sharing will be managed based on project role. Prior to submission for long term archiving, all data, including personal identifiable information, will be deidentified in a manner approved by Florida State University's IRB to protect the identities of respondents to the study. Any consent forms used to enroll participants in this study will include options for release permissions so that identifiable data can be publicly viewed. Although some data will be shared during the project period, after the competition of the final project outcomes and deliverables the deidentified project datasets with accompanying metadata will be submitted to Diginole, the Florida State University digital repository in accord with common practices. Once these data sets have be n submitted for archiving, the repository will have primary responsibility for long term data curation and access control.

This data management plan will be reviewed yearly, or more frequently if events warrant.

Organizational Profile

Florida State University College of Communication and Information School of Information

Mission

Faculty, staff, and students at the Florida State University School of Information (Florida's iSchool) recognize the profound importance of connecting people, information, and technology for the betterment of society. We demonstrate our commitment to universal information design, creation, access, use, and evaluation within a dynamic culture of emerging technology through innovative teaching, research, and service.

We are committed to preparing information professionals with the knowledge, skills, abilities, and attitudes to overcome information challenges in all organizations. Our dedication to innovative and interdisciplinary research, collaboration, service, and leadership; respect for diversity; and commitment to ongoing professional development make a vital contribution to the University's mission as a research-extensive institution.

Placement Within Parent Organization (Service Area)

Founded in 1947, the School of Information has been preparing professionals to make vital connections between people and information ever since. The School's undergraduate and graduate studies are guided by the Director of the School of Information, who reports to the Dean of the College of Communication and Information. The project responsibility will be assigned to the Project Director who is a faculty member in the School of Information.

Degree Programs Offered

The flagship program of the School of Information is its ALA accredited Master of Science in Information. The School also offers a Bachelor of Science in Information Technology, a Master's of Science in Information Technology, a post Master's Specialist and a Ph.D. in Information.

Sources used

FSU School of Information (2019). iSchool Mission. Retrieved from

https://ischool.cci.fsu.edu/about/mission/)

FSU School of Information (2016). 2016 Narrative Report to American Library Association.