Inequity in Healthcare Delivery: Barriers Faced by the Newly Released Inmate

Kelsey Jayne Hirsch

A dissertation

submitted in partial fulfillment of the

requirements for the degree of

Doctor of Philosophy

University of Washington

2019

Reading Committee:

Elaine M. Walsh, Chair

Hsin-Yi Tang

Bruce Gage

Program Authorized to Offer Degree:

Nursing

©Copyright 2019

Kelsey Jayne Hirsch

University of Washington

Abstract

Inequity in Healthcare Delivery: Barriers Faced by the Newly Released Inmate

Kelsey Jayne Hirsch

Chair of the Supervisory Committee:

Elaine M. Walsh

School of Nursing

A disparity in healthcare exists for individuals accessing primary care following incarceration. Whether due to the myriad of barriers that inhibit people from establishing new care with providers, or the poor perceptions of healthcare and adverse experiences that have likely had a negative effect on this already marginalized group, recently released prisoners returning to homelessness constitute some of the highest emergency service utilizers in the nation. A mixed-methods intervention study was conducted to identify common barriers that inhibit an individual from accessing care upon jail release and to assess the feasibility of a warm handoff intervention to improve utilization of primary care over emergency services. Participant interviews, along with the researcher's experiences, highlighted four key barriers to accessing healthcare upon jail release: navigating the system, wait times for appointments, prioritizing health, and logistic challenges such as transportation and means of making contact. Quantitative results of the study show that there was no significant difference between groups in number of primary care provider appointments or emergency room visits following release. However, qualitative results show support for the warm handoff intervention in overcoming some of the identified barriers and

improving relationships with primary healthcare providers, as well as a desire of participants to increase utilization of primary care over the emergency room. In addition to identifying common barriers for participants and assessing the feasibility of the warm handoff intervention, this study identified the larger systems issues that work to hinder this high-needs, high-utilizer group from receiving necessary healthcare, such as Medicaid delays and a lack of available providers to serve Medicaid users in an effective and timely manner. The following papers represent: 1) the methodological challenges faced by the researcher in design and implementation of a study conducted inside a jail and immediately following release; 2) a case example to demonstrate the typical pattern for a participant receiving the intervention; and 3) a results paper to outline the details of the study and pertinent findings. Together, these papers demonstrate that while the warm handoff intervention appears to be a step in the right direction for improving access to primary care providers for newly released prisoners, modifications to the intervention are needed and larger societal changes will be necessary in order to truly improve the health and well-being of this highly marginalized population.

In loving memory of my oldest brother, Aaron, who struggled every day to feel accepted, to feel cared for, and to love himself.

Acknowledgments

I offer my sincerest gratitude to my committee members. To Dr. Elaine Walsh, thank you for believing in my dream and encouraging me to break through every closed door that came my way. To Dr. Bruce Gage, thank you for offering your expertise to illuminate everything hiding in the dark when I chose to shine my light on one specific discovery. To Dr. Jean Tang, thank you for reminding me to keep my focus on the health and wellness of all populations. Finally, to Dr. James Mazza, thank you for your enthusiasm and support in this project. Each one of you is an inspiration to me, and I appreciate your mentorship more than you can imagine.

Second, I would like to thank the contributors of the Warren G. Magnuson and Hester McLaws Scholarships, which provided me the ability to conduct a research study the way I envisioned it, rather than sacrifice key components due to lack of funding. More importantly, I thank you for believing in the advancement of nursing science, for investing in future generations who have the opportunity to change the world, and for truly hearing me as I shared my vision and goals. Senator Magnuson was an incredible leader who continues to better the world even after he’s gone. I also thank the University of Washington School of Nursing for their continual financial support throughout my education.

Finally, I thank my incredible family and friends for their support and encouragement throughout this journey. Thank you for reminding me of your unwavering love and for believing in what I am working toward. I am fortunate to have such amazing heroes to emulate and will never stop trying to contribute as much to the world of science and academia as you have.

Table of Contents

Inequity in Healthcare Delivery: Barriers Faced by the Newly Released Inmate……………………………………………………………………………………..1

Copyright…………………………………………………………………………………….2

Abstract………………………………………………………………………………………3

Dedication……………………………………………………………………………………5

Acknowledgments……………………………………………………………………………6

Chapter I- Introduction………………………………………………………………………9

Chapter II- Health Research in a Jail: Methodological Challenges…………………………...12

Challenges with Participation……………………………………………………………17

Challenges with Data Collection………………………………………………………...25

Challenges with Dissemination…………………………………………………………..29

Conclusion…………………………………………………………………………….31

Chapter III- A Rocky Road to Care: A Case Example on Accessing Healthcare Upon Jail Release………………………………………………………………………………………...35

Figure 1: Care Map Illustrating the Barriers Faced by Participants as They Attempted to Access Healthcare following Jail Release….……………………………………………39

Pre-Arrest Barrier………………………………………………………………………..39

Time of Release Barriers to Care………………………………………………….…..41

Pre-Appointment Barriers to Care……………………………………………………43

Time of Appointment Barriers to Care ………………………………………………46

Follow-up Appointment Barriers to Care……………………………………………..47

Conclusion………………………………………………………………………………..47

Future Research…………………………………………………………………………50

Chapter IV- Barriers to Primary Care Access at Jail Release: A Mixed-Methods Study to Assess a Warm Handoff Intervention…………………………………………………………………52

Introduction………………………………………………………………………………54

Methods………………………………………………………………………………….63

Table 1: Participant Demographics…………………………………………………65

Results……………………………………………………………………………………68

Identified Barriers……………………………………………………………………...…71

Feasibility of Intervention………………………………………………………………76

Figure 1: Self-Initiated Primary Care Provider Visits…………………………….…81

Figure 2: Emergency Department Visits………………………………………….…82

Discussion………………………………………………………………………………82

Chapter V- Conclusion…………………………………………………………………..91

CHAPTER I

Introduction

A disparity in healthcare exists for individuals accessing primary care following incarceration. As some of the highest utilizers of emergency services, individuals who cycle in and out of jails and return to homelessness between stays represent an extremely high-needs and high-risk population. Often coming from underprivileged backgrounds and with a history of limited access to healthcare, the United States prison population is comprised of over two million individuals with complex medical needs when compared to the general public (Koester, Brenner, Goulette, Wojcik, & Grant, 2017). Issues of mental illness, chronic conditions, and infectious disease all appear to occur more frequently in the incarcerated population than the general public (Al-Rousan, Rubenstein, Sieleni, Deol, & Wallace, 2017; I. Binswanger, Krueger, & Steiner, 2009; Smith & Braithwaite, 2016). Upon release, previously incarcerated individuals use emergency services at rates much higher than the general public and interestingly, of those emergency department visits, less than 40% of patients required a hospital admission, suggesting it might have been possible to effectively address those needs in a lower-acuity setting (Koester et al., 2017). If even a small portion of prisoner-patients were treated by a primary care provider instead of in the hospital, the cost savings could be significant. Additionally, these individuals are at increased risk of death upon release, with a mortality rate of approximately 737 per 100,000, which is 3.61 times higher than non-institutionalized individuals (I. A. Binswanger, Blatchford, Mueller, & Stern, 2013). Furthermore, the median time from release to death is only 1.7 years, meaning interventions are most important in the time immediately following release (I. A. Binswanger et al., 2013). Whether due to the myriad of barriers that inhibit them from establishing new care with providers, or the poor perceptions of healthcare and adverse

experiences that have likely had a negative effect on this already marginalized group, recently released prisoners returning to homelessness constitute some of the highest emergency service utilizers in the nation.

A mixed-methods intervention study was conducted to identify common barriers that inhibit an individual from accessing care upon jail release and to implement a warm handoff intervention to improve utilization of primary care over emergency services. The aims of the study were to: 1) identify the common barriers that impede access after leaving jail; 2) understand the experiences and perceptions that lead a person away from choosing to access care; and 3) to assess the feasibility of a warm handoff intervention that may offer some success in overcoming those issues and increase primary care access over emergency services. Qualitative interviews were utilized to accomplish the first and second aims; and both qualitative results and quantitative claims data, collected from a local managed care organization (MCO), were used to measure the success of the warm handoff intervention in encouraging people to return to their primary care provider over the emergency room. The following chapters represent: 1) a paper addressing the methodological challenges faced by the researcher in design and implementation of a study conducted inside a jail and immediately following release; 2) a case example to demonstrate the typical pattern for a participant receiving the intervention and the barriers they faced in the process of establishing primary care; and 3) a results paper to outline the details of the study and pertinent findings. Together, these three papers illustrate the importance of research that seeks to promote the health and well-being of this marginalized population, as well as the potential for improving lives through small interventions that work to increase access to healthcare.

References

Al-Rousan, T., Rubenstein, L., Sieleni, B., Deol, H., & Wallace, R. B. (2017). Inside the nation's largest mental health institution: A prevalence study in a state prison system. *BMC Public Health, 17*(1), 342. doi:10.1186/s12889-017-4257-0.

Binswanger, I., Krueger, P., & Steiner, J. (2009). Prevalence of chronic medical conditions among jail and prison inmates in the USA compared with the general population. *Journal of Epidemiology & Community Health 63*, 912-919.

Binswanger, I. A., Blatchford, P. J., Mueller, S. R., & Stern, M. F. (2013). Mortality after prison release: Opioid overdose and other causes of death, risk factors, and time trends from 1999 to 2009. *Annals of Internal Medicine, 159*, 592-600. doi:10.7326/0003-4819-159-9-201311050-00005.

Koester, L., Brenner, J. M., Goulette, A., Wojcik, S. M., & Grant, W. (2017). Inmate health care provided in an emergency department. *Journal of Correctional Health Care, 23*(2), 157-161. doi:10.1177/1078345817699595.

Smith, S. A., & Braithwaite, R. L. (2016). Introduction to public health and incarceration: Social justice matters. *Public Health and Incarceration: Social Justice Matters, Volume 27*(2, Supplement). doi:10.1353/hpu.2016.0048.

CHAPTER II

Health Research in a Jail: Methodological Challenges

Kelsey Hirsch

University of Washington

Abstract

Background: Following the strict regulations for research with prisoners that arose in the mid-late 20th century, studies that focused on improving the health and wellbeing of incarcerated persons dwindled to nearly nothing. In more recent years, Institutional Review Boards have begun to strategize ways to conduct fair and ethical research in the jail/prison setting. As such, a new challenge arose: how to address the many methodological challenges that exist when conducting research in a correctional facility. **Methods:** An intervention study was conducted to assess the feasibility and success of an intervention to improve access to primary care upon release from jail. Throughout the process, many methodological challenges were noted and overcome, and later assessed for how they may have impacted the study. **Purpose:** The purpose of this paper is to discuss those findings and make a case for more research to be done in the correctional setting in order to better understand how methodological challenges can be overcome in the future. **Results:** Three main categories of methodological issues were identified: participation, data collection, and dissemination. Each category presents its own challenges, and methods for mitigating those effects are discussed. Despite the challenges of conducting research in this setting, researchers have the opportunity to improve the lives of some of the most marginalized members of society if they can learn to adjust to its unique requirements and design studies to overcome the barriers.

Health Research in a Jail: Methodological Challenges

Introduction

In a misguided attempt to avoid repeating the atrocities of the past, researchers and scientists have, in recent decades, unintentionally neglected one of the highest risk populations in our society: incarcerated persons. Following the overt maltreatment of prisoners prior to the 1970s, federal and international research regulations have shifted from being a means of protecting the vulnerable, to restricting research almost all together (Wakai, Shelton, Trestman, & Kesten, 2009). Vital regulations, such as the Nuremberg Code (1947), the Belmont Report (1974), and the creation of a National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research (1974) unfortunately made research with prisoners nearly impossible in the late 1970s (Wakai et al., 2009). Despite the high needs of the incarcerated population, and the advancement of interventions that target behavior change and mental health, few nurse researchers have made contributions to inmate healthcare (Ferszt & Hickey, 2013). Now that the pendulum has begun to swing back, more research studies are being conducted. Data has shown that incarcerated individuals have higher health needs than the general population in areas like mental illness, communicable diseases, substance misuse, and sexually transmitted illnesses, and it has become clear that research in this population is of the utmost necessity (Wakai et al., 2009).

Unfortunately, even when researchers decide to conduct a study with incarcerated individuals, they are likely to face several challenges. Researchers have begun to address some of the difficulties with conducting research in a jail or prison, and have offered some guidance to overcome the issues in order to improve public health research conducted in a correctional facility (Apa et al., 2012). Despite the support for completing research studies with incarcerated

individuals, however, most of the literature focusses on overcoming systems barriers, such as strategies for navigating the system, connecting with stakeholders, and understanding the environment to help create a successful study, rather than steps needed to complete a rigorous and valid study (Apa et al., 2012; Ferszt & Hickey, 2013; Wakai et al., 2009). While these best practices focused on strategies are helpful, there remains a large aspect not yet explored: the methodological challenges that exist, and how these may impact the validity, reliability, and generalizability of a study conducted in a correctional facility. Many of these challenges came to light during a mixed-methods study designed to understand barriers to accessing primary healthcare upon jail release.

Background

Low utilization of healthcare by the recently jailed and homeless population is an ongoing problem, particularly among those with mental and behavioral health needs, but it is unclear where the issues lie. Repeat offenders, and particularly those who return to homelessness upon release, have some of the highest health needs in society, but constitute a very small portion of utilizers of preventive and health promotion services (Pauly, 2008). Jail institutions offer a unique opportunity to address a higher volume of offenders than do prisons, and are better positioned to reach those who suffer from the "revolving door" between jail and the community (Winterbauer & Diduk, 2012).

Recently released inmates typically return to the community with very little to their name. They may not have health insurance or government benefits, making it extremely challenging to establish appropriate community-based physical and mental health services (Baillargeon, Hoge, & Penn, 2010). Challenges in obtaining care are often exacerbated by issues of substance abuse and homelessness (Baillargeon et al., 2010). Since the average length of stay

in jails in the United States is short, 25 days in 2016, many individuals are unable to establish ongoing care with a primary care provider or enroll in Medicaid prior to release (Zeng, 2018). Even if they do receive Medicaid coverage during their incarceration, issues related to homelessness, lack of transportation and phone availability, and mental health challenges, all act as barriers to an individual seeking healthcare following release. Both perceived and actual barriers to healthcare have been shown to impact an individual's choice to access care, and these issues are magnified among the homeless population, where inconsistencies in care and problems of interdisciplinary communication are prominent (Rae & Rees, 2015). Additionally, it is possible that simple lack of motivation to seek care inhibits this population from getting the care they need. Regardless of the cause, a clear disparity in accessing care exists for this population that often cycles from jail to the streets, and improvements in access to care could have substantial effects.

A study was conducted in a local jail to assess the feasibility and usefulness of an intervention called a "warm handoff," which entails transporting an individual from the jail directly to a pre-scheduled primary care provider appointment on the day of release. The use of a "warm handoff" offers a way to "hand deliver" a person to their first appointment at a primary healthcare clinic, thereby removing a major gap in the choice to access care, and the provision of encouragement (motivation) to take the initial steps. The purpose of this study was to better understand the barriers to accessing primary healthcare by individuals with repeat jail sentences who are returning to homelessness, and to assess the feasibility of a "warm handoff" to healthcare upon release from jail in establishing a primary care provider for ongoing health needs. In order to achieve this goal, a mixed-methods, exploratory study was attempted, in which participants were assigned to either a treatment group that had a provider appointment on the day

of release, or to a control group that was released as usual if it was not possible to schedule an appointment at release. Results of the study are reported elsewhere (Hirsch et al., 2019). Unfortunately, many challenges arose in the process which clearly impacted the study design and therefore the results as well.

The purpose of this paper is to describe the methodological challenges faced by one researcher during her dissertation work in nursing science. While some challenges may be common to all new researchers, many are unique to the jail setting and therefore constitute a disparity in research conducted within the criminal justice system compared to the general population.

Challenges with Participation

A common challenge faced by all researchers is achieving appropriate participation. Of course, sheer numbers are vital for making claims of significance, but it is also important that the research sample be representative of the whole population and that groups be shown to be relatively equal in other attributes that may impact the response to treatment (Council, 2001). There are three main challenges to ideal participation in a jail setting: bias in recruitment, potential coercion to participate, and a self-selection bias.

A key component of conducting research inside a correctional facility is assuring that staff members in the facility feel the study is being done in a safe and secure way. For this reason, many decisions during the research process are made to appease the staff and minimize the burden placed on them (Wakai et al., 2009). Recruitment in this setting is inherently different than in the general population, partially due to this need to minimize staffing burden. Recruitment methods need to be accomplished in a way that does not impact jail staffing, and

additionally minimizes prisoner movement from one location to another (Wakai et al., 2009). As such, common methods used outside of an incarceration setting, such as hanging posters, sending letters or emails or even individual recruitment methods such as through a healthcare provider or teacher, are difficult. Inside the jail, hanging a poster is unlikely to be successful since it may be construed by inmates as being an institution-run program. The inherent distrust imbedded in the correctional system may cause people to shy away from participating. There may also be a feeling that participation in any jail/prison-conducted study would be perceived by peers as colluding with authorities, a perception that may place an individual at safety risk. In one study, conducted inside the New York prison system, hanging fifty flyers to describe the study and recruit participants only yielded a single response that was not even to express interest (Apa et al., 2012). Additionally, it would be difficult to assure that participants meet the inclusion/exclusion requirements from a flyer, meaning many people would be given a special visit or altered schedule even though they are ultimately found to be ineligible. Disruptions such as this to inmate scheduling and movement may cause frustrations for jail staff and negatively impact relationships with the researcher. Following initial recruitment, if someone decides he/she does want to participate, the next question is how to sign up. If a potential participant needs to write his/her name on a list, confidentiality would be breached, since correspondence within the jail is likely to be reviewed by custody staff; if he/she is asked to send a letter to a corrections officer expressing interest, the researcher would need a way of assuring every potential participant has paper and a pencil readily available, which may not be approved by jail personnel and if it is, could not be guaranteed by the researcher. It would also be difficult to ask potential participants to show up at an information session or meeting since free movement is limited. This would also exclude groups of inmates who may be housed in a different area of the jail and

therefore not have access to the designated room. Additionally, prior research studies reported the difficulty in conducting group recruitment instead of individually, because "group think" may sway some individuals away from participating if one person expresses concern or negativity (Apa et al., 2012). Of course, there are ways to overcome these barriers to "anonymous recruitment," such as hanging a poster that instructs someone to contact a corrections officer for a recruitment paper indicating interest and then sending it back through them to the researcher. However, even with this form of recruitment, the likelihood of sampling bias remains, due to increased difficulty recruiting in high-security areas, cultural bias against participation and cooperation with the jail, inability to recruit anonymously, and individual differences based on sentence length and nature of conviction. All these threats to establishing a representative and unbiased sample work to challenge the methodological soundness of the study.

Targeted recruitment is also difficult in the jail, since access to email is limited, and letters need to be screened before delivery and may take a long time to arrive. The "inter-mail" system in many correctional facilities involves some form of sending a "kite" or one-sheet paper with the intended recipient, such as "healthcare", written on the front. The problem, from the perspective of inmates, is that this system is very slow, and people report often not getting a response (Hirsch, 2016). If people express interest in a study, then they would have a large responsibility for using free time to access a pencil, fill out the paper, and put it into the presumably slow delivery system. It means there is no way for a participant to know if their message has been received other than eventually hearing that a meeting with the researcher has been scheduled. Additionally, this method relies on an adequate reading level and English proficiency. Targeted recruitment also requires that the researcher be exposed to private

information about potential participants in order to know who should receive letters, such as specific diagnoses, housing status, convictions, or other inclusion criteria. Although this lack of privacy is likely an issue with the use of targeted recruitment in the general population as well, exposure in the correctional setting could put potential participants at risk of being identified and even “outed” to other inmates before agreeing to join the study. Additionally, obtaining such information about the population would require added work for one or more of the jail employees to either assist in providing access to a database for the researcher, or helping to identify potential participants.

Interestingly, the protection of private information presented an additional methodological challenge to the researcher in this study. One of the barriers to conducting a research study inside a correctional facility, as discussed in the introduction, is appropriately developing relationships with stakeholders. The flip side to this, however, is establishing a potentially overly-strong relationship with stakeholders, in which it may be easy to blur the line between collaborator and friend. For the researcher in this study, it was relatively easy to gain support from stakeholders in the community, and thankfully, the Jail Lieutenant was extremely invested in the “success” of the study. They offered a great deal of support and went out of their way to assure the researcher was able to implement the intervention whenever possible. One challenge faced by the researcher, however, was the disparate understanding and appreciation of privacy that exists inside a jail and out in the community. The Lieutenant was accustomed to a culture of limited privacy inside the jail and felt that occasionally breaching confidentiality was necessary for keeping someone safe and preventing future harm. This willingness to share certainly did not come from a place of malice, but rather from a desire to help and a culture of openness that is very different than the more stringent regulations that guide research in the

general population. Nonetheless, it brought up further questions regarding the underlying methodology for the researcher. While it is important to embrace and understand the culture of the population in which research is being conducted, one must constantly return to the fidelity of the study and assure that no vital components of rigorous, valid, research are compromised in the process.

Individual recruitment inside a jail is likely the most challenging form of enrollment. The only options for private recruitment include either the researcher requesting meetings with specific individuals, which would require significant staffing changes and space, or that recruitment duties be assigned to an employee of the jail, such as a healthcare provider or corrections officer. If the researcher requests to meet with individuals one-on-one for recruitment purposes, the meeting would either need to occur during visiting hours, and the researcher would need to go through the proper channels to be allowed to skype or phone chat with each person, or it would occur in a secure part of the jail and would require a corrections officer to transport each individual and stand by during meetings (Wakai et al., 2009). The use of "call-outs" for participants presents its own set of challenges, as well. It depends on a participant's willingness to leave, spur of the moment, whatever they are doing, it assumes that participants are appropriately notified of their meeting, and it requires that the participant still be willing to participate without the researcher being available to answer questions or alleviate concerns (Apa et al., 2012). Either way, the processing alone is insurmountable. Alternatively, if a corrections officer or staff member at the jail was responsible for alerting potential participants to the study, it would be impossible to avoid the possibility of coercion since there is an inherent power dynamic between incarcerated persons and the staff who work at the place of their confinement. As the superior, a jail employee must deeply question the nature of consent from an inmate, since

it comes from a place of subordination and may be perceived as carrying a threat of penalty for refusal. Regardless of state of mind, willingness, or even excitement, being asked to participate in anything by a superior is potentially unethical regardless of the intent. Additionally, according to Federal Regulation Code 46.306(a) Subpart C, little or no financial compensation should be offered to inmates in research studies (Wakai et al., 2009). This can cause significant challenges for recruitment since there are likely no tangible incentives to participate. Therefore, it is vital in research settings like this that the investigator remain separate from the correctional staff, so that participants can truly participate or leave of their own free will without fear of reprisal.

An additional issue with participation in this setting, and given the chosen form of recruitment, is the problem of a self-selection bias. If participants self-select to join a study, they are likely to be among the highest achieving members of the jail. For instance, they may be individuals who are attempting to maintain a clean record and appear cooperative and engaged in preparation for a sentence hearing. Alternatively, they may be people who are truly hoping to improve their circumstances and turn their life around. Regardless, self-selecting participants are likely to be the most self-starting, competent, and reliable individuals in the jail. For a study like this, which ultimately relies on self-sufficiency and empowerment for the intervention to be successful, it is important to ensure that participants arrive from all walks of life and with varying levels of independence.

In this study, recruitment efforts started with a list of participants involved in a program offered by the County Health Department, which matched inclusion criteria for the new study. This was followed by requesting that the Lieutenant at the jail select people they felt would be safe to meet with one-on-one, based on their level of security and history of non-violent interactions. A corrections officer, or the Lieutenant, then approached everyone’s cell to ask if

they were interested in participating in the study. This was certainly not the ideal form of recruitment, but it represents a good example of one of the challenges in conducting research within a jail setting. The researcher originally requested that a letter be delivered to every person who matched the inclusion criteria, but the stakeholders felt that this may be more dangerous for the researcher and preferred to maintain more control over participation for safety reasons. Ultimately, decisions about recruitment strategies must fit within the environment and be conducted in a way that is deemed safe, efficient and effective by the institution employees. Throughout this process of balancing the needs of the study with the desires of the institution, all procedures for this study were approved by the Institutional Review Board at the University of Washington.

Several methodological challenges can be seen in this form of recruitment. For one, there is certainly bias present, since the ultimate decision about who to seek out was made by an employee in the jail who has personal knowledge of each potential participant. It cannot be known if the Lieutenant or jail officer was only reaching out to the people they thought would benefit most from the study, or to those who would be most likely to agree, or even to those with whom they had the strongest personal connection. Additionally, there is a strong potential for coercion in this form of recruitment since it came from a person of power, or alternatively may have caused more individuals to refuse participation due to a desire to not form allegiances with jail employees. Of course, the lieutenant and officers felt they needed to be the ones to approach potential participants simply to keep the researcher safe, but it was difficult to assure that potential participants did not feel any pressure.

In an effort to overcome this possible misconception from participants, the researcher was careful to review the consent form and specifically point out that participants were free to

leave at any time, that it would not be shared with jail staff whether or not they chose to participate, and that it would not be reflected in any jail documentation that they did or did not take part in a study. Additionally, the researcher had multiple discussions with the Lieutenant and other officers about how to approach individuals and how to reassure potential participants that the corrections officers had no stake in the study.

The use of incentive was impossible to avoid in this study since transportation was a key component of the intervention. The researcher intended to offer alternative transportation to the participants who were not given a provider appointment; however, it quickly became clear that this was not necessary since the jail already provided individuals with a ride to the train station or a bus ticket to their desired location at release. As such, there was no avoiding the perceived incentive. It could be argued, however, that transportation was not a strong incentive since people would likely be granted some form of transportation at release regardless of their participation. Moreover, incentives within the jail are extremely difficult to avoid, since any change in the status quo is likely an improvement and therefore desirable. For instance, visitation in general is limited within a jail setting, so having an engaged researcher available to talk for a significant amount of time was an incentive in itself. It meant that participants were granted time out of their cell, they got to meet someone new, they got to talk and share frustrations, and then they were potentially provided a free ride to their home county for a healthcare appointment. All those components of the project may be construed as a benefit of participation and therefore, an unintended incentive.

Overall, the clear challenge with participation in research in a jail is that the power dynamics in this setting are so strong, and the desire for any incentive so great, that it is challenging to assure that individuals participate freely and in a fair and ethical manner

(Kaimowitz v. Department of Mental Health for the State of Michigan, 1973). Research studies may appear, although unintentionally, to be the only source of hope for improving health and wellness in this setting. The inmates likely do not have a clear understanding of the alternatives to participation and are therefore willing to agree to any opportunity to go against the status quo.

Challenges with Data Collection

After overcoming the challenges with participation, the next issues in terms of methodology occurred during the data collection phase. Problems with randomization, privacy, trustworthiness, and individual variability in answers threaten the validity and rigor of a study inside the jail. The first issue, randomization, impacts the researcher's ability to make claims of significance or even identify trends in data. For this to happen, it is vital to have a comparison group in which the only clear difference between groups is whether they received the treatment. Without appropriate randomization, other causes for group differences cannot be ruled out. In this study, for example, efforts were not made to balance groups on variables such as race, age, mental health, housing status, and chronic health conditions. Because initial group assignment was based on release date and time, along with provider availability, it was impossible to ensure that groups had similar baseline demographics.

Intervention implementation in this study relied on the ability of the researcher to schedule a provider's appointment for the participant on the day of his or her release, and with a healthcare provider in the desired county. This meant that strict randomization was not feasible. Disruptions to group assignment included: issues of minimal time between the initial interview and a participant's release date, release dates falling on a weekend or holiday, last minute changes in release plans and transportation, and limited availability of a provider currently enrolling new patients in the desired geographical area. Some of these issues are not unique to

the jail setting, such as the availability of a provider, but they certainly have much greater impacts on the jail population when considering the challenges of transportation, telephone access, remembering appointments that are scheduled months in the future, and struggles with substance abuse and mental illness. For these reasons, if an appointment on the day of release was not possible, the participant was usually placed in the control group. Of note, the intention was not for members of the control group to be scheduled an appointment, but rather to be released as planned and given a flyer with some options of where to seek care. Therefore, if an appointment could not be scheduled in the ideal location at the ideal time, the participant was released as planned and only follow-up data from the insurance company will be gathered. The likelihood of intervention success was assumed to decrease with every added day after release. Fortunately, this process did maintain some degree of randomness, since the factors that influenced group placement were still out of the researcher's control, and there is no reason to assume that one group had more commonalities than the other. Nonetheless, it is difficult to truly compare the two groups since they were not equal in size and there could be other differences between the groups beyond the treatment received.

In addition to challenges with randomization, another threat to sound methodology in a jail setting is the inherent lack of privacy. The assurance of privacy to a participant answering sensitive interview questions is essential to the validity of the study. Unfortunately, the assumption of privacy is not plausible in a correctional setting. Depending on the facility and security clearance of the researcher, the leaders in a jail may not feel comfortable with offering complete privacy during interviews, except in extreme circumstances. Decisions about the level of privacy may also depend on other factors, such as any history of violence by the participant, the number of corrections officers on duty, and the comfort level of officers in working with the

researcher. In this study, it was common for the officers to leave the interview room door propped slightly open, so that they could return to their desk and simply be available should the researcher need any help. Additionally, all rooms of the jail are under video surveillance, meaning jail staff certainly knew who had agreed to participate even if they could not hear the responses.

Although this method allowed for a semi-private interview, it is possible that the lack of completely private interviews influenced the responses by participants. Given the nature of the interview questions, surrounding topics of healthcare distrust and maltreatment, it is possible that participants did not feel comfortable being completely honest. Nonetheless, from the researcher's personal experience, it appeared that participants were very forthcoming with their opinions and did not hesitate to share stories about maltreatment or poor care both inside and out of the jail. This experience was also described by Apa et.al., while conducting a study inside a jail, stating that "inmates appeared very open and willing to provide information" (Apa et al., 2012). This may be related to the culture of a jail, which typically involves a social contract between the institution and the inmate population that privacy is no longer a human right. Similar to other studies inside a correctional facility, it appeared to the researcher in this study that privacy was not an expectation by any participant. Nonetheless, from a strictly methodological standpoint, this issue of privacy must be considered simply for the validity and veracity of participant responses.

The final issue with methodology during data collection, and is a key component of qualitative research, was establishing trustworthiness through credibility, transferability, and confirmability (Lincoln & Guba, 1986). There were several issues with measuring trustworthiness in this study. One challenge was the inability to return to the data and member

check the thematic codes with participants to assure they matched the intended feelings of interviewees (Ferszt & Hickey, 2013). Because of the difficulty with follow-up and continued contact with this nomadic population, the researcher did not plan for any follow-up interviews after coding of the data was complete. This is an important method in qualitative research, since it is used to assure that the researcher correctly identified what the participants were attempting to articulate. Additionally, because the researcher was working alone, there was not originally a means of establishing inter-rater reliability, which would have contributed to the transferability and confirmability of results (Sun, Crooks, Kemnitz, & Westergaard, 2018). To overcome this threat to reliability, the researcher had a second researcher review transcripts to verify established codes. Additionally, the original recordings were verified with the transcripts to assure accuracy. Recorded journal entries were also used for the researcher's reflection following most of the interviews and intervention implementation.

Along with struggles on the side of the researcher, there also exists a threat to trustworthiness on the side of the participant: the struggle to rule out manipulation or false information during interviews. As with any study that relies on self-report, there is a risk of under- or over-reporting due to inaccurate interview responses, whether it be purposeful or due to misinterpretation of questions (Apa et al., 2012). Given the inherent distrust of systems, the high rates of mental illness and substance misuse, and the desire for control in this setting, it is possible that the answers provided by participants to the researcher's questions were either misremembered, distorted due to a variety of psychopathological conditions, altered due to distrust, or given simply to provide a "shock" to the researcher. Some stories that were shared with the researcher sounded quite far-fetched, and of course could not be corroborated by facts. It is possible that these tales were shared to impress the researcher, to anger or shock her, or even

to relate to her concerns. Regardless of veracity however, these stories represent the individual's true perceptions of healthcare. They may not be true, but they do provide insight into how this person remembers their past experiences with medicine, and certainly influence any future interactions with healthcare and the healthcare team members they will encounter.

Challenges with Dissemination

The generalizability, dissemination and replication of results presents yet another methodological barrier to overcome with research in a jail setting. The first, obvious struggle is that low level of participation means the results are not generalizable. Even beyond that, though, researchers must question the fidelity and fit of the intervention before trying to adapt it for other settings. In translating the results of this study to another jail setting, one needs to assure that any adaptation does not violate the integrity of the intervention (Bernal & Adames, 2017). Research by Bernal and Adames (2017) demonstrates that this can be done properly, so long as the theory of change and underlying philosophical assumptions remain intact. Hypothetically speaking, it would be possible, then, to alter the order of events or mechanisms of action in offering the intervention; however, core concepts need to be consistent. It must be considered, however, that even maintaining the same underlying philosophical assumptions, such as the meaning of health and self-determination for care, may vary from institution to institution, making it difficult to maintain the fidelity of the intervention (Bernal & Adames, 2017). Therefore, the results may not be generalizable regardless of the number of participants, due to the variability in institutions' culture and procedures around the country. Not only did this particular jail have a unique environment and different workflow structure than many other places, but its staff also clearly embraced the assumptions that directed the intervention in the first place: a clear concept of health, self-directed care, and the human capacity for change. One reason this setting may be

different than other jails is that it is privately run, with no state-wide standardization as there would be with a Department of Corrections facility. Additionally, this jail is fairly new, only built within the last decade, meaning it likely has different challenges than those that have existed for longer.

This jail also created procedures to address special circumstances for participants, meaning the researcher relied on the jail stakeholders for much more support than would likely be possible at other facilities. Control at this institution was quite centralized, meaning the Lieutenant at the jail had a great deal of authority over the employees and responsibility for the day-to-day workflow. This allowed them to provide oversight and step in when necessary, but this may not be the case at other facilities. During this study, the lieutenant was readily available by phone or email for the researcher to contact. They were able to alter release schedules to assure that participants were released early enough in the day to make it to their appointments. They also communicated changes to the researcher in real time and helped her to contact parole officers for scheduling coordination. Additionally, the Lieutenant was able to train and grant security clearance to the researcher within a week of the study start date, which is likely to take much more time and effort at other facilities.

In this study, each participant was treated individually, meaning if any challenges arose, such as inadequate Medicaid coverage, a change in release time/date, special desires with pick up or drop-off around the provider appointment, etc., the researcher was able to work with the jail staff to make accommodations. This is not only a threat to the reliability of the study; it also means that the results are less generalizable to other facilities. In order to translate the intervention to other settings, this study would need to provide strong support for the validity of the intervention, assure methods that allow for replication of the intervention, and demonstrate

success across a more diverse population. Ideally, this study would have used an alternative method for establishing internal validity, such as a regression discontinuity design or a matched group design, but a combination of low participation and limited time frame or follow-up made these methods unlikely to succeed (Bernal & Adames, 2017). This threat to validity and the challenge of adapting this intervention to fit at other institutions limits the generalizability of findings. This is not to say the venture was completely fruitless, but it does limit the possibilities for future use.

Conclusion

As with any study conducted inside a jail, this project was littered with methodological challenges and threats to the reliability, validity, and generalizability. Nonetheless, the success of this study, to understand the feasibility of an intervention that improves access to healthcare, relied on those accommodations made and acceptance of the less-desirable modifications. Additionally, some of the threats discussed in this paper are, in reality, not major concerns for the jail setting.

Inside correctional facilities, assurances of privacy and confidentiality, randomization, and veracity with data are simply not often feasible, nor are they truly expected. There are some unwritten rules inside these institutions, such as the limited privacy. Once people are sentenced to a jail term, they seem to accept that privacy will no longer exist for them, at least while incarcerated. Along with this comes an understanding of disclosure. People, for the most part, seem to be very open and honest about experiences in this setting, perhaps from an expectation that they no longer have the right to keep secrets.

The truth is that conducting a rigorous study in a correctional facility is likely to always require methodological compromises. If we are unwilling, as researchers, to embrace the environment in which our study takes place, we likely will never make any progress in settings like this. On the other hand, if we can appreciate the unique microcosm that is a jail or prison and learn to appreciate the many challenges that come with conducting research in these areas, we have the potential to make life-altering discoveries and to improve the lives of those in and newly outside of the walls.

References

Apa, Z. L., Bai, R., Mukherejee, D. V., Herzig, C. T., Koenigsmann, C., Lowy, F. D., & Larson, E. L. (2012). Challenges and strategies for research in prisons. *Public Health Nursing, 29*(5), 467-472. doi:10.1111/j.1525-1446.2012.01027.x

Baillargeon, J., Hoge, S. K., & Penn, J. V. (2010). Addressing the challenge of community reentry among released inmates with serious mental illness. *American Journal of Community Psychology, 46*(3-4), 361-375. doi:10.1007/s10464-010-9345-6

Bernal, G., & Adames, C. (2017). Cultural adaptations: Conceptual, ethical, contextual, and methodological issues for working with ethnocultural and majority-world populations. *Prevention Science, 18*(6), 681-688. Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/28573426. doi:10.1007/s11121-017-0806-0

Council, N. R. (2001). Methodological issues in research on educational interventions. *Educating Children with Autism*. doi:https://doi.org/10.17226/10017.

Ferszt, G. G., PhD, RN, PMHCNS-BC, & Hickey, J., MS, RN, PMHCNS-BC. (2013). Nurse researchers in corrections: A qualitative study. *Journal of Forensic Nursing, 9*(October-December), 200-206.

Hirsch, K. (2016). *Chronic disease self-management program inside a prison*. Unpublished manuscript. University of Washington.

Kaimowitz v. Department Of Mental Health For The State Of Michigan, 1973. 47 Mental Disability Law Reporter 147 (Michigan Circuit Court Sept. & oct., 1976) (Hein Online, Dist. file).

Lincoln, Y. S., & Guba, E. G. (1986). But is it rigorous? Trustworthiness and authenticity in naturalistic evaluation. *New Directions for Program Evaluation*, 73-84. doi:doi: 10.1002/ev.1427

Pauly, B. (2008). Shifting moral values to enhance access to health care: Harm reduction as a context for ethical nursing practice. *International Journal of Drug Policy, 19*, 195-204.

Rae, B., & Rees, S. (2015). The perceptions of homeless people regarding their healthcare needs and experiences of receiving health care. *Journal of Advanced Nursing, 71*(9), 2096-2107.

Sun, S., Crooks, N., Kemnitz, R., & Westergaard, R. P. (2018). Re-entry experiences of Black men living with HIV/AIDS after release from prison: Intersectionality and implications for care. *Social Science & Medicine, 211*, 78-86. doi:https://doi.org/10.1016/j.socscimed.2018.06.003

Wakai, S., Ph.D., Shelton, D., Ph.D., R.N., B.C.-N.E., Trestman, R. L. P. D., M.D., & Kesten, K., M.S. (2009). Conducting research in corrections: Challenges and solutions. *Behavioral Sciences and the Law, 27*, 743-752. doi:DOI: 10.1002/bsl.894

Winterbauer, N., & Diduk, R. (2012). The ten essential public health services model as a framework for correctional health care. *Journal of Correctional Health Care, 19*(1), 43-53.

Zeng, Z. (2018). *Jail Inmates in 2016*. www.bjs.gov

CHAPTER III

A Rocky Road to Care: A Case Example on Accessing Healthcare Upon Jail Release

Kelsey Hirsch

University of Washington

Abstract

Background: A study was conducted at a local jail to assess the feasibility of an intervention intended to improve access to primary care providers upon release. The intervention, a "warm handoff", involved the researcher pre-scheduling provider appointments for participants, then transporting them via a taxi cab voucher to their appointment on the day of release. Throughout the process, several barriers were identified, and the researcher discovered that the healthcare system may not be well-poised for the implementation of an intervention promoting ready access to primary care at jail release. **Purpose:** This case example is derived from the original study but follows the path of only one participant on their journey to access healthcare following jail release. **Methods:** The participant was offered a ride to a pre-scheduled primary care provider appointment on the day of his release. Prior to his appointment, the researcher worked to ensure proper Medicaid coverage and provider availability, then attempted to overcome the barriers of transportation cost and motivation. **Results:** This paper illustrates two important findings from the larger study: the fact that there are very motivated and determined individuals in the jail setting who would desperately like to receive appropriate healthcare, and that a myriad of barriers exist for this population when it comes to establishing new care. **Conclusion:** A gap exists both in utilization of healthcare and access to it for individuals who are recently released from jail. A call to action is warranted for society to begin investing in the high healthcare needs of this extremely marginalized population.

A Rocky Road to Care: A Case Example on Accessing Healthcare Upon Jail Release

Introduction

A study was conducted at a local jail to assess the feasibility of an intervention intended to improve access to primary care providers upon release. The intervention, a "warm handoff", involved the researcher pre-scheduling provider appointments for participants, then transporting them via a taxi cab voucher to their appointment on the day of release. (The researcher drove her own vehicle and met the participant at the appointment.) Throughout the process, several barriers were identified, and the researcher discovered that the healthcare system may not be well-poised for the implementation of an intervention providing ready access to primary care. This paper represents a case example drawn from the larger project and demonstrates a care map for the process of accessing healthcare immediately upon release from incarceration. (See Figure 1.) The example follows the experience of one participant and endeavors to identify barriers faced throughout the process. In order to maintain privacy, the participant will be referred to in this paper by the pseudonym "Sawyer." This participant was chosen because they faced barriers that were common to most other participants but also brought to light some unique challenges that were not previously thought of by the researcher. Sawyer had a strong desire to establish primary care at release in order to continue the administration of Vivitrol injections started in jail to treat a heroin addiction. The case example is used to illustrate two important findings from the larger study involving healthcare access at jail release. The first is that, like Sawyer, there are many individuals who have found themselves caught up in the system, and who have a true desire to seek and access appropriate primary care. They may not have the resources to access care easily, such as familiarity with navigating the system and the luxury of waiting for future appointments, but they do have two vital characteristics that many in the general population are lacking: an

appreciation for the importance of seeing a provider, and the determination to get there. If we can provide these individuals with the necessary tools, access to quality care could make a significant difference in their lives. The second finding is that, despite the motivation demonstrated by participants like Sawyer, there are innumerable challenges within the healthcare and criminal justice systems that inhibit the people with the greatest needs from reaching necessary care. Sawyer represents a composite of the many people who are suffering between homelessness and custody, who desperately want to change their lives but cannot seem to find the means.

The Care Map shown was derived from the researcher's experience throughout the entire study and represents the common findings from all participants. The map is divided into three main categories: pre-arrest status, pre-appointment barriers, and barriers at appointment time. The goal of the care map is to clearly delineate the barriers derived from the current study to an individual accessing healthcare at jail release in order to provide guidance for future studies and interventions It identifies factors such as Medicaid enrollment, socioeconomic status, mental health, effects of homelessness, and issues with navigating the system, to depict the many road blocks faced by this high-risk population. The care map illustrates Sawyer's journey, and the remainder of this paper will be presented in the same fashion: pre-arrest status, pre-appointment barriers, and time of appointment barriers. Additionally, some of the challenges to obtaining follow-up care, based on the barriers at initial appointment, are identified. It is vital that future studies recognize the multi-factorial barriers present for these individuals, and work to overcome them one step at a time.

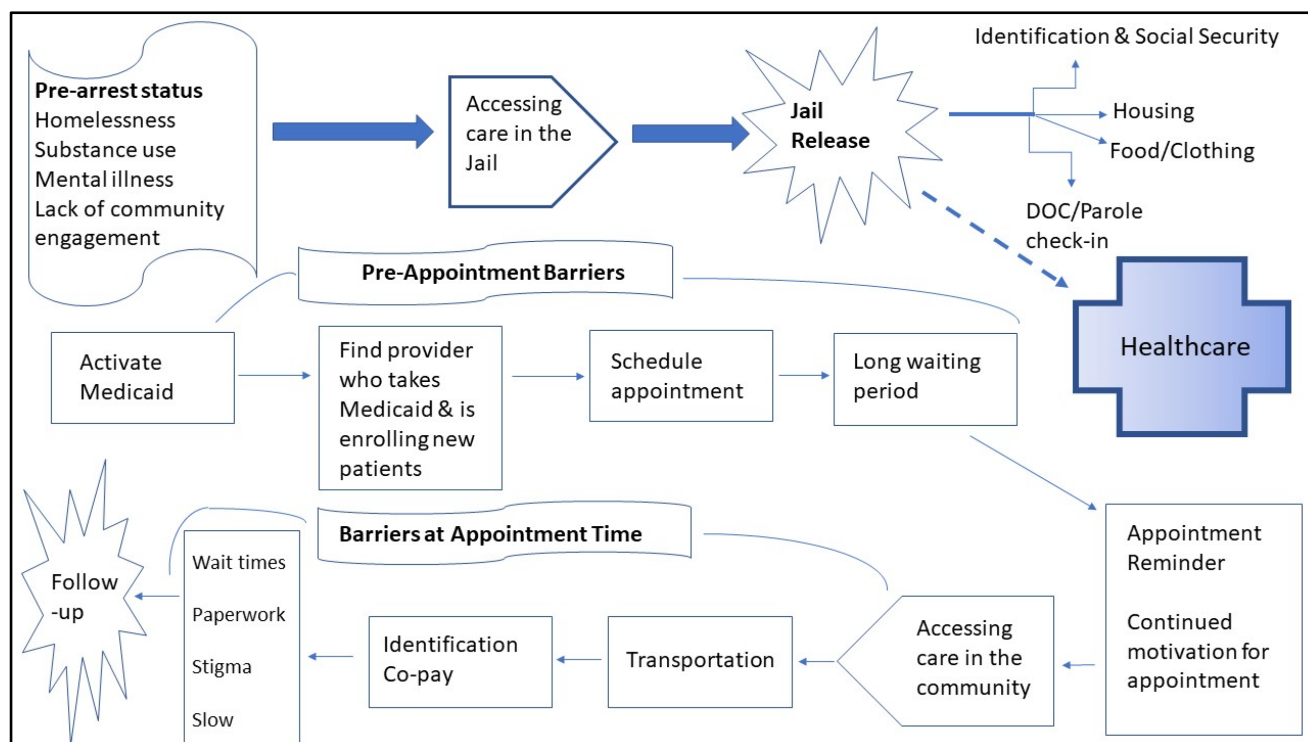

Figure 1: Care Map illustrating the barriers faced by participants as they attempted to access healthcare following release from jail.

Pre-Arrest Barriers to Care

Like many participants in the larger study, Sawyer continues to cycle in and out of jail, often related to substance use or misdemeanor crimes. When he is not in jail, he lives primarily in an encampment for homeless individuals with his husband who suffers from mental and physical impairments following a stroke. Sawyer stated that his primary job is to care for his husband, who also struggles with substance misuse and has significant health challenges. Sawyer's prior history with healthcare is limited, and he said that the care he has received has been "negligent" and "dismissive", stating that he once waited for three hours to be seen in the Emergency Department before finally deciding to leave. He described his experience in the Emergency Department as "being treated almost as a second-class citizen," and "embarrassing". From his perspective, Sawyer was "targeted" as being homeless because of the way he dressed

and the pack he carried. He stated that providers spoke poorly of him, stating he “smells and is dirty.” As such, he has an inherent distrust of the healthcare system and is uncertain about the ability of healthcare providers to improve his life. Sawyer stated that he “would rather go through the pain and self-medication than go somewhere [to see a provider].” He is not alone. Despite his previous disappointment with the healthcare system, however, Sawyer recognized that he needs to establish care quickly if he hopes to overcome his heroin addiction and improve his current life situation. He pointed out in his research interview that he could have strong family support if he was able to manage his addiction, and that his main reason for being homeless right now is that he chose “the high life” over family. Access to primary care means the potential for medication assisted treatment (MAT) to quit heroin. This may be the only hope for Sawyer, as he has tried many other methods to manage his addiction. Even with his distrust in the system, he showed hope that this study may represent an opportunity for an improved relationship.

Sawyer is a prime example of the many people who suffer from consequences of their environment and respond by pushing their healthcare needs to the back burner. It is unrealistic to think that someone would prioritize a physical check-up or vaccination appointment, for example, over their hope to find shelter, earn some money or obtain food that day. If basic physiologic needs are not being met, it is unlikely that individuals will have the luxury of spending time or energy focusing on less immediate and less emergent concerns. (See Figure 1: issues after jail release.) Sawyer explained his primary reason for not seeking healthcare is “the priorities that come to [him] being homeless…. Taking care of [his] homestead as opposed to going out taking care of [his] health.” Pair that rationale with his history of poor experiences and strong distrust of the healthcare system, and it becomes clear that even prior to this arrest, he had

extensive personal barriers to overcome in obtaining appropriate primary healthcare outside of the hospital.

Time of Release Barriers to Care

Upon release, Sawyer is returning to homelessness with few possessions or resources. He is unsure of where his husband may be living now, and states that the only way he may be able to find him is by walking the streets and “asking around.” Like many other homeless individuals, Sawyer feels that his priorities at release are mainly focused on meeting the basic needs of shelter and food. He stated that the greatest barrier to healthcare access for him is the inability to prioritize it above the other necessities he faces in the “daily grind.” (See Figure 1: issues after jail release.) When he leaves the jail, he will essentially be escorted out the door with no direction to go to have his basic needs met.

For many individuals released from the jail, the only certain task to accomplish is a requirement to check in with their parole officer at the Washington State Department of Corrections (DOC) office. This is necessary for any person still under DOC supervision and must be accomplished within 24 hours of release. At the jail where this study took place, transportation was available for individuals who needed to check in with a parole officer, although it did not always guarantee them a ride to the correct county. The DOC vans transport groups of people to specific office locations, and from there individuals are expected to find their own transportation to the office they are assigned to. For many people in the study, this was the first and only step they knew to take at release. Beyond that, their tasks typically involved, as with Sawyer, a need to find housing, clothes, and food. Sawyer described this experience when he stated the following:

> You know there's the five dollars in my pocket and I have to choose between food, water or laundry with this five dollars. It's difficult because then you have the role of addiction and then you have the requirements of DOC. And on five dollars you are supposed to go from Federal Way to Tacoma [a distance of approximately 20 miles], but you're starving [and] don't have clean clothes… so healthcare almost comes at the bottom of the list.

Sawyer was a unique case in this study, in the sense that he showed remarkable initiative to establish care with a provider and was exceptionally self-sufficient at the time of release. He, like many others, was required to check in with his parole officer, so he opted to take the ride that was offered by the DOC and then make his way to the appropriate county. It was established with the researcher prior to his release that the area he would be taken to was not the county where he primarily resided and so he wanted a provider in his home county. The researcher offered to arrange to have a cab pick him up at the DOC office and transport him to his appointment later in the day. The morning of his release, however, Sawyer called the researcher to say that he had already checked in with DOC, and then had paid his own way in a cab to get to the town where his appointment was. He asked for the address and stated that he would walk there himself. Sawyer's efforts exceed those of all other participants in the study, and they represent a clear example of an individual's motivation when it comes to finding primary care. The barriers that must be overcame - the initiative it takes to schedule, the need to prioritize health, and the cost of transportation - represent some of the challenges that would typically be faced by any person at the time of release. For Sawyer, however, these barriers were mitigated by the researcher's support and his own determination. He saw the potential good that could come from making it to this appointment but felt incapable of doing so on his own. He couldn't

be sure that all his problems would be solved with one provider appointment, but at a time of such desperation to do anything different in his life, Sawyer was eager to take the opportunity to challenge his status quo.

Pre-Appointment Barriers to Care

Although Sawyer's experience represents a seemingly easy process, in which he did everything right to see a provider, it must be noted that some of the common barriers to accessing care were already overcome with help from the researcher as part of the study. (See Figure 1: pre-appointment barriers.) As was the case with all participants in this study, the researcher met with Sawyer approximately 1-2 weeks prior to his release date for an interview and to gather the necessary information for scheduling his appointment. In order to schedule any provider appointment, the researcher needed a name and date of birth from the participant. This was the bare minimum, however, and only worked for one specific healthcare facility. Other locations either needed more time to schedule the appointment or required an additional piece of identifying information. One facility requested either an address or social security number, which the researcher did not feel comfortable asking for, and did not have permission to share. Thankfully for Sawyer, the researcher was able to get an appointment at one facility that could accommodate participants with limited notice and only a name and birth date.

The next barrier for the researcher was to assure that Medicaid was active and that the designated managed care organization was still providing coverage for the participant. To do this, the researcher used a contact at the insurance company to perform a search and assure that the participant was currently covered. If he was not, the insurance employee would then ask a coworker to make a visit to the jail and get the participant enrolled in the managed care organization. Occasionally this worked, while other times the employees were unable to make

the accommodation. For Sawyer, after the insurance employee assured that his Medicaid was active, his appointment was able to go forward. Of note, Sawyer did face one more barrier with his insurance that was common among all participants. The problem occurs when individuals are arrested with a sentence longer than thirty days, causing Medicaid coverage is inactivated, and their insurance to be "paused" until release. The assumption is that the incarcerated individual will get their outpatient health needs met by the institution, so Medicaid is not necessary. Unfortunately, it is estimated that somewhere between 14 and 46% of incarcerated men who report a medical need do not actually use health services while incarcerated, meaning it is vital that they find care upon release (Nowotny, 2017).The reactivation process, however, can take two to three days after release to complete, meaning that many individuals exit the jail with no true health insurance coverage. When Sawyer checked in for his appointment, he was told that his Medicaid member ID for the specific Managed Care Organization (MCO) was expired, but that his ProviderOne card, which is a services card that shows a person is eligible for Apple Health (state Medicaid), was active, so they would attempt to use that for billing.

The issue with Medicaid activation constituted a particularly challenging scenario for the researcher to navigate. Upon contacting the Health Care Authority, the researcher was told that it does typically take one to two days for reactivation, but they stated that the coverage would be retroactively put in place to cover the provider bill. Of course, this could be a much larger issue if there is any trouble getting the insurance active in time to pay a bill, but even if it does eventually get established, it may cause significant emotional distress to the participant if they are required to argue for coverage or they receive a bill that appears to show a balance due. This population has historically not had a good relationship with healthcare, and they likely do not know the ins and outs of the "system" or who to call for inquiries. Receiving a bill, even if it will

eventually be covered, could be devastating and negatively affect their future interactions with the healthcare system.

Transportation arrangements also presented challenges for many participants. Thankfully, Sawyer was self-sufficient and able to transport himself to the necessary county, but this was not always the case. Prior to study initiation, the researcher thought that transportation would be an ideal incentive and used with ease by all participants. Unfortunately, requirements by the DOC meant that offering participants a ride to their provider appointment immediately upon release was not always desired. Many participants, like Sawyer, wanted to check in with their parole officer immediately at release, which meant that they did not want a ride from the jail. Instead, these individuals opted to take the DOC transportation to one of a few offices and then make their way to their designated office. For Sawyer, this meant taking transportation to a location that is approximately forty minutes from the jail, then going back to a nearby county for his healthcare provider appointment. The researcher agreed to have a cab pick him up from the DOC office and drive him to his appointment, but he opted to get there independently. This was quite different than other participants who decided to check in with DOC first. The researcher's experience was that, if participants would not agree to be picked up from the jail immediately, they likely would not make it to their medical provider appointments. This could be due to participants getting distracted by other tasks after the DOC check in, or saying that they would be at home waiting for a ride and then not actually be present, or even just taking longer than expected at the DOC office. Whatever the reason, it was clear to the researcher that the best time to intervene was immediately following release rather than later in the day.

Time of Appointment Barriers to Care

Despite overcoming the barriers of scheduling, Medicaid inactivation, lack of motivation, and transportation issues, Sawyer still faced a significant challenge when he arrived for his appointment. (See Figure 1: barriers at time of appointment.) When Sawyer was first arrested, he did not have any belongings with him, but assumed that everything would be back at his homeless encampment for him to collect. Unfortunately, when he returned to the place he had been sleeping prior to arrest, he discovered that everything was gone. He assumed the camp was broken up and the residents displaced because there no longer appeared to be anyone living there. Additionally, all his belongings were gone. This meant that, when he showed up for his appointment, he did not have any identification. Unbeknownst to the researcher, a patient not having identification at this particular primary care facility either meant that they could not be treated at that facility or at best they could be seen and assessed, but not prescribed medication or have any labs or diagnostic tests performed. Sawyer tried to show his jail identification card, but this was not enough. Therefore, Sawyer was briefly seen by the provider, but was then sent home without prescriptions, labs, or even an influenza vaccination.

When discussing this frustrating barrier after the appointment, Sawyer explained what his next steps would be. He stated that he could go to the Department of Social and Health Services (DSHS) to obtain a voucher for a discounted identification card, and then go to the Department of Licensing to request an identification card. Although Sawyer appears to be very capable and knowledgeable regarding this process, it can also be very daunting. It demonstrates the many steps it takes just for an individual to get in to a provider's office, even for something as simple as a flu vaccine. The monotonous and arduous steps necessary to perform a task so simple that

most of the general population is likely not even aware of, demonstrates a true disparity in access to services for the homeless population.

Follow-up Appointment Barriers to Care

One of the greatest barriers to receiving follow up care for the participants in this study is the fact that they will not have the researcher there to help with the many challenges that come up during their next appointment. If Sawyer needs to arrange follow-up appointments, which he clearly does need to do once he gets his identification card, he will need to contact the provider's office on his own, find a method for remembering his appointment, figure out transportation again, come with proper identification and a co-pay if necessary, and deal with any remaining Medicaid issues. At this point, Sawyer does not even have a phone. He needs to find the money for that, so that he has a means of contacting the office. He then needs to put forth the effort to get himself to the DSHS office and the Department of Transportation to get his identification. He then needs to schedule the appointment and make sure that he has a way to remember it. Finally, on the day of his appointment, he will need to coordinate transportation and any co-pay or unforeseen cost that arises. As Sawyer pointed out in his pre-release interview, healthcare is simply not a priority with everything else he is trying to balance in his life on the streets. The likelihood of Sawyer actually making it to his follow-up appointment, particularly given the frustrations of this first one, seems very low.

Conclusion

Sawyer was chosen as a case example from this larger study regarding access to healthcare at jail release for two key reasons. First, Sawyer's journey through this process illustrates how motivated and determined he was to receive appropriate healthcare. This was a

highly self-sufficient individual, who showed exceptional competency in getting himself to a provider. Sawyer recognized that accessing healthcare had the potential to improve his life in many ways. He was hoping to continue Vivitrol injections for his heroin addiction and wanted to discuss options for mental health treatment, as well as improve his physical health. Sawyer was willing to extend himself considerably to get to his initial appointment and establish care and to do so, he showed great initiative.

The second reason Sawyer was chosen as an example is that his care map to accessing healthcare outlines some of the key barriers faced by people released from jail. Even when most of these challenges were overcome for Sawyer, he was derailed by the lack of a privilege most people take for granted: state identification (ID). Sawyer fought through most of the challenges with strength and determination but a trivial factor, not having an ID, prevented him from getting care. His hope for successful engagement of the healthcare system disappeared in that moment.

Unfortunately, Sawyer's struggle to access care is not unique. Prior research shows that individuals recently released from a correctional facility are at high risk of mortality and need for emergency care. Dumont and colleagues found that recently released prisoners are much more likely than the public to die of any cause and up to 129 times more likely to die of a drug overdose in the two weeks following release (Dumont, Allen, Brockmann, Alexander, & Rich, 2013). The all-cause mortality rate of recently released prisoners is approximately 737 per 100,000, which is 3.61 times higher than non-institutionalized individuals, and the median time from release to death is only 1.7 years (Binswanger, Blatchford, Mueller, & Stern, 2013). The leading cause of death following release was drug overdose, followed by cardiovascular disease (Binswanger et al., 2013). This increased mortality rate, along with a hospitalization rate that is more than two times that of the general population over a two-week period, makes the immediate

post-release period an extremely volatile time for individuals returning to society (Vail, Niyogi, Henderson, & Wennerstrom, 2017).

In addition to their clear marginalization, incarcerated individuals are often subject to less access to healthcare, inadequate prevention methods, and decreased harm reduction services (Sander & Lines, 2016). Additionally, the environment of the jail/prison is often conducive to increased transmission of diseases due to substandard conditions and risk behavior (Sander & Lines, 2016). Because they are often overcrowded, unsanitary, and stressful environments, diseases can thrive and spread rapidly in these institutions (Rubenstein et al., 2016). Without adequate prevention and treatment programs, or follow-up healthcare at release, jails represent a place where marginalized people become even more at-risk.

As Sawyer left his appointment that evening, his disappointment pouring out in tears, it became clear to the researcher that the system lost him. He was very close to accessing the care that he desperately needed, an opportunity that might have altered the path of his life dramatically… but it was just too difficult. There were too many barriers to overcome, and it was disheartening for him to be refused care. Sawyer took a chance on this research project and he was still denied care in the end. There is little hope for him returning to the healthcare provider. He stated he would try to remember, but it felt as if this was the one and only chance to get him connected to care before he becomes overwhelmed with life's challenges.

Sawyer's struggle to get care has many causes, of course, such as homelessness, substance use, and lack of family support. It cannot be overlooked, however, that the overarching barrier to accessing care for this population seems to be that the healthcare system is not designed to be accessible to the most marginalized members of our society. From the difficulty navigating the system during scheduling, to long wait times and slow processing, to the

innumerable steps of bureaucratic red tape, the system makes little to no effort to mitigate the effects of homelessness, mental illness, and marginalization common in the repeat offender population. For people like Sawyer to choose a primary care provider over the emergency room in times of need, the system needs to be more approachable, easier to navigate, and not impose additional significant financial or emotional burdens on the individual.

Future Research

Additional research is needed to identify strategies to improve access to, and to increase the desire to access healthcare for, this marginalized population. Sawyer's story illustrates the vast potential to improve lives and reduce financial burden if societies invest in healthcare access for this high need, high utilization population. The care map developed for this paper offers a starting point for researchers, to identify one or two barriers and work to overcome those barriers through individual or systems-level change. We must work to promote health and wellness for the most vulnerable of our society if we want to develop an effective, efficient and equitable healthcare system.

References

Binswanger, I. A., Blatchford, P. J., Mueller, S. R., & Stern, M. F. (2013). Mortality after prison release: Opioid overdose and other causes of death, risk factors, and time trends from 1999 to 2009. *Annals of Internal Medicine, 159*, 592-600. doi:10.7326/0003-4819-159-9-201311050-00005

Dumont, D., Allen, S., Brockmann, B., Alexander, N., & Rich, J. (2013). Incarceration, community health, and racial disparities. *Journal of Health Care for the Poor and Underserved 24*(1), 78-88.

Nowotny, K. M. (2017). Health care needs and service use among male prison inmates in the United States: A multi-level behavioral model of prison health service utilization. *Health Justice, 5*(1), 9. doi:10.1186/s40352-017-0052-3

Rubenstein, L. S., Amon, J. J., McLemore, M., Eba, P., Dolan, K., Lines, R., & Beyrer, C. (2016). HIV, prisoners, and human rights. *Lancet, 388*(10050), 1202-1214. doi:10.1016/s0140-6736(16)30663-8

Sander, G., & Lines, R. (2016). HIV, Hepatitis C, TB, harm reduction, and persons deprived of liberty: what standards does international human rights law establish? *Health and Human Rights, 18*(2), 171-182.

Vail, W. L., Niyogi, A., Henderson, N., & Wennerstrom, A. (2017). Bringing it all back home: Understanding the medical difficulties encountered by newly released prisoners in New Orleans, Louisiana - a qualitative study. *Health and Social Care in the Community, 25*(4), 1448-1458. doi:10.1111/hsc.12445

CHAPTER IV

Barriers to Primary Care Access at Jail Release:

A Mixed-Methods Study to Assess a Warm Handoff Intervention

Kelsey Hirsch

University of Washington

Abstract

Repeat offenders who return to homelessness upon jail release are among the highest utilizers of emergency services in society. Without established primary care, they have nowhere to turn other than the closest emergency department. Additionally, poor perceptions of the healthcare system have likely had a negative effect on this already marginalized group and may lead them to refuse available care. The purpose of this mixed-methods intervention study was to identify common barriers that inhibit an individual from accessing care upon jail release and to assess the feasibility of a warm handoff intervention to improve access to primary care versus emergency services. Current inmates in a privately-run multi-county jail with an impending release date were randomized into two groups. The intervention group ($N = 9$) was offered the warm handoff intervention, which entailed a researcher pre-scheduling a primary care appointment for the day of release, coordinating transportation, and escorting the newly released individual to and from the initial appointment. The control group ($N = 7$) was released, as usual. Following their appointments, those who received the intervention stated they would return to their provider in the future and expressed an understanding of when to go there versus the emergency room. Additionally, the intervention group felt positive regard toward their new providers and appreciated the care. The results of this study showed no significant difference between groups in number of primary care provider visits after the intervention ($t(14)= 0.90$, $p>0.05$), or emergency room visits ($t(14)= 0.68$, $p>0.05$) at two months post intervention, but they do demonstrate a feeling of success in accessing care by participants receiving the intervention. More importantly, this study identifies larger systems issues that work to hinder this high-needs, high-utilizer group from getting necessary healthcare. Limitations to the interpretation of the results, such as low enrollment and group assignment, are discussed.

Barriers to Primary Care Access at Jail Release: A Mixed-Methods Study to Assess a Warm Handoff Intervention

Introduction

As some of the highest utilizers of emergency services, individuals who cycle in and out of jails and return to homelessness between stays represent an extremely high-needs and high-risk population in society. It is clear this group experiences many more negative interactions with the healthcare system (meaning more emergent and temporary) and lacks the ongoing primary and preventive care that is highly promoted with the rest of the population, but what is unknown is why. Questions of access must be approached from two directions: what are the barriers that inhibit people from accessing necessary care, and what are the individual factors that cause a person to choose to not access care that is available? The aims of this study were to: 1) identify the common barriers that impede access, 2) understand the experiences and perceptions that lead a person away from choosing to access care, and 3) to assess the feasibility of a warm handoff intervention that may offer some success in overcoming those issues and increase primary care access over emergency services. To accomplish these aims, a mixed-methods approach was used. The qualitative component, one-on-one interviews, was used to deepen understanding of the lived experiences of this marginalized group, including previous experiences with the healthcare system and any previous attempts at accessing care. Additionally, the quantitative data, in the form of number of visits to a primary care provider versus emergency care in the treatment and control groups were used to measure success of the intervention in improving access to care. The researcher hypothesized that an intervention which is designed to overcome the barriers of transportation, difficulties in navigating the system, and motivation to initiate care, would mitigate the effects of homelessness and poor perceptions of healthcare to make

individuals more likely to return to their newly-established primary care provider over the emergency room. Furthermore, the researcher hypothesized that there may be some incidental improvement in the participants' relationships with the healthcare system after feeling listened to by the researcher during interviews and cared for by a community provider during their initial appointment.

Background

Over the last fifty years, correctional facilities have increasingly become places to serve socioeconomically-disadvantaged people with a plethora of illnesses (Dumont, Allen, Brockmann, Alexander, & Rich, 2013). Coming from underprivileged backgrounds and with a history of limited access to healthcare, the United States incarcerated population is comprised of over two million individuals with comparatively complex medical needs compared to the general public (Koester, Brenner, Goulette, Wojcik, & Grant, 2017). Issues of mental illness, chronic conditions, and infectious disease all appear to be higher in the incarcerated population than the general public (Al-Rousan, Rubenstein, Sieleni, Deol, & Wallace, 2017; I. Binswanger, Krueger, & Steiner, 2009; Smith & Braithwaite, 2016b). As such, questions arise regarding how and where this population is receiving their healthcare.

Although the exact prevalence varies, it is estimated that mental illness in the incarcerated population in the United States is between two and four times higher than in the general population, meaning approximately half of the prison population has a history of at least one mental illness, and close to one-third have been diagnosed with a serious mental illness (Al-Rousan et al., 2017). Jails, in particular, seem to have an extremely high rate of mental illness, with more than 17% of admitted people reporting a severe mental illness, compared to approximately 4% in the general population (Sayers, Domino, Cuddeback, Barrett, & Morrissey,

2016). Unfortunately, mental illnesses are often not treated appropriately inside correctional facilities. Data from a 2011-2012 US National survey show that only 38% of jail inmates who were told in the past that they had a mental disorder were actually receiving treatment inside the correctional facility (Bronson & Berzofsky, 2017). Approximately 50% of incarcerated individuals who reported previously using medication to treat a mental health condition stated that they no longer receive medication for the condition once in prison, with no specifics accounting for this disruption in care cited in the report (Reingle Gonzalez & Connell, 2014). Additionally, the incarceration experience itself makes mental health treatment more challenging due to several factors including crowded living space, the lack of privacy, the use of solitary confinement, and the risk of victimization (Reingle Gonzalez & Connell, 2014). The stressful environment can also exacerbate, or cause, new symptoms of anxiety and depression, in addition to those that already exist (Mohan et al., 2017). Research has shown that physical and psychological wellbeing worsens during incarceration, and symptoms of depression increase while life dissatisfaction decreases (Wildeman & Wang, 2017). Furthermore, research shows that recently released inmates who received a diagnosis of any mental disorder were 70% more likely to return to prison than those who did not receive a diagnosis, making their recidivism rate significantly higher than those without a diagnosed mental health condition (Reingle Gonzalez & Connell, 2014). Although mental health conditions may constitute different needs for recently released prisoners, the initial step of seeing a primary care provider opens the door for initial treatment and potential referrals with improved follow-up with mental health professionals.

Other chronic health conditions are also more prevalent in the jail population. Compared with the general population, jail inmates have 1.19 times the rate of hypertension, 1.41 times the rate of asthma, 1.65 times the rate of arthritis and 2.57 times the rate of hepatitis (I. Binswanger

et al., 2009). Additionally, the prison population in the United States is aging, which is likely to bring about a new wave of health-related issues in the near future (Koester et al., 2017). In the United States, over 74,000 men and 4,000 women over the age of 55 years were being held in prisons in 2008, and this number has likely only increased in the last decade (Fazel & Bailargeon, 2011). There is no doubt that this older population has higher rates of chronic illnesses and physical impairments than both younger prisoners and community members of similar age (Fazel & Bailargeon, 2011). Cardiovascular risk is also higher in the prison population, likely because the prevalence of common, modifiable risk factors is much higher than in the public, and incarceration itself likely increases a prisoner's risk for hypertension (Mohan et al., 2017). The prevalence of hypertension among 18-33 year-olds, for example, was more than 10% in incarcerated individuals, compared to less than 7% in the general public (Dumont et al., 2013).

Incarcerated individuals are more likely than the general public to have an infectious disease, with more than 21% reporting one; compared to only 5% in the general population (Smith & Braithwaite, 2016a). Rates of infectious diseases in the prison population have consistently been higher than those of the general population. In fact, studies suggest that approximately 25% of HIV-infected individuals and 40% of hepatitis carriers have been incarcerated (Sequera, Valencia, Garcia-Basteiro, Marco, & Bayas, 2015). Furthermore, it is estimated that more than 14% of jail inmates and 20% of prison inmates have had a sexually transmitted infection at one point in their lifetime, compared to less than 5% of the general population (Mahaffey, Stevens-Watkins, & Knighton, 2016). Unfortunately, those diseases are likely to spread rapidly considering that around 30% of prisoners are sexually active while

incarcerated, and most of these individuals either do not have access to, or choose not to use, methods that minimize the risk of disease transmission (Sequera et al., 2015).

To make matters worse, follow-up care among previously incarcerated individuals is rare. One study reported that anti-retroviral therapy use decreased from 51% to 29% and virologic suppression fell from 40% to 21% in the time following release from prison (Rubenstein et al., 2016). Additionally, many people do not actually perceive themselves to be at risk for such diseases, meaning their behaviors are unlikely to change upon release. A recent study conducted in a prison found that among the 20% of individuals who perceived themselves to be at low-risk for HIV, 88% were involved in HIV risky behaviors (Golin, Barkley, Biddell, Wohl, & Rosen, 2017). Furthermore, an individual's perceived changes in health status during their time in incarceration may influence the likelihood of seeking medical care upon release (Yu, Sung, Mellow, & Koenigsmann, 2015). These misconceptions among prisoners can have a detrimental effect on both their own health, and the health of the community in which they live. Due to the "revolving door" syndrome, where individuals cycle in and out of prisons/jails, concern for the spread of diseases relates to the institution itself, as well as to the community where prisoners return (Shaw & Elger, 2015). If incarcerated individuals do not seek healthcare upon release from jail, they will bring back to their communities many unaddressed health needs.

Studies demonstrate that medical problems are most often reported by individuals who were homeless prior to arrest, those who reported receiving government assistance prior to arrest, and those who used a needle to inject drugs (Maruschak, 2017). These facts are particularly staggering when considering that nearly 67% of inmates were living in a shelter, hotel, or temporarily staying in family member's home, prior to incarceration, indicating that a large

portion of the incarcerated population was considered to be homeless prior to arrest (Holliday et al., 2016).

Interestingly, incarceration itself serves as a double-edged sword in this equation. On one hand, incarceration has been shown to add to, and further exacerbate, the health challenges of people (Reingle Gonzalez & Connell, 2014). On the other hand, correctional facilities often provide the first access to healthcare that people encounter (Wildeman & Wang, 2017). Approximately 40% of incarcerated individuals were first diagnosed with a chronic condition while serving time, and 80% of incarcerated individuals were seen by a medical provider during their stay (Wildeman & Wang, 2017).

Theoretically, correctional facilities could provide a means of “equal access” to healthcare, since they have the opportunity to mitigate the negative impacts on access to care seen in the general population due to economic limitations and geographic disparities by reducing the cost and providing available care in-house. In reality, however the lack of standardization and varying pattern of health service use in jails and prisons across the country (anywhere from 54-86% access care), implies that incarceration is actually a variable social determinant that influences the health of individuals housed in a correctional facility, allowing some access they may have lacked in the general public and further marginalizing others by missing the opportunity to provide care (Nowotny, 2015). Furthermore, jail and prison healthcare in general is not well utilized, whether due to limited access, or from few people choosing to access it. One study found that of the 38% of state prisoners who reported a persistent medical condition, 20% reported that the condition was not actually addressed by a medical personnel (Rosen, Hammond, Wohl, & Golin, 2012).

The need for access to healthcare is also evidenced by the high mortality rate in the weeks following release (Dumont et al., 2013). Recently released prisoners are much more likely than the public to die of any cause and up to 129 times more likely to die of a drug overdose in the two weeks following release (Dumont et al., 2013). The all-cause mortality rate of recently released prisoners is approximately 737 per 100,000, which is 3.61 times higher than non-institutionalized individuals, and the median time from release to death is only 1.7 years (I. A. Binswanger, Blatchford, Mueller, & Stern, 2013). The leading cause of death following release was drug overdose, followed by complications of cardiovascular disease (I. A. Binswanger et al., 2013). This increased mortality rate, along with a hospitalization rate that is more than two times that of the general population over a two-week period, makes the immediate post-release period an extremely vulnerable time for individuals returning to society (Vail, Niyogi, Henderson, & Wennerstrom, 2017). Although access to care may not be the solution to prevent many of these deaths, it is likely that people who attempted to overcome a drug addiction while incarcerated were released with no follow-up care and therefore lost their resource for drug rehabilitation and slipped back to their previous substance use disorders.

A retrospective chart review from 2013 demonstrated that the most common complaints for recently released prisoners presenting to the emergency department were trauma (16.8%), abdominal pain (13.5%), chest pain (9.0%) and self-injury (8.7%) (Koester et al., 2017). These rates differed drastically from the general population, in which the chief complaints were abdominal pain (8.1%) and chest pain (5.2%) (Koester et al., 2017). Trauma in the general population was also significantly lower, at a rate of only 1.5%, approximately 15% less than the prison population (Koester et al., 2017). Interestingly, of the emergency department visits, less than 40% of patients required a hospital admission, meaning it might have been possible to

effectively address the majority of needs in a lower-acuity setting (Koester et al., 2017). If even a small portion of prisoner-patients were treated at a primary care provider instead of the hospital, the cost savings could be highly significant. This observation, and the potential to both reduce cost and connect patients to ongoing care by a primary provider, is what drove the choice to implement a warm handoff intervention for people being released from jail.

Warm handoff

The "warm handoff" is a frequently used approach to healthcare transitions most notably used in Screening, Brief Intervention, and Referral to Treatment (SBIRT) for patients with self-reported drug and alcohol use, but novel in the transition of care following incarceration (Mussulman et al., 2017). Key components of the warm handoff include care transition planning and the identification of follow-up care, transportation support, and hand-delivery of a patient to the next appropriate provider. It has been shown to be successful for smoking cessation among smokers recently discharged from the hospital (Richter et al., 2012). When compared to fax referral for six-month follow up smoking cessation care, abstinence rates for the warm handoff group were 45.5%, compared to 14.3% in the fax referral group (Mussulman et al., 2017). Its success is likely partially due to the continuation of treatment among vulnerable groups by providing a link for patients to receive follow-up or more specialized care via face-to-face or telephone contact (Richter et al., 2012). The warm handoff has also been shown to improve patient outcomes when used for end-of-shift transfer of care in hospitals (Saag et al., 2018). These results demonstrate that the warm handoff is most successful when used with populations who are at risk for non-adherence to a treatment plan and for interventions that rely on personal relationships for success, such as continuation of care or lifestyle change. Like patients in previous studies, the individuals being released from jail are in dire need of transitional care and

continued support for the lifestyle changes and medical management that was started during incarceration.

Considering that two major barriers to accessing healthcare and establishing a primary care provider upon release from jail are transportation cost and navigating the system, the warm handoff was used as a means of "hand delivering" a person to his/her first appointment at a primary healthcare clinic. By having an interventionist present at the jail immediately upon a participant's release, ready to escort them to a health clinic, the effect of these common barriers is mitigated and care is more likely to occur. Providing a taxi ride to a pre-scheduled provider appointment eliminates the barriers of transportation cost and scheduling effort. Additionally, the physical presence of an escort helps to ensure that the participant maintains motivation to arrive at their appointment.

Familiar Faces Initiative

In order to identify potential participants for this study, the researcher worked with stakeholders from the Public Health Department who were actively engaged in a collaboration with the jail entitled "Familiar Faces" (Buettner, 2016). Familiar Faces is a county Public Health initiative focused on improving the clinical and criminal justice outcomes for individuals who frequently interact with the jail, in part due to an inability to effectively engage with the often-fragmented health and human services systems. Based on the target population, the term "familiar faces" was coined because they have had four or more jail bookings in the last year and have a diagnosed mental health and/or substance use disorder. The goal is to improve the performance and integration of multiple systems through a set of shared policy and process improvement strategies.

Methods

Recruitment

After IRB approval was obtained, potential participants were identified from a list of those involved in the "Familiar Faces" Initiative. The inclusion criteria for the initiative was having four or more arrests in the last year, returning to homelessness, and having a history of mental health diagnosis or substance misuse. The intention of recruiting from an ongoing initiative at the jail was to ensure that study inclusion factors were met without needing to meet with many individuals who were not eligible for the study. This initiative also required that there was an ongoing shared information agreement between the county, a Managed Care Organization (M.C.O.), and the jail, enabling names to be passed freely between the institutions.

The researcher visited the jail one to two times per week for approximately three months. On those days, potential participants were approached by a jail staff member, either the Lieutenant or another corrections officer, and asked if they would be interested in meeting with a researcher from outside the institution. Potential participants were reassured that the jail had no stake in the study, and that participation or non-participation would not be reflected in any record. If the individual agreed, they would be escorted to the "programs" section of the jail, where the researcher was waiting in a private room with the door propped open. At that point, the study was explained, and the consent form reviewed and signed, in accordance with the Institutional Review Board-approved procedures. Since the researcher was not present at the time of initial contact with potential participants, refusal rates are not reported. Nineteen participants agreed to participate through the consent and initial interview. The refusal rates are unknown.

Participants

The overall goal of the Familiar Faces initiative was to identify high-utilizing individuals, meaning people who were known to have interacted with "the system" in primarily negative ways through accessing unnecessary emergency care, repeat arrest, or utilization of homeless shelters. One goal of the initiative was to assure that Medicaid enrollment occurs during incarceration, however this was not always successfully completed. Three participants in this study, all placed in the control group, did not get enrolled in the M.C.O. as intended, meaning claims data could not be collected on them. The remaining participants were all currently incarcerated individuals, both male and female (Treatment = 8 male or 89%, 1 female or 11%; Control = 5 males or 71%, 2 female or 29%) and between the ages of 23 and 52 (treatment group average age was 36.67 ± 8.79, control group average age was 33.86 ± 6.75). A Chi-square test to assess for significant group difference was not performed due to the low number of participants, however no clear differences were evident to the researcher (Table 1). It should be noted, however, that the researcher did not attempt to gather a representative sample of the population, but rather enrolled participants based on a convenience sampling from the already established group in Familiar Faces. All participants had at least four arrests within the last year and stated that at jail release they would be returning to homelessness. Additionally, the remaining participants were all receiving insurance coverage from the Medicaid care plan of a local M.C.O. Limiting recruitment to only those covered by one entity assured that the researcher would have access to claims data after jail release.

Once individuals agreed to participate, the researcher worked to identify primary care settings available on the day of their release. If an appointment could be successfully scheduled, the participant was placed in the treatment group and the lieutenant was notified of the time of

their appointment to assure that the participant did not make other arrangements for transportation and that they were released on time. If the researcher was unable to find an available provider due to the short time between initial meeting and release date, or the participant was scheduled to be released on a weekend, they were placed in the control group. The control group was released as planned, with no further follow-up from the researcher or the jail. Random assignment was attempted, but release dates and provider availability did not always align. To ensure equal access, the researcher provided one-page information sheets to the control group regarding which providers they could reach out to in their home county. Unfortunately, this step was occasionally missed if someone was switched to the control group at the last minute due to a change in release date, refusal to participate, or they were unreachable at release.

Table 1: Participant Demographics

	Control Group	Treatment Group
Males	5	8
Females	2	1
Age 23-28	2	2
Age 29-34	2	2
Age 35-40	2	1
Age 41-46	0	3
Age 47-52	1	1
Average Age	33.86	36.67

Data Collection

Qualitative data was collected through 15-to-45-minute semi-private interviews. The first interview for every participant was conducted within the jail, prior to release, after consent was obtained. The purpose of this interview was to gain insight into the participant's perceptions of healthcare, as well as what they view as barriers to accessing care after release. Semi-structured interviews were conducted to determine prior experiences with healthcare, feelings of the success or challenges in those experiences, how they plan to access care now, and what may be stopping them from accessing care with a primary provider versus the emergency department.

The second interview was conducted following the provider appointment for the treatment group only. This interview was structured around the perceptions the participant shared during the process of previously seeing a provider. Questions were asked about the provider, the ease of the appointment, feelings of respect and empowerment, whether the patient felt cared for (and what care meant to the participant), and whether the participant anticipated going back to the provider.

Interviews were semi-structured as the researcher started with a predetermined list of questions, then chose to pursue other directions for follow-up if the participant seemed to have a specific story to share or if the questions no longer seemed to relate to the individual. The interview concluded once it appeared that the participant had nothing else to share or was getting agitated by additional questions. All interviews were recorded on a non-internet-based recording device, in accordance with the approval from the jail and the Institutional Review Board requirements.

Quantitative data was received from the M.C.O. in the form of claims data, as well as from the jail Lieutenant. Participant names for both the treatment and control groups were sent in a password-protected document, and they were asked to respond with counts of 1) number of visits to a primary care provider, 2) number of visits at an Emergency Department, and 3) number of re-arrests, all in the two-months following initial release. Data reported here is for the two months following release, and additional follow up will be collected by the researcher at one-year post-release.

Data Analysis

Interviews were transcribed verbatim, and 10% were verified by the researcher reviewing transcriptions while listening to the original recordings. Transcripts were then analyzed using thematic analysis to establish common themes and codes. The researcher first conducted a single pass-through to highlight key statements or main ideas, then revisited each transcript to assign an appropriate theme to the identified sections. Finally, the themes were grouped together to create codes that thoroughly encapsulated the ideas and feelings of participants. The codes identified address two major questions of the study: 1) what are peoples' perceptions of healthcare; and 2) what are the identified barriers to accessing primary care after jail release?

Quantitative data was analyzed by using an independent sample two-group t-test to assess for group differences. This was done for all three data points (primary care provider appointments, emergency room visits, and re-arrests). Additionally, descriptive statistics were analyzed and discussed as a method to better understand the trends of the data, given the statistical imitation of having a small sample size.

Trustworthiness

Although only one researcher conducted interviews, a second researcher reviewed all interview transcripts and verified identified thematic codes to increase the trustworthiness of the study. Additionally, the researcher reduced bias through continual self-reflection by recording journal entries following the completion of each intervention for the treatment group. Furthermore, the researcher tried to clarify the intention behind each story shared by participants during their interviews.

Results

Perceptions of Healthcare

Perceived history of maltreatment

A few participants described prior experiences with healthcare in which they felt they were undertreated or maltreated. Regardless of veracity, these experiences have profoundly influenced individuals' perceptions of healthcare and have likely caused hesitation in their decision to seek care in the future. One example of perceived maltreatment occurred for a participant who was diagnosed with cancer. He stated:

> *I have an issue with doctors. About ten to twelve years ago, I was diagnosed with cancer. At the end of the two years of them sending me to doctor to doctor, they just shrugged their shoulders and said, 'Good luck. We don't know what's going on with you, and goodbye.'*

This individual felt neglected by his providers, and as such no longer felt safe being cared for by them. He went on to say, "I do need something done, and I would like to be healthy again, but I just don't do it with doctors." This represents a disconnect between the patient and the healthcare system. The patient perceived that he was being neglected by the healthcare system and therefore

felt alienated. Another participant described her experience in seeking care from medical mobile vans in the area, stating, “Those doctors are only willing to go so far. Like, they’re not going to look you over, like check. It’s more conversational.” This participant also reported that providers did not believe her when she reported pain. A similar scenario was described by another participant, who felt he was judged as someone seeking pain medications and had to ask repeatedly if he could have medication to manage his pain in the hospital. He felt that his pain was not treated until the third time he asked.

When visiting the hospital, one participant explained that even after a very long wait time, “they actually didn’t find the problem… it took about a year for me to find out that there was [a problem].” This person’s perception of healthcare is that he spent a year with no answers because he was dismissed from the hospital without proper care. Another participant described a similar experience:

> *Tragic. No help provided. Yeah, I didn’t get anything good out of [them]. Mad, it was mad. I sat in there one time, I went two times and didn’t talk to anybody. Every time I kind of talked to them, they kind of threw their hands in the air like, ‘are you alright? I hope you’re alright. Is there anything we can do? We hope you’re alright.’ You know what I mean? I mean, they seemed like they cared at one point I was in jail and they came to see me- I don’t know what the agenda was- but I never received any help, and I went to her a few times. I never received any help.*

Clearly, this participant felt dismissed by both community providers and the jail providers, and as such stated that he had not been to a doctor in “many moons.” He described another scenario in which he was taken to an emergency room via ambulance:

I had people stop me on the street, and I was trying to put some belongings of mine into storage. I was pushing them in a recycling bin… [police officers] said, 'Hey why are you taking that outside?'… he made me sit down on the car… I asked the cops not to touch me, I had no warrants, I had done nothing wrong… they called an ambulance… they took me to a medical center, and they held me down with a cop, and they stuck needles in me to make me go to sleep for no reason.

Experiences like this led to undeniable distrust in healthcare and the criminal justice systems. Regardless of whether the police or the emergency medical technicians have the same recollection of incidents on that day, this individual now has no desire to access the system for fear of mistreatment. He is unlikely seek care for his health needs until the situation is dire and he has no other options.

Distrust of healthcare

Almost all participants described a high level of distrust in the healthcare system. Prior frustrations, or perceptions of being poorly treated, led participants to refuse any care, even when it was offered by their jailers. Many participants described a feeling of being second-class or misjudged when meeting with healthcare providers. One said that during his prior care, what made it a poor experience was "how [he] was treated compared to everybody else… like [he] was second class or something like that." Another participant described that experience as being "red-tagged right when you go in" as someone seeking drugs. One stated:

The word is dejected, it's disenfranchised, it's cut off, it's bad, it's marginalized. Best way to say it, it's worse on the other side. It's worse than marginalized, forgotten, done. This is terrible.

A few participants stated that they had a particular distrust in the healthcare offered inside the correctional facility. When asked what care was like while incarcerated, one person stated:

> *They don't even listen to what you're asking for. They don't care what the pain is, or what you're going through. They just see your history, on, or not on drugs, or how long you've been in jail. How long you're going to be in jail and they just brush it off.*

Another participant said the biggest issue was the cost of care inside the jail, stating:

> *I can't get it because they only want to charge you fifteen dollars. And if I'm lucky, I get a little bit of money in my books. And I'm not going to starve up here because they barely feed you… even though you have healthcare, they want the money off my books.*

This individual felt that the priority of where to spend his limited money in the jail was on food, rather than healthcare. Another participant stated that this was the first she heard of receiving medical care in the jail. Other participants agreed, stating that care in the jails is frustrating because the patient is charged for everything. As a result, many incarcerated individuals refuse to access care. This is quite unfortunate, since most participants are returning to homelessness and it appears that accessing care after release is not any easier.

Identified Barriers

3.3. Navigating the System

Most participants in this study (95%) reported that it had been nearly ten years since seeing a primary care provider. When health needs arose for these individuals, they simply called for emergency services or found their way to an emergency department. Challenges in navigating their way through the healthcare system, and an inability to know what constitutes a need for

emergency medicine versus standard primary care, demonstrated that most participants had a significantly low health literacy. One participant described getting the run around in healthcare without knowing what type of care was needed. He stated:

> *I know I had to go to DSHS to get evaluated and I went to [a mental health facility] to get evaluated over there, but they just kept telling me I needed to get evaluated again, so I've been getting social security and stuff.*

It appears that this individual did not even have the capacity to understand what types of care he qualifies for, and what issues he may be facing. He later stated that his mother used to help him with any medical appointment, but now that he's older, he feels alone. He shared that he does not know where to start, so if he doesn't know where to go for care, or who to call, he just goes to the Department of Social and Health Services office or goes straight to the emergency department.

Another participant prefers to go to the Emergency Department for similar reasons: the system is too difficult to navigate. He stated "that's why I just go to the ER, it's quick. I know they accept my insurance. I don't have to go looking for anywhere and I move around a lot too." This individual described a common issue with care for homeless individuals; living a nomadic lifestyle makes it very difficult to establish care somewhere and commit to returning to that provider in the future.

Further examples of navigating the system occurred at the appointment time, when participants were asked to spend more than thirty minutes filling out a barrage of paperwork. Many participants relied on support from the researcher to complete these forms, which participants often did not fully understand. The researcher was available to answer questions and

explain the often-unnecessary medical jargon that was used. This demonstrates more than just low health literacy; it is a discriminatory factor in healthcare in that individuals who are afraid of feeling inferior or confused in the healthcare setting are likely not going to return for care.

Wait Times

Even after individuals find an appropriate primary care provider, they still face several barriers that may cause them to not follow through before receiving care. One such barrier is the long wait time between calling for an appointment and being seen. Many offices were scheduling new patients two-three months out, which makes access limited, and contributes to the appeal of going to the emergency department. One participant described her attempt to access care at a community clinic as frustrating because she was asked to explain her needs multiple times to different providers and that if a health need comes up, she "might have to wait out two weeks to see a particular doctor. So that's a hassle which would make [her] go to the emergency." Additionally, she described the frustration of walk-in appointments as being particularly time consuming:

> *You can come in and do a walk-in if someone doesn't come and keep their appointment. So then, now you're sitting there all day waiting to see if there's an opening which you might not get. So that's a hassle which makes me go run to the emergency.*

For this participant, it is clear that one of the greatest barriers to accessing primary care is the time delay and the hassle it takes to schedule an appointment. Another participant described a similar frustration:

> *If you're sick and, in my case, I feel like I need to go to the doctor right away, there's really no way to just schedule it, you know? You have to wait for an appointment. So, I just go to the emergency room.*

One participant stated that he arrived at the clinic when providers were at lunch, and all the rooms were full, so he opted to leave rather than wait longer. This delay in care means that the healthcare system is not serving people in their immediate time of need, the point in time when they may be most willing to comply.

Prioritizing Health

Many participants described one of the major barriers to accessing healthcare as a reluctance to prioritize health over other needs. Most participants were either returning to homelessness or planned to float from one relative's house to another, meaning their basic needs of shelter, food, and safety were likely not being met. The individuals who spoke of this challenge stated that they felt pressure to focus on where they would sleep and what they would eat, over scheduling a doctor's appointment. One individual described his prioritizing as follows:

> *Food, clothing, shelter. They're too busy trying to take care of their basic needs. Healthcare? You know they might want a shower first before you go to the doctor. You don't go to the doctor with dirty underwear, right?... they need the basic necessities first… All these things that the homeless are doing takes so much more time for them to complete a simple task than it would take a normal person. Time is money and money is time, and the homeless are paying in time.*

As a result of not prioritizing healthcare, most participants stated that they had only received care at the emergency department, even for non-acute matters. One participant articulated this issue:

Most of the time it wasn't emergency, but also because I put it off until it became an emergency. So, it could have been something that I could have taken care of before, most of the time.

This scenario appears be a common one among most participants. Many made statements about attempting to care for themselves for as long as possible before seeking care.

Interestingly, participants with children described their experiences of accessing care for them as being very different. There seems to be fewer questions as to whether healthcare is a priority when speaking of one's child. One participant explained the scenario:

They go there regularly…. For my kids, it's a lot easier, just because they have to go… I have to establish something for them. So, they have a record of what shots they'd had… so, they go to the same provider.

This participant was quick to establish care for her children, but still stated that she had not seen a primary care provider at all in her adult life. She was willing to prioritize the health of her children over basic needs, but not her own health.

Logistic Challenges

In addition to barriers from the healthcare system and individual determination, there were also many logistical challenges for this population in accessing care. Tools that most of the general population take for granted, such as cell phone use, internet access, transportation, and money for a copayment, all presented major barriers for this population to break down when attempting to access care. One participant described "every time I go to jail, I lose [my phone], or they don't give it back to me. So, I always have to get me a new cell phone." Another participant felt that the biggest barrier was transportation, stating "I've never had a vehicle. So

that's the biggest part is just the transportation part." Many others agreed that transportation presented one of the largest barriers in accessing care.

Cost can also be a major limiting factor for people seeking healthcare. One participant originally answered that the thing stopping him from finding care was his pride, but then quickly changed his answer to money, illustrating that there may not be enough support available for people who would like to see a provider and simply don't have the means.

Furthermore, logistical challenges that the participants were not always fully aware of occurred often for the researcher. One example was a delay in the activation of Medicaid after a participant was released from jail. Since the researcher took care of insurance issues prior to jail release, or privately with the healthcare facilities, many participants did not ever realize that their Medicaid occasionally remained inactive at the time of their appointment. Two participants were aware of this barrier and worked with the researcher to contact their insurance company and the State Health Care Authority to correct the oversight. These participants gained insight into navigating the healthcare system to overcome these barriers through long phone calls, being placed on hold for up to ten minutes, and feelings of frustration when asking a large system to correct its actions. In the end, the researcher was reassured that Medicaid would retroactively cover these primary care visits, but it should be recognized that initial denial, even if likely to be reversed, could have a negative impact on peoples' perceptions of healthcare and cause hesitation in future access attempts.

Feasibility of Intervention

Addressed common barriers

The warm handoff intervention successfully addressed several barriers faced by individuals returning to homelessness at jail release. First, use of the intervention meant that many challenges in navigating the system were overcome. The researcher was able to appropriately identify a primary care provider who accepted participants' insurance and was enrolling new patients. By scheduling the appointment for the individual on the day of jail release, the researcher was also able to help overcome the barriers of time delay for appointments and individual motivation to schedule. Additionally, the intervention provided a solution to transportation issues, including cost, and assured that the patient was delivered straight to the front door and not distracted by other needs or desires on the day of release. All these barriers were identified by the participants as valid concerns and issues that often prevented them from seeking care in the past.

Unfortunately, the intervention did not address all the barriers that participants stated, or the researcher identified, as issues. Some challenges that were left unaddressed were: long wait times in the lobby, low health-literacy, limited cell phone access, and co-payment cost (if necessary). Additionally, the larger issue of ingrained distrust in the healthcare system may or may not have been addressed by this intervention. On one hand, the researcher hoped that implementing a successful intervention with care centers that have experience with individuals suffering from homelessness and other marginalizing issues might improve relations with the healthcare system and show participants that there are safe and reliable providers in the community who care deeply about the wellbeing of their patients. On the other hand, any time there was a glitch in the intervention, or a participant was not able to get scheduled for an appointment, may have put more strain on their relationship with healthcare. It is possible that

this missed opportunity for some participants will have the unintended consequence of increasing the distrust that already runs deep for some.

Feelings of Success

Qualitative interviews following the intervention revealed that all participants who successfully completed their initial provider appointments felt grateful for it, and stated it was a good interaction. Several participants thanked the researcher for providing the appointment, and left the appointment feeling like they were properly cared for. Most participants were able to get necessary vaccinations and lab work, as well as discuss referral options for dental and mental healthcare. Two participants even described a feeling of hope for their health in the future. Although this data cannot be quantified and may not actually lead to an increase in primary care appointments immediately following jail release, it does imply that there is potential for improved relationships with the healthcare system, and that perhaps with more development and dissemination of the intervention, access to care for this population could improve.

Effect on Utilization

All nine participants who received the intervention stated that they intended to return to their newly-established primary care provider. Additionally, each of them verbalized an understanding of when they should return to their new provider versus when they need to go to the emergency department. Most of the individuals recognized the barriers they were likely to face in making it to their next appointment, such as transportation cost, remembering their appointment date, and prioritizing their health over other pertinent needs. None of the participants, however, were able to articulate the challenges that may be faced in scheduling future appointments, such as knowing who to call, navigating the system, assuring healthcare

coverage, and potentially long wait times. Perhaps this is because the researcher overcame that barrier for them, but it should be noted that this could be detrimental to individuals in their future attempts at accessing care.

Quantitative data provided by the M.C.O. and the jail was analyzed using descriptive statistics and a two-group t-test. Unfortunately, at the time of quantitative data collection, it was discovered that three participants who had been placed in the control group were never enrolled in the partner M.C.O. For this reason, claims data could not be provided and the sample size decreased to nine in the treatment group, and seven in the control group. This small sample size makes detecting group differences, if any exist, difficult to detect. The t-test for number of primary care visits revealed that there was no significant difference between groups ($t(14) = 0.90$, $p>0.05$), however important trends may be seen when looking at the data individually. For example, the average primary care provider appointments in the first two months after release, beyond the one offered by the researcher, was 0.67 for the treatment group and 0.57 for the control group (Figure 1). This does not appear to be a large difference; however, it should be noted that only one participant in the control group saw a provider at all, it just so happens that they visited one four times. This outlier certainly skewed the statistics. Additionally, there were two participants in the treatment group who returned to their primary care providers three times after their initial visit. This implies that those two individuals may have been able to establish ongoing sustainable care, rather than just one visit. Unfortunately, no one else in the treatment group appears to have returned to their provider. This could mean that two-month follow-up is too soon for individuals to schedule return visits, or it could be an indication that the warm handoff might be more successful if follow-up care for future appointments was also offered.

In terms of emergency visits, similar trends were noted in both groups, with a treatment group average of 0.56 and control group average of 0.71visits (Figure 2).The t-test for differences between groups was not significant ($t(14) = 0.68$, $p > 0.05$). Interestingly, one of the highest utilizers of the emergency department in the treatment group was an individual who also had three follow-up appointment with primary care. This could mean that this person had significantly higher health needs than the rest of the group. Alternatively, the other individual who saw his primary care provider three times following the intervention never went to the emergency room, so perhaps he was able to get his needs met in a lower-acuity setting.

Trends in re-arrest were also analyzed, but showed no significant difference ($t(14) = 0.33$, $p > 0.05$). This data was collected from the jail Lieutenant, and since Medicaid coverage was not pertinent, data was collected on all original nineteen participants (treatment n=9, control n=10). Although the warm handoff intervention was not intended to have any effect on recidivism rates, it is valuable data to analyze, since there is some question as to whether establishing primary care, and therefore an opportunity for mental health referrals, might provide substance abuse treatment and decrease re-arrests for drug procession.

Overall, analysis of the data does not reveal any statistically significant differences, partially because of the small sample size and partially due to the data being collected only two months after release. It is possible that there simply has not been enough time to develop any sort of trend in care visits. For this reason, additional claims data will be collected from the M.C.O. after one-year post-release. Additionally, one threat to internal validity should be noted. During the time following intervention implementation, the state in which this study took place experienced a winter storm constituting a "state of emergency." This event, which caused record low temperatures and momentous snowfall and ice, may have led many people who were

suffering from homelessness to seek shelter in emergency departments. There is no way to know if this weather change had an effect on the number of emergency room visits, but it does constitute a historical event threat to validity.

Non-significant results should be interpreted from multiple angles. On one hand, it could simply be that the intervention was not powerful enough to overcome the myriad of barriers faced by the study population in terms of accessing primary healthcare. On the other hand, qualitative results imply that it does show some promise, but perhaps needs to be expanded to include more follow up care and additional support in overcoming the challenges of homelessness. Regardless, it constitutes a novel implementation of the warm handoff intervention in a clearly high-utilizing population.

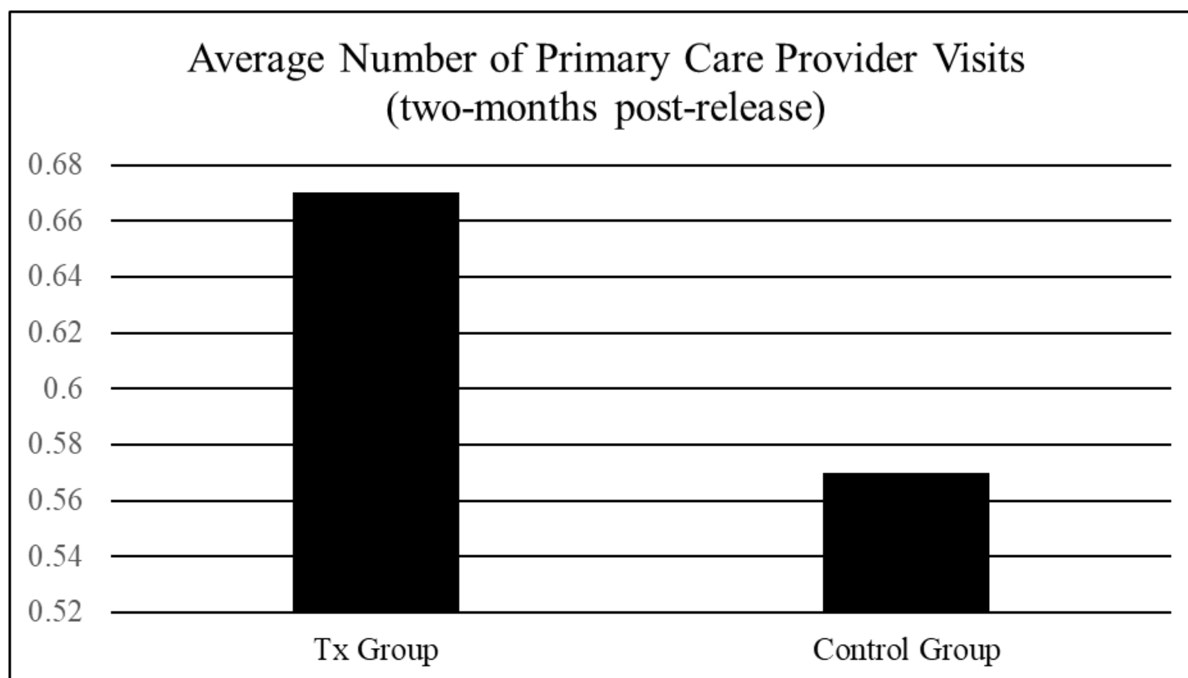

Figure 1: Self-Initiated Primary Care Provider Visits

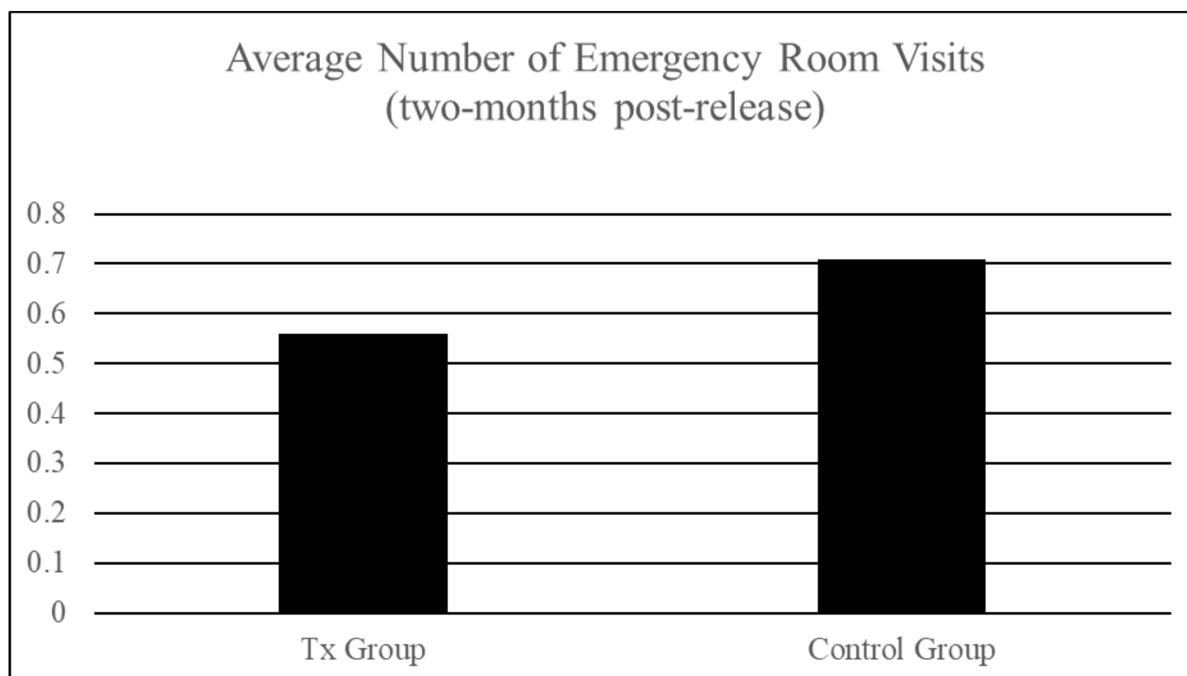

Figure 2: Emergency Department Visits

Discussion

Summary

This study accomplished three aims: 1) identify the common barriers that impede access to primary healthcare immediately following jail release, 2) understand the experiences and perceptions that lead a person away from choosing to access care, and 3) assess the feasibility of a warm handoff intervention that may offer some success in overcoming those issues and increase visits to primary care instead of the emergency room. A total of nineteen participants agreed to participate, with nine receiving the intervention. Three participants in the control group were later removed from data analysis due to a lack of health insurance with the partner M.C.O. Participant interviews identified a plethora of barriers faced by recently released prisoners who are returning to homelessness while attempting to access primary care. Utilizing thematic analysis, four key barriers that exist at the time of jail release were found, as well as one over-

arching theme of distrust of healthcare that works to discourage individuals from choosing to access care. The barriers found in this study - difficulty navigating the system, long delays in scheduling an appointment, not prioritizing health, and logistical challenges - may potentially be overcome by an intervention such as the warm handoff. The mediating factors of the warm handoff - assuring available care, scheduling, transportation, and hand-delivery - all work to address barriers that are known to prevent people from seeking and receiving care.

Unfortunately, the larger issue of needing to mitigate the lasting effects of perceived mistreatment and stigmatization in healthcare is likely to take some time. Most of the participants in this study had suffered from years of perceived neglect, from repeat incarcerations, poorly managed chronic health conditions, and homelessness. The development of interventions that work to improve access, and thereby offer repeat positive relationships with providers who are equipped to address their unique needs, however, is an important and appropriate place to start.

Quantitative results showed no significant difference in primary care versus emergency room visits; however these findings should be interpreted through the lens of a small sample size and minimal time between offering the intervention and collecting claims data. Insurance information collected at one-year post-release may identify more trends in utilization. Additionally, these non-significant results point to a need for improvement in intervention design and implementation. For example, if the intervention included more follow-up support to encourage participants to continue to visit their primary care provider and remind them of upcoming appointments, it might have a more sustainable effect.

Limitations

This study was limited by significant issues with enrollment. Part of the challenge with recruiting from within a separate ongoing initiative, such as Familiar Faces, is that there is a limited pool to draw from. In this study, the researcher reached the end of the potential participant pool after only three months. Additionally, with such rapid turnover in the jail, there were many potential participants who were unable to enroll due to a quickly approaching release time. Notably, there was very little attrition after participants agreed to participate (9.5%). Two challenges arose when participants requested special accommodations for pick up (other than leaving straight from the jail). In these cases, neither participant was present or available at the designated pick-up spot, indicating the importance of offering this intervention only at the exact time of jail release.

An additional limitation was the inability of the researcher to use true randomization for group assignment. Although only outside factors, such as the rapidity and day of the week of release, influenced whether a participant was placed in the treatment group, it cannot be ruled out that these factors may also impact the likelihood of an individual accessing primary care, despite whether they received the intervention. For example, if a person's release date approached too rapidly for the researcher to find available primary care, it is likely that a person who was placed in the control group because of that quick release date would also not be able to find prompt care on their own. Additionally, if the researcher was unable to schedule an appointment for a participant being released on the weekend, it should be noted that said person would likely not be able to find care on their own at release either. Therefore, being placed in the control group may mean that the participant will face similar challenges in scheduling primary care that the researcher experienced. Although group assignment was out of the researcher's control, it is not clear that any success in accessing primary care was due only to the intervention as opposed to

other factors, such as the ease of scheduling an appointment on a weekday versus weekend, or the increased likelihood of establishing care on the day of release if there is more time between initiation and release date

Conclusion

In conclusion, this research demonstrates a myriad of barriers faced by individuals attempting to access healthcare at jail release. Issues of homelessness and histories of perceived maltreatment in healthcare have likely also influenced this group with significant health needs to refuse to access any care that may be available. Offering the warm handoff intervention has the potential to address many of these barriers, making access to care slightly more attainable for this highly marginalized population.

Although the warm handoff will not completely overcome the deeply ingrained distrust in healthcare, nor the perceptions of maltreatment, qualitative data following provider appointments demonstrates that it can offer a potentially positive experience for individuals with a provider who understands their needs, that may have lasting effects.

Future research should focus on broadening the warm handoff intervention to possibly include follow-up appointments and address more immediate needs such as hunger and shelter concerns. Additionally, larger studies need to be conducted to evaluate the difference in maintaining primary care after this intervention is offered. Most importantly, a cry for change must be heard by the healthcare system, overall, to find ways to engage and care for the most vulnerable in our society. Individual interventions offer a place to start in terms of overcoming barriers to access, but this study also identified several large systems issues, such as delays in Medicaid activation, unavailability of primary care providers for immediate health needs, and

unwillingness of many providers to engage with or even accept these individuals as new patients. These changes in the healthcare system, along with a philosophical change in society to prioritize the health needs of the most marginalized people, are vital to improving the health and well-being of the population.

References

Al-Rousan, T., Rubenstein, L., Sieleni, B., Deol, H., & Wallace, R. (2017). Inside the nation's largest mental health institution: A prevalence study in a state prison system. *BMC Public Health, 17*(1), 342. doi:10.1186/s12889-017-4257-0.

Binswanger, I., Krueger, P., & Steiner, J. (2009). Prevalence of chronic medical conditions among jail and prison inmates in the USA compared with the general population. *Journal of Epidemiology & Community Health 63*, 912-919.

Binswanger, I., Blatchford, P., Mueller, S., & Stern, M. (2013). Mortality after prison release: Opioid overdose and other causes of death, risk factors, and time trends from 1999 to 2009. *Annals of Internal Medicine, 159*, 592-600. doi:10.7326/0003-4819-159-9-201311050-00005.

Buettner, B. (2016). King county health and human services transformation: The familiar faces initiative. Retrieved from https://www.kingcounty.gov/elected/executive/health-human-services-transformation/familiar-faces.aspx.

Bronson, J & Berzofsky, M (2017). Indicators of mental health problems reported by prisoners and jail inmates, 2011-2012. U.S. Department of Justice. *Bureau of Justice Statistics*. Retrieved from https://www.bjs.gov/index.cfm?ty=tp&tid=132.

Dumont, D., Allen, S., Brockmann, B., Alexander, N., & Rich, J. (2013). Incarceration, community health, and racial disparities. *Journal of Health Care for the Poor and Underserved 24*(1), 78-88.

Fazel, S., & Bailargeon, J. (2011). The health of prisoners. *The Lancet, 377*, 956-965. doi:10.1016/S0140-6736(10)61053.

Golin, C., Barkley, B., Biddell, C., Wohl, D., & Rosen, D. (2017). Great expectations: HIV risk behaviors and misperceptions of low HIV risk among incarcerated men. *AIDS and Behavior*. doi:10.1007/s10461-017-1748-z.

Holliday, R., Braithwaite, R., Yancey, E., Akintobi, T., Stevens-Watkins, D., Smith, S., & Powell, C. (2016). Substance use correlates of depression among African American male inmates. *Journal of Health Care for the Poor and Underserved 27*(2), 181-193.

Koester, L., Brenner, J., Goulette, A., Wojcik, S., & Grant, W. (2017). Inmate health care provided in an emergency department. *Journal of Correctional Health Care, 23*(2), 157-161. doi:10.1177/1078345817699595.

Mahaffey, C., Stevens-Watkins, D., & Knighton, J. (2016). Psychosocial determinants of health among incarcerated Black Women: A systematic literature review. *Journal of Health Care for the Poor and Underserved, 27*(2), 45-70.

Maruschak, L. (2017). Medical problems of prisoners. Retrieved from https://www.bjs.gov/content/pub/html/mpp/mpp.cfm.

Mohan, A., Thomson, P., Leslie, S., Dimova, E., Haw, S., & McKay, J. (2017). A systematic review of interventions to improve health factors or behaviors of the cardiovascular health of prisoners during incarceration. *Journal of Cardiovascular Nursing*. doi:10.1097/jcn.0000000000000420.

Mussulman, L., Faseru, B., Fitzgerald, S., Nazir, N., Patel, V., & Richter, K. (2017). A randomized, controlled pilot study of warm handoff versus fax referral for hospital-initiated smoking cessation among people living with HIV/AIDS. *Addictive Behaviors, 78*, 205-208. doi:10.1016/j.addbeh.2017.11.035.

Nowotny, K. (2015). Race/ethnic disparities in the utilization of treatment for drug dependent inmates in U.S. State correctional facilities. *Addictive Behaviors, 40*, 148-153.

Reingle Gonzalez, J. & Connell, N. (2014). Mental health of prisoners: Identifying barriers to mental health treatment and medication continuity. *American Journal of Public Health, 104*(12), 2328-2333. doi:10.2105/ajph.2014.302043.

Richter, K., Faseru, B., Mussulman, L., Ellerbeck, E., Shireman, T., Hunt, J., & Cook, D. J. (2012). Using "warm handoffs" to link hospitalized smokers with tobacco treatment after discharge: Study protocol of a randomized controlled trial. *Trials, 13*, 127. doi:10.1186/1745-6215-13-127

Rosen, D., Hammond, W., Wohl, D., & Golin, C. (2012). Disease prevalence and use of health care among a national sample of Black and White male state prisoners. *Journal of Health Care for the Poor and Underserved 23*(1), 254-272.

Rubenstein, L., Amon, J., McLemore, M., Eba, P., Dolan, K., Lines, R., & Beyrer, C. (2016). HIV, prisoners, and human rights. *Lancet, 388*(10050), 1202-1214. doi:10.1016/s0140-6736(16)30663-8.

Saag, H., Chen, J., Denson, J., Jones, S., Horwitz, L., & Cocks, P. (2018). Warm handoffs: A novel strategy to improve end-of-rotation care transitions. *Journal of General Internal Medicin, 33*(1), 116-119. doi:10.1007/s11606-017-4145-4.

Sayers, S., Domino, M., Cuddeback, G., Barrett, N., & Morrissey, J. (2016). Connecting mentally ill detainees in large urban jails with community care. *Psychiatric Quarterly, 88*, 323–333. doi:DOI 10.1007/s11126-016-9449-8.

Sequera, V., Valencia, S., Garcia-Basteiro, A., Marco, A., & Bayas, J. (2015). Vaccinations in prisons: A shot in the arm for community health. *Human Vaccines & Immunotherapeutics, 11*(11), 2615-2626. doi:10.1080/21645515.2015.1051269.

Shaw, D., & Elger, B. (2015). Improving public health by respecting autonomy: Using social science research to enfranchise vulnerable prison populations. *Preventive Medicine, 74*, 21-23. doi:10.1016/j.ypmed.2015.01.024.

Smith, S., & Braithwaite, R. (2016). Introduction to public health and incarceration: Social justice matters. *Public Health and Incarceration: Social Justice Matters, Volume 27*(2, Supplement). doi:10.1353/hpu.2016.0048.

Vail, W., Niyogi, A., Henderson, N., & Wennerstrom, A. (2017). Bringing it all back home: Understanding the medical difficulties encountered by newly released prisoners in New Orleans, Louisiana - a qualitative study. *Health & Social Care in the Community, 25*(4), 1448-1458. doi:10.1111/hsc.12445.

Wildeman, C., & Wang, E. (2017). Mass incarceration, public health, and widening inequality in the USA. *Lancet, 389*(10077), 1464-1474. doi:10.1016/s0140-6736(17)30259-3.

Yu, S., Sung, H., Mellow, J., & Koenigsmann, C. (2015). Self-perceived health improvements among prison inmates. *Journal of Correctional Health Care, 21*(1), 59-69. doi:10.1177/1078345814558048.

CHAPTER V

Conclusion

The prior three chapters consisted of papers to be submitted for publication. All were derived from experiences conducting a mixed-methods research study with aims to: 1) identify the common barriers that impede access to healthcare following release from jail; 2) understand the experiences and perceptions that lead a person away from choosing to access care; and 3) to implement a warm handoff intervention that may offer some success in overcoming those issues and increase utilization of primary care over emergency services.

The first paper examined the methodological challenges faced by the researcher while conducting a study inside a jail. The first challenge identified occurred with participation, including difficulties in recruitment and sampling. Issues of bias and coercion threatened the representativeness of the sample and therefore its generalizability. Threats to privacy and confidentiality in the jail setting were also discussed. The next set of methodological challenges discussed occurred in the data collection phase. Threats to the validity and rigor of the study arose from difficulties with randomization and a possible reluctance on the part of participants to be fully candid inside the jail. Finally, challenges in dissemination, due to low participation and difficult replication, were also discussed. The purpose of this paper was to provide insight into the many limitations of performing research inside a jail, but also to highlight the success that can come from appreciating the unique culture and social norms that exist there.

The second paper provided a case example of one participant in their plight to access primary care at the time of jail release. The participant was chosen for their unique engagement in the research and demonstrated determination to establish care, but still ultimately experiencing

failure due to the many blockades in the system. Presenting the care map of one participant allows a focus on two important findings from the larger study: 1) many incarcerated individuals do have the desire to establish appropriate primary care, even though they may not know the proper mechanisms to do so; and 2) there are a myriad of barriers in the healthcare and criminal justice systems that make accessing care most difficult for those with the greatest need. The care map outlined in the second paper addresses the aim of identifying the barriers that exist for individuals attempting to access primary care at jail release and puts a face on those recurring challenges.

The third paper provides both qualitative and quantitative results for the study, as well as a call to action for future research. Qualitative interviews, along with the researcher's experience, offered insight into four of the common barriers faced by individuals attempting to access healthcare at the time of jail release: navigating the system, wait times for appointments, prioritizing health above other needs arising from homelessness, and logistical challenges such as lack of transportation and a cell phone. Interviews with the treatment group, following their provider appointment, provided support for the warm handoff intervention as useful in overcoming some of the identified barriers to care, as well as the potential for it to improve relationships with healthcare providers by offering a positive experience in accessing care. Quantitative results collected two-months post-jail release showed no significant difference between groups in terms of primary care provider visits ($t(14) = 0.90$, $p>0.05$) or emergency visits ($t(14) = 0.68$, $p>0.05$). Additional data will be collected at one-year post-release.

This study demonstrated that access to healthcare is inherently more difficult for those who suffer from homelessness, mental illness, and a history of arrest. Beginning with the initial

effort it takes to schedule an appointment, the process of accessing care is much easier for people who have the ability to search the internet for a provider, own a telephone to call the office, acquire basic knowledge of the care they need, identify what insurance coverage they have, have the luxury of time to weed through many questions and have the capacity to remember an appointment that may be scheduled months in the future. The use of the warm handoff mitigated many of the obstacles in accessing care, since the researcher was able to address the issues without the participant knowing. Nonetheless, further sources of disparity arose once the individual made it to the appointment.

During all treatment group appointments, the researcher sat with the participant and assisted when necessary with paperwork or questions from the receptionist, providing an additional unintended intervention in the form of emotional support and education. Issues of lack of identification (e.g., driver's license) and delayed Medicaid activation arose for three participants, and likely would not have been solved had the researcher not been physically present to help resolve the issue. The fact that even sitting in a waiting room, preparing for an appointment, is easier for more-educated individuals who have the luxury of missing hours of work (or time devoted to finding food and housing for the night) to visit a doctor is another example of the discrimination in healthcare that is so ingrained that it is likely not even recognized by providers.

Although this study did not specifically address racial and class disparities in accessing healthcare, it cannot be denied that these factors play a role. Providers must begin to recognize the racism and classism that prevent access to healthcare services and make a conscious effort to thwart such disparity. Those who work within this system of injustice are the best positioned to take the appropriate steps in overcoming these inequities by committing to the advancement of

social justice and human rights issues in healthcare (Waite & Nardi, 2017). They must recognize that racism "informs an individual's life opportunities and access to valued resources in society" (Waite & Nardi, 2017). Access to healthcare in this country is not an inherent right, therefore, but rather a resource available only to the racial majority, along with the wealthiest, most educated, and those with the highest social status. The steps involved in accessing healthcare are so convoluted and complicated with monotonous red tape, that only those with unlimited time, a surplus of money, and a high enough health literacy are able to endure the process. Researchers, therefore, must invest in efforts to call out these discriminating factors and design interventions that can help the most vulnerable overcome them.

The warm handoff, although not nearly enough, does offer a step in the right direction for addressing some of these barriers to care. By explicitly focusing on issues that most negatively affect the already disenfranchised of society, such as those suffering from homelessness or repeat incarcerations, the warm handoff can begin to level the playing field in terms of access. An intervention such as this, however, does require a significant degree of buy-in from community members and stakeholders, and until it is more established, places quite a bit of responsibility on the shoulders of the interventionist. For a warm handoff to be successful, a collaborative effort between the jail, public health department, and even specific primary care settings is necessary.

The researcher in this study relied heavily on the jail lieutenant to make accommodations and assure timely releases in order to get participants to their appointments on time. Additionally, having an established relationship with the managed care organization allowed the researcher to assure proper Medicaid coverage prior to release, which is certainly not the case for many incarcerated individuals. Future studies, therefore, should be conducted under the premise that a local jail, managed care organization, and public health department all sign on as

stakeholders and agree to necessary modifications or exceptions to protocol in real time, should they arise. Attempting to implement this intervention in a more step-by-step manner could lead to greater success since challenges could be addressed immediately.

Additionally, future studies would likely be more successful if the researcher added a specific health center or a variety of primary care providers on as stakeholders. Although the researcher was able to identify some available providers for participants, the intervention could have been even stronger if primary care providers had agreed ahead of time to offer space for newly-released inmates, and perhaps to streamline the scheduling process. This collaboration will be integral to future studies that hope to enroll a greater number of participants. Future studies should focus on strengthening this relationship between the jail and primary care providers, with the researcher as a mediator, to ensure that providers prioritize the needs of participants and recognized the importance of establishing care immediately upon release.

Other possibilities for success in future studies are to focus on ways to broaden the scope of the warm handoff intervention to include follow-up appointment support, such as reminder phone calls and even transportation. In this case, the warm handoff role would fall to a "case manager", who can provide continual resource support to the newly-released individual. By doing this, the intervention would be more sustainable and could lead to a decrease in emergency care visits in the years following jail release.

The intervention might also be more successful if it was paired with efforts to address the immediate needs of a newly-released prisoner returning to homelessness, such as hunger and shelter concerns. A few participants made comments that they hoped for food when they agreed to participate, or that it would be helpful if they had the opportunity to get food before seeing the

provider. Since this was not part of the original design of the study, it could not be offered, but it may be worthwhile to include such crucial necessities in future studies.

Finally, and most importantly, a cry for change must be heard by the healthcare system to find ways to engage and care for the most vulnerable in our society. The barriers identified in this study represent only a small glimpse into the larger issues faced by this population. The healthcare world, and health researchers, must recognize that the goal of providing adequate care to all humans including those who are routinely forgotten and ignored during periods of incarceration. Until now, responsibility for the life and wellness of these individuals has only fallen on the shoulders of the criminal justice system, but this is both unsustainable and unethical. If we cannot assure equity in access to healthcare for the most neglected, how can we ever hope to improve the health of society as a whole?

Reference

Waite, R., & Nardi, D. (2017). Nursing colonialism in America: Implications for nursing leadership. *Journal of Professional Nursing, 35*, 18–25. doi:https://doi.org/10.1016/j.profnurs.2017.12.013.