

Safer Together Linkages to Care: A Prisoner Reentry Preliminary Program Evaluation

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Abstract

Formerly incarcerated individuals are often sent back into their communities with limited access to transportation, housing, employment, and access to other important services, which poses significant challenges in their ability to reintegrate successfully. Additionally, overdose death rates among former inmates with a substance use disorder is 13 times higher than the standard population and is the leading cause of death for released prisoners nationwide. One approach to mitigate these challenges and reduce overdose death rates is the utilization of peer support case management. The *Safer Together Linkages to Care* reentry program in Buncombe County works to connect recently released inmates with a Substance Use Disorder (SUD), to a Peer Support Specialist (PSS) in an effort to foster successful community reintegration by targeting their individualized Social Determinants of Health (SDOH) related needs. The purpose of this study was to analyze the data that were collected in the first six months of the program in order to assess which SDOH services were most needed at intake and at follow-up. Data analysis included univariate and bivariate analysis to assess the characteristics of the program participants, the percentage of expressed SDOH related needs at intake, and the percentage of expressed needs at the program's six-month mark. The study included a total of 55 participants, most of whom were Male and White. These findings demonstrate that Sunrise resources (89%), transportation (84%), housing services (75%), and benefits (65%) were the highest needed services at intake into the program. Additionally, findings suggest that most needs were met at follow-up for at least three months. In essence, the results demonstrate that the program was overall successful at connecting participants to their SDOH needs by utilizing a PSS, which as evidenced in external research, may have the potential to mitigate overdose death rates and recidivism and could serve as a model to strengthen future reentry programs. The paper acknowledges the limitations of this research and proposes areas for further research.

1. Introduction

As reintegration procedures remain inconsistent across the nation, individuals recently released from prison or jail may experience difficulties obtaining housing, employment, mental health and substance abuse treatment, transportation, and proper identification forms. These barriers are related to Social Determinants of Health (SDOH), which play a large role in whether a recently released inmate will reenter the community successfully¹. Furthermore, prevalence of Substance Use Disorders (SUD) among incarcerated individuals is high compared to the general population, as over 75% of all inmates currently have an active SUD²⁰. Recently released prisoners, especially, suffer overdose deaths at 13 times the rate of the general population, making it the leading cause of death for released prisoners nationwide³⁶.

Reentry programs aim to address SDOH-related barriers through transition planning and community reintegration strategies. The effect of such programs can be even greater when recently released inmates are connected with a Peer Support Specialist (PSS) who has a history of incarceration and substance use⁹. A PSS is able to provide a level of personal support and connection to the released inmate which is rarely available in reentry courts, or reentry programs

that utilize parole officers or health care providers^{9, 32}. As overdose death rates are so high among recently released prisoners and continue to rise, it is imperative to evaluate reentry programs that address the barriers often associated with these adverse outcomes³⁵.

1.1 Social Determinants of Health & Re-Integration

Several areas of research demonstrate the relationship between barriers recently released inmates face and their risk for overdose. These SDOH are the structural determinants and conditions in which people are born, grow, live, work and age, and are increasingly being acknowledged as influencing individuals' health outcomes. Factors such as socioeconomic status, housing status, education, the physical environment, employment, transportation access, social-support networks, food access, as well as access to medical care, fall among some of these determinants²⁷.

Although the importance of SDOH is more widely recognized in reentry procedures, inmates are still often released with little to no spending money, without proper identification and paperwork, and without adequate transportation and housing accommodations³². Without identification materials, for instance, it is nearly impossible to apply for housing, employment, and health insurance. Studies examining the health of former prisoners found that as many as 85% of former prisoners did not have health insurance and 70% were without employment, an important factor in receiving health care insurance³⁴. Individuals without health insurance experience substandard quality of care, and worse health outcomes than individuals with health insurance⁷. Figures from the Institute of Medicine suggest that 8,000 deaths were attributed to a lack of health insurance in 2000 alone⁷. Former inmates experience rates of chronic and acute health conditions, substance use disorders, and mental illness at higher rates than the standard population, all of which may be exacerbated without health insurance coverage. Applying for substance use treatment programs, primary health care, and obtaining prescription medication is arduous without insurance coverage. Furthermore, since 75% of prisoners being released from state prisons have an active substance use disorder, it is all the more necessary to have insurance to obtain proper medication and treatment³².

Although addressing a wide range of SDOH-related needs is imperative upon reentry, many of these needs are difficult to address without first having stable housing. The Census for the Bureau of Justice Statistics of the U.S. Department of Justice identified that 15.3% of the U.S. jail population were homeless in the year before incarceration, and anywhere between 25-50% of those who are currently experiencing homelessness have had a history of incarceration^{7,11}. Once released, many of those who were previously homeless will return to homelessness, and many released inmates will become homeless for the first time. Homelessness significantly increases the risk of incarceration and adverse health outcomes. Roughly 66% of former inmates with a severe mental illness or substance use disorder are currently living and staying in shelters, which is cause for concern given that mental illnesses may prolong homelessness⁷. Unfortunately, basic human needs such as housing often fail to be addressed during reentry procedures¹⁹. Without addressing important barriers such as insurance, employment, housing, transportation, and mental and physical health care, a released prisoner's chances of relapse and overdose increases significantly.

1.2 Evidence-Based Reentry Practices

Despite the more recent recognition of SDOH-related barriers, many reentry programs continue to utilize a one-dimensional approach concentrated on reducing specific deficits without addressing the larger range of needs. It is not uncommon for reentry programs to address one area of immediate need by focusing on either a large scale need such as housing, employment and transportation accommodations, or a small scale need such as obtaining identification forms^{4,6,14,16,30,38}. Reentry programs often lack the wrap-around, comprehensive, multi-dimensional approach that have recently been demonstrated to be effective in fostering successful reintegration^{16,17,19}. Therefore, reentry programs are encouraged to focus on an all-encompassing, integrated approach that targets multilevel challenges simultaneously¹⁶. In addition, best practices include approaches that are culturally and socially competent, utilize multiple levels of coordination between governmental and community networks, and begin the process prior to release^{16,39}.

Even when reentry programs take a broader approach to target multiple needs, obtaining and maintaining housing, employment, education, and transportation remain the most commonly reported barriers to successful reentry, often due to insufficient pre-planning^{6,8,32,39}. An effective strategy to ensure that accommodations are arranged in a timely manner is to begin the reentry process well in advance to the release date by connecting and making arrangements with community-based networks and services. In addition to planning ahead, research has shown that even once the basic needs are secured, reentry programs should integrate a post-release continuation of care to assess the adherence

to care and services¹⁶. This is most effective when those leading the intervention are culturally competent, socially supportive, and can empathize with the lived experiences of the former inmate³⁹.

The social support and cultural competency components and their relation to offender success are progressively becoming more widely recognized as a vital component in reducing health disparities and increasing health equity³⁹. Social support may be a network of family and friends, a supportive community, or a reentry supervisor that provides emotional support as the individual reintegrates back into the community. As such, peer support systems aim to function as a social support network, working closely with formerly incarcerated individuals to meet their SDOH needs, provide wrap around services and continuity of care³⁵.

1.3 Peer Support Specialists

A Peer Support Specialist (PSS) is an individual who has had lived experience and is formally trained to support those who are struggling with mental health, psychological trauma, substance use or involvement in the criminal justice system²⁸. A PSS is adept in understanding system barriers by virtue of their own lived experiences. Therefore, they are able to serve as a recovery catalyst, motivating and supporting an individual during reentry, connecting them with community health services, social support services, and assisting their adherence to care instead of providing professional counseling and medical treatment^{29,10}. As such, PSS can be especially effective in providing community connection and mutual support to individuals with an SUD who are leaving the criminal justice system.

Support that comes directly from someone who has similar lived experiences can greatly benefit an individual in navigating potential barriers to recovery and reentry. Research suggests that employing a PSS who works to address recently released individuals SDOH needs in reentry programs can significantly reduce relapse rates, increase treatment retention, enhance community engagement and reduce involvement with the criminal justice system^{4,9}. A recent meta-analysis conducted to assess the efficacy of a PSS found that the PSS decreased the sense of isolation, reduced impacts of stressors, and increased the sharing of health information from the participant to the PSS²¹. As such, participants who sought out and adhered to mental health and substance use treatment were significantly higher among those who received a PSS than those who did not^{5,31}. Additionally, qualitative evidence suggests that working as a PSS aided in their own recovery while also serving as an opportunity for client-peer rapport building²⁸. Further, participants reported a greater comfort in talking with a peer and thought that the peer had more credibility based on their shared experiences, while peer supports themselves note that their own lived experience was the most valuable tool in effectively working with their clients^{5,31}. Therefore, the *Safer Together Linkages to Care* reentry program uses SDOH and PSS as the primary intervention targets to foster successful reintegration, thereby reducing overdose death rates and further involvement with the criminal justice system.

2. Background of Program, Safer Together Linkages to Care

In January 2020, Buncombe County, North Carolina Health and Human Services (BCHHS) was awarded funding to implement the *Safer Together Linkages to Care* reentry program, which provides a PSS to those who have been released from prison or jail within the past three months, and who are experiencing a SUD. The participants in this program, particularly in the first six months, were primarily coming from the local jail in Buncombe County rather than prison. The role of the PSS is to address SDOH-related barriers by connecting participants to their needed areas of service in an attempt to reduce overdose death rates and allow for successful reintegration into the community. The program assigns the PSS a cohort of no more than 30 participants. The active time frame of the program lasts through the first three months of enrollment. During this time, the PSS works to connect the program participants to an extensive network of community services. At regular intervals during the active stage, the PSS checks in with each participant to track their progress, offer support, and provide additional assistance if needed. After the completion of the active stage, the participants transition to the inactive stage, which lasts for another three months in which the check-ins become less frequent. The focus of the inactive stage is cultivating independence in preparation for their discharge after completion of the program. The following linkages to services are offered through this program:

- *Medication Assisted Treatment (MAT)* - While the *Safer Together Linkages to Care* reentry program does not offer clinical services, the PSS refers interested participants to two local FQHCs; AMCHC (Appalachian Mountain Community Health Centers), WNCHHS (Western North Carolina Community Health Services), and MAHEC (Mountain Area Health Education Center) for MAT.

- *Housing Support* - Participants in need of housing accommodations are referred to local sober living, drug treatment centers, and halfway houses as needed. The program is vetted through a patient brokering subcommittee which connects participants to housing services that have not had recent allegations of patient brokering. Additionally, housing referrals are only made to community partners that accept individuals who are actively on MAT.
- *Transportation Services* - The program offers bus vouchers when needed and referrals to RideHealth services, which is contracted through Uber/Lyft to provide free or low cost rides to appointments.
- *Employment/Education* - The PSS will work with participants to find training programs, employment opportunities, or referrals to assistance with resume building and job search.
- *Harm Reduction* - Participants have access to local harm reduction organizations such as Western North Carolina Aids Project (WNCAP) that offer services such as syringe exchange programs, peer navigators, HIV/AIDS and HEPc testing and education, among others.
- *Sunrise Resources* - Interested participants have access to the resources that *Sunrise Community for Recovery and Wellness* offers, including virtual support groups, and syringe access programs among others.
- *Legal Services* - Participants in need of assistance with custody, criminal, eviction or other charges are connected to local legal services such as Pisgah Legal.
- *Mental Health Treatment* - The PSS works with interested participants in connecting to local mental health treatment centers, including intensive outpatient programs if applicable.
- *Phone Services* - Participants are provided a phone, phone card and a three month phone service plan at no cost.
- *Identification Services* - The PSS works with participants to set up appointments at the DMV to obtain important identification forms such as birth certificate and driver's license.
- *Benefit Services* - Participants have the ability to apply for food stamps and Medicaid. Food stamp applications are often filled out with the PSS, while those interested in Medicaid are referred out to Pisgah Legal to assist with the application process.
- *Flex Funds* - Funds up to \$500 will be set aside to assist program participants in mitigating these SDOH challenges and accessing services. For example, a program participant may need financial assistance to secure an ID when exiting the jail, or transportation to attend referral appointments. The financial assistance is provided directly to the organization and services. There are no cumbersome and unnecessary restrictions on these funds.

In an effort to understand the conduct and impact of the *Safer Together Linkages to Care Program*, this study examines and identifies which SDOH services were most needed at intake and at the program's six-month follow-up. For this preliminary program evaluation, the main research question(s) were:

1. Which services were most needed by program participants at intake?
2. Which services were met and still needed by program participants at the six-month program follow-up timepoint?

3. Methods

This study is a cross-sectional analysis of existing data that were collected through the *Safer Together Linkages to Care* reentry program regular program tracking processes.

3.1.1 program participants

The preliminary evaluation of the *Safer Together Linkages to Care* reentry program is based on data for the 55 participants who were enrolled in the first two cohorts during the first six months of the program. The first cohort included 27 participants whose intakes occurred between April 15th, 2020 and July 13th, 2020. The second cohort included 28 participants whose intakes occurred between July 14th, 2020 and October 7th, 2020. Eligible participants are those who identified as having an SUD, and who had been incarcerated during the past three months. The first program exclusion criterion is for those who were provided Medication Assisted Treatment during incarceration and those who were registered sex offenders. There are no exclusion criteria based on age, gender, race, etc.

3.1.2 data collection

This study analyzes the intake and follow-up data collected by the PSS. Although the PSS continuously collected progress data at frequent check-ins with the participants, this analysis focuses on the data collected for the first two cohorts of participants during their initial intake needs assessment and at a follow-up time point six months into the program, in October 2020. During the initial intake needs assessment, the PSS met individually with participants to determine their areas of need and which services they would be directed to. The PSS continued to check in with participants weekly to collect progress data on their use of services and ensure their adherence to the program. At the conclusion of each quarter, a follow-up meeting took place to collect data on which services the participants used, and which needs were met.

3.1.2 analysis

The researcher obtained approval from the UNC Asheville Institutional Review Board (IRB) to conduct the secondary data analyses. The PSS sent quarterly spreadsheets with de-identified, individual-level data to the researcher. The quarterly reports included data collected at intake for both cohort one and two. The reports also included follow-up information about needed services at the six-month mark of the program, in October 2020. Once transferred, the researcher re-structured the data into excel 365 (Version 2102) spreadsheets to organize all of the intake and follow-up data.

Univariate analyses were undertaken, including frequency tables to assess program participants' demographic characteristics, including gender, age, race, family status, and veteran status. Also, in order to answer research question #1 (Which services were most needed by program participants at intake?) the proportion of participants in the program at the six-month time point (n=55) who needed each of the services was calculated.

In order to answer research question #2 (Which services were met and still needed by program participants at the six-month program follow-up timepoint?) bivariate analyses were undertaken, specifically cross-tabulations of the percentage who expressed SDOH-related needs at intake and the percentage of expressed needs at the program's six-month follow-up mark. For this analysis, the researcher limited the sample to only the first cohort (n=27), who enrolled at least 90 days before the follow-up data were collected and would have had time for needs to be met.

4. Results

As shown in Table 1, most participants identified as white, single, male, non-veterans and were between the ages of 30-39 years as shown in the table below. This sample of participants were 71% Male and 29% Female (see Table 1). Participants identified as White (89%), African American (7%). Only cohort one had Hispanic (4%) and Multiracial (4%) participants.

Table 1: Participant Demographics

	Percent of Participants		
	Cohort 1	Cohort 2	Total
	(n=27)	(n=28)	(n=55)
Gender			
Male	67	75	71
Female	33	25	29
Age			
20-29	15	18	16
30-39	56	32	44
40-49	19	21	20
50-59	7	18	13
60-69	0	11	6

Race			
African American	7	7	7
Hispanic	4	0	2
Multiracial	4	0	2
White	85	93	89
Family Status			
Single	89	89	89
Married	7	7	7
Divorced	4	0	2
Widowed	0	4	2
Veteran Status			
Yes	4	4	4
No	96	96	98

The percentage of participants who expressed SDOH-related need at intake is shown in Table 2. The highest percentage of respondents indicated they were in need of Sunrise resources (89%), transportation (84%), housing services (75%), and benefits (65%). In contrast, harm reduction (11%) and legal services (11%) were the lowest needs for participants at intake.

Table 2: SDOH-Related Service Need at Intake by Cohort (n=55)

	Percent of Participants Who Expressed Need at Intake		
	Cohort 1 (n=27)	Cohort 2 (n=28)	Total (n=55)
Sunrise Resources	93	86	89
Transportation	89	79	84
Housing	81	71	75
Benefits	70	61	65
Employment	48	61	55
Identification	56	50	53
Phone	41	50	45
Education	44	43	44
MAT	33	46	40
Mental Health	33	46	40
Harm Reduction	11	11	11
Legal	15	7	11

Table 3 displays the follow-up data for cohort one at the program six-month follow-up. As such, the table exhibits the percentage of those participants who did or did not need each service at intake and at follow up. For example, the percentage of cohort one participants who needed Sunrise resources at intake was 93%. Of those, 12% did not need Sunrise resources and 88% did need Sunrise resources at follow-up. Of the 7% who did not need Sunrise resources at intake, 100% did not need Sunrise resources at follow-up.

Among all participants enrolled in the program in the first six months (n=55), the highest need at intake was for Sunrise resources (89%). Among cohort one participants (n=27), 93% needed Sunrise at intake, and of those, 88% were still in need at follow-up. The second highest need for all participants enrolled in the program was for transportation (84%). Among the cohort one participants who initially needed transportation, 67% did not have any additional needs, and 29% still needed RideHealth at follow-up. Housing support was the third highest need at intake among all participants (75%). Of the cohort one participants who needed housing support at intake, most (64%) were in a halfway house and very few (14%) were homeless at follow-up. Of the cohort one participants who did not need housing support at intake, 40% were homeless, 20% were staying with family and friends, and 40% were in a halfway house. In addition, of the participants who needed housing at intake, only 18% needed additional support, whereas of the participants who did not need housing at intake, 60% needed additional housing support at follow-up. Benefit needs were the fourth highest need at intake (65%), which included access to both food stamps and Medicaid. Of the cohort one participants who needed both Medicaid and food stamps at intake, 25% were still in need of food stamps at follow-up, and 75% did not need either food stamps or Medicaid at follow-up. Of those who did not need any benefits at intake, 32% needed food stamps and 67% did not need either service at follow-up.

Table 3: SDOH-Related Service Needs at Intake and Follow-up, Cohort 1 (n=27)

Service	Needed at Intake (%)	Not needed at Intake (%)
Sunrise resources	93	7
Not needed at follow-up	12	100
Needed at follow-up	88	0
Transportation	89	11
Not needed at follow-up	67	100
Needed Bus tickets at follow-up	4	0
Needed RideHealth at follow-up	29	0
Housing Placement	81	19
Staying with Family/Friends	18	20
Halfway House	64	40
Drug Treatment	5	0
Homeless	14	40
Housing Status	81	19
Gained housing 1 month	5	20
Maintained housing	77	20
Needed at follow-up	18	60
Benefits	70	30
Not needed at follow-up	75	68
Needed Food Stamps at follow-up	25	32
ID	56	44
Not needed at follow-up	93	100
Needed at follow-up	7	0
Employment	48	52
Gained employment at follow-up	100	100
Needed at follow-up	0	0
Education	44	56
Not needed at follow-up	100	100
Needed at follow-up	0	0
Phone	41	59
Not Needed at follow-up	45	75
Needed Phone Card at follow-up	0	13
Needed Both Phone & Phone Card at follow up	55	13
MAT	33	67
AMCHC at follow-up	45	0
MAHEC at follow-up	22	6
Other at follow-up	0	11
Not in treatment at follow-up	33	83
Mental Health Care	33	67
Not needed at follow-up	89	83
Needed at follow-up	11	17
Legal Services	15	85
Not needed at follow-up	100	100
Needed at follow-up	0	0
Harm Reduction	11	89
Not needed at follow-up	67	79
Needed at follow-up	33	21

The lowest needs at intake were for harm reduction (11%) and legal services (11%). All cohort one participants, whether or not they were in need at intake, did not need any additional legal services at follow-up. By contrast, among those who initially said they did not need harm reduction services at intake, 21% reported needing harm reduction at follow-up. Of the few participants who needed harm reduction at intake, 33% were still in need at follow-up.

For services such as education, identification, mental health and employment, the needs at follow-up remained very low. No cohort one participants needed additional education or employment support at follow-up. For identification services, of those who needed it at intake, only 7% were still in need at follow-up. Mental health services had a slightly higher need at follow-up, although many participants were connected to those services. Of the participants who needed mental health services at intake, 11% were still in need at follow-up, and for those who did not need mental health services at intake, 17% of participants indicated a need at follow-up. The results also demonstrate that the program was successful at connecting most cohort one participants to MAT. Of the participants who needed MAT at intake, 45% were in treatment at AMCHC, 22% were in treatment at MAHEC, and 33% were without treatment.

5. Discussion

The results from the first two cohorts suggest that the *Safer Together Linkages to Care* reentry program was implemented according to design and that the cohort one participants who were enrolled in the program were largely connected to their respective services at the six-month follow-up. Although the comparative follow-up analysis could only be conducted for the 27 participants in cohort one, the results for the service connections made are promising. The present findings suggest that addressing SDOH related needs by connecting individuals to community services and providing peer support can help mitigate the challenges of reintegration. Additionally, the findings for the intake needs among all 55 participants are useful as they highlight the types of services and the areas of need that should be addressed in reentry programs. Although the data that were provided to the researcher did not initially include overdose death rates, the PSS informed the researcher that out of the total 55 participants enrolled there were 4 total overdoses. This report, however, does not include analysis based on those figures. Instead, this analysis documents a range of successful service connections made as well as lessons learned throughout the first six months of the program operation. This discussion provides context to the data collected by the PSS in the first six months of the program and summarizes the key observations and lessons learned.

5.1 Demographic Characteristics

Although demographic characteristics were consistent among cohort one and two participants, cohort one had slightly more diversity in terms of race, including participants who were African American, Hispanic, Multiracial and White, whereas in cohort two, only few participants were African American and the rest of them were White. This is interesting given that the high proportion of White men enrolled in this program is reflective of Buncombe county's opioid addicted residents but is not representative of the county's incarcerated population. Overall, there were only six participants of color out of the 55 participants. It is worth mentioning that the racial makeup dramatically changed once the program began taking referrals for all illicit substance use disorders, and not just opioids. Although this data is not reflected in this report as this change occurred during the third quarter intake, it was a necessary and important step to expand the reach of care and diversify the participant pool, which can serve as a model for other programs moving forward.

Most of the participants in this sample were single, divorced, or widowed, which may have implications for the level of support they received. Studies that examine the relationship between family support for individuals with mental health or substance use disorders suggests that direct family, economic and social support all play an important role in helping individuals adhere to treatment. Individuals without family support are therefore at a significant disadvantage⁶. Although the participants may or may not be receiving family support based on their relationship status, this program's success may be attributed to the level of support provided by the PSS. As an individual with lived experience, the PSS may positively influence any gaps in support whilst assisting and facilitating navigation of the potential barriers to recovery and reentry.

5.2 Transportation

The needs at intake in this sample align with the basic needs typically identified for inmates reentering society in prior

research. Based on the analysis of needs for all participants enrolled in the first six months of the program (n=55), there was an extremely high need for transportation services at intake (89%). While most cohort one participants were able to obtain their respective transportation services, there was still a need for RideHealth at their six-month follow-up. RideHealth is contracted through Uber and Lyft services, providing low-cost rides to important appointments such as MAT, primary and dental care, job interviews and more. This additional need at follow-up is not indicative of the program failing to connect participants to transportation services. In this case, it is an indicator that the program is working well at connecting participants to the service and offering continuity of care since RideHealth is a continued service. In an attempt to foster independence, the PSS encouraged the use of RideHealth for 'appointments that felt appropriate', although there was no limit to the number of times permitted to use the service. Therefore, until participants have the capabilities, resources, and stability needed to acquire their own means of transportation, the continuation of RideHealth services is important to access necessary appointments.

Due to COVID-19, bus tickets were of no cost to the participants, which enabled the flex funds to be utilized towards RideHealth services. This may explain why many participants chose to utilize RideHealth instead of the bus tickets upon release. Participants may also not wish to utilize public transportation due to both the limited hours of operation and the locations of the transit stops, which creates vulnerable situations for released inmates, often subjecting them to victimization and criminal behavior^{18,24}. Roughly 25% of all released inmates have reported a significant barrier in accessing public transportation, often due to the lack of public transit in the area, and overall difficulties navigating the systems¹⁸. It is likely that the participants in this program are familiar with the public transportation barriers in Buncombe County and have therefore opted into the RideHealth services instead.

The connection to transportation is a basic, yet critical need that should be met with immediacy at the moment of release. Reliable transportation allows participants to navigate structural barriers of reentry such as accessing important medical appointments, substance use treatment, job interviews, and employment amongst others¹⁸. In fact, followed by low education or work history, transportation has been reported the third most significant barrier to accessing stable employment²². In essence, the PSS was successful in connecting participants to their transportation services and sustaining continuity of care by providing RideHealth services throughout the duration of the program.

5.3 Housing

The sample of participants indicated an extremely high need for housing during their intake procedures. Most cohort one participants were connected to housing services, with the majority staying in a half-way house at follow-up. A smaller percentage of those participants reported living with family or friends at follow-up. It may be advantageous for participants to stay with family or friends if those living situations foster a healthy and supportive environment. Having an emotionally supportive network of family and friends is a vital component to offender success as they transition back into the community^{6,32,8}. We assume that the individuals staying with family and friends were in a supportive environment provided their frequent follow-ups with the PSS and overall adherence to the program.

Despite the overall positive results in obtaining housing, many participants reported being homeless at follow-up. Among those who initially did not need housing accommodations, 40% reported being homeless at follow-up. Without housing accommodations, individuals often return back to communities and social networks that perpetuate violence, and substance use, ultimately jeopardizing their health and safety which places them at a higher likelihood of recidivism and/or relapse³⁰. Homelessness can also be significantly prolonged among those who have mental health and substance use disorders, which is concerning given that 66% of all inmates have an active SUD⁷. Bearing in mind that this sample of participants have an active SUD, it is imperative to address housing needs with immediacy.

The notion that housing was among one of the highest needs aligns with the scarcity of housing availability in Buncombe County. According to the North Carolina Housing Coalition, almost half of all Buncombe County renters have trouble affording their housing, which leaves little hope for those with criminal records to obtain housing without being offered proper support. According to one of the program partner sites, MAHEC (Mountain Area Health Education Center), unstable housing is one factor that contributes to return to use²². Despite a higher rate of homelessness amongst the participants who initially did not need housing support, the program was successful at connecting most participants to the housing services they needed. Given the scarcity of housing availability in Buncombe County, it is encouraging that the PSS is connecting most participants to housing services.

5.4 Benefit Services

Benefit services, which included both Medicaid and food stamps, were among the fourth highest needs for participants. The program was successful at connecting many cohort one participants to those respective services, especially

Medicaid. All participants secured Medicaid coverage considering that there were not any additional Medicaid service needs at follow-up. This is encouraging, given the probative value of insurance coverage for individuals with an SUD who are already at a higher risk of developing mental or physical health conditions¹⁵. To avoid perpetuating health challenges, increasing the risk of overdose, and recidivism, formerly incarcerated individuals need to be immediately connected to care, treatment and medication, which requires having health insurance^{15,18,35}. It is not uncommon for inmates to lose Medicaid coverage during incarceration, and although they may apply for re-enrollment upon release, the process to determine eligibility may take as long as 90 days, leaving little hope to access the care they need¹⁸. Medicaid eligibility was expanded in 2010 and has increased the opportunities to provide coverage for individuals reentering back into the community. States with expanded Medicaid have seen an overall higher rate of insurance coverage among former inmates and are able to provide coverage for treatments that address SUD, including MAT. As such, recently released inmates need immediate assistance in applying for and securing Medicaid upon release. Therefore, it is encouraging that the connection to community partnerships such as Pisgah Legal were able to offer participants the support and assistance in applying for and securing Medicaid.

Although significant connections were made to Medicaid services, there was still a need for food stamps at follow-up, although the need was relatively low. The need for additional food stamps at follow-up may be attributed to the fact that some class felons are not eligible to receive food stamps or participate in food assistance programs. Individuals who experience food insecurity, or the inability to access affordable, healthy foods, experience significantly higher rates of chronic conditions such as hypertension or diabetes than those who are food secure². Former inmates are at a particularly high risk for being food insecure, which may have significant negative ramifications for dietary behavior, physical health, and psychological well-being^{13,33}. A 2019 longitudinal study assessing food security among former inmates found that 20% were food insecure³³. Another recent survey found that up to 91% of former inmates did not have adequate access to food, and of those respondents, 37% could not afford food and had therefore gone entire days without eating³⁶. Released inmates not only encounter structural barriers related to food inaccessibility but are also often burdened with chronic conditions and illness which can be exacerbated without access to nutritional foods. Programs such as SNAP offer nutrition assistance to eligible individuals, which can significantly reduce the worsening of chronic illness, reduce food insecurity and otherwise involvement with the criminal justice system². Therefore, it is important the PSS connects participants to benefit services such as food stamps during the reentry procedures.

5.5 Employment and Education

Over half (55%) of the participants in this sample indicated that they were in need of employment assistance and education services (44%) at intake. Of the cohort one participants who indicated a need for education assistance, all of them were able to obtain the respective services at follow-up. This is encouraging because incarcerated individuals typically have markedly lower academic achievements and are twice as likely to not have completed high school than the general population^{24,29}. BCHHS' partnerships with local community colleges were able to provide opportunities for participants to obtain their GED, associates, bachelor's degrees or attend other training sessions needed for future employment. Long incarceration periods compounded with lower levels of education, limited work experiences, and a criminal background create tremendous challenges in both finding and maintaining employment, therefore we are encouraged that the need for additional educational support was so low^{2,24,27}. Similarly, there was no additional need for employment assistance which is promising given that having employment and financial security is associated with lower rates of recidivism, and criminal behavior¹⁸. Every month the PSS is provided a comprehensive list of job openings with 'felony friendly' employment agencies, which is then shared with participants during their intake procedures. Immediately providing the participants with this abundance of employment and educational opportunities contributed to the successful connections made to these agencies.

5.6 Medication Assisted Treatment

Although all of the participants in this program had an active SUD, only 40% of participants indicated that they were in need of MAT at intake. Of the cohort one participants who needed MAT at intake, only 33% were without treatment, and the rest were actively in treatment at AMCHC and MAHEC. The high percentage rate of participants actively enrolled in treatment is encouraging, given that the immediate connection and adherence to MAT programs has been proven to reduce the risk of relapse and overdose death rates, especially in the 2 weeks post release¹¹. Furthermore, studies have shown that when logistical and financial barriers are minimized, participants are much more likely to successfully engage and adhere to MAT. Additionally, peer intervention programs that link participants to MAT have

also been proven successful as they are able to assist not only with navigating the logistical and financial barriers, but also function as an encouraging support network^{24,25}. These findings demonstrate that the *Safer Together Linkages to Care* reentry program has the resources and capacity to provide linkages to the partnerships with local FQHCs that offer MAT services, and is also able to alleviate the logistical barriers that may have implications for MAT adherence.

5.7 Mental Health

Less than half (40%) of all participants needed mental health services at intake. Among the 33% of cohort one participants who needed mental health services at intake, very few (11%) needed it at follow-up. The low need for mental health at intake is somewhat surprising given that roughly 72% of incarcerated individuals with a substance use disorder also have co-occurring mental health disorders²⁶. Many reentry programs fail to address mental health during reintegration procedures and do not provide adequate connections to community networks to support those re-entering³⁸. Furthermore, many inmates do not receive mental health care during incarceration, which may imply that immediate access to mental health care, outpatient care in particular, could enhance successful community reintegration¹⁷. Therefore, it is imperative that this program continues to offer connections to mental health services and follows up with participants to check their adherence to care.

6. Limitations and Future Research

While this analysis provides useful information on the first six months of *Safer Together Linkages to Care* reentry program, the study design and analysis procedures have several key limitations.

6.1 Data Collection & Analysis

Data collection for the program was not systematic. Due to the high caseload for each PSS and sporadic requests for needs and services, it was difficult and would have been time-consuming for the PSS to collect data consistently and uniformly. Future data collection for the program would benefit from implementing a standardized data collection system.

In addition, since the data was often collected by means of informal conversation between the program participant and the PSS, the quantitative data points provided to the researcher in the quarterly reports did not capture participants' subjective experiences, which would have provided context to their various outcomes. Furthermore, self-reported information is susceptible to social desirability and recall bias. Inconsistent timing and approaches to data collection also threatens the reliability of the data. Therefore, future studies and evaluations should utilize a mixed method approach which would provide the context needed to assess what aspects of the *Safer Together Linkages to Care* reentry program enabled successful community reintegration.

Finally, the major limitation of this study is the inability to do a comparative analysis on all 55 participants' follow-up data due to variability in time of enrollment in the program. The intake procedures occurred on a rolling basis from April 15th to October 7th, which meant that some participants were in the program for longer periods of time than others. As such, the researcher decided to only conduct the comparative follow-up analysis for cohort one participants. Another important limitation is that the follow-up data did not include rates of recidivism and overdose. Future evaluations should therefore analyze all cohorts' follow-up data and include rates of recidivism and overdose.

6.2 Sample Generalizability

Definitive conclusions cannot be drawn from this study due to its relatively small and selective sample size. The demographics of our sample were not representative of the general population of incarcerated individuals, which limits the generalizability of our findings. Therefore, future reentry program evaluations should examine a larger, more diverse participant pool.

Moreover, this program operated in Buncombe County, North Carolina, where there is a rich abundance of community services and strong community partnerships which allowed the PSS to easily connect and guide the participants to their respective services. Although this may ultimately serve to benefit the participants re-entry experience, future evaluations should be conducted on similar programs that operate in various geographical areas. Therefore, this program may not be generalizable to the population of individuals with an SUD who are being released

from incarceration.

7. Conclusion

In spite of these challenges, using an approach that incorporates a PSS to target SDOH needs, has implications for the preliminary success of the *Safer Together Linkages to Care* reentry program. Individuals face a number of challenges upon release and are often not only difficult to recruit into reentry programs but also do not adhere to the program due to recidivism, relapse, overdose death, and other factors. The high level of adherence and engagement in this program may not have been achieved without the level of support, abundance of resources and service connections, and continuity of care. The high participation rate is in part credited to the partnership with community-based services organizations and the efforts of the PSS.

In this preliminary program evaluation, participants recently released from incarceration are at risk for overdose death and recidivism. Not having connections to services that address immediate reentry needs is associated with higher rates of overdose death, recidivism, and otherwise unsuccessful community reintegration. Programs such as the *Safer Together Linkages to Care* reentry program are needed to support individuals' success in their reintegration experience. Further evaluations are also needed to determine what aspects of the program contributed to success, and how these types of programs influence participants' long-term outcomes.

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9. Citations

1. About social determinants of Health (SDOH). (2020, August 19). Retrieved March 09, 2021, from <https://www.cdc.gov/socialdeterminants/about.htm>
2. Access to healthy foods: Social determinants of health. (2019, June 10). Retrieved March 08, 2021, from <https://www.ahip.org/access-to-healthy-foods-social-determinants-of-health/>
3. Anderson-Facile, D. (2009). Basic challenges to prisoner reentry. *Sociology Compass*, 3(2), 183-195. doi:10.1111/j.1751-9020.2009.00198.x
4. Bagley, S. M., Schoenberger, S. F., Waye, K. M., & Walley, A. Y. (2019). A scoping review of post opioid-overdose interventions. *Preventive Medicine*, 128, 105813. doi:10.1016/j.ypmed.2019.105813
5. Bassuk EL, Hanson J, Greene RN, Richard M, Laudet A. Peer-Delivered Recovery Support Services for Addictions in the United States: A Systematic Review. *J Subst Abuse Treat*. 2016 Apr;63:1-9. doi: 10.1016/j.jsat.2016.01.003. Epub 2016 Jan 13. PMID: 26882891.
6. Binswanger, I. A., Stern, M. F., Deyo, R. A., Heagerty, P. J., Cheadle, A., Elmore, J. G., & Koepsell, T. D. (2007). Release from prison — a high risk of death for former inmates. *New England Journal of Medicine*, 356(2), 157-165. doi:10.1056/nejmsa064115
7. Caruso, G. D. (2017). Public Health and Safety: The Social Determinants of Health and Criminal Behavior. *Public Health and Safety: The Social Determinants of Health and Criminal Behavior*, 1-38.
8. Denney, Andrew S.; Tewksbury, Richard; and Jones, Richard S., "Beyond Basic Needs: Social Support and Structure for Successful Offender Reentry" (2014). *Social and Cultural Sciences Faculty Research and Publications*. 96
9. Fallin-Bennett, A., Elswick, A., & Ashford, K. (2020). Peer support specialists and perinatal opioid use disorder: Someone that's been there, lived it, seen it. *Addictive Behaviors*, 102, 106204. doi:10.1016/j.addbeh.2019.106204

10. Gonzalez, J. M., Rana, R. E., Jetelina, K. K., & Roberts, M. H. (2019). The Value of Lived Experience With the Criminal Justice System: A Qualitative Study of Peer Re-entry Specialists. *International Journal of Offender Therapy and Comparative Criminology*, 63(10), 1861-1875. doi:10.1177/0306624x19830596
11. Gordon, M. S., Kinlock, T. W., Schwartz, R. P., & O'Grady, K. E. (2008). A randomized clinical trial of methadone maintenance for Prisoners: Findings at 6 months post-release. *Addiction*, 103(8), 1333-1342. doi:10.1111/j.1360-0443.2008.002238.x
12. Greenberg, G. A., & Rosenheck, R. A. (2008). Jail incarceration, homelessness, and mental health: A national study. *Psychiatric Services*, 59(2), 170-177. doi:10.1176/ps.2008.59.2.170
13. Initiative, P. (2021, February). Food insecurity is rising, and incarceration puts families at risk. Retrieved March 08, 2021, from <https://www.prisonpolicy.org/blog/2021/02/10/food-insecurity/>
14. Jacobs, E., & Western, B. (2007, October). Report on the evaluation of the comalert prisoner reentry program. Retrieved March 08, 2021, from
15. Joseph P. Morrissey Ph.D.Kathleen M. Dalton M.A.Henry J. Steadman Ph.D.Gary S. Cuddeback Ph.D.Diane Haynes M.A.Alison Cuellar Ph.D., Ph.D., J., Search for more papers by this author, M.A., K., Ph.D., H., Ph.D., G., . . . Luchins, D. (2006, June 01). Assessing gaps between policy and practice in medicaid disenrollment of jail detainees with severe mental illness. Retrieved March 08, 2021, from <https://ps.psychiatryonline.org/doi/full/10.1176/ps.2006.57.6.803> <https://www.ojp.gov/ncjrs/virtual-library/abstracts/report-evaluation-comalert-prisoner-reentry-program>
16. Lattimore, P. K., & Visher, C. A. (n.d.). *The Multi-site Evaluation of SVORI: Summary and Synthesis* (pp. 1-121, Publication No. 230421). National Institute of Justice (U.S. Department of Justice).
17. Lamberti, J. S., Weisman, R., & Faden, D. I. (2004). *Forensic assertive community treatment: Preventing incarceration of adults with severe mental illness*. *Psychiatric Services*, 55(11), 1285-1293. doi:10.1176/appi.ps.55.11.1285
18. La Vigne, N., Wolf, S., & Jannetta, J. (2004, November 01). Voices of Experience: Focus GROUP findings from the state of Rhode Island. Retrieved March 08, 2021, from <http://webarchive.urban.org/publications/411173.html>
19. McKernan, P. (n.d.). Homelessness and prisoner re-entry: Examining barriers to housing: Volunteers of america. Retrieved April 03, 2021, from <https://www.voa.org/homelessness-and-prisoner-reentry>
20. NIDA. 2020, June 1. Criminal Justice DrugFacts. Retrieved from <https://www.drugabuse.gov/publications/drugfacts/criminal-justice> on 2021, April 24
21. Pfeiffer, P. N., Heisler, M., Piette, J. D., Rogers, M. A., & Valenstein, M. (2011). Efficacy of peer support interventions for depression: A meta-analysis. *General Hospital Psychiatry*, 33(1), 29-36. doi:10.1016/j.genhosppsych.2010.10.002
22. Randle, B. (2019). Local report reveals rise in local homeless population. Mountain Xpress. Retrieved from: <https://mountainx.com/news/annual-report-reveals-rise-in-local-homeless-population/>
23. Rich, J. D. (2005). Attitudes and practices regarding the use of methadone in US state and federal prisons. *Journal of Urban Health: Bulletin of the New York Academy of Medicine*, 82(3), 411-419. doi:10.1093/jurban/jti072
24. Rossman, Shelli B., and Caterina Gouvis Roman. 2003. "Case-Managed Reentry and Employment: Lessons from the Opportunity to Succeed Program." *Justice Research and Policy* 5 (2): 75-100.
25. Scott, C. K., Dennis, M. L., Grella, C. E., Kurz, R., Sumpter, J., Nicholson, L., & Funk, R. R. (2020). A community outreach intervention to link individuals with opioid use disorders to medication-assisted treatment. *Journal of Substance Abuse Treatment*, 108, 75-81. doi:10.1016/j.jsat.2019.07.001
26. Semenza, D. C., & Grosholz, J. M. (2019). Mental and physical health in prison: How co-occurring conditions influence inmate misconduct. *Health & Justice*, 7(1). doi:10.1186/s40352-018-0082-5
27. Semenza, D. C., & Link, N. W. (2019). How does reentry get under the skin? Cumulative reintegration barriers and health in a sample of recently incarcerated men. *Social Science & Medicine*, 243, 112618. doi:10.1016/j.socscimed.2019.112618
28. Social Determinants of Health. (n.d.). Retrieved October 26, 2020, from <https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-of-health>
29. Solomon, A. L., Johnson, K. D., Travis, J., & McBride, E. C. (2004). From prison to work: The employment dimensions of prisoner reentry: A report of the reentry roundtable. *PsycEXTRA Dataset*. doi:10.1037/e720262011-001
30. Sung, H., & Richter, L. (2006). Contextual barriers to successful reentry of recovering drug offenders. *Journal of Substance Abuse Treatment*, 31(4), 365-374. doi:10.1016/j.jsat.2006.05.010
31. Tracy K, Wallace S. Benefits of peer support groups in the treatment of addiction. *Subst Abuse Rehabil*. 2016;7:143-154. <https://doi.org/10.2147/SAR.S81535>

32. Travis, J., Solomon, A. L., & Waul, M. (2001). FROM PRISON TO HOME Jeremy Travis Amy L. Solomon Michelle Waul The Dimensions and Consequences of Prisoner Reentry. Retrieved from http://research.urban.org/UploadedPDF/from_prison_to_home.pdf
33. Testa, A., & Jackson, D. B. (2019). Food insecurity among formerly incarcerated adults. *Criminal Justice and Behavior*, 46(10), 1493-1511. doi:10.1177/0093854819856920
34. URBAN INSTITUTE Justice Policy Center. (2005, August). *Returning Home Illinois Policy Brief: Health and Prisoner Reentry*. Kamala Mallik-Kane. <https://www.urban.org/sites/default/files/publication/42876/311214-Returning-Home-Illinois-Policy-Brief-Health-and-Prisoner-Reentry.PDF>
35. Vikki Wachino and Samantha Artiga Follow @SArtiga2 on Twitter Published: Jun 17, 2. (2019, July 29). How connecting justice-involved individuals to medicaid can help address the opioid epidemic. Retrieved March 08, 2021, from <https://www.kff.org/medicaid/issue-brief/how-connecting-justice-involved-individuals-to-medicaid-can-help-address-the-opioid-epidemic/>
36. Waddell, E. N., Baker, R., Hartung, D. M., Hildebran, C. J., Nguyen, T., Collins, D. M., . . . Stack, E. (2020). Reducing overdose after release from incarceration (roar): Study protocol for an intervention to reduce risk of fatal and non-fatal opioid overdose among women after release from prison. *Health & Justice*, 8(1). doi:10.1186/s40352-020-00113-7
37. Wang, E. A., Zhu, G. A., Evans, L., Carroll-Scott, A., Desai, R., & Fiellin, L. E. (2013). A pilot study examining food insecurity and hiv risk behaviors among individuals recently released from prison. *AIDS Education and Prevention*, 25(2), 112-123. doi:10.1521/aeap.2013.25.2.112
38. Wilper, A. P., Woolhandler, S., Boyd, J. W., Lasser, K. E., McCormick, D., Bor, D. H., & Himmelstein, D. U. (2009). The health and health care of Us PRISONERS: Results of a nationwide survey. *American Journal of Public Health*, 99(4), 666-672. doi:10.2105/ajph.2008.144279
39. Woods, L. N., Lanza, A. S., Dyson, W., & Gordon, D. M. (2013). The role of prevention in Promoting continuity of health care in PRISONER Reentry Initiatives. *American Journal of Public Health*, 103(5), 830-838. doi:10.2105/ajph.2012.300961