Improving Transitions of Care for the Jailed Population: An Evaluation of the Wellness, Opportunity, Resilience Through Health (WORTH) Program

Project Overview

Transitioning back to the community from jail can be a stressful time, full of unknowns, stigma, and logistical barriers[1,2]. Accessing healthcare can be one of the most difficult services to coordinate due to fragmented health systems providing care (jail/prison care, hospitals, pharmacies, etc.), insurance, and competing psychosocial needs[2]. These complicated factors, coupled with feelings of distrust towards medical systems, are enough to keep many recently incarcerated individuals from accessing medical care when they transition back into the community[2]. The Wellness, Opportunity, Resilience Through Health (WORTH) program was established at the University of Colorado Anschutz Medical Campus to help minimize the stress and difficulty of transitioning back into the community for incarcerated individuals in jails in the Denver Metro Area. Utilizing the expertise and lived experience of peer support specialists (who connect participants with social resources) and a health navigator (who helps participants get the medical support they need), WORTH establishes relationships with incarcerated individuals before they leave jail, or soon after they are released, and provides resources and facilitation to aid them in fulfilling their health and wellness goals.

Evaluation

Using REDCap data compiled by WORTH, Colorado Medicaid claims data, program team member interviews, and WORTH participant feedback surveys, we conducted a quantitative and qualitative assessment of program reach, WORTH participant engagement, healthcare utilization, and satisfaction with the program to aid in refining the program.

Program Elements

WORTH began in 2021, hiring a program manager and a health navigator in their first year, later expanding to include two peer support specialists and a medical director in their second year. WORTH receives referrals from medical staff at county jails, courts and attorneys, community organizations, UCHealth (UCH) and CU Medicine (CU) clinics, and self-referrals. Following acceptance of a referral by the WORTH team, attempts are made to meet the participant, either in jail or in the community after release, to orient the participant with the services. If a participant agrees to work with a WORTH peer support specialist and/or health navigator, they are enrolled in WORTH. The WORTH team provides participants with care coordination, education about health conditions and the health system, resource connections, healthcare advocacy, and peer support based on individual needs. Support is offered until a participant either stops needing/being eligible for services or meets their goals, after which point they are graduated.

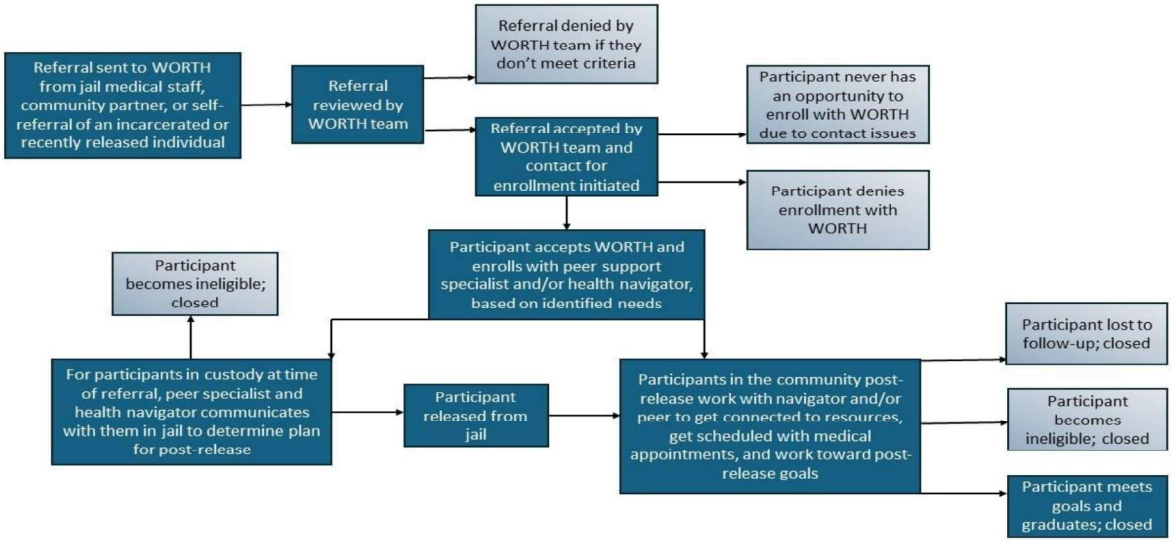


Figure 1. WORTH Workflow

[1] Langley, C.A. (2022). Jail Transitions and Rural Communities: Implications for Practice and Policy. *The Journal for Nurse Practitioners, 18*, 1081-1085.
[2] Held, M.A., Brown, C.A., Frost, L.E., Hickey J.S., & Buck, D.S. (2012). Integrated Primary and Behavioral Health Care in Patient-Centered Medical Homes for Jail Releasees with Mental Illness, *Criminal Justice and Behavior, 39* (4), 533-551.

QUANTITATIVE ANALYSIS

Methods Overview

The quantitative analysis characterized demographics, referral information, and WORTH enrollment for participants referred to WORTH between June 1, 2022, and December 31, 2023. Engagement with the peer support specialists and health navigator (as identified by successful versus unsuccessful encounters) and closure reasons were also characterized to better understand participant involvement with the WORTH program. Healthcare utilization, as indicated by state Medicaid claims data, was analyzed for up to twelve months following WORTH referral or release from jail (whichever was later) for WORTH participants that consented for their Medicaid ID to be shared and used for evaluative purposes.

Over this 19-month evaluation period, 127 people were referred to WORTH. Nine of those referrals were denied due to either not meeting WORTH's criteria (n=3), being released from jail more than 30 days prior to referral (n=2), WORTH team not having capacity (n=1), lack of contact information (n=1), plans to move out of the Denver area after release (n=1), or an unknown reason (n=1). Of the 118 accepted referrals (Table 1), most participants were referred while in custody. Most referrals came from community organizations, with It Takes a Village referring 38% of these participants. Most participants indicated needing specialty medical care (75%), with infectious disease, neurology, OB/GYN, orthopedic, and medication-assisted treatment being the top five needs. Over half of accepted WORTH referrals met with WORTH staff and enrolled with WORTH (52%). Of the participants that enrolled with WORTH, most enrolled with both a peer support specialist and the health navigator.

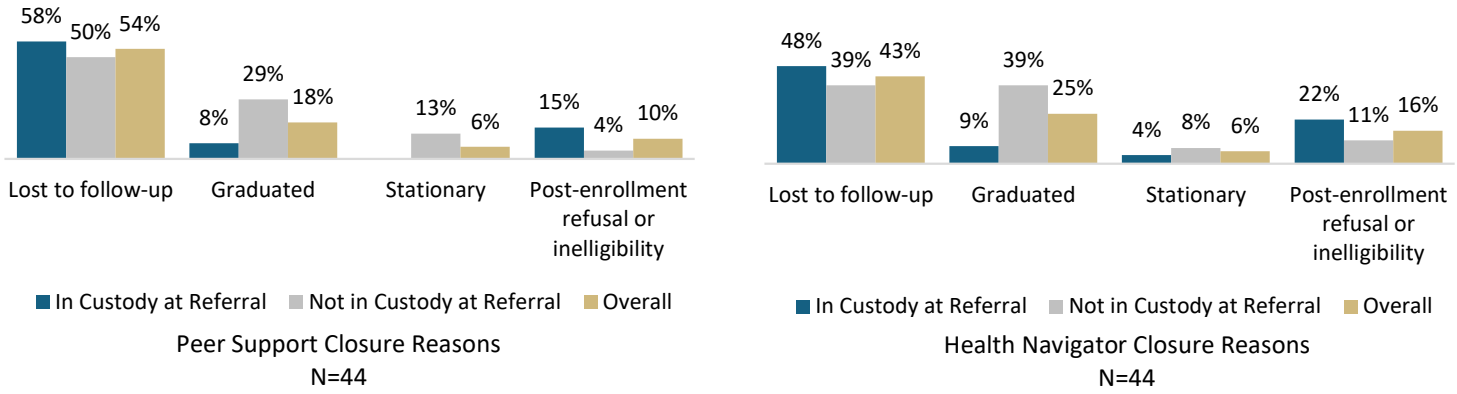
Table 1: Accepted Participant Demographics and Referral Information

	In Custody at Referral N = 71		**Not in Custody~ at Referral** N = 47		**Overall** N = 118	
*Demographics^*						
Medicaid recipients consenting to share IDs*	14	(19.7%)	20	(42.6%)	34	(28.8%)
Gender identity+						
Male	29	(40.8%)	33	(70.2%)	62	(52.5%)
Female	29	(40.8%)	6	(12.8%	35	(29.7%)
Age (years), mean (standard deviation)	39.1	(10.5)	37.1	(10.5)	38.2	(10.5)
Referral Source						
Community organization	9	(12.7%)	33	(70.2%)	42	(35.6%)
Jail medical staff	28	(39.4%)	0	(0%)	28	(23.7%)
CU jail midwife	15	(21.1%)	0	(0%)	15	(12.7%)
Courts/attorney	6	(8.5%)	6	(12.8%)	12	(10.2%)
Self-referred/Word of mouth	8	(11.3%)	2	(4.3%)	10	(8.5%)
Other	0	(0%)	3	(6.4%)	3	(2.5%)
Other jail staff	2	(2.8%)	2	(4.3%)	4	(3.4%)
UCH/CU clinic staff	3	(4.2%)	1	(2.1%)	4	(3.4%)
Medical Needs Indicated at Time of Referral						
PCP provider needed	24	(33.8%)	24	(51.1%)	48	(40.7%)
Specialist needed#	60	(84.5%)	28	(59.6%)	88	(74.6%)
Infection disease	18	(30.0%)	12	(42.9%)	30	(34.1%)
Neurology	9	(15.0%)	5	(17.9%)	14	(15.9%)
OB/GYN	13	(21.7%)	1	(3.6%)	14	(15.9%)
Orthopedic	6	(10.0%)	2	(7.1%)	8	(9.1%)
Medication-assisted treatment	8	(13.3%)	0	(0.0%)	8	(9.1%)
Unknown medical provider needed	9	(12.7%)	5	(10.6%)	14	(11.9%)
WORTH Enrollment						
Enrollment with WORTH	31	(43.7%)	30	(63.8%)	61	(51.7%)
Enrollment with a peer support specialist	26	(83.9%)	24	(80.0%)	50	(82.0%)
Enrollment with the health navigator	23	(74.2%)	26	(86.7%)	49	(80.3%)

~Not in custody includes 14 participants who were incarcerated in community environments, including half-way houses or house arrest. ^Demographics other than those shown here were inconsistently gathered, with missing/unknown rates exceeding 30%. *Medicaid status is only known if a participant enrolls with WORTH and consents to their Medicaid ID being used; numbers here likely underrepresent the proportion of Medicaid WORTH participants. +Gender identity was unknown for 14% of participants; 3% of accepted participants identified as transwomen. # Participants could indicate multiple specialty areas of need. Other specialties indicated at rates of less than 10% of the participant population each include psychology, endocrine, cardiology, dermatology, general surgery, ophthalmology, urology, breast care, ENT, hepatology, oncology, radiology, medication refills, and other.

For the 50 participants that enrolled with a WORTH peer support specialist, the average number of successful encounters (contact made with participant) was 12.3 (StDev = 16.0), with one individual having 89 successful encounters. The average number of unsuccessful encounters (outreach that did not result in contact with a participant) for this group was 6.0 (StDev = 5.8), with one individual having 24 unsuccessful encounters. For the 49 participants that enrolled with the WORTH health navigator, the average number of successful encounters was 8.2 (StDev = 9.5), with one individual having 42 successful encounters. The average number of unsuccessful encounters for this group was 7.5 (StDev = 7.6), with one individual having 31 unsuccessful encounters.

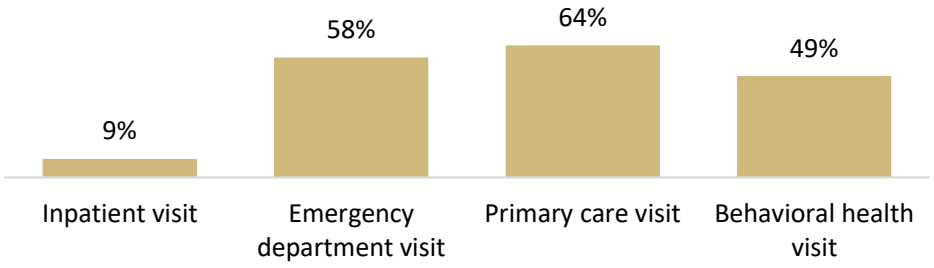
At the time of evaluation, 6 participants from this cohort were still active with their peer support specialist and 5 participants were still active with the health navigator. Closure reason for those no longer active with WORTH is displayed in Figure 2. For both peer support and health navigation services, lost-to-follow-up was the most common reason for closure, regardless of whether in custody or in the community at time of referral. For those in custody at time of referral, many became ineligible for services following enrollment, either due to being sentenced to prison or being released from custody without having met someone from the WORTH team or providing WORTH with post-release contact information. Health navigation had a higher proportion of participants graduated at the time of evaluation. For both groups, participants were more likely to be marked as graduated at the time of evaluation if they were not in custody at time of referral.



Note: Stationary refers to a participant that is responsive to outreach but is not demonstrating working toward established goals

Figure 2. Closure reasons for peer support and health navigator services

Healthcare utilization claims data was available for 33 participants that reported having Medicaid coverage and consented to having their claims data used after their release; 1 participant was found to have a non-valid Medicaid ID and was excluded from the export. Most Medicaid participants had a visit with a primary care provider, nearly half had a behavioral health visit, inpatient utilization rates were below 10%, and emergency department utilization rates were above 50% in the twelve months following referral or jail release (Figure 3). Using diagnosis descriptions associated with emergency department diagnostic codes in Medicaid claims data, the top diagnoses for emergency department visits were related to nicotine dependence, pregnancy (e.g. preterm labor, complications), and pain (e.g. chronic pain, pain in extremities).



Note: n = 33; this reflects up to 12 months of time following referral or release, though not all had a full 12 months of data available

Figure 3. Percentage of consented WORTH Medicaid participants with healthcare claims (by type) up to a year post referral or release

QUALITATIVE FEEDBACK FROM WORTH TEAM MEMBERS

Interviews were conducted with three WORTH team members: the program manager, a peer support specialist, and a health navigator. Responses were thematically analyzed into two domains: successes and challenges.

Project Successes

WORTH team members shared that they felt the program provides a much needed "bridge" from jail release to community that allows their participants to become connected and set up for success in a world that frequently discriminates against and overlooks them. Through building partnerships with the carceral systems, the community, and the healthcare system, WORTH has created a network of trusted clinical partners that their participants can in turn start trusting. As one team member shared, "We want to make sure that providers that we are referring our participants to want to work with this population and want to change…the stigma, want to change the trauma…so [participants] can feel more comfortable advocating for their medical needs. They can start trying to gain that trust back with those medical providers." Team members shared that the creation of a network of clinical partnerships has allowed WORTH to provide expediated, better transitions of care that allow the team the ability to break down barriers and build their participants' trust, especially with the healthcare system.

"I think being a support system for them allows us to be a voice for them… it's a powerful thing, and I think it's made a huge difference in the lives of our participants."

Trust is a top priority for the WORTH team. By building strong partnerships in the community, ensuring providers they refer to are trauma informed, and hiring staff that have personal lived experience of the jail system, the team feels they have made great strides in promoting trust with their participants. Team members felt that by building trust, not only are they improving advocacy and engagement in healthcare for their participants, but they are also improving the quality of care that participants are receiving. As one team member shared, "helping them, providing them with the tools so that they have the ability to advocate for their medical needs…and they have the ability to help them gain the skills to just navigate the resources that are just not only medical, but all of the other social determinants."

Project Challenges

Team members were also able to identify barriers and had suggestions for improvement. Difficulties navigating the limited resources in the carceral and healthcare systems were the top concern shared by team members. Lack of ability to meet or call individuals while they were incarcerated was frequently cited as a barrier. While some improvements have been made (as of November 2023, two jails have allowed WORTH to have free incoming phone calls and access to scheduled virtual visits), they were frequently not able to speak with or meet incarcerated individuals in the way they had planned. Additionally, stigma, the structure of the healthcare system, and the siloing of the healthcare and carceral systems has created difficulties in the way WORTH has been able to provide care for their participants.

Team members shared frustration with the training received at time of hire and understanding the expectations of their role. Specifically, the lack of training offered and the time it took to get fully trained in their area of service, and therefore feel comfortable in and fully understand their role, were cited as barriers to progress by team members. Team members shared that they would prefer more structured training for future hires, perhaps with a mentorship component, where the new hire can shadow the existing team members in that position.

"We're hindered by resources…you only have so much capacity. And by limiting how much staff we have that limits our capacity."

Team members also shared that while it was great to be able to "build a program from the ground up," it has caused significant logistical challenges in operationalizing the program. Graduating participants, defining scope of the program, creating new data tools, and facilitating community engagement have all been challenging and were cited as growth areas. The limited bandwidth of the team was also cited as a barrier. Team members shared that the current team structure, with two peer support specialists and one health navigator, puts more burden on the health navigator as the division of labor is not divided equally.

PROCESS AND FEEDBACK FROM PARTICIPANT SURVEYS

Survey Methodology

In collaboration with the WORTH team, we created a participant survey and distribution plan for their participant population. The survey was hosted on Qualtrics and was written at a 4th/5th grade reading level, addressed participant trust in the healthcare system, and gathered participant feedback about the WORTH program. Specifically, survey questions focused on trust and comfortability with the healthcare system in general, confidence in making progress towards health goals, satisfaction with WORTH program team members and services, and recommendations for improvements.

The survey population consisted of WORTH enrollees who were released from jail during our evaluation period and had consented to receive surveys. To create the distribution list of participants to be outreached, we used both the WORTH REDCap data and contact information listed in their electronic health record (EHR).

Outreach Process

We conducted a leveled-contact outreach through which participants were invited to complete the survey between 4-7 times. Participants were initially contacted via Qualtrics text message with a link to the survey. Then, they received a follow-up text reminder in Qualtrics. Those that did not complete the survey after the text messages received a Qualtrics email with the survey link. Those that still did not respond received two phone call attempts from a QUEST team member who would fill out the survey while on the phone with the participant, if the participant agreed to participate.

Many of the participants' numbers in the initial outreach seemed to be disconnected, therefore we elected to conduct a secondary outreach using additional numbers found in the EHR for several of the participants. This secondary outreach consisted of another Qualtrics text message as well as another Qualtrics email with the survey link but not a phone call.

Participant Response Rate

Of the 127 referred participants in our evaluation period, 35 (28%) were eligible to be contacted to participate in the survey. Six participants were excluded from outreach due to no contact information being found in either data system or from being terminated from the program due to negative interactions. Of the 29 participants outreached, 2 completed the survey (response rate 7%). One participant completed the survey via email and one via a phone call.

Participant Feedback

Due to the response rate not meeting the threshold (five responses) of reportable data, we were not able to analyze and report specific Likert results from the couple of responses we did have. However, in general, the two responses were positive in both aspects of trust in the healthcare system and satisfaction with the WORTH program. Open-ended responses were also positive, though vague on which components of WORTH they found valuable.

"I like all of it, I like the care, it was very nice and everything."

Survey Limitations and Suggestions for Improvement

These two responses are likely not representative of all experiences of everyone that engaged with WORTH during the evaluation period. Some eligible participants did not have numbers or emails listed in REDCap or in the EHR, meaning they could not be contacted. Participants' numbers may have also been outdated in either data system which caused text messages and phone calls to not go through. Additionally, it is likely that most participants were not engaged in WORTH's services at the time of outreach, which may have caused some confusion and reluctance to being contacted.

In the future, attempting to gather feedback while the participant is engaged in WORTH's services may improve both response rates and breadth of feedback. Additionally, utilizing other methods (e.g. interviews, focus groups) to gather feedback may prove to have better engagement and responses. Further, the ability to provide compensation for participation is a proven method to improve participant response rates[3].

[3] Abdelazeem, B., Hamdallah, A., Rizk, M. A., Abbas, K. S., El-Shahat, N. A., Manasrah, N., ... & Eltobgy, M. (2023). Does usage of monetary incentive impact the involvement in surveys? A systematic review and meta-analysis of 46 randomized controlled trials. *PloS one*, *18*(1), e0279128.