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PEER OUTCOMES PILOT / HAVEN FOR HOPE

# Peer Services and Individual Outcomes

## Haven for Hope / San Antonio, Texas

Submitted to the Health and Human Services Commission (HHSC).

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# Background

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This evaluation considers the context and effect of peer services in two programs operating to meet the needs of individuals with mental health and/or substance use concerns who experience homelessness: Haven for Hope's Permanent Supportive Housing and Jail Outreach. It also examines the attitudes and beliefs of staff members, including peer and non-peer staff, who work at the organization.

## Peer Support

Peers are individuals in recovery from mental health or substance use issues who are employed to share their experiences and promote the recovery of others impacted by similar conditions. The dominant paradigm for behavioral healthcare in the United States has become recovery; the Substance Abuse and Mental Health Services Administration (SAMHSA, 2015) defines recovery as: "a process of change through which individuals improve their health and wellness, live a self-directed life and strive to reach their full potential" (para. 2).

Research suggests that peers may positively influence recovery outcomes by assisting in recovery planning, providing group peer support, Wellness Recovery Action Planning, one-to-one peer support, crisis support, and by advocating for people receiving services. While these services can also be delivered by non-peer staff, peers are better equipped "to inspire hope, destigmatize mental illness, and empathically support" the people they serve because of their personal lived experience (Oh & Rufener, 2017, p. 424). The provision of practical supports, role modeling, mentoring, social opportunities, and emotional support, provided through the normalizing relationship of someone who has shared experiences, may be the most effective aspect of the peer relationship (Gidugu et al., 2015).

Peer providers are not clinicians. Their role is to supplement clinical services by engaging individuals in their own care and health services, and helping them navigate "complex and fragmented systems" (Davidson et al., 2018, p. 2). As a result, research on the effectiveness of peer services should take into consideration this mechanism of action (Chinman et al., 2014). According to the literature, receiving peer services can produce positive outcomes for individuals in several areas of their life, including:

- Reduced use of inpatient and emergency services (Sledge et al., 2011; Clarke et al., 2000)
- Better psychiatric and social functioning (van Vugt, Kroon, Delespaul, & Mulder, 2012)
- Reductions in mental health/psychiatric symptoms (Barker & Maguire, 2017; Resnick & Rosenheck, 2008)
- Fewer homeless days (van Vugt et al., 2012; Bean, Shafer, & Glennon, 2013; Boisvert, Martin, Grosek, & Clarie, 2008)
- Greater use of wellness tools and awareness of symptom triggers (Cook et al., 2010)
- Better social support system (Cook et al., 2010; Bean et al., 2013)
- Reductions in involvement with criminal justice system (Bean et al., 2013)
- Increased satisfaction with finances and employment (Weissman, Covell, Kushner, Irwin, & Essock, 2005)
- Increased life satisfaction, greater quality of life (Weissman et al., 2005).

There is a paucity of research examining the potential benefits of peer support on family life. A model of family peer support exists, where family members with lived experience caring for a child with emotional or behavioral health needs assist other parents and caregivers in similar situations (Lopez, 2013). Evidence suggests that the family peer support model has a positive impact on family engagement, parental anxiety, and service retention (Lopez, 2013). It remains to be seen if traditional peer support has similar benefits. It may be that traditional peer support services have a positive effect on family unit stability and parental engagement by improving the psychiatric functioning, social support, and quality of life of parents who receive those services.

Peers may work in a variety of programs, independently, or as consultants. As evidence grows of the breadth of effectiveness of peer provided services, researchers continue to examine the contexts in which they work.

## **Permanent Supportive Housing**

Permanent supportive housing programs (PSH) offer a combination of permanent affordable rental housing and flexible and voluntary supportive services to individuals who experience chronic homelessness (National Alliance to End Homelessness [NAEH], 2019; Technical Assistance Collaborative [TAC], 2019). Supportive services include those “designed to build independent living and tenancy skill and connect people with community-based health care, treatment and employment services” (NAEH, 2019, para. 1). The PSH model emerged in the 1980s, distinguishing itself from older residential treatment models, which were restrictive and congregate, and did not establish the tenancy rights of their residents (O’Hara, 2003). Recently, there has been an increasing emphasis on ensuring that PSH is accessible to people with the highest acuity and homeless chronicity (Center for Evidence-based Solutions to Homelessness [CESH], 2019; U.S. Department of Housing and Urban Development [HUD] Office of Community Planning and Development, 2016).

### **Housing First**

During the same time that many PSH programs were established, in response to the McKinney-Vento Act of 1987 and the U.S. Supreme Court’s affirmation of the community integration rights of individuals with disabilities in the 1999 Olmstead case, numerous programs that take a “housing first” approach have also been established. Programs that take a housing first approach place individuals who are experiencing homelessness in permanent housing without pre-condition that the person receive any other type of service, including services for mental health or substance use issues. Thus, PSH programs may or may not operate under the housing first model of care. For example, some PSH programs establish a condition of substance use treatment or sobriety prior to placement in housing (e.g., Recovery Housing); others might establish income or background check requirements (Department of Housing and Urban Development [HUD], 2015). This contradicts the housing first approach, which prioritizes reducing the barriers that exist to attaining housing and placing individuals in housing faster.

Though each program that implements a housing first approach may vary in its activities and operations, one key element of successful programs that has been identified in the literature is an emphasis on providing housed individuals with community-based, client-driven services (Pearson et al., 2007). Additionally, a survey of three early-established housing first programs found that staff at all three programs had an underlying belief that recovery from mental health issues and substance use, common concerns for program

participants, is possible (Pearson et al., 2007). According to the authors, “the presumption of the Housing First approach is that, once clients achieve housing stability, they are better prepared to address their mental illness and substance-related issues” (p. 81).

There is an abundance of evidence for the clinical and cost effectiveness of the housing first model in addressing the needs of individuals with disabilities who experience homelessness. A randomized control trial found that 87 participants with dual-diagnoses who received housing without pre-requisites were able to obtain and maintain housing without compromising psychiatric or substance use symptoms just as effectively as the control group, who were required to enter substance use treatment prior to receiving housing (Tsemberis, Gulcur, & Nakae, 2004). Authors concluded that housing first consumer-driven and consumer choice models offer additional benefits, worth integrating into the prevailing Continuum of Care model. Another study conducted a cost-benefit analysis of the Denver Housing First Collaborative and found that the housing first initiative demonstrated cost savings in the areas of emergency room services, inpatient medical and psychiatric services, detoxification services, incarceration costs, and emergency shelter costs (Perlman & Parvensky, 2006). The program also provided health, mental health, and quality of life improvements for members (Perlman & Parvensky, 2006).

## **Jail Outreach**

Jail or prison outreach programs provide services to individuals who are incarcerated, both before and after their release. These programs operate to connect individuals to services in their community, in order to reduce the likelihood that they will return to jail. They may also have a special focus on addressing issues of substance use, mental health, homelessness, or unemployment in the community. Jail-based services may also be termed “in-reach” services, as they engage individuals during their incarceration, increasing the likelihood that they will engage in services with a given organization after they have been released (Crayton, Ressler, Mukamal, Jannetta, & Warwick, 2010). The Urban Institute’s (2010) guidebook for community-based organizations that partner with jails to improve reentry states that the jail outreach model serves as a “continuum of care... an essential part of a successful transition from jail to the community” (p. 17).

Transition from Jail to Community (TJC) is a comprehensive model of jail outreach, designed by researchers at the Urban Institute and funded by the National Institute of Corrections (Buck Willison et al., 2012). Research on this model has shown that the method by which different community-based organizations partner with jails to provide screenings and services varies widely. Organizational partners consistently indicated that while the measure of recidivism was an important metric of their program’s success, it was insufficient to capture all of the aims of their services and activities. According to evaluators of the model, “employment, housing stability, sobriety, and mental and physical health were all important outcomes that TJC activities sought to deliver” (Willison et al., 2012, p. 91). At least two of the six community organizations under study (Kent County and Denver) included peer-led support groups as a part of their continuum of care programs.

## Staff Beliefs about Recovery

Peer provided services may vary in efficacy based on the environment in which they are offered. Specifically, the degree to which peers are integrated within an organization may have a significant impact on their ability to assist the individuals with whom they work (Gates & Akabas, 2007). Several elements of organizational culture that are important to peer specialist integration have been identified in the literature, including buy-in from administration, embracing the values of recovery at the organizational level, and empowerment of people in services (Earley, Lodge, Kuhn, Daggett, & Stevens Manser, 2016). However, barriers to peer specialist integration persist, including non-peer staff members' fear and stigma of peer providers and people in services, as well as a lack of peer specialists in positions of authority (Earley et al., 2016).

In 1989, a national survey of supported housing programs found that 38% of respondent programs had mental health consumers as paid staff (Besio & Mahler, 1993). In a follow up study, organizations that were surveyed indicated that some of the benefits of employing peer specialists include increasing the sensitivity and knowledge of non-peer staff and increasing the relevance of the organization's services to individuals receiving services (Besio & Mahler, 1993). However, all organizations indicated that stigmatization and distrust of consumer staff by non-consumer staff was a concern. Researchers indicated that "this situation may be inherent in the professional power paradigm of most organizations; hiring people who have different credentials or who have always been perceived as lower in the paradigm, or as not as capable, can be very threatening" (Besio & Mahler, 1993, p. 491). Unfortunately, this issue appears to persist. In 2018, a study of best practices in peer employment found that stigma was still a concern, including labeling, stereotyping, and internalized or experienced discrimination (Chapman, Blash, Mayer, & Spetz, 2018). Authors found that though some organizations required staff and leadership to attend training on the role of peer providers, many interviewees reported that stigma continues, possibly "because of a misunderstanding of the peer role... and partially fear of encroachment of traditional provider roles" (Chapman et al., 2018, p. 268).

In addition to stigma, staff beliefs and knowledge about recovery from mental health issues and substance use may have important implications for the efficacy of peer services within an organization. Staff members' belief in recovery is fundamental to the housing first approach (Pearson et al., 2007). Additionally, staff and administrative buy-in to the importance of peer services, and organizational recovery orientation, has been tied to peer staff morale, retention, and self-reported efficacy (Earley et al., 2016). Measuring staff stigma and beliefs about recovery may give insight into implications for the effectiveness of peer services at an organization.

## The Current Study

The Texas Health and Human Services Commission (HHSC) contracted with the Texas Institute for Excellence in Mental Health (TIEMH) to assess the effect of peer support services, delivered through various organizations in Texas, on individual mental health and homelessness outcomes. TIEMH researchers proposed a pilot study to leadership at Haven for Hope, a 22-acre "Transformational Campus" that serves people who are experiencing homelessness. Haven for Hope brings multiple service providers to a single location where they serve over 700 people daily through a low-barrier shelter program called The Courtyard.



Haven for Hope also operates two peer-driven programs: Jail Outreach (JO) and Permanent Supportive Housing (PSH).

The proposed pilot sought to fill gaps in the knowledge base related to the provision of peer services in programs that serve individuals experiencing homelessness, including:

- the context(s) in which peers work,
- differences between peer and non-peer staff recovery knowledge and mental health stigma,
- and the outcomes of members who receive peer services, including those related to mental health, self-care, managing tenancy, and family unit stability and function.

Researchers collaborated with leadership at Haven for Hope to establish the study design and collect data. Findings of this study may be used to guide current and future program development, and provide important insights into the outcomes of peer support services at Haven for Hope.

## Haven for Hope

Haven for Hope is a non-profit organization that has been providing services to individuals and families experiencing homelessness since 2010. The organization has mixed funding streams, ranging from private donors to the federal government. Haven for Hope offers a wide-array of services in-house. It also partners with over 60 other non-profit organizations on its campus to provide additional services to Haven members.

The Haven for Hope campus offers dormitories for 850 people, as well as a temporary shelter (the Courtyard) for non-members who choose not to seek other services. Services provided by Haven include “detox and sobering,” medical and dental services, peer support, case management, psychotherapy, spiritual services, meals, a post office, a pet kennel, employment readiness, and educational support. Haven for Hope promotes “personal transformation” for its members. While Haven for Hope requires its members to be drug- and alcohol-free while on campus and receiving services, it also provides programs that follow the housing first model.

### *Permanent Supportive Housing Program*

Permanent Supportive Housing (PSH) is one of the housing first programs offered at Haven for Hope. Members at Haven for Hope are housed in the community according to the housing first model of care; there is no requirement for them to receive any other services or abstain from substance use before their need for housing is met. After a member is housed, they are referred to the PSH program. There is usually a short wait list to enroll. After a member is enrolled in PSH, staff provide support and connect them with the resources they need to maintain independent housing.

### *Jail Outreach Program*

The Jail Outreach (JO) program connects people who have recently been released from incarceration with the resources needed to remain in the community and maintain independent housing. The JO team is staffed by five peers. Referrals to JO come from Bexar county pre-trial services and University Health System (UHS) in San Antonio. Previously, the JO program also accepted non-contractual referrals; however, JO currently only

accepts up to 40 referrals from pre-trial and 20 referrals from UHS, for a total capacity of 60. There is no waitlist for JO.

Peers at JO usually make first contact with an prospective member when the person is incarcerated. At this time, peers provide information about the JO program. Membership in the program is voluntary. Once enrolled in the JO program, peers begin a housing plan with the member after they have gained employment. Some JO members also participate in other housing programs, including through the Center for Healthcare Services, sober living, and Oxford House, among others.

## Evaluation Questions

There is a need to better understand peer roles within programs that provide services for individuals experiencing homelessness, as well as the goals of those programs.

Question 1: What are the goals of PSH and JO? How do peers see themselves as helping to meet the goals of these programs? What job roles and responsibilities do peers have in these programs? Do peers feel supported in these programs?

The leadership team at Haven for Hope sought to better understand factors that might affect staff members' ability to engage with members, including peer and non-peer team members. Staff knowledge and beliefs about recovery, and stigma toward individuals with mental health concerns, have been shown to have implications for the effectiveness of peer services. This study examined staff members' recovery knowledge and attitudes toward people with substance use and mental health concerns. Differences in knowledge and beliefs between peer and non-peer staff were also examined.

Question 2: What lived experience do staff members have? What level and types of stigma about mental health conditions do staff members have (e.g., do they use stigmatic language, do they believe that individuals with mental health concerns are often dangerous)? Do staff members believe in the process of recovery from mental health or substance use concerns (e.g., do they believe that individuals with mental health or substance use concerns should make decisions about their own care, do they believe individuals in recovery should "comply" with mental health or substance use treatment)? Are stigma and recovery knowledge related to a staff member's department, role, lived experience, and/or peer role?

Member outcomes were also of interest. Available outcome data included Service Prioritization Decision Assistance Tool (SPDAT) scores for individuals enrolled in the PSH program. The SPDAT includes questions related to the domains of wellness, risks, socialization, daily functioning, and housing history. The family version of the SPDAT also asks questions about the stability of the family unit. See OrgCode (2019) for a description of both the family and individual SPDAT assessments. These domains are theoretically linked to peer services.

Question 3: Did member outcomes change over the course of PSH program participation? Were changes related to interaction with peer staff? Did individuals who received a greater number of peer services show greater reductions in SPDAT scores, relative to members who received fewer peer services?

# Methods

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This pilot employed multimethod data collection techniques including 1) interviewing peer support staff employed in the two programs under study (PSH and JO), 2) administering an online survey to all staff at Haven for Hope, and 3) extracting existing member records from the Homeless Management Information System (HMIS) at Haven for Hope, as well as jail and hospitalization records maintained by the Texas Department of Health and Human Services (HHSC).

A quantitative approach was taken to answer the evaluation questions related to staff recovery knowledge and stigma and member outcomes. A qualitative approach was taken to describe program settings in which peers work, in addition to the experiences and job roles of the peer specialist staff. Understanding these contextual factors is necessary to reporting on the outcomes of peer support services, given that this new workforce is emerging in the midst of a paradigm shift in the larger mental health system. It is necessary to understand the impact and constraints presented to these staff on the organizational- and program-level.

## Procedures

### 1) Interview peers

To better understand how PSH and JO operate, and to understand the environment and context in which peers are employed at these programs (Question 1), one researcher conducted a semi-structured, informal phone interview with two peers, one from the JO program and another from PSH. The two peers were asked about 1) the goals of the program in which they work, 2) procedures they follow to meet the program goals, 3) their job roles, and 4) the support of their supervisors. The interviews were not recorded. The interviewer made notes during the interview, and the results/responses are briefly summarized in the results section of this report. Another purpose of this interview was to guide the selection of outcome measures to be analyzed from the HMIS data pull, and to contextualize responses from the staff survey on beliefs about recovery.

### 2) Conduct staff survey

An online survey was developed, with input from leadership at Haven for Hope, to measure staff characteristics, including: 1) demographics, 2) lived experience, 3) knowledge of mental health and substance use recovery, and 4) attitudes or stigma toward people with mental health or substance abuse concerns (Question 2). See Appendix A for the survey items and response choices. The survey was hosted on Qualtrics® online survey platform. The survey was open for response for two weeks. A reminder email was sent one week prior to closure.

### 3) Obtain member outcomes data from HMIS and the HHSC

Researchers at TIEMH worked with staff at Haven for Hope to collect baseline and outcomes data for members of the PSH program (Question 3). This information came from the Homeless Management

Information System (HMIS), a web-based software system used to coordinate care among 44 direct service provider agencies in the San Antonio Continuum of Care (CoC).

Many organizations that serve individuals experiencing homelessness utilize HMIS. The Data Standards for HMIS are published by the U.S. Department of Housing and Urban Development (HUD), for use by all HUD-funded providers serving people who are receiving homeless assistance services, as well as other non-HUD funded providers who opt to use the system to coordinate care in their communities. The types of data that are collected, as well as the standards by which they are operationalized and reported, are consistent across all HUD CoC homeless assistance providers. This allows for comparison of outcomes among different communities. Haven for Hope collects the minimum data required to meet HUD standards; they also collect additional information to support their own programs.

For the current study, measures that were drawn from HMIS included:

- Length of stay
- Substance use and mental health diagnosis
- Service engagement
- Demographic information
- SPDAT assessment scores

Additionally, arrest and hospitalization records were received from HHSC. Researchers sent data requests to HHSC, requesting arrest and hospitalization records for members. Each Haven member's client identification number from the HMIS system was matched to their associated Clinical Management for Behavioral Health Services (CMBHS) number. CMBHS is a database operated by HHSC. Using each member's CMBHS number, PSH member arrests and hospitalizations were examined.

## Participants

Two peers who worked in the programs under study completed the peer interview, one from Jail Outreach and one from Permanent Supportive Housing. Interview responses are reported anonymously. However, peers were known by their supervisors and coworkers to have completed the interview. Thus, interview data collection was not anonymous.

The staff survey was sent to all paid staff, as well as social work interns, employed at Haven for Hope ( $N = 276$ ). The survey data were collected anonymously. Respondents were made aware of the informed consent process and were offered a \$25 gift card for their participation.

Participants of the HMIS data pull included all individuals enrolled in the PSH program from July 2014, the date the PSH program was implemented, to August 2018. This included 242 adults.

## Instruments

The peer interview included the following questions:

- What are the goals of the program in which you work?
- What is your job role?

- How do you feel your supervisor supports you in your position?

The staff survey included questions to measure demographics and lived experience with mental health issues, substance use issues, homelessness, incarceration, and/or trauma. In addition, the survey included two instruments that gauged staff recovery knowledge and one measure to assess level of stigma towards people with mental health issues. See Appendix A for a copy of the survey items and response choices.

#### Beliefs about Recovery: Recovery Knowledge Inventory (RKI)

To assess staff knowledge and attitudes on recovery from mental health and substance use issues, the survey included two revised versions of the Recovery Knowledge Inventory (RKI; Bedregal, O’Connell, & Davidson, 2006). The two versions included one on mental health recovery (RKI MH) and another on substance use recovery (RKI SU). Both versions of the RKI consist of 20 questions, with a Likert-scale response format. Responses can range from 1- *strongly disagree* to 5- *strongly agree*. Some items are reverse scored. The average score across all 20 items is calculated and reported. Possible scores range from 1.0-5.0, with lower scores indicating lower levels of recovery knowledge.

Each version of the RKI measures four distinct domains of understanding about mental health and substance use recovery: 1) roles and responsibilities in recovery, 2) non-linearity of the recovery process, 3) roles of self-definition and peers in recovery, and 4) expectations regarding recovery. The averages of the four subscales, are also calculated and reported.

#### Stigma: Mental Illness: Clinician’s Attitudes Scale (MICA)

To measure helping professionals’ stigma toward people with mental health issues, the staff survey included a revised version of the Mental Illness: Clinician’s Attitudes Scale (MICA, version 4; King’s College London, 2019). For this evaluation, some wording on the MICA-4 instrument was revised; instances of the term “mental illness” were replaced with “mental health issues.” This was done to keep the study’s language consistent with the recovery paradigm (as opposed to the illness paradigm). The authors of the original scale did not grant permission for the researchers to use the MICA-4 with these language revisions. Thus, this report will refer to the scale used as the MICA-TIEMH revised (MICA-TR), so as not to be confused with the original MICA.

The MICA-TR has 16 items, with a 6-point Likert-style response format (same as the MICA-4). Responses may range from 1- *strongly agree* to 5- *strongly disagree*. Some items are reverse scored. A higher score, on a scale from 16-96, indicates greater stigma toward people with mental health issues.

## Analysis

### Peer Interview

Results from the interview with two peers are summarized qualitatively, in the results section of this report. The two programs are described separately. The goals of each program are listed, and each program’s operation is described. The interviewees gave a basic summary of the process of membership. For PSH, where peers and non-peers work, the difference in roles between the two types of staff are discussed.

Finally, the ways in which the interviewees felt supported, or not, by their supervisors and leadership at Haven are summarized.

## Staff Survey

For the staff survey, respondent demographics are reported descriptively. Average scores for the three scales included in the survey (RKI MH, RKI SU, and MICA-TR) are presented. Respondents who completed 70% or more of a given scale were included in the average score; respondents who completed less than 70% of a given scale (missed 6 or more items on the RKI MH, RKI SU, and/or 4 or more items on the MICA-TR), were excluded in that scale's average. Subscale averages for the RKI MH and RKI SU scales are also presented.

Researchers examined differences in staff attitudes based on the department in which a respondent was employed. Additionally, differences between administrative and direct service workers' responses were examined, to determine if these different types of employees had different levels of recovery knowledge or stigma. Finally, differences between individuals with and without lived experience, and differences between peer and non-peer employees were examined.

## Member Outcomes

For member outcomes, demographics of all PSH program members are reported. There were 242 program members. Demographics include age, gender, race, ethnicity, education, family status, number of dependents, and length of stay in the program (for members who had discharged).

To analyze member outcomes, enrollment identification numbers (enrollment IDs) were used. Each PSH member may have had one or more enrollments, identified by an enrollment ID. Over the course of an enrollment, one or more SPDAT assessments are administered. For each enrollment ID, the total number of SPDAT assessments over the course of that enrollment was calculated. Of these, the first and last SPDAT scores were compared (including total scores and item scores), to analyze differences in scores over time.

Each SPDAT assessment is either of a family or individual assessment type. The two types are scored differently; family type assessments have a wider score range due to the addition of questions related to family unit stability. In the event that the first and last assessment for a particular enrollment ID were of a different type (family or individual) the first and last assessments of the type that was most frequently recorded for that enrollment was considered. For example, if an individual had five SPDAT assessments during one enrollment, patterned 1- family, 2- family, 3- individual, 4- family, and 5- individual, the first and last family assessments (numbers 1 and 4) were compared.

During the course of each enrollment, service data were incorporated for analysis. Service data were available from the time period after March 1<sup>st</sup>, 2016. Thus, enrollments and SPDAT assessments conducted prior to this date were removed from consideration. Services that were administered between the first and last SPDAT assessment for a given enrollment ID were considered. Services were categorized into either peer, clinical non-peer, or non-clinical non-peer categories. See Appendix B for a description of services that fell into each category.

For members who had service data available, the average number of services during the course of their enrollment, as well as the average number of services by type (peer, non-peer clinical, and non-peer non-clinical) are reported. Some members had no services recorded between the time of the first and last SPDAT assessment for a given enrollment. Additionally, the number of enrollments by member ID that were compared, the number of arrests and hospitalizations that were recorded, the number of SPDAT assessments that were administered, and the length of each enrollment are described. The demographics of this subset of members is also reported. The difference between first and last SPDAT assessment scores, including total scores and item scores, are reported. The relationship between score differences between the first and last assessment, and the number of overall services and peer-provided services was analyzed through correlation and regression analyses. Finally, subscale of items from the SPDAT was constructed. The subscale utilized only items from the SPDAT that were theoretically linked to constructs that might be affected by peer service provision. The relationship between SPDAT subscale score changes and the number of overall and peer-provided services were analyzed through correlation and regression analyses.

## Results

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### Peer Interviews

During the peer interview, one peer from each program discussed the goals of the program in which they work and how they see their job role as fitting in to the program goals. During the interview, both peers stated that they had worked for Haven for Hope in some capacity for over three years. However, neither peer had started their employment in the programs under study. Rather, they were each initially employed in other departments at Haven for Hope and eventually transitioned to original roles into their current peer roles in the PSH and JO programs.

### Permanent Supportive Housing

The peer from PSH reported that program goals include promoting the self-sustainability of individuals who are receiving services. To this end, program staff individually tailor services to meet the needs of members, and attempt to connect members to resources that will allow them to sustain independent housing. Staff at PSH provide members with education on how to read a lease agreement and budget for housing expenses. They also accompany members to appointments that occur off the Haven campus. They teach members about home maintenance, as well as how to avoid eviction. PSH staff provide services and referrals to members, including financial assistance for housing, peer support, crisis support, life skills education, and referrals to other resources and concrete supports.

There are five case managers and five peers that work in the PSH program. The program is comprised of five teams of two staff, one case manager and one peer each; each team of two serves a caseload of approximately 25 PSH members. There is normally a short waitlist to be accepted into the program. Members at Haven for Hope are housed straight away, under the housing first model, regardless of mental health treatment or sobriety. Referral to the PSH program occurs after the member is housed. To remain in the program, members must meet with their provider teams during reoccurring home visits.

After enrolling in PSH, the Service Prioritization Decision Assistance Tool (SPDAT) must be completed within 30 days. It is then updated every three months. Additionally, the Person Centered Plan (PCP), which serves as the reference point for working to support the goals of the person, is also updated every three months. Members with more needs meet more frequently with their team (about once weekly) and members with fewer needs to remain independently housed meet less frequently (from bi-weekly to once per month). The peer and case manager teams provide individually-tailored services to members for as long as it takes to graduate from the program. Once members graduate, the team checks in at 30 and 90 days post-graduation; members then exit the program or re-open enrollment if needed.

The peers and case managers on the PSH staff teams have similar roles, but the peers use their lived experience to engage with members. Anecdotally, this peer engagement is often the key difference between successful long-term housing and returning to homelessness.

According to the peer interviewee, the peer job role at PSH includes the following duties and tasks:

- Walk through of the member's apartment
- Ease into relationship with members, building rapport slowly
- Schedule reoccurring home visits
- Complete a SPDAT within 30 days of enrollment and then every 3 months
- Utilize motivational interviewing to determine what members want to work on
- Develop a Person Centered Plan (PCP)
- Work on goals from PCP
- Call for crisis services or adult protective services when necessary

The peer from PSH reported that they feel supported by their supervisors. They reported that they sometimes experience secondary trauma during the course of their employment, and that they are able to receive clinical supervision, feedback, and support in these instances. The peer reported that they sometimes feel thwarted by limitations of the health treatment system, especially in getting help for members in crises. One takeaway the peer expressed was the hope for a "pure" peer role at Haven for Hope. That is, a peer employee who does not have to conduct assessments or fulfil any other type of clinical roles.

## Jail Outreach

The peer interviewee from the JO program reported that JO is completely peer run. There are four full-time peer providers on staff at JO. These staff provide peer services (group and individual), case management services, and housing assistance to approximately 52 members. The staff team does not split the members into caseloads; all four peers provide services to all members enrolled in the JO program.

In most cases, staff at JO make first contact with members while the member is incarcerated. At this time, staff gather as much information as they need to complete an initial assessment. In the JO program, the Vulnerability Index Service Prioritization Decision Assistance Tool (VISPDAT) is completed during the initial assessment. Additionally, the staff member gathers information needed to conduct a person-centered plan (PCP). Anecdotally, the peer approach to the initial interview makes all the difference in truly engaging the member during an otherwise stressful and public review of personal information.



In the JO program, peers begin a housing plan with members once they are in stable employment, although some members do participate in other housing programs (e.g., at the Center for Healthcare Services, sober living, Oxford House, etc.). At the time of the interview, no staff at JO had referred any members to other teams at Haven, including the PSH program. Most JO services are provided at the Haven for Hope campus; the program maintains an open-door policy, which encourages members to drop in as-needed to receive services. Snacks and coffee are available in the community office. The interviewee reported that a flexible schedule is an essential component to the success of the JO program, because members who are awaiting adjudication often have many obligations to fulfill within the criminal justice system.

The interviewee reported that member length of stay (LOS) in the JO program ranges from five days to six months. They estimated that the average LOS was around four months. Sometimes members exit the program before adjudication, if restrictions have been lowered. Once adjudicated, members may remain enrolled in the JO program for a maximum of 90 days.

According to the peer interviewee, job duties of peers who are employed in the JO program include:

- Meeting members in jail to gather as much information as is possible in the first visit
- May meet with up to 10 members in jail from 9am to 12pm, daily
- Completing the VISPDAT for new members, after returning to the JO office
- Attend weekly team meetings and engage in ongoing co-supervision
- Must communicate effectively so that all peers on JO staff can serve all JO members
- Conduct groups that JO members can attend

The peer described how the first visit with a new member might be uncomfortable, as the peer is asking a stranger to discuss many aspects of their history in a public setting. The ability for staff to introduce themselves as a peer, at the outset of the meeting with a new member, and to be able to describe their own lived experience changes the dynamic of the first meeting in a positive way. The peer staff person describes to a potential program member what is available through the JO program and how the program is completely voluntary. There are instances when the potential member does decline to enroll in JO. This is understandable, from the interviewee's perspective, given that people in jail will have so many obligations to meet after they are released.

The peer from JO reported that they feel their supervisors are very supportive and that leadership at Haven knows their value as a staff member. The peer stated that they work in a great environment, and that their job is very intrinsically fulfilling; the process of seeing members go from incarceration to stability in employment and housing is very satisfying.

## **Staff Survey**

### **Demographics**

A total of 65 staff members and interns (of 276 total invited) across 17 departments responded to the survey (response rate of 23.6%). Two persons skipped more than 30% of the first instrument, the RKI MH, so  $N = 63$  for this measure. Twelve people skipped more than 30% of the second instrument, the MICA-TR, so  $N = 53$

for this measure. Twenty people skipped more than 30% of the third instrument, the RKI SU, so  $N = 45$  for this measure.

Respondents represented a majority (77.3%) of Haven for Hope's 22 departmental groups. See Table 1 for a breakdown of the number of respondents for each department of employment.

*Table 1. Respondents by department.*

Department	N	%
Campus Services	12	18.5
CEO	1	1.5
Clinical Services	5	7.7
Coordinated Enrichment	3	4.6
Courtyard	5	7.7
Development	2	3.1
Employment Readiness	2	3.1
External Relations	1	1.5
Facilities	2	3.1
Fiscal	2	3.1
Housing Services	8	12.3
Intake	6	9.2
Legal	1	1.5
Life Safety	5	7.7
Partner Relations	1	4.6
Social Work Interns	3	4.6
Spiritual Services	3	4.6
Veterans Program	3	4.6

The average respondent duration of employment at Haven for Hope was 43.0 months ( $SD = 27.9$ ), ranging from 4 to 101 months. Staff classified as peers ( $N = 14$ ) had a shorter average length of service ( $M = 30.1$ ,  $SD = 17.1$ ) relative to non-peer staff ( $M = 46.8$ ,  $SD = 29.4$ ).

Of the 50 respondents who reported their demographics, most identified as female (68%). Most also identified as white (68%). Approximately one-third (30%) identified as Hispanic/Latino. Nearly all (94%) respondents spoke English as a first language; 12% reported Spanish language fluency. A majority of

respondents had attended college (90%); 36% had a graduate degree. See Table 2 for a description of the demographics of respondents.

*Table 2. Demographics of survey respondents.*

<b>Demographics</b>		<b><i>N</i></b>	<b>%</b>
Gender	Male	16	32.0
	Female	34	68.0
	Transgender / non-binary	0	0.0
Age	18 – 25	1	2.0
	26 – 35	15	30.0
	36 – 45	11	22.0
	46 – 55	11	22.0
	56 – 65	10	20.0
	66 and older	2	4.0
Hispanic or Latino origin?	Yes	15	30.0
	No	35	70.0
Race	American Indian / Alaska Native	5	10.0
	Asian	0	0.0
	Black or African American	6	12.0
	Native Hawaiian or other Pacific Islander	0	0.0
	White	34	68.0
	Other	5	10.0
Primary language	English	47	94.0
	Spanish	3	6.0
Secondary language fluency?	No	41	82.0
	Yes ( <i>English – 2, Spanish – 6, German – 1</i> )	9	18.0
Education	High school diploma or GED	5	10.0
	Some College	14	28.0
	Associates Degree	4	8.0
	Bachelor’s Degree	9	18.0
	Graduate Degree	18	36.0

## Lived experience

Of the 50 staff members that responded to the question on lived experience, a large majority (78%) had at least one type of lived experience (trauma, mental health, substance use, incarceration, and/or

homelessness). Additionally, 60% reported having more than one type of lived experience, and 18% had all five types of lived experience. The most common type of lived experience was trauma, with 70% of respondents reporting lived experience with trauma. See Table 3 for a description of the number of respondents who identified having lived experience of each type.

*Table 3. Lived experience of respondents, by type.*

Type of Lived Experience	<i>N</i>	%
Homelessness	12	24.0
Incarceration	10	20.0
Mental Health Issues	27	54.0
Substance Use Issues	22	44.0
Trauma	35	70.0
*At least one type	39	78.0

At the time of the survey, 31 staff (12% of all staff and interns) at Haven for Hope were classified as ‘peers’ working in a peer support role; approximately half ( $N = 14$ ) responded to the survey. Among the 11 peer staff that responded to the item on lived experience, all reported more than one type of lived experience. Over half (63.6%) reported all five types of lived experience. Most (91%) reported lived experience with mental health issues, 91% with substance use issues, 81.8% with trauma, and 63.6% with both homelessness and incarceration. Most (81.8%) reported experience with both mental health and substance use issues.

At the time of the survey, the majority of Haven for Hope’s 219 staff were classified as ‘direct service’ staff (78.8%); the remaining 21.2% were classified as ‘administration’ staff. In terms of survey respondents, fewer worked in administration roles ( $N = 10$ ) than in direct service roles ( $N = 55$ ). Proportionally fewer staff in administration roles reported having any type of lived experience (57.1%) than staff in direct service roles (81.4%).

## Overall Scores

### Beliefs about recovery

For respondents who completed the instrument ( $N = 63$ ), the average score on the RKI mental health scale (RKI-MH) was 3.70 ( $SD = 0.60$ ), indicating moderate levels of recovery knowledge regarding mental health recovery. Respondents who completed the RKI substance use scale (RKI-SU,  $N = 45$ ) had the same average score ( $M = 3.70$ ,  $SD = 0.59$ ). The two scales were strongly correlated ( $r = .87$ ,  $p < .00$ , two-tailed) and both had

high internal consistency (RKI-MH  $\alpha = .90$  and RKI-SU  $\alpha = .90$ ), indicating that the items on each scale were measuring the same construct.

### *Stigma*

For respondents who completed the instrument ( $N = 53$ ), the average score on the MICA-TR was low ( $M = 30.2$ ,  $SD = 7.0$ ), indicating low levels of stigma toward people in mental health recovery amongst survey respondents. The scale had adequate internal consistency, indicating that the items on the scale were generally measuring the same construct ( $\alpha = .70$ ). Scores ranged from 17 to 49 (on the scale from 16 to 96), where high scores indicate higher stigma.

### Scores by Department, Staff Role, Lived Experience, and Peer Role

Average scores for the RKI-MH, RKI-SU, and the MICA-TR by department are presented in Table 4. Only departments in which at least one survey respondent worked at the time of the survey are included. The department with the highest average score on the two RKI scales, denoting greater understanding of the recovery process, was Clinical Services. Regarding the MICA-TR, the department with the lowest score was Facilities. The second lowest scoring department was Clinical Services. The department with the lowest average score across the two RKI instruments was Life Safety; this department also scored highest on the MICA-TR instrument. Note that the number of staff respondents varied by department.

Nonparametric tests were analyzed to determine if differences existed amongst departmental scores on the three instruments (RKI MH, RKI SU, and MICA-TR). Non-parametric tests were used because sample sizes between departmental groups varied, and some groups had an  $N = 1$ . Independent-Samples Kruskal-Wallis tests determined that there were significant differences amongst departmental scores on the RKI MH ( $\chi^2(16) = 29.72$ ,  $p = .02$ ) and the MICA-TR scales ( $\chi^2(16) = 27.07$ ,  $p = .04$ ), but no difference on RKI SU scores ( $\chi^2(16) = 18.83$ ,  $p = .22$ ).

Table 4. Average scores for recovery knowledge and stigma, by department.

Department	RKI MH Mean (SD)	RKI SU Mean (SD)	MICA TR Mean (SD)
Campus Services	3.84 (0.44)	3.87 (0.38)	28.13 (3.60)
CEO Office	3.25 (0.00)	-	32.00 (0.00)
Clinical Services	<b>4.41 (0.81)</b>	<b>4.27 (1.02)</b>	24.20 (4.87)
Coordinated Enrichment	3.35 (0.31)	3.30 (0.31)	35.33 (5.03)
Courtyard	3.30 (0.43)	3.31 (0.32)	28.67 (8.08)
Development	3.33 (0.67)	3.55 (0.57)	30.00 (4.24)
Employment Readiness	3.20 (0.07)	3.35 (0.21)	41.50 (0.71)
External Relations	3.90 (0.00)	4.10 (0.00)	26.00 (0.00)
Facilities	3.48 (0.67)	3.95 (0.00)	<b>22.00 (0.00)</b>
Fiscal	3.13 (0.32)	2.90 (0.00)	40.00 (0.00)
Housing Services	4.26 (0.56)	3.92 (0.78)	26.63 (7.31)
Intake	3.68 (0.65)	3.74 (0.40)	27.60 (5.86)
Legal	3.65 (0.00)	3.45 (0.00)	32.00 (0.00)
Life Safety	<b>3.02 (0.14)</b>	<b>2.93 (0.04)</b>	<b>43.25 (4.65)</b>
Partner Relations	-	-	-
Social Work Interns	3.57 (0.16)	3.53 (0.23)	29.33 (4.51)
Spiritual Services	3.92 (0.38)	4.00 (0.00)	33.00 (2.83)
Veterans Program	3.78 (0.29)	3.63 (0.29)	31.00 (1.73)

Note: A higher score on the RKI (out of a 5 point average) indicates a high level of recovery knowledge. A higher score (out of 96 total points) on the MICA-TR indicates a more negative attitude / greater stigma toward mental illness.

Survey respondents in administration roles had slightly lower scores on the RKI-MH and RKI-SU. Staff in these roles had approximately the same scores on the MICA-TR relative to their coworkers in direct service roles (see Table 5). Nonparametric Independent-Samples Mann-Whitney U tests were used to examine differences between scores on the three assessments between staff in administrative roles and those in direct service roles. Nonparametric tests were used due to the difference in group sizes. No significant differences were found between groups for the three assessments (RKI MH  $t = 1.62$ ,  $p = .11$ ; RKI SU  $t = 0.40$ ,  $p = .69$ ; and MICA-TR  $t = 0.18$ ,  $p = .87$ ).

*Table 5. Average scores on recovery knowledge and stigma, by provider type.*

<b>Provider Type</b>	<b>RKI MH Mean (SD) Number</b>	<b>RKI SU Mean (SD) Number</b>	<b>MICA TR Mean (SD) Number</b>
Administration	3.41 (0.43) N=9	3.58 (0.49) N=6	30.29 (5.85) N=7
Direct Service	3.75 (0.61) N=54	3.71 (0.61) N=39	30.13 (7.27) N=46

*Note: A higher score on the RKI (out of a 5 point average) indicates a high level of recovery knowledge. A higher score (out of 96 total points) on the MICA-TR indicates a more negative attitude / greater stigma toward mental illness.*

Staff with lived experience scored approximately the same on the stigma assessment, compared with staff with no lived experience. Staff with no lived experience demonstrated marginally higher scores on both recovery knowledge instruments (Table 6). Nonparametric Independent-Samples Mann-Whitney U tests were used to examine differences between scores on the three assessments between staff with lived experience and those without lived experience. Nonparametric tests were used due to the difference in group sizes. No significant differences were found between groups for the three assessments (RKI MH  $t = -0.20$ ,  $p = .84$ ; RKI SU  $t = -0.14$ ,  $p = .90$ ; and MICA-TR  $t = -0.04$ ,  $p = .97$ ).

*Table 6. Average scores for recovery knowledge and stigma, by lived experience.*

<b>Lived Experience (Yes/No)</b>	<b>RKI MH Mean (SD) Number</b>	<b>RKI SU Mean (SD) Number</b>	<b>MICA TR Mean (SD) Number</b>
No	3.83 (0.72) N=11	3.74 (0.78) N=10	30.00 (6.69) N=11
Yes	3.74 (0.55) N=38	3.68 (0.54) N=35	29.82 (6.82) N=38

*Note: A higher score on the RKI (out of a 5 point average) indicates a high level of recovery knowledge. A higher score (out of 96 total points) on the MICA-TR indicates a more negative attitude / greater stigma toward mental illness.*

Peer staff demonstrated slightly less stigma, and had slightly higher scores for recovery knowledge in the domains of both mental health and substance use, than non-peer providers. See Table 7 for a description of recovery knowledge and stigma scores by provider role. Nonparametric Independent-Samples Mann-Whitney U tests were used to examine differences between scores on the three assessments between peer and non-peer staff. Nonparametric tests were used due to the difference in group sizes. No significant differences were found between groups for the three assessments (RKI MH  $t = 1.09$ ,  $p = .28$ ; RKI SU  $t = 0.51$ ,  $p = .63$ ; and MICA-TR  $t = -0.92$ ,  $p = .36$ ).

Table 7. Average scores for recovery knowledge and stigma, by peer provider role.

Peer Provider (Yes/No)	RKI MH Mean (SD) Number	RKI SU Mean (SD) Number	MICA TR Mean (SD) Number
No	3.68 (0.63) N=50	3.68 (0.61) N=36	30.60 (7.42) N=43
Yes	3.78 (0.48) N=13	3.73 (0.52) N=9	28.20 (4.94) N=10

Note: A higher score on the RKI (out of a 5 point average) indicates a high level of recovery knowledge. A higher score (out of 96 total points) on the MICA-TR indicates a more negative attitude / greater stigma toward mental illness.

### Recovery Beliefs Subscales

The RKI MH and RKI SU are both comprised of four subscales. The *roles and responsibilities* subscale is comprised of seven items. These items include: “Only people who are clinically stable should be involved in making decisions about their care,” and “It is the responsibility of professionals to protect their clients against possible failures and disappointments.” The *non-linearity of the recovery process* subscale is comprised of six items, including “Recovery is characterized by a person making gradual steps forward without major steps back” and “Absence of symptoms is an essential component of mental health/substance use recovery.” The *roles of self-definition and peers* subscale is comprised of five items, including, “All professionals should encourage clients to take risks in the pursuit of recovery”, and “Other people who are in recovery from mental health/substance use issues can be as instrumental to a person’s recovery as mental health/substance use professionals.” Finally, the *expectations regarding recovery* subscale is comprised of two items: “Not everyone is capable of actively participating in the recovery process” and “It is often harmful to have too high of expectations for clients.”

In scoring the RKI SU and RKI MH, the average of the total 20 items is calculated. Total average scores can range from 1.0 to 5.0. The same process is used to score each subscale. In the current survey, scores on the *roles and responsibilities* and *roles of self-definition and peers* subscales on both the MH and SU RKI instruments were above the overall average of the instruments. These two subscales had the highest averages, with participants’ average scores exceeding 4.0 out of 5.0.

The only subscale where average scores fell below 3.0 out of 5.0 was the *non-linearity of the recovery process* subscale on the RKI SU instrument (see Table 8). This may be because one of the items on the subscale asks about agreement with the following statement “Abstinence from substance use is an essential component of recovery.” It may be that more staff agreed with that statement, to some degree, than with the item on the RKI MH scale “Absence of symptoms is an essential component of mental health recovery.”



Table 8. Scores for recovery knowledge by subscale.

RKI MH	N	Mean	Std. Deviation
RKI MH Average Score (out of 5)	63	3.70	.60
Roles and Responsibilities Subscale	64	4.10	.69
Non-linearity of the Recovery Process Subscale	63	3.10	.79
Roles of Self Definition and Peers Subscale	63	4.09	.64
Expectations Regarding Recovery Subscale	62	3.08	1.03
RKI SU	N	Mean	Std. Deviation
RKI SU Average Score (out of 5)	45	3.69	.59
Roles and Responsibilities Subscale	46	4.13	.65
Non-linearity of the Recovery Process Subscale	45	2.86	.87
Roles of Self Definition and Peers Subscale	45	4.24	.53
Expectations Regarding Recovery Subscale	45	3.32	.96

## Outcomes Data

To discuss outcomes data, researchers began by describing the demographics of all PSH members who were enrolled in the program throughout the life of the program, for whom data were available ( $N = 242$ ). Subsequently, we discuss the demographics of a subset of members ( $N = 198$ ), who were enrolled at some point after March 1, 2016, when data on service provision became available. This included members who began enrollment prior to March 1, but remained enrolled, or re-enrolled, after that time.

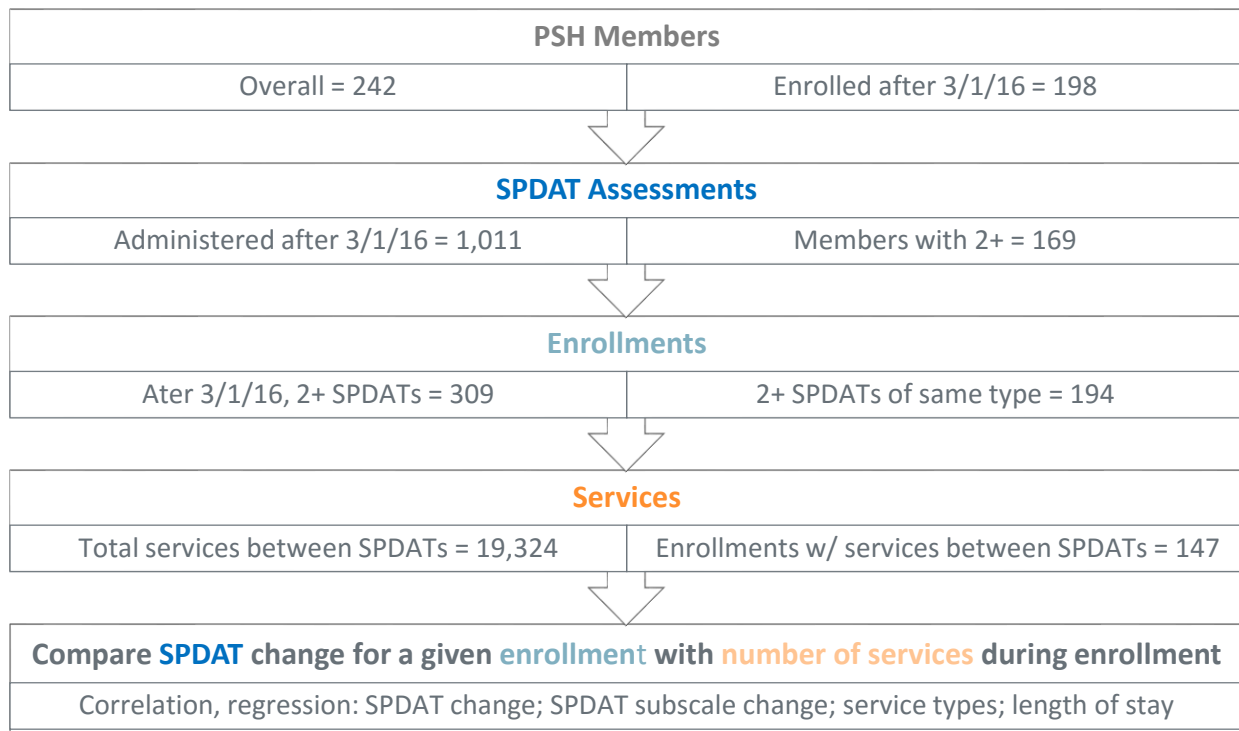
Following the description of demographics, a summary of the number of SPDAT assessments administered after March 1, 2016, to the 198 members who were enrolled at some point after that date, is given ( $N = 1,011$ ). The number of members with more than one SPDAT assessment for the purpose of comparison is also described ( $N = 175$ ). Mean first and last SPDAT scores are given.

The number of enrollments for those 175 members with more than one SPDAT was calculated ( $N = 309$ ). From this, the number of enrollments with more than one SPDAT of the same type (family or individual), for comparison, was derived ( $N = 194$ ). These 194 enrollments were held by 155 members: 118 members with one enrollment, 35 members with two enrollments, and 2 members with 3 enrollments.

The number of services received between the time periods of the first and last SPDAT assessment for the 194 enrollments under consideration was calculated ( $N = 19,324$ ). Of the 194 enrollments with one or more SPDATs for comparison, 147 were documented to have received services between the time of their first and last SPDAT assessment.

Finally, SPDAT score changes (total and sub-scale) were calculated and compared to the number of services that were documented over the course of an enrollment, between the first and last assessments. Figure 1 shows the process of evaluation.

*Figure 1. Process of narrowing the sample and determining exclusion criteria for evaluation.*



### PSH Demographics

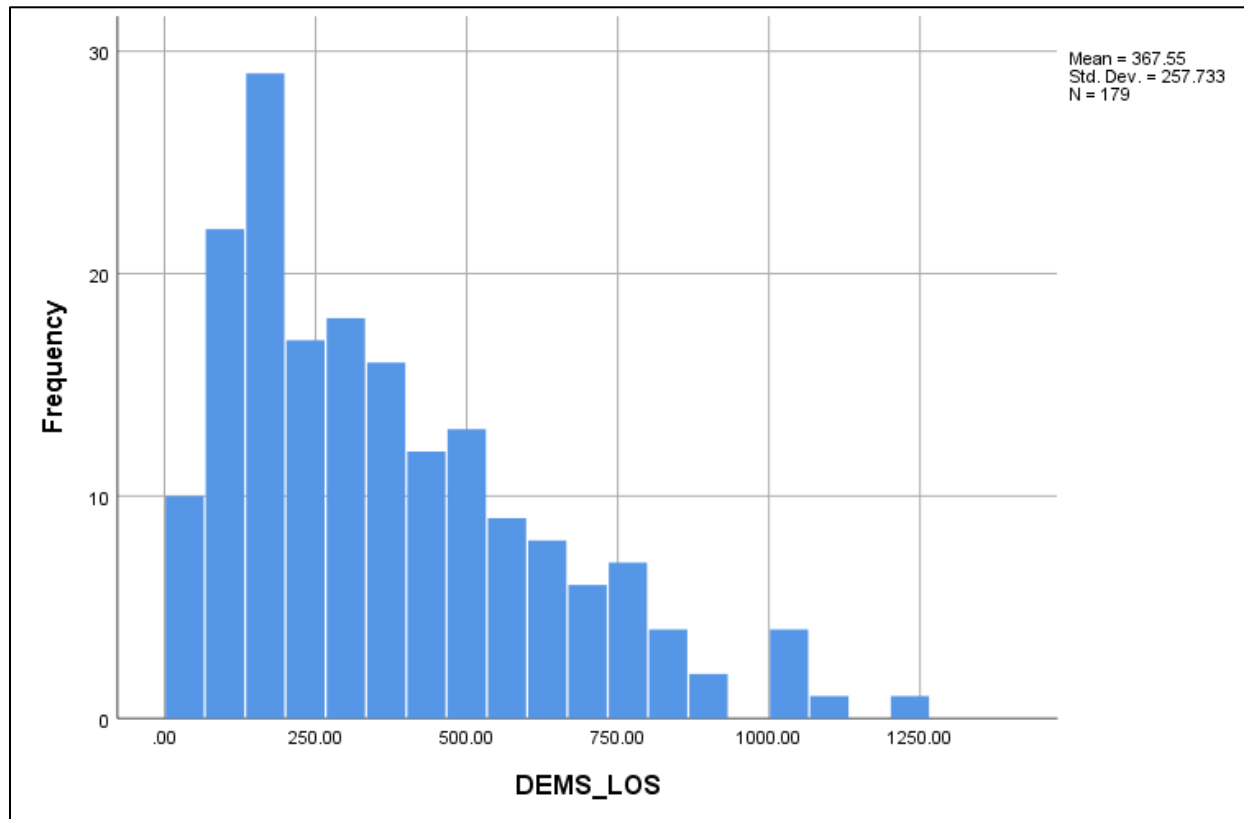
The average age at entry for a PSH member ( $N = 242$ ) was 47 years ( $M = 46.68$ ,  $SD = 11.88$ ). The number of dependents that members had ranged from zero to eight ( $M = .50$ ,  $SD = 1.22$ ). Slightly over half of members identified as female (51.7%). The majority of members identified as White (80.2%). Education was inconsistently reported. Of the 39 participants with a recorded level of education, most had either some college ( $N = 8$ ), an Associate's degree ( $N = 5$ ), or a Bachelor's degree ( $N = 12$ ). See Table 9 for a description of the demographics of the PSH members.

Table 9. PSH member demographics.

		<i>N</i>	%
Gender	Female	125	51.7
	Male	111	45.9
	Transgender Female (MTF or Male to Female)	5	2.1
	Transgender Male (FTM or Female to Male)	1	0.4
Hispanic or Latino	No	158	65.3
	Yes	84	34.7
Race	White	194	80.2
	Black or African American	42	17.4
	American Indian / Alaska Native	3	1.2
	Multi-Racial	2	0.8
	Native Hawaiian or other Pacific Islander	0	0.0
	Asian	0	0.0
Education	Bachelor's degree	12	5.0
	Some college	8	3.3
	Associate's degree	5	2.1
	School program does not have grade levels	4	1.7
	Grades 7-8	3	1.2
	Grades 9-11	3	1.2
	Grades 5-6	2	.8
	GED	1	.4
	Grade 12 / High school diploma	1	.4

Length of stay was highly variable, ranging from 14 to 1,259 days ( $M = 367.54$ ,  $SD = 257.73$ ). See Figure 2 for a description of the length of stay (for individuals who left the program,  $N = 179$ ).

Figure 2. PSH member lengths of stay.



Note: DEMS\_LOS indicates the number of days an individual was enrolled as a member of Haven for Hope. Frequency indicates the number of members who were enrolled across the length of stay axis.

#### *Members enrolled after March 1<sup>st</sup>, 2016*

Service use by PSH members was reported starting March 1, 2016. Therefore, to analyze SPDAT score change relative to service use, a subset of PSH members were included in this analysis. A total of 198 of the 242 PSH members were enrolled at some point beyond March 1. Some of these members were initially enrolled prior to March 1 and continued to be enrolled past that date. For those individuals, only SPDAT assessments that were administered after March 1, 2016 were included in the analyses.

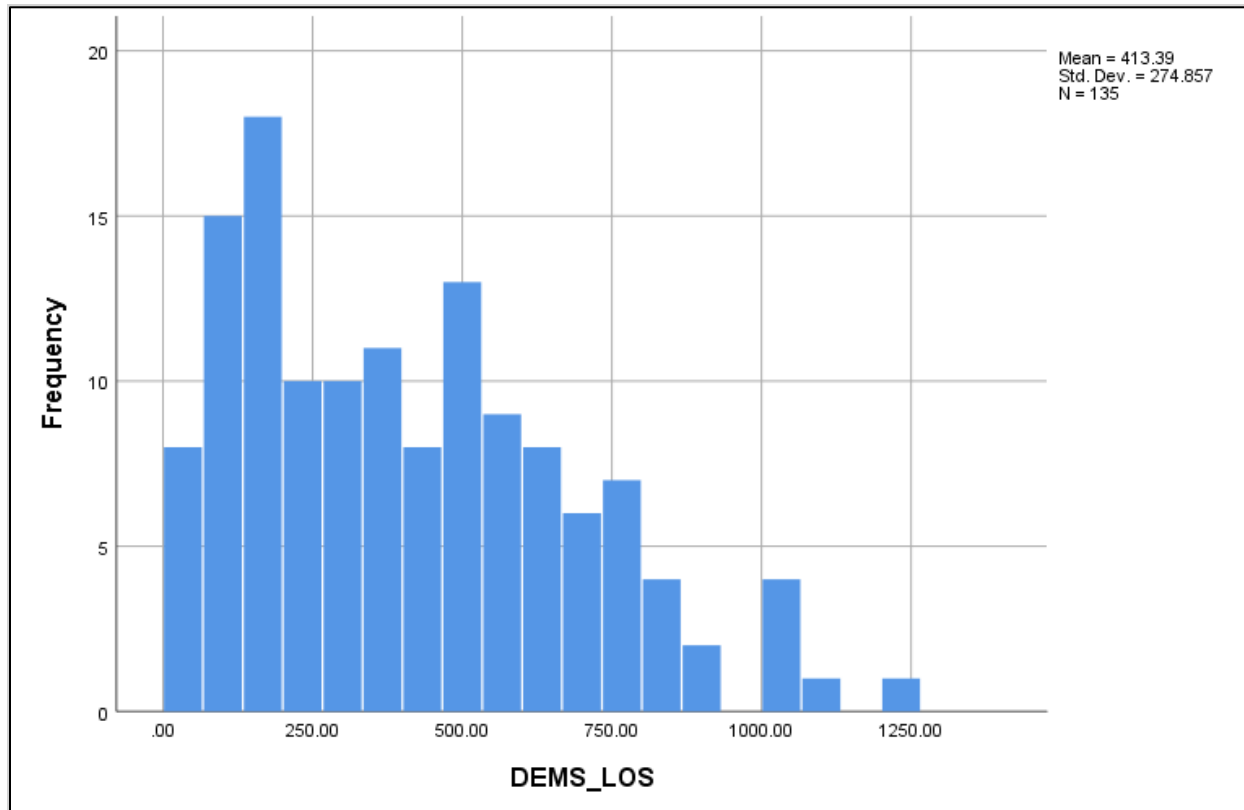
The average age at entry for PSH members enrolled after March 1, 2016 ( $N = 198$ ) was 46 years old ( $M = 46.26$ ,  $SD = 12.24$ ). The number of dependents that members reported they had ranged from zero to eight ( $M = .60$ ,  $SD = 1.33$ ). See Table 10 for a description of the demographics of this subset of members. Overall, demographics and length of stay did not appear to differ between the overall PSH members, and the subset of members who were enrolled after March 1, 2016.

Table 10. PSH member demographics.

		<i>N</i>	%
Gender	Female	108	54.5
	Male	85	42.9
	Transgender Female (MTF or Male to Female)	5	2.5
	Transgender Male (FTM or Female to Male)	0	0.0
Hispanic or Latino	No	130	65.7
	Yes	68	34.3
Race	White	160	80.5
	Black or African American	34	17.4
	American Indian / Alaska Native	2	1.0
	Other	2	1.0
Education	Bachelor's degree	6	3.0
	Some college	7	3.5
	Associate's degree	4	2.0
	School program does not have grade levels	1	0.5
	Grades 7-8	2	1.0
	Grades 9-11	1	.5
	Grades 5-6	0	.0
	GED	1	.5
	Grade 12 / High school diploma	1	.5

Among individuals who were enrolled during the time that service data were available, for members with a reported length of stay ( $N = 135$ ), length of stay ranged from 28 to 1,259 days. The average number of days enrolled was 413.39 ( $SD = 274.86$ ). This was approximately 46 days longer than the average length of stay for all PSH members, including those enrolled prior to the time that service data were available. See Figure 3 for a description of the length of stay of the subset of PSH members with service data available. The distribution of length of stay for all PSH members was similar to the distribution for the subsample of members enrolled after March 1, 2016.

Figure 3. PSH member lengths of stay for individuals with service data.



Note: DEMS\_LOS indicates the number of days an individual was enrolled as a member of Haven for Hope. Frequency indicates the number of members who were enrolled across the length of stay axis.

### SPDAT Assessments

For the 198 PSH members enrolled during the time that service data were available, 185 were administered a total of 1,011 SPDAT assessments after March 1, 2016; 13 members did not have any recorded SPDAT assessments. Of the 1,011 assessments, 209 were family type assessments and 802 were individual type assessments. For each member, the number of SPDAT assessments that were administered ranged from 1 to 11 ( $M = 5.46$ ,  $SD = 3.06$ ). A total of 169 members were administered more than 1 SPDAT assessment; 16 members were administered only 1 assessment in the time after March 1, 2016.

On average, a member's first SPDAT score was 35.57 ( $SD = 10.248$ ). For those that had more than one assessment ( $N = 169$ ), the average score of their last SPDAT assessment was 33.10 ( $SD = 11.41$ ). However, each member may have gone through one or more periods of enrollment during the time between their first and last SPDAT assessment (i.e., they may have left the program and then enrolled again at a later time). In order to avoid comparing, for example, the last assessment of one enrollment with the first assessment of a different enrollment, this analysis compares the first and last assessment for a given enrollment ID.

## Enrollments

SPDAT score change was examined for enrollments with more than one SPDAT assessment of the same type. For the 198 members enrolled at some point after March 1, 2016, there were 309 documented enrollments (enrollment IDs). The number of SPDAT assessments administered during a given enrollment ranged from 1 to 11 ( $M = 3.27$ ,  $SD = 2.75$ ). A total of 113 enrollments had only 1 SPDAT assessment. The remaining 196 had two or more SPDAT assessments administered. In two cases, only two SPDAT assessments were administered over the course of the enrollment, one being a family type assessment and the other being an individual type assessment. Family and individual type assessments are scored differently and are not comparable, thus, these two enrollments were excluded from the analysis. This left a remainder of 194 enrollments for consideration.

Of the 194 enrollments with more than one SPDAT assessment of a matching type, many had only two assessments administered during the course of the enrollment (33%), followed in frequency by three (16.0%), four (8.8%), and five assessments (9.3%). For 33% of enrollments where only two SPDAT assessments were administered, those two assessments were used for comparison. For the 2.6% of enrollments with 11 assessments administered, the 1<sup>st</sup> and 11<sup>th</sup> SPDAT would be compared, if they were of the same type (family or individual). See Table 11 for a description of the frequency of SPDAT assessments by enrollment ID, for enrollments where more than one assessment was administered. Of the 194 enrollments with multiple SPDAT assessments for comparison, 41 (21.1%) were comparisons of family type assessments and 153 (78.9%) were of individual type assessments.

*Table 11. Number of SPDAT assessments administered during an enrollment, for enrollments with more than one assessment of the same type.*

Number of Assessments	N	%
2	64	33.0
3	31	16.0
4	17	8.8
5	18	9.3
6	14	7.2
7	16	8.2
8	12	6.2
9	8	4.1
10	9	4.6
11	5	2.6
<b>Total</b>	<b>194</b>	<b>100</b>

## Services

Service data started being reported on March 1, 2016. For this analysis, researchers coded all services that were reported by Haven into three sub-types: peer services, non-peer clinical services, and non-peer non-clinical services. The peer services category included two services: “Peer Support – Contact” and “Peer Support – Home Visit.” The non-peer clinical category included counseling services, education classes, referrals, outreach services, medical/dental services, housing related services, case management, psychiatric services, and employment services, among others. The non-peer non-clinical category included resources, including financial and transportation resources, childcare, food and hygiene supplies, rental assistance, among others. See Appendix B for a list of all services that were reported, as well as a description of the services that were classified into each sub-category.

Researchers also coded services by time point. For each enrollment, only services that were received between the times of the two compared SPDAT assessments were included in the analysis. From the services data, there were gaps in the documentation of service provision, possibly due to a coding error. For example, a SPDAT assessment should be coded as a service, but in many cases, there was a SPDAT assessment completed, but no documentation of the SPDAT as a service. In several cases, there were no recorded services provided to individuals with one or more SPDAT assessments over the course of an enrollment. In other cases, there were no services provided in a specific quarter, indicating that there may have been a coding error in that quarter (services are reported on a quarterly basis).

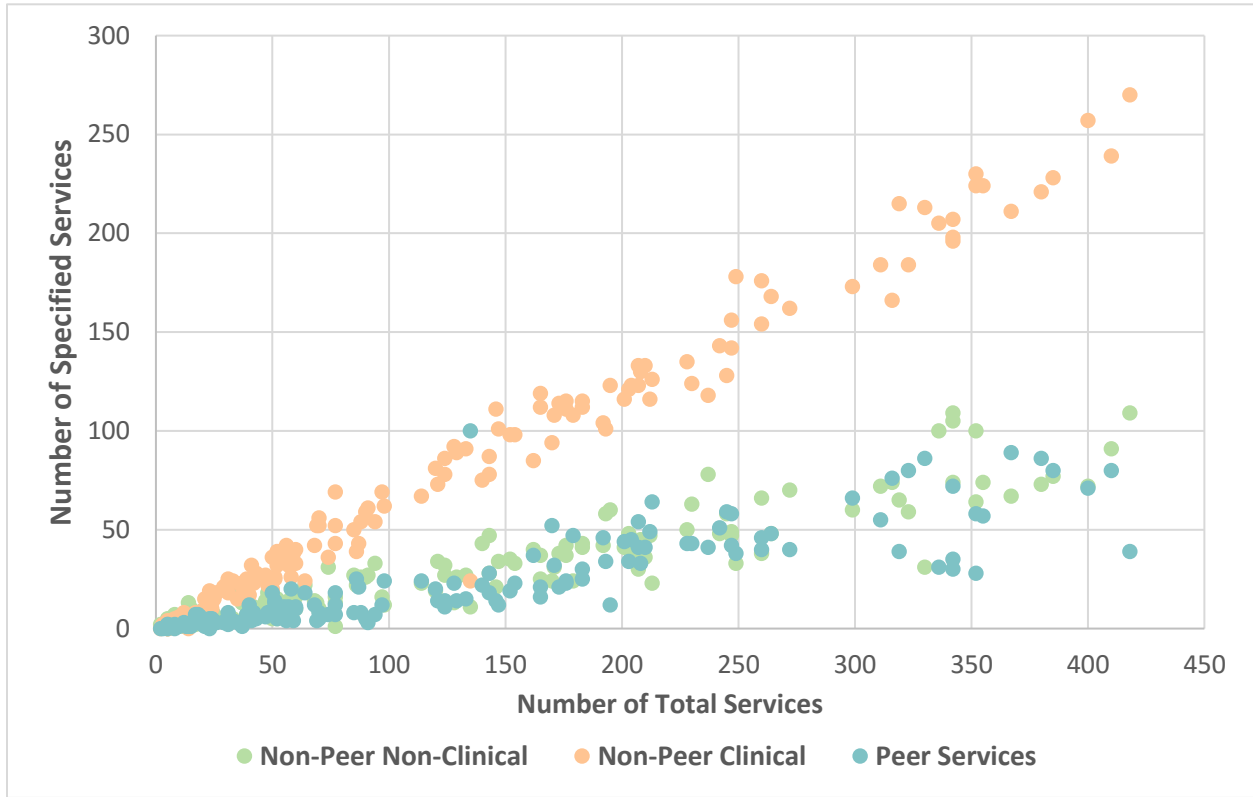
Of the 194 enrollments for comparison, 49 enrollments had no recorded services between the two SPDAT time points. The number of SPDAT assessments recorded during the course of each enrollment with no services ranged from two to nine. This further suggests a coding error. The average number of services received in the overall sample of enrollments was 99.60 ( $SD = 113.72$ ). Excluding those with no service data, the average number of services received ranged from 2 to 418 ( $M = 131.46$ ,  $SD = 113.50$ ). Altogether, 19,324 services were recorded between the dates of the first and last SPDATs of all enrollments. Demographics and characteristics of the total sample of enrollments ( $N = 194$ ) are compared with the sample of enrollments with service data ( $N = 147$ ) to ensure there were not substantial differences between members with and without documented services.

### *Services by type*

During most enrollments where services were documented, non-peer clinical services were the most frequently documented services provided. Non-peer non-clinical services and peer services were mixed for second and third in frequency, depending on the enrollment. Figure 4 shows the number of each type of services provided, on the vertical axis, relative to the total number of services provided during a given enrollment, on the horizontal axis, for enrollments where services were provided.

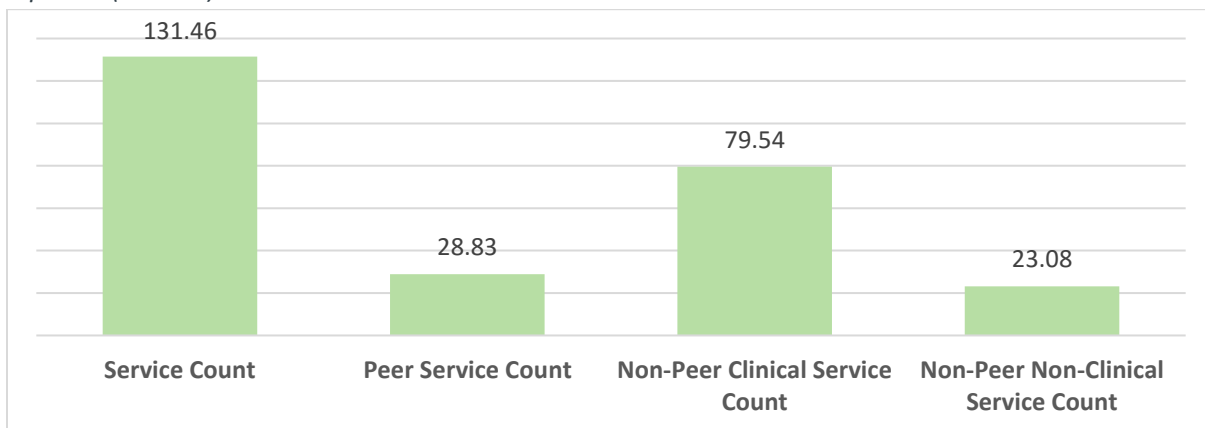


Figure 4. Distribution of services received during an enrollment, for enrollments with services reported.



For members with two SPDATs to compare during a specified enrollment, where service data were recorded ( $N = 147$ ), during the course of an enrollment a member would receive an average of 131.46 services ( $SD = 113.50$ ), including 79.54 non-peer non-clinical services ( $SD = 69.75$ ), 28.83 peer services ( $SD = 26.05$ ), and 23.08 non-peer clinical services ( $SD = 23.49$ ). See Figure 5 for a comparison of the averages of overall services, and each service type. These averages were lower, when considering the total sample of enrollments ( $N = 194$ ); overall members received 98.59 services ( $SD = 113.58$ ), 21.62 peer services ( $SD = 25.78$ ), 59.66 non-peer clinical services ( $SD = 69.54$ ), and 17.31 non-peer, non-clinical services ( $SD = 22.66$ ).

Figure 5. Average number of each type of service received during an enrollment, for enrollments with services reported ( $N = 147$ ).



### *Comparing enrollments with and without services*

The 194 enrollments used for comparison were held by 155 PSH members: 118 members with one enrollment, 35 members with two enrollments, and 2 members with 3 enrollments. A total of six members had services recorded for more than one enrollments. Thus, 141 members held the 147 enrollments with service data recorded.

The average age of members with enrollments for comparison ( $N = 194$ ) was 45.02 ( $SD = 12.11$ ). The average number of dependents that they claimed was 0.70 ( $SD = 1.47$ ). This compared with enrollments where services were recorded ( $N = 147$ ). Their average age was approximately the same, 45.29 years old ( $SD = 12.03$ ), as was the number of dependents they reported ranged ( $M = .58$ ,  $SD = 1.37$ ). For all 194 enrollments under consideration, most members identified as female (57.2%), followed by male (39.7%), and transgender female (3.1%). For members with service data recorded ( $N = 147$ ), patterns were the same; slightly more than half were female (57.1%), followed by male (40.1%), and transgender female (2.7%).

Of the overall sample of enrollments ( $N = 194$ ), most members were white (79.4%), followed by black (18%), American Indian or Alaskan Native (1.5%), and two other races, not specified to protect their identity (1%). Of the 147 with services recorded, most members in this group were white (81%), followed by black or African American (17.7%). Two other races were represented at 0.7% each; these races are not specified to protect their identity. Most members of both the overall enrollments ( $N = 194$ ) and of enrollments with service data ( $N = 147$ ) identified as non-Hispanic (64.6%).

Average length of stay was reported, both overall and for enrollments with service data. For overall enrollments, 114 of the 194 enrollments had length of stay reported; average length of stay for this group was 452.28 ( $SD = 263.25$ ). For enrollments with service data, 92 of 147 had length of stay reported. This group had longer than the lengths of stay than both members overall ( $N = 242$ ), and members enrolled after March 1, 2016 ( $N = 198$ ). Average length of stay for the 147 enrollments with service data was 496.76 ( $SD = 265.72$ ). Numbers of hospitalizations and arrests that were recorded were too low to be considered for analysis ( $N = 9$  hospitalizations,  $N = 13$  arrests).

In addition to length of stay, the number of days between the first and last SPDAT for a given enrollment ID was calculated. The number of days between first and last SPDAT in an enrollment ranged from 3 to 991 for both overall enrollments and enrollments with service data. For enrollments overall, the average number of days between first and last assessments was 370.42 days ( $SD = 266.32$ ). See Figure 6 for a depiction of the number of days between first and last SPDAT assessment for all enrollments. For enrollments with service data, average days between first and last assessments was higher, at 408.63 days ( $SD = 272.84$ ). See Figure 7 for a depiction of the number of days between first and last assessment for enrollments with services data. The distribution of number of days between first and last assessments of an enrollment are skewed, in both cases (overall and with service data).

Figure 6. Number of days between first and last assessment for all enrollments.

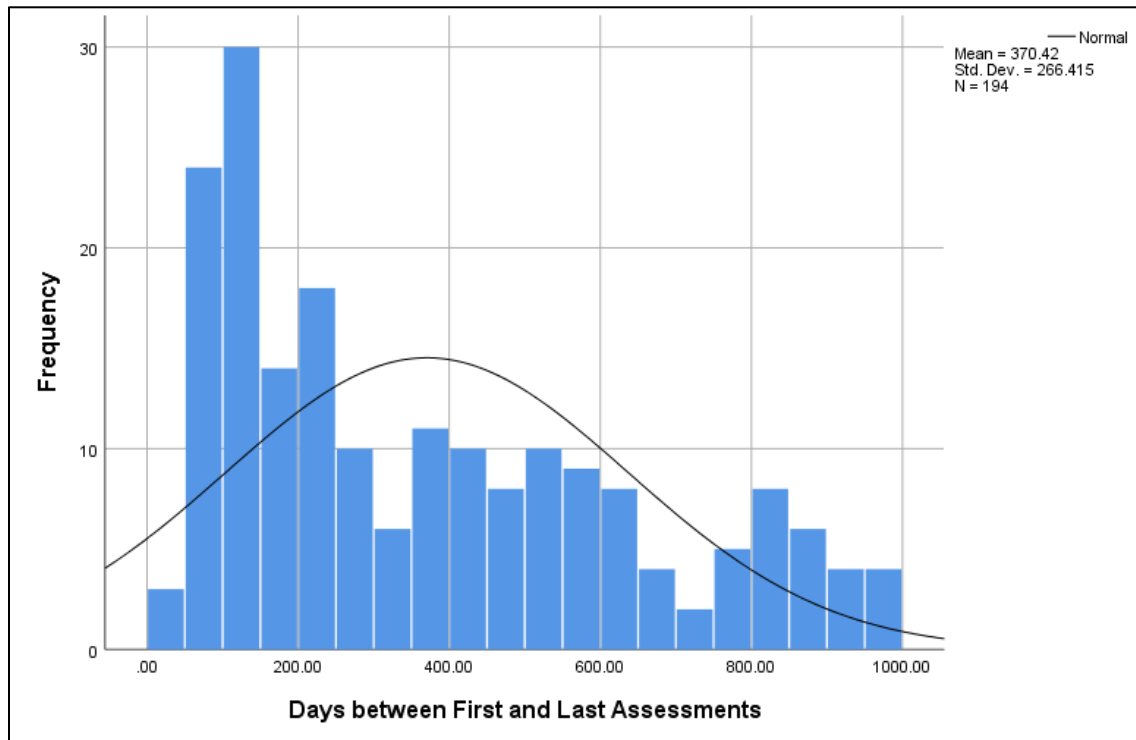
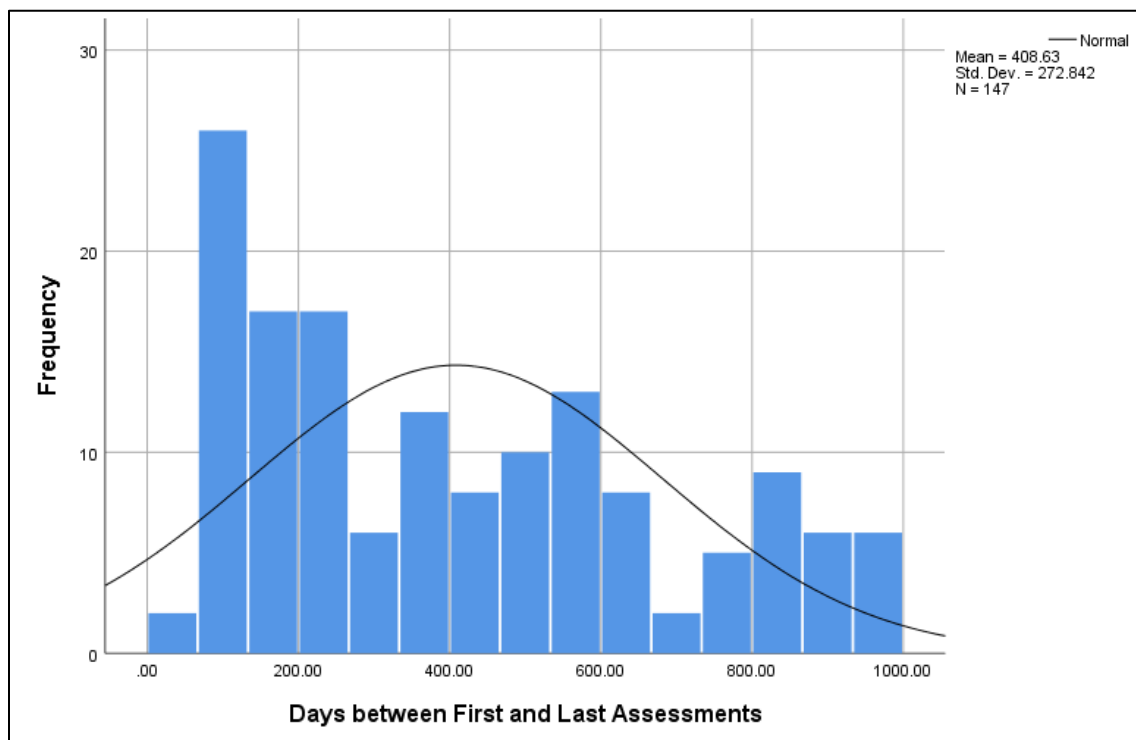
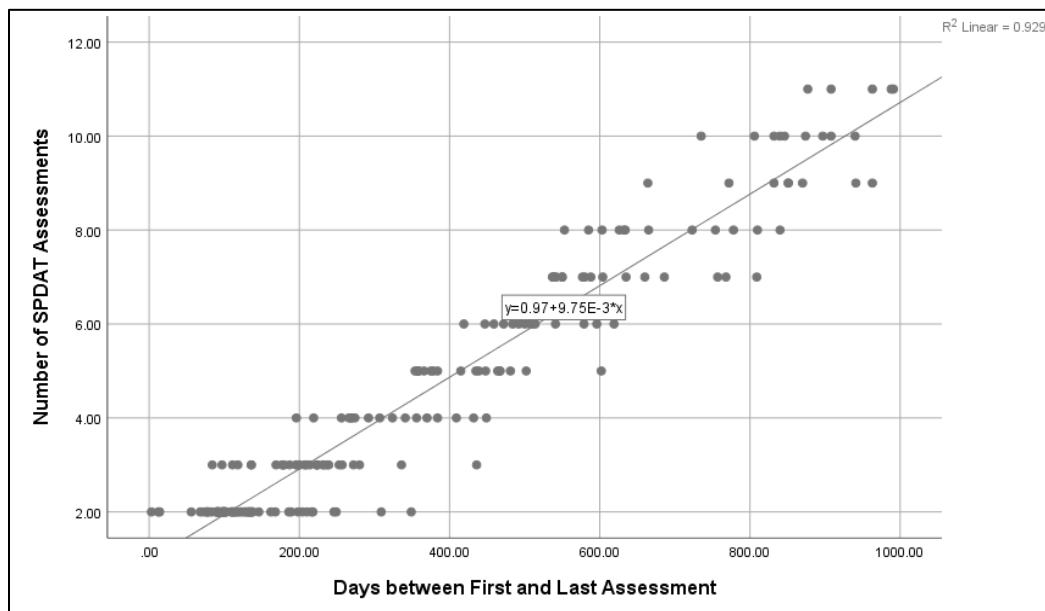


Figure 7. Number of days between first and last assessment for enrollments with service data.

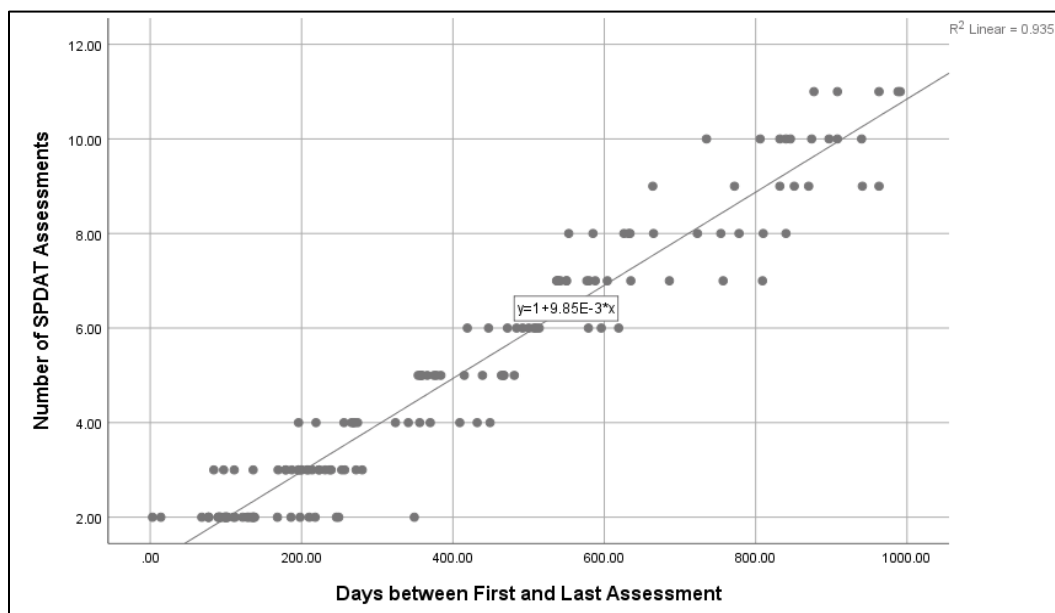


The relationship between number of days between first and last SPDAT assessments and the number of assessments administered between the first and last assessment was strong and positive for both the group of 194 and 147 enrollments (see Figure 8 and Figure 9, respectively). From this, it can be derived that members were receiving SPDAT assessments at an approximately uniform pace.

*Figure 8. Relationship between the number of SPDAT assessments and number of days between first and last SPDAT of an enrollment, N = 194.*



*Figure 9. Relationship between the number of SPDAT assessments and number of days between first and last SPDAT of enrollment, for those with service data N = 147.*



In the sample of 194 enrollments, in four cases the first and last SPDAT for an enrollment were administered less than 60 days apart (at 3, 12, 14, and 56 days apart). Of those four with fewer than 60 days between assessments, two had service data (at 3 and 14 days apart) and two did not (at 12 and 56 days apart).

#### *Relationship between services and SPDAT score change*

In examining the relationship between SPDAT score change and service use, the overall sample of enrollments was used, excluding the four enrollments where the first and last SPDAT were conducted less than 60 days apart ( $N = 190$ ). Receiving a greater number of any of the four types of services (overall, peer, non-peer clinical, and non-peer non-clinical) was related to a lower final SPDAT score, indicating better outcomes. The decrease in score from first to last SPDAT through increased overall services was statistically significant ( $r = -.147, p < .05$ ). The total number of peer services received was also related to a decrease in final SPDAT score, however, the result was not statistically significant ( $r = -.096, p = .190$ ). The relationship between non-peer clinical services and SPDAT score change was also significant ( $r = -.163, p < .05$ ). Finally, the relationship between non-peer, non-clinical services was negative, but not significant ( $r = -.124, p = .087$ ). The relationship between score change and the number of days between the first and last SPDAT was also calculated. This relationship was negative, indicating that the more days between the first and last SPDAT assessment, the lower the last SPDAT score would be (indicating better outcomes), however, the result was not statistically significant ( $r = -.039, p = .591$ ). See Table 12 for a description of the correlation between SPDAT change and services by type and days between first and last SPDAT.

*Table 12. Correlations between SPDAT score change, rates of services by type, and days between first and last SPDAT.*

	Pearson's $r$	$p$	N
1. SPDAT Change	--		
2. Total Service Count	<b>-.147*</b>	<b>.044</b>	190
3. Peer Service Count	-.096	.189	190
4. Non-Peer Clinical Service Count	<b>-.163*</b>	<b>.024</b>	190
5. Non-Peer Non-Clinical Service Count	-.124	.087	190
6. Date difference between first and last SPDAT	-.039	.591	190

Note: \* indicates correlation is significant at the  $p < .05$  level.

Some items were more strongly related to the number of services and peer services received. See Table 13 for a description of SPDAT item relationships with overall service count and peer service count. Some relationships were positive, indicating that a higher number of services was related to a higher score on some items, including physical health and abuse or trauma. It may be that score increases were related to services in that a higher number of services resulted in more awareness about some issues.

Table 13. Correlations between rates of overall services, peer services, and SPDAT items.

	Service Count	Peer Service Count
1. SPDAT Change	<b>-.147*</b>	-.096
2. Mental Health Change	<b>-.160*</b>	-.112
3. Physical Health Change	<b>.163*</b>	<b>.161*</b>
4. Medication Change	-.010	<b>.022</b>
5. Substance Use Change	-.001	<b>.019</b>
6. Abuse Or Trauma Change	<b>.060</b>	<b>.107</b>
7. Harm Self Or Others Change	-.076	-.045
8. High Risk Change	<b>.002</b>	.000
9. Emergency Services Change	<b>-.164*</b>	-.114
10. Legal Change	-.139	-.123
11. Managing Tenancy Change	-.139	-.122
12. Money Management Change	-.083	-.064
13. Social Change	-.124	-.108
14. Self-Care Living Change	-.090	-.077
15. Meaningful Daily Activity Change	-.080	-.051
16. Homeless History Change	-.096	-.090
17. Parental Engagement Change	<b>-.175*</b>	-.132
18. Family Unit Stability Change	<b>-.154*</b>	<b>-.149*</b>
19. Children Needs Change	-.087	-.040
20. Family Size Change	<b>.019</b>	<b>.025</b>
21. CPS Interaction Change	-.064	-.047

Note: \* indicates correlation is significant at the  $p < .05$  level.

#### Relationship between services and SPDAT subscale score change

Based on a review of the literature on peer provided services for people experiencing homelessness, a subscale of SPDAT items was constructed. Select items on the SPDAT were chosen, as they were theoretically influenced by the receipt of a greater number of peer services. For example, a change in family size, medication use, or homelessness history was not expected to be related to receiving peer services; however, changes in mental health and managing tenancy might be a result of receiving peer services. Additionally, the relationship between peer services and elements of family unit stability were explored.

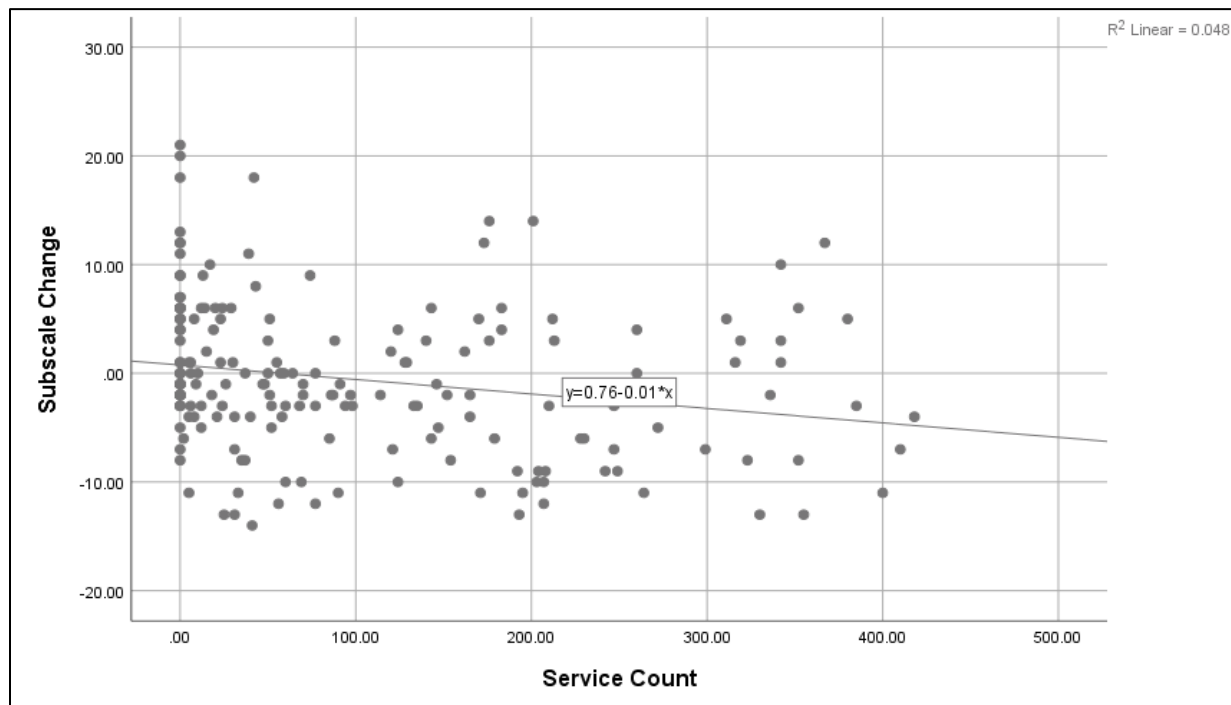
Some items on the subscale were noted to have a positive relationship, independently, with overall services received and with peer services received. However, items on the subscale were chosen a priori, based on the literature review. The following 13 SPDAT items were included in the subscale:

- Mental Health
- Harm Self or Others
- High Risk
- Emergency Services

- Legal
- Managing Tenancy
- Social
- Self-Care Living
- Meaningful Daily Activity
- Parental Engagement
- Family Unit Stability
- Children Needs
- CPS Family Court Interaction

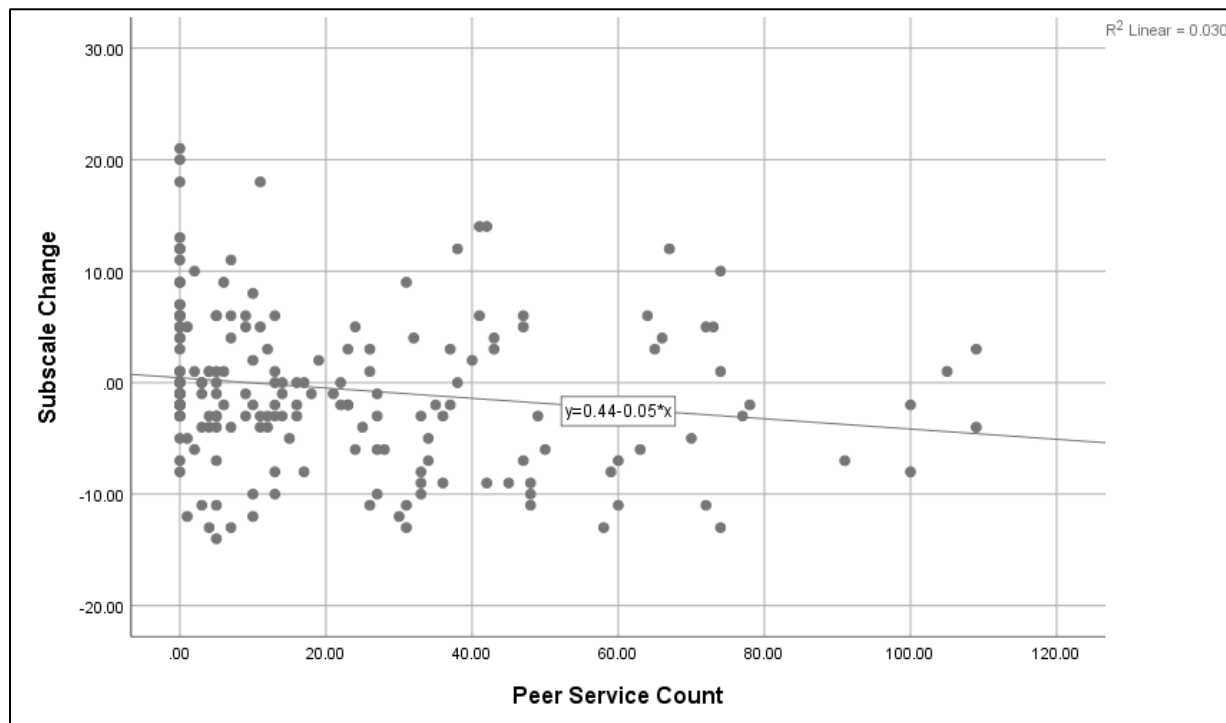
The relationship between receipt of a greater number of services, overall, and a reduction in SPDAT subscale scores was statistically significant ( $r = -.220, p < .01$ ). See Figure 10 for a description of the relationship between services overall and subscale score change from first to last SPDAT.

*Figure 10. Relationship between SPDAT subscale score change and rates of overall services.*



The relationship between receipt of a greater number of peer services and a reduction in SPDAT subscale scores was also statistically significant ( $r = -.172, p < .05$ ). See Figure 11 for a description of the relationship between peer services and subscale score change from first to last SPDAT.

Figure 11. Relationship between SPDAT subscale score change and rates of peer services.



A regression analysis was conducted to determine if the number of overall services received was predictive of SPDAT subscale score change. There was independence of residuals, as assessed by a Durbin-Watson statistic of 1.723. Residuals were normally distributed as assessed by visual inspection of a normal probability plot. Average number of overall services received accounted for 4.3% of the variation in SPDAT subscale change. This represents a small effect size (Cohen, 1988). Average number of overall services received statistically significantly predicted SPDAT subscale change,  $F(1, 188) = 9.54, p < .01$ . Each additional service received was related to a 0.013 point decrease in SPDAT subscale score.

Additionally, a regression analysis was conducted to determine if the number of peer services, specifically, was predictive of SPDAT subscale score change. There was independence of residuals, as assessed by a Durbin-Watson statistic of 1.693. Residuals were normally distributed as assessed by visual inspection of a normal probability plot. Average number of peer services received accounted for 2.5% of the variation in SPDAT subscale change. This represents a small effect size (Cohen, 1988). Average number of peer services received statistically significantly predicted SPDAT subscale change,  $F(1, 188) = 5.76, p < .05$ . Each additional peer service received was related to a 0.046 point decrease in SPDAT subscale score.

## Discussion

The current evaluation sought to understand the context and effect of peer services in the Permanent Supportive Housing (PSH) and Jail Outreach (JO) programs at Haven for Hope. Researchers conducted an interview with one peer from each of the two programs, implemented a staff survey of the entire organization, and examined outcomes of individuals who received peer services through the PSH program.



## Peer Interview

Results from the peer interview suggest that the two peers felt supported in their employment by their supervisors. However, secondary trauma was a concern for the peer at PSH. The peer at PSH also expressed a hope that in the future, the peer role would be separated from any type of clinical work, including assessments and other clinical tasks. This is an important point to recognize and address at the organizational level; research has shown that role clarity and fidelity to the peer role, including not performing tasks outside of the scope of a peer specialist, is important for peer specialist integration (Earley et al., 2016). Successful peer specialist integration, in turn, has been reported to increase work productivity and job satisfaction for peers (Earley et al., 2016).

## Staff Survey

From the staff survey, it was found that the majority of respondents had at least one type of lived experience (78%); most had more than one type of lived experience (60%) and many (18%) had all five types of lived experience (mental health, trauma, substance use, incarceration, and homelessness). Of the 65 members and interns who responded to the survey, 14 were peers. It is encouraging that so many individuals with lived experience work at Haven for Hope, and that the organization employs many peers, as other studies have indicated that working alongside peers increases the sensitivity and knowledge of non-peer staff and increases the relevance of the organization's services to individuals receiving services (Besio & Mahler, 1993). It may also have been that staff who had lived experience were more invested in the topic of the study, and thus were more likely to opt-in to participating in it (self-selection bias).

In terms of knowledge of recovery, staff scores on the mental health and substance use recovery knowledge assessment were moderately high. Results from the attitudes/stigma assessment indicated that there were not high levels of stigma among respondents. Scores on the stigma and recovery knowledge measures did not differ significantly between individuals with and without lived experience. Peer staff demonstrated slightly less stigma and had slightly higher recovery knowledge, though the difference was small. Overall, these findings are positive.

On the recovery knowledge substance use instrument, the only subscale that was rated relatively low (indicating lower recovery knowledge) was *non-linearity of the recovery process*. This may have been related to the statement "Abstinence from substance use is an essential component of recovery." At the organizational level, results indicate that there is an opportunity for continuing education on the concepts of the *non-linearity of the recovery process* and on *expectations regarding recovery*. Several studies have shown that consumer-led recovery trainings can improve staff knowledge and attitudes, as measured by the RKI (Meehan & Glover, 2009; Walsh, Meskell, Burke, & Dowling, 2017). So leadership at Haven may consider conducting these trainings in the future, with the domains of *non-linearity* and *expectations* as a focus.

## Member Outcomes

To examine PSH member outcomes, differences in SPDAT assessment scores for a given enrollment ID were analyzed over time. The number of services that were received during the enrollment, between the two SPDAT assessment time points, was also considered. Services were categorized into either: peer services, non-peer clinical services (e.g. doctor appointments, medication management, etc.), and non-peer non-clinical services (e.g. food, transportation, etc.). Results indicated that enrollees with services data were most often engaged in non-peer non-clinical services ( $M = 79.54$ ), followed by peer services ( $M = 28.83$  per enrollment), and non-peer clinical services ( $M = 23.08$  per enrollment). However, service data was missing for many enrollments. Future evaluations can be strengthened if data reporting becomes more comprehensive.

When comparing the number of services received during the course of an enrollment with SPDAT score change over time, results indicated that enrollments where more services were provided did have a greater decrease in SPDAT score, indicating improvement. The relationship (correlation) between number of services overall and SPDAT score change was statistically significant. The relationship between peer services, specifically, and scores on the overall SPDAT assessment over time also indicated improvement, however, this relationship was not statistically significant.

In relation to both peer services and services overall, the SPDAT areas where individuals experienced the most positive improvements included the domains of mental health, family unit stability, and parental engagement. This is an interesting finding, as there has not been much research into the effects of peer services on the family unit. Two areas where the relationship between services and SPDAT scores was positive, indicating worsening, were on the domains of physical health and abuse or trauma. It is unlikely that receiving services caused decline of physical health or increases in the experience of abuse or trauma. This may indicate that individuals were more likely to report physical ailments or abuse/trauma over time, as they engaged more with their providers.

Many other items on the SPDAT would not theoretically change over time with receipt of a higher number of peer services (e.g. family size change, children needs change, etc.). Therefore, a subscale of SPDAT items was constructed to test the relationship between items theoretically related to peer services and the receipt of peer services. Subscale items included mental health, emergency services, and meaningful daily activity items, among others. The relationship between subscale change and receipt of services overall was statistically significant. Regression results indicated that each service received was related to a .013 decrease in SPDAT subscale score (indicating improvement), and that the number of services received accounted for 4.3% of the overall SPDAT subscale score change. The relationship between the number of peer services received and SPDAT subscale score change was also significant. Each peer service received was associated with a .045 decrease in SPDAT subscale score and that peer services accounted for 2.5% of the overall change in SPDAT subscale scores. This is positive, as it indicates that engagement in services improves several aspects of member's lives.

## Limitations

One limitation of the peer interview was the small sample size. The views of one peer from each program may not reflect the views of all peers that work in JO or PSH. However, only five peers work in each program.

Thus, the decision to interview one peer from each program, to describe the general context, environment, and processes of working within JO and PSH, was deemed appropriate. This equated to a sample size 20% of the population size.

Limitations to the survey include self-selection bias. The majority of respondents reported at having at least one type of lived experience. So it may have been that people with lived experience were more likely to self-select to participate in the survey. There also may have been response bias in answering questions about mental health and substance use recovery and on mental health stigma. Even though survey data were collected and reported confidentially, respondents still may have answered questions in a way that would be considered socially desirable (e.g., reduced reports of stigma or inflated reports of recovery knowledge).

Finally, the PSH program supports a person-centered model of care and expected recovery-oriented outcomes through supporting peoples' integration into the communities of their choosing on their own terms. However, the peer providers in the PSH program provide a mix of peer services and traditional case management services, necessitated by the structure of the program and contractual requirements. This may limit the ability to determine how member outcomes are impacted specifically by peer support – over and above recovery-oriented services. Additionally, for the study of outcomes, service data were missing for 49 of the 194 enrollments that were included in the final sample. The relationship between SPDAT score change and enrollment may be strengthened if future reporting of service data becomes more comprehensive. Finally, individuals were not randomly assigned into the PSH program, thus, a causal relationship between peer services and SPDAT score change cannot be established.

# References

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- Barker, S. L., & Maguire, N. (2017). Experts by experience: Peer support and its use with the homeless, *Community Mental Health Journal*, 53(5), 598–612. doi: 10.1007/s10597-017-0102-2.
- Bean, K. F., Shafer, M. S., & Glennon, M. (2013). The impact of housing first and peer support on people who are medically vulnerable and homeless. *Psychiatric Rehabilitation Journal*, 36(1):48–50. doi: 10.1037/h0094748.
- Bedregal, L. E., O’Connell, M., & Davidson, L. (2006). The Recovery Knowledge Inventory: Assessment of mental health staff knowledge and attitudes about recovery. *Psychiatric Rehabilitation Journal*, 30(2), 96-103. doi: 10.2975/30.2006.96.103.
- Besio, S. W., & Mahler, J. (1993). Benefits and challenges of using consumer staff in supported housing services. *Hospital and Community Psychiatry*, 44(5), 490-91.
- Boisvert, R. A., Martin, L. M., Grosek, M., & Clarie, A. J. (2008). Effectiveness of a peer-support community in addiction recovery: participation as intervention. *Occupational Therapy International*, 15(4), 205–220. doi: 10.1002/oti.257.
- Buck Willison, J., Jannetta, J., Dodd, H., Neusteter, S. R., Warwick, K., Greer, K., & Matthews, A. (2012). Process and systems change evaluation findings from the Transition from Jail to Community Initiative. *Urban Institute Justice Policy Center*. Retrieved from <https://www.urban.org/sites/default/files/publication/25881/412670-Process-and-Systems-Change-Evaluation-Findings-from-the-Transition-from-Jail-to-Community-Initiative.PDF>
- Center for Evidence Based Solutions to Homelessness. (2019). *Permanent supportive housing*. Retrieved from <http://www.evidenceonhomelessness.com/topic/permanent-supportive-housing/>
- Chapman, S. A., Blash, L. K., Mayer, K., and Spetz, J. (2018). Emerging roles for peer providers in mental health and substance use disorders. *American Journal of Preventive Medicine*, 54(6S3), 267-274.
- Chinman, M., George, P., Dougherty, R. H., Daniels, A. S., Ghose, S. S., Swift, A., & Delphin-Rittmon, M. E. (2014). Peer support services for individuals with serious mental illnesses: Assessing the evidence. *Psychiatric Services*, 65(4), 429-441. doi: 10.1176/appi.ps.201300244.
- Clarke, G. N., Herinckx, H. A., Kinney, R. F., Paulson, R. I., Cutler, D. L., Lewis, K., & Oxman, E. (2000). Psychiatric hospitalizations, arrests, emergency room visits, and homelessness of clients with serious and persistent mental illness: Findings from a randomized trial of two ACT programs vs usual care. *Mental Health Services Research*, 2, 155–164. Retrieved from doi: 10.1023/A:1010141826867.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2<sup>nd</sup> ed.). Hillsdale, NJ: L. Erlbaum Associates.

- Cook, J. A., Copeland, M. E., Corey, L., Buffington, E., Jonikas, J. A., Curtis, L...Nichols, W. (2010). Developing the evidence base for peer-led services: Changes among participants following Wellness Recovery Action Planning (WRAP) education in two statewide initiatives. *Psychiatric Rehabilitation Journal*, 34, 113–120. doi: 10.2975/34.2.2010.113.120.
- Crayton, A., Ressler, L., Mukamal, D. A., Jannetta, J., & Warwick, K. (2010). Partnering with jails to improve reentry: A guidebook for community based organizations. *Urban Institute*. Retrieved from [urban.org/sites/default/files/publication/29146/412211-Partnering-with-Jails-to-Improve-Reentry-A-Guidebook-for-Community-Based-Organizations.PDF](http://urban.org/sites/default/files/publication/29146/412211-Partnering-with-Jails-to-Improve-Reentry-A-Guidebook-for-Community-Based-Organizations.PDF)
- Davidson, L., Bellamy, C., Chinman, M., Farkas, M., Ostrow, L., Cook, J. A...Salzer, M. (2018). Revisiting the rationale and evidence for peer support, *Psychiatric Times*, 35(6). Retrieved from <https://www.psychiatrictimes.com/special-reports/revisiting-rationale-and-evidence-peer-support/page/0/1>
- Department of Housing and Urban Development. (2015). Recovery housing policy brief. *HUD Exchange*. Retrieved from <https://www.hudexchange.info/resource/4852/recovery-housing-policy-brief/>
- Earley, J., Lodge, A. C., Kuhn, W., Daggett, P., & Stevens Manser, S. (2016). Assessing peer specialist integration in Texas. *Texas Institute for Excellence in Mental Health, School of Social Work, University of Texas at Austin*.
- Gates, L.B., & Akabas, S.H. (2007). Developing strategies to integrate peer providers into the staff of mental health agencies. *Administration and Policy in Mental Health*, 34(3), 293-606. doi: 10.1007/s10488-006-0109-4.
- Gidugu, V, Rogers, E. S., Harrington, S., Maru, M., Johnson, G., Cohee, J., & Hinkel, J. (2015). Individual peer support: A qualitative study of mechanisms of its effectiveness. *Community Mental Health Journal*, 51(4), 445–452. doi: 10.1007/s10597-014-9801-0.
- Lopez, M.A. (2013). Texas Family Partner evaluation: Interim report. *Texas Institute for Excellence in Mental Health, School of Social Work, University of Texas at Austin*.
- King's College London. (2019). *Mental Illness Clinician's Attitudes (MICA) scale*. Retrieved from <https://www.kcl.ac.uk/ioppn/depts/hspr/archive/cmh/research-projects/sapphire/measurements/mica>
- Meehan, T., & Glover, H. (2009). Using the recovery knowledge inventory (RKI) to assess the effectiveness of a consumer-led recovery training program for service providers. *Psychiatric Rehabilitation Journal*, 32(3), 223-226. doi: 10.2975/32.3.2009.223.226.
- National Alliance to End Homelessness. (2019). Permanent supportive housing. Retrieved from <https://endhomelessness.org/ending-homelessness/solutions/permanent-supportive-housing/>
- Oh, H., & Rufener, C. (2017). Veteran peer support: What are the mechanisms? *Psychiatric Services*, 68(4), 424. doi: 10.1176/appi.ps.201600564.

- O'Hara, A. (2003). Permanent supportive housing: A proven solution to homelessness, *Opening Doors: A Housing Publication for the Disability Community*, 20, 1-16. Retrieved from <http://www.tacinc.org/media/13714/PSH%2020.pdf>
- Pearson, C. L., Locke, G., Montgomery, A. E., McDonald, W. R., Buron, L., & McDonald, W. R. (2007). The applicability of Housing First models to homeless persons with serious mental illness. *U.S. Department of Housing and Urban Development Office of Policy Development and Research*. Retrieved from <https://www.huduser.gov/portal//publications/pdf/hsgfirst.pdf>
- Perlman, J. & Parvensky, J. (2006). Denver Housing First Collaborative: Cost benefit analysis and program outcomes report. *Colorado Coalition for the Homeless*. Retrieved from [https://shnny.org/uploads/Supportive\\_Housing\\_in\\_Denver.pdf](https://shnny.org/uploads/Supportive_Housing_in_Denver.pdf)
- Resnick, S. G. & Rosenheck, R. A. (2008). Integrating peer-provided services: a quasi-experimental study of recovery orientation, confidence, and empowerment. *Psychiatric Services*, 59(11), 1307-14.
- Sledge, W. H., Lawless, M., Sells, D., Wieland, M., O'Connell, M. J., & Davidson, L. (2011). Effectiveness of peer support in reducing readmissions of persons with multiple psychiatric hospitalizations. *Psychiatric Services*, 62, 541–544. doi: 10.1176/ps.62.5.pss6205\_0541.
- Substance Abuse and Mental Health Services Administration. (2015). *Recovery and recovery support*. Retrieved from <https://www.samhsa.gov/recovery>.
- Technical Assistance Collaborative. (2019). *Permanent supportive housing*. Retrieved from <http://www.tacinc.org/knowledge-resources/topics/permanent-supportive-housing/>
- Tsemberis, S., Gulcur, L., & Nakae, M. (2004). Housing First, consumer choice, and harm reduction for homeless individuals with a dual diagnosis, *American Journal of Public Health*, 94(4), 651–656.
- U.S. Department of Housing and Urban Development Office of Community Planning and Development. (2016). Notice on prioritizing persons experiencing chronic homelessness and other vulnerable homeless persons in permanent supportive housing. *HUD Exchange*. Retrieved from <https://files.hudexchange.info/resources/documents/notice-cpd-16-11-prioritizing-persons-experiencing-chronic-homelessness-and-other-vulnerable-homeless-persons-in-psh.pdf>
- van Vugt, M. D., Kroon, H., Delespaul, P. A., Mulder, C. L. (2012). Consumer-providers in assertive treatment programs: associations with client outcomes. *Psychiatric Services*, 63, 477–481. doi: 10.1176/appi.ps.201000549.
- Walsh, F. P., Meskell, P., Burke, E., & Dowling, M. (2017). Recovery-based training in mental health: Effects of staff knowledge and attitudes to recovery. *Issues in Mental Health Nursing*, 38(11), 886-895. doi.org/10.1080/01612840.2017.1346014.
- Weissman, E. M., Covell, N. H., Kushner, M., Irwin, J., & Essock, S. M. (2005). Implementing peer-assisted case management to help homeless veterans with mental illness transition to independent housing. *Community Mental Health Journal*, 41(3), 267–276. doi: 10.1007/s10597-005-5001-2.

# Appendix A: Staff Survey

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## Haven for Hope: Recovery Outcomes Survey

You are being invited to complete this survey because your organization, Haven for Hope, is taking part in the Peer Outcomes Pilot Study conducted by the Texas Institute for Excellence in Mental Health at the University of Texas at Austin. The purpose of the survey is to learn more about your beliefs regarding mental health and substance use recovery.

Your responses will only be reported in aggregate. No individual responding to this survey will be connected to their individual responses. This survey is voluntary. You may skip items if you choose, and you may stop the survey at any time.

### Recovery Knowledge- Mental Health

The following questions are about mental health recovery and the mental health recovery process. Please rate your agreement or disagreement with the following items using the scale below:

1	2	3	4	5
Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree

- Only people who are clinically stable should be involved in making decisions about their care.
- Recovery from mental health issues is achieved by following a prescribed set of procedures.
- It is the responsibility of professionals to protect their clients against possible failures and disappointments.
- The idea of recovery is most relevant for those people who have completed, or are close to completing, active treatment.
- People with mental health issues should not be burdened with the responsibilities of everyday life.
- People receiving mental health-related treatment are unlikely to be able to decide their own treatment and rehabilitation goals.
- Recovery is not as relevant for those who are actively experiencing symptoms.
- Recovery is characterized by a person making gradual steps forward without major steps back.
- Expectations and hope for recovery should be adjusted according to the severity of a person's mental health issues.
- The more a person complies with treatment, the more likely he/she is to recover.
- Absence of symptoms is an essential component of mental health recovery.
- There is little that professionals can do to help a person recover if he/she is not ready to accept treatment.
- Symptom management is the first step towards recovery for persons with mental health issues.
- The pursuit of hobbies and leisure activities is important for recovery.
- Other people who are in recovery from mental health issues can be as instrumental to a person's recovery as mental health professionals.

- The concept of recovery is equally relevant to all phases of mental health treatment.
- Defining who one is, apart from his/her mental health issues, is an essential component of recovery.
- All professionals should encourage clients to take risks in the pursuit of recovery.
- Not everyone is capable of actively participating in the recovery process.
- It is often harmful to have too high of expectations for clients.

## Recovery Beliefs- Mental Health

Instructions: For each of the following questions, please respond by selecting one response choice only. "Mental health issues" here refers to conditions for which an individual would be receiving mental health services.

1	2	3	4	5	6
Strongly Disagree	Disagree	Somewhat disagree	Somewhat agree	Agree	Strongly Agree

- I just learn about mental health when I have to, and would not bother reading additional material on it.
- People with severe mental health issues can never recover enough to have a good quality of life.
- Working in the mental health field is just as respectable as other fields of health and social care.
- If I had mental health issues, I would never admit this to my friends because I would fear being treated differently.
- People with severe mental health issues are dangerous more often than not.
- Health/social care staff know more about the lives of people treated for mental health issues than do family members or friends.
- If I had mental health issues, I would never admit this to my colleagues because I would fear being treated differently.
- Being a health/social care professional in the area of mental health is not like being a real health/social care professional.
- If a senior colleague instructed me to treat people with mental health issues in a disrespectful manner, I would not follow their instructions.
- I feel as comfortable talking to a person with mental health issues as I do talking to a person with a physical illness.
- It is important that any health/social care professional supporting a person with mental health issues also ensures that their physical health is assessed.
- The public does not need to be protected from people with severe mental health issues.
- If a person with mental health issues complained of physical symptoms (such as chest pain) I would attribute it to their mental health issues.
- General practitioners should not be expected to complete a thorough assessment for people with psychiatric symptoms because they can be referred to a psychiatrist.
- I would use the terms 'crazy', 'nutter', 'mad', etc., to describe to colleagues people with mental health issues who I have seen in my work.
- If a colleague told me they had mental health issues, I would still want to work with them.



This scale has been modified from its original version: Mental Illness: Clinicians' Attitudes Scale MICA-2 © 2010. Health Service and Population Research Department, Institute of Psychiatry, King's College London.

## Recovery Knowledge- Substance Use

The following questions are about substance use recovery and the substance use recovery process. Please rate your agreement or disagreement with the following items using the scale below:

1	2	3	4	5
Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree

- Only people who are clinically stable should be involved in making decisions about their care.
- Recovery from substance use issues is achieved by following a prescribed set of procedures.
- It is the responsibility of professionals to protect their clients against possible failures and disappointments.
- The idea of recovery is most relevant for those people who have completed, or are close to completing, active treatment.
- People with substance use issues should not be burdened with the responsibilities of everyday life.
- People receiving substance use-related treatment are unlikely to be able to decide their own treatment and rehabilitation goals.
- Recovery is not as relevant for those who are using substances.
- Recovery is characterized by a person making gradual steps forward without major steps back.
- Expectations and hope for recovery should be adjusted according to the severity of a person's issues/condition.
- The more a person complies with treatment, the more likely he/she is to recover.
- Abstinence from substance use is an essential component of recovery.
- There is little that professionals can do to help a person recover if he/she is not ready to accept treatment.
- Symptom management is the first step towards recovery for persons with substance use issues.
- The pursuit of hobbies and leisure activities is important for recovery.
- Other people who are in recovery from a substance use issues can be as instrumental to a person's recovery as mental health or substance use disorder professionals.
- The concept of recovery is equally relevant to all phases of substance use treatment.
- Defining who one is, apart from his/her substance use issues, is an essential component of recovery.
- All professionals should encourage clients to take risks in the pursuit of recovery.
- Not everyone is capable of actively participating in the recovery process.
- It is often harmful to have too high of expectations for clients.

## Demographic Information

What is your gender?

Male

Female

Transgender / Non-binary

What is your age range?

18 - 25

26 - 35

36 - 45

46 - 55

56 - 65

66 and older

Are you of Hispanic or Latino origin?

Yes

No

What race do you consider yourself to be? (Select all that apply)

American Indian or Alaska Native

Asian

Black or African American

Native Hawaiian or other Pacific Islander

White

Other (please specify):

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What is your primary language?

English

Spanish

Other (please specify):

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Are you fluent in a second language?

No

Yes

What is your secondary language (fluent)?

English

Spanish

Other (please specify):

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What is the highest level of education you have completed?

Less than High School Diploma

High School Diploma or GED

Some college

Associates Degree

Bachelor's Degree

Graduate Degree

I have lived experience in... (Select all that apply)

Homelessness

Incarceration

Mental health issues

Substance use issues

Trauma

List all Designations, Certifications, and Licensures that you hold.

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Thank you for completing the survey. If you have any questions or concerns, please contact Wendy Brooks at the University of Texas at Austin: [wendy.brooks@austin.utexas.edu](mailto:wendy.brooks@austin.utexas.edu).

# Appendix B: Services Categorization

Non-Peer, Non-Clinical Services	Non-Peer Clinical Services	Peer Services
60 Day Retention Bonus	Boundaries Class	Peer Support - Contact
90 Day Retention Bonus	Case Manager Liaison	Peer Support - Home Visit
Access To Fax Machine	Case/Care Mgmt-HMIS	
Backpack	CentroMed Visit	
Badge Issues or Reprint-Intake Main	Clinical Services	
Bed Night	Clinical Services Outreach Attempt	
Bed Nights	CM - Home Visit	
Benefit Bank Service	Collateral - APS Contact Service	
Benefits/ Entitlements Assistance	Collateral - CPS Contact Service	
Blankets	Collateral Contacts	
Bus Passes	Community Orientation	
Bus Ticket	Consultation	
Childcare	Counseling	
Clothes	Dental Exam (Non-SACDC)	
Clothing Provided	Dental Services	
Community Resource Provided	Employment Assistance	
Evening Medication - IHWP	Employment Readiness Outreach/Recru	
Food Pantry Items	Employment Readiness Outreach/Recruitment	
Full Mattress with Frame	Employment/Job Develop/Find- HMIS	
Furniture	Family Support Communication	
Gift Cards	Family Support Misc	
Groceries Financial Assistance	Group Participation	
HEB Gift Card	H4H Campus TB Test I	
Household Good Financial Assistance	H4H Campus TB Test II	
Household Goods	Helping Hands	
HSV Application Assistance	Home Visit	
Hygiene Items Financial Assistance	Housing Advocacy or Mediation	
Hygiene Kit	Housing Application Assistance	
Hygiene- Body Care	Housing Assessment	
Hygiene- Hair Care	Housing Education	
ID/Birth Cert Recovery	Housing Inspections	
Kitchen Items	Housing Orientation	
Legal Fees	Housing Referral	

Material Goods/Clothes-HMIS	Housing Search and Placement	
Medical Fees	I Care - Vision Center Visit	
Move Out Assistance	Illness Management and Recovery	
Move Out Kit	Legal Aid	
Non-SMI Financial Assistance	Life Skills - Daily Living	
Parent-Child Reunifications	Life Skills-Group	
Phone Call	Medical Services	
Placement Bonus	Medication Assistance	
Provide Copy of Identification Docu	Mental Health Services-HMIS	
Provide Homeless Verification	One-on-one Spiritual Care	
Referral- Furniture	Parent-Child Reunifications	
Rental Assistance (Short Term)	PCP (person-centered-plan)	
Rental Payment Assistance	PCP Renewal	
Restroom	Pre-PCP	
SAFB Breakfast- Campus	PSH Eligibility and Screening	
SAFB Dinner - Campus	Psychiatric Services	
SAFB Lunch- Campus	Referral- DARS	
Security Deposit Assistance	Referral- Employment Services	
Shoes	Referral- Other	
Towels	Rehabilitative Services	
Transportation- Activities	Residential Contact	
Transportation- Medical	SACDC Visit	
Transportation- Move-Out	SAHA-HSV	
Transportation- Purchases	SPDAT	
Twin Mattress with Frame	Spiritual Connect Off Site	
Utilities Deposit Assistance	Spiritual Services	
Utilities Payment Assistance	Staff Assisted - Job Search	
Work Clothes	Staff Assisted Job Development	
	Substance Abuse and Mental Illness	
	Taking Time for Me Class	
	TARGET Therapy	
	Training & Development Services	
	Trauma Recovery/Empowerment Group	
	Vision Center Visit	
	WRAP	