Bernalillo County Behavioral Health Initiative: Peer Case Management Process Evaluation

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Introduction

In April 2015, the Bernalillo County Commission (BCC) contracted with Community Partners Inc. (CPI) to provide consultation and develop a business plan for a regional cohesive system of behavioral health care. In the 2015 report, CPI noted that, "It is important to develop a crisis care network for individuals that will not only rely on the provision of crisis services but to ongoing treatment following crisis stabilization" (CPI 2015: 32). To this end, the report identified both case management generally and Intensive Case Management (ICM) specifically as evidence-based approaches which could be used to address this community need. In their 2017 Request for Proposals (RFP 09-10-JZ), Bernalillo County and the Department of Behavioral Health Services (DBHS) built upon these earlier CPI case management recommendations to solicit proposals from community behavioral health providers to implement Peer Case Management (PCM) interventions. The goal of PCM interventions is to link clients in the target population – usually defined as individuals with concurrent substance abuse and serious mental illnesses – to relevant social services through the use of relatable peers instead of licensed clinicians, behavioral health professionals, or paraprofessionals.

In 2019, the DBHS contracted with two community-based behavioral health providers – Centro Sávila (CCN 2019 – 0519) and Crossroads for Women (CRFW) (CCN 2019 - 9463) – to provide PCM interventions to relevant target populations in Bernalillo County. Common among the services offered by the two providers are: traditional case management services, the development of individualized service plans, employment and education support, a focus on ICM with small case manager-client loads, the integration of Motivational Interviewing (MI) techniques into case management practice, and the provision of more general behavioral health services. The programs differ, to some extent, in the target populations served and their referral streams, some of the types of case management services offered, program incentive structures, and existing organizational capacities.

To date, the two funded PCM programs have not been systematically evaluated to determine whether program activities have been implemented as intended and whether program implementation is consistent with program-developed logic models and process maps, the existing evidence-base on peer case management and ICM, and recommended best practices in the field. The purpose of the present process evaluation is to evaluate three primary components of program implementation: (1) fidelity (i.e., the degree of correspondence between the program-in-theory and program-in-practice), (2) dose (i.e., how frequently clients utilize PCM services, which specific services clients utilize, and which clients are frequent service utilizers), and (3) reach (i.e., whether the programs serve their intended population).

In order to assess fidelity, dose, and program reach, this process evaluation employs a mixed-methods approach – using both qualitative and quantitative data – to assess these dimensions of program implementation. To facilitate our review, we rely on data from four primary data sources – (1) monthly performance measure data each provider reported to the DBHS, (2) 15 semi-structured staff interviews, (3) quarterly client-satisfaction surveys conducted by each provider, and (4) client-level data from our record review – each of which are described in more detail in the *Study Design and Methodology* section of this report.

In what follows, we first survey the peer-reviewed literature on peer case management and ICM. We proceed to discuss the design, data sources, and methodology of the process evaluation. We then review both providers' (a) performance measure data, (b) client-level data, (c) client satisfaction survey data, and (d) interview data separately. We conclude the report by synthesizing themes across multiple data sources, identifying central insights from the data and offering recommendations to improve process flow and data quality in reporting going forward.

Literature Review

As noted in the *Introduction*, the central goal of PCM, as with most other variations of case management models, is to link clients in the target population – usually defined as individuals with concurrent substance abuse and serious mental illnesses – to relevant social services in an effort to help individuals in the target population navigate an often-fragmented behavioral health ecosystem (Albrecht and Peters 1997). Specifically, case managers aim to link clients to resources which can help address clients' short-term and long-term behavioral health needs, whether these specific needs relate to housing stability, vocational training, employment stability, educational access, mental health, substance abuse, financial capability, life skills, identity formation, or service coordination (Wellness Recovery Action Plan 2010).

However, case managers often perform a variety of additional tasks beyond information provision alone, including the provision of social support to the clients they case manage, counselling, outreach, coaching and advocacy, and service referrals (Pitt et al., 2013). Over the long-term, most case management programs seek to promote positive psychosocial outcomes for program participants, whether perceptual (e.g., heightened self-esteem, self-management, self-efficacy, and sense of community belonging) or behavioral (e.g., reduced relapse rates, reduced hospital time, increased use of community services, etc.) in nature.

However, the uniqueness of the PCM approach to case management lies in the form of its service delivery: PCM, in contrast to other approaches to case management in the clinical literature such as generalist case management or Assertive Community Treatment (ACT), relies on relatable peers – defined formally as "individuals with histories of successfully living with serious mental illness who, in turn, support others with serious mental illness" (Chinman et al. 2014: 429) – instead of licensed clinicians, behavioral health professionals, or paraprofessionals to deliver case management services. Notably, these peers are distinct from other behavioral health professionals who typically provide case management services in that their knowledge about recovery is a function of both formal training – usually, some form of state-certification – and shared lived experience (Borkman 1976; Dennis 2003). In part because of the shared lived experiences peer case managers have with the target population, peer case managers tend to mirror the socio-demographic characteristics of the individuals they serve and are often matched to clients on the basis of such characteristics (Fuhr et al. 2014; Daniels, Bergeson, and Jan Myrick 2017; Nicholson and Valentine 2018).

Drawing from the socio-cognitive theoretical foundation of Social Learning Theory (Bandura 1977), PCM approaches to case management reason that because peer case managers typically share relevant experiences with, and background characteristics of, the target population and because peer case managers serve as salient exemplars of successful recovery, clients will be motivated to model the peer case manager's behavior (Salzer 2002; Fuhr 2014). Advocates of peer case management approaches reason that

this modeling occurs because the shared experience of coping with addiction and recovery paired with shared background characteristics help cultivate a sense of empathy, connectedness, mutualism, and reciprocity between the peer case manager and their respective clients (Mead and Macneil 2006) and because the visibility of the case manager's own successes in recovery will be motivational to the client (Gidugu et al. 2015). To these points, Chinman et al. note that peer case managers "draw upon their lived experiences to share 'been there' empathy, insights, and skills . . . serve as role models, inculcate hope, engage patients in treatment, and help patients access supports in the community" (2008: 1315). From this, the perceived "peerness" of the case manager is reasoned to increase clients' self-efficacy and case manager-client trust which, in the short-term, is theorized to increase positive self-disclosure and reduce client attrition. Over the long term, it is reasoned that peer case management will promote positive psychosocial, mental health, recovery-oriented, physical health, and wellness outcomes including improved mental well-being, reduced rates of substance use, reduced hospitalization rates, and reduced criminality, among other things.

The evidence-base for PCM has expanded rapidly over the last twenty years. While there are some notable methodological concerns with the existing evidence-base on PCM – specifically, a lack of clarity about what peer support looks like and how peerness is defined and quantified, heterogeneity in programmatic characteristics across interventions, and variability in model fidelity – the existing empirical evidence to date from the most rigorous studies – meta-analyses and systematic reviews of randomized controlled trials on PCM interventions – suggests that, on balance, peer case managers are either equivalently effective or, in some cases, more effective than traditional behavioral health professionals and paraprofessionals at improving client-side behavioral health outcomes.

To this point, Bellamy, Schmutte, and Davidson (2017) provide a comprehensive literature review of eight recently published meta-analyses and systematic reviews which evaluated the effectiveness of peer-case management programs on a set of mental health and physical outcomes, primarily analyzing studies which used high-quality experimental or quasi-experimental designs. The first review discussed in the paper by Pitt et al. (2013) analyzed 11 randomized controlled trials (RCTs) from 1979 - 2012 on peer support and presented evidence that clients with serious mental illnesses who worked with peer case managers did not experience any difference in psychosocial, mental health symptom, and service use outcomes compared to clients who were under the supervision of traditional health professionals. This same review also presented some tentative evidence that peer support lead to mild reductions in how frequently clients made use of emergency services.

The second article discussed by Bellamy, Schmutte, and Davidson (2017) was a 2014 meta-analysis of 18 peer-support RCTs from 1982 to 2013 by Lloyd-Evans et al. (2014). Similar to the Pitt et al. (2013) review, this review did not find consistent evidence that peer support improved hospitalization rates, mental health symptoms, or service satisfaction relative to control groups. The review presented some tentative evidence that the reception of peer support services significantly increased subjective measures of hope, recovery, and empowerment in clients, though the authors noted that improvements in these measures were partially dependent on specific features of program implementation such as program content, target client group, whether case management was group-based or individual, whether case management was delivered face-to-face or internet-based, the degree of support case management providers received from local mental health services, and the extent of provider training.

The third review discussed by Bellamy, Schmutte, and Davidson (2017) was a 2014 meta-analysis of 14 RCTs by Fuhr et al. (2014). This review found that for individuals with serious mental illness, peer support interventions produced small positive effects for improving clients' quality of life and hope and were as effective as other clinical approaches at improving clinical symptoms and quality of life. The fourth review discussed by Bellamy, Schmutte, and Davidson (2017) was a 2014 systematic review of 20 studies, a mix of RCTs and correlational studies from 1995 to 2012 by Chinman et al. (2014). The authors of this review concluded that the level of evidence for each type of peer support service was moderate. However, the authors also noted that many of the studies considered in their review had methodological shortcomings, and that outcome measures varied across studies, making comparisons across studies difficult. The authors also noted that the effectiveness of PCM services varied by service type. The authors found when compared to professional staff, peers were better able to reduce inpatient use and improve a range of recovery outcomes, although one study they referenced found a negative impact. The effectiveness of peers in existing clinical roles was mixed.

The other set of review papers discussed by Bellamy, Schmutte, and Davidson (2017) evaluated the effects of peer support on physical health outcomes which are less relevant for the purposes of the present process evaluation given the emphasis on behavioral health outcomes. However, the overall conclusion of Bellamy, Schmutte, and Davidson states: "In regards to traditional clinical outcomes (e.g. hospitalization rates, symptom severity), the evidence clearly supports the inclusion of peer services *is not detrimental to care quality and results in at least equivalent outcomes to usual care conditions and/or services provided solely by non-peer staff* [emphasis added]" (2017: 165). The authors also concluded on the basis of their review that there is some evidence that peer services can modestly reduce psychiatric inpatient service use and crisis emergency services overall.

While the evidence noted so far presents a somewhat mixed picture on the efficacy of peer support interventions relative to other forms of case management and flags the conditionalities constraining the intervention's effectiveness, it is worth noting that governing behavioral health agencies, including the Substance Abuse and Mental Health Services Administration (SAMHSA), included peer case management in their National Registry of Evidence-Based Programs and Practices (Wellness Recovery Action Plan 2010). Furthermore, it is worth highlighting that even if it is the case that peer-case management is not uniquely effective at improving some outcomes of interest relative to other modes of case management, it may still be a worthwhile intervention to pursue from a cost-effectiveness and opportunity cost perspective given that the approach is, at worst, as effective as alternative approaches to case management and is typically less expensive on the provider's side per the current evidence-base.

In the context of the DBHS' proposals and the actual implementation of peer case management in the field, it is worth noting that in Bernalillo County's initial RFP for PCM programs, the RFP indicated that peer case management proposals would also be considered for acceptance which integrate Strengths-Based Case Management (SBCM), an approach to case management which focuses on clients' strengths and emphasizes their capacity for growth and recovery (Fukui et al., 2012). Recent evidence suggests that individuals who receive SBCM are hospitalized less frequently, are more independent in daily life, achieve more goals, function better in the competitive employment and educational domains, report greater social support, and have overall better physical and mental health (Barry et al., 2003; Rapp and Goscha 2006; Fukui et al., 2012).

The two behavioral health providers who received contracts for the PCM program through the DBHS have both implemented, in the broader context of their existing PCM programs, variations of ICM practices as well, an approach to case management which enjoys more empirical support than PCM alone (see, for instance, the Cochrane systematic review on ICM by Dieterich et al. 2017). Thus, we have reason to expect that to the extent that the implementation of PCM by the providers is faithful to the underlying theoretical models of SBCM and ICM and when considered in tandem with other evidence-based case management strategies, positive behavioral health outcomes are likely to follow.

Study Design and Methodology

The design of this process evaluation follows recommendations on best practices for reporting for process evaluations articulated by the MRG – Population Health Sciences Group (Moore et al. 2015). In their article "Process Evaluation of Complex Interventions: Medical Research Council Guidance", Moore et al. (2015) note:

> *An intervention may have limited effects either because of weaknesses in its design or because it is not properly implemented. On the other hand, positive outcomes can sometimes be achieved even when an intervention was not delivered fully as intended. Hence, to begin to enable conclusions about what works, process evaluation will usually aim to capture fidelity (whether the intervention was delivered as intended) and dose (the quantity of intervention implemented). Complex interventions usually undergo some tailoring when implemented in different contexts. Capturing what is delivered in practice, with close reference to the theory of the intervention, can enable evaluators to distinguish between adaptations to make the intervention fit different contexts and changes that undermine intervention fidelity*. (p. 2).

Moore et al. (2015) offer the following guidance on the types of information worth collecting within process evaluations in order to assess program fidelity, dose, and reach (see also Figure 1):

- Use quantitative methods to measure key process variables and allow testing of pre-hypothesized mechanisms of impact and contextual moderators
- Use qualitative methods to capture emerging changes in implementation, experiences of the intervention and unanticipated or complex causal pathways, and to generate new theory
- Balance collection of data on key process variables from all sites or participants with detailed data from smaller, purposively selected samples
- Consider data collection at multiple time points to capture changes to the intervention over time
- Provide descriptive quantitative information on fidelity, dose, and reach

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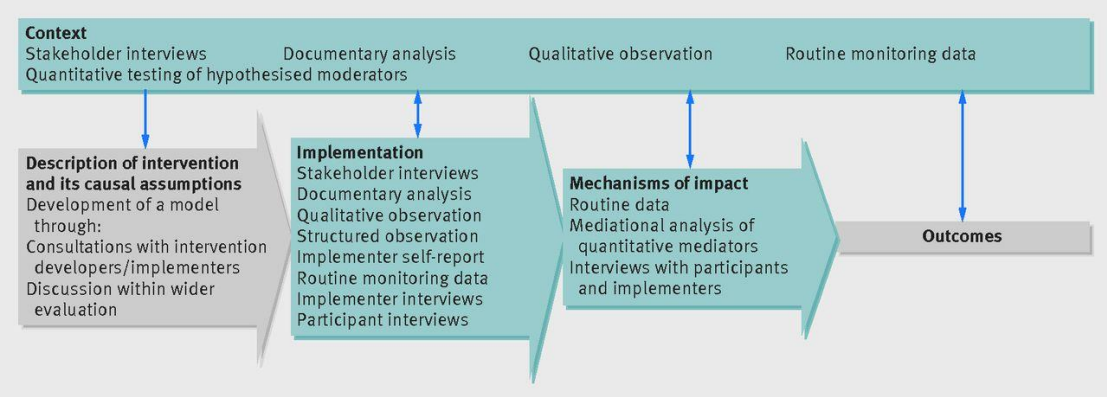
Figure 1: Commonly Used Data Collection and Analysis Methods for Process Evaluations



With these recommendations in mind, this process evaluation utilizes a mixed-method approach which includes a review of existing program documents to serve as a baseline against which implementation fidelity can be assessed (i.e., process maps; logic models; referral materials), a review of monthly performance measures, a record review of service data of clients, a review of client-satisfaction survey data, and semi-structured interviews with staff from both providers to assess program fidelity, dose, and reach and to explore how contextual factors – most saliently, the Covid-19 pandemic – influenced program implementation.

In October 2020, we completed two program evaluability assessments of both PCM providers after an initial review of program documentation and conversations with both providers. The evaluability assessments indicated that while both providers' programs were evaluable, there were some challenges to evaluability common to both providers (i.e., changes in service delivery brought on by Covid-19 which influenced client participation levels and self-selection disparately across multi-site provider locations) and some challenges to evaluability unique to each provider (i.e., challenges related to the methodological rigor of assessment tools; conceptual ambiguity in programmatic definitions of peerness; theoretical differences between PCM programs and other related interventions such as peer drop-in centers). In November 2020, we submitted an IRB application for a process evaluation interview protocol that was approved by UNM's Institutional Review Board on December 19, 2020. The approval granted clearance for us to conduct evaluation interviews of relevant program staff including case managers and peer support staff, program directors, supervisors, and other programmatic staff. Program staff interviews began in late January 2021 and proceeded through the first week of March 2021. During this time frame, we also submitted a performance measure status report update to the DBHS on Wednesday, February 24th, 2021 providing an overview of the two providers' performance measures from program inception through January 2021. After staff interviews were completed in March 2021, we requested client-level data as part of our record review from both providers on March 5, 2021 and received data from both approximately two months later. We provide the program schema crosswalk we used to request client-level data in Appendix A. There were some legal barriers which limited the scope of our client-level data collection for CRFW given their contract start date: specifically, the passage of New Mexico House Bill 267 (2019) limited our ability to collect identifiable data for individuals aged 18+ from July 1st, 2019 onwards. As CRFW had a contract start date of March 25, 2019, in our client-level data request, we requested that the provider not report client-level data from March 2019 through June 30, 2019. Based on our record review, this eliminated four clients from our final client-level data set for CRFW.

Table 1 summarizes the target populations for each provider and lists the screening and assessment tools each provider identified using – at some point throughout the program's existence – in their original contracts.

Table 1. Overview of PCM Providers' Target Populations and Forms

Program	*Target Population*	*Listed Forms*
Centro Sávila	High-risk adults 18 and older who have co-occurring mental health and substance use challenges including returning citizens who were formerly incarcerated, who reside in the South Valley or International District of Bernalillo County, and who would benefit from intensive peer case management to access services that address the social determinants of health (SDOH)	• General Services Intake • ACEs • Triage Referral Form • Columbia Suicide Severity Index (CSSI) • WellRx Social Risk Screening Tool • Functional Assessment (SNAP)
CRFW	Women who have completed any of Crossroads' housing programs and have transitioned to independent living in the Albuquerque community, specifically those with co-occurring mental health and substance abuse diagnoses	• POPPS Screening Tool (Modified Version of AHC-HRSN Screening Tool) • POPPS Aftercare Program Follow-Up Form

Program Data

In order to assess program fidelity, it is important to understand the causal assumptions underpinning each provider's intervention and to trace the evolution of program process from start to finish. Causal assumptions are typically articulated – either directly or indirectly – in logic models and visible, in practice, in process maps. These program documents, in tandem, serve as a baseline against which we can make eventual assessments of program fidelity in the field: deviations from the logic models and process maps could either be construed as adaptive responses to evolved program needs, reflecting the unique ecosystems of each provider (i.e., staffing; existing resources; stage of program implementation) and natural fluctuations in the needs of their served target population or could signal a more meaningful departure from program fidelity if and where the deviations conflict with the intervention's central theory. Distinguishing between these two explanations for process deviations can help us arrive at a better sense of a program's potential effectiveness downstream.

Performance Measures

As part of BHI funding requirements, BHI-funded PCM providers agreed to report a number of performance measures on a monthly basis to the DBHS. These performance measures were designed to describe basic aspects of program implementation and to provide updates to the DBHS about changes to program implementation. Both PCM providers indicated in their contracts that they would report performance measure data including variables such as: the number of clients who completed intake forms and screening, the number of service plans constructed, the number of clients reaching personal self-identified goals, staff-to-client ratios, participation in civic engagement opportunities or community events, the number of referrals, the number of client contacts with community providers, the number of case

management appointments made, the number of case management appointments attended, the number of clients with more than one visit with their case manager, the number of internal referrals, social determinants of health (SDOH) data, the number of staff trainings and case staff meetings, client satisfaction survey results, the number of community events attended, and client demographics, including age, gender, race, ethnicity, housing status, and preferred language. Not all of these performance measures were reported by both providers throughout stages of program implementation (i.e., number of staff trainings and staff case management meetings were never reported) and which performance measures were reported to the DBHS evolved over time as data management tools and screening and assessment forms co-evolved.

In February 2021, we completed a status report which aggregated performance measure data by provider and by year. In the status report, we noted that the performance measure data had not been cross-validated against client-level data and thus could contain inaccuracies. Because the performance measure data was summed across multiple years of program implementation and because some programs changed data collection instruments for specific performance measure variables over time, the level of analysis provided in the February 2021 status report did not permit inferences about changes in service delivery or program effectiveness over time. Further, at the time of the report, it was unclear which specific instruments were used to document program success: some of these measures, after discussions with providers in the interviewing process, appear to not be evidence-based measures (i.e., assessing mental health improvements for the performance measure data by asking only a subset of clients a single question about whether their mental health improved versus using psychometrically-validated tools for tracking changes in mental health improvement) whereas other performance measures were ambiguous (i.e., the number of repeat clients and new clients and their summation severely overstated actual program participation; some performance measure variables were vaguely-labelled). Thus, some of the conclusions of our February status report were inaccurate given the use of total clients – and not new clients – as the relevant denominator. Additionally, there were two other issues with performance measure data we observed upon reviewing the performance measure data after the status update to the DBHS was submitted: the problem of client duplication makes it difficult to assess whether new, continuing, or total clients should be used as the relevant denominator in rate calculations such as attendance rates at case management meetings (i.e., the new versus continuing client distinction is unclear in performance measure reporting as continuing clients include non-PCM clients since continuing clients were reported on the performance measure data the first month both programs began), and the reporting of demographic statistics, at times, included all clients at the organization-level and not at the relevant program-level. For these reasons, one cannot necessarily draw accurate inferences about the target population served at the program-level from the performance measure demographic data alone.

This process evaluation's discussion of performance measure data updates the February 2021 status report which only reviewed performance measure data through January 2021. Further, we review additional reported performance measures by provider not detailed in that report. In so doing, we provide a brief description of each performance measure's operationalization – if we are aware of how the performance measure is coded – and include an additional three months of data added in through April 30, 2021. We reproduce a table of performance measures in each provider section based on the most recently reported performance measures reported to the DBHS by provider through the end of April 2021. We also provide brief summaries of the performance measures by year noting some additional interpretative caveats of the performance measure data and discrepancies between the performance measure data and client-level data

where they exist in the *Discussion and Conclusion* section of this report. As identified in previous ISR reports (ACES and E & T), the type and quality of performance measures collected typically varies by provider and by stage of program implementation. Thus, for these reasons, we want to underscore the limited utility of performance measures for evaluation purposes, particularly when contrasted with the greater granularity of client-level data, and we discourage the DBHS from using performance measure data to either (a) inform contract renewal decisions or (b) inform subjective senses of programmatic successes until the existing issues with performance measure data – expanded upon more systematically in *Discussion and Conclusion* section – are resolved.

Client-Level Data

We met with both PCM providers between September 2020 and April 2021 in order to better understand their program design and their data collection procedures. The meetings and discussions were important for consensus-building between the evaluation team and the providers, allowed us to better understand the data-management capacity of the providers, and allowed us to clarify any ambiguity surrounding our data-pull requests (i.e. clarify details on variable collection and reporting processes). The following two sections describe the client-level data collection process for each provider.

Centro Sávila

We met virtually with the provider twice before the data extraction in April 2021 to clarify specific questions the provider had about variables we had requested data on and to discuss potential complications associated with extracting the data from the existing EMR system and from paper records. We performed our first data extraction on May 10, 2021. There were some limitations to the data provided during the first extraction: some variables had ambiguous response categories not enumerated in the program schema crosswalk, the initial data pull included identified data on minors which was inconsistent with the stated program target population and thus was deleted given the requirements of New Mexico House Bill 267 (2019), the initial data did not include dates of intake and discharge in a readable format, and we did not receive client-satisfaction survey data. After an email exchange to clarify some of these questions, we also requested updated logic models, process maps, and additional referral documentation. We received a number of updated program documents on May 12, 2021 including a .pdf with aggregated client satisfaction survey data included in Spanish, Centro Sávila's Strategic Initiative Report from 2021 which helped clarify recent organizational changes to the peer case management program, and a copy of the WellRx Questionnaire Centro Sávila used in the screening process. We performed our second data extraction on May 13, 2021. With Centro Sávila's client-level data, we are able to report data on client enrollment, referral sources, client demographics, case management appointment counts and duration, client pre-program residential status, and scores on the WellRx screening tool.

Crossroads for Women

We sent an initial request for data extraction – including a program schema crosswalk – to the appropriate programmatic staff at CRFW on March 8, 2021, carbon-copying the program director. We met virtually with the provider once before the data extraction to clarify some questions about variable coding. We extracted the data on April 26, 2021. We followed up with CRFW staff three times via email after the initial data extraction to ask a few clarification questions about the coding of specific variables on the client

satisfaction survey and to clarify some discrepancies which emerged in the data after brief descriptive analysis (i.e., some questions about the scoring procedure used to identify clients' unmet needs). With CRFW's data, we are able to report data on client enrollment, referral sources, client demographics, case management appointment types, counts, and duration, pre-program employment and residential status, and scores on the POPPS screening tool.

Client Satisfaction Surveys

Providers conducted quarterly client satisfaction surveys to assess how peer case management clients evaluated the services they received and to evaluate other client-side attitudes (i.e., mental health improvement), program knowledge, and barriers to service access. Since client satisfaction often correlates with program retention (Tsai, Reddy, and Rosenheck 2014), having a better understanding of how clients perceive the program can help evaluators and providers assess what works and what does not at the level of service-provision. While both providers conducted quarterly satisfaction surveys, the types of questions used to assess satisfaction varied both in number and form. As we note in the provider subsections, each provider's way of asking about client satisfaction has some limitations in terms of psychometric question-design (i.e., the way these questions were worded and the answer choices provided could bias estimates of satisfaction or could be improved through expanding the range of response options). Further, the quarterly satisfaction surveys do not have high response rates. While low response rates are not as intrinsically problematic as non-statisticians may reflexively assume (see, for instance, Kohut et al. 2012), because we cannot assess outcome-correlated differences between clients who responded to satisfaction surveys and those who did not, we cannot assess whether the opinion reported in the client satisfaction surveys typifies the opinions of all clients more generally in the program: thus, the external validity of these survey instruments paired with question wording concerns limit the interpretative scope of client-satisfaction survey data.

Staff Interviews

From January 2021 – March 2021, we conducted 15 semi-structured interviews with current and former case managers, program directors, and other administrative staff at the two providers. We used purposive sampling to identify our sampling frame (Palinkas et al. 2015). We generated the sampling frame from staff-emailed lists of past and current employees involved with each program's peer case-management programs. We report response rates by provider – assessed on the basis of these initial lists – in Table 2. Of those who did not participate in staff interviews, most were former staff who did not have valid organizational email addresses. Additionally, our interview recruitment email noted the need to enumerate peer-case management relevant staff from program inception through January 2021. Thus, newer program hires – including a new Program Operations Director at Centro Sávila – were excluded from participation.

Despite the lack of full-coverage in our interviewing, we suspect that we reached a concept in qualitative interview research known as concept saturation which is defined formally as the point in data collection where further data collection generates redundant information provided in previous interviews (Low 2019). While in practice, the number of individuals volunteering to participate in the interview determined when recruitment into the study ceased, by the last few interviews, significant repetition of concepts occurred, suggesting adequate sampling and concept saturation.

Table 2. Interview Response Rates

Provider	*Response Rate (N)*
Centro Sávila	76.9% (N = 10)
CRFW	100% (N = 5)

We conducted all interviews using the video-conferencing platform Zoom. Most interviews (93.3%; N = 14) were video-recorded and automatically transcribed using Zoom's built-in transcription feature. Participants had the option of not having their Zoom interview session recorded and transcribed. One participant completed the interview process but did not consent to video-recording, and one participant requested data deletion after the interview was completed and thus, we exclude the latter participant's data from the remaining analyses we present in this report. On average, interviews lasted 53 minutes though median interview length varied by staff type given the interview's skip logic (i.e., case managers were typically asked 24 more questions than other types of program staff). Appendix B includes the interview questionnaire. The interviews linearly progressed through the following thematic content:

- Participant training and qualifications
- Program referral sources
- Intake processes including assessments for mental health and substance use
- Self-assessment of the use of evidence-based practices
- Case management practices and services (i.e. case-manager-client relations; service plan construction)
- Discharge and aftercare policies
- Workplace satisfaction and work burnout inventories

An analysis of these interviews allowed us to understand how peer case managers and other program staff make sense of their work. Specifically, we wanted to document how peer case managers and other staff process and monitor clients and evaluate the quality of their work environments, looking for similarities and differences in their accounts. In the interviews, we also wanted to examine factors identified in the peer-reviewed literature which limit the generalized effectiveness of peer support services (i.e., how peers perceive their peerness in relation to their clients; whether peer support workers feel supported by other staff) (Bellamy, Davidson, and Schmutte 2017). In what follows, we provide aggregated interviewing counts and statistics across both providers. Table 3 reports the number of interviews completed by provider excluding data from the participant who requested data deletion.

Table 3. Number of Interviews

Provider	*Number of Interviews*
Centro Sávila	9
CRFW	5

Table 4 reports the education-level of participants. Over 75% percent of participants had at least a Bachelor's degree or a Master's degree.

Table 4. Education

Education-Level	*Count*	*Percent*
HS or Equivalent	2	14.3%
Some College	1	7.1%
BA	5	35.7%
MA	5	35.7%
Doctoral Degree or Equivalent	1	7.1%

Table 5 reports formal case management-related certifications held by participants (i.e., CPSS; CPSW). We provide details on the specific types of certifications received in the later discussion of each providers' interviews. It is worth noting that not all staff positions (i.e., intake assessors; directors) necessarily require case management-related certifications.

Table 5. Peer Case Management Certification Status

	Count	*Percent*
Yes	8	57.1%
No	6	42.9%

Table 6 reports whether participants were case management or administrative staff. A few participants indicated job title changes which occurred within a few weeks preceding their interviews, and some respondents indicated a division of work responsibilities between case management and other types of work (i.e., completing intakes). We code these participants as blended staff.

Table 6. Job Titles of Staff Interviewed

Staff Type	*Count*	*Percent*
Case Management	7	50%
Administrator or Director	5	35.7%
Blended Staff	2	14.3%

Table 7 reports the years of work experience participants had in the behavioral health field. On average, participants had 13 years of experience with a minimum of 0.5 years and a maximum of 50 years. Three (21.4%) of the participants had 21 years or more of work experience and two (14.3%) had 16 to 20 years of work experience. Over 30% of the participants had 16 or more years of work experience.

Table 7. Years of Work Experience

Years	*Count*	*Percent*
0 to 2	3	21.4%
3 to 5	3	21.4%
6 to 10	2	14.3%
11 to 15	1	7.1%
16 to 20	2	14.3%
21 +	3	21.4%

Table 8 reports the number of years each respondent had been employed by their respective employer. On average, participants had been employed 3.1 years with a range of 0.25 years to 10 years.

Table 8. Years at Provider

Years	*Count*	*Percent*
0 to 2	9	64.3%
3 to 4	1	7.1%
5 to 6	1	7.1%
7 to 8	1	7.1%
9 to 10	2	14.2%
11 +	0	0%

Table 9 reports the number of hours worked weekly by participants. The vast majority (92.9%; N = 11) of participants were full-time employees.

Table 9. Hours Worked Weekly

Hours	*Count*	*Percent*
Less than 20	0	0.0%
20-30	3	7.1%
31-39	0	0%
40+	11	92.9%

Table 10 reports the number of hours staff delivered peer case management services each week. Four of the 14 participants did not answer this question as their job responsibilities did not involve case management responsibilities. While over 90% of participants were full-time employees, only 20% indicated working full-time providing peer case management services.

Table 10. Hours of Peer Case Management Services Provided

Hours	*Count*	*Percent*
1 to 20	4	40%
21 to 39	4	40%
40+	2	20%

Table 11 summarizes the average years of experience and average years worked at the provider by provider.

Table 11. Summary Information by Provider

Provider	*Interview Count*	*Average Years of Experience*	*Range in Years of Experience*	*Average Years Worked at Provider*	*Range in Years Worked at Provider*
Centro Sávila	9	14.5	0.58 - 50	2.5	0.25 – 10
CRFW	5	10.4	1 - 30	4.1	1- 10

In each interview session, we asked participants, specifically those who reported providing case management services, a series of questions designed to assess their perceived workloads (i.e., number of clients seen per week), perceptions of client similarity (1 = Very Dissimilar; 7 = Very Similar), and

perceptions of the quality of case manager-client relationships (1 = Very Unsatisfied; 7 = Very Satisfied). We report these results in Table 12 below.

Table 12. Aggregated Case Management Perceptions

PCM Variables	*N*	*Mean*	*Standard Deviation*	*Minimum*	*Maximum*
Clients Per Week	9	10.89	4.53	6	20
Client Similarity	9	6.00	1.11	4	7
Client Relationship	9	6.22	1.09	4	7

The results from Table 12 suggest that perceptions of case management workload were typically in the range of ICM recommendations for case-loads. Generally, to ensure high-dosage, high-intensity case management, the peer-reviewed literature on ICM suggests case managers have no more than 15-20 active clients at a time. Further, the results from Table 12 suggest that, on average, case managers typically perceived the clients they worked with to be similar to themselves – indicative of high peerness evaluations – and perceived their relationships with their clients positively. No case managers provided ratings of similarity or client relationship quality below the midpoint of the 7-point scale.

We also asked a series of questions designed to assess employee perceptions of (a) workplace satisfaction (1 = Very Unsatisfied; 7 = Very Satisfied), (b) role change (0 = No Role Change; 1 = Role Change), (c) certification usefulness (1 = Very Useless; 7 = Very Useful), (d) case manager – staff relations (1 = Very Unsatisfactory ; 7 = Very Satisfactory), and (e) professional fulfillment, the latter of which was assessed using the Stanford Professional Fulfillment Index (PFI) (Trockel et al., 2018). The PFI assesses the degree of intrinsic positive reward an individual derives from their work, including happiness, meaningfulness, contribution, self-worth, satisfaction, and feeling in control when dealing with difficult problems at work. We coded response options on a five-point Likert scale (0 = Not at all True; 4 = Completely True). We calculated scale scores by averaging the scores of all items within the PFI. These factors – workplace satisfaction, role change, certification usefulness, case manager staff relations, and professional fulfillment – have been identified in recent studies of peer support as factors which influence the generalized effectiveness of peer support workers. We report descriptive statistics for all quantitative interview questions in Table 13.

Table 13: Work Environment Variables

Workplace Variables	*N*	*Mean*	*Standard Deviation*	*Minimum*	*Maximum*
Work Satisfaction	13	5.15	2.15	1	7
Role Change	13	0.76	0.43	0	1
Certification Use	10	6.4	0.84	5	7
PCM-Staff Relations	14	5.43	1.74	1	7
PFI	13	2.97	0.54	2	3.67

From Table 13, we observe that, in general, average levels of workplace satisfaction were high ($\overline{x}$ = 5.15 on 7-point scale), though there is variability across participants in ratings given the standard deviation and range, suggesting some polarization in perceptions of workplace satisfaction. Seventy-six percent (N = 10) of employees reported experiencing role change since starting their positions. All employees who had received relevant training or certifications perceived their training and certification to be, at minimum, useful to them on the job. Average perceptions of case management - staff relations were positive ($\overline{x}$ = 5.43

on 7-point scale), though similar to the workplace satisfaction variable, there is variability across participants given the standard deviation and range. Finally, PFI scores were, on balance, high ($\bar{x}$ = 2.97 on 4-point scale) indicating overall positive perceptions of professional fulfillment.

As there are interpretative and statistical challenges associated with detecting statistically significant differences in underpowered, small-N samples using both parametric techniques such as t-tests or regression analyses and non-parametric tests such as Wilcoxon Mann Whitney tests (Button et al. 2013), we present a correlation matrix in Table 14 to assess bivariate relationships across providers for the quantitative interview variables. The numbers reported in Table 14 – Pearson correlation coefficients – are a simple measure of linear correlation between two variables which range from -1 to +1: a value of -1 indicates a perfectly negative correlation (as Variable 1 increases, Variable 2 decreases monotonically), a value of 0 indicates the absence of a correlation, and a value of 1 indicates a perfectly positive correlation (as Variable 1 increases, Variable 2 increases monotonically). We want to underscore the cliché: correlation does not imply causation. Examining bivariate associations does not tell one whether a variable is causally related to another variable as a correlation does not account for confounding or potential spuriousness in bivariate relationships. For instance, it might be that evaluations of work satisfaction may be influenced by how a specific provider addresses role change or by some unmeasured variable which would not be accounted for through the examination of a bivariate correlation alone. Nonetheless, correlational analysis can be suggestive of – though not probative of – potentially real relationships.

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Table 14. Correlation Matrix of Interview Covariates with Employee Workplace Perceptions

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
(1) Work Satisfaction	**1.00**	--	--	--	--	--	--	--	--	--	--	--
(2) PCM Satisfaction	**0.82**	**1.00**	--	--	--	--	--	--	--	--	--	--
(3) PFI	0.14	0.31	**1.00**	--	--	--	--	--	--	--	--	--
(4) Org: CRFW	**0.55**	**0.52**	-0.18	**1.00**	--	--	--	--	--	--	--	--
(5) Job: Case Manager	-.01	0.00	0.05	-0.15	**1.00**	--	--	--	--	--	--	--
(6) Work Full-Time	-0.14	-0.07	**0.49**	0.03	**-0.52**	**1.00**	--	--	--	--	--	--
(7) Weekly Hours	0.04	0.17	**0.47**	-0.01	**-0.66**	**0.87**	**1.00**	--	--	--	--	--
(8) Education	-0.14	0.01	0.13	0.04	-0.25	0.22	0.39	**1.00**	--	--	--	--
(9) Certifications	0.22	0.05	0.21	0.04	0.29	-0.1	-0.26	-0.15	**1.00**	--	--	--
(10) Experience	-.024	-0.34	**-0.51**	-0.15	0.05	**-0.54**	**-0.45**	0.31	0.34	**1.00**	--	--
(11) Years w/ Provider	0.31	0.42	0.08	0.22	**-0.64**	0.26	**0.65**	**0.58**	-0.27	0.08	**1.00**	--
(12) Role Change	0.39	0.12	0.11	0.06	**-0.51**	0.13	0.27	-0.18	-0.14	-0.26	0.36	**1.00**

Note: Statistically-significant correlations (p-value < 0.10) presented in bold.

Table 14 presents the correlation matrix of all individual-level quantitative variables measured in the interview process across all 14 participants. There were some quantitative variables measured exclusively among staff who indicated providing peer support services, described in more detail in the *Study Findings* subsection, not reported in Table 14. From Column 1, we observe that higher levels of workplace satisfaction were significantly and positively correlated with higher levels of perceived PCM–staff relationships ($r = 0.82$; p-value < 0.01) and organization (i.e., employees at CRFW reported higher levels of workplace satisfaction than employees at Centro Sávila) ($r = 0.55$; p-value < 0.1). A similar story emerges from Column 2. From Column 3, we observe that higher mean levels of PFI (i.e., feeling more fulfilled at work) were significantly negatively correlated with years of experience in the behavioral health field ($r = -0.51$; p-value < 0.10), positively correlated with working full–time ($r = 0.49$; p-value < 0.10), and positively correlated with the number of hours one worked ($r = 0.47$; p-value < 0.10). Again, we caution against making causal inferences on the basis of bivariate correlations given issues of potential confounding and given the small sample size which makes such correlations particularly sensitive to the presence of outliers.

Study Findings

Our evaluation of the two programs focused on a review of program materials (i.e. most recent fiscal year contracts and available program descriptions contained in process maps and logic models where provided), an analysis of performance measures provided to the DBHS, a review of identified data pulled from record reviews, a review of client satisfaction data where provided, and interviews with staff, supervisors, administrators, and directors.

Centro Sávila

Program Description

Centro Sávila's PCM program offers intensive and strengths-based peer case management in conjunction with counselling services to high-risk individuals with co-occurring mental health illnesses and substance use disorders in Bernalillo County. One of the stated goals noted in Centro Sávila's contract was the desire to expand case management staffing capacity at Centro Sávila with the expectation that increased PCM staffing would, in linking program clients to relevant community resources, reduce client recidivism and otherwise attenuate the effects of adverse social determinants of health (SDOH) on client behavioral health outcomes. Centro Sávila's approach to peer case management emphasizes the development of individualized treatment plans, the provision of case management services emphasizing ICM and MI practices, and the provision of employment and education support.

Centro Sávila outlined program process and procedures in their contract (CCN 2019 - 0519). The following description of Centro Sávila's program process reviews the contracted description of Centro Sávila's process and not necessarily the process observed in practice or the process described in the provider's process maps. First, staff at Centro Sávila would use a series of intake forms to identify client case management needs. Following this, staff would screen program participants for Adverse Childhood Effects (ACES). Following this, case managers would create individualized service plans with their clients which would be updated every 90 days. Case managers would provide intensive case management to their clients, with an idealized staff-to-client ratio of 8:1, pairing case management with harm reduction approaches to treatment and the use of MI techniques, and would accompany clients to meetings and appointments in support of their goals. Additionally, case managers would provide episodic urgent care out of the WEHC location. We report the list of Centro Sávila's evidence-based practices in Table 15.

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Table 15. Centro Sávila's Evidence-Based Practices

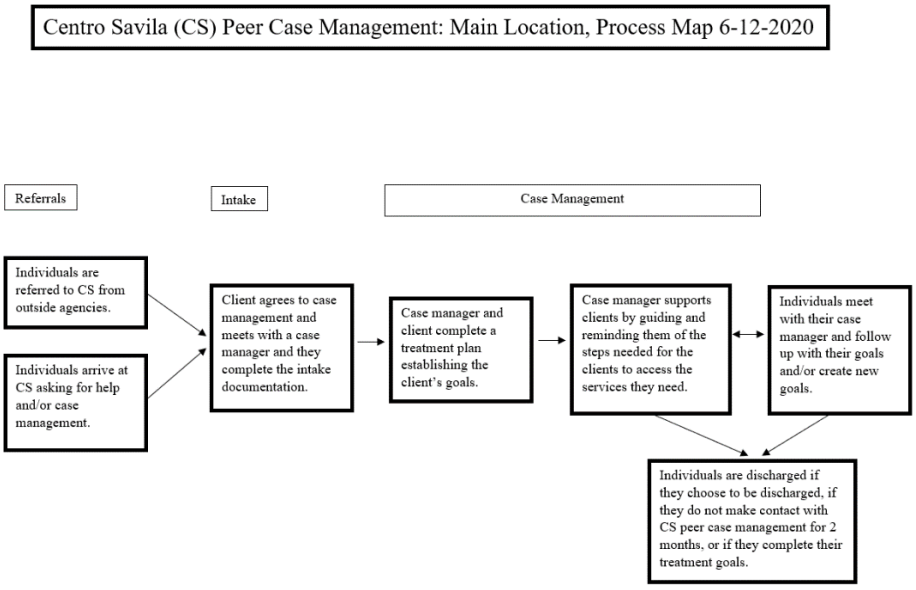
Evidence-Based Practice	*Description*
Motivational Interviewing (MI)	Motivational Interviewing (MI) is a counseling method that helps participants resolve ambivalent feelings and insecurities to find the internal motivation they need to change their behavior. It is a practical, empathetic, and short-term process that takes into consideration how difficult it is to make life changes (Rollnick and Allison 2004; Hettema, Steeler, and Miller 2005) See also: https://www.samhsa.gov/homelessness-programs-resources/hpr-resources/empowering-change
Intensive Case Management	Intensive Case Management (ICM) is a community-based package of care aiming to provide long-term care for severely mentally ill people who do not require immediate admission. Intensive Case Management evolved from two original community models of care, Assertive Community Treatment (ACT) and Case Management (CM), where ICM emphasizes the importance of small caseload (fewer than 15) and high-intensity inputs (King 2006; Burns et al. 2007; Dietrich et al. 2017) See also: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6472672/#:~:text=Intensive%20Case%20Management%20(ICM)%20is,do%20not%20require%20immediate%20admission.
Strengths-Based Case Management	Strengths-Based Case Management combines a focus on individual's strengths with three other principles: promoting the use of informal supportive networks; offering assertive community involvement by case managers; and emphasizing the relationship between the client and case manager. It is an approach that helps participants achieve specific desired outcomes. Implementation of Strengths-Based Case Management has been attempted in a variety of fields such as substance abuse, mental health, school counselling, older people and children and young people and families (Rapp 2008). See also: https://www.iriss.org.uk/resources/insights/strengths-based-approaches-working-individuals

Centro Sávila provided us with three different process maps: one for their Main Location located at 1317 Isleta Blvd SW (Figure 2) and two for the Westside Emergency Housing Center (WEHC) located at 7440 Jim McDowell NW pre-Covid and post-Covid (Figure 3 and Figure 4). Centro Sávila also provided services at The Hopkins Center located at La Mesa Presbyterian Church at 7401 Copper Ave and housing for clients during Covid-19 out of the Hilton Garden Inn. These process maps highlight how the provider viewed client engagement with the program, beginning with client referral, screening and eligibility criteria determination, intake processes, assessment and service delivery, and the discharge process.

Centro Sávila Process - Main Location

Figure 2 describes program processes at Centro Sávila's main location through December 2020. To reiterate, the following description of Centro Sávila's process map does not necessarily reflect the process observed in practice. As indicated in Figure 2, Centro Sávila aimed to receive referrals from a variety of sources from outside agencies. Once a referral was received by an intake coordinator at Centro Sávila, preliminary eligibility was determined and an intake appointment was scheduled and completed if the client consented to case management. The case manager and client then developed a treatment plan based on expressed client goals and needs. Following this, the case manager provided clients with information on how to access services and would meet with clients to follow-up with them and assess goal progress. Clients could be discharged from the program if they indicated that they did not want to continue in the program, if they did not contact their case manager for two months, or if they completed their treatment goals.

Figure 2. Centro Sávila Process Map – Main Location

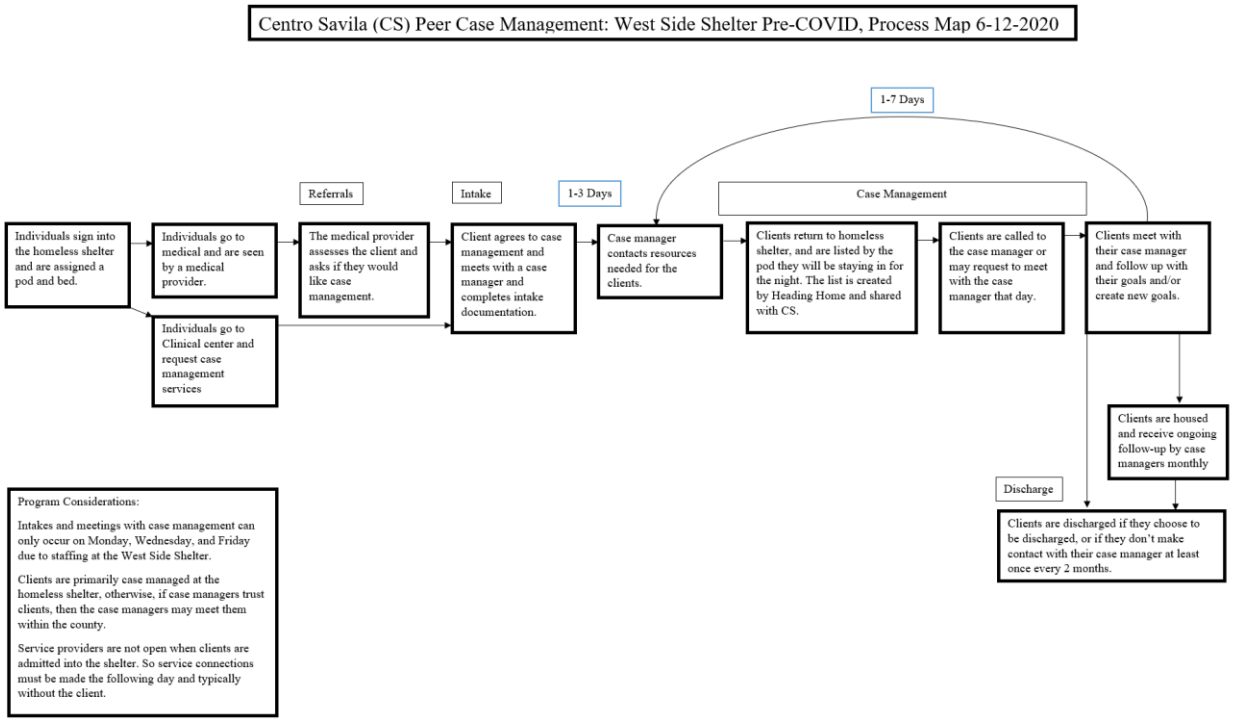


Centro Sávila Process – Westside Emergency Housing Center (WEHC)

Centro Sávila also provided peer case management services to individuals out of the WEHC. However, the types of case management services provided at WEHC were different in form than those provided at their main location given the shelter's focus on the delivery of rapid access services and urgent care. Notably, there were some points of contrast between the process maps for Centro Sávila's Main Location and WEHC location. First, the referral sources at WEHC were distinct from those at Centro Sávila's main campus with most referral sources at WEHC being self-referrals of individuals who showed up at the shelter. Second, the WEHC process map identifies an additional medical screening step which precedes case management provision for some clients who presented with medical needs. After a client consented to case management

services, within 1-3 days the client would meet with a case manager to complete intake documentation. Within 1-3 days after the intake appointment with the case manager, the case manager would collect resources needed for clients based off of expressed needs. If a client exited WEHC, they would either be called by the case manager or could request to meet with the case manager. Within 1 day of the initial intake appointment, clients typically created a service plan in coordination with their peer case manager, were housed, and received monthly case manager updates. The discharge criteria indicated that clients could be discharged if they wanted to be or if they failed to contact the case manager for two months. The process map indicates some relevant program considerations unique to the WEHC delivery of peer case management services: the limited availability of intakes and case management meetings (i.e., limited to 3 weekdays), the limited geographic provision of case management services (i.e., case managers limited to meeting clients at homeless shelter), and delays in connecting clients with service providers.

Figure 3. Centro Sávila Process Map – WEHC (Pre-Covid)



The onset of the Covid-19 pandemic changed how Centro Sávila operated out of the WEHC location as articulated in Figure 3's modified process map from June 12, 2020. Some key points of contrast with the initial process map for WEHC include: (1) the nature of case management contact converted to non-face-to-face contact (i.e., virtual messengers or phone calls) and (2) the timeline to discharge changed (i.e., clients were discharged if they missed three meetings with their case manager versus every 2 months).

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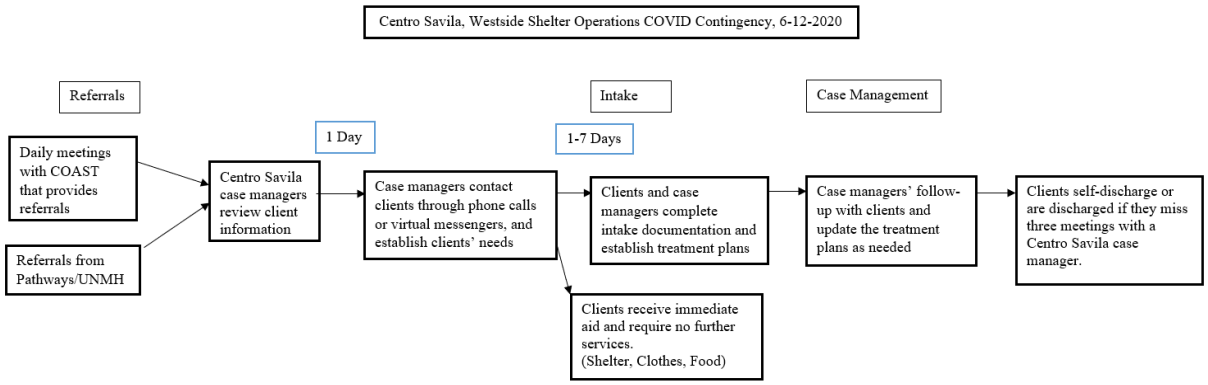
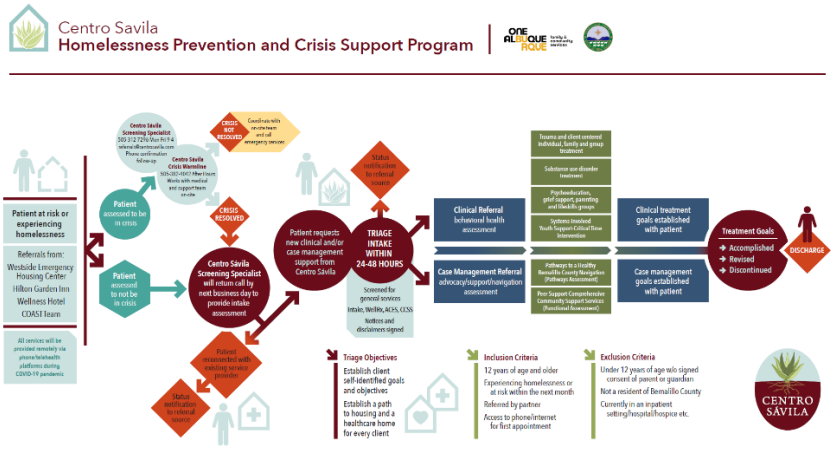
Figure 4. Centro Sávila Process Map – WEHC (Post-Covid)



Centro Sávila also provided us with a Referral and Process Map from August 2020 reproduced in Figure 5 below. This referral and process map provides greater specificity surrounding program operations including components of crisis resolution, greater specificity over the intake screeners administered (e.g., Intake; WellRx; ACES; CCSS), and more detail on program inclusion and exclusion criteria. However, this map more generally articulates process and referral procedures for all of Centro Sávila's homelessness prevention and crisis support programs and not just Centro Sávila's peer case management program.

Figure 5. Centro Sávila Referral and Process Map (Updated August 2020)



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Centro Sávila's process flow evolved over time in response to organizational growth and the expressed needs of clients and staff. In the fall of 2020, Centro Sávila conducted a study in partnership with Mora Consulting LLC to evaluate workflows related to service access. The results of this study – detailed in the Centro Sávila Strategic Initiative Report (2021) – suggested the following barriers to organizational service-access at the client and staff levels:

1. Clients were frustrated with the number of steps required before seeing a clinician.
2. Clients were often sent to voicemail so staff could attend to other tasks.
3. New client outpatient appointments were difficult to coordinate.
4. There were often delays in referral response for both client/referring entity.
5. Waitlists were often unmanaged.
6. Staff felt overwhelmed and were confused about processes and data entry requirements for reporting.
7. There was duplication of work effort across teams.
8. Staff were unsure of performance metrics and could not confidently navigate the system.
9. Cumbersome reporting due to limited EMR data.
10. Billing by third parties creates extra work on clinicians.

The Centro Sávila Strategic Initiative Report (2021) suggested that one of the root causes of these barriers was the operational independence, or siloing, of different teams within the organization. In response to the issues identified by the study by Mora Consulting LLC in the fall of 2020, Centro Sávila proposed implementing biphasic changes – effective in January 2021 and March 2021 – to streamline existing processes. Table 16 provides an overview of these proposed operational changes.

Table 16. Centro Sávila Strategic Initiative Report Biphasic Restructuring Plans

Phase	*Start Date*	*Components*
Phase 1	January 2021	• Centralization of scheduling and referral management, program enrollment, peer case management • Direct referral request into EMR Bear Intercom • Expansion of direct services • Automatic Billing
Phase 2	March 2021	• Management structure changes • Human Resources components • CCSS Certifications

Some organizational changes relevant to peer case management identified in the Centro Sávila Strategic Initiative Report (2021) included (1) modifications to the intake process to reduce case manager responsibilities for intake, (2) reassignment of some case management staff to the intake and enrollment team, and (3) the hiring of a new Director of Operations to oversee, in part, the peer case management program. Centro Sávila, in the Strategic Initiative Report, reasoned that these operational modifications should increase the number of direct service hours case managers provide which should, in turn, produce a more efficient workflow.

Performance Measures

Centro Sávila's reported performance measures have evolved over time in part because of program maturation, the Covid-19 pandemic, and the expansion of services delivered out of the WEHC location. Table 17 provides an overview of Centro Sávila's performance measures and their operationalization.

Table 17. Performance Measures

Performance Measure	*Operationalization*
Number of Clients Screened for Intake	• Number screened for PCM intake from City Partnership • Number accepted and/or transferred to PCM from City Partnership • Number screened for initial intake for CS PCM • Number accepted and or transferred to CS PCM • Number referred from internal CS programs • Total number of clients screened • Total number of clients accepted
Clients in Active Case Management	• Case Manager Number of Clients • Case Manager Hours of PCM Services • Total number of clients on active caseloads
Self-Identified Service Plans	• Number of plans initiated (by 30 days) • Number of clients reaching personal self-identified service plan goals • Number of clients that decreased in severity • Number of clients with improved mental health
Referrals – Warm Hand Offs	• Number of clients • Number of clients referred • Number of total referrals • Number of clients who connect with community provider • Percent of clients referred out
Appointments with PCM	• Number of scheduled appointments with PCM • Number of appointments attended • Number of high severity clients seen weekly
Client Satisfaction	• Number of client satisfaction surveys (quarterly) • Percent of clients satisfied (quarterly)
Number of Collaborative Community Partners	• Shared information and coordination of services • Established new partnership, cooperation, and relationship
Peer Screening and Brief Intervention - Westside	• Clients referred from City • Clients peers called • Clients peers assessed • Clients brief intervention

	• Minutes of services provided • Number of staff allocated – average
Referrals Out	• Number of referrals from COAST Team • Number of referrals from City HGI • Total • Number of clients referred to internal CS PCM • Number of clients who reconnected with provider for case management • Number of clients who contact community provider
Client Demographics	• Gender • Age by category • Race/ethnicity • SDOH • Client Insurance

Table 18 reports the non-demographic performance measures reported by Centro Sávila's main location for Year 1 (July 2019 – June 2020) and Year 2 (July 2020 – April 2021) of program implementation and Table 19 reports the demographic performance measures reported by Centro Sávila's main location for Year 1 (July 2019 – June 2020) and Year 2 (July 2020 – April 2021) of program implementation.

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Table 18. Overview of Non-Demographic Performance Measures at CS Main Location

Performance Measure	*Year 1*	*Year 2*
# of New Clients	250	N/A
# of Clients Screened	N/A	406
# of Clients Accepted	N/A	222
Case Management Hours	2019	4236
Active Caseload Clients	212	521
# of Case Managers	7	7
# of Plans Initiated	N/A	168
# of Clients Meeting Goals	26	133
# of Clients w/ Improved Mental Health and Decreased Substance Use	22	N/A
# of Clients with Decreased Severity	N/A	87
# of Clients with Improved Mental Health	N/A	144
# of External Referrals	129	295
# of Clients Reconnecting w/ Provider	N/A	N/A
# of Clients Making Contact w/ Community Provider	108	220
# of Drop-In Appointments	N/A	N/A
# of Appointments Scheduled with PICM	541	1201
# of Appointments Attended	437	835
# of High Severity Clients Seen Weekly	N/A	111
# of Clients with More than 1 Visit w/ PICM	235	N/A
# of Clients Referred to Internal CS Counselling	51	N/A
# of Clients Who Participate in Internal CS Counselling	27	N/A
# of Outreach Events Attended	35	N/A
Number of New Collaborative Partners	30	54

Note: Year 1 = July 2019 - June 2020. Year 2 = July 2020 - April 2021.

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Table 19. Overview of Demographic Performance Measures at CS Main Location

Performance Measure	*Year 1*	*Year 2*
Gender: Male	112	164
Gender: Female	144	233
Age: 0-5	5	6
Age: 6-11	14	7
Age: 12-19	31	45
Age: 19-24	39	42
Age: 25-44	72	140
Age: 45-64	61	124
Age: 65+	24	32
Ethnicity: Hispanic/Latino	186	227
Ethnicity: Non-Hispanic/Latino	18	71
Race: Black	4	5
Race: Asian	0	1
Race: White	41	28
Race: American Indian or Alaskan Native	15	28
Race: Native Hawaiian or Pacific Islander	0	0
Race: Multiracial	1	11
Race: Other	23	146
Race: Not Reported	17	178
Insurance: Medicaid	126	86
Insurance: Commercial	21	81
Insurance: No Insurance	86	223
# of SDOH Screeners		240

Note: Year 1 = July 2019 - June 2020. Year 2 = July 2020 - April 2021.

Table 20 reports the non-demographic performance measures reported by Centro Sávila's WEHC location for Year 1 (July 2019 – June 2020) and Year 2 (July 2020 – April 2021) of program implementation and Table 21 reports the demographic performance measures reported by Centro Sávila's WEHC location for Year 1 (July 2019 – June 2020) and Year 2 (July 2020 – April 2021) of program implementation.

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Table 20. Overview of Non-Demographic Performance Measures at WEHC

Performance Measure	*Year 1*	*Year 2*
# of New Clients	475	N/A
# of Clients Referred from City	N/A	249
# of Clients Peers Assessed	N/A	213
Minutes of Services Provided	N/A	5060
Case Management Hours	3389	N/A
Active Caseload Clients	760	N/A
# of Case Managers	7	N/A
# of Clients Meeting Goals	56	N/A
# of Clients w/ Improved Mental Health and Decreased Substance Use	48	N/A
# of External Referrals	435	N/A
# of Clients Reconnecting w/ Provider	164	N/A
# of Clients Making Contact w/ Community Provider	119	N/A
# of Drop-In Appointments	525	N/A
# of Appointments Scheduled with PICM	843	N/A
# of Appointments Attended	684	N/A
# of Clients with More than 1 Visit w/ PICM	462	N/A
Number of New Collaborative Partners	88	N/A

Note: Year 1 = July 2019 - June 2020. Year 2 = July 2020 - April 2021.

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Table 21. Overview of Demographic Performance Measures at WEHC

Performance Measure	*Year 1*	*Year 2*
Gender: Male	412	N/A
Gender: Female	434	N/A
Age: 0-5	26	N/A
Age: 6-11	18	N/A
Age: 12-19	44	N/A
Age: 19-24	44	N/A
Age: 25-44	245	N/A
Age: 45-64	353	N/A
Age: 65+	96	N/A
Ethnicity: Hispanic/Latino	103	N/A
Ethnicity: Non-Hispanic/Latino	85	N/A
Race: Black	18	N/A
Race: Asian	0	N/A
Race: White	29	N/A
Race: American Indian or Alaskan Native	56	N/A
Race: Native Hawaiian or Pacific Islander	1	N/A
Race: Multiracial	10	N/A
Race: Other	20	N/A
Race: Not Reported	73	N/A
Insurance: Medicaid	561	N/A
Insurance: Commercial	3	N/A
Insurance: No Insurance	222	N/A

Note: Year 1 = July 2019 - June 2020. Year 2 = July 2020 - April 2021.

Performance measure reporting to the DBHS changed between Year 1 and Year 2 of program implementation: in Year 2 of the program's operation through April 2021, Centro Sávila did not report performance measure data for WEHC clients in their reporting which explains the high frequency of NAs in the Year 2 column in Tables 20 and 21. In the narrative section of their October 2019 Performance Measure report provided to the DBHS, Centro Sávila provided some added context to this decision, noting that there were issues associated with collecting demographic data from clients at WEHC and also noting:

> *They [quantitative performance measures] don't account for the intensive work that goes into setting up an entirely new clinic. They are focused primarily on the services that are directly provided to the patients at the WEHC clinic. The growth of the clinic is limited by several factors, including financial resources, space, provider availability, and the communication that needs to happen when multiple providers and agencies team up on a collaborative process. Nevertheless, there have been great successes that are unlikely to be captured by the data. We are focused on finalizing the intake process at the shelter to truly obtain the number of residents coming through for services with us and partnering organizes.*

One insight we can extract from the reported performance measure data not reported in Table 20 or Table 21 and not available in the provided client-level data are staff-to-client ratios. Of staff who reported providing case management services each month and through April 2021, case managers had an active caseload of approximately 20.2 clients per month. However, the average obscures variation between case managers (i.e., one case manager averaged 4 clients per month; another averaged 77.1 clients per month), does not account for the part-time or full-time work status of the case manager – which is unknown from the performance measures and could explain variation in caseloads, and obscures month-to-month

variability within case-managers (e.g., one case manager saw 102 clients in back-to-back months and 1 client another month, suggesting temporal variation in client inflows). Two case managers saw particularly high levels of caseloads in the first year of program implementation per the reported performance measures: one averaged 55.2 cases per month and another averaged 77.1 cases per month. It is unclear why these numbers were so high, whether this was a function of (a) the case manager engaging with high-volume, low-intensity WEHC clients or (b) a miscalculation in the performance measures. Removing these two case managers from the average caseload calculation suggests the active caseload per case manager was closer to 12.3 clients per month which is within range of ICM recommendations. Having noted this, there is still monthly variability within this subset of case managers when excluding the two case managers with significantly high caseloads: for instance, in Year 1, one case manager had 0 active cases one month and 29 another. In Year 2, for instance, one case manager had 4 active cases one month and 27 in another.

Centro Sávila also provided comments on program successes, barriers, and changes related to performance measure tracking over time in the narrative section of their performance measure reporting. This information provides useful context for tracking program change longitudinally and identifying successes with, and complications to, service delivery which are not captured directly in the interviewing data – given the limited time-frame of the interviewing – or client-level data. A majority of program successes mentioned in the narrative reports were centered on either (a) anecdotal examples of individual-client success stories securing services, (b) expansion of collaborative community partners, (c) expansion of training and certification opportunities for staff, or (d) the ability of the program to secure funding post-Covid (i.e., CARES Act relief funding) and thus we do not detail these in more length here. We highlight important barriers to service delivery mentioned in at least two monthly narrative reports below:

- There were many reported barriers clients encountered at the WEHC location (i.e., clients often lacked access to reliable Internet, computers, and phones; clients often encountered transportation barriers getting to the WEHC; clients often lacked money to afford identification cards and birth certificates which limited clients' ability to access other types of services; WEHC's limited hours of operation often did not overlap with those of other service providers and partners).
- Staff turnover at the WEHC location led to limited communication with Centro Sávila's case managers which made scheduling and locating clients difficult.
- It was difficult for the provider to collect demographic data for WEHC clients given the initial outsourcing of demographic information in intakes received by other providers. It was difficult for the provider to collect SDOH data given concerns that administering the Well-Rx scale would re-traumatize clients and increase substance use among the client base.
- The provider identified many instances of friction with some partnering agencies (i.e., lack of communication with providers and clients; outdated housing lists provided to clients; non-comprehensive demographic data provided; other agencies' lack of professionalism in dealing with clients).
- Covid-19 and government public health emergency measures increased the remote delivery of services (i.e., referrals, screenings, and case management were primarily conducted through phone calls or using Tele-med). This limited case managers' ability to collect relevant paperwork from clients who did not have access to reliable Internet connections or phones.
- Covid-19 increased clients' food-security needs (i.e., substantial uptick in utilization of food box program).
- Covid-19 and government public health emergency measures reduced clients' ability to access external resources and offices and often delayed appointments (i.e., MVD had limited hours; increased risk of homelessness due to limited housing supply; PCMs were not able to access copies

of documentation needed to obtain and reach client's goals, such as housing applications, ISD financial support, and other direct assistance applications.)

- The provider noted there were systemic issues trying to get new case management staff certified in Peer Support Work (i.e., lack of communication with Office of Planning, Evaluation, and Research).
- The provider reported some data-entry issues associated with their previous referral systems, particularly out of the WEHC location.
- The provider noted that there were often seasonal fluctuations in client enrollment (i.e., decreases in winter months).

Client-Level Data

This section details the client-level data we received from Centro Sávila which includes data on referrals, enrollment and intake, screening, assessment, and services provided. During the time period considered for this report, between June 2019 and May 2021, Centro Sávila's PCM program screened 529 individuals for program eligibility. We excluded 51 clients from analysis given that they were minors (i.e., either their date of birth was entered incorrectly in the data we received or they were referred to non-PCM services). The following set of tables reports the data we received for the remaining 478 PCM clients. Table 22 reports where clients accessed case management services given the unique constellation of services offered at the WEHC location in contrast to Centro Sávila's other locations.

Table 22. Location of Service Provision for Centro Sávila PCM Clients

Client Program Location	*Count*	*Percent*
WEHC	95	19.9%
Main Campus	383	80.1%
Total	477	100%

Note: Missing location data for 1 client.

From Table 22, we note that a majority of 80.1% (N = 383) of Centro Sávila's PCM clients received services at their main campus. Table 23 reports client data by referral source.

Table 23. Referral Source for Centro Sávila PCM Clients

Referral Source	*Count*	*Percent*
WEHC	174	36.4%
Self-Referral	299	62.7%
Unknown	4	0.0%
Total	477	100%

Note: Missing referral source data from 1 client.

Table 24 reports the combined race and ethnicity of screened clients in line with recommendations from the Census Bureau for merging race-ethnicity data reporting. 147 clients self-reported being White with 144 of these individuals reporting they were Hispanic/Latino. Seven clients reported they were American Indian, 6 reported being African-American, 1 Asian, zero reported being Native Hawaiian or Other Pacific Islander, and 173 identified their race as "Other".

Table 24. Race & Ethnicity

Race & Ethnicity	*Count*	*Percent*
American Indian or Alaska Native	7	1.6%
Asian	1	0.0%
African American	6	1.4%
Native Hawaiian or Other Pacific Islander	0	0%
White	3	1%
Hispanic/Latino	144	33.6%
Other Race	173	40.3%
Unknown	95	22.1%
Total	429	100%

Note: Missing race and ethnicity data from 49 clients.

Table 25 reports clients' sex. 48.6% (N = 228) of Centro Sávila's PCM client base identified as female and 51.3% (N = 241) of Centro Sávila's PCM client base identified as male.

Table 25. Sex

Sex	*Count*	*Percent*
Female	228	48.6%
Male	241	51.3%
Total	469	100%

Note: Missing sex data from 9 clients.

Table 26 reports clients' ages using the age cut points produced in the performance measure data for ease of comparison. A plurality of 41.8% (N = 197) of PCM clients were in the 45-64 age bracket. The average age of all clients was 45.2 years of age and the median age of all clients was 46. The youngest client was 18 years old, and the oldest client was 85 years old.

Table 26. Age

Age-Group	*Count*	*Percent*
19-24	39	8.3%
25-44	182	38.7%
45-64	197	41.8%
65+	53	11.2%

Note: Missing age data from 4 clients. 3 clients were 18.

Table 27 reports clients' residential status at the time they were enrolled. A plurality of 43% (N = 197) of Centro Sávila's client base reported being homeless at the time of intake compared to the 40.2% (N = 184) of Centro Sávila's client base which reported being housed at a private residence. Centro Sávila did not report data on clients' employment status at intake.

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Table 27. Residential Status at Intake

Residential Status	*Count*	*Percent*
Homeless	197	43.0%
Private	184	40.2%
Other	12	2.6%
Unknown	62	13.5%
Total	458	100%

Note: Missing residential status data from 30 clients.

In order to assess client needs at the point of intake, Centro Sávila administered the WellRx Questionnaire to clients during the initial screening and assessment process. The WellRx Questionnaire is an 11-item binary-response self-reported screening tool used to assess the social determinants of health across four primary domains (i.e., economic stability, education, neighborhood and physical environment, and food) (Page-Reeves et al., 2016). Clients can indicate multiple needs on the WellRx Questionnaire. See Appendix C for more detail on WellRx Questionnaire question wording.

Per staff interviews and programmatic materials, the WellRx Questionnaire was used at the discretion of case management staff at or near the point of intake. 22.2% (N = 106) of clients completed the WellRx Questionnaire with some unexplained drop-off for the utilities question (Question Response Rate: 80.2%; N = 85). The low completion rate of the overall questionnaire reflects a combination of (a) lack of data from earlier paper records and (b) case manager discretion in administering the scales. Table 28 reports clients' identified needs on the WellRx Questionnaire at the time they were enrolled. The typical client who completed the WellRx screener identified an average of 4.10 unmet needs with the total number of unmet needs identified ranging from a minimum of 0 needs to a maximum of 11 needs, spanning the full gamut of the scale's range. Per Table 28, the three most commonly identified unmet needs, identified in bold text, were income assistance (61%; N = 65), housing (56%; N = 59), and transportation (43%; N = 45). The three least commonly identified unmet needs were substance use (13%; N = 14), medical (17%; N =17), and ER visits (22%; N = 23). It is unclear whether these needs typify the overall distribution of unmet needs across all Centro Sávila PCM clients given the low completion rate of the WellRx Questionnaire. The WellRx Questionnaire was only administered at the point of intake and not at any other routine points as clients progressed through the PCM program, and thus we cannot conduct pre-post statistical analysis using the existing SDOH data.

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Table 28. Descriptive Statistics of WellRx Screening Scale Score at Intake

Variable	*N*	*Mean*	*St. Dev.*	*Min*	*Pct (25%)*	*Pct (75%)*	*Max*	*% with Need*
Food	106	0.36	0.48	0	0	1	1	36%
Housing	**106**	**0.56**	**0.50**	**0**	**0**	**1**	**1**	**56%**
Utilities	85	0.41	0.50	0	0	1	1	41%
Transportation	**105**	**0.43**	**0.50**	**0**	**0**	**1**	**1**	**43%**
Childcare	104	0.08	0.27	0	0	0	1	8%
Income	**106**	**0.61**	**0.49**	**0**	**0**	**1**	**1**	**61%**
Employment	105	0.42	0.50	0	0	1	1	42%
Education	106	0.35	0.48	0	0	1	1	35%
Substance Use	106	0.13	0.34	0	0	0	1	13%
Safety	106	0.31	0.47	0	0	1	1	31%
Abuse	103	0.24	0.43	0	0	0	1	24%
ER Visits	103	0.22	0.42	0	0	0	1	22%
Medical	101	0.17	0.38	0	0	0	1	17%

Note: 372 clients enrolled in PCM did not complete any of the WellRx screening tool.

Centro Sávila also indicated in their process maps and interviews they administered the Columbia-Suicide Severity Rating Scale (C-SSRS) during the screening and assessment process to assess clients' potential suicidality risk in order to refer clients of given risk-levels to the appropriate in-house clinical staff and therapeutic services (Posner et al., 2008). However, this tool was only administered to 2.7% (N = 13) of clients. Of the clients the C-SSRS was administered to, 7.7% were classified as no-risk (N = 1), 77.0% (N = 10) were classified as low-risk, and 15.3% (N = 2) were classified as moderate-risk. Centro Sávila did not report any additional screening or assessment data including ACEs screens which were indicated in the original contract and process maps.

Centro Sávila also provided us with data on the primary need identified by clients in their service plans. Table 29 reports the primary need identified by clients in their service plans.

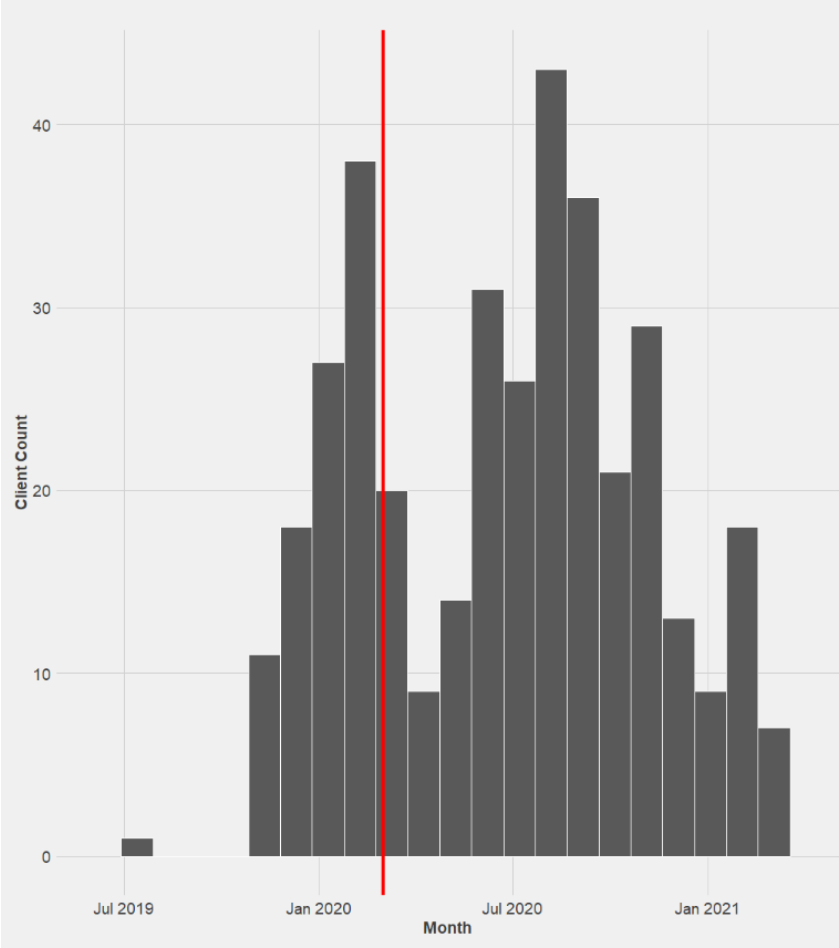
Table 29: Primary Need Identified in Client Service Plans

	Number of Clients	*Percent of Clients Identifying Goal*
Housing	**60**	**12.6%**
Social Security Card	9	1.9%
Food	58	12.1%
Employment	12	2.5%
ID Acquisition	15	3.1%
Behavioral Health	**104**	**21.8%**
Public Benefit Enrollment	**75**	**15.7%**
Other	69	14.4%
Unknown	76	15.9%
Total	478	100%

From Table 29, we note that the three highest priority needs identified by clients – excluding the miscellaneous "Other" category – were behavioral health needs (21.8%; N = 104), public benefit enrollment needs (15.7%; N = 75), and housing needs (12.6%; N = 60).

In order to assess Centro Sávila's dosage of case management services, it can be helpful to examine how client enrollment in Centro Sávila's PCM program evolved over time. An examination of client enrollment trend data enables us to understand the temporal dynamics of client entrance and exit patterns as they evolve in response to internal organizational changes and external stimuli such as the Covid-19 pandemic. Figure 6 plots the number of clients enrolled in Centro Sávila's PCM program from July 2019 – April 2021 with a red discontinuity line indicating the onset of the Covid-19 pandemic in March 2020 which was associated with wide-scale programmatic changes in service delivery reflecting the program's uptake of social distancing policies and Covid-safe practices. Figure 6 – paired with the results of a change point detection test designed to assess discontinuities in time-series data using the *changepoint* package in R – suggest a few things about the evolution of client in-flows in Centro Sávila's PCM program over time. First, the onset of the Covid-19 pandemic in March 2020 was associated with a statistically significant short-term decline in client enrollment levels which persisted for three months. Second, program enrollment levels rebounded to pre-Covid levels in July 2020 before decreasing continuously in the later months of 2020 and into 2021.

Figure 6. Centro Sávila Client Enrollment Patterns from July 2019 – April 2021



In order to assess dosage, it can also be helpful to get a sense of how long clients remain enrolled in the program. Of the 45.8% (N = 219) of total program clients who were discharged from the program before the data collection period end-date of May 6, 2021, the median number of days a client was enrolled in the

program was 93 days. Of the remaining 54.2% (N = 259) of clients who still remained in the program through the data collection period end-date of May 6, 2021, the median number of days a client had been enrolled in the program was 240.5 days.

It is also worth considering the dosage of case management services provided as this allows us to more directly assess the intensity of case management services provided and to estimate which client-level factors predict disparate rates of service utilization. There are a few ways we can assess dosage within the client-level data we received from Centro Sávila: (1) analyzing the overall number of minutes clients spent directly interacting with case managers; (2) analyzing the number of case management meetings each client scheduled; (3) analyzing the number of case management meetings each client attended; and (4) analyzing the typical number of minutes each client engaged with their case manager per successful contact. Unfortunately, we did not request data on the type of case management contact from Centro Sávila so we cannot assess the form these contacts assumed, whether these contacts represented in-person case management meetings, virtual meetings via Zoom or other video-conferencing platforms, telephonic meetings, or direct mailers. However, we can approximate this indirectly by looking at the disparity between number of attempted contacts (i.e., which we assume are either in-person or phone meetings with clients) relative to other modes of contact (i.e., texts or mailers).

We present the descriptive statistics – including mean, median, and ranges – of these four variables in Table 30. We choose to discuss the median estimates instead of the mean given visible rightward skew in the data (i.e., the relative rarity of high-frequency service utilizers) which biases estimates of mean minutes and contacts artificially upwards. Thus, the median provides a more substantively meaningful interpretation of the typical client's case management interactions.

Table 30: Descriptive Statistics of Dosage

Variable	*Mean*	*Median*	*St. Dev*	*Min*	*Pct (25%)*	*Pct (75%)*	*Max*	*N*
Minutes Per Client	177.9	60.0	353.9	0	60	120	3,050	374
Number of Meetings Scheduled	2.68	1.0	4.54	1	1	2	43	374
Number of Meetings Attended	2.17	1.0	3.82	0	1	2	38	374
Minutes Per Contact	71.3	60	39.8	15	60	70	590	303

Note: The data we report in Table 30 excludes the 95 individuals who received rapid services at the WEHC location as data on case management services was not reported for most clients at the WEHC location.

From the first row in Table 30, the median client received 60 minutes of case management services. From Rows 2 and 3 of Table 30, we can estimate the attendance rate of scheduled client meetings (i.e., the degree of client no-shows) by contrasting the number of clients who scheduled meetings against the number of clients who attended meetings. Overall, clients attended 80.9% (N = 813) of 1,004 scheduled case management meetings. While all of the 374 clients considered had at least one case management meeting scheduled, 12.6% (N = 47) of clients attended no meetings with their case manager, and 61.50% (N = 230) of clients only attended one case management meeting with their case manager. Thus, the overall dosage of case management services provided for most clients is comparatively low (74.1% of clients met with case managers no more than one time) when we consider ICM recommendations for high-frequency, high-

intensity contacts with case managers. From Row 4 of Table 30, we observe that of the 303 clients who had contact with case managers of any duration (i.e., phone calls or in-person meetings), the median length of contact was 71.3 minutes per contact.

It can also be helpful to analyze the profiles of high-service utilizers (i.e., clients logging higher volumes of contacts and more minutes of contacts with case managers) in order to observe whether there are any systematic patterns underlying service utilization rates. To this end, we utilize ordinary least squares (OLS) regression to estimate whether these three outcomes – the number of client contacts, total minutes met with case managers, and attendance rate – were predicted by recorded demographic characteristics of clients (i.e., age, sex, race, ethnicity, marital status), the duration of client enrollment in the program, and unmet needs as assessed by WellRx Questionnaire. We coded a client as having an unmet SDOH need using the criteria identified on the WellRx Questionnaire (0 = Not an Unmet Client Need; 1 = Unmet Client Need). We present the results of these regressions in Table 31 below excluding variables for which no statistically significant differences were reported across models for ease of interpretation and excluding data on race given potential identification concerns related to small cell size. Model 1 presents the results of an OLS model predicting the total number of case management contacts a client had. Model 2 presents the results of an OLS model predicting the total numbers of minutes of case management services provided. Model 3 presents the results of an OLS model predicting client attendance rates.

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Table 31. Results of OLS Models Predicting Service Utilization Outcomes

	Model 1 - Contacts	*Model 2 – Minutes*	*Model 3 – Attendance Rate*
Age	0.02 (0.01) *	1.22 (1.15)	-0.00 (0.00)
Ethnicity: Non-Hispanic	1.71 (1.03) *	181.41 (99.87) *	-0.10 (0.11)
Ethnicity: Unknown	-1.42 (0.70) **	-127.86 (67.55) *	-0.17 (0.8) **
Res Status: Homeless	0.78 (0.47) *	133.21 (45.42) ***	-0.05 (0.05)
Res Status: Other	7.14 (1.12) ***	451.71 (108.5) ***	-0.18 (0.12)
Days in Program	0.01 (0.00) *	0.15(0.09)	-0.00 (0.00) ***
SDOH: Food	-1.74 (0.97) *	-199.9 (93.9)	-0.07 (0.11)
SDOH: Housing	-1.04 (0.80)	-63.63 (77.72)	-0.15 (0.09) *
SDOH: Utilities	2.51 (0.54) ***	237.37 (52.34)	0.05 (0.06)
SDOH: Childcare	5.00 (1.46) ***	391.47 (141.00) ***	-0.05 (0.15)
SDOH: Income	3.24 (0.81) ***	248.24 (78.45) ***	0.08 (0.08)
SDOH: Employment	-1.85 (0.83) **	-158.14 (80.58)	-0.13 (0.09)
SDOH: Education	2.00 (0.91) **	143.59 (88.16)	0.13 (0.10)
SDOH: Substance Use	-3.26 (1.33) **	-322.76 (128.70) ***	-0.13 (0.14)
SDOH: Safety	-2.56 (0.88) ***	-290.74 (84.71) ***	0.13 (0.10)
SDOH: ER	2.12 (0.99) **	327.77 (95.27) ***	0.12 (0.11)
Observations	314	314	314
R^2	0.46	0.44	0.25
Adjusted R^2	0.41	0.39	0.18
F - Statistic	9.60***	9.00***	3.78***

*Note: Results of OLS regressions. *p < 0.10, **p < 0.05, *** p < 0.01. Reference category for Ethnicity = Hispanic. Reference category for residential status = private residence.*

The results from Table 31 suggest a few things about clients who engage more frequently in case management services at Centro Sávila's main location. We consider here, for brevity's sake, primarily variables which achieve statistical significance at conventional levels (p-value < 0.05) and not marginally-significant results (p-value < 0.10) and variables which achieve statistical significance across more than one model. To facilitate interpretation, the coefficients in Model 1 can be interpreted as the effect of moving from one unit to another unit of the row variable (i.e., either the reference category for categorical variables identified in the table caption or from the absence of a need to the presence of a need for SDOH variables) on the total number of times a client is contacted by their case manager. Thus, for illustration, the coefficient of 5.00 for the *SDOH Childcare* variable in Model 1 indicates that, all else equal and after controlling for other variables in the model, clients who reported an unmet childcare need were contacted 5 more times than clients without an unmet childcare need. Clients who indicated having unmet needs in utilities, childcare, income, education, and emergency room usage were significantly more likely to have higher levels of contact with case managers than clients without such needs after statistically controlling for other factors. Conversely, clients who indicated having unmet needs in employment, substance use, and safety were more likely to have significantly fewer contacts with case managers than clients without such needs. From Model 2, we note that relative to clients who lived at private residences at the point of intake, clients who were homeless received, on average, 133.2 more minutes of case management. Similarly, clients with expressed childcare needs, income needs, and ER needs were significantly more likely to have longer case management sessions than clients without those needs. Conversely, clients with expressed substance use

and safety needs were significantly more likely to have shorter case management sessions than clients without those needs. Finally, from Model 3, we note that there were not as many predictors of client attendance rates as there were for contacts or minutes of case management services. Specifically, the only need-based variable predicting attendance rates was the *SDOH: Housing* variable. Clients who reported having unmet housing needs at the point of intake had, on average, 15% higher no-show rates for case management appointments than clients reporting not having unmet housing needs, though this result is marginally significant at conventional levels of statistical significance (p-value < 0.10). When dropping the WellRx variables from the model, the *Residential Status: Homeless* variable similarly emerges as statistically significant and is of the same direction and substantive size as the *SDOH: Housing* variable, suggesting that housing issues and particularly, homelessness, reduces the likelihood of a client attending scheduled case management meetings.

Finally, it is worth considering external referral streams for clients at Centro Sávila. Excluding 332 referrals to case management services, Table 32 reports referrals to other types of services beyond case management.

Table 32. External Referral Services Provided

	Referral Count	*Percent*
Food Security	9	17.6%
Outpatient Services	14	27.4%
Psychoeducation	2	3.9%
Public Benefits Enrollment	22	43.1%
Services for Systems-Involved Youth	1	2.0%
Services for Victims of Crime	3	5.9%
Total	51	100%

From the external referral data provided by Centro Sávila, we were not able to assess the number of minutes of referral services provided or whether those who received case management services also received referrals to non-case management services as only one referral was reported per client in the data we received. Of non-case management referrals identified in the data, public benefits enrollment (43.1%; N = 22) and outpatient services (27.4%; N = 14) were the primary services clients were referred out to. Comprehensive data on clients' service enrollment and uptake are currently unavailable, so we are unable to determine the extent to which client service referrals resulted in service receipt at this time.

Client Satisfaction Surveys

We received aggregate data from Centro Sávila for one client satisfaction survey conducted in October 2020 (N = 33). It is unclear what the response rate was for the October 2020 survey given a lack of information on the standard denominator used to compute response rates for surveys (i.e., the total number of clients who received survey invitations). The October 2020 survey was conducted in Spanish. We translated the survey questionnaire and survey results using Google's translation services. The October 2020 survey asked clients 36 questions including questions about the length of time clients were enrolled in the program, referral sources, appointment attendance rates and reasons for non-attendance, clients'

distance to the counselling center, clients' primary mode of transportation, and demographic information (i.e., sex; education-level; ethnicity; preferred language; length of residency in the United States; zip code; etc.). While most questions were closed-choice format, there were a few questions which were open-ended. We provide a sample of questions relevant for case management service delivery below and descriptive statistics for each of these variables in Table 33[1].

1. How long have you been receiving services? (0 = It's my first visit; 1 = Less than a Month; 2 = 1-5 months; 3 = 6 months -1 Year; 4 = More than a year)
2. How often do you see your counselor? (0 = Once a Month; 1 = Once Every Two Weeks; 2 = Once a Week; 3 = Two or more times a week)
3. Compared to your first visit, how do you feel now? Would you say you feel worse, the same, a little better, somewhat better, or much better? (0 = Worse; 1 = Same; 2 = A Little Better; 3 = Somewhat Better; 4 = Much Better)
4. How satisfied are you with services? (0 = Not Satisfied; 3 = Very Satisfied)
5. Have you received mental health services outside of Centro Sávila /Hopkins Center? (0 = No; 1 = Yes)
6. Do you have health insurance? (0 = No; 1 = Yes)

Table 33. Descriptive Statistics of Client Satisfaction Surveys (October 2020)

Variable	*Mean*	*Median*	*St. Dev*	*Min*	*25%*	*75%*	*Max*	*N*
Length of Services	3.03	3.00	0.92	0	2	3	4	33
Counselor Frequency	1.54	2.00	0.57	0	1	2	2	31
How Do You Feel	3.75	4.00	0.57	1	4	4	4	32
Satisfaction with Services	3.00	3.00	0.00	3	3	3	3	32
Outside Mental Health	0.19	0.00	0.40	0	0	0	1	32
Health Insurance	0.09	0.00	0.30	0	0	0	1	33

From Table 33, we note that a plurality of respondents (42.4%; N = 14) indicated accessing services for between six months to a year. Most respondents indicated meeting with their counselors once a week (56.25%; N = 18). Respondents could also provide open-ended answers explaining the reasons why they might not have been able to attend a scheduled appointment with a counselor. The most common explanations offered for non-attendance of scheduled appointments included job responsibilities and family commitments. A majority of respondents indicated that they felt much better since their first visit (81.25%; N = 26), and all respondents (100%; N = 32) indicated that they were satisfied with the services they had received. 19% (N = 6) of respondents reported receiving mental health services outside of Centro Sávila. Only 9% (N = 3) of respondents indicated having health insurance.

However, it is worth noting that self-selection bias likely limits the generalizability of these findings to Centro Sávila 's broader client base when considered jointly with the small sample size of the survey. First, no clients from the WEHC location were included in the survey per the survey's referral source data. Second, there was an overrepresentation of female respondents in the sample (90.6%; N = 29) relative to the sex distribution of all Centro Sávila clients identified in the client-level data where only 48.6% of the client base was female. While we did not examine other potential demographic imbalances between the survey sample and the broader client base given time constraints associated with translating the survey and

[1] We modified variable coding from the original survey such that higher values for a variable indicate higher levels of the variable under consideration to ease aid of interpretation.

generating the raw data from aggregated report totals, we suspect the survey sample is likely not representative of the broader client base in other meaningful ways which likely correlate with measured outcomes. Because of this, it is important to consider how the profile of survey respondents systematically differs from the broader client base and to consider how these imbalances may bias outcomes. Further, survey results are time-bound, identifying a subset of broader opinion at a snapshot of time, and thus do not necessarily allow us to make inferences of client satisfaction at other time points throughout program implementation.

Staff Interviews

We conducted 10 interviews with staff at Centro Sávila. Interviews were conducted by one trained researcher using the semi-structured interview guide available in Appendix B and took between 30 and 90 minutes to complete. We took notes during the interview, and all interviews were audio-recorded. After each interview, we wrote up expanded notes in full. A few common themes emerged from the interviews which we highlight in Table 33 and Table 34 below which identify various factors facilitating or impeding the delivery of peer case management services which were mentioned by, at minimum, two staff members. We split the tables into areas where staff perceived program success – what we term facilitating factors (Table 34) – and areas where staff perceived areas for program improvement – what we term impeding factors (Table 35).

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Table 34. Facilitating Factors

Factors
• There was general consensus among program staff on the adequacy of existing referral sources. • There was general consensus among program staff on program purpose and goals (i.e., service coordination; client retention; active listening; meeting client where they are at without judgment). • Most staff agreed on common measures of program success (i.e., service plan completion; discharge rates). • Among case managers, there were high perceptions of client similarity (i.e., peerness) ($\overline{x}$ = 5.4 on 7-point scale) and satisfaction with client relationships ($\overline{x}$ = 6.2 on 7-point scale). • Among case managers, there was a high capacity for trust-building and use of self-disclosure with clients. • Some staff indicated that the new intake and enrollment teams increased work efficiency. • For staff which had received training, most generally perceived their training to be effective and helpful ($\overline{x}$ = 6.5 on 7-point scale). There was also consensus that there were many opportunities for training development and updating. • In general, there were high scores on PFI index ($\overline{x}$ = 3.03 on 4-point scale), indicating high levels of staff professional fulfillment. • In general, staff were satisfied with the frequency of meetings with other program staff and perceived higher-level staff as being open to feedback. • In general, staff agreed that Centro Sávila did a good job facilitating working at home during Covid-19 (i.e., providing access to chairs, Internet, phones, and desks). • Some staff indicated that recent hiring changes brought about more accountability.

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Table 35. Impeding Factors

Factors
• Most staff identified issues with client retention and viewed low client retention as a barrier to program success. • Staff had slightly positive levels of overall workplace satisfaction ($\bar{x}$ = 4.25 on 7-point scale). • Some staff noted that they perceived their roles to be more similar to case management than peer support particularly for participants who worked out of WEHC. • Most staff indicated contacting clients could be difficult at points and that lack of contact or interest on clients' part could be demotivating. • Most staff noted that frequent changes to the EMR Bear system were hard to track and understand. • Some staff felt frustrated with the perceived hopelessness of housing access (i.e., waitlists for housing referrals). • Some staff expressed frustration with the fact that case managers hired earlier in program implementation lacked relevant state-certifications. • Some staff expressed concerns about working remotely (i.e., lack of relationship development with other staff, particularly clinicians). • Some staff expressed concerns about some of the new hires made as part of the 2021 Strategic initiative (i.e., new staff does not have community connections; unresponsive to staff needs). • Some case managers – particularly those with recent job title changes to the intake assessment team – noted dissatisfaction with their new roles and role confusion (i.e., getting calls from former clients and providing case management services despite new roles). • Most staff identified multiple issues with the WEHC implementation of PCM including staffing gaps (i.e., hesitancy among existing staff to work out of the WEHC), limited program availability, technological barriers such as broken computers, and vaccine hesitancy among clients served out of WEHC. • Some staff indicated they would like more input and awareness (i.e., unclarity about direction of the program).

Service Delivery

In general, participants agreed on the goals of the PCM program – specifically, on the program's service coordination functions – and perceived existing referral streams as satisfactory. In general, a majority of case management staff reported integrating evidence-based practices into their case management practices, most commonly referencing the use of Motivational Interviewing strategies and the use of active listening strategies.

Centro Sávila 's PCM program offered an array of services including services such as: food drives and food boxes, linkages to appropriate governmental agencies, assistance attaining Social Security cards, birth certificates, medical records and other documentation, assistance acquiring cell phones, coordination of scheduling with other providers who provide other behavioral health and social services in the community, clothing donations, assistance applying to and activating or confirming services such as TANF benefits, Medicaid, and Medicare, and helping transport clients to medical or other services, among other things.

Per our interviews, the quality and dosage of case management service delivery was site-dependent: at Centro Sávila's main location, service delivery was primarily case-management focused whereas at WEHC, service delivery was more diffuse given the range of services offered to serve the unique client bases' urgent care needs. In part because of this, a number of participants highlighted service delivery issues at the WEHC location. A few interview participants in particular noted difficulties engaging with the client population at the WEHC location expressing sentiments such as:

> *Sometimes they [homeless case management clients] do not remember that they know you once they're in the shelter. Once they're in the shelter, they're like "Oh yes, I want a case worker" but once you call them they're like "No, I don't need the services" or they don't call you or they don't remember you or "I already have someone else, I don't want you" or "Yes, I need the services because I am working with another case manager who isn't helping me" or "Yes, I need a caseworker because I don't have one.*

Other participants expressed frustrations with the quality and frequency of services delivered at WEHC given the limited hours of operation and staffing concerns. Clinic hours at WEHC were often scheduled when most other community providers and resources were closed, reducing the ability of case managers to make same-day referrals. For referrals which occurred the following day, participants reported issues transporting clients and connecting clients to other agencies.

One participant noted that at the WEHC location, clients often did not have phone access and when they were able to use the phone at WEHC, there could be a lot of background noise which made it difficult to hear what the client was saying. Similarly, other participants identified issues with the reliability of Internet services at the WEHC noting that it could be difficult to get responses from staff and clients to emails in part due to connectivity issues and in part due to high levels of staff turnover. A few participants noted that they felt demotivated by the complexity and severity of needs clients present with at WEHC. For instance, one participant noted:

> *This is a perpetual situation, dealing with the homeless population, it's never going to be solved. There's not enough housing. There's a misunderstanding within the [peer case management] community. What I mean about a misunderstanding is where the individual worker thinks that just because a client is on a waiting list for housing that that's going to solve their current situation, but it's not because the next thing is how are they going to pay for a house. It's perpetual. It's never going to end, especially if they have other underlying condition like substance use or mental health; that's going to be perpetual whether I am working with them or not.*

Covid-19 changed, at least temporarily, the primary mode of case management service delivery as staff transitioned to a mixture of in-person case management and telehealth. While staff generally felt supported working remotely by Centro Sávila, the nature of remote work presented barriers to service delivery and interagency coordination, as one participant noted:

> *Right now, specifically in Covid, it has made behavioral health, case management, and therapy, all of those different ways of providing services so much harder. First of all, I can't see my clients in person, so that makes it hard, let alone go to another agency.*

As detailed in more length in the *Discussion and Conclusion* section of this report and as mentioned in the *Literature Review*, the transition from in-person case management to primarily telephonic case management modalities can potentially disrupt the theoretic logic of ICM models of case management which emphasize high-intensity case management inputs and in-person interactions. Further, the transition from in-person

case management to other virtual modalities risks changing the pool of program participants if those without reliable access to phones or the Internet are less likely to make use of virtual case management services.

Training and Certification

Many peer case management staff indicated seeing value in training and the acquisition of state-certifications for peer support. While most participants reported perceiving that their own training and certifications had been helpful to them on the job and indicated that there were continual opportunities to update their training on the job, a few participants indicated dissatisfaction with both (a) Centro Sávila's prior hiring of non-certified peer case managers and (b) organizational barriers to completing training certifications (i.e., failure to receive signatures internally from relevant staff). To this end, some participants noted that the initial contract for PCM did not mandate PCM state-level certifications for the hiring of case managers. Rather, the expectation on the provider's side was that non-certified staff would receive training on the job. However, staff indicated that this training was phased in slowly. Other forms of training that were mentioned in the interviewing process that peer case managers received included training in harm reduction practices and MI, training in Question, Persuade, Refer (QPR) suicide prevention techniques, internal workshops on active listening, training on ACES, training in the administration of the C-SSR scale to screen clients for suicidality, and training in Comprehensive Community Supports Services (CCSS). In terms of formal training certifications, 50% (N = 3) of Centro Sávila's peer case management staff indicated having received formal state-certifications as Certified Peer Support Workers (CPSW) or Certified Peer Support Specialists (CPSS).

Intake and Screening

Most participants described a screening and assessment process distinct from the one outlined in the process map due to the overlap of the interview timeline with the changes to the screening and assessment process noted in Stage 1 of Centro Sávila's 2021 Strategic Initiative Plan which highlighted the creation of new enrollment and intake teams. Whereas before, case managers had shared responsibility for administering intake forms and screening participants, the new policies were designed to reduce case manager workload burden. These updates to program organization were met with mixed reactions by staff. Some participants indicated the creation of enrollment and intake teams helped (a) increase accountability and structure, (b) reduce the amount of time case managers worked on non-case management activities, and (c) improve client relations by reducing the perceived "clinicalness" of the first point of contact clients had with case management staff. However, other participants – typically, former case managers who were re-assigned job responsibilities to the intake team – indicated frustration with their job transition given that their role as intake assessors was inconsistent with their previous peer case management training, that their new role was not what they were passionate about, and/or that there was some role ambiguity associated with their new job responsibilities. For instance, multiple staff reassigned to the intake team reported that they still received case management calls from former clients despite their new job titles and were performing double-work because of this. Multiple staff – including those not on the intake team – reported that they felt the role of intake assessor should be delegated to individuals who were not previously case managers.

In terms of the process for screening and assessment, staff suggested the new screening and assessment process would typically work in the following manner. First, a potential-client would call Centro Sávila and set up an appointment with a staff member on the enrollments team. The enrollments team member would then schedule an appointment with a case manager on the basis of shared lived experience, program-fit, and case manager availability. Once the schedule was set, a member of the scheduling team would call the potential client and email them relevant intake forms (i.e., WellRx). Once a client completed the intake

forms, they would electronically sign paperwork – including a release of information – by email, send back the documentation to the scheduling team member who would then set up an appointment with a peer case manager.

Some participants indicated it was difficult to screen clients on the phone given lack of access to a phone among many clients. Staff indicated that if they encountered difficulties trying to screen a potential client on the phone, they would try to schedule a meeting in-person though this was difficult given technological access issues. All case management staff identified using common screening tools, specifically the WellRx Questionnaire and C-SSR. Some also identified using the Universal Triage form during the screening process. There was some inconsistency in reporting when scales were used: while most participants indicated the WellRx Questionnaire was only administered at intake, two participants noted the SDOH was re-administered on a quarterly basis.

Evidence-Based Practices

The evidence-based practice most commonly mentioned by program staff was the use of Motivational Interviewing. Staff emphasized the importance of taking client-centered approaches, using self-reflection and question mimicry to foster greater senses of autonomy and choice among clients. From the interviews, it was not as obvious how other evidence-based practices – such as Strengths Based Case management or harm reduction – were incorporated into existing case management practice.

Service Plan Development

Case managers developed treatment plans – using CCSS Functional Assessments – with their clients to identify primary and secondary sets of goals. Most staff indicated the acquisition of Social Security cards or other forms of identification were the primary goal mentioned by the client base and indicated this was problematic because a large portion of homeless services and benefit applications require a state-issued identification card, proof of residency, and proof of citizenship. Some staff provided information on the periodic updating of these service plans, noting they were reviewed by the case manager every 90 days and updated at that point. Others suggested the service plans were updated at the discretion of the case manager.

Client Relations

Participants whose job responsibilities partially or at some point involved the provision of peer case management services typically perceived themselves as similar to the clients that they served ($\overline{x}$ = 5.67 on 7-point scale where 7 = “Very Similar”) and perceived relationships with their clients to be satisfactory ($\overline{x}$ = 6.33 on 7-point scale where 7 = “Very Satisfactory”). Participants generally indicated they were either unaware as to how peerness was assessed during the hiring process or provided vague guidelines surrounding common lived experience. Common issues case managers identified in working with their client population, where they existed, included high client attrition rates and establishing and maintaining contact with clients, particularly with clients housed within the WEHC. Case managers emphasized relatability and trust as important factors in developing a rapport with clients and mentioned concepts from MI in discussing how they typically interacted with clients.

EMR-Bear Issues

A number of participants identified challenges associated with the introduction of, and modifications to, the EMR Bear system used to log and track participant progress. Specifically, participants identified issues with (a) the frequency of changes to the EMR-Bear system (i.e., not logging case notes to logging case

notes) and (b) inadequate training on inputting information into the system. These concerns echoed some of the concerns identified in the Mora Consulting LLC report from the fall of 2019. Other participants emphasized the limited scope of data captured by the EMR Bear system. For instance, one participant noted:

> *There's a set-up here that they haven't quite figured out…It's a program called EMR Bear and it's not user-friendly for the worker because all they are assessing is appointments. And to me, it's irrelevant because my clients call me in the middle of the day without an appointment and there's no way to document that.*

Some staff also some expressed concern that the process of inputting data into EMR BEAR was time-consuming.

Workplace Satisfaction

In general, PFI scores at Centro Sávila were high ($\bar{x}$ = 3.3 on 4-point scale). Additionally, staff generally perceived moderately positive relations between peer case managers and other staff ($\bar{x}$ = 4.78 on 7-point scale). While PFI scores were high, there was some polarization in attitudes with respect to quality of supervision and management received at Centro Sávila. For instance, some issues identified included: concerns over new hires and doing extra work beyond the work which was scheduled. To this end, one participant noted:

> *So we have case management and we put in our schedule, but then I have a lot of phone calls for case management on a daily basis, so I do a lot of case management, even though it's not on the schedule. So per week and then on top of that there's paperwork, and so I end up scrambling to do the paperwork and do the case management, but I do a lot of I think a lot of his case management. And then later and doing the back end of paperwork.*

Crossroads for Women (CRFW)

Program Description

CRFW's Peer on Peer Supportive Services (POPSS) aftercare program deploys a matrix of peer case management, therapeutic groups, social events, and community-building activities among dual-diagnosis clients who previously completed any CRFW housing program to promote short, intermediate, and long-term client-level behavioral health outcomes (i.e., reduction in daily illegal substance use; increased housing stability; reduced criminal justice system involvement). For program recruitment, CRFW relies primarily on internal referral streams from CRFW or from their existing transitional housing programs: Maya's Place in Albuquerque and The Pavilions in Los Lunas. The POPPS program offers intensive case management services, monthly check-ins with peer support specialists, monthly alumni group meetings, vocational support services, access to therapeutic groups located at CRFW community building, and access to the CRFW Incentives Program which included service-plan related incentives for need-based items including bus passes, limited housing vouchers, and discounted prices on furniture, among other things, which clients could access if they attended a certain number of case management meetings or groups. Table 36 highlights CRFW's evidence-based practices used in the POPPS program.

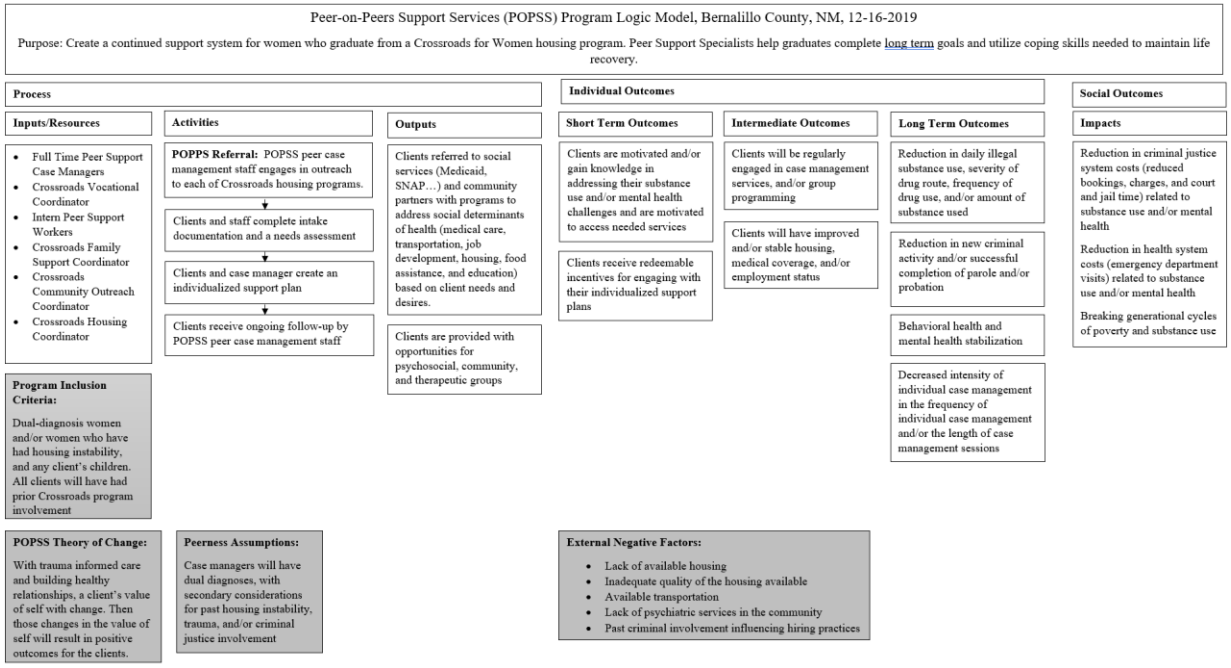
Table 36. Evidence-Based Practices

Evidence-Based Practice	*Description*
Intensive Case Management	Intensive Case Management (ICM) is a community-based package of care aiming to provide long-term care for severely mentally ill people who do not require immediate admission. Intensive Case Management evolved from two original community models of care, Assertive Community Treatment (ACT) and Case Management (CM), where ICM emphasizes the importance of small caseload (fewer than 20) and high-intensity input. (King 2006; Burns et al. 2007; Dietrich et al. 2017) See also: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6472672/#:~:text=Intensive%20Case%20Management%20(ICM)%20is,do%20not%20require%20immediate%20admission.
Motivational Interviewing	Motivational interviewing is a counseling method that helps people resolve ambivalent feelings and insecurities to find the internal motivation they need to change their behavior. It is a practical, empathetic, and short-term process that takes into consideration how difficult it is to make life changes (Rollnick and Allison 2004; Hettema, Steeler, and Miller 2005) See also: https://www.samhsa.gov/homelessness-programs-resources/hpr-resources/empowering-change
Trauma-Informed Care	Patients with a history of traumatic life events who enter the health care system are particularly vulnerable because they can become distressed or re-traumatized as the result of health care experiences (Coles and Jones 2009). A large population of patients may be suffering from the symptoms and sequelae of trauma and could benefit from trauma-informed care, which uses an understanding of trauma to meet the unique health care needs of survivors (Rosenberg 2011). Trauma-informed care aims to meet the unique needs of trauma survivors (Rosenberg 2011) and has been studied and practiced in the contexts of addiction treatment (Covington 2008; Frisman, Ford, Lin, Mallon, and Chang 2008; Harris and Fallot 2001; Morrissey et al., 2005) and inpatient psychiatric care (Barton, Johnson, and Price 2009; Chandler

	2012; Regan, 2010). See also: https://ncsacw.samhsa.gov/userfiles/files/SAMHSA_Trauma.pdf

CRFW's logic model is illustrated in Figure 7 and provides insight into how POPPS clients engaged in the program, beginning with the client referral, screening and eligibility criteria determination, intake process, assessment and service delivery and ending with a discussion of anticipated short, intermediate and long-term outcomes at the individual-level and social outcomes more generally. POPPS' theory of change notes that the provision of trauma-informed care would promote changes in self-attitudes which would, in turn, result in positive outcomes for clients. While it is a beneficial that the provider articulated a theory-of-change, the language used in the statement of the theory-of-change is vague and thus could prove hard to falsify (i.e., "What does "value of self" refer to? How is that measured? What are healthy relationships, and with whom? How are those measured?) (Forti 2012).

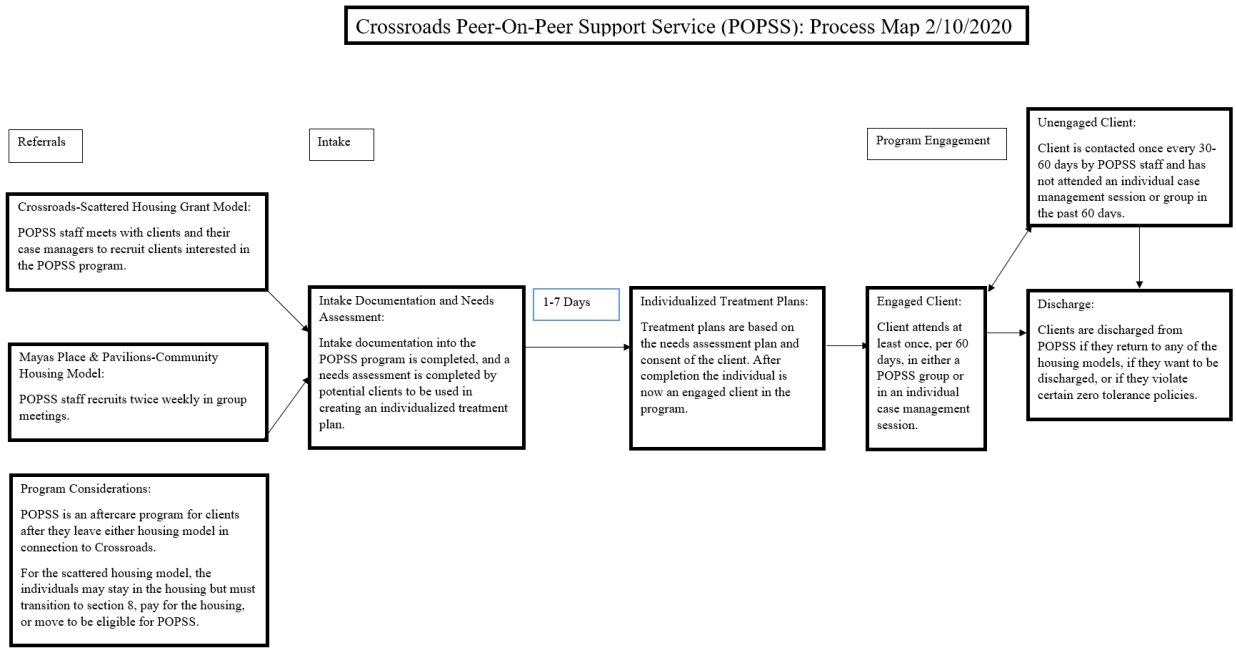
Figure 7. Crossroads' Logic Model



We present CRFW's process map, finalized with Crossroads in February 2020, in Figure 8. The process map describes the program's vision of program implementation and not necessarily the program process observed in practice and thus provides a baseline against which model fidelity can be assessed. Per Figure 8, referrals for the POPPS program would come primarily from existing CRFW transitional housing programs through Maya's Place and Pavilions therapeutic communities. After a referral had been made to the POPPS program, intake documentation would be completed including a needs assessment which would be completed by potential clients. This needs assessment would be used to structure a client's individualized treatment plans. Within 1-7 days of completing intake documentation, clients would construct an individualized treatment plan with a case manager. For a client to be considered engaged in the program,

they would need to attend either (1) at least one POPPS group meeting or (2) one case management session within 60 days of enrollment. Clients could be discharged from the POPPS program if they returned to either Maya's Place or Pavilions Community Housing, if they wanted to be discharged, or if they violated CRFW's zero-tolerance policies. Other details on program process – for instance, participation in the incentives program – were not mentioned in the process map but were detailed more extensively in in the interview process.

Figure 8. Crossroads' Process Map



We requested from the provider additional logic models and process maps in May 2021 if they happened to be available; however, the provider indicated they had not updated their logic models or process maps since their initial construction.

Performance Measures

Per BHI-funding requirements, CRFW reported a series of performance measures to the DBHS on a monthly basis. As with Centro Sávila, the reporting of performance measures evolved over time. Table 37 lists and describes the performance measures reported by CRFW.

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Table 37. Performance Measures

Performance Measure	*Operationalization*
Number of Client Served	• Number of new clients served in case management, therapeutic groups and community/social events • Number of returning clients served in case management, therapeutic groups and community/social events
Total Service Usage	• Number of clients • Number of clients attending 6 or more services • Number reporting improved mental health • Number reporting decreased substance use relapse • % of clients attending 6 or more services
Case Management	• Hours of case management services provided • Number of new clients receiving case management • Number of returning clients receiving case management • Number of clients attending 3 or more case management meetings
Service Plans	• Number of clients who completed service plans • Number of clients making progress of their service plans • Percentage of clients making progress on their service plans
Re-Arrest Rates	• Percentage of clients with no new arrests
Maintenance of POPPS Services	• Number of clients exiting CRFW housing services • Number of clients with 2 contacts in 3 months • Percent maintaining
Outreach	• Social media outreach • Outreach events conducted
Client Satisfaction	• Number of client satisfaction surveys (quarterly) • Percentage of Clients Satisfied (quarterly)
Number of Collaborative Community Partners	• Number of collaborative meetings • Number of collaborative meeting attendees • Number of collaborative community partners (quarterly)
Client Demographics	• Gender • Age by category • Race/ethnicity • SDOH

Table 38. Overview of Non-Demographic Performance Measures at CRFW

Performance Measure	*Year 1*	*Year 2*
# of New Clients	67	84
Case Management Hours	391	655
# of Clients Attending Six or More Services	168	102
# of Clients w/ Improved Mental Health (6 or More Services)	39	47
# of Clients w/ Decreased Substance Use (6 or More Services)	41	58
# of New Clients Receiving Case Management Services	61	75
# of Returning Clients Receiving Case Management Services	314	597
# of Clients Attending Three or More CM Meetings	77	288
# of Clients Completing Service Plans	48	49
# of Clients Making Progress on Service Plans	48	30
Rearrest Rates (% No New Arrests)	100%	100%
% Maintaining POPPS Services	0%	33%
# of Clients Exiting CRFW Housing Services	N/A	66
Social Media Outreach (Posts)	104	218
Outreach Events Conducted (F2F)	0	2
# of Collaborative Meetings	11	17

Note: Year 1 = May 2019 - April 2020. Year 2 = May 2020 – April 2021.

Table 39. Overview of Demographic Performance Measures at CRFW

Performance Measure	*Year 1*	*Year 2*
Gender: Male	0	0
Gender: Female	1288	2215
Age: 0-5	0	0
Age: 6-11	0	0
Age: 12-18	0	0
Age: 19-24	13	56
Age: 25-44	772	1354
Age: 45-64	481	772
Age: 65+	22	21
Ethnicity: Hispanic/Latino	573	1173
Ethnicity: Non-Hispanic/Latino	425	782
Race: Black	61	103
Race: Asian	2	24
Race: White	808	1617
Race: American Indian or Alaskan Native	140	256
Race: Native Hawaiian or Pacific Islander	0	11
Race: Multiracial	0	0
Race: Other	0	0
Race: Not Reported	144	190
Insurance: Medicaid	197	N/A
Insurance: Commercial	0	N/A
Insurance: No Insurance	0	N/A
# of Clients Screened for SDOH	58	142

Note: Year 1 = May 2019 - April 2020. Year 2 = May 2020 – April 2021.

CRFW's performance measure documentation also allowed space for the provider to comment on program successes and barriers and to identify any changes related to performance measure tracking over time. This information provides helpful context for tracking program change longitudinally and identifying successes

with, and complications to, service delivery which are not captured directly in the interviewing data – given the limited time-frame of the interviewing – or client-level data. A majority of program successes mentioned in the narrative reports were centered on either (a) particular examples of individual-client success stories securing services (i.e., number of clients receiving housing vouchers) and (b) specific community events the provider hosted to provide social integration to program participants, and thus we do not detail these in more length here. We highlight important barriers mentioned in multiple monthly narrative reports below:

- The provider noted there were often seasonal shifts in clients' use of services and corresponding relapse-risk, particularly in the winter and summer months, which increased demand for limited services (i.e., motel and housing vouchers). Relatedly, the provider indicated clients transitioning from Section 8 housing to permanent supportive housing often had high-severity profiles and higher service needs.
- In the first year of the program's implementation, the provider indicated some clients were confused over how the incentives program worked (i.e., eligibility requirements for holiday wish-lists).
- The provider identified some barriers engaging with the client population, specifically (1) the frequency with which clients' addresses changed and (2) the frequency with which clients' phone numbers changed which resulted in out-of-date contact information.
- The provider noted a subset of clients was prone to cancellation of appointments or was consistently late to scheduled appointments.
- The provider noted there were periodic bouts of staff illnesses which temporarily limited the scope of program reach and the ability to collect follow-up data on substance use relapse and mental health improvements among clients due to limited staffing (i.e., March 2020 and November 2020).
- The provider noted some concerns with collecting information on clients (i.e., if clients spend too much time filling out paperwork, they may not return to the program).
- The provider noted that there were some growing pains associated with transitioning from in-person case management to virtual and telephonic case management and identified some issues with the use of online groups (i.e., limited functionality on Facebook; mild learning curves for clients).
- The provider noted that a 2021 audit revealed data quality issues related to the possibility of duplicate services (i.e., when CRFW completed intakes with women who were still enrolled in one of their therapeutic communities, it was difficult to identify where one program ended and the other began because the clients were receiving services in two programs).

Client-Level Data

This section summarizes key dimensions of the client-level service data we received from CRFW which includes data on incoming and external referrals, enrollment and intake sources, screening and assessment tools, and case management services provided. During the time frame considered for this report, between June 2019 – April 2021, the POPPS program enrolled 127 individuals. The following set of tables reports on these individuals.

Table 40 reports the referral source. The largest number of referrals (35.4%; N = 45) were internal referrals from CRFW, followed by Pavilions (34.6%; N = 44) and Maya's Place (29.9%; N = 38). These were the only reported referral sources for Crossroads for Women's POPPS program.

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Table 40. Referral Source for CRFW

Referral Source	*Count*	*Percent*
Crossroads for Women	45	35.4%
Maya's Place	38	29.9%
Pavilions	44	34.6%
Total	127	100%

Table 41 reports the race and ethnicity of enrolled individuals as extracted from the client-level data. 99 clients self-reported being White with 68 of these individuals reporting they were Hispanic/Latino. 14 clients reported they were American Indian, 5 reported being African-American, 2 Asian, and 1 reported being Native Hawaiian or Other Pacific Islander. 3 American Indians and 1 Asian client also identified their ethnicity as Hispanic/Latino. In total, 68 clients (56.2%) reported being Hispanic/Latino. Six clients either refused to report or did not know their race or ethnicity.

Table 41. Race & Ethnicity

Race & Ethnicity	*Count*	*Percent*
American Indian or Alaska Native	14	11.6%
Asian	2	1.7%
African American	5	4.1%
Native Hawaiian or Other Pacific Islander	1	0.8%
White	29	24.0%
Hispanic/Latino	68	56.2%
Total	121	100%

Note: 6 clients missing.

100% of CRFW's client base identified as female.

Table 42. Sex

Sex	*Count*	*Percent*
Female	127	100%
Male	0	0%
Total	127	100%

Table 43 reports the educational levels of respondents. The education level for 80.3% (N = 102) of CRFW's client base was not reported and thus there is considerable missingness in this variable. Of the clients who reported their educational levels, a plurality (40%) attended a 2-year college. 24% of respondents indicated they had achieved their GED or graduated high school, 16% did not complete high school, 16% attended a vocational school, and 4% attended a four-year college.

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Table 43. Education-Levels

Education Level	*Count*	*Percent*
Less Than High School	4	16%
High School/GED	6	24%
Two-Year College	10	40%
Vocational College	4	16%
Four-Year College	1	4%
Total	25	100%

Note: 102 clients missing

Table 44 reports clients' ages as detailed in the record review data. The average age of all clients was 40.1 years of age and the median age of all clients was 38. The youngest client was 20 years old and the oldest client was 63 years old.

Table 44. Age

Age-Group	*Count*	*Percent*
20-24	2	1.6%
25-29	16	12.6%
30-34	24	18.9%
35-39	25	19.7%
40-44	18	14.2%
45-49	20	15.7%
50-54	7	5.5%
55-59	11	8.7%
60-64	4	3.1%
Total	127	100%

Table 45 reports clients' residential status at the time they were enrolled. A plurality of 40.1% (N = 51) clients had unknown residential statuses at intake. Of the client base for whom residential statuses were known, 31.5% (N = 40) of clients indicated residential care.

Table 45. Residential Status at Intake

Residential Status	*Count*	*Percent*
Homeless	4	3.2%
Residential Care	40	31.5%
Institutional	6	4.7%
Private	20	15.8%
Other	6	4.7%
Unknown	51	40.1%
Total	127	100%

CRFW used the POPPS Screening Tool to assess client needs during an intake interview or at re-assessment. The POPPS screening tool is a modified version of the Health-Related Social Needs Screening Tool (HRSN) used to identify and screen for the social determinants of health. The provider noted that the

scale is intended as a tool to support staff and clients in assessing clients' service needs during an intake interview or re-assessment and that a secondary purpose of the scale's administration is to increase client re-engagement. Initial POPPS Screening Tool data was reported for 82 of the 127 (64.6%) clients who completed the intake process. In conversations with the provider, the disparity between the number of clients who completed the intake process and the number of clients who completed the POPPS screening tool was noted to be a function of (1) the newness of the process of using the POPPS screening tool (i.e., it was phased in in August 2020), (2) the need to meet the more immediate needs of clients instead of having clients fill out paperwork, (3) difficulty contacting clients to complete the POPPS tool after initial intake, and (4) client stability. Re-assessments of the POPPS Screening Tool were conducted at the discretion of case managers and not at uniform reporting periods throughout client progression through the program. However, the provider noted in their June 2020 narrative section of their performance measure reporting that, "We have configured the Social Determinants of Health Survey for new clients and will being administering it at intake and after a client has a long service lapse, though we are working to define what long service lapse means in terms of concrete time frames." 25.6% (21) of the 82 clients who completed the initial POPPS Screening tool completed it a second time. Of the clients who completed the POPPS screener a second time, the typical duration between completion of the first and second screeners was 165 days.

One way we could analyze this data is through the use of a one-group pretest-posttest design where we compare client scores at intake against scores at reassessment to estimate mean changes in SDOH needs. Pre-post designs are often used when an intervention is applied between two time points. It is worth noting that a number of methodological issues are associated with this design choice: for instance, the lack of a randomized control group, client maturation effects, historical effects, and statistical regression to the mean are all issues which complicate the interpretability of findings emerging from one-group pretest-posttest designs (Knapp 2016). Whether the observed change can be attributed to the PCM intervention or not depends on a number of factors including whether (a) a control group exists; (b) the study is experimental, quasi-experimental or observational; and (c) relevant covariates and cofounds have been adequately controlled for (Pearl 2009; Mayer et al. 2016). Further, given the small sample size of clients completing a POPPS reassessment and specific methodological challenges associated with repeated-measure designs, we cannot statistically control for factors we anticipate would influence POPPS scores at reassessment, most importantly, the length of time a client was enrolled in the POPPS program before reassessment. Indeed, regressions controlling for repeated-measure of clients cannot be carried out due to these limitations. The results of limited paired sample t-tests – not reported – indicate no statistically significant differences in POPPS scores at intake and at reassessment across all seven subscales of the screening tool. However, we caution against extrapolating from these null findings given the lack of relevant controls – most notably, the duration of time between assessments – and given the violation of a number of parametric assumptions (i.e., normality in the residuals).

We detail the criteria by which unmet client needs were classified in Table 46 below and provide descriptive statistics – including the proportion of clients who were classified as having specific unmet needs on the basis of the criteria articulated in CRFW's POPPS screening tool program documentation – in Table 46. Information on the specifics used for scoring client needs using the HRSN screening tool is available here. However, the information provided for the HRSN screening tool documentation scoring is ambiguous or not articulated for some SDOH subscales (i.e., for living situation needs, it is unclear whether a Yes/No

answer for Question 1 or any Yes answer for Question 2 is used to calculate the expressed need). Per conversations with the provider, some items from the original HRSN screening tool (i.e., physical activity) were redacted for the POPPS screening tool to reflect the seven domains CRFW works in and to save time.

To the extent scoring was accurately conducted, the POPPS questionnaire permits crude inferences about the scope of challenges confronted by program clients and can help assess components of program reach (i.e., does the program serve its intended population).

Table 46. POPPS Screening Tool Scale Description and Definition of Unmet Needs

Scale	*Unmet Need Criteria*
Independent Living	Any score above 0 may indicate an unmet need in independent living, including housing, food security, and transportation.
Family or Social	A score of 11 or more may indicate that the client is in an unsafe situation
Vocational/Educational	Any score above zero may indicate that the client has unmet needs in the Vocational/Educational domain.
Medical	Any score above zero may indicate that the client has unmet medical needs or is experiencing barriers in accessing medical services
Substance Use	Any score above zero may indicate that the client has unmet needs focused on maintaining or stabilizing their recovery or substance use disorders.
Mental Health	Any score of 3 or higher may indicate that the client has unmet needs related to mental health stabilization.
Legal	Any score above zero may indicate that the client has unmet needs in the legal domain.

Table 47. Descriptive Statistics of POPPS Screening Scale Score at Intake

Variable	*N*	*Mean*	*St. Dev.*	*Min*	*Pct (25%)*	*Pct (75%)*	*Max*	*% with Unmet Need*
Housing	**82**	**1.78**	**2.01**	**0**	**0**	**3**	**7**	**61.0%**
Family	82	5.12	2.46	3	4	5	16	6.1%
Vocational	**82**	**0.96**	**0.90**	**0**	**0**	**2**	**3**	**63.4%**
Medical	82	0.00	0.00	0	0	0	0	0%
Substance Use	**82**	**1.34**	**0.97**	**1**	**1**	**2**	**4**	**86.6%**
Mental Health	82	1.68	1.83	0	0	2.75	6	25.6%
Legal	82	0.00	0.00	0	0	0	0	0%

From Table 47, we note the primary unmet needs identified by clients on the POPPS screening tool, identified in bold, were: substance use (86.6%; N = 71), vocational needs (63.4%; N = 52), and housing needs (61%; N = 50).

Clients were asked to complete a service plan in consultation with their case manager though these service plans evolved over time. These service plans identify key client-identified goals – not necessarily related to a clients' presented primary needs – and are used to assess client progress throughout the program. Table 48 reports the primary goal identified by clients in the construction of their service plans of the 64 clients

who completed service plans. To be clear, these are not necessarily the clients' only goals recorded in their service plan but are rather, the primary client goal identified at the point of intake. These goal categories can help provide a crude sense of the most immediate needs of POPPS program participants though goals can evolve as a client progresses through the program and clients can have multiple goals. In our record review, CRFW also reported data on the number of clients who met their goals; however, there were some interpretability issues (i.e., numeric coding inconsistent with the initial program schema crosswalk) paired with missingness for some of this data given episodic data collection, and thus, we do not report these results. From Table 48, we note that the three most common needs identified in initial service plans, highlighted in bold, related to: (1) education (28.1%; N = 18), housing (26.6%; N = 17), and job security (25.0%; N = 16).

Table 48: Primary Need Identified in Client Service Plans

	Number of Clients	*Percent of Clients Identifying Goal*
Housing	**17**	**26.6%**
Social Security Card	1	1.6%
Job Security	**16**	**25.0%**
ID Acquisition	1	1.6%
Education	**18**	**28.1%**
Substance Abuse Recovery	4	6.3%
Family	1	1.6%
Legal	1	1.6%
Mental Health	3	4.7%
Medical	2	3.1%
Total	64	100%

In order to assess CRFW's dosage of case management services, it can be helpful to examine how client enrollment in the POPPS program evolved over time. Figure 9 plots the number of clients enrolled in CRFW's POPPS program from July 2019 – April 2021 with a red discontinuity line indicating the onset of the Covid-19 pandemic in March 2020 which was associated with wide-scale programmatic changes in service delivery as social distancing guidelines were adopted. Figure 9 suggests that the onset of the Covid-19 pandemic in March 2020 temporarily reduced client in-flows, though the effect on client in-flows was short-lived.

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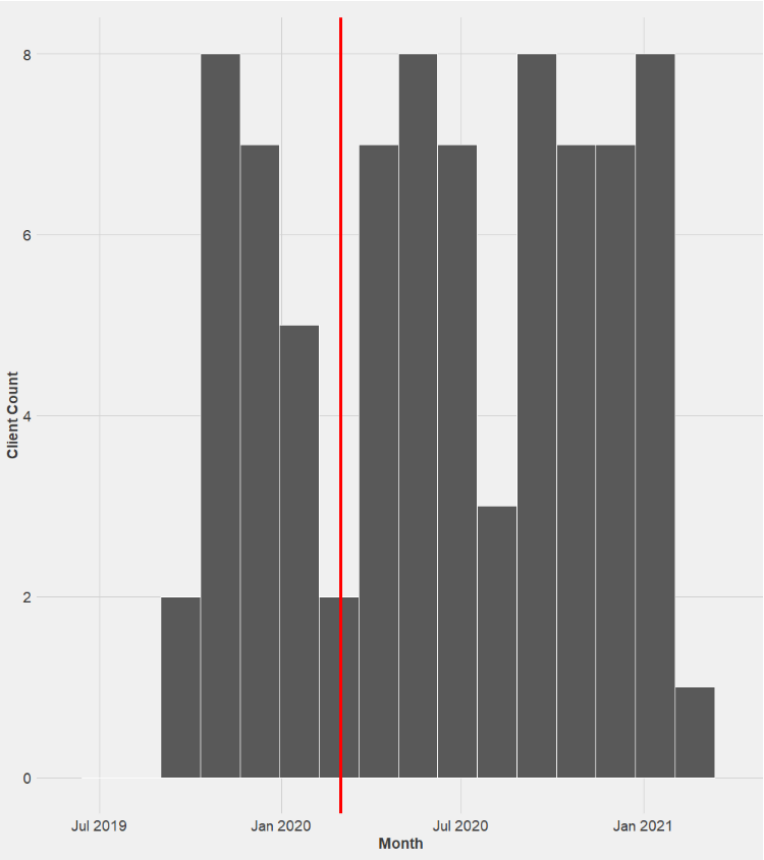
Figure 9. CRFW Client Enrollment Patterns from July 2019 – April 2021



In order to assess dosage, it could also be helpful to get a sense of how long clients remain enrolled in the POPPS program. However, CRFW only formally discharged 2.4% (N = 3) clients from the program. Because the program is aftercare-centric, most clients (97.6%; N =124) remained enrolled at the end of the data collection period on April 21, 2021.

It is worth considering the dosage of case management services provided as this allows us to assess the intensity of case management services provided and to estimate which client-level factors predict service utilization rates. There are a few ways of assessing dosage within the client-level data we received from CRFW: (1) analyzing the overall number of minutes clients spend directly interacting with case managers – independent of type of contact; (2) analyzing the median number of minutes a client spends interacting with the case manager per contact of those types of contacts where duration makes sense to record (i.e., phone calls and in-person meetings); and (3) analyzing mode of the contact (i.e., whether the contact was face-to-face or not) which can help assess intensiveness. We present the descriptive statistics – including mean, median, and ranges – of these three variables in Table 49. We choose to discuss the median estimates instead of the mean given visible rightward skew in the data (i.e., one outlier client reported 1215 minutes of case management) which biases estimates of mean minutes and contacts artificially upwards. Thus, the median provides a more substantively meaningful interpretation of the typical client's case management interactions.

Table 49: Descriptive Statistics of Dosage

Variable	*Mean*	*Median*	*St. Dev*	*Min*	*Pct (25%)*	*Pct (75%)*	*Max*	*N*
Minutes Per Client	125.4	60	193.2	15	30	150	1215	69
Minutes Per Contact	27.0	24.4	13.8	15	17.5	30	75	1953
Number of Face-to-Face Meetings Per Client	4.3	2.0	7.8	0	0	5	61	126

From the first column in Table 49, we observe that 69 clients logged more than 0 minutes of interactions with their case managers. To be clear, that this number is not 127 does not reflect unsuccessful case management outreach but rather reflects the mode of contact. For instance, postal mail and text communications with clients were logged in the client-level data as case management contacts of 0 minutes in duration. Thus, the mode of interactions for which case management meeting minutes were logged only include those where meeting minutes are a sensible metric: phone calls and in-person meetings. Of the 54.3% (N = 69) of clients who had contact with case managers of any non-zero duration (i.e., phone calls or in-person meetings), the median client received an average of 60 minutes of case management services. We can also examine the typical number of minutes per contact of the 1,953 case management interactions which were not by postal mail or text. Of the 54.3% (N = 69) of clients who had contact with case managers of any duration (i.e., phone calls or in-person meetings), the median length of contact was 24.4 minutes/contact. Finally, we can examine the number of face-to-face meetings per client. Overall, 42.3% (N = 827) of case manager contacts with clients were face-to-face. The typical client logged a median of 2 face-to-face interactions with their case managers. For a more specific breakdown of service mode across all case management contacts, see Table 50.

Table 50. Type of Case Management Contacts

Contact Type	*Count*	*Percent*
In-Person	827	42.3%
Phone Call	995	50.9%
Text	96	4.9%
Other	35	1.8%
Total	1,953	100%

It is also helpful to analyze the profiles of high-service utilizers (i.e., clients logging higher volumes of contacts and more minutes of contacts with case managers) in order to observe whether there are any systematic patterns underlying service utilization rates. To this end, we regressed both of these outcomes – number of contacts and total minutes of meetings with a case manager – on a series of available demographic covariates (i.e., race, ethnicity, marital status) and other predictors (i.e., employment status at intake; residential status at intake; unmet needs as assessed by POPPS Screening tool) to assess whether and how different variables predicted different patterns of utilization of case management services. We coded a client as having an unmet need using the criteria identified on the POPPS screening tool (0 = Not an Unmet Client Need; 1 = Unmet Client Need). We present the results of these regressions in Table 51 below excluding variables for which no statistically significant differences were reported across either model for ease of interpretation and excluding the race variable given cell size concerns. Notably, client ethnicity, employment status at intake, residential status at intake, and most POPPS unmet needs (Housing

Status; Vocational Status; Medical Status; Substance Use Status) were not significant predictors of either the number of successful case management contacts or minutes of case management services provided. While we statistically controlled for client race in Model 4 and Model 5, we do not report the results for the race variables due to possibility of client identification given small cell sample size of racial subgroups.

Table 51. Results of OLS Models Predicting Service Utilization Outcomes

	Model 4 – Non-Text Contacts	*Model 5 - Minutes*
Age	0.27 (0.17)	6.40 (2.56) **
Marital: Married + Cohabitating	-0.12 (6.8)	40.26 (69.90)
Marital: Separated	-1.02 (6.1)	-21.70 (76.11)
Marital: Divorced	-4.87 (4.02)	-102.55 (43.51) **
Marital: Widowed	-10.34 (8.6)	-106.63 (92.33)
Marital: Unknown	-7.00 (7.21)	33.15 (98.46)
POPPS: Family Needs Unmet	22.50 (8.10) ***	122.73 (97.07)
Observations	126	69
R^2	0.22	0.74
Adjusted R^2	0.02	0.60
F – Statistic	1.1	5.23***

*Note: Results of OLS regressions. *p < 0.10, **p < 0.05, *** p < 0.01. Reference category for race = White. Reference category for Marital = Never Married.*

The results from Model 4 – where we predicted the number of contacts clients' case managers had with clients – suggests that, on average, case managers were significantly more likely to contact clients with unmet family needs relative to those who did have unmet family needs (p-value < 0.05). Relative to clients were not classified as having unmet family needs, clients with unmet family needs had, on average, 22.5 more contacts with case managers all else equal (p-value < 0.01). However, this is likely a statistical artifact of the comparatively small proportion of clients who met the classification standard for having family unmet needs (i.e., 6.1% of clients met this criteria). The results from Model 5 – where we predicted the number of minutes each case manager logged with each client – suggest that, on average, case managers were significantly more likely to meet for longer durations with older clients relative to younger clients and divorced clients relative to never married clients. Specifically, all else equal, an additional decade of client age predicted an additional 64 minutes of case management received (p-value < 0.05). Finally, all else equal, divorced clients received 102 fewer minutes of case management services relative to never married clients (p-value < 0.05). Notably, we cannot determine why these associations exist beyond flagging the statistical and sampling frame issues noted here as possible explanators. However, being able to assess which types of clients have a higher likelihood of engaging with PCM services may be helpful information for program staff to have when considering individualized treatment plan construction and potential outreach and engagement strategies.

CRFW also reported data on external referrals. We present the distribution of external referrals below in Table 52 with the most referred out services highlighted in bold text.

Table 52. External Referral Services Provided

	Referral Count	*Percent*	*Number of Unique Clients Referred*	*Total Minutes of Referred Services*
Substance Abuse and Recovery	8	3.6%	3	390
Housing	**90**	**40.3%**	**24**	**3045**
Vocational	**105**	**47.1%**	**25**	**2700**
Family	10	4.5%	1	255
Clinician	10	4.5%	2	225
Total	223	100%	55	6615

As noted in Table 52, a plurality of external referrals (47.1%; N = 105) were vocational in scope and 40.3% (N = 90) were housing-related referrals.

Client Satisfaction Surveys

We received data from CRFW for two client satisfaction survey waves: one conducted using the survey platform SurveyMonkey in October 2019 (N = 52) and one conducted using the SurveyMonkey platform in January 2021 (N = 51). CRFW distributed their client satisfaction surveys through their Facebook group and by text. It is unclear what the precise response rates were for both surveys given a lack of information on the standard denominator used to compute response rates for surveys (i.e., the total number of clients who received survey invitations). However, the .csv files we received for both survey batches included information on the percentage of surveys completed of the total number of surveys viewed. Using this metric – which likely understates survey participation given that the number of survey views is greater than the total number of POPPS program participants enrolled during the survey wave dates – the completion rate for the October 2019 wave was 19.9% (N = 261) and 32.3% (N = 161) for the January 2021 wave. The October 2019 survey asked clients the following set of questions[2]:

1. How long have you been a client of the POPSS (aftercare) program? (0 = Less than 6 months; 1 = 6 months to a Year; 2 = 1-2 years; 3 = More than 2 years)
2. Which of the following types of engagement have you had with the POPPS program? Please select all that apply. (0 = Case Management; 1 = Peer Support; 2 = Facebook Groups; 3 = Zoom Groups; 4= Other)
3. Overall, how satisfied are you with POPPS services? (0 = Not Satisfied; 1 = Satisfied; 2 = Somewhat Satisfied; 3= Very Satisfied; 4 = Extremely Satisfied)
4. Are the POPPS services meeting your needs? (0 = No; 1 = Yes)
5. After engaging with POPPS services, did you feel more stable in your mental health) (0 = No; 1 = Somewhat; 3 = Yes)
6. After engaging with POPPS services, did you feel more stable in your substance use recovery? (0 = No; 1 = Somewhat; 2 = Yes)
7. How likely are you to continue to access POPPS services? (1 = Absolutely Not Likely; 1 = Not So Likely; 2 = Somewhat Likely; 3 = Very Likely; 4 = Extremely Likely)

We present the descriptive statistics of the October 2019 wave in Table 54.

[2] We modified variable coding from the original survey such that higher values for a variable indicate higher levels of the variable under consideration (i.e., 0 = no Facebook services used; 1 = Facebook services used or 0 = Not Satisfied; 4 = Extremely Satisfied) to ease aid of interpretation.

Table 53. Descriptive Statistics for October 2019 Survey Wave

Variable	*Mean*	*Median*	*St. Dev*	*Min*	*Pct (25%)*	*Pct (75%)*	*Max*	*N*
Access Length	1.87	2.0	1.14	0	1.0	3.0	3	52
Services: CM	0.90	1	0.30	0	1	1	1	52
Services: PS	0.39	0	0.49	0	0	1	1	52
Services: Facebook	0.65	1	0.48	0	0	1	1	52
Services: Zoom	0.40	0	0.50	0	0	1	1	52
Satisfaction	3.62	4	0.77	0	3	4	4	52
Needs Met	0.98	1	0.13	0	1	1	1	52
Mental Health Stability	0.90	1	0.30	0	1	1	1	52
Substance Use Recovery Stability	0.98	1	0.14	0	1	1	1	51
Continuing	1.75	2	0.48	0	2	2	2	52

From Table 53, we note that a majority 82.7% (N = 43) of respondents indicated accessing services for over six months. On average, of the listed services, majorities of respondents used case management services (90%; N = 47) and Facebook groups (65%; N = 34). Large majorities of respondents reported mental health stability (90%; N = 47) and substance use recovery (98%; N = 50) and indicated that they felt their needs were met (98.1%; N = 51). Most respondents (98%; N = 51) indicated they felt they would continue making use of POPPS services in the future. Respondents also had the option of providing open-ended feedback specifically about both (1) types of POPPS resources they perceived to be the most valuable and (2) any additional comments they had for program staff which we produce in Table 54 below. In terms of POPPS resources, most respondents indicated that food boxes, gas cards, and bus passes were particularly helpful to them.

Table 54. Most Commonly Identified Incentives in October 2019 Survey

	Mentioned	*Percent*
Bus Passes	8	15.4%
Food Boxes	28	53.8%
Motel Vouchers	5	9.6%
Gas Cards	7	13.5%
Phone Cards	5	9.6%

In terms of additional comments respondents offered, overall sentiment about the program was highly positive reflecting sentiments such as this:

> *Just knowing that you guys are always there no matter what I'm very grateful for the staff that we have. You're all doing an awesome job and I love Crossroads they saved my life.*

The January 2021 survey had a sample size of 51 clients with a completion rate of 19.9% (N = 261). The January 2021 survey asked clients the following questions:

- How long have you accessed POPSS (aftercare services) services? (0 = less than 6 months; 1 = 6 months or more)
- What services have you accessed with POPSS. Select all that apply. (0 = Case Management; 1 = Peer Support Services; 3 = Groups; 4= Vocational Services; 5 = Accessing Resources)
- After accessing POPSS services did you feel stable in your mental health? (0 = No; 1 = Yes)
- After accessing POPSS services did you feel stable in your substance use recovery? (0 = No; 1 = Yes)
- Do you feel like your needs are being met by the POPSS program? (0 = No; 1 = Yes)

We present the descriptive statistics of the January 2021 wave in Table 55.

Table 55. Descriptive Statistics of Client Satisfaction Surveys (January 2021)

Variable	*Mean*	*Median*	*St. Dev*	*Min*	*Pct (25%)*	*Pct (75%)*	*Max*	*N*
Access Length	0.61	1	0.49	0	0	1	1	51
Services: Case Management	0.77	1	0.43	0	1	1	1	52
Services: Peer Support	0.48	0	0.51	0	0	1	1	52
Services: Groups	0.42	0	0.50	0	0	1	1	52
Services: Vocational	0.29	0	0.46	0	0	1	1	52
Services: Resources	0.50	0.5	0.51	0	0	1	1	52
Mental Health Stability	0.92	1	0.27	0	1	1	1	51
Substance Use Recovery Stability	0.94	1	0.24	0	1	1	1	50
Needs Met	0.96	1	0.19	0	1	1	1	52

From Table 55, we note that a majority, 61% (N = 31) of respondents indicated accessing services for over 6 months. On average, of the listed services, respondents accessed 2.70 services with the most common service utilized being case management services (77%; N = 40). Large majorities of respondents reported mental health stability (92%; N = 47) and substance use recovery (94%; N = 47) and indicated that they felt their needs were met by the POPPS program (96.2%; N = 50). Respondents also were able to enter comments and suggestions for POPPS program staff. As with the October 2019 wave, a large majority of respondents indicated favorable attitudes toward services they were receiving. Below are some sample comments from clients which typify respondent attitudes.

> *If I didn't have Maya's place or Crossroads I wouldn't be where I am today!*
>
> *I love the community of people. Crossroads and POPSS have helped me in any way they can. I love the team of support it's a great program. I don't go to any groups but I'm going to start.*

When clients did note areas where the POPPS program could be improved, the typical comment related to a client desiring more contact from their case managers.

Staff Interviews

We conducted 5 interviews with staff at CRFW including peer support staff and other administrative personnel. Interviews were conducted by one trained researcher using the semi-structured interview guide

available in Appendix B and took between 20 and 90 minutes to complete. We took notes during each interview, and all interviews were audio-recorded. After each interview, we wrote up expanded notes in full. A few common themes emerged from the interviews which we highlight in Table 56 and Table 57 below which identify various factors which facilitated or impeded the delivery of peer case management services which were mentioned by, at minimum, two staff members. We split the tables into areas where staff perceived program success – what we term facilitating factors (Table 56) – and areas where staff perceived areas for program improvement – what we term impeding factors (Table 57).

Table 56. Facilitating Factors

Factors
• All staff indicated the work environment was supportive and non-hierarchical (i.e., open door policy; nonjudgmental staff; high levels of flexibility; high levels of collaboration across staff). • Staff had positive levels of overall workplace satisfaction ($\bar{x}$ = 6.6 on 7-point scale). • Most staff agreed on definitions of program success (i.e., percentage of women in recovery; engagement in groups). • In general, most staff believed the POPPS program was successful in achieving its goals. • Among staff with case management responsibilities, there were high perceptions of client similarity (i.e., peerness; $\bar{x}$ = 6.67 on 7-point scale) and satisfaction with client relationships ($\bar{x}$ = 6.0 on 7-point scale). • In general, staff had high perceptions of training and certification usefulness ($\bar{x}$ = 6.25 on 7-point scale). Most staff indicated there were many opportunities for training and professional development (i.e., maintenance of CPSW certification through CEUs). • In general, PFI scores for CRFW were high ($\bar{x}$ = 2.83 on 4-point scale) indicating high levels of professional fulfillment.

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Table 57. Impeding Factors

Factors
• Some staff expressed concerns about staffing and caseloads (i.e., small number of staff for an expanding client base; new program growing pains). • Some staff noted the program did not make much use of intensive case management because of the sporadic nature of client-contact. This led to a belief the program was more similar to a peer drop-in center since clients accessed services on an as-needed basis and given limited staffing capacity (i.e., not much of opportunity to update client service plans because of infrequent contact with clients). • Some staff indicated there were difficulties working with the client population (i.e., clients have difficulty achieving independence; housing is limited and the criminal histories of clients restricts ability to access housing services; some clients violate boundaries; challenges associated with ID acquisition). • Some staff indicated it could be difficult for clients to sustain gains made in program (i.e., housing) due to Covid-19. • Some staff indicated there were supply-demand imbalances for clients using the incentive program (i.e., more clients needed incentives than could be provided).

Service Delivery

In general, most participants agreed on the primary goals of the POPPS program and perceived existing referral streams from CRFW and the two therapeutic communities to be satisfactory. In terms of the dosage of case management services provided to clients, most participants who provided case management services noted that the number of interactions they had with clients was a function of the severity of needs clients had with some types of needs (i.e., food needs) necessitating only one appointment with case management staff and clients with more intensive needs (i.e., housing) necessitating more frequent interactions. Prior to Covid-19, case management services occurred more regularly in the form of in-person interactions with clients. A number of community events – including nights at Cliff's Amusement Park and Painting with a Twist – were used to foster a sense of community among the client base and to integrate POPPS clients with other CRFW clients. After Covid-19, participants noted they would still provide case management services to clients in the form of home visits on an as-needed basis (i.e., dropping off food boxes, diapers, and/or cleaning supplies at client homes), though most case management became telephonic, and other services such as therapeutic groups became increasingly virtual in delivery. However, CRFW resumed limited in-person groups in August 2020 limiting group totals to 10 person and gradually started folding in in-person and office-based groups before reverting back to virtual services in October 2020 in response to heightened Covid-rates. Many participants identified the private Facebook CRFW Butterflies group for CRFW program alumni as an active source of client engagement with the number of group members reportedly doubling since the onset of Covid-19 in March 2020. Relatedly, program outreach was predominantly conducted via group text messaging, Facebook posts, and Facebook Messenger. The use of Facebook Live on Fridays was designed to provide weekend support to program alumni with messaging focusing on topics such as relapse prevention, healthy local activities for women, upcoming events, and crisis support reminders.

CRFW had an incentive program which allowed clients to receive signatures for attending case management sessions, engaging actively with CRFW's groups, and attending socialization events. Clients could exchange these signatures for incentives such as: $20 Walmart gift cards, $20 Smiths gift cards, $20 Dollar Tree gift cards, and holiday wish lists. Participants noted that they received client feedback at

monthly client-advisory board meetings and through the use of quarterly client satisfaction surveys and that they used the information received in both contexts to inform the types of incentives they offered to clients for program participation. Participants reported that the program spent $4,954 on motivational incentives including bus passes and gift cards and an additional $11,245.69 on client costs such as PNM bills for clients, the Night of Excellence event expenses, and hygiene. Participants noted broad client participation in the incentives program and generally perceived the incentives program as effective for increasing client participation.

However, Covid-19 influenced the nature and scope of CRFW's incentives program due to reported increases in the demand for incentives. This increase in demand was reported to be related to both increases in program enrollment and more pronounced economic needs by clients. Because of this, CRFW placed limitations on the number of incentives a client could receive on a monthly basis (i.e., clients were limited to 1 Walmart Card; 2 Smiths Card; 1 Dollar Tree card per month). Participants noted that there were some difficulties tracking signatures for the incentives program during this time which were typically logged in the AWARDs database. One issue identified with the incentives program in the few months after March 2020 was that clients would log in to Facebook Live groups for relatively short durations (< 5 minutes) and receive signature credits despite not participating in earnest. However, participants noted that this behavior was reduced once the program director met with clients to discuss the issue.

Relatedly, multiple staff indicated that Covid-19 depressed opportunities for clients to access housing and job opportunities for clients making it difficult for clients to sustain housing and job gains made in the program. To this end, some participants noted that CRFW was able to secure rental assistance funding in the summer of 2020 to help support clients with housing needs.

However, there were also some operational issues Covid-19 engendered as well. Specifically, CRFW had to reduce the number of beds available in both therapeutic communities to comply with social distancing guidelines. Additionally, one of the community houses at The Pavilions had to close for two months due to water damage. The nature of remote work presented barriers to service delivery and interagency coordination, as one participant noted:

> *I do think we have seen an increase in connections, especially because of Covid, because it has been not so, not disorganized, but so discombobulated in terms of what resources they [the client base] can access at any one time because of Covid whether MVD or Social Security or things like that so we've actually seen a dramatic increase over the last year, and we've identified new resources to provide so we've seen a lot more connection because of our ability to access resources like motel vouchers.*

Covid-19 also impacted staffing at CRFW. In November 2020, a number of staff at CRFW were diagnosed with Covid-19. CRFW was able to rotate healthy staff in to cover for some of the CRFW staff during this time period.

Reasons for discharge were expanded upon in the interview process. Specifically, a client could be discharged for physical assault or threats of violence, the possession of illegal substances on CRFW grounds, stealing from CRFW, repeatedly missing groups and/or not meeting with case managers, or being kicked out of housing. However, there was some unclarity surrounding when a client re-entered the program after extended inactivity.

Training and Certification

All peer case management staff indicated seeing value in training ($\bar{x}$ = 6.25 on 7-point scale) and the acquisition of state-certifications for peer support. All staff reported having received training in MI and strengths-based case management. However, some case management staff reported not always incorporating MI techniques into the delivery of their case management services. Other forms of training mentioned in the interviewing process that staff received included training in harm reduction practices. In terms of formal training certifications, 100% (N = 3) of CRFW's peer case management or peer support staff indicated having received formal state-certifications as Certified Peer Support Workers (CPSW) or Certified Peer Support Specialists (CPSS).

Intake and Screening

Most participants described a common process for screening and assessment at CRFW. Participants suggested that the screening and assessment process would typically work in the following manner. First, a potential-client would be initially referred to CRFW through contacts – typically either transition officers or parole officers – at the New Mexico Department of Corrections. Once potential clients graduated from the therapeutic communities (i.e., Maya's Place or Pavilions), they would be informed of the POPPS program through weekly CRFW case manager outreach at the communities. Individuals who had completed CRFW program internally were emailed upon graduation to inform them of the existence of the POPPS program and available resources. Clinical assessments were performed prior to a client entering the POPPS program by trained clinicians affiliated with the therapeutic communities or by the licensed substance abuse specialist on staff. Participants indicated that clinical assessments would be re-administered on an as-needed basis throughout program participation.

Once an individual was referred to the POPPS program, their information (i.e., demographics) would be inputted into the AWARDs system database. Clients would complete an intake form with case managers within 90 days of referral. The intake process usually involved completion of the POPPS Questionnaire to assess client SDOH needs as well as the construction of individual treatment plans where clients would identify a number of goals they wanted to work on. However, participants noted not always administering the POPPS questionnaire at the point of intake. Typically, at the point of intake, case managers provided clients with information on how to access online groups (i.e., the private Facebook Butterflies community page) and information describing the incentives program at CRFW. Clients would also complete a telehealth consent form given high frequency of virtual meetings in the post-Covid era. Participants indicated re-administering the POPPS questionnaire and updating treatment plans at different time points as a client progressed through the program. For instance, some staff indicated re-administering the POPPS questionnaire every 90 days if they had not heard from a client whereas other staff indicated re-administering the POPPS questionnaire every 30 days after meeting with a client in-person. Participants indicated updating the service plans every 90 days as well if they were able to establish contact with clients.

Evidence-Based Practices

In general, a majority of case management staff reported integrating evidence-based practices into their case management practices, most commonly referencing the use of Motivational Interviewing practices and strengths-based case management. Participants also mentioned using harm reduction practices, noting that they would connect clients with needle-exchanges if needed. However, some staff indicated that they did not always use MI in every session and some staff indicated using a blend of evidence-based practices and non-evidence-based practices. To this end, one participant noted:

CRFW in general is based on the teachings of Stephanie Covington, and those are evidence-based practices. We use those and also Stephanie Covington's curriculums for our groups because they were created for women…and that forms the foundation of what happens in each of our programs whether POPPS or any of our other programs, so evidence-based practices are important. But I will say that we do incorporate things that the women want to see that people wouldn't say are necessarily evidence-based but our women want to see this so we are like "Ok" because we are a holistic program so we want to ensure we provide a wide variety of tools so we want to balance our evidence-based practices with what our women want to see.

Additionally, a few participants indicated they did not perceive the services offered through the POPPS program as constituting intensive case management. To this point, one participant noted:

The POPPS program is probably our least intensive case management and that's because it is voluntary and often it is focused on crisis intervention which we do use. And so we use crisis intervention techniques in that [the POPPS] program more so in other programs and more harm reduction in the POPPS program and more MI in that program than any other program.

Service Plan Development

Participants noted that treatment plans were completed during intake. Staff would use strengths-based case management to discuss client strengths and immediate needs. They would then discuss which goals a client had. However, there were some challenges associated with tracking treatment plan progress over time identified by multiple staff related to client drop-off. For instance, one participant noted:

And the issue though with the treatment plans with this program is because we are sort of like a drop-in center, and women are coming to access things on an as-needed basis, there hasn't been a lot of opportunity to update treatment plans because I might hear from one person but I might not hear again from them for 30 or 60 days so that's been kind of hard.

Client Relations

Participants whose job responsibilities partially or at some point involved the provision of peer case management services typically perceived themselves as similar to the clients that they served (X = 6.67 on 7-point scale where 7 = "Very Similar") and perceived relationships with their clients to be satisfactory (X = 6.00 on 7-point scale where 7 = "Very Satisfactory"). Common issues case managers identified in working with their client population, where they existed, included establishing and maintaining contact with clients (i.e., client contact information could become out-of-date), difficulties engaging with some clients who had mental health issues, and difficulties with clients' level of independence. Some participants also noted that requests for mental health referrals, housing referrals, and substance abuse treatment increased due to the Covid-19 pandemic. Another issue identified was that it could be difficult to secure housing for clients who had criminal backgrounds as well as with securing various forms of identification. Case managers emphasized transparency and utilizing client-centric approaches as important factors in developing a rapport with clients.

Database

Participants indicated that they tracked the delivery of case management services and other client information through the AWARDs database. Participants did not indicate they had difficulties inputting information into the system and generally perceived the EMR software and tracking as being up to date.

Workplace Satisfaction

In general, PFI scores at CRFW were high ($\bar{x}$ = 2.83 on 4-point scale). Additionally, participants generally perceived positive relations between peer case managers and other staff ($\bar{x}$ = 6.6 on 7-point scale). Participants generally indicated feeling supported by both clinical staff and higher-level management and felt satisfied with the quality of supervision and leadership they received at work ($\bar{x}$ = 6.6 on 7-point scale).

Discussion and Conclusion

In what follows, we review the limitations to the present report, provide evidence-based recommendations to address data-quality concerns and some of the concerns providers identified in the interviewing process, and summarize key study findings.

Limitations

As with any study, the present process evaluation has several limitations which limit the ability to extrapolate from the data. We address the limitations of each data type in brief here and provide some recommendations on how to remedy some of these limitations in the subsequent *Recommendations* subsection.

Performance Measure Data

The ability to draw meaningful conclusions on the basis of performance measure data is limited given issues associated with (a) ambiguity in performance measure meaning (i.e., uncertainty surrounding how measures are computed, such as total client counts, or the data sources of some measures), (b) performance measure aggregation (i.e., composite measures which combine individual measures in ways which are unclear), (c) performance measures' unknown psychometric properties (i.e., reliability; sensitivity), (d) inaccurate Excel formulas (i.e., total and continuing client counts overstate program enrollment; percent of clients remaining enrolled in services did not use the more appropriate weighted average measure which adjusts averages for sample size), (e) demographic measures being reported at the provider-level and not the program-level, and (f) the omission of performance measure variables identified in the original provider contracts (i.e., number of staff trainings). More generally, given the evolution of performance measures over time and changes in the Excel templates for performance measure reporting over time, it is difficult to assess meaningful longitudinal change in a plurality of performance measures.

Client-Level Data

We were able to gather client-level data from both providers within approximately two months of our initial data pull request and, in general, were satisfied with the scope of data included, the formatting of the data, and the degree of provider cooperation, though some of the data predictably required cleaning, transformation, and recoding on our end. After the initial data extractions, we followed up with both providers more than once to receive clarification about (a) inconsistencies we noticed in the data if we detected them or (b) ambiguity in the values of response categories for some of the variables we requested data on.

However, there are some limitations to the client-level data which we note. First, across providers, both baseline and follow-up data collection for clients – specifically, relevant screening and assessment tools (i.e., SDOH and C-SSR) was sporadic [i.e., only 31.1% (N = 188) of 604 clients completed 1 or more SDOH assessments across both providers and less than 1% (N = 14) of 604 clients completed C-SSR screening] which poses challenges for analyzing the data and making comparisons, especially over time, as very few clients were given re-assessments and even then, re-assessments were not administered at consistent time intervals. This limits the statistical power to detect meaningful program effects and the inconsistent re-administration of such tools may result in a survivorship and selection biases favoring longer-term clients who are doing better in the program versus clients who disengage and withdraw from active program participation. Secondly, some of the data we received contained inaccuracies (i.e., columns with information on the number of goals a client achieved included values inconsistent with our data schema crosswalk). Third, while both providers incidentally reported data above and beyond what we requested in the crosswalk schema and which ended up being helpful for our analyses, we wish we had included some additional variables in our initial data request for both providers (i.e., mode of case management meetings; number of overall contacts and number of successful contacts; external referral minutes and contacts). Finally, while Centro Sávila did report some data on clients served at the WEHC location, we did not receive any screening, assessment, or case management service data for this portion of the client base. These gaps in the data – which constitute roughly a quarter of all Centro Sávila clients – paired with the non-inclusion of WEHC clients in client satisfaction surveys – is sizable. While we recognize that case managers face pressures to be responsive to the immediate and unique needs of the client base served at the WEHC and that immediate triaging needs often override data-collection protocols and while we recognize that there is a lack of institutional capacity and support at the WEHC which complicates data collection, the sparseness of specific data on this population makes it difficult to draw any definitive conclusions about what case management does or does not look like at WEHC and which services are or are not helpful for this client base.

Client-Satisfaction Survey Data

Per their contracts, both providers noted they would conduct quarterly client satisfaction surveys. We received, in total, three quarterly satisfaction surveys for both providers. Thus, the client satisfaction survey data we examined did not represent all waves of each programs' client satisfaction surveys. Another complication is that it is unclear how to calculate survey response rates given a lack of information on the appropriate denominators (i.e., the survey files did not contain information on the total number of surveys sent out in each wave). Third, there are open questions about the degree of sample representativeness given the small sample sizes for all three surveys and given both the skew in the demographic profiles of survey participants and the sites considered for sampling. For instance, in Centro Sávila's survey data, despite 48.6% of the overall PCM client base being women, 90.0% of survey respondents were women. Further, Centro Sávila 's client satisfaction data excluded clients at the WEHC location. Who agrees to voluntarily self-select to participate in surveys may represent the tails of the distribution of opinion given stronger incentives to reply to surveys when one feels strongly about the survey's subject matter (i.e., highly negatively or highly positively) and can also be influenced by other client-side characteristics which correlate with outcome measures of interest (i.e., opportunity costs associated with completing a survey). CRFW did not collect data on client demographic characteristics in their client satisfaction surveys. Thus,

it is possible that the results of client satisfaction results may not generalize to the broader client base if the reasons for why clients choose not to participate or the demographic imbalances – where they exist – between survey takers and non-survey takers correlate with measured outcomes and should be interpreted with due caution. Finally, there were some question-wording and response option practices which could be improved given best practices from survey methodology research. For instance, some questions included in the client satisfaction surveys had narrower response ranges than is typically recommended in the survey methodology literature. Typically, questions which have five-to-seven response options are more desirable than questions with three or four response options or binary options (i.e., Yes/No) as they permit the researcher a greater ability to detect statistically meaningful differences and more nuanced gradations of opinion. To this point, Preston and Colman (2000) note:

> *On several indices of reliability, validity, and discriminating power, the two-point, three-point, and four-point scales performed relatively poorly, and indices were significantly higher for scales with more response categories, up to about 7. Internal consistency did not differ significantly between scales, but test–retest reliability tended to decrease for scales with more than 10 response categories. Respondent preferences were highest for the 10-point scale, closely followed by the seven-point and nine-point scales. Implications for research and practice are discussed.* (p. 1)

In addition, some questions violated the principle of survey endpoint parallelism which could artificially skew responses toward the tails of the distribution by, for instance, including non-equivalent endpoints of the scale (i.e., including endpoints of "Very Unsatisfied and Very Satisfied" is better practice than "Very Poor" and "Very Satisfied"), and some questions were not necessarily psychometrically-sound ways of assessing client-level outcomes (i.e., asking if someone's mental health improved does not tell one whether it actually did, and respondents can be biased toward answering questions about behavior like substance abuse in socially-desirable ways). We encourage providers to consider these points going forward and also encourage providers to collect more data on relevant demographic characteristics (i.e., age, income, sex, race, ethnicity, etc.) such that the results of the client satisfaction surveys can be more granularly analyzed to assess variation across clients in satisfaction which can, in turn, help programs develop more effective and targeted service delivery.

Interview Data

We conducted interviews with 15 staff at both providers for an overall response rate of 83.3% (N = 15/18). However, throughout the interview process, participants informed us of additional program staff who would have been good candidates for the interview sampling frame (i.e., new program hires) who were not included in the initial sampling frame from the emailed lists we had received. However, we could not interview these individuals due to the time-bound recruitment frame stipulated in our IRB application. Additionally, interviews occurred within the first quarter of 2021 (January 2021 – March 2021). A number of programmatic changes occurred during this time – for instance, the first set of program changes associated with Centro Sávila 's Strategic Initiative Plan. Thus, the interview results we obtained represent a snapshot of opinion at one discrete time point and do not necessarily allow us to make inferences about how interviewees felt at other stages of program implementation. Third, the interpretation of the quantitative data obtained in the interviews can be suggestive, but the inferential power of this data is limited due to common small-sample biases (i.e., it only takes one respondent answering with a one on a 7-point

scale to drive average estimates downwards). Fourth, there were some interviewing questions which, in retrospect, we wish we had included in the interview guide (i.e., workplace burnout in the PFI scale; questions about staff onboarding procedures; questions about how peer support staff made their peerness evident to clients), some questions in the interview guide which were suboptimal in design or question wording (i.e., we often needed to provide additional clarification on questions where we asked participants to assess whether their programs use evidence-based practices and for questions where we asked peer support workers about their perceptions of their peerness given interviewee confusion over the terms evidence-base and peerness), and some questions we wish we had omitted due to redundancy in content which may have increased interview length unnecessarily.

Recommendations for Providers

Strategies for Clearer Performance Measure Reporting

There were a few issues identified with performance measure reporting – some unique to each provider – which can be modified which will help improve the clarity of performance measure results in the future. We recognize that some of these issues are more easily resolvable than others and that there are some reasonable defenses for a subset of these issues which can be offered (i.e., a desire not to burden clients with excessive scale administration; the amount of time to extract data from EMR systems). We also recognize that providers were in an implementation pilot phase for the first year of their programs' existence and that performance measures evolved over time as more institutional knowledge was acquired. However, making at least some of the following recommended improvements identified below in Table 58 could generally help improve the quality of performance measure reporting and lead to more accurate programmatic insights going forward.

CONTINUE TO NEXT PAGE

Table 58. Performance Measure Issues and Recommendations

Issue	*Recommendation*
Client counts are ambiguous (i.e., Who is a continuing client? Are they a client enrolled specifically in the program or more generally in the organization? Are they double-counted month-to-month?)	Our recommendation is to only include clients enrolled in the program in the total client calculation. We also note that running totals for "Total Clients" should not simply use Excel formulas which sum total and continuing clients for each month given that this summation duplicates continuing clients across months which leads to an overstatement of total clients in the performance measure data.
Some variables should be decomposed to allow for more granular insights (i.e., combining the number of clients with improved mental health and substance use together into one variable does not allow one to understand differential improvements in each category).	Our recommendation is to break variables – such as number of clients with improved mental health and substance use – into two different variables and report each separately.
The measurement of some performance measure variables could be enhanced by using psychometrically-validated scales (i.e., asking a subset of clients a single-question about if their mental health improved is not adequate for assessing true mental health improvements given both (1) issues with single-item measures of complex phenomena and (2) familiar self-report biases related to social desirability.	Our recommendation is to rely on existing program scales available in EMRs – instead of single-item self-report questions – to assess changes in mental health or substance use over time, if feasible. This will allow for a more accurate depiction of improvement. There are also short-form scales (i.e., PHQ – 9; WHODAS 2.0) which take < 3 minutes to administer which could be considered.
Some variables are inappropriately computed in the Excel spreadsheets (i.e., % of continuing clients).	One recommendation is to verify that the computation of variables in the Excel spreadsheets is accurate (i.e., make use of weighted-averages where appropriate instead of taking the average of averages without adjusting for different sample sizes in different months).
Some variables are vague (i.e., Is the number of clients who reportedly reach their goals each month all of their treatment plan goals or just one goal? How is a decrease in severity measured?) and are not clearly defined in the narrative description section of Excel sheets. Relatedly, some sheet indicators are unclear.	Our recommendation is to provide a codebook in a new sheet in the Excel file which specifically explains the data used to generate each variable, including question-wording, if applicable, and source. If a provider changes how they measure a performance measure, the provider should indicate (1) how the performance measure changed, (2) when it changed, and (3) why it changed.

Demographic data are reported for all provider clients and not just program participants.	Our recommendation is that data should only be reported at the program-level and not the provider-level.
Not all contracted performance measures are recorded.	Our recommendation is to reach out to the appropriate DBHS staff for technical assistance for collecting additional variables.

Strategies for Increasing Attendance Rates and Intensiveness

A systematic review by Ponka et al. (2020) on ICM notes:

> *ICM helps service users maintain housing and achieve a better quality of life through the support of a case manager that brokers access to an array of services. The case manager accompanies the service user to meetings and can be available for up to 12 hours per day, 7 days a week. Case managers for ICM often have a caseload of 15–20 service users each…Case management interventions may be most effective when they target specific complex populations or times of transition with more effective interventions that involve low caseloads, greater intensity and continuity of contact time, and direct service provision in addition to mere coordination.* (p. 5)

Both providers indicated that it was difficult, at times, to encourage continual engagement in their PCM programs, particularly given the voluntariness associated with harm-reduction approaches to case management and common issues establishing and maintaining contact with their respective client bases including clients' limited access to phones, reliable Internet, and reliable transportation. These challenges are not unique to these providers and are relatively common for behavioral health providers: for instance, a 2013 systematic review reported that approximately 40-54% of homeless patients owned a cell phone relative to 84% of homed-individuals who did own a cell phone (McInnes, Li, and Hogan 2013).

Providers seemed aware of the possibility of low program engagement rates at earlier stages of program implementation and noted that it is important to understand the reasons for low-level engagement. For instance, in their monthly narrative from their performance measure report from July 2019, CRFW staff noted:

> *When we designed the program, we anticipated that POPSS clients would engage with the program once or twice to address specific issues and then there would be long periods where they did not engage with the case manager. We have been surprised at the number of women who want to engage regularly for longer periods. To ensure that we are offering a truly client-driven program, we want to ensure that our processes match the needs of the clients. It's perfectly acceptable for a client to drop in for support around a single issue or to continue with more sustained engagement.*

The issue of low program engagement and attendance rates – and having a better understanding of the reasons underlying both – are important to think about when considering (a) the scale of a program's reach, (b) potential biases in the data for outcome evaluation, and (c) cost-effectiveness. It is also worth considering how a program formally defines client disengagement and discharge procedures given the

vulnerabilities of the populations being served and the possibility of duplication upon service re-entry after longer periods of program disengagement. Speaking to this point, an article by Mitchell and Selmes (2007) notes:

> *In most psychiatric specialties in the United Kingdom, two or three episodes of nonattendance elicit the withdrawal of that service, with no attempt to contact the patient personally. Yet there is general acceptance that unexpected loss of contact with a patient who has established symptoms is more likely to signify increased rather than absent mental health needs. We suggest that whenever possible, clinicians should consider potential causes of nonattendance before discontinuing any services unilaterally. Likelihood of initial nonattendance reflects patient beliefs and insight, source of the referral, and barriers to care (such as distance and cost). These continue to influence follow-up attendance, as do important interpersonal influences, such as therapeutic alliance and perceived helpfulness. Special consideration is needed for individuals whose first language is not the same as the one used by the health professional and for those with cognitive impairment or limited social support.* (p. 871)

Most existing research finds that ongoing substance use during treatment and diagnosis with an SMI is consistently correlated with lower meeting attendance (Penzenstadler et al., 2019). Demographic variables, interestingly, typically display inconsistent relationships with attendance and continual program enrollment, though in our review of client-level data, we did find suggestive evidence that age positively correlated with higher rates of peer case management service utilization. It is important to consider the statistical effect that variability in client attrition rates may have on evaluating outcomes downstream: the likelihood of survivorship bias, for instance, increases if clients who leave the program for long periods are clients with higher levels of severity or if the reason for disengagement (i.e., homelessness) correlates with outcomes we want to measure (i.e., housing stability). Further, the peer-reviewed literature suggests that appointment adherence can have a negative impact on client health, provider productivity, and can result in reduced cost-effectiveness (Mohammadi et al. 2018).

The challenges with client program engagement manifest in two primary ways in the client-level data we reviewed for both providers: an overall low volume of case management contacts and noncompliance rates for scheduled case management meetings. For instance, while all of the 374 clients considered in Centro Sávila's analysis had at least one case management meeting scheduled, 12.6% (N = 47) of clients attended no meetings with their case manager and 61.50% (N = 230) of clients only attended one case management meeting with their case manager. Thus, the overall dosage of case management services provided for most clients was comparatively low as 74.1% of clients met with case managers no more than one time. While the typical client at CRFW had 4.10 contacts with their case managers, 21.3% (N = 27) of CRFW clients logged no more than one contact with their case manager. Additionally, 52.7% of CRFW's case management contacts were not face-to-face and 45.7% (N = 58) of clients never met with a case manager in-person or on the phone.

The evidence-base on client retention for behavioral health programs suggest a few strategies for increasing client retention rates and engagement, some of which the providers have already adopted and others the providers have not. The feasibility of adopting these strategies will vary as a function of provider resources

and broader environmental and system-level factors. To improve client retention rates, Orwin et al. (1999) suggest that providers:

- Eliminate or decrease waiting times between enrollment and entry.
- Orient clients with a realistic view of program expectations.
- Increase contact with case managers.
- Make services more accessible (e.g., by scheduling more hours when services are available).
- Improve program facility environment.
- Improve responsiveness to client-specified needs (e.g., housing).
- Invite families to come to the program early to increase their understanding of the program.
- Increase opportunities for recreation and self-improvement.
- Improve relapse prevention efforts.

Additionally, a recent systematic review by McClean et al. (2016) suggests that the inclusion of reminder systems – specifically, those which include additional information including appointment date, time, and place but also information on orientation and health – are effective at reducing appointment non-attendance. We also want to draw providers' attention to a 2010 report by The United States Department of Housing and Urban Development (HUD), "Strategies for Improving Homeless People's Access to Mainstream Benefits and Services" which featured CRFW. The HUD report provides a number of actionable recommendations to address some of the common challenges providers mentioned in the interviewing process and which were evident in the client-level data with respect to primary client goals and SDOH needs, including advice on how to overcome service barriers associated with: geographic and transportation barriers, negative office atmospheres and stigmatization, the complexity and cognitive demands of lengthy benefit applications, ID and documentation requirements, the complexities of maintaining enrollment, staff system knowledge, and broader system interaction problems. For instance, the HUD reports identifies the following mechanisms as ways providers can address common difficulties associated with client transportation:

- Many homeless services providers simply use program funds to provide transportation, often in the form of an agency van, or in tokens for taxis or public transportation.
- Others went a step further and located their agencies and programs to alleviate problems of transportation, setting up in close proximity to benefit offices
- Many mainstream agencies in study communities outstation workers—that is, workers from a program or agency go to homeless assistance programs during regularly scheduled times to do intakes and deliver services. In addition to alleviating issues of program knowledge and system interaction, workers from various agencies and programs go to service sites such as shelters, emergency rooms, and day centers to bring benefit applications and information to homeless clients
- Outreach workers also provide some measure of transportation assistance by either bringing applications for people to fill out without their having to come into the office, or by arranging transportation services once they make the initial contact, as is the case with Denver Outreach Collaborative.
- Multi-service centers, at which users may access multiple services and benefits, are an effective tool for minimizing travel expenses as well as integrating services, as discussed below.

We encourage both providers to review the recommendations contained in the HUD report to address existing challenges with enrollment and program engagement where feasible. However, we also recognize that there are systemic limitations which constrain providers' abilities to adopt some of these recommendations. For instance, while one of the HUD report recommendations is to increase client contact rates with case managers, we recognize that this goal can be difficult to achieve given limited staffing, unanticipated temporal surges in the client base, and access to reliable technology. We also recognize that broader systems-level factors are often beyond the control of providers (i.e., recommendations for improved responsiveness for client housing needs are constrained by broader market forces of supply-and-demand).

Timing and Scope of Screening and Assessment Tools

Another issue we want to highlight is the timing and scope of the delivery of screening and assessment tools given that our process evaluation revealed that there were inconsistencies with when screening and assessment tools were administered between the process maps, interviews, and client-level data and given the comparatively low rates of scale administration across both providers and even lower rates of scale re-administration. Specifically, providers' initial process maps indicated that screening tools (i.e., WellRx and POPPS Screening Tool II) would be re-administered at periodic intervals (i.e., 90 days) whereas in practice, these scales often were either not re-administered a second time or were re-administered at inconsistent time points (i.e., 152 days after initial administration). Our interviews also revealed that there was some confusion across participants regarding when these scales should be administered. Further, some scales that case managers reported receiving training in and which were identified in provider contracts (i.e., ACES; C-SSR) were used very sparingly in practice (i.e., 0% of clients were ACE screened; < 1% of clients were screened for suicidality using the C-SSR) despite SAMSHA's recommendations that *all clients* [emphasis added]—particularly those who have experienced trauma—should be screened for suicidality (see, for instance, TIP 50 – "Addressing Suicidal Thoughts and Behaviors in Substance Abuse Treatment").

We want to underscore the importance of re-administering scales periodically at specific, clearly-defined time points for outcome evaluation purposes: in order to assess program effectiveness, it is important to have repeated measures on behavioral health assessment tools (i.e., particularly, the SDOH screeners) in order to be able to evaluate the effect of PCM programs on behavioral health outcomes. Repeated measures of psychometrically-validated assessment tools are more reliable ways of tracking true participant progress and outperform empirically-weaker forms of assessing change in mental health (i.e., single item questions which suffer statistical reliability issues) or subjective impression-based views of client success. In the absence of repeated assessments, it can be difficult to accurately assess whether a program has its intended effect. On the provider-side, this is important information to have as it can help promote more effective service delivery downstream and lead to better serving the existing target population. On DBHS' side, this is important information to have as it can help promote cost-effectiveness in grant distribution to behavioral health providers on the basis of demonstrable change.

We recognize that there are some logistical issues associated with scale administration and re-administration that the providers flagged in the interviewing process which we will address in turn. Staff at both providers in the interviewing process indicated that they were resistant to administering screening and assessment tools due to either (1) a perception that the administration of these scales (i.e., specifically, the SDOH scales) risks re-traumatizing clients and/or (2) administration of these scales increases perceptions that the program is not organic, threatens the therapeutic alliance of case-managers with their clients and,

in so doing, risks client attrition. To address these concerns, we review SAMHSA's recommendations for trauma-informed assessment and scale delivery at the clinician-level which can be adapted by case managers and note that screening and assessment can be performed by non-case management staff (i.e., clinicians or others) in ways which are less invasive and are sensitive to the needs of clients who have experienced trauma.

First, the Department of Health and Human Services (HHS) has developed criteria for certified community behavioral health clinics (CCBHCs) related to the timing of screening tools for evaluation purposes. We replicate the criteria below from the SAMHSA website which can serve as a template for timing which providers can more explicitly articulate in their relevant program documentation (i.e., process maps):

- *A preliminary screening and risk assessment at the point of first contact with a consumer*: If the screening identifies an emergency or crisis need, an immediate response with appropriate services is required. The criteria do not specify the content of the preliminary screening and risk assessment.
- *An initial evaluation and services*: If the preliminary screening reveals emergency or urgent needs, the initial evaluation must be completed within one business day and, for urgent needs, services must be provided within one business day. If the preliminary screening reveals routine needs, the initial evaluation must be completed and services provided within 10 business days. Criterion 4.d.3 specifies the content of the initial evaluation.
- *A comprehensive person- and family-centered diagnostic and treatment planning evaluation*: This evaluation must be completed within 60 calendar days of the first request for services. Criterion 4.d.5 includes suggestions for states to consider in determining the content of this evaluation, although it is up to states to establish the final content. This criterion also recognizes that state, federal, or accreditation content requirements might already exist that apply to the CCBHC.

In terms of the providers' concerns that scale re-administration risks re-traumatizing their client base, we want to note that (1) trauma-informed care requires scale administration in order to assess trauma in the first place, (2) there are clinical and evidence-based strategies for reducing the potential harms clients feel when filling out screening and assessment tools that non-clinicians can adopt, and (3) best practices for trauma-informed care note the importance of completing these screenings. For a more comprehensive review on these considerations, we refer providers to SAMSHA's TIP 57 "Trauma Informed Care in Behavioral Health Services". For instance, TIP 57 notes:

> *As a trauma-informed counselor, you need to offer psychoeducation and support from the outset of service provision; this begins with explaining screening and assessment and with proper pacing of the initial intake and evaluation process. The client should understand the screening process, why the specific questions are important, and that he or she may choose to delay a response or to not answer a question. at all. Discussing the occurrence or consequences of traumatic events can feel as unsafe and dangerous to the client as if the event were reoccurring. It is important not to encourage avoidance of the topic or reinforce the belief that discussing trauma-related material is dangerous, but be sensitive when gathering information in the initial screening. Initial questions about trauma should be general and gradual. Taking the time to prepare and explain the screening and assessment process to the client gives him or her a greater sense of control and safety over the assessment process.* (p. 110)

The TIP provides guidelines which we replicate below which can help reduce the probability that clients feel stress when completing the SDOH screeners:

- Clarify for the client what to expect in the screening and assessment process. For example, tell the client that the screening and assessment phase focuses on identifying issues that might benefit from treatment.
- Inform him or her that during the trauma screening and assessment process, uncomfortable thoughts and feelings can arise.
- Provide reassurance that, if they do, you'll assist in dealing with this distress—but also let them know that, even with your assistance, some psychological and physical reactions to the interview may last for a few hours or perhaps as long as a few days after the interview, and be sure to highlight the fact that such reactions are normal (Read et al., 2003).
- Use self-administered, written checklists rather than interviews when possible to assess trauma.
- Interviews should coincide with self-administered tools to create a sense of safety for the client (someone is present as he or she completes the screening) and to follow up with more in-depth data gathering after a self-administered screening is complete.

Covid-19, Telehealth, and ICM Best Practices

The evaluation of the two providers' PCM programs occurred in the broader context of the Covid-19 pandemic. The pandemic influenced a number of program operations, staffing procedures, and morale. It is worth being mindful of the ways in which the specific service delivery changes engendered by Covid-19 mid-intervention – most prominently, the transition away from in-person to telephonic case management services – may influence behavioral health outcomes, differentially bias who self-selects into programs, and complicates the ability to make causal inferences about specific providers' program efficacy. The onset of the pandemic – paired with government-mandated public health orders – required nontrivial resets from both providers, resulted in statistically-significant short-term drops in program enrollment per a series of change point detection regressions, required providers to reconfigure modes of service delivery on the fly, and generated challenges for the existing client base which correlate with program outcomes (i.e., increased food insecurity; substance use relapse; increased job loss).

It is unclear whether the programmatic shifts to telephonic and virtual case management are in tension with the underlying theoretical logic of ICM. For instance, a recent network analysis by Suzuki et al. (2019) suggests that one of the definitional components of ICM involves regular face-to-face contact with case managers. If case management is primarily delivered through telephonic or virtual modes, there are breaks from model fidelity which can potentially threaten the effectiveness of the intervention if these formats reduce client-side perceptions of mutualism, closeness, and reciprocity they feel with their case managers. The delivery of virtual services also negates some of the streets-side elements of case management which are typical of ICM programs (i.e., going with clients to appointments in the field). Further, it seems reasonable to suspect that programs' client bases change when service delivery changes (i.e., those without access to reliable Internet may be less likely to participate in programs which emphasize virtual or telephonic forms of engagement, problems which seem particularly pronounced in the client populations

served by both providers given the unique vulnerabilities of these populations). To this point, CRFW noted in their performance measure narrative report from March 2020:

> *All groups have gone to an online format during Facebook live videos. This changes a lot of the group dynamics insofar as it's more public and less intimate than an in-person group. We encourage comments, but not the disclosure of a ton of personal experience just to ensure that the women's privacy is protected. This changes the dynamic between the group facilitator and the clients, moving the dynamic closer to a lecture and away from a group conversation. Nevertheless, given the circumstances, it's a good compromise.*

Following up on this point – specifically with respect to the broader point about who is using case management services – CRFW noted in their performance measure narrative report from May 2020:

> *Groups will continue in an electronic format. The regular videos and groups that happen on the program's social media page will continue. However, clients are warned that the social media page is not a HIPPA compliant format and are asked to be mindful of that fact and privacy issues when commenting on the videos. We will be transitioning some of our groups to Zoom. Attendance in those groups might decrease a bit, since clients will be learning a new way of accessing groups and it won't be quite as simple and straightforward as a Facebook Live video. However, we believe that the benefit of increasing the interactivity between the group facilitator and the clients and allowing clients to speak more openly about their thoughts and experiences is worth making the change. We are finding that a lot of our clients are missing the face to face connection they had with their peers when they were able to come to our building. Zoom won't replace all of that, but we think it will help.*

Having noted some potential challenges telehealth presents, in the interest of balance, it is worth noting some of the potential advantages telehealth approaches afford over the standard model of behavioral health care provision. For instance, a recent paper by Mochari-Greenberger and Pande (2021) highlights how the move to telehealth can overcome some established barriers to behavioral health care. We replicate a table from Mochari-Greenberger and Pande (2021) below:

CONTINUE TO NEXT PAGE

Figure 10. Barriers to Behavioral Health During COVID-19 Overcome with Virtual Health Care Delivery

Established Barriers to Behavioral Health Care	How Virtual Care Delivery Solves for Barriers
• Cost of treatment	★ Increasingly covered by health insurance plans ★ Low or no childcare or transportation costs / needs ★ Providers anywhere in the state in which you reside ★ Appointments at home or in preferred private location ★ Private and secure ★ Care can be provided outside of traditional office hours, including nights and weekends ★ Integration with physicians and other care health care professionals in your care team ★ Quality accreditation available ★ Care delivered in different languages and adapted to health literacy level
• Geographic distance to nearest provider	
• National provider shortages	
• Poor physical health	
• Privacy concerns	
• Stigma	
• Time constraints during weekday hours	
• Transportation challenges	
• Uncertainty about how treatment could help	
• Challenges finding high quality care	
Additional COVID-19 Related Challenges	
• Risk of contracting COVID-19	
• Increased strain on mental care system capacity	
• Additional time constraints due to caregiving	

Figure 1. Barriers to behavioral health during COVID-19 overcome with virtual health care delivery.

Thus, there are tradeoffs to the incorporation of telehealth services which are worth being mindful of when considering outreach and engagement activities.

Summary of Key Findings

A total of 604 clients participated in both providers' PCM programs in the time-frame considered for this process evaluation from June 2019 – April 2021. Across providers – of the clients who received case management services of any duration – clients received, on average, 151.6 minutes of case management services, though the average number of minutes of case management services provided varied by provider (177.9 minutes per client for Centro Sávila and 125.4 minutes per client for CRFW). The median number of total case management minutes provided per client – of the clients who received case management services of any duration – was 60.0 minutes per client and is equivalent for both providers. Across providers, the average duration of case management meetings was 49.2 minutes, and the median duration of case management meetings was 42.2 minutes. Across both providers, the median number of total meetings with case managers was 1.50 meetings. Additionally, across both providers, only 50.3% (N = 304) of clients met with their case managers more than one time. While all of the 374 clients considered in Centro Sávila's analysis had at least one case management meeting scheduled, 12.6% (N = 47) of clients attended no meetings with their case manager, and 61.50% (N = 230) of clients only attended one case management meeting with their case manager. Thus, the overall dosage of case management services provided for most clients was comparatively low as 74.1% of clients met with case managers no more than one time. While the typical client at CRFW had 4.10 contacts with their case managers, 21.3% (N = 27) of CRFW clients logged no more than one contact with their case manager. Additionally, 52.7% of CRFW's case management contacts were not face-to-face and 45.7% (N = 58) of clients never met with a case manager in-person or on the phone.

These low-level engagements – while not particularly unique to these providers and while potentially reflective of the specifics of clients' shorter-term needs – are at odds with the ICM models' emphasis on

high frequency, high-intensity contact between case managers and their clients and make both programs somewhat indistinguishable from other case management models. See, for instance, this table from Ponka et al. (2020) which provides an overview of different case management models and note where the distinctions between the providers' ICM programs and other case management interventions are unclear:

Figure 11. Characteristics of Case Management Models

	Standard Case Management	Intensive Case Management	Assertive Community Treatment	Critical Time Intervention
Focus of Services	Coordination of services	Comprehensive approach addressing several needs (i.e. housing, physical and mental health, addictions services etc.)	Comprehensive approach addressing several needs (i.e. housing, physical and mental health, addictions services etc.)	Targeted to continuity of care between a period of transition i.e. between precarious housing conditions (i.e. living in a shelter or discharged from hospital) and independent housing arrangements
Target Population	Homeless persons with complex health concerns	Homeless persons with the greatest service need i.e. persons with serious mental illnesses, but typically fewer hospitalizations or less functional impairments [18], and for people experiencing addictions [19].	Homeless persons with the greatest service need i.e. for persons with serious mental illness, often schizophrenia or bipolar disorder, accompanied by a history of multiple psychiatric hospitalizations and functional impairment [20].	Homeless persons at critical transitions in their lives i.e. between a shelter or hospital and independent housing
Access Point	Varies by location. Typically services are accessed through a referral by healthcare professionals (clinician, nurse, social worker, outreach worker). Some locations offer self-referral services where clients can apply for access to services on their own [21].			
Duration of Services	Time limited. once the case manager has brokered the client to a service provider, the service provider to provide ongoing support until a positive outcome is achieved [15].	Ongoing	Ongoing but transfer to lower intensity services is common after a period of stability [22,23].	Time-limited. Usually a period of 9 months after institutional discharge or placement in housing [22].
Availability of case management services		up to 12 hours per day, 7 days a week [24].	24 hours per day, 7 days per week availability [22].	
Where services are offered	Brokering of services to other providers [25].	Case manager accompanies clients to meetings and appointments [24].	Services are offered in a natural setting such as the workplace, home or social setting [15,22].	Worker provides services in the home and helps to strengthen community networks [22].
Coordination of access to services run by other agencies or **service provision** by the agency itself	Coordination	Coordination and service provision	Coordination and service provision	Coordination and service provision
Average Caseload (program intensity)	35	15	15	25
Outreach	No	Yes	Yes	Yes
Responsibility for clients' care	Case managers can originate from several different teams (a mental health team, addictions care team, primary care health team, shelter team, Housing First etc.). Regardless of the team, all case managers play the role of navigator and keep the client's needs at the forefront of their care.			
	Case manager or a navigator role is played by a clinician, nurse, community outreach worker, or social worker [15,26].	Case manager	A multidisciplinary team including case managers, peer support workers, and physicians [20].	Case manager or CTI worker [22].

In general, staff who had peer case management job responsibilities indicated work-loads consistent with ICM best practices (i.e., < 15 active clients per case manager), though we note that, per the performance measure data that we have, workloads tended to vary on a month-to-month basis, reflecting broader system-level factors (i.e., housing availability; Covid-19) and at times exceeded ICM recommendations for caseloads.

The profiles of high-service utilizers (i.e., clients logging higher volumes of contacts and more minutes of contacts with case managers) at both providers shared only one common predictor: in both cases, younger clients tended to be significantly less likely to have contacts with their case managers and were significantly less likely to meet with case managers for longer durations. In terms of the unmet needs of the client bases

served by both providers, while both providers used different assessment tools to measure social determinants of health and had differing assessment completion rates, both providers reported that a majority of their clients – of those who completed the SDOH assessments – had housing needs (59.5% of clients) and either income or vocational needs (62.2%) at the point of intake. Better understanding the profiles of high-frequency service utilizers is important for programs to understand as this can allow them to reconsider existing strategy related to outreach, engagement, and service plan construction.

The services providers were likely to refer clients out to varied, though this data is limited for Centro Sávila given the reporting of only one external referral per client: CRFW was most likely to refer clients out to housing services whereas Centro Sávila was most likely to refer clients out to public benefit enrollment services. Comprehensive data on clients' service enrollment and uptake are currently unavailable, so we are unable to determine the extent to which client service referrals resulted in service receipt at this time.

We found that across providers, peers generally perceived themselves to be similar to the clients they served and that they generally had satisfactory relationships with their clients which suggests that peerness-perceptions were not a barrier to peer support. However, across providers, case managers identified common barriers to working with their specific target populations, most commonly noting transportation limitations and the infrequency of client contacts. Additionally, across providers, most peer-support and case management staff indicated that they were satisfied with the work they performed and felt supported from others within their organizations, though we do note some variability across and within providers in the uniformity of these perceptions. A majority of staff at both providers indicated experiencing some role change in their job functions since starting their positions: while role change is common to new programs, we want to highlight that excessive role change is associated with higher perceptions of role ambiguity, higher levels of workplace burnout, and reductions in perceptions of workplace satisfaction (Acker 2003). Nearly all respondents indicated that the training they had received was useful to them on the job.

In terms of client satisfaction metrics, clients at both providers reported high levels of satisfaction with program services, though the scope of data collected in these surveys varied by provider and is limited due to the limited sampling frames used which excluded meaningful subsets of clients (i.e., those without reliable Internet; clients at WEHC). Thus, we caution against drawing strong inferences about aggregate satisfaction on the basis of this data and view this data as suggestive at best.

Finally, both providers changed how they delivered case management services in response to Covid-19 and public health orders. These shifts from in-person service delivery to primarily virtual and telephonic modes could result in different patterns of client engagement, potentially excluding portions of the client base without reliable Internet access or consistent telephone services. However, initial statistically significant declines in enrollment levels observed in March and April 2020 were eventually corrected for and both programs updated procedures and protocols on the fly. As noted in the ***Recommendations*** subsection, the potential negative effects of telehealth case management service delivery should be considered, in balance, against potential gains from these platforms when programs consider how to transition back to in-person service delivery as public health orders are relaxed.

Future Research

Though we were able to answer a number of questions in the present process evaluation, there are still a few process-related questions which we were not able to answer but which could help us better understand how both providers' programs are implemented going forward. We present a sample of some research questions below which could help us better understand the dynamics of both providers' process flows in the future:

1. Is CRFW's POPPS incentive program effective at increasing client-engagement? Understanding the profiles of POPPS clients who utilize the incentives program can provide insights into whether, and under which conditions, the POPPS' incentives program is effective at increasing client participation, which incentives work best, and which types of clients are most likely to make use of the program.
2. What does virtual case management engagement look like when quantified? Gathering specific data on aggregated and de-identified user engagement with relevant Facebook groups (i.e., scraping Facebook API data for CRFW's Butterflies group) could permit a deeper understanding of the degree of virtual service utilization and change over time in response to Covid-19.
3. How do clinicians perceive the PCM programs at both providers? Conversations with clinicians on staff could result in refinement of the clinician record data collection tools to address the questions of screening and assessment tools at other points of contact.
4. In which specific ways do peer case managers make their "peerness" known to their clients? How does – in other words – the notion of peerness get reinforced in case manager-client interactions?
5. Were there significant changes in the demographic characteristics of clients participating in program activities before and after Covid-19? We could explore whether and how Covid-19 changed which types of clients were more likely to engage and disengage from both PCM programs before and after Covid-19 to empirically assess the effect of telehealth on client engagement.

Before discussing plans for an outcome evaluation, we want to note that there are a series of challenges to conducting an outcome evaluation of both PCM programs going forward.

1. Both programs incorporate elements of other behavioral health interventions in addition to peer case management into their programming. For instance, both providers indicated their case managers use MI techniques, and the evidence-base suggests that MI interventions have independent positive effects on behavioral health outcomes. While the inclusion of multiple evidence-based techniques in service-delivery may maximize the likelihood of program participants realizing positive behavioral health outcomes, because multiple interventions are being applied to the same population simultaneously, this makes it difficult to assess the degree to which any positive behavioral health outcomes observed in the future are a direct function of the "peerness" of case managers or whether the outcomes are a function of other varied dimensions of the case management services provided, such as the use of MI.
2. The conceptual distinction between the two programs' case management and other models of case management is ambiguous. For instance, both programs' service delivery shares resemblance to other modes of case management – the standard case management model because of the drop-in and episodic nature of service provision, particularly post-Covid, and critical time interventions (CTI) because of the target populations they are working with at the WEHC and POPPS more generally. This similarly makes it difficult to assess the extent to which the programs are purely peer case management programs and whether it is the peers *per se* or these other forms of case management which have the largest effect on the outcomes observed.

3. The absence of data on outcome-relevant variables (i.e., demographics, residential status, employment status) – both at intake and throughout program progression – reduces our ability to assess how program participation and other baseline client characteristics influence outcomes.
4. A recent pre-print paper by Haber et al. (2021) discusses how key assumptions underlying common outcome evaluation research designs (i.e., pre-post analysis) are violated because of the Covid-19 pandemic. Specifically, Haber et al. argue that it is difficult to conduct outcome evaluations when evaluating interventions which were ongoing when Covid-19 began since it difficult to determine what explains outcomes in the absence of a control group (i.e., it violates an assumption called conditional exchangeability). We still need some time to consider and reason through best methodological practices for outcome evaluation because of Covid-19 going forward and will attend to best evaluation practices as they are developed.

Assuming an outcome evaluation is desirable, we would ideally like to collect data on the following set of outcomes: client housing stability, mental health improvements, quality of life measures, substance use, hospitalization, income, and employment status. It may also be useful to conduct a cost-benefit analysis to estimate whether peer case managers are more cost-effective when compared against standard case management models or the system as usual.

Conclusion

After approximately two years of program development and maturation, a total of 604 clients have received over 1,253 hours of peer case management services while enrolled in both Centro Sávila's and CRFW's PCM programs. In general, there are elements of both programs' implementation which are consistent with ICM best practices (i.e., average caseloads for case managers are typically under 15 active caseloads per case manager; service delivery, before Covid-19, featured more streets-based service provision) and PCM best practices (i.e., peerness perceptions are high among case managers; peers generally perceive supportive work environments; peers have the capacity to receive state peer support certifications and are generally supported by their providers in doing so). However, there are other elements of program implementation which fall short of these standards (i.e., the frequency and intensity of case management contact is low; service-delivery post-Covid-19 was mostly not in person; the distinction between peer case management and other related interventions is unclear at times). Limitations to data collection and gathering (i.e., high levels of assessment missingness and re-administration; gaps in more extensive data collection for clients at WEHC) – paired with the unique and unprecedented disruption to service-delivery of Covid-19 mid-intervention – present considerable challenges to evaluation going forward. The evidence from the process evaluation presents a mixed picture of program successes (i.e., high client satisfaction rates; generally positive work environments; high peerness perceptions) and limitations (i.e., common difficulties engaging the target population repeatedly) and identifies unique characteristics of both providers' client bases who are prone to access services. We encourage the DBHS and the providers to reflect on some of the recommendations we spotlight in the *Recommendations* subsection to enhance the quality of data collection, increase prospects for longer term program evaluability, and maximize potential program effectiveness going forward.

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Appendix A – Sample Crosswalk for Client-Level Data Request

Peer Case Management Basic Client Information Data Elements Review - Client Records

Comments for Providers

Thank you for your assistance in helping us gather data for the purposes of the Institute of Social Research's process evaluation of your peer case management program. The Excel sheet on the next page provides a detailed list of specific variables that we are interested in collecting which will help us evaluate the process of your peer case management program. We recognize that (a) there are differences across providers in which types of data are reported, (b) that you may not have collected data for each of the variables listed or for all clients, and (c) that where you do collect data on these variables, the variables may be scored or coded differently than the scoring or coding system we have listed on the next page. This is okay: we recognize these are all possibilities. For the variables that you do have coded differently than what we report here, however, if you could let us know how your coding or scoring differs for these variables by making a note in the Excel sheet comment section (e.g., are there different questions added in or taken out or different time periods for arrest data variables), that would be helpful to us. Additionally, if you feel as though there are any other variables which you track which may be helpful for us to know about that are collected at the client-level (e.g., other behavioral health screeners not mentioned here; more specific question-level data from the quarterly client satisfaction surveys; case management notes; other data on client criminal justice involvement; drug usage), feel free to include it. We only ask that the data you provide be de-identified for human subject research purposes (e.g., that you provide a randomized client ID # or identifier that is consistent across multiple data files and that you do not report data that could theoretically identify the client, things like names/SSNs/birth-dates). We recognize that this process of data gathering and cleaning may take some time given that you may have to pull data from multiple sources within and beyond your EMR systems. Once the data has been compiled, if you could shoot an email to Alex Severson @ awseverson@unm.edu to let us know the data is ready, we would be happy to set up a time to come pick it up in person as we have to follow, due to IRB and university regulations, a specific protocol for data collection where we have to physically pick up the data at each provider location using a thumbnail. Please feel free to reach out to Alex Severson if you need any clarification on this process or any of the variables listed on the next sheet, and thank you again for your assistance!

Labeling a data element that is not collected: If a data element is not currently collected by the provider, write 'Not Collected'. For example, if the provider is not collecting Substance Abuse Diagnosis on any of its population, write 'Not Collected.'

Labeling a data element that is collected only for certain population: If a data element is not collected for all served population, please provide a brief description for whom the information is not collected. For example, if the provider is not collecting outcome data (employment status) for all non-SMI population who receive services, state this in the comment column of the crosswalk.

Peer Case Management Basic Client Information Data Elements Crosswalk - Client Records

Client Level Data Project Data			
CLD Field #	**Code**	**Data Item Description**	**ISR Comments/Notes on Variables**
C-01	**Unique Client Identifier**		A non-PHI identifier (ID) that is assigned to a person served by the PCM/POPPS program.
	[Unique Alphanumeric Code]	A non-PHI identifier (ID) that is assigned to a person	
C-02	**Client Treatment Status At the Start of the Reporting Period**		
	1	New Client	
	2	Continuing Client	
C-03	**Client Treatment Status At the End of the Reporting Period**		
	1	Continuing Client	
	2	Discharged with Service Plan Completed	
	3	Discharged Due to Lost Contact/ Administrative Discharge	
	4	Discharged to Corrections, Jail	
	5	Discharged Due to Death of Client	
	6	Aged Out	
	7	Discharged Due to Other Specified Reasons	
	8	Discharged, Reason Unknown	
C-04	**Community Referral Source**		Where was the client referred from? [Feel free to add additional categories if collected].
	1	Crossroads for Women	
	2	Westside Shelter	
	3	Maya's Place	
	4	Centro Savila	
	5	Hilton Garden Inn	
	6	Other	
	98	Not Reported	
C-05	**Completed Intake Form**		
	0	No	
	1	Yes	

Peer Case Management Basic Client Information Data Elements Crosswalk - Client Records

Client Level Data Project Data			
CLD Field #	Code	Data Item Description	ISR Comments/Notes on Variables
C-06	**Intake Accepted**		
	0	No	
	1	Yes	
	98	Not Applicable	
C-07	**Sex**		
	1	Male	
	2	Female	
	7	Unknown	
	98	Not Collected	
C-08	**Age**		
	<= 85	Any Number up to 85	
	97	Unknown	
	98	Not Collected	
C-09	**Race**		
	1	American Indian and Alaska Native	
	2	Asian	
	3	Native Hawaiian or Other Pacific Islander	
	4	Black or African American	
	5	White	
	6	Some Other Race alone	
	7	Two or More Races	
	97	Unknown	
	98	Not Collected	
C-10	**Ethnicity**		
	1	Hispanic Origin	
	11	Puerto Rican	
	12	Mexican	
	13	Cuban	
	14	Other Specific Hispanic	
	2	Not of Hispanic Origin	
	98	Unknown	
C-11	**Education Level at Intake**		
	1	Less than high school	
	2	High school diploma or equivalent	
	3	Some college, no degree	

Peer Case Management Basic Client Information Data Elements Crosswalk - Client Records

Client Level Data Project Data			
CLD Field #	Code	Data Item Description	ISR Comments/Notes on Variables
	4	Associate's degree	
	5	Bachelor's degree	
	6	Master's degree	
	7	Doctoral or professional degree	
	98	Not Collected	
C-12	**Veteran Status at Intake**		
	1	Veteran	
	2	Not a Veteran	
	7	Unknown	
	98	Not Collected	
C-13	**Marital Status at Intake**		
	1	Never Married	
	2	Married/Living as Couple	
	3	Separated	
	4	Divorced	
	5	Widowed	
	97	Unknown	
	98	Not Collected	
C-14	**Insurance Information at Intake**		
	1	Medicaid	
	2	Commerical Insurance	
	3	No Insurance	
	98	Not Collected	
C-15	**Employment Status at Client Intake**		
	1	Full time (includes Armed Forces, Full Time Supported Employment)	
	2	Part time (includes Part Time Supported Employment)	
	3	Unemployed	
	5	Employed--Full Time/Part Time Not Differentiated (Temporary code)	
	6	Homemaker	
	7	Student	

Peer Case Management Basic Client Information Data Elements Crosswalk - Client Records

Client Level Data Project Data			ISR Comments/Notes on Variables
CLD Field #	**Code**	**Data Item Description**	
	8	Retired	
	9	Disabled	
	10	Other Reported Classification (e.g. volunteers)	
	11	Sheltered/Non-Competitive Employment	
	12	Not in Labor Force, Classification not	
	96	Not Applicable	
	97	Unknown	
	98	Not Collected	
C-16	**Residential Status - At Admission or Start of the Reporting Period**		
	1	Homeless	
	2	Foster Home/Foster Care	
	3	Residential Care	
	4	Crisis residence	
	5	Institutional Setting	
	6	Jail/Correctional Facility	
	7	Private Residence - living arrangement not known (for adult use only)	
	8	Private Residence -- Independent Living (for adult use only)	
	9	Private Residence -- Dependent Living (for adult use only)	
	10	Private Residence (for children use only)	
	11	Other Residential Status	
	12	Unknown	
	98	Not Collected	
	SCREENING INFORMATION		
C-17	**Completed Screening Form**		
	0	No	
	1	Yes	
	98	Not Applicable	

Peer Case Management Basic Client Information Data Elements Crosswalk - Client Records

Client Level Data Project Data			ISR Comments/Notes on Variables
CLD Field #	**Code**	**Data Item Description**	
C-18	**Screening Form Accepted**		
	0	No	
	1	Yes	
	98	Not Applicable	
C-19	**Columbia Suicide Severity Index (CSSI) Ideation Severity Score (Time 1 - Intake)**		Severity of Ideation Subscale; Suicidal Behavior Subscale; Intensity of Ideation Subscale [Can also indicate risk-level]
	[Score]		
	96	Not Applicable	
	98	Not Collected	
C-20	**Date Columbia Suicide Severity Index (CSSI) Administered (Time 1 - Intake)**		
	[Insert	Date of Administration	
	98	Not Applicable/Not Completed	
C-21	**Columbia Suicide Severity Index (CSSI) Score (Time 2)**		Optional (If administered to same client more than once)
	[Score]		
	96	Not Applicable	
	98	Not Collected	
C-22	**Date Second Columbia Suicide Severity Index (CSSI) (Time 2)**		
	[Insert Date]	Date of Administration	
	98	Not Applicable/Not Completed	
C-23	**SDOH Scale Score (Time 1 - Intake)**		*Different providers have different ways of assessing Social Determinants of Health using different scales (some replicated below). If using one of these other scales, please indicate which one and note any modifications made to the scale (e.g., addition or deletion of specific questions).
C-24	**Date SDOH Score Administered (Time 1 - Intake)**		
C-25	**SDOH Subscore on Housing (Time 1 - Intake)**		
C-26	**SDOH Subscore on Food (Time 1 - Intake)**		
C-27	**SDOH Subscore on Medical (Time 1 - Intake)**		

Peer Case Management Basic Client Information Data Elements Crosswalk - Client Records

Client Level Data Project Data			ISR Comments/Notes on Variables
CLD Field #	Code	Data Item Description	
C-28		SDOH Subscore on Behavioral Health (Time 1 - Intake)	
C-29		Subscore on Transportation (Time 1)	
C-30		SDOH Scale Score (Time 2)	Optional (May not have been administered a second time)
C-31		Date SDOH Score Administered (Time 2)	Optional (May not have been administered a second time)
C-32		SDOH Subscore on Housing (Time 2)	Optional (May not have been administered a second time)
C-33		SDOH Subscore on Food (Time 2)	Optional (May not have been administered a second time)
C-34		SDOH Subscore on Medical (Time 2)	Optional (May not have been administered a second time)
C-35		SDOH Subscore on Behavioral Health (Time 2)	Optional (May not have been administered a second time)
C-36		Subscore on Transportation (Time 2)	Optional (May not have been administered a second time)
C-37		POPPS Screening Tool Score II (AHC HRSN) (Time 1 - Intake)	Crossroads Only: Not sure how POPPS II screening tool is distinct from AHC HRSN (from which it is adapted) or POPPS Screening Tool I. Some clarification on this point would be helpful (e.g., any questions added/deleted). If POPPS I screening tool scores are available, could be helpful to have that scale too.
C-38		Date POPPS Screening Tool II Given (Time 1 - Intake)	
C-39		Subscore on Housing/Independent Living (Time 1)	
C-40		Subscore on Family/Social (Time 1)	

Peer Case Management Basic Client Information Data Elements Crosswalk - Client Records

Client Level Data Project Data			ISR Comments/Notes on Variables
CLD Field #	Code	Data Item Description	
C-41		Subscore on Vocational/Educational (Time 1)	
C-42		Subscore on Medical (Time 1)	
C-43		Subscore on Substance Use (Time 1)	
C-44		Subscore on Mental Health (Time 1)	
C-45		Subscore on Legal (Time 1)	
C-46		Date POPPS Screening Tool Given (Time 2)	Optional (May not have been administered a second time)
C-47		POPPS Screening Tool Score (Time 2)	Optional (May not have been administered a second time)
C-48		Subscore on Housing/Independent Living (Time 2)	Optional (May not have been administered a second time)
C-49		Subscore on Family/Social (Time 2)	Optional (May not have been administered a second time)
C-50		Subscore on Vocational/Educational (Time 2)	Optional (May not have been administered a second time)
C-51		Subscore on Medical (Time 2)	Optional (May not have been administered a second time)
C-52		Subscore on Substance Use (Time 2)	
C-53		Subscore on Mental Health (Time 2)	
C-54		Subscore on Legal (Time 2)	
C-55		WellRx Screening Tool Score (Time 1 - Intake)	11-item Index
C-56		WellRx Screening Tool Score (Time 2 - Intake)	11-item Index
C-57		SMI/SED Status	Indicates whether the client has serious mental illness (SMI) or serious emotional disturbance (SED) using the state definition.

Appendix B – BHI Interview Guide

BHI Provider Interview Guide (Peer Case Management)

General Interviewer Instructions

Instructions and guidance for interviewers are in italics. You should not skip any questions or sections unless directed to by the instructions. If the interviewee declines to answer any questions, please note this. Some questions have a line to record a numeric answer. Please use this instead of circling, x'ing or checking the appropriate response.

- *Remember to speak slowly and remain accessible for questions.*
- *Remind participant that all answers are confidential and they can skip any question they are not comfortable answering.*
- *At the end, review the interview to make sure you did not miss any relevant questions.*
- *If the participant is a former employee of the provider, please note "Former on the "Current Job Title" line and change all relevant language to past tense.*
- *The topics have separate headings. Do not read the headings as part of the interview: they are for your benefit.*
- *Be sure to read through the entire guide before beginning the interview; there are instructions at the end for interviewer observations.*

Text in **Bold** is meant to be read to the interviewee
Text in ***Bolded Italics*** notes skip patterns
Text in *Italics* is instructions for the interviewer

Administrative Information (Prefilled by Interviewer)

1. Interview Date:
2. ISR Interviewer:
3. BHI Program Name:
4. BHI Program Provider (if more than one provider):
5. Interviewee ID #:

Introduction

Before we begin, do you have any questions about the project or the interview?

Thank you for participating in our research. Just to let you know, this interview should take approximately 75 minutes to complete depending on the length of your answers. First, I need to ask a few administrative questions.

6. Current Job Title: Click or tap here to enter text.
7. What is the highest level of education you have completed?
   High School/GED = 12

8. Please tell me about any certifications and/or licenses you have that are relevant to Peer Case Management[3]:
   Click or tap here to enter text.

9. How many total years of work experience in this field do you have? [*Answer should be converted to years and months*]
   Choose an item.
10. How long have you worked for this program?
    Choose an item.

11. Are you employed?

    ☐Full-time

    ☐Part-time

    ☐Other [Please specify]: _____

12. About how many hours per week do you work? Click or tap here to enter text.
13. About how many hours per week do you work on Click or tap here to enter text.
14. In a few brief sentences, describe what you do in your role as a [*Insert answer from Q6 above*].

    Click or tap here to enter text.

Program Information

Now I'm going to ask you a few questions about your *[Peer Case Management]* program.

15. In your own words, what are the main goals of this program?
    Click or tap here to enter text.
16. What do you feel is the most accurate measure of this program's success?
    Click or tap here to enter text.
17. How successful or unsuccessful do you feel this program is based on that measure?
    Click or tap here to enter text.
18. In your view, does this program use evidenced-based practices and/or curricula? [*Probe: Some examples mentioned in your proposal are Motivational Interviewing or Strengths-Based Case Management.*] [***If Yes, proceed to Q 19. If No or Don't Know, Proceed to Q 20***].

    ☐Yes

    ☐No

    ☐Don't Know

19. Could you describe, in specific detail, what your program's evidence-based practices are and how they are used in practice?
    Click or tap here to enter text.

[3] Program name = Peer-on-Peer Supportive Services (POPPS) or Peer Case Management (PCM) depending on the provider.

20. Next, I would like for you to tell me how you think about the concept of peerness in the context of your [*Peer Case Management*] program. In your view, what does peerness mean?
    Click or tap here to enter text.

21. Does Centro Sávila have any official criteria by which peerness is defined when selecting potential peer case managers or peer support specialists? [***If Yes, proceed to Q 22. If No or Don't Know, Proceed to Q 23***].

    ☐Yes

    ☐No

    ☐Don't Know

22. What are the official criteria for defining peerness?
    Click or tap here to enter text.

Outreach

Next, I have a few questions about how potential clients and other providers learn about your [*insert program name here***] program.**

23. Are you involved in outreach for this program? Yes ____ No ____ [***If Yes, proceed to Q 24; If No, skip to Incoming Referrals section.].***

    ☐Yes

    ☐No

24. How do potential clients or other agencies learn about your program? [*Probe: Where do you go to let people know about your services?*]
    Click or tap here to enter text.

Incoming Referrals

Next, I have a few questions about incoming referrals to the program.

25. Is handling referrals one of your job functions? [***If Yes, proceed to Qs 26-28. If No, skip to the Screening section Q 29.****]*

    ☐Yes

    ☐No

26. Briefly describe how potential clients are referred to this program. [*Probe: phone calls, word of mouth, from family, criminal justice system [ask for specifics – i.e. courts, police, jail, probation, pre-trial], from within your agency [ask some detail about this], are there formalized procedures or paperwork for this?*]
    Click or tap here to enter text.
27. Which of those is the best source of referrals? [*Probe: Is there a top three? What about other providers within the BHI funding initiative?*] Click or tap here to enter text.

28. Is there a source that you wish you received referrals from? Click or tap here to enter text.

Next, I have a few questions about how individuals are screened for eligibility in your program.

29. Is screening a person for program eligibility one of your job functions? [***If Yes, proceed to Q 30. If No, then skip to General Intake section.****]*.

    ☐Yes

    ☐No

30. What are the eligibility criteria for this program? [*Be sure to ask for both inclusion and exclusion criteria.*] Click or tap here to enter text.
31. Could you briefly describe how the screening works? [*Probe: How are those criteria determined?*] Click or tap here to enter text.
32. Share with us your impressions of the initial screening process thus far. How favorably or unfavorably, in your view, has it been received by your clients?

Click or tap here to enter text.

Next, I have a few questions about what happens to an individual once they are screened and deemed eligible for the program.

33. Is intake one of your job functions? [***If Yes, proceed to Q34. If No, skip to the Assessments section.***]

    ☐Yes

    ☐No

34. Would you please describe how your intake process works? [*Prompt: Is there anything else that is part of the process?*]
    Click or tap here to enter text.

Assessments

Now I'm going to ask you a few questions about the assessment process for the program and any assessment instruments or tools you might use.

35. Is giving or facilitating assessments one of your job functions? [***If Yes, Proceed to Q 36. If No, skip to Service Delivery section****]*.

    ☐Yes

    ☐No

36. When you have a new client, what specific assessments are administered at or near the time of intake? [*List each assessment in the table below. If this interview is audio recorded, make sure to write down the list so you can ask the follow-up questions for each assessment.]*

Click or tap here to enter text.

For each assessment, ask the following questions to complete the table information.

37. At what other times is [*insert assessment name]* administered?
38. How is the information from [*insert assessment name*] used?

Assessment Name	At Intake	Additional Time points (#)	At Discharge	Use

	□		□	
	□		□	
	□		□	
	□		□	
	□		□	
	□		□	
	□		□	
	□		□	
	□		□	
	□		□	

39. If you are familiar, could you discuss, in some detail, how you or the staff at [*insert provider name*] selected these specific assessment tools over other assessment tools? Click or tap here to enter text.
40. If you are familiar, could you discuss, in some detail, why you or the staff at [*insert provider name*] selected these specific assessment tools over other assessment tools? Click or tap here to enter text.

Service Delivery

Next, we would like to ask a few questions about the specific services delivered as part of your [*insert program name here*] program. ***[If Q6 = Peer Case Manager or Peer Support Specialist, proceed with Q41 – Q 63. If Q6 =! Peer Case Manager or Peer Support Specialist, skip to Q64]***.

41. How many clients do you typically meet with each week?

Click or tap here to enter text.

42. Do you carry out home visits with your clients? [***If Yes, Proceed to Q 42. If No, Skip to Q 43***].

☐Yes

☐No

43. For a typical week and for a typical client, how many home visits would you say you conduct? Click or tap here to enter text.

44. Do you provide virtual case management services – for example, over platforms such as Zoom, Facebook, or Skype - to your clients? [***If Yes, Proceed to Q 45. If No, Skip to Q 46***].

☐Yes

☐No

45. For a typical week and for a typical client, how many virtual meetings with your clients would you say you conduct? Click or tap here to enter text.

46. Could you describe, in some detail, how exactly individual service plans are constructed with each client? [*Probe: How are competing client needs prioritized?]*
    Click or tap here to enter text.

47. In general, could you name specifically which types of services you are *most* likely to refer clients to?

    Click or tap here to enter text.

48. In general, could you name specifically which types of services are you *least* likely to refer clients to? Click or tap here to enter text.

49. Have the types of services you have referred clients to evolved over time? If so, how?

    Click or tap here to enter text.

50. How are referrals monitored or tracked?

    Click or tap here to enter text.

51. Could you describe, in some detail, what it means for a client to progress through their customized service plan?

    Click or tap here to enter text.

52. Could you describe what difficulties, if any, clients commonly encounter as they progress through their customized service plans?
    Click or tap here to enter text.

53. How are clients informed about community resources including education, employment assistance, and housing-related services?

    Click or tap here to enter text.

54. How frequently would you say you contact your clients?

    Click or tap here to enter text.

55. How frequently would you say your clients contact you?

    Click or tap here to enter text.

56. How much time would you say you spend communicating with each client per week?

    Click or tap here to enter text.

57. On a scale of 1-7 where a 1 indicates Very Dissimilar, a 4 indicates Neither Dissimilar nor Similar, and a 7 indicates Very Similar, in general, how similar would you say you are – in terms of your background and lived experiences - to the typical client you case-manage?

    ☐Very Dissimilar (1)

☐ Dissimilar (2)

☐Somewhat Dissimilar (3)

☐Neither Dissimilar nor Similar (4)

☐Somewhat Similar (5)

☐Similar (6)

☐Very Similar (7)

58. Why would you rate the similarity this way?

    Click or tap here to enter text.

59. On a scale of 1-7 where a 1 indicates Very Unsatisfied, a 4 indicates Neither Unsatisfied nor Satisfied, and a 7 indicates Very Satisfied, in general, how satisfied would you say you are with the quality of the relationships you have with your clients?

    ☐Very Unsatisfied (1)

    ☐Unsatisfied (2)

    ☐Somewhat Unsatisfied (3)

    ☐Neither Unsatisfied nor Satisfied (4)

    ☐Somewhat Satisfied (5)

    ☐Satisfied (6)

    ☐Very Satisfied (7)

60. Why would you rate the quality of your client relationships this way?

    Click or tap here to enter text.

61. Have you encountered any challenges developing relationships with your clients? [***If Yes, Proceed to Q 62. If No, Skip to Q 63***].

    ☐Yes

    ☐No

62. Could you provide some specific examples of such challenges?
    Click or tap here to enter text.

63. How do you build trust with your clients?

    Click or tap here to enter text.

64. Could you tell us a little bit more about how specifically you integrate evidence-based practices – such as Strengths Based Case Management or Motivational Interviewing - into the case management services you deliver?

    Click or tap here to enter text.

65. How are schedules for treatment sessions monitored? Click or tap here to enter text.

66. How are appointments, attendance, and reporting compliance monitored and documented, and who is responsible for this? Click or tap here to enter text.

67. How is participant progress or non-compliance with their service plans reported?

    Click or tap here to enter text.

68. In your view, is this information up-to-date?

    Click or tap here to enter text.

69. Are any incentives given to program participants for completing different stages of their service plans? [***If Yes, proceed to Q 70. If No, Proceed to Discharge from Program Section.***]

    ☐Yes

    ☐No

70. What specific incentives have been provided?

    Click or tap here to enter text.

71. Why did you decide on this specific set of incentives?

    Click or tap here to enter text.

72. What are the goals of these specific incentives?

    Click or tap here to enter text.

73. In your view, do you view think that these incentives are effective or ineffective?

    Click or tap here to enter text.

Discharge from Program

Next, we have a few questions about how clients are discharged from your program.

74. Would you describe the different ways a person leaves your program?
    Click or tap here to enter text.

75. What does it mean for a person to successfully discharge from your program?
    Click or tap here to enter text.
76. Under what circumstances can a participant be removed from the program?
    Click or tap here to enter text.

77. Do you create some sort of discharge or transition plans for your clients? [***If No or Don't Know, skip to Aftercare/Follow-Up Section*****].**

    ☐Yes

    ☐No

    ☐Don't Know

78. Could you please describe those?
    Click or tap here to enter text.

After Care + Follow-Up

I have a few questions about aftercare or follow up with clients.

79. Does your program offer after care or any follow-up for your clients? [***If Yes, Proceed to Q 80. If No, skip to Work Environment and Relationships section***.]

    ☐Yes

    ☐No

80. What does it entail?
    Click or tap here to enter text.
81. What kinds of barriers, if any, are there to providing aftercare for clients?
    Click or tap here to enter text.
82. For how long do you offer this service?
    Click or tap here to enter text.

Work Environment and Relationships

Finally, I have a few questions about the work environment and relationships at [*insert provider name*].

83. What's the general work environment like for employees at [*insert provider name*] in regard to having the necessary support to be able to get your job done in the best way possible? [*Probe: Some key issues we are interested in include being included in decision making, having the proper autonomy and authority to make decisions, having access to the information you need, and having support from management*].
    Click or tap here to enter text.
84. On a scale of 1 – 7 where 1 indicates Very Unsatisfied, 4 indicates Neither Unsatisfied nor Satisfied, and 7 indicates Very Satisfied, in general, how would you rate the quality of the supervision, management, and leadership you receive at [*insert provider name*]?

    ☐Very Unsatisfied (1)

    ☐Unsatisfied (2)

    ☐Somewhat Unsatisfied (3)

    ☐Neither Unsatisfied nor Satisfied (4)

    ☐Somewhat Satisfied (5)

    ☐Satisfied (6)

    ☐Very Satisfied (7)

85. Why would you rate the quality of the supervision, management, and leadership you receive at [*insert provider name*] this way?
    Click or tap here to enter text.
86. In your view, has your role as a [*Insert Q6 answer here*] changed at all since being hired? [***If Yes, Proceed to Q 87. If No, Proceed to Q 88***].

    ☐Yes

☐No

87. In what specific ways has your role changed since being hired?
Click or tap here to enter text.
88. [***Only Ask if Q6 =Peer Case Manager or Peer Support Specialist***]: On a scale of 1 – 7 where a value of 1 indicates Very Useless, 4 indicates Neither Useless nor Useful, and 7 indicates Very Useful, in general, how useful would you say your training certification has been for your job?

☐Very Useless (1)

☐Useless (2)

☐Somewhat Useless (3)

☐Neither Useless nor Useful (4)

☐Somewhat Useful (5)

☐Useful (6)

☐Very Useful (7)

89. [***Only Ask if Q6 =Peer Case Manager or Peer Support Specialist***]: Do you have opportunities to update your peer case management training or certification? If you do, what does these look like?

☐Yes

☐No

Click or tap here to enter text.

90. How many times each month do you meet with other program staff at [*insert provider name here*] to discuss [*insert program name here*]? Click or tap here to enter text.

91. What generally happens when program staff meetings occur at [*insert provider name here*]? Click or tap here to enter text.

92. On a scale of 1 – 7 where a value of 1 indicates Very Unsatisfactory, 4 indicates Neither Unsatisfactory nor Satisfactory, and 7 indicates Very Satisfactory, in general, how would you evaluate the quality of the relationships between peer case managers and other staff at [*insert provider name here*]?

☐Very Unsatisfactory (1)

☐Unsatisfactory (2)

☐Somewhat Unsatisfactory (3)

☐Neither Unsatisfactory nor Satisfactory (4)

☐Somewhat Satisfactory (5)

☐Satisfactory (6)

☐Very Satisfactory (7)

93. Why would you evaluate the relationship that way?

_____
_____
_____
_____

94. How true do you feel the following statements are about you at work during the past two weeks? [Not at all True, Somewhat True, Moderately True, Very True, Completely True]

    a. I feel happy at work

Select Participant Answer Here

    b. I feel worthwhile at work

Select Participant Answer Here

    c. My work is satisfying to me

Select Participant Answer Here

    d. I feel in control when dealing with difficult problems at work

Select Participant Answer Here

    e. My work is meaningful to me

Select Participant Answer Here

    f. I'm contributing professionally in the ways I value most

Select Participant Answer Here

Conclude the Interview

This concludes the interview questions; thank you for your time. Is there anything I missed or that you would like to add?

Interviewer Notes: Observations made by interviewer

- *How was the interview conducted? (ex: Skype video, audio only, telephone)*
- *Did participant seem comfortable answering questions in this format? Were there any positive or negative comments you could note here?*
- *Did you experience any technical difficulties during this interview? If so, do you think these had any impact on data quality?*
- *Were there any other distractions during the interview? If so, do you think these had any impact on data quality?*
- *Did participant have questions about interview, how the information will be used, or other questions? If so, what were their inquiries?*
- *Did participant have any issues with interview or questions? If so, what were their concerns?*

Interviewer Notes:

Appendix C – Provider Screening Tools

Appendix

WellRx Questionnaire

DOB_____ Male___ Female _____

WellRx Questions

1. In the past 2 months, did you or others you live with eat smaller meals or skip meals because you didn't have money for food?
_____ Yes _____ No
2. Are you homeless or worried that you might be in the future?
_____ Yes _____ No
3. Do you have trouble paying for your utilities (gas, electricity, phone)?
_____ Yes _____ No
4. Do you have trouble finding or paying for a ride?
_____ Yes _____ No
5. Do you need daycare, or better daycare, for your kids?
_____ Yes _____ No
6. Are you unemployed or without regular income?
_____ Yes _____ No
7. Do you need help finding a better job?
_____ Yes _____ No
8. Do you need help getting more education?
_____ Yes _____ No
9. Are you concerned about someone in your home using drugs or alcohol?
_____ Yes _____ No
10. Do you feel unsafe in your daily life?
_____ Yes _____ No
11. Is anyone in your home threatening or abusing you?
_____ Yes _____ No

POPSS Aftercare Program

POPSS Screening Tool II

Client Name

Date Inventory Performed

Housing/Independant Living

What is you living situation today?

○ I have a steady place to live.
○ I have a place to live today, but I am worried about losing it in the future.
○ I do not have a steady place to live (I am temporarily staying with others, in a hotel, in a shelter, on the streets, in a car, abandoned building, park, or other place not mean to for human habitation)

Think about the place that you live. Do you have any problems with the following (Choose All that Apply)

☐ Pests such as bugs, ants, or mice
☐ Mold
☐ Lead paint or pipes
☐ Lack of heat
☐ Oven or stove not working
☐ Smoke Detectors missing or not working
☐ Water Leaks
☐ None of the Above

Within the last 12 months, have you worried that your food would run out before you got money to buy more?

○ Often True ○ Sometimes True ○ Never True

Within the last 12 months, the food you bought just didn't last and you didn't have money to get more.

○ Often True ○ Sometimes True ○ Never True

In the past 12 months, has a lack of reliable transportation kept you from getting to medical appointments, meetings, work, or from getting things needed for daily living?

○ Yes ○ No

In the past 12 months, has the eletric, gas, or water company threatned to shut off service at your home?

○ Yes ○ No

If for any reason you need support wtih day-to-day activities such as bathing, preparing meals, shopping, managing finances, etc, do you get the help you need?

○ I don't need any help ○ I get all the help I need ○ I could use a little more help ○ I could use a lot more help

Beause of a physical, mental, or emotional condition, do you have difficulty doing errands alone such as visitng a doctor's office or shopping?

○ Yes ○ No

Family/Social

Is your physical safety threatened by family or friends?

○ Never ○ Rarely ○ Sometimes ○ Fairly Often ○ Frequently

Does anyone, including friends or family, insult or talk down to you?

○ Never ○ Rarely ○ Sometimes ○ Fairly Often ○ Frequently

Does anyone, including friends and family, threaten you with harm?

○ Never ○ Rarely ○ Sometimes ○ Fairly Often ○ Frequently

Does anyone, including friends and family, scream or curse at you?

○ Never ○ Rarely ○ Sometimes ○ Fairly Often ○ Frequently

Vocational/Educational

How hard is it for you to pay for he very basics like food, housing, medical care, and heating?

○ Very Hard ○ Somewhat Hard ○ Not Hard at All

Do you want support finding or keeping work or a job?

○ Yes, help finding work ○ Yes, help keeping work ○ I don't need need or want help

Do you speak any language other than English at home?

○ Yes ○ No

Do you want help with school or training? For example, starting or completing job training, or getting a highschool diploma, GED or equivalent.

○ Yes ○ No

Medical

In the last 30 days, other than activities you did for work, on average, how many days per week did you engage in moderate exercise (like walking fast, running, jogging, dancing, swimming, biking, or other similar activities)?

☐ 0
☐ 1
☐ 2
☐ 3
☐ 4
☐ 5
☐ 6
☐ 7

On average, how many minutes did you usually spend exercising at this level on one of those days?

☐ 0
☐ 10
☐ 20
☐ 30
☐ 40
☐ 50
☐ 60
☐ 90
☐ 120
☐ 150 or more

Have you had any emergency room visits recently?

○ yes ○ no

If yes, when was your last ER visit?

○ Within the past 30 days ○ 1-2 months ago ○ 3-6 months ago ○ more than 6 months ago

Substance Use

How many times in the past 12 months have you had 4 or more drinks in a day?

○ Never ○ Once or Twice ○ Monthly ○ Weekly ○ Daily or Almost Daily

How many times in the past 12 months have you used tobacco products like cigarettes, cigars, snuff, chew, electronic cigarettes?

○ Never ○ Once or Twice ○ Monthly ○ Weekly ○ Daily or Almost Daily

How many times in the past year have you used prescription drugs for non-medical reasons?

○ Never ○ Once or Twice ○ Monthly ○ Weekly ○ Daily or Almost Daily

How many times in the past year have you used illegal drugs?

○ Never ○ Once or Twice ○ Monthly ○ Weekly ○ Daily or Almost Daily

Mental Health

How often do you feel lonely or isolated from those around you?

○ Never ○ Rarely ○ Sometimes ○ Often ○ Always

Over the past two weeks, how often have you been bothered by feeling little pleasure or interest in doing things?

○ Not at all ○ Several days ○ More than half the days ○ Nearly every day

In the past two weeks, how often have you been bothered by feeling down, depressed, or hopeless?

○ Not at all ○ Several Days ○ More than half the days ○ Nearly every day

Stress means a situation in which a person feels tense, restless, nervous, or anxious, or is unable to sleep at night because his or her mind is troubled all the time. Do you feel this kind of stress?

○ Not at all ○ A little bit ○ Somewhat ○ Quite a bit ○ Very Much

Because of a physical, mental, or emotional condition, do you have serious difficulty concentrating, remembering, or making decisions?

○ Yes ○ No

Legal

How many times have you been arrested?

How many times have you been incarcerated?

How many times have you been booked into MDC?

Do you have any legal issues pending?

○ yes ○ no

If yes, please describe any legal issues that you have pending.

Update POPSS Screening Tool II Section

Independent Living-Any score above 0 may indicate an unmet needs in indepednent living, including housing, food security, and transportation.

0

Family or Social--A score of 11 or more may indicate that the client is in an unsafe situation.

0

Vocational/Education-any score above zero may indicate that the client has unmet needs in the Vocational/Educational domain.

0

Medical--any score above zero may indicate that the client has unmet medical needs or is experiencing barriers in accessing medical services.

0

Substance Use-Any score above zero may indicate that the client has unmet needs focused on maintaining or stablizing their recovery or substance use disorders.

0

Mental Health Score--any score of 3 or higher may indicate that the client has unmet needs related to mental health stabilization.

0

Legal-any score above zero may indicate that the client has unmet needs in the legal domain.

0

Note--the POPSS screening tool is adapted from Health Related Social Needs Screening Tool. It is intended as a tool to support staff and clients in assessing the client's service needs during an intake interview or reassessment.

SAVE