Evaluation of the Pinellas Integrated Care Alliance (PICA) Outcomes and Implementation

YEAR 2 INTERIM REPORT EXECUTIVE SUMMARY
For the Period 4/1/20 – 9/30/20

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EXECUTIVE SUMMARY

Evaluation Objectives

The purpose of this evaluation is to assess the implementation and outcomes of the Pinellas Integrated Care Alliance (PICA) initiative, the primary goal of which is to improve coordination and collaboration among Pinellas County behavioral health providers in order to increase access to behavioral health services, address system gaps and inequities, improve follow-up care and long-term outcomes, and decrease utilization of auxiliary services for mental health needs such as jails and crisis stabilization units (CSUs). Qualitative and quantitative analyses have been conducted by the evaluation team to measure the impact of the initiative at both the client and systems level. This report covers the first six months of Year 3 of the implementation, from 4/1/20 – 9/30/20. The components of the evaluation include analyses of client outcomes, PICA meeting observations, stakeholder surveys, and client interviews. A full technical report including a more comprehensive discussion of background, methods, and data analyses and outcomes is available upon request.

PICA Model

A **steering committee** for the initiative has been comprised of leaders from agencies who have an integral role within the behavioral health system and who are connected with behavioral health services in Pinellas County: The Central Florida Behavioral Health Network (CFBHN), Pinellas County Human Services (PCHS), the Pinellas County Health Department (PCHD), and the Pinellas County Sheriff's Office (PCSO). The steering committee acts as a decision-making body that drives strategic changes in Pinellas County's behavioral health system of care at the systemic level, and works closely with lead provider agencies to oversee processes at the client level.

A **centralized care coordination team**, the Pinellas Integrated Care Team (PIC Team), is responsible for connecting clients with appropriate behavioral health and related services. Clients are referred through the PCSO Mental Health Unit (MHU), which is comprised of co-responder teams made up of a deputy and a mental health clinician. Individuals within the PCSO's jurisdiction who receive Baker Act exam initiations, make frequent 9-1-1 calls, or who have multiple arrests that are considered to be potentially related to mental health are flagged for consideration for care coordination services by the PIC Team. Members of the PCSO MHU determine whether services are appropriate, and if the individuals meet criteria for enrollment, they are referred to the PIC Team.

PIC Team Outcome Findings

Enrollment and engagement data, functioning outcomes, arrest and jail data, and involuntary mental health exam initiation (Baker Act) data were used to assess how PICA has impacted clients. Since July 2018, 501 clients were referred to the PIC Team and of those 325 were admitted for care coordination services. Key findings are identified below and elaborated in subsequent sections.

Key Client Outcome Findings

- White clients are overrepresented in the PIC Team compared to Pinellas County and MH need
- The PIC Team spends between 2.5 to 3.5 hours on average engaging clients
- Most PIC Team clients remain in care coordination services for 6 months or less
- Client functioning and self-sufficiency improved for PIC Team clients (even for re-admissions)
- Long-term arrests and Baker Acts (1 year post case closure) decreased for PIC Team clients
- Days in jail for PIC Team clients increased long-term (1 year post case closure)

Enrollment and Engagement

With regard to **client characteristics**, slightly more admitted clients are male (52.6%) than female (47.4%). The majority of clients identify as White or Caucasian (89%), and Black and Other racial minorities make up 11% of admitted clients. About 8.4% of clients reported their ethnicity as Hispanic. Nearly 20% of clients reported ever being homeless (see Appendix A for a table of client characteristics). Clients ranged from 18 to 86 years of age with an average age of 41.4 years.

Engagement data indicate that the PIC Team made an average of 3.73 contacts and spent 2.58 hours on average engaging admitted clients after they were referred by the PCSO MHU. For referred clients who were not admitted, system coordinators made 5.41 contacts, spending 3.55 hours on average on engagement. Engagement strategies include phone calls, face-to-face contact, "activity on behalf" (arranging appointments for clients), collateral contact (contact with a family member or other support), and telehealth.

The **length of stay in PIC Team services** varied widely, between less than one month and more than twelve months. Care coordination lasted less than one month for about 8% of clients. For the majority of clients, care coordination services were provided for six months or less. The length of service lasted greater than six months for less than 20% of clients. (see Figure 1).

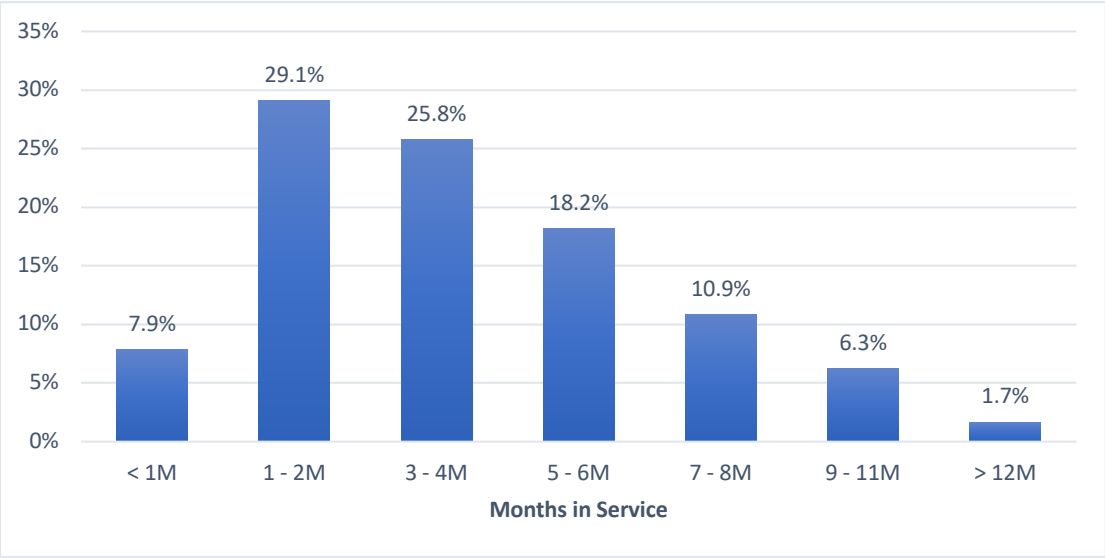

Figure 1. Length of care coordination service time for admitted clients (n=302).

Client Functioning

Client functioning improved for clients admitted to the PIC Team, as shown by significant decreases in Functioning Assessment Ratings Scale (FARS) scores over time for each factor, indicating greater functionality in all areas (see Figure 2). This pattern of improvement was also true for re-admitted clients, indicating long-term effectiveness.

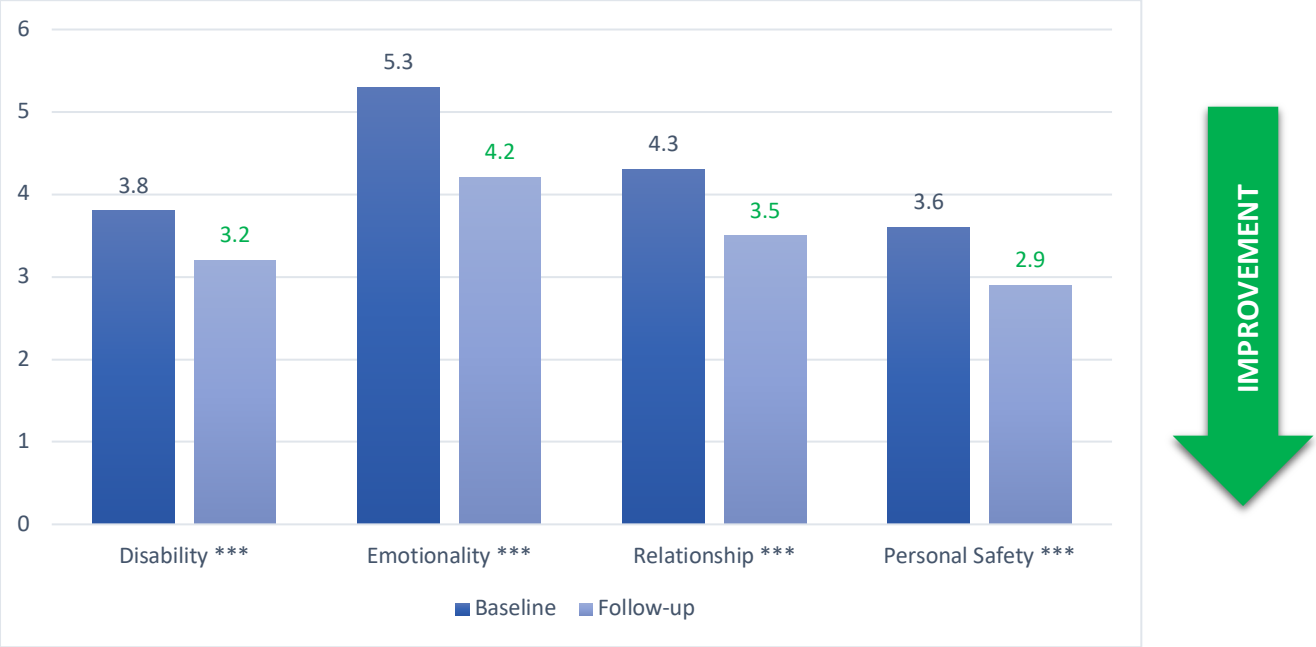

Figure 2. Average FARS Factor Scores at Baseline and Follow Up (n=235)

Clients also showed significant **improvements in self-sufficiency** across all domains of the Self-Sufficiency Matrix (SSM) (see Figure 3). As a result of PIC Team intervention, more than half of PICA clients were stable or thriving across eight self-sufficiency domains: Access to Services (56.9%), Housing, (59.6%), Support System (54.2%), Substance Use (54.7%), Safety (63.2%), Family Health Care Coverage (66.8%), and Family Physical Health (53.4%) (see Appendix B for full Self-Sufficiency Matrix Scores). Again, clients who were re-admitted several months later did not show decreases in scores compared to when their cases were closed.

Client Arrests and Jail Days

Data on arrests before and after referral to or engagement in care coordination showed that the **number of arrests decreased** for clients who received care coordination for those who whose cases were closed for at least one year. However, for individuals who were referred to the PIC Team but not admitted, their arrests increased after one year of their engagement period ending (see Figure 3). However, when we look at arrests for referred-only and admitted clients whose referrals or cases were closed within a shorter period (less than one year), both groups show decreases in arrests. This was the first time the evaluation team was able to look at these patterns for cases/referrals that had been closed for a full year, which is important to understand because studies on similar models have typically only looked at short-term outcomes (nine months or less) (Shapiro et al., 2015). Therefore, the long-term results are encouraging, but a larger sample size would allow for more confidence in the results.

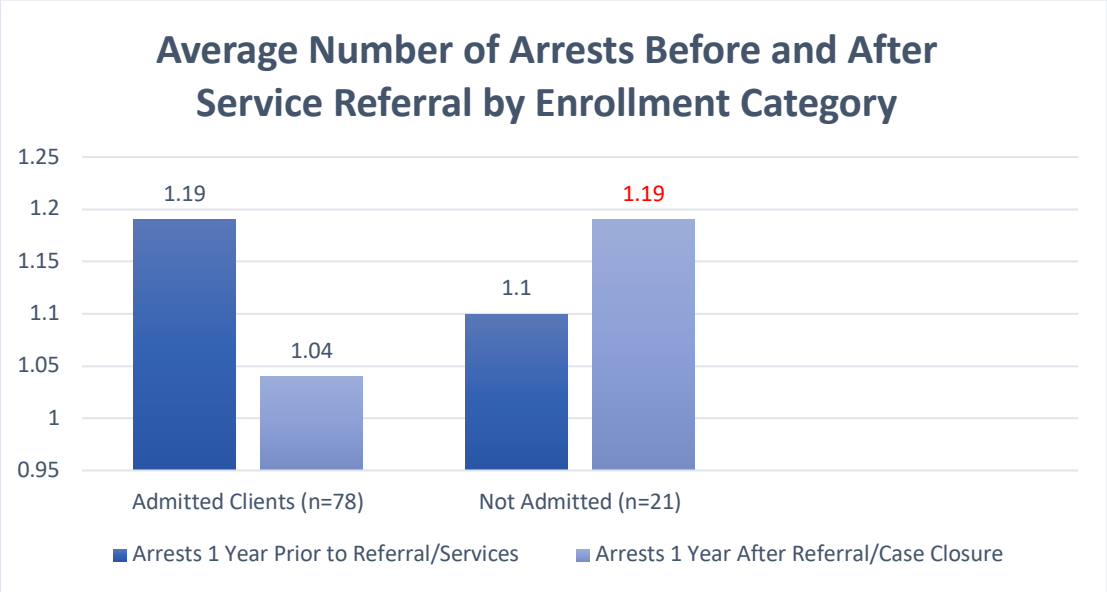

Figure 3. Average Number of Arrests for Referrals or Cases Closed at Least 1 Year.

For PIC Team clients who were arrested, their **days in jail increased** one year after their case closure, as did the number of jail days in for those referred to PIC Team services but not admitted (see Figure 4). This finding is also somewhat unclear when compared to arrests made less than one year of service referral, which shows that arrests decreased for clients who were referred only and increased for admitted clients (see Table 8 of technical report). The longer term jail day patterns shown below (1 year or more after case/referral closure) indicate that jail days for both admitted and non-admitted individuals increase over time; however, this much of an increase warrants further investigation.

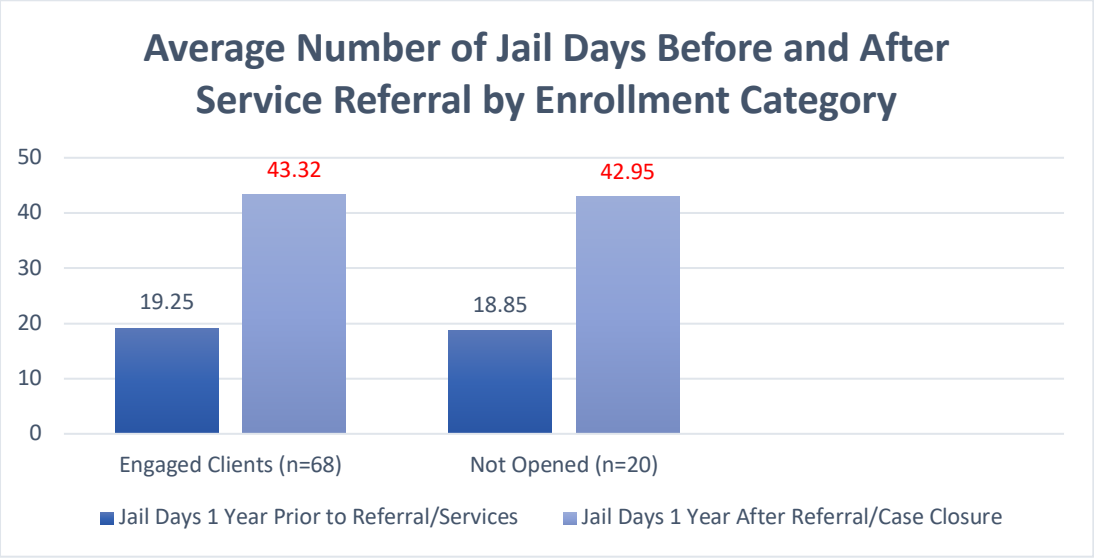

Figure 4. Average Number of Days in Jail for Referrals or Cases Closed at Least 1 Year.

The average number of **Baker Act exam initiations decreased significantly** for clients who were admitted as well as for individuals who were referred but not admitted after one full year of the referrals or cases being closed (see Figure 5). It is expected that Baker Act exam initiations would

decrease for admitted clients, as system coordinators work with clients to maintain stability and prevent mental health crises. However, it is unclear why individuals who are not admitted to services would also have a significant decrease in Baker Acts. One possibility is that, through their initial engagement, they are prompted to seek services or support, even if it is not through the PIC Team.

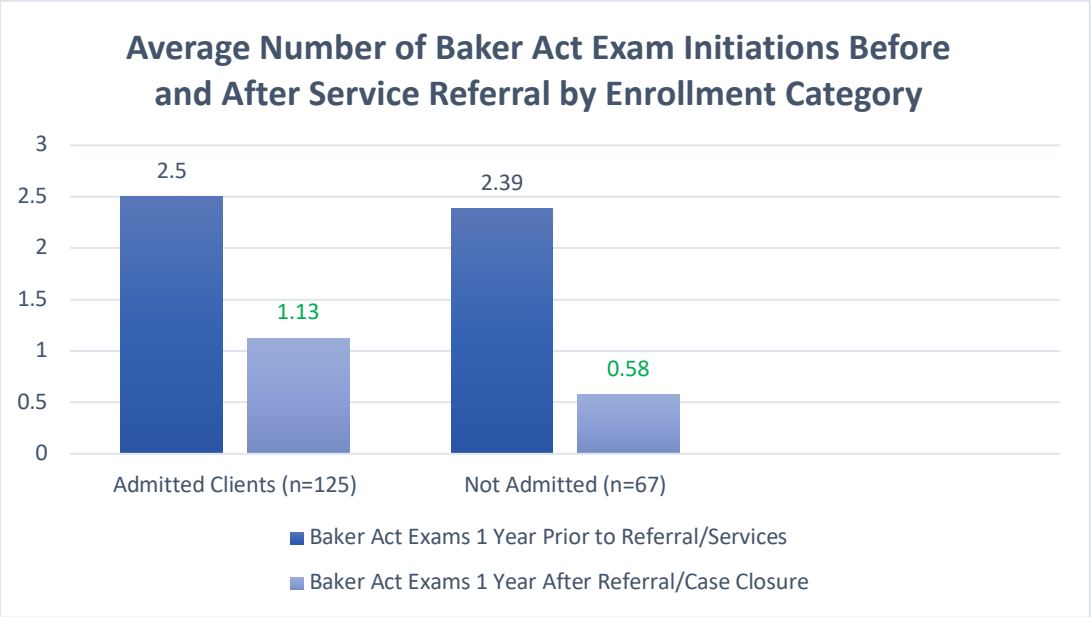

Figure 5. Average Baker Act Exam Initiations for Referrals or Cases Closed for at Least 1 Year.

Most of the client outcome indicators suggest that the PIC Team model meets target goals of increasing functioning and self-sufficiency of clients and decreasing their interactions with auxiliary services (jails, Crisis Stabilization Units). However, the increase in arrest days of clients who are arrested warrants further investigation.

Implementation Findings

The goal of the implementation analysis is to provide an understanding of factors that support or hinder implementation of PICA initiatives (PIC Team, HIE task force, collaborative efforts) at both the systems level, at which overarching project decisions are made, and the client level, through which project goals are carried out. Key findings are shared below.

Key Implementation Findings

- **The steering committee provided direction for developing substance use initiatives, aligning performance measures, and enhancing system coordination**
- **Challenges to client care prior to PIC Team were: difficulty navigating services and insurance plans and some negative experiences with law enforcement and Baker Acts**
- **The PIC Team identified several challenges with engagement among resistant clients**
- **Clients widely agreed that the PIC Team offered unique benefits and supports**
- **High levels of collaboration and commitment by PICA were indicated by assessments**
- **Challenges included role and structure clarity, funding, and inconsistency in client care**

Discussions and action items from steering committee meetings during this period centered largely around developing substance use initiatives, understanding racial equity across the system, identifying system-wide performance indicators, and generally **improving partnerships that support integrated care and better access to care**. The committee also identified ways in which peer specialists could be integrated into the existing behavioral health infrastructure to improve service access and engagement. Discussions of how to expand the PIC Team were not a significant part of meetings, but funding and sustainability of the existing PIC Team model was prioritized in recent meetings, as were discussions of moving forward with the Health Information Exchange (HIE) initiative to improve referral and care coordination.

> "This is work, work, work. I'm hurting here. But in the long run, [my system coordinator] gave me all the tools I needed…she's been my biggest cheerleader."
>
> "…I've totally felt like I've had more of decision-making abilities in my life."

Interviews were conducted with a sample of 10 clients who were admitted to services with the PIC Team. System coordinators were described as empathetic, proactive, and resourceful, and as providing a wide variety of services and supports. **Service provision was highly regarded among all participants**, who viewed it as a noticeable improvement over their previous experiences navigating services or seeking treatment. Some clients said that prior to their referrals to the PIC Team, they were unsure of where to go or how to navigate their insurance plans, and some said they were not connected to care in-between law enforcement calls.

Evidence from client interviews and from PIC Team meeting observations showed that some clients reported negative experiences with receiving Baker Acts from law enforcement, which made them fearful of seeking help (it did not appear that any of these experiences were related to the PCSO MHU). **Problems with engagement** were also highlighted. PIC Team staff discussed cases in which clients were resistant to numerous engagement attempts and outreach to family members, and in some cases, support by peer specialists (from the PIC Team and other agencies) was helpful in this regard. Some clients discussed their hesitancy to engage in services because of the seemingly abrupt nature of outreach: "[The system coordinator] just showed up one day…" and "…at first, you're very scared, skeptical."

Collaboration and systems change assessments were administered to steering committee partners, behavioral health agency administrators, the PIC Team and PCSO MHU, and ancillary providers. **Collaboration and coordination were reported to be strong among stakeholders** who participated in the Interagency Collaborative Activities Scale (IACAS) survey. According to the systems change Stakeholders Survey, respondents indicated there was a shared understanding of the vision, mission, and goals for PICA; substantial support among stakeholders; and a high level of commitment to carrying out goals of the initiative (see Figure 6). Negligible differences were seen from baseline (Year 1) to follow up.

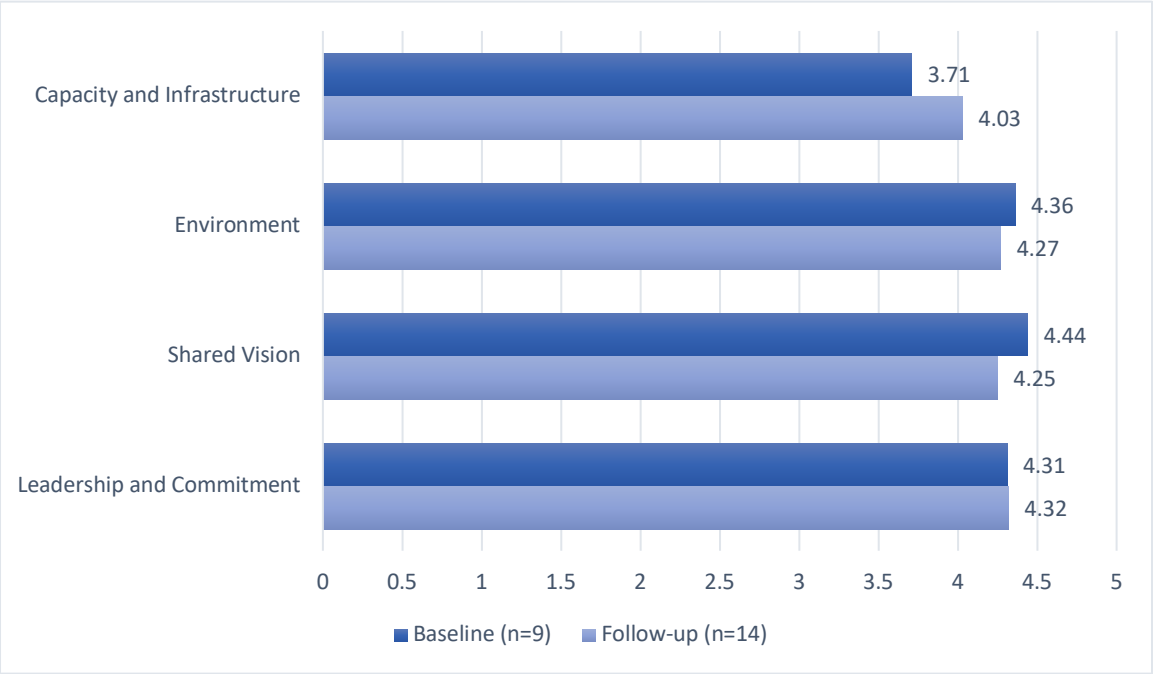

Figure 6. Systems Change Stakeholder Survey

A network analysis was conducted among PICA stakeholders to understand perceptions of commitment and coordination among different levels of stakeholders (see the technical report for a full analysis and diagrams for this component). Perceptions of coordination were largely in alignment with the intended model in that agencies in higher administrative roles (steering committee and provider agency administrators) were seen as more influential in coordinating services and supports for clients than those who provide more direct service (e.g., the PIC Team); however the PIC Team was seen as central to coordination among all stakeholders. For commitment, strong connections among the majority of stakeholders were shown, indicating perceptions that these **stakeholders were highly committed** with regard to funding, time, and/or human resources invested in PICA.

Some **deficits were identified through open feedback** from the assessments, such as lack of clarity in roles among the PIC Team and MHU, problems with establishing a common framework for the PIC Team, limitations to using CFBHN funding for services, and inconsistency in client care across the system. Concerns related to decision-making, insufficient resources to support interagency collaboration, infrequent or inconsistent communication, previously strained relationships among members, and frequent changes in staff were also reported. However, feedback also pointed to several facilitators to effective collaboration, such as communication, convening regularly scheduled meetings, stakeholders' willingness to commit resources, shared purpose and vision, and having effective leadership.

Conclusions: Implementation Drivers and Systems Change

The evaluation team examined drivers of implementation for PICA that fall within three broad categories defined by the National Implementation Research Network (2016): 1) competency drivers (staff selection, training and coaching, and performance assessment); 2) organizational drivers (administrative supports, data system supports, funding, policies and procedures); and 3) leadership drivers (identification of technical and adaptive challenges by leaders) (Bertram et al., 2015). Though the implementation analysis has taken into consideration the system-wide goals of the PICA initiative, the evaluation has focused largely on the implementation of the PIC Team as a central point of focus. Table 1 summarizes the strengthens and challenges for each competency driver based on all data components. **This framework is designed to support systems change**, in that assessment of a centralized care coordination model helps to identify gaps in care and in system functioning. By effectively addressing these challenges, pathways to coordination and collaboration are improved.

Table 1

Summary of Implementation Drivers and Challenges

Domain	Strengths	Challenges
Competency Drivers	Ongoing formal and informal training and education among PIC Team	Perceptions of inappropriate use of Baker Acts and lack of training with individuals with ASD by law enforcement
	Consistency in service delivery and team cohesion among PIC Team	Lack of clarity in roles and miscommunication among PIC Team and MHU staff
	Indicators of effective coordination as evidenced by the network analysis	Difficulties in engaging or referring non-compliant clients
	Perceptions of effective PIC Team care among clients	
Leadership Drivers	Positive stakeholder perceptions of PICA implementation (collaboration and systems change domains)	Challenges securing continuous funding for PIC Team
	Consistent use of data in decision-making processes	Lack of clarity around concrete development of PICA initiatives (HIE system, expanding PIC Team)
	Identification of and advocacy for innovative and best practices to develop behavioral health infrastructure	
Organizational Drivers	Strong overall performance outcomes (improvements in client functioning, decreases in arrests and Baker Acts)	Inconsistencies “level of success” of outcomes and relatively high rate of re-admissions (14%)
	Supportive environment for developing behavioral health systems interventions	Stalled utilization of PICA 2 data system to more efficiently and comprehensively measure success
	Effective targeting of vulnerable individuals in terms of homelessness, disability, and unemployment.	Lack of county-wide racial equity addressed by existing model

Model Change

The PCSO recently announced that, beginning October 1, 2020, they would no longer contract with Directions for Living to provide clinical staff for the co-responding teams who do initial engagement of PIC Team clients. Instead, the PCSO will hire clinical staff to fulfill and expand these roles internally and provide a clinical director at the agency to oversee the teams. It is unclear what impact this change might have on the existing model, as it changes the nature of the inter-agency co-responding teams. Strong partnerships with behavioral health agencies and community support are two factors identified in the research literature on co-responding police mental health programs that contribute to effective reduction of arrests and diversion from hospitalization (Shapiro et al., 2015). It is also unclear how the increase in capacity to engage potential clients and make referrals will affect the PIC Team's caseloads.

Recommendations

The evaluation findings from this report are based on assessing the effectiveness of the performance outcomes and implementation process of the PICA initiative. Based on the analysis of each component, the evaluation team has developed the following recommendations to consider with respect to ongoing implementation.

Recommendations Based on Outcome Findings:

- Determine a strategy for finalizing and utilizing the PICA 2 data system more extensively to more effectively assess PIC Team client outcomes.
- Explore data sources and strategies that can be used to better understand which services clients are connected to at discharge and what the outcomes of these referrals are.
- Assess whether Peer Specialist services can be strategically used to increase "successful" case closure or prevent re-admissions for clients with complex needs.
- Consider targeted efforts to address racial and ethnic disparities in behavioral health care and improve cultural responsiveness (e.g., working collaboratively with grass roots organizations or faith-based communities, or increasing the presence of community health workers or peer specialists who can serve as trusted representatives in underserved communities).
- Determine whether further data assessment on PIC Team client arrests would help to better understand why an increase in jail days was observed for clients during this report period.

Recommendations Based on Implementation Findings:

- Prioritize collaborative activities that engage other providers and ancillary agencies in new and existing behavioral health initiatives and best practices.
- Identify sustainable funding options for maintaining the PIC Team's staffing structure and service capacity, including expansion.
- Ensure processes are in place for clear pathways of communication among PIC Team and MHU staff and that roles are clearly defined.

- Develop concrete steps or plan for implementing/improving HIE system and expanding PIC Team model
- Enhance law enforcement training on conducting appropriate Baker Act exams and interacting with individuals with autism spectrum disorder, which often coincides with mental health conditions.
- Conduct community outreach efforts to share ways that PCSO has the training and ability to address mental health and substance use issues to coincide with the expansion of PCSO MHU, and continue developing collaborative partnerships with behavioral health providers.

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APPENDIX A: CLIENT CHARACTERISTICS

Characteristics of Clients Referred and Admitted to PIC Team

Characteristic	All Referred % (n)	Admitted Clients % (n)
Sex		
Male	55.7% (n=220)	52.6% (n=163)
Female	44.3% (n=175)	47.4% (n=147)
	Total n = 395 [a]	Total n = 310
Race/ Ethnicity		
White	88.6% (n=350)	89.0% (n=276)
Black	6.3% (n=25)	5.8% (n=18)
Other	5.1% (n=20) [b]	5.2% (n=16)
Hispanic	7.9% (n=31)	8.4% (n=26)
	Total n = 395 [a]	Total n = 310
City of Residence		
St. Petersburg	21.8% (n=86)	23.2% (n=72)
Clearwater	18.5% (n=73)	20.3% (n=63)
Largo	13.7% (n=54)	12.3% (n=38)
Palm Harbor	12.7% (n=50)	12.3% (n=38)
Pinellas Park	7.6% (n=30)	7.1% (n=22)
Dunedin	7.4% (n=29)	6.5% (n=20)
Seminole	6.9% (n=27)	7.4% (n=23)
Safety Harbor	3.8% (n=15)	4.8% (n=15)
Oldsmar	3.6% (n=14)	2.3% (n=7)
Other [c]	4.1% (n=16)	3.9% (n=12)
	Total n = 395 [a]	Total n = 310
Ever Homeless	18.8% (n=94 of 500)	19.4% (n=63)

[a] Demographics are missing for 106 clients (21.2%). Client characteristics represent valid data only.
[b] "Other" race category includes Asian/Pacific Islander (n=3), American Indian (n=2), multi-racial (n=7), and Other/Not specified (n=8)
[c] "Other" City of Residence category includes Tarpon Springs (n=7), Belleair (n=3), Holiday (n=1), Indian Rocks (n=1), Madeira Beach (n=1), New Port Richey (n=2), and Sarasota (n=1).
Note- Most recent data provided includes clients referred through July 30, 2020

APPENDIX B: SELF-SUFFICIENCY MATRIX (SSM) SCORES

Self-Sufficiency Matrix: Proportion of Clients Stable or Thriving (n ≈ 320)